Contract No:

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MEMORANDUM

August 11, 2014 **SRNL-L3100-2014-00170**

To: **E. N. Hoffman**

From: **T. B. Edwards**
K. M. Fox

Re: **Composition Driven, Statistical Review of Cast Stone Screening Matrix Results**

A. D. Cozzi, Technical Reviewer

Summary

Recent studies in support of Cast Stone development for the Hanford Site were designed to screen the effects of mix components on properties and performance of the waste form.[1-3] Dry blend components, including portland cement, blast furnace slag, and Class F fly ash, sourced from both southeastern and northwestern suppliers, were included in the screening matrix. Multiple decontaminated salt solutions (simulated) were combined with the dry blend components at various liquid to solid ratios following a statistically designed matrix of compositions. Properties of the resulting mixes and performance of the cured materials were then measured and related to the dry blend components and salt solutions that were used for each mix.[4]

At the conclusion of the screening matrix work, SRNL felt that additional insight into the study might be obtained by relating the properties and performance of the materials to the composition of each Cast Stone mix, as opposed to just the dry blend – salt solution combination. This memorandum provides the results of a statistically driven review of the screening matrix data as a function of the composition of each mix. It is meant to augment the results obtained by reviewing the screening matrix data as a function of the dry blend and salt solution combination.

Discussion

This memorandum contains a series of appendices that provide a statistically driven review of the results from recent studies conducted in support of Cast Stone development for the Hanford Site. The studies were designed to screen the effects of mix components on properties and performance of the waste form.[reference test plans][1-3] Dry blend components, including portland cement, cement slag, and fly ash, sourced from both southeastern and northwestern suppliers, were included in the screening matrix. Multiple decontaminated salt solutions (simulated) were combined with the dry blend components at various liquid to solid ratios following a statistically designed matrix of compositions. Properties of the resulting mixes and performance of the cured materials were then measured and related to the dry blend components and salt solutions that were used for each mix.[4]

The purpose of this memorandum is to augment the earlier results that were obtained by reviewing the screening matrix data as a function of the dry blend and salt solution combination. This is accomplished in a series of appendices that relate the properties and performance of the materials generated by the studies to the composition of each Cast Stone mix, as opposed to just the dry blend – salt solution combination. In addition, relationships between the compositions of the mixes are investigated as well as correlations among the property and performance measures of the cured materials. JMP Version 11.1.1 was used to complete the statistical review presented in this memorandum.[5]

Appendix A provides a set of plots (in pages A1 through A20) of the compositions of the mixes by mix number. The property and performance measures of the cured materials are also plotted by mix number in this appendix. The color utilized to represent each of the mixes in the plots of this appendix (as well as in the plots of the other appendices of this memorandum) is tied to the value of the iodine (I) concentration of the mix. See the upper plot on page A11 that covers the I values.

Appendix B provides a set of pair-wise plots (in pages B1 through B40) of the various components of the dry blend-salt solution combinations that were included as part of these studies. The symbols used to represent the mixes in the plots of this appendix (as well as in the plots of the other appendices, including Appendix A) are tied to the visible groupings indicated for some of these plots. See, for example, the plot of Ca versus Dry Blend Cr on page B2.

The plots of Appendix B are of value in providing insight into correlations between the values of various pairs of components of the dry blend-salt solution combinations. A strong correlation between two components indicates a confounding of the effects of the two components on the property and performance measures of the cured materials. The confounding of the effects of explanatory factors on response variables makes interpretation of each factor's individual effect very difficult without additional test data.

Appendix C provides a set of pair-wise plots and linear regressions (in pages C1 through C64) of the various property and performance measures that were included as part of these studies. A strong correlation between a pair of responses in one of these plots suggests the potential for alleviating the need to measure both responses in the future. The more desirable response from the perspective of precision, speed, or cost would suffice.

Appendix D provides a set of plots and linear regressions (in pages D1 through D96) of the various property and performance measures versus the various components of the dry blend-salt solution combinations that were included as part of these studies. A strong correlation in one of these plots

suggests a relationship between the response variable and the component variable. However, interpreting this result as an influence solely due to the component variable involved misses the potential for confounded effects among the components suggested by some of the results from Appendix B.

References

1. Westsik, J. H., Jr., "Supplemental Immobilization of Hanford Low Activity Waste: Project Test Plan," *U.S. Department of Energy Report TP-62745-001,* Pacific Northwest National Laboratory, Richland, WA (2012).

2. Cozzi, A. D., "Task Technical and Quality Assurance Plan for Hanford Low Activity Waste Cast Stone Screening Test Matrix," *U.S. Department of Energy Report SRNL-RP-2012-00816, Rev. 0,* Savannah River National Laboratory, Aiken, SC (2012).

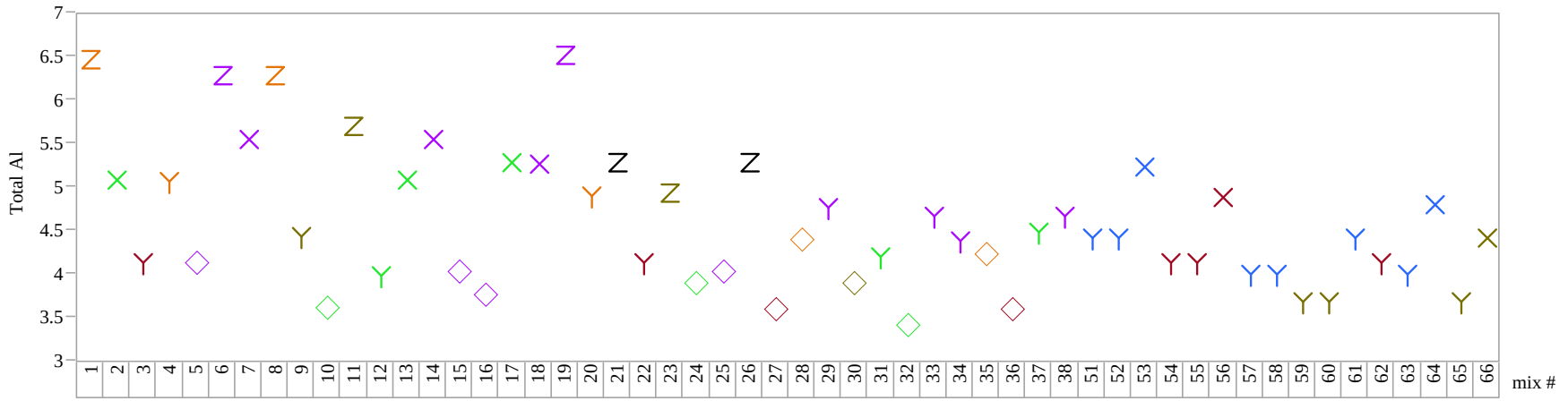
3. Russell, R. L., J. H. Westsik, Jr., D. J. Swanberg, R. E. Eibling, A. D. Cozzi, M. J. Lindberg, G. B. Josephson, and D. E. Rinehart, "Letter Report: LAW Simulant Development for Cast Stone Screening Tests," *U.S. Department of Energy Report PNNL-22352,* Pacific Northwest National Laboratory, Richland, WA (2013).

4. Westsik, J. H., Jr., G. F. Piepel, M. J. Lindberg, P. G. Heasler, T. M. Mercier, R. L. Russell, A. D. Cozzi, W. E. Daniel, R. E. Eibling, E. K. Hansen, and M. M. Reigel, "Supplemental Immobilization of Hanford Low-Activity Waste: Cast Stone Screening Tests," *U.S. Department of Energy Report SRNL-STI-2013-00465, Revision 0,* Pacific Northwest National Laboratory, Richland, WA (2013).

5. **JMP™, Ver. 11.1.1,** [Computer Software] SAS Institute Inc., Cary, NC (2014).

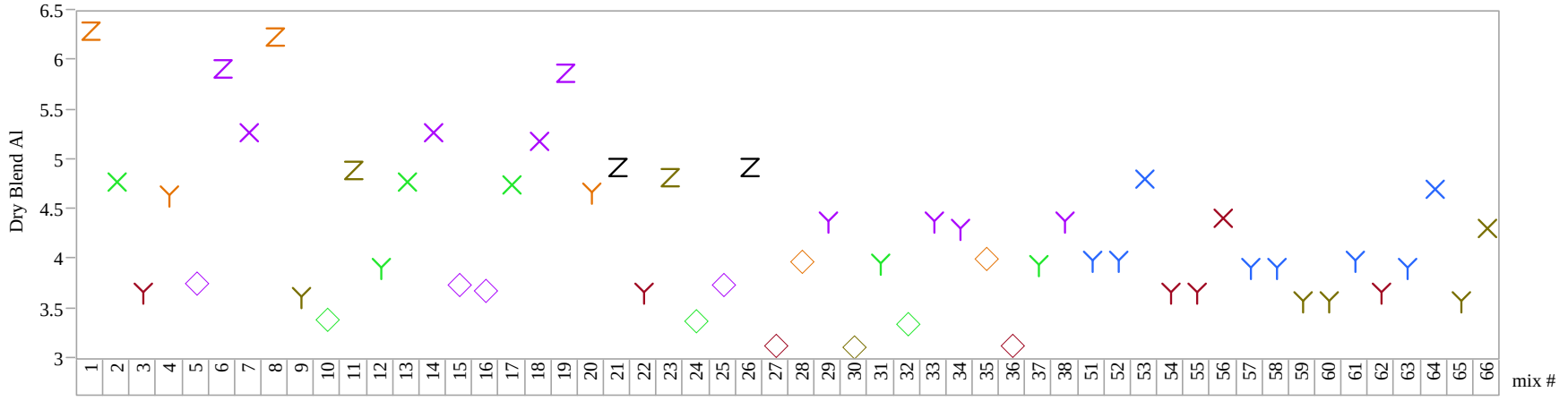
Variability Gauge

Variability Chart for Total Al



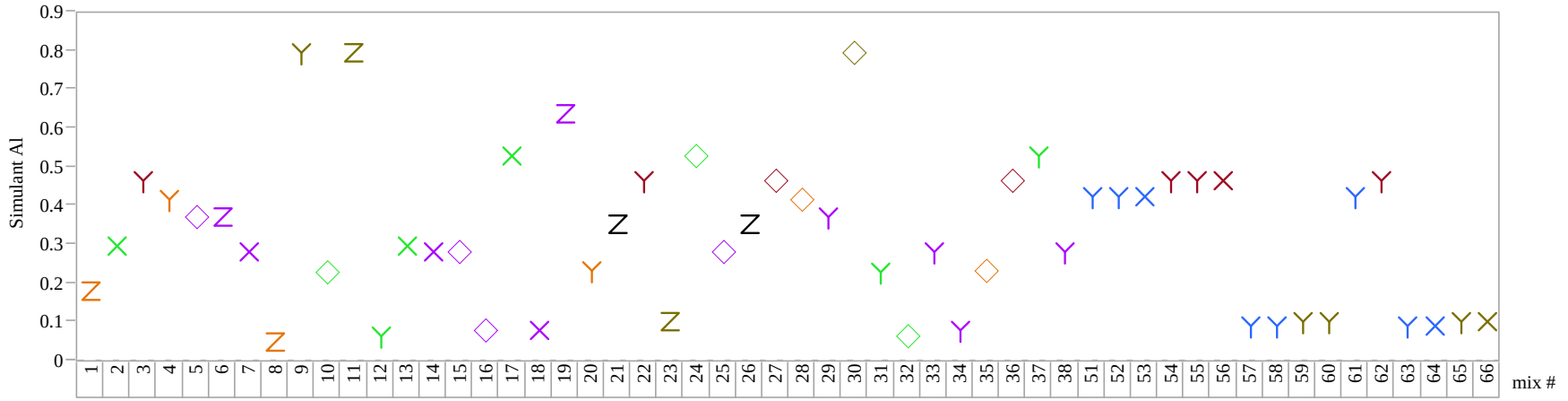
Variability Gauge

Variability Chart for Dry Blend Al



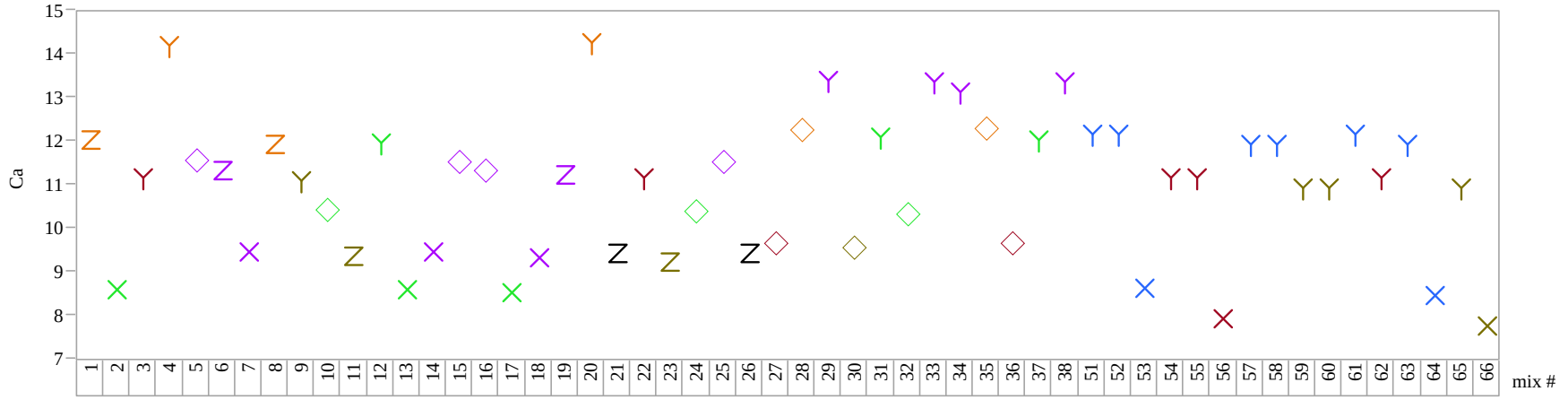
Variability Gauge

Variability Chart for Simulant Al



Variability Gauge

Variability Chart for Ca



Variability Gauge

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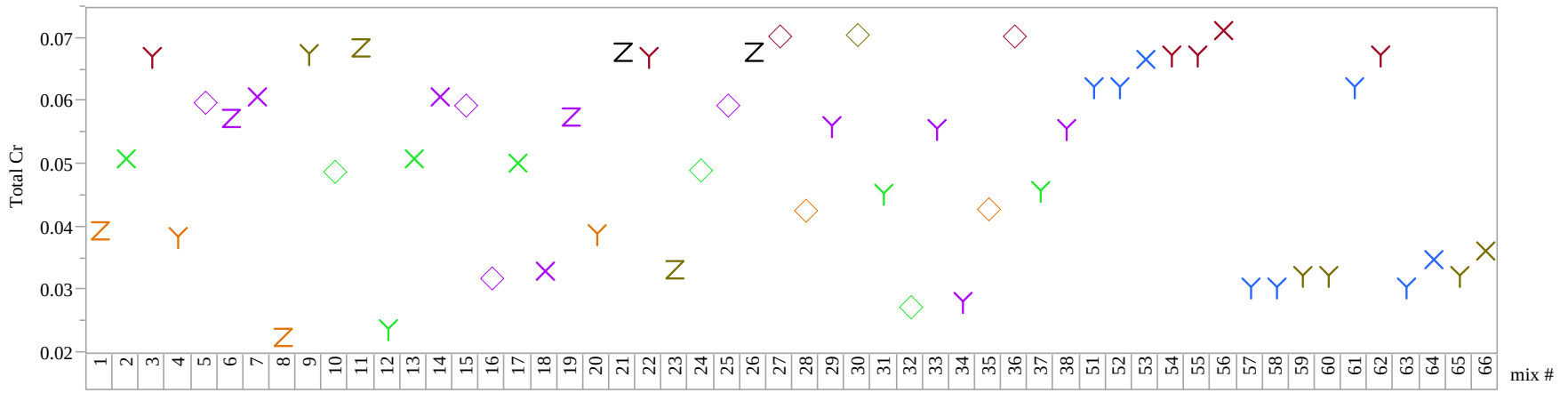

Variability Gauge

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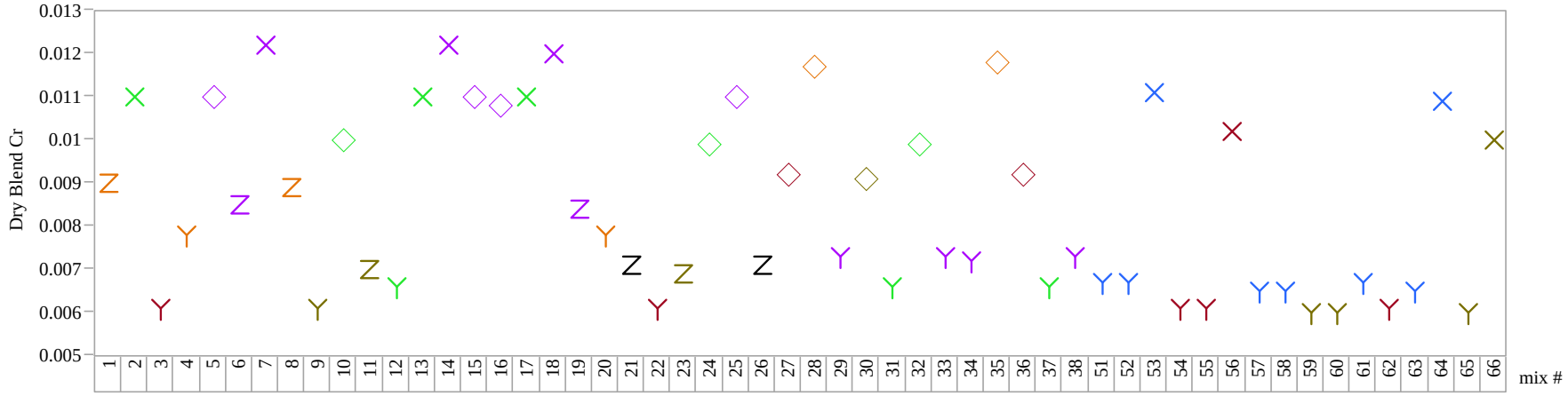

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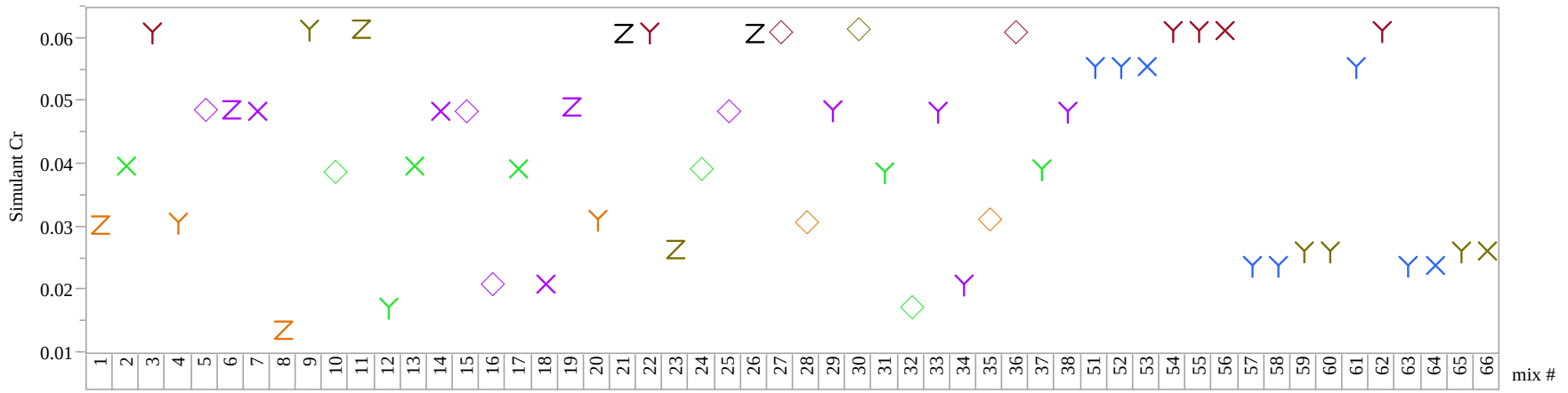
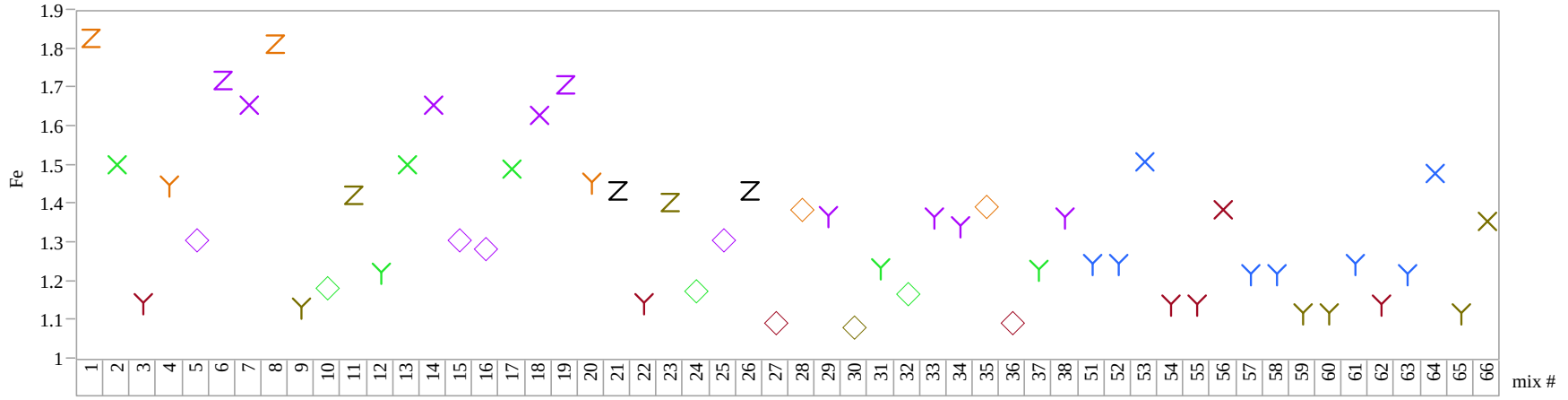


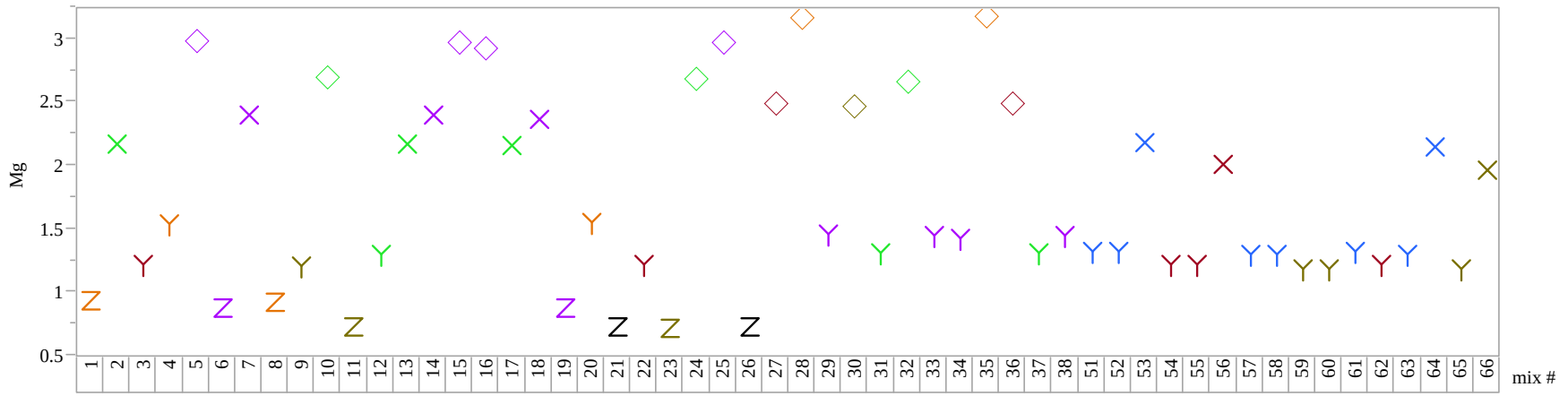
Variability Gauge

Variability Chart for Fe



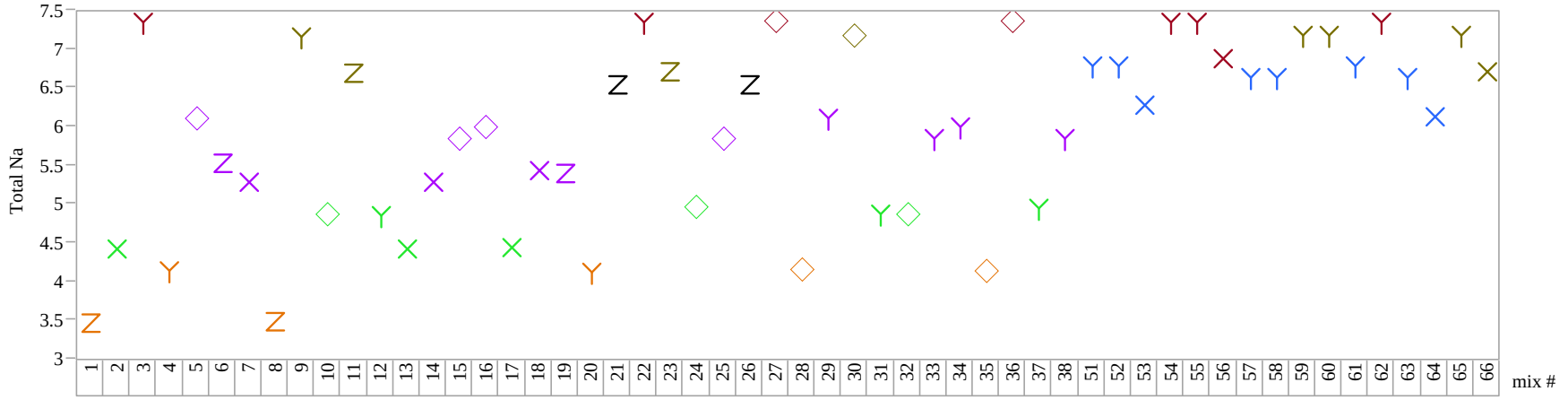
Variability Gauge

Variability Chart for Mg



Variability Gauge

Variability Chart for Total Na



Variability Gauge

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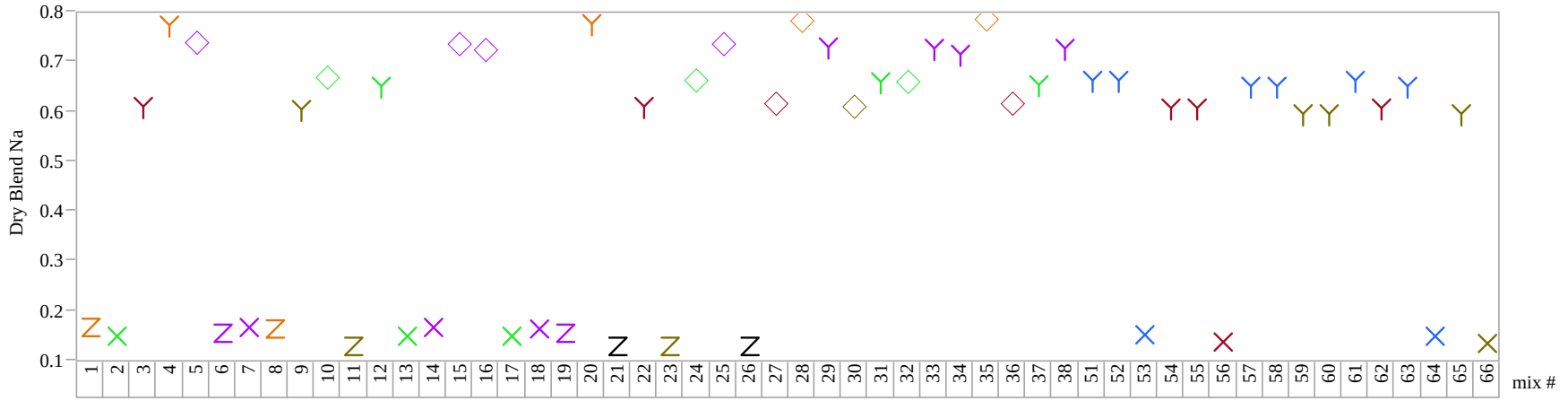

Variability Gauge

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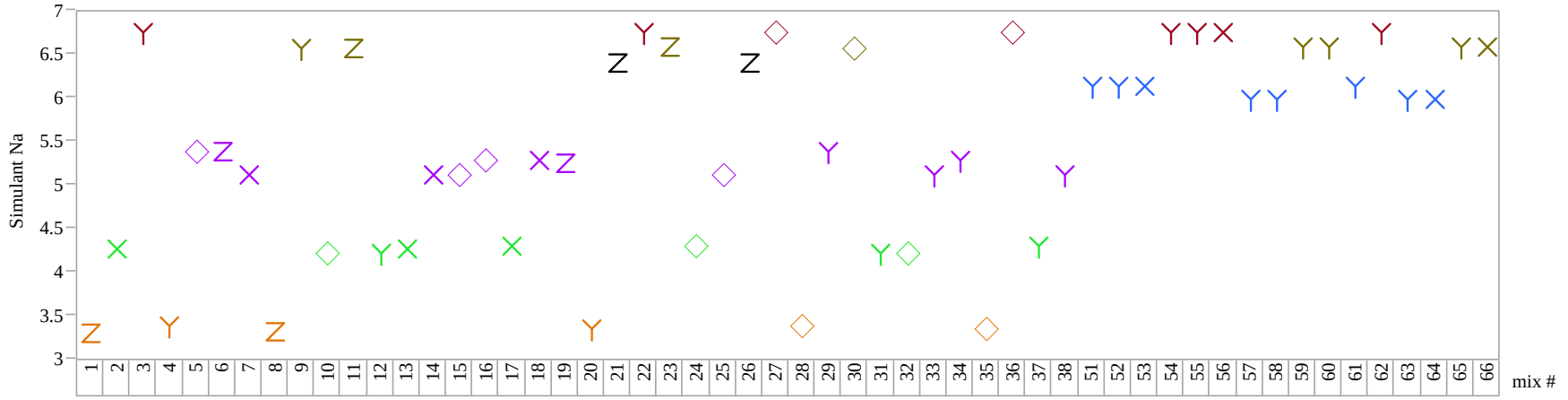
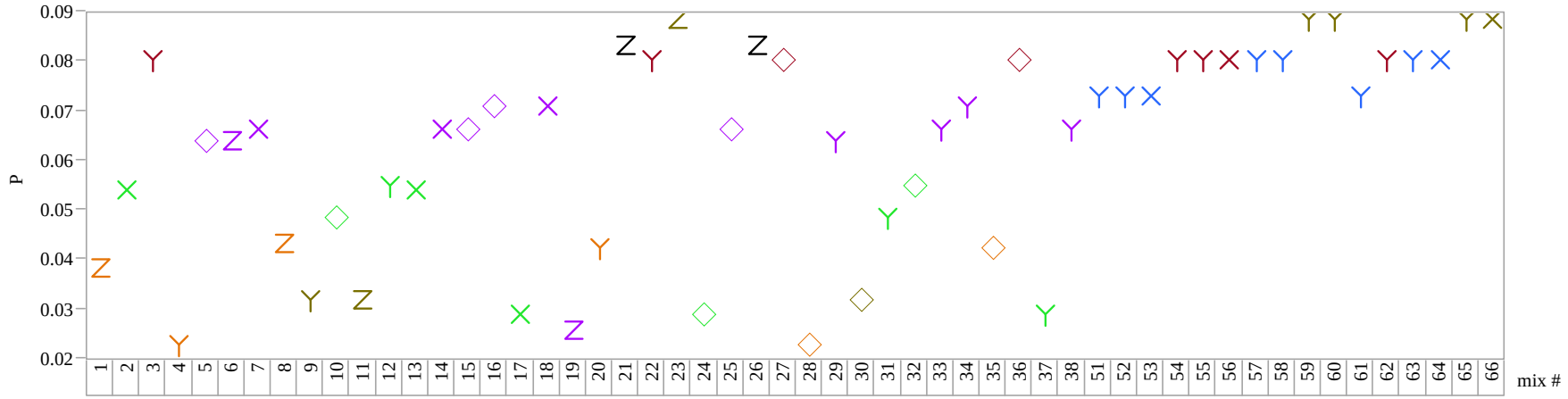


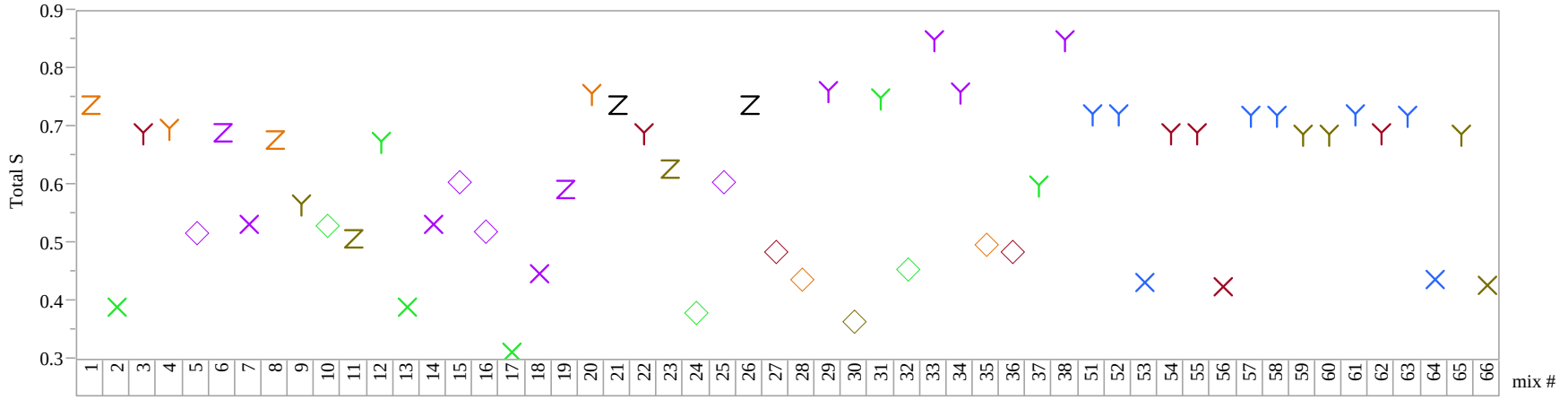
Variability Gauge

Variability Chart for P



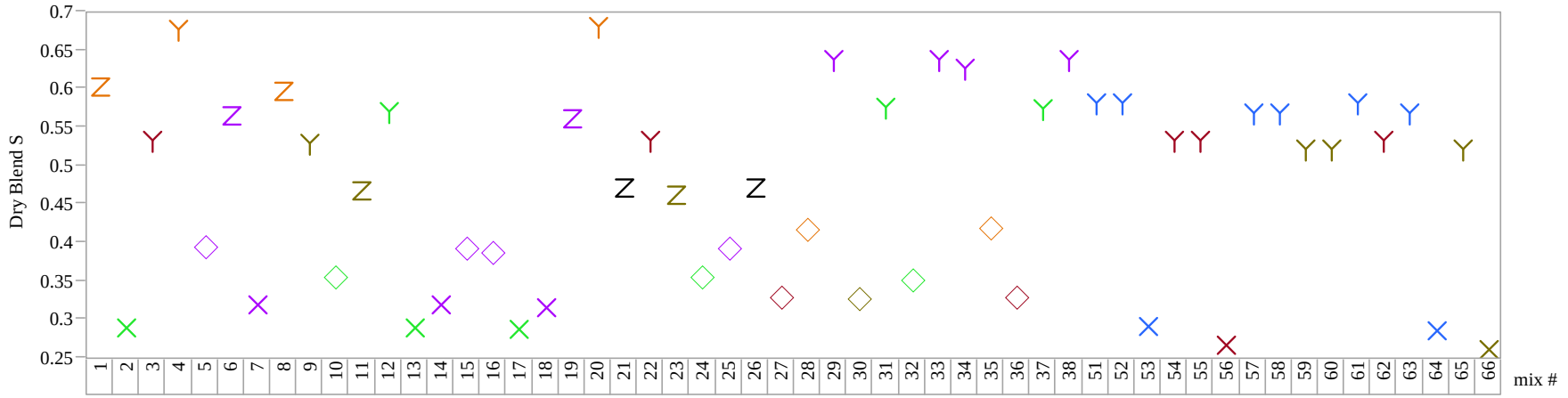
Variability Gauge

Variability Chart for Total S



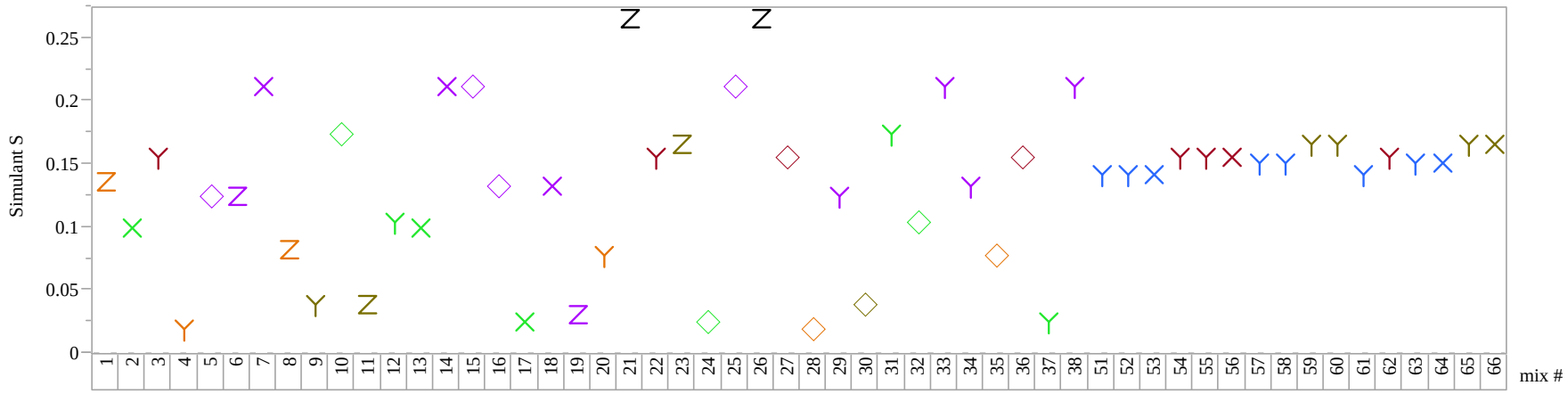
Variability Gauge

Variability Chart for Dry Blend S



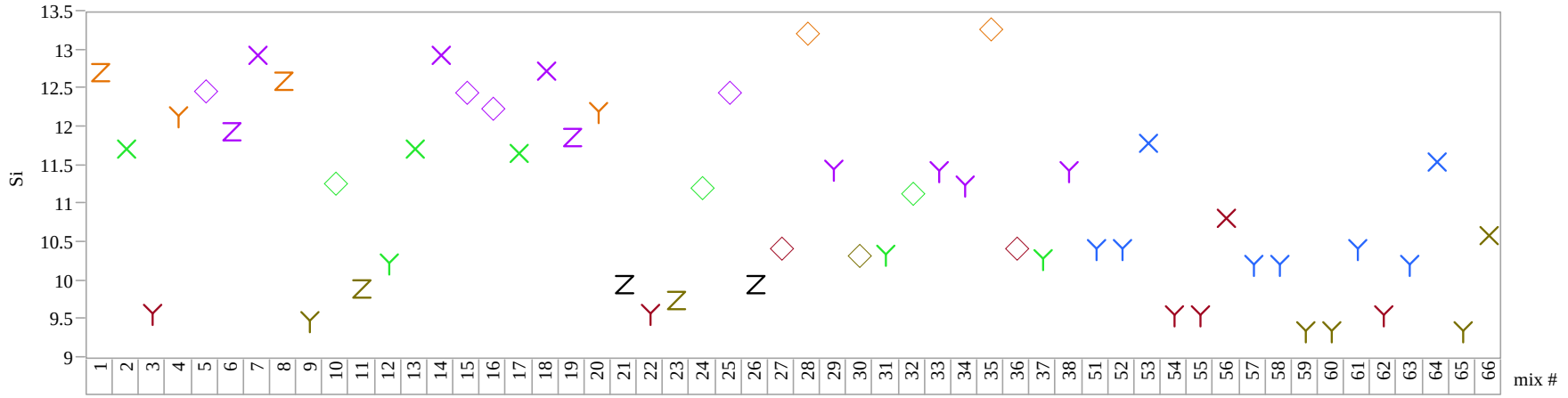
Variability Gauge

Variability Chart for Simulant S



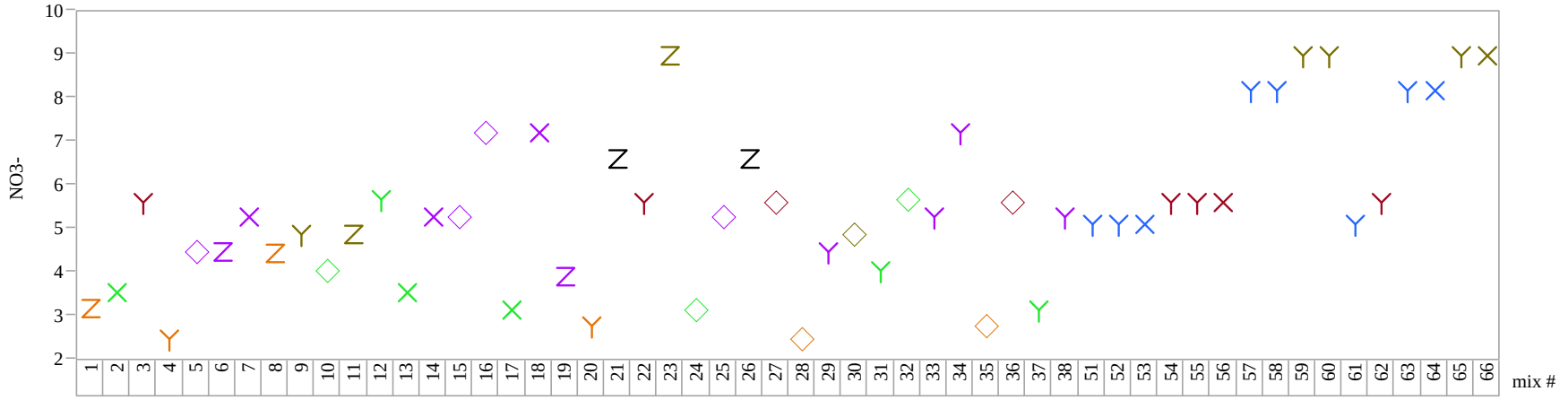
Variability Gauge

Variability Chart for Si



Variability Gauge

Variability Chart for NO3-



Variability Gauge

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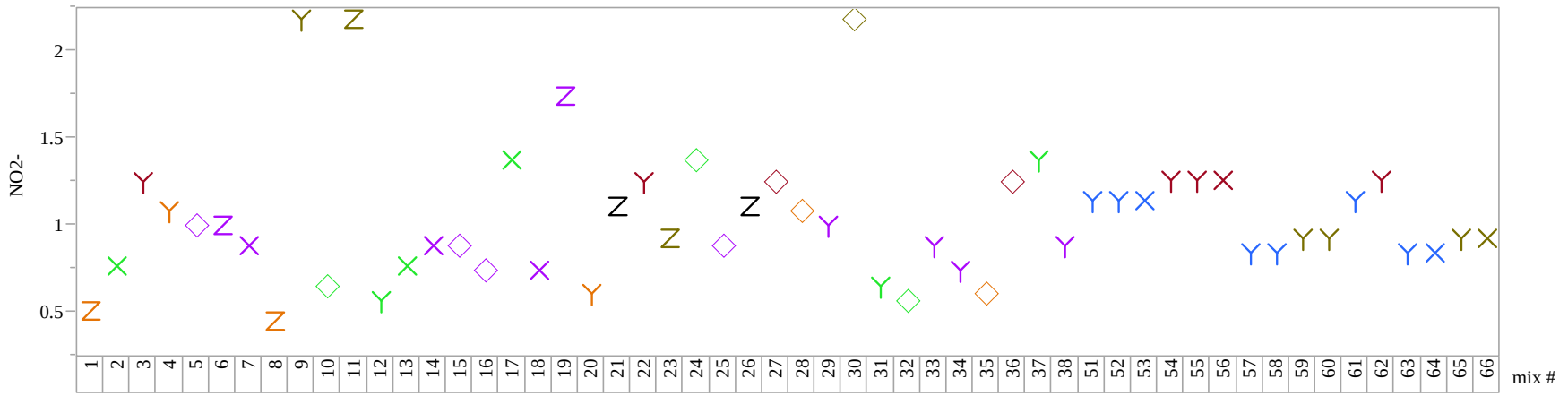
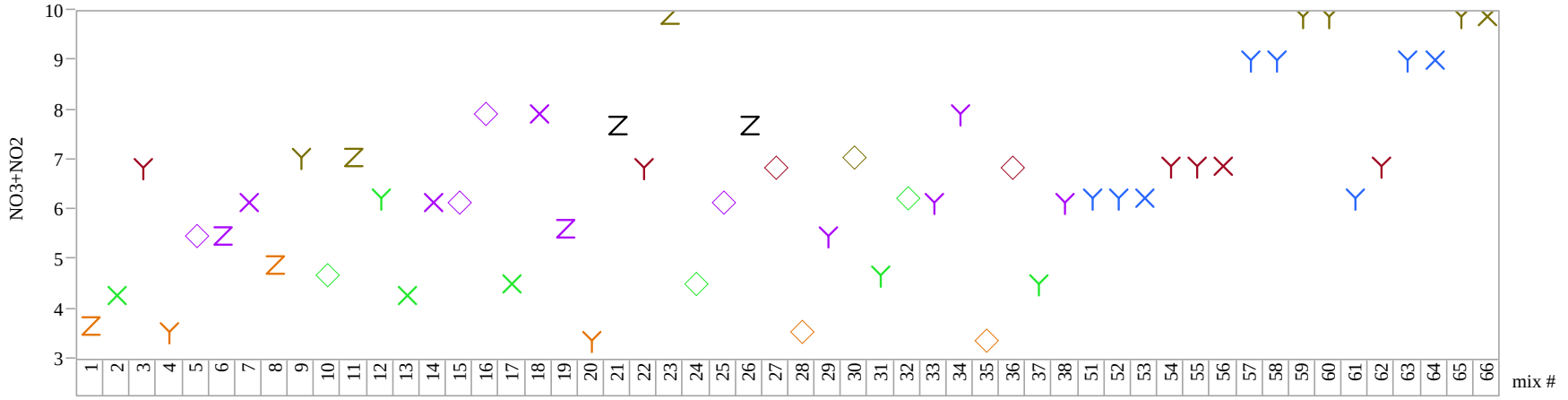


Variability Gauge

Variability Chart for NO3+NO2



Variability Gauge

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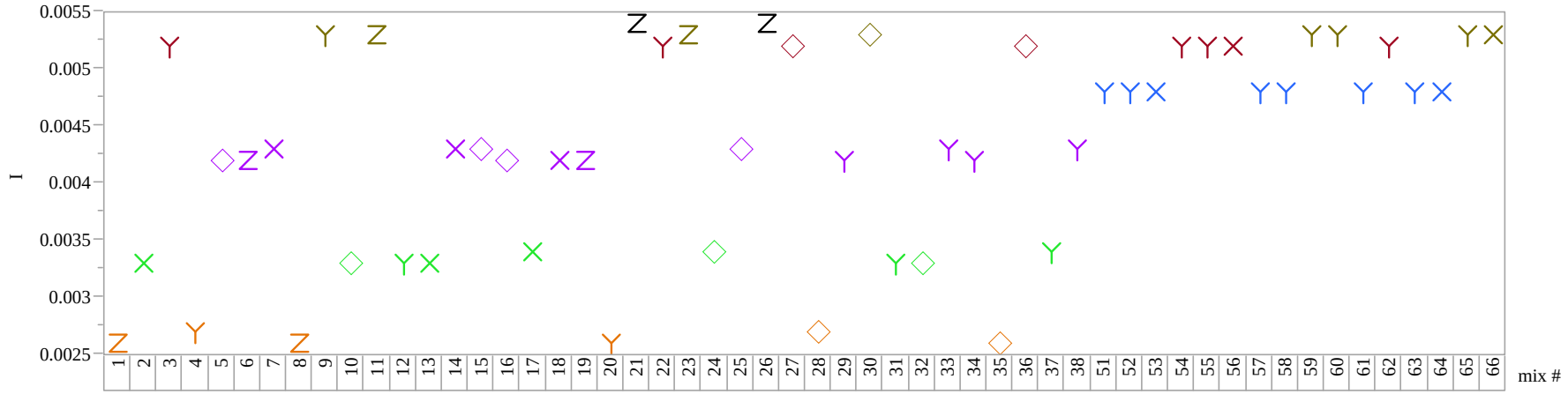

Variability Gauge

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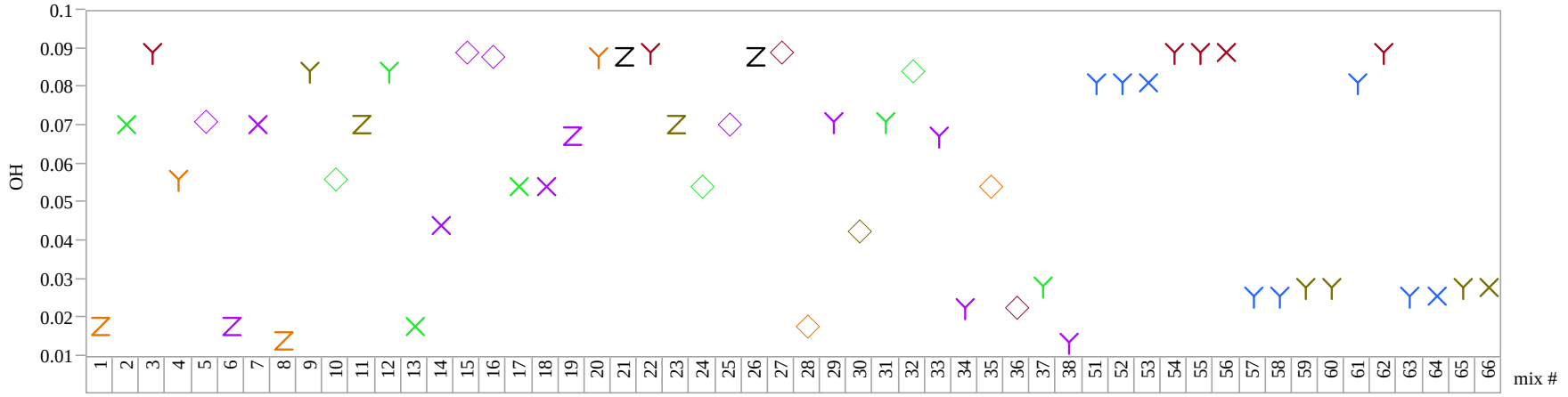


Variability Gauge

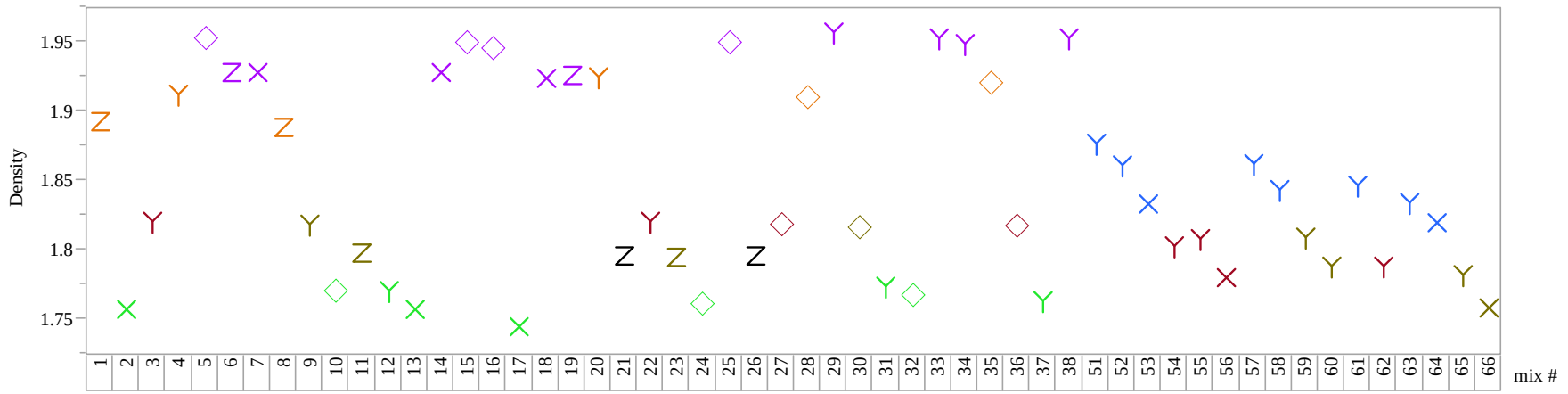
Variability Chart for Silica fume

Variability Gauge

Variability Chart for Xypex

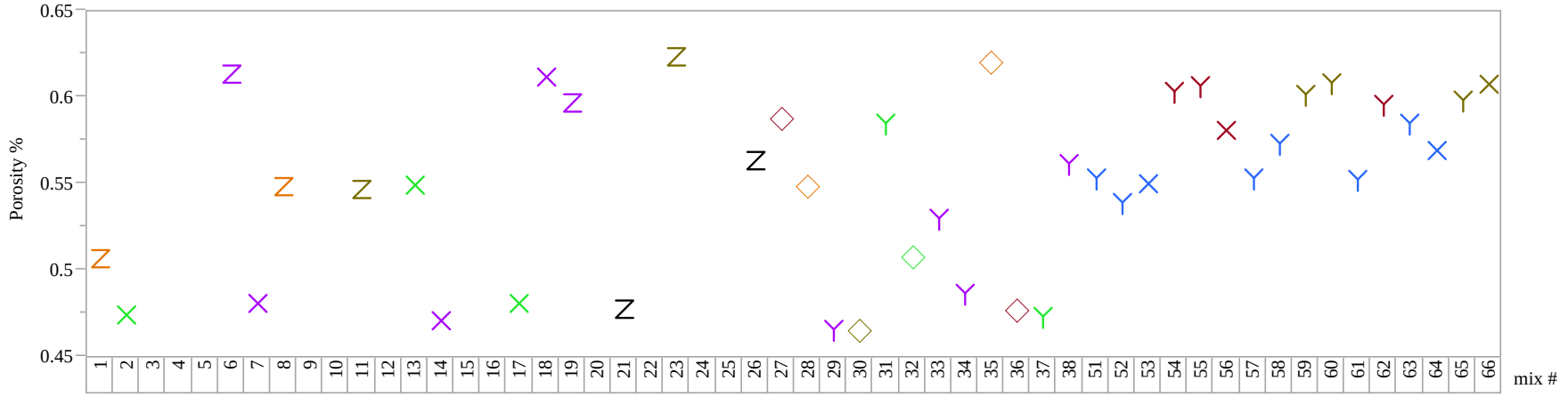
Variability Gauge

Variability Chart for Density



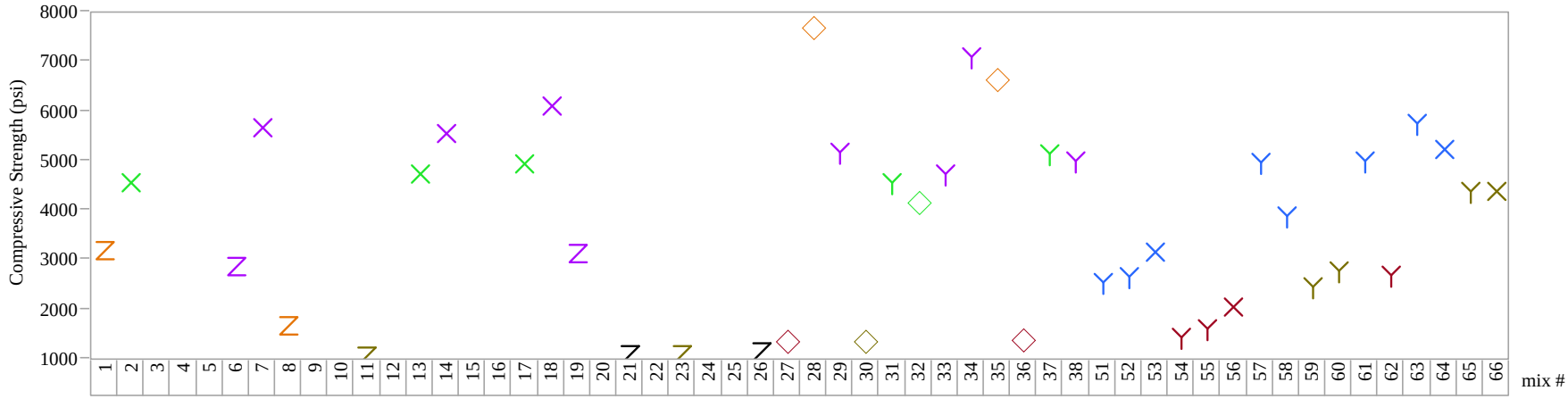
Variability Gauge

Variability Chart for Porosity %



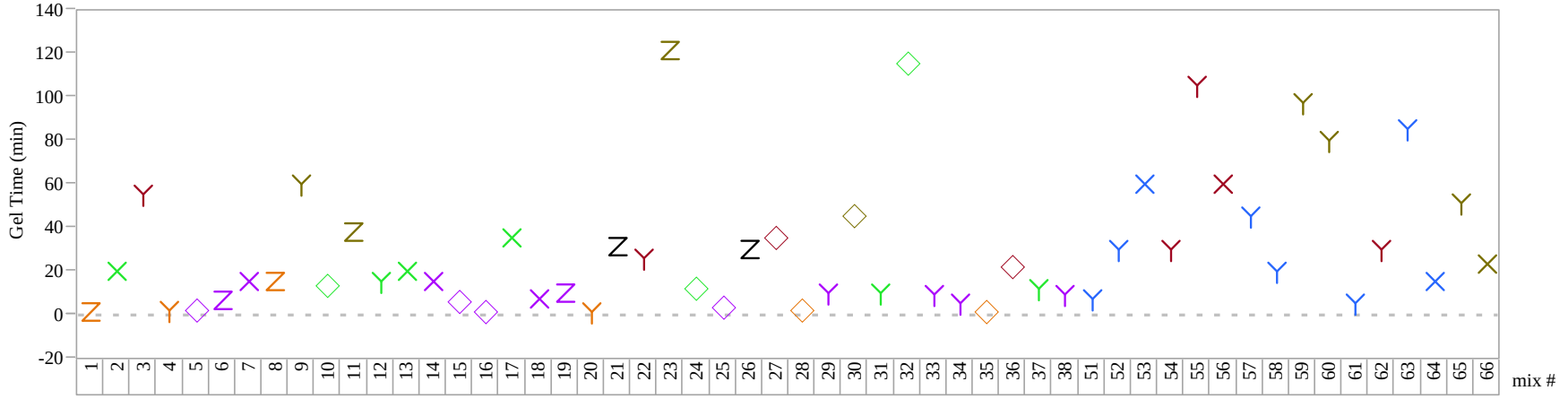
Variability Gauge

Variability Chart for Compressive Strength (psi)



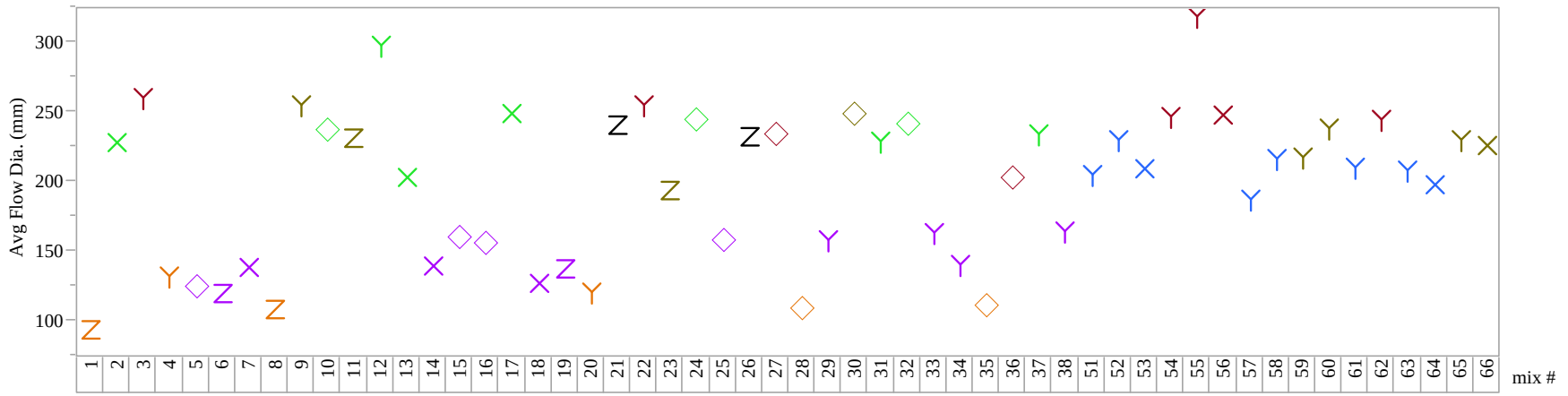
Variability Gauge

Variability Chart for Gel Time (min)



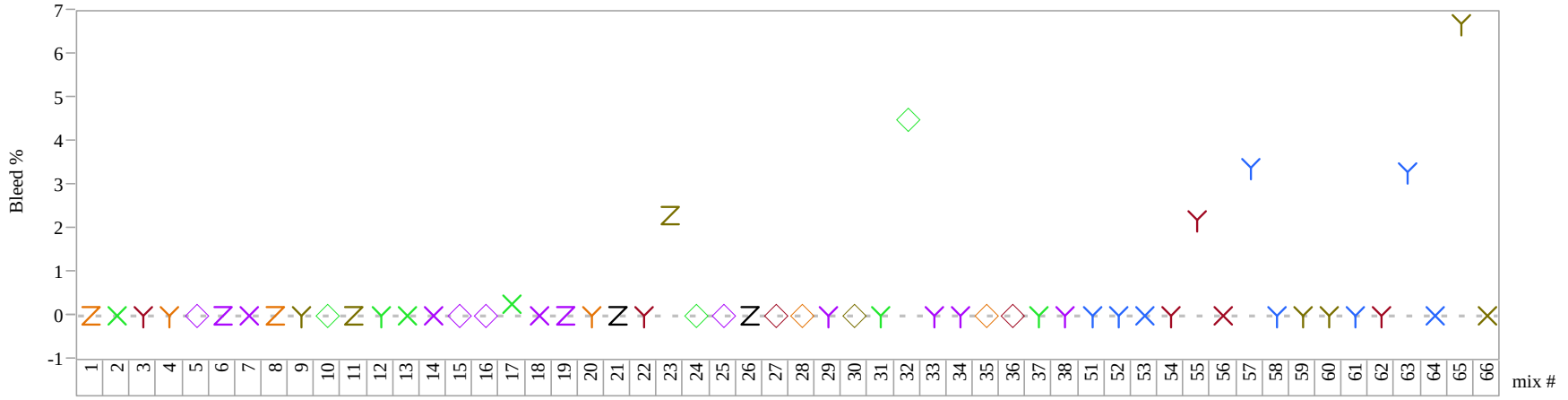
Variability Gauge

Variability Chart for Avg Flow Dia. (mm)



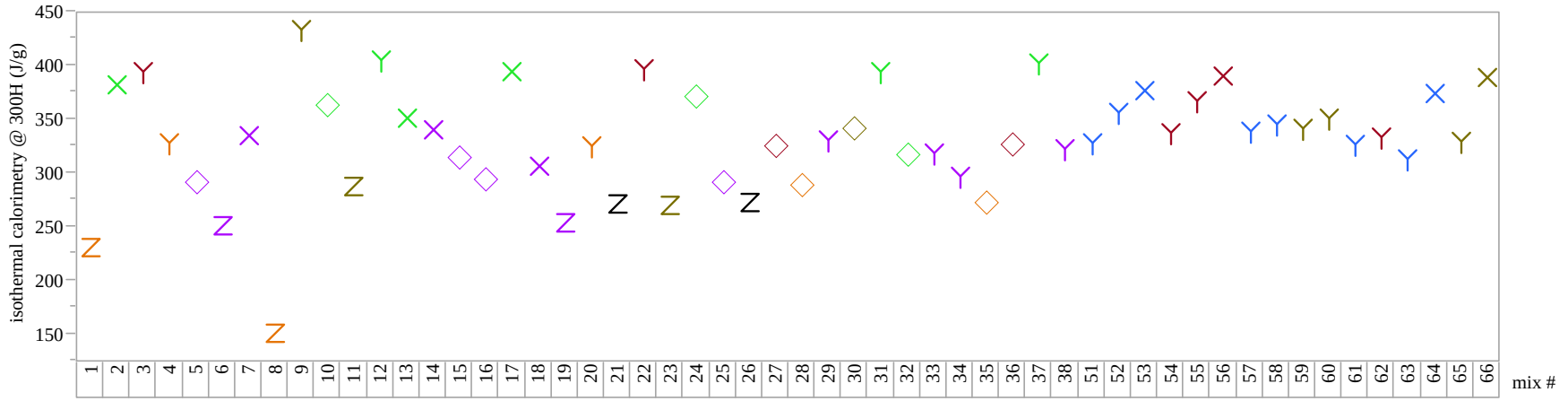
Variability Gauge

Variability Chart for Bleed %



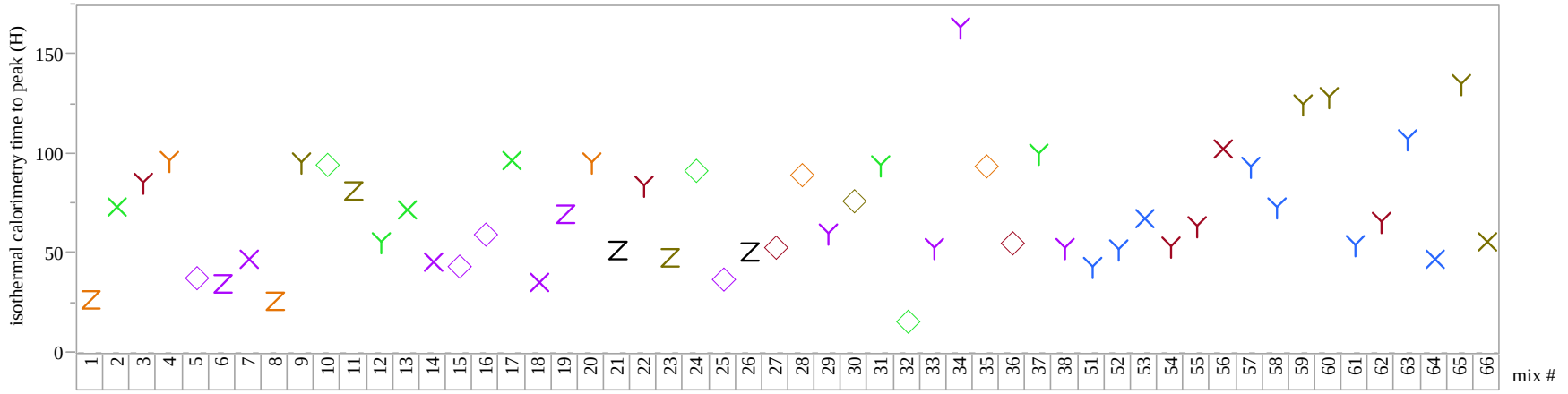
Variability Gauge

Variability Chart for isothermal calorimetry @ 300H (J/g)



Variability Gauge

Variability Chart for isothermal calorimetry time to peak (H)



Variability Gauge

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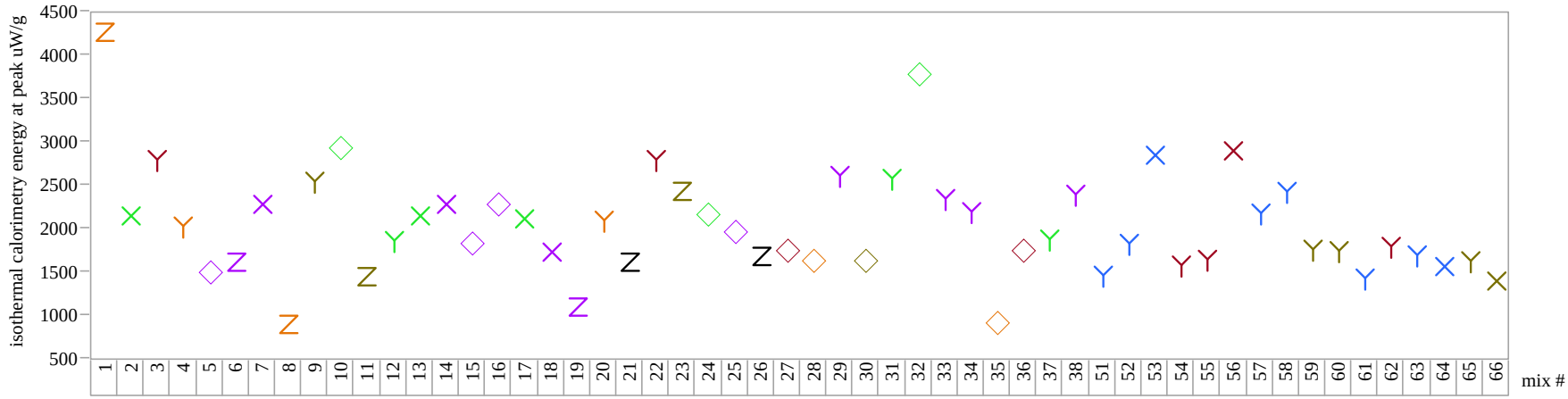
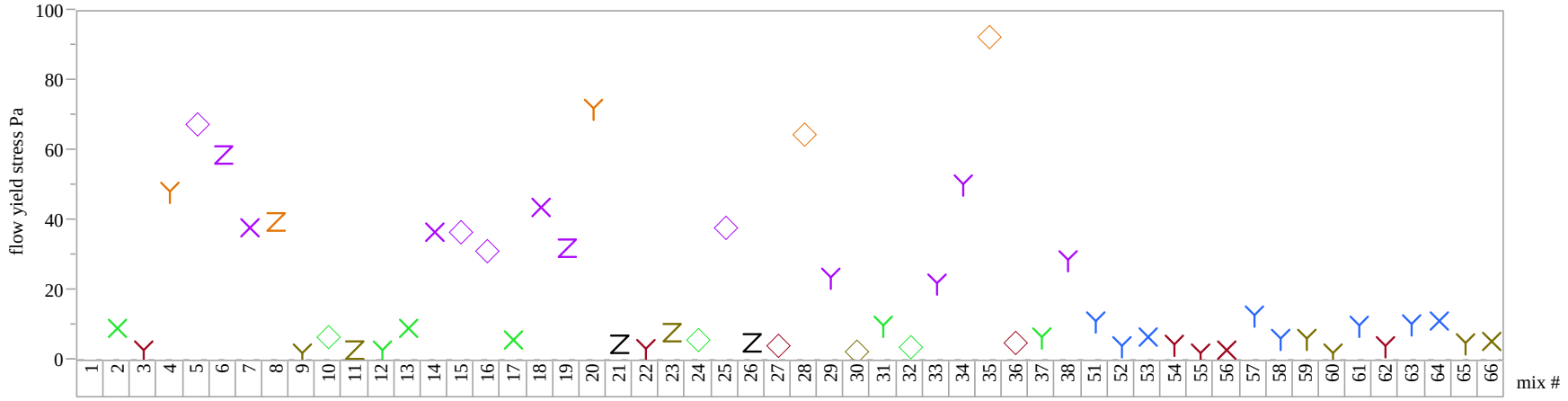


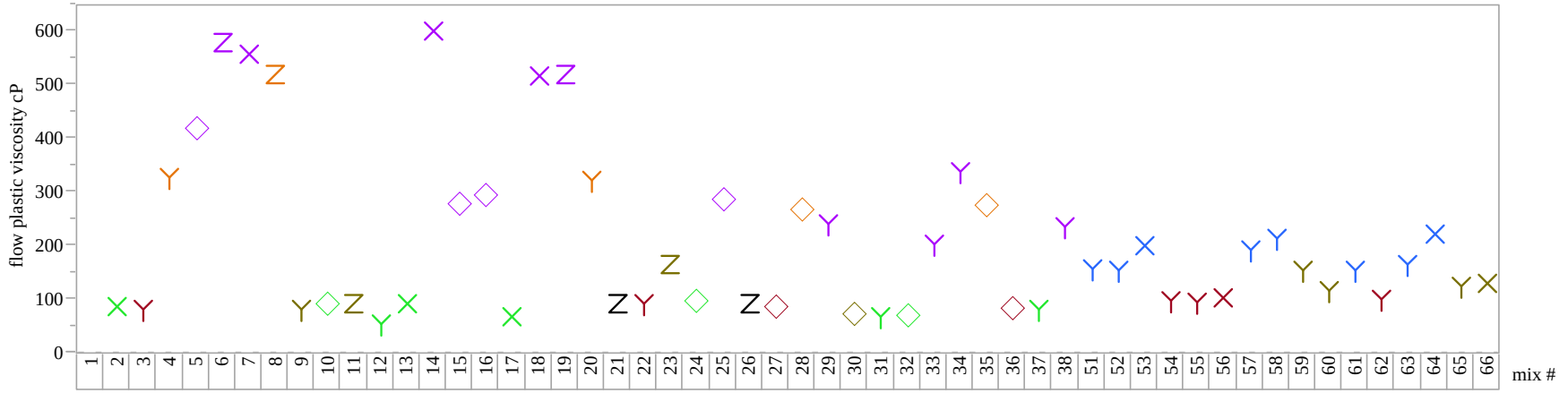
Variability Gauge

Variability Chart for flow yield stress Pa



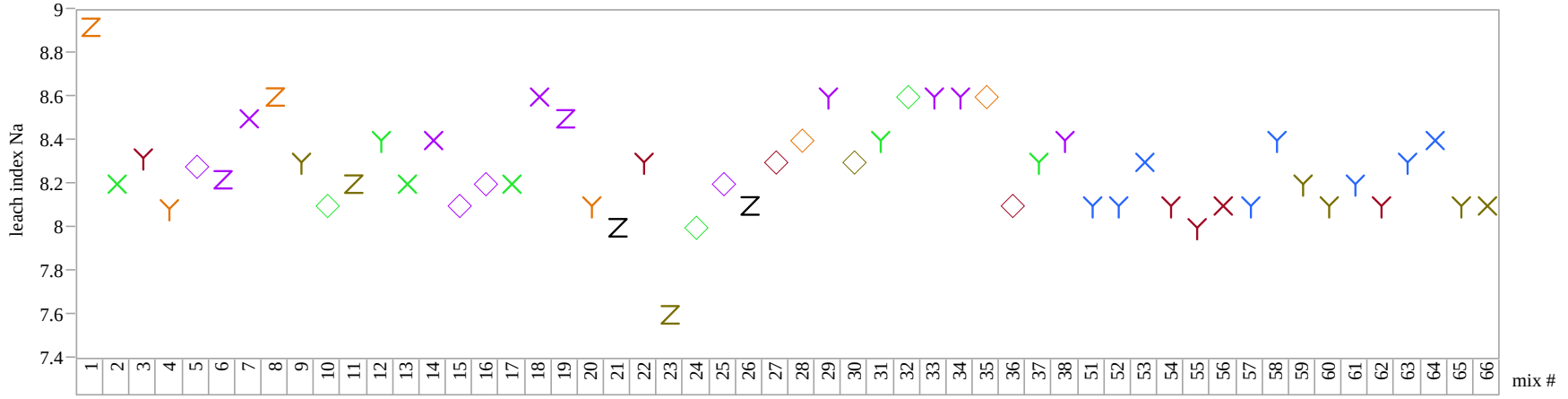
Variability Gauge

Variability Chart for flow plastic viscosity cP



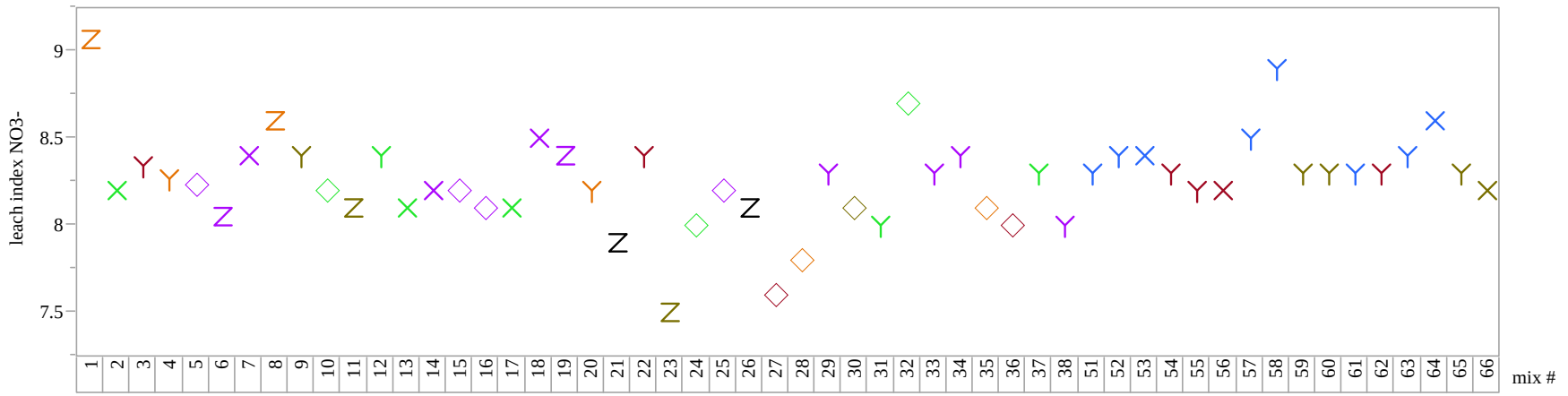
Variability Gauge

Variability Chart for leach index Na



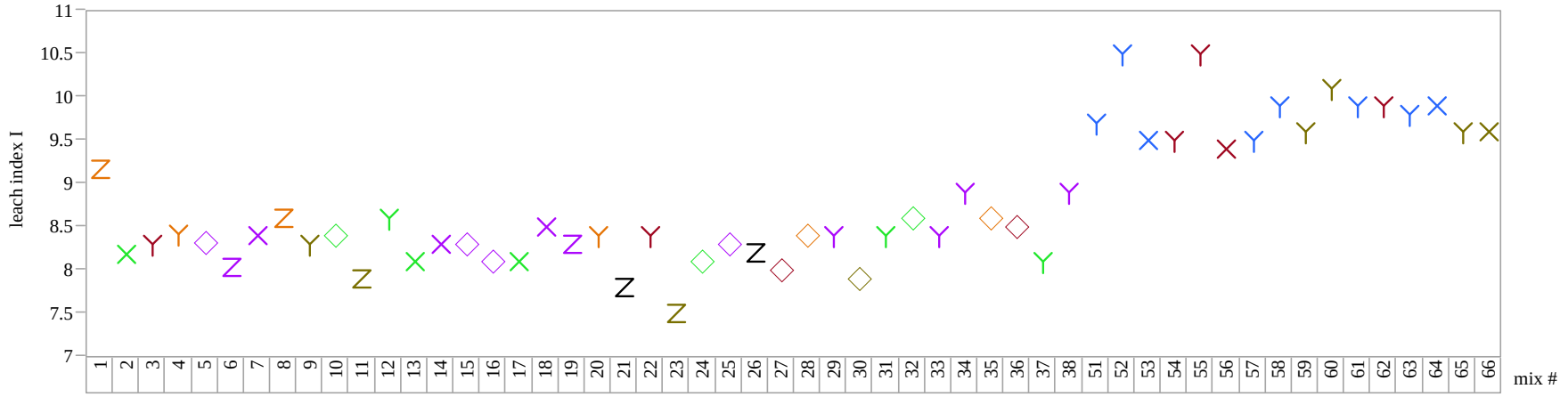
Variability Gauge

Variability Chart for leach index NO3-



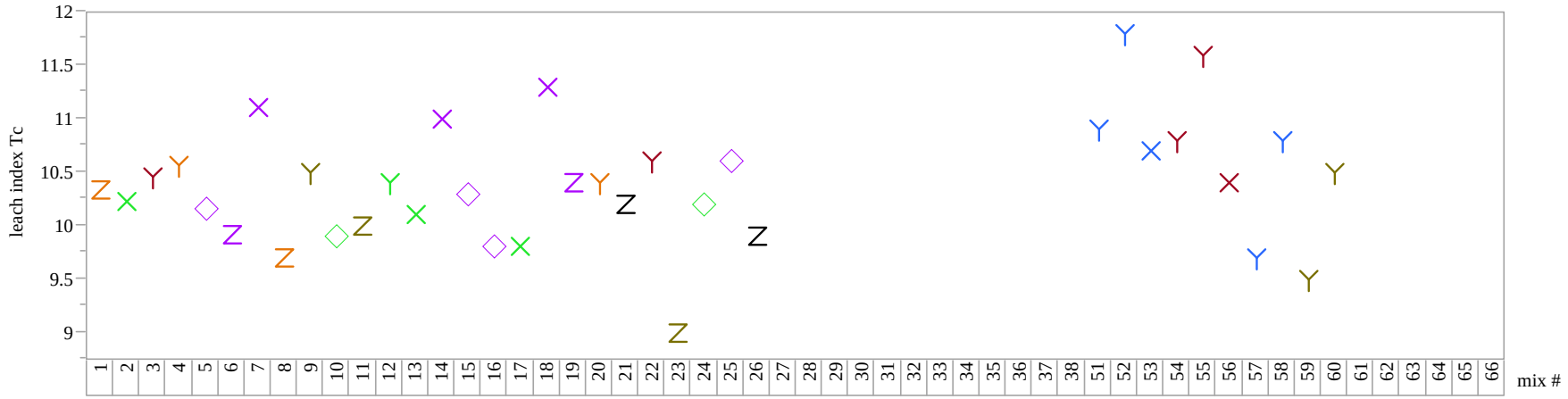
Variability Gauge

Variability Chart for leach index I



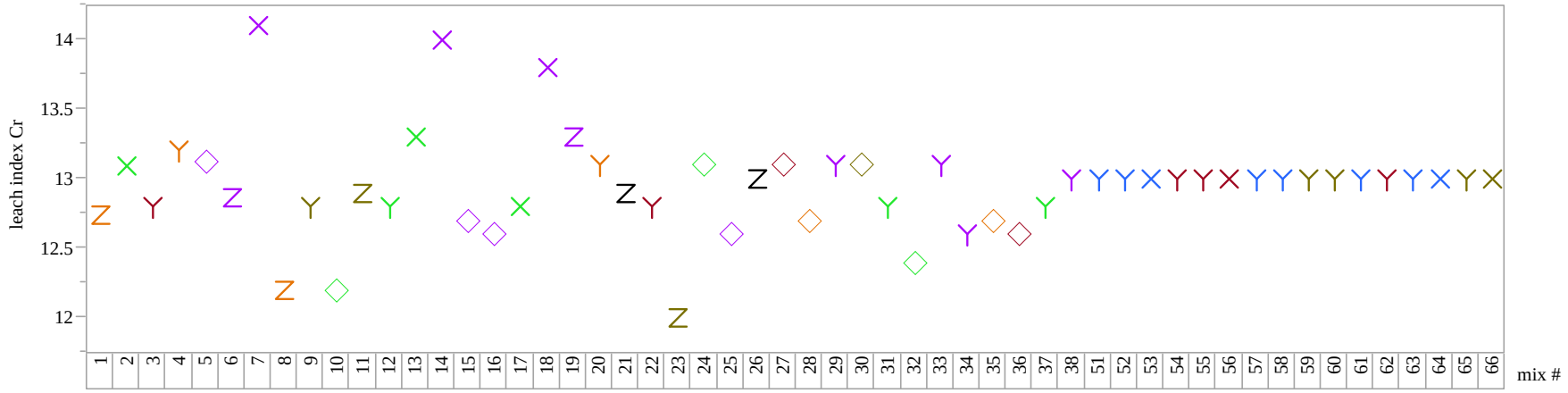
Variability Gauge

Variability Chart for leach index Tc



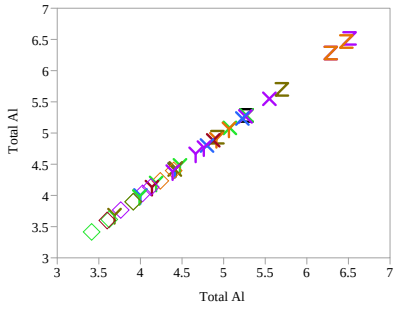
Variability Gauge

Variability Chart for leach index Cr

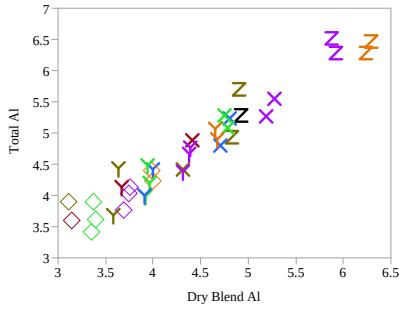


Fit Group

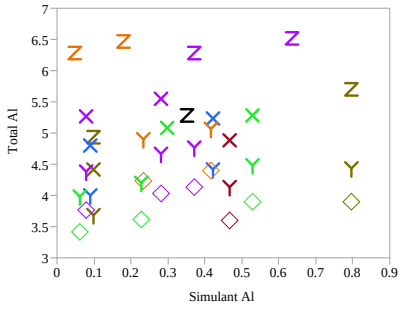
Bivariate Fit of Total Al By Total Al



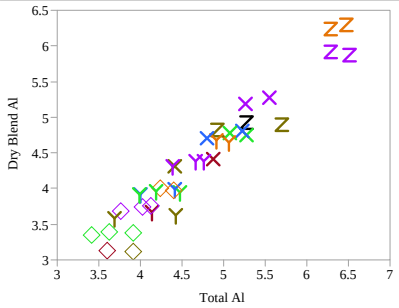
Bivariate Fit of Total Al By Dry Blend Al



Bivariate Fit of Total Al By Simulant Al



Bivariate Fit of Dry Blend Al By Total Al



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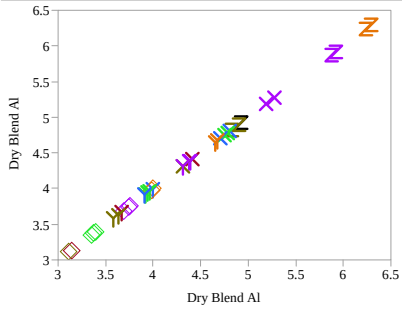
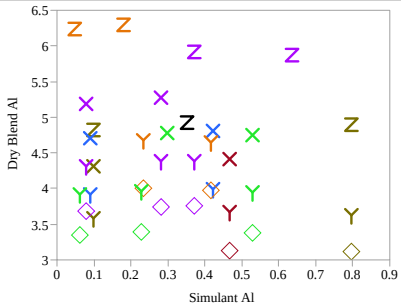
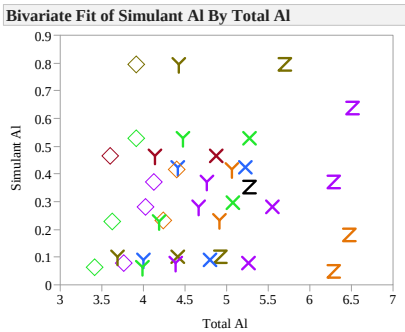


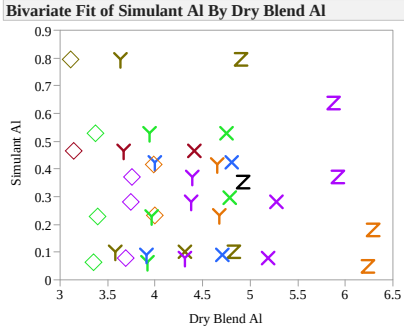
Bivariate Fit of Dry Blend Al By Simulant Al



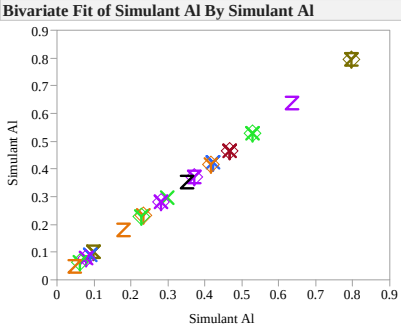
Bivariate Fit of Simulant Al By Total Al



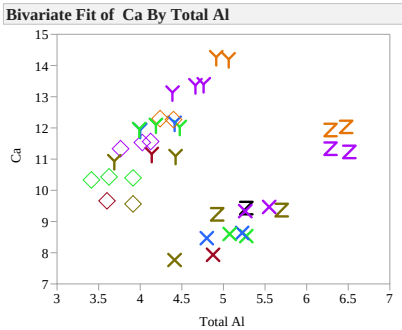
Bivariate Fit of Simulant Al By Dry Blend Al



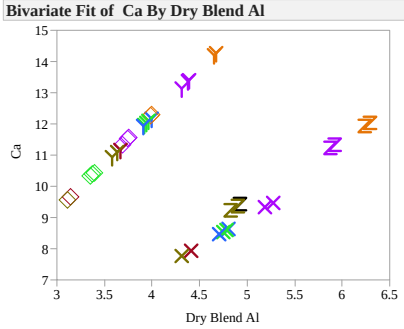
Bivariate Fit of Simulant Al By Simulant Al



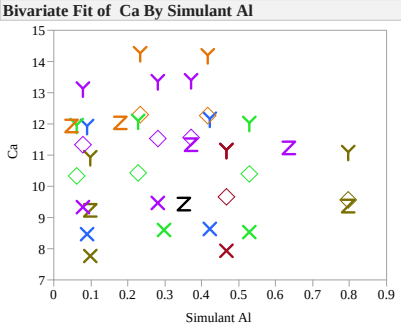
Bivariate Fit of Ca By Total Al



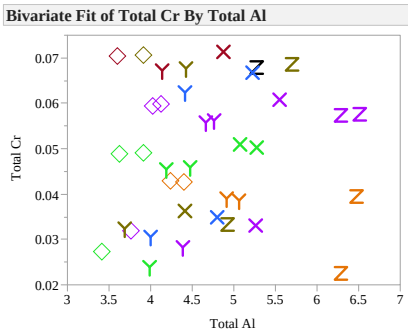
Bivariate Fit of Ca By Dry Blend Al



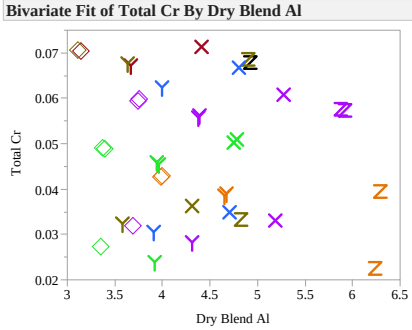
Bivariate Fit of Ca By Simulant Al



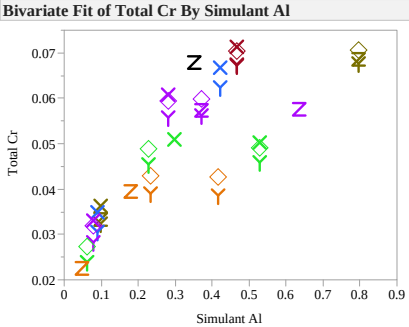
Bivariate Fit of Total Cr By Total Al



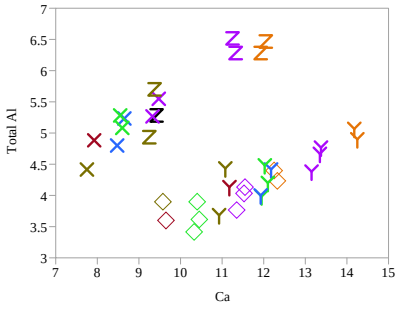
Bivariate Fit of Total Cr By Dry Blend Al



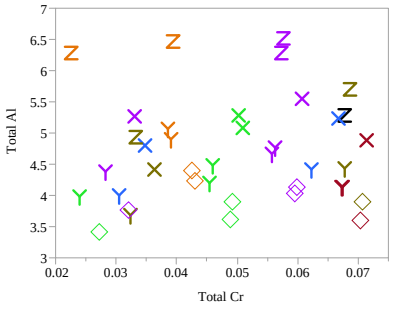
Bivariate Fit of Total Cr By Simulant Al



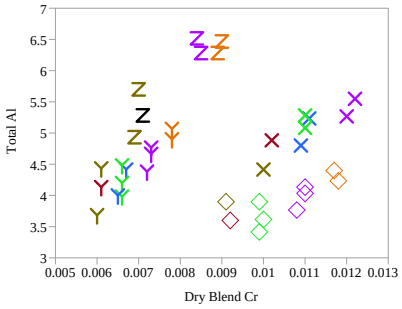
Bivariate Fit of Total Al By Ca



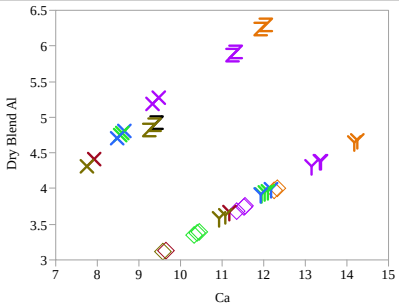
Bivariate Fit of Total Al By Total Cr



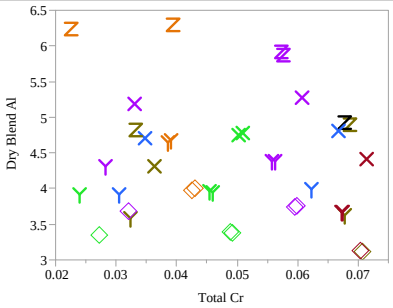
Bivariate Fit of Total Al By Dry Blend Cr



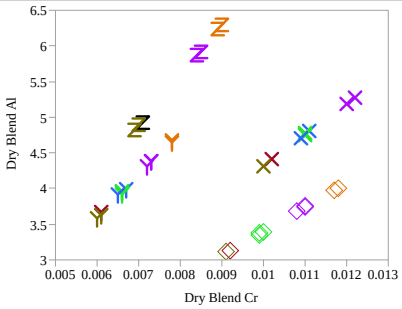
Bivariate Fit of Dry Blend Al By Ca



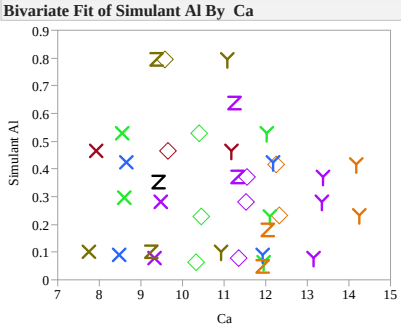
Bivariate Fit of Dry Blend Al By Total Cr



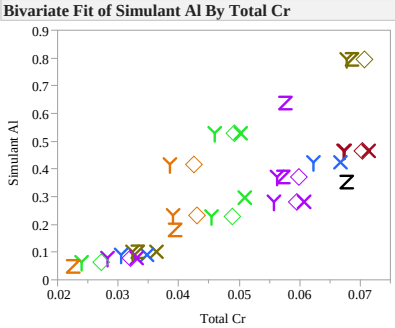
Bivariate Fit of Dry Blend Al By Dry Blend Cr



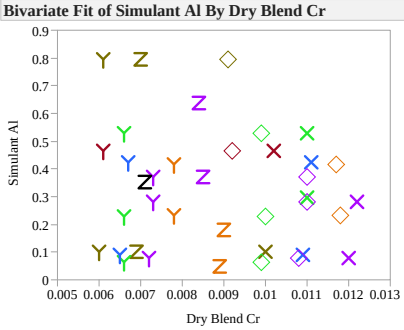
Bivariate Fit of Simulant Al By Ca



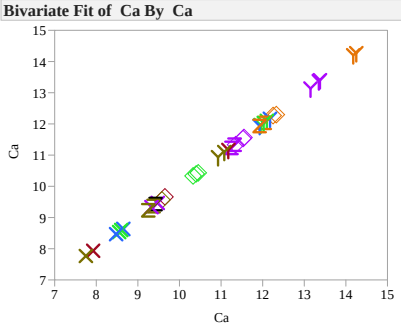
Bivariate Fit of Simulant Al By Total Cr



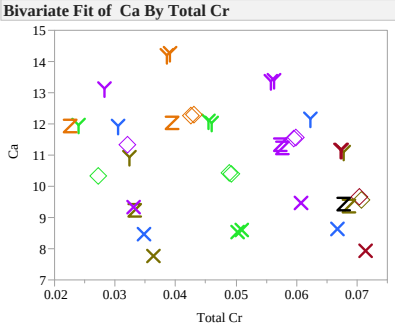
Bivariate Fit of Simulant Al By Dry Blend Cr



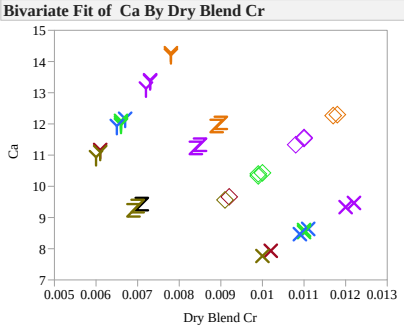
Bivariate Fit of Ca By Ca



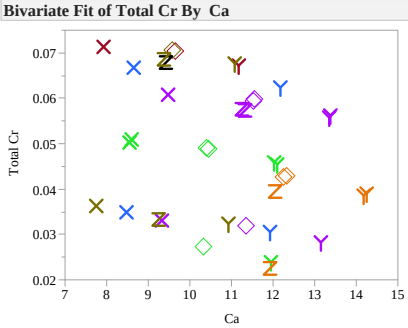
Bivariate Fit of Ca By Total Cr



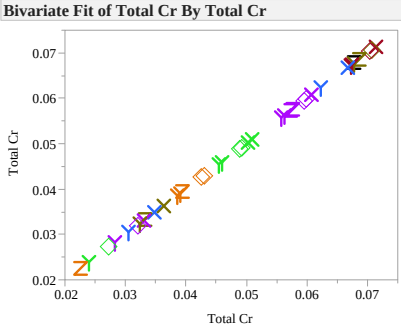
Bivariate Fit of Ca By Dry Blend Cr



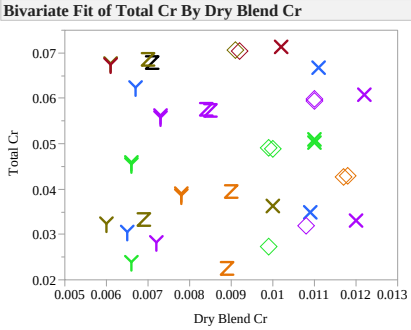
Bivariate Fit of Total Cr By Ca

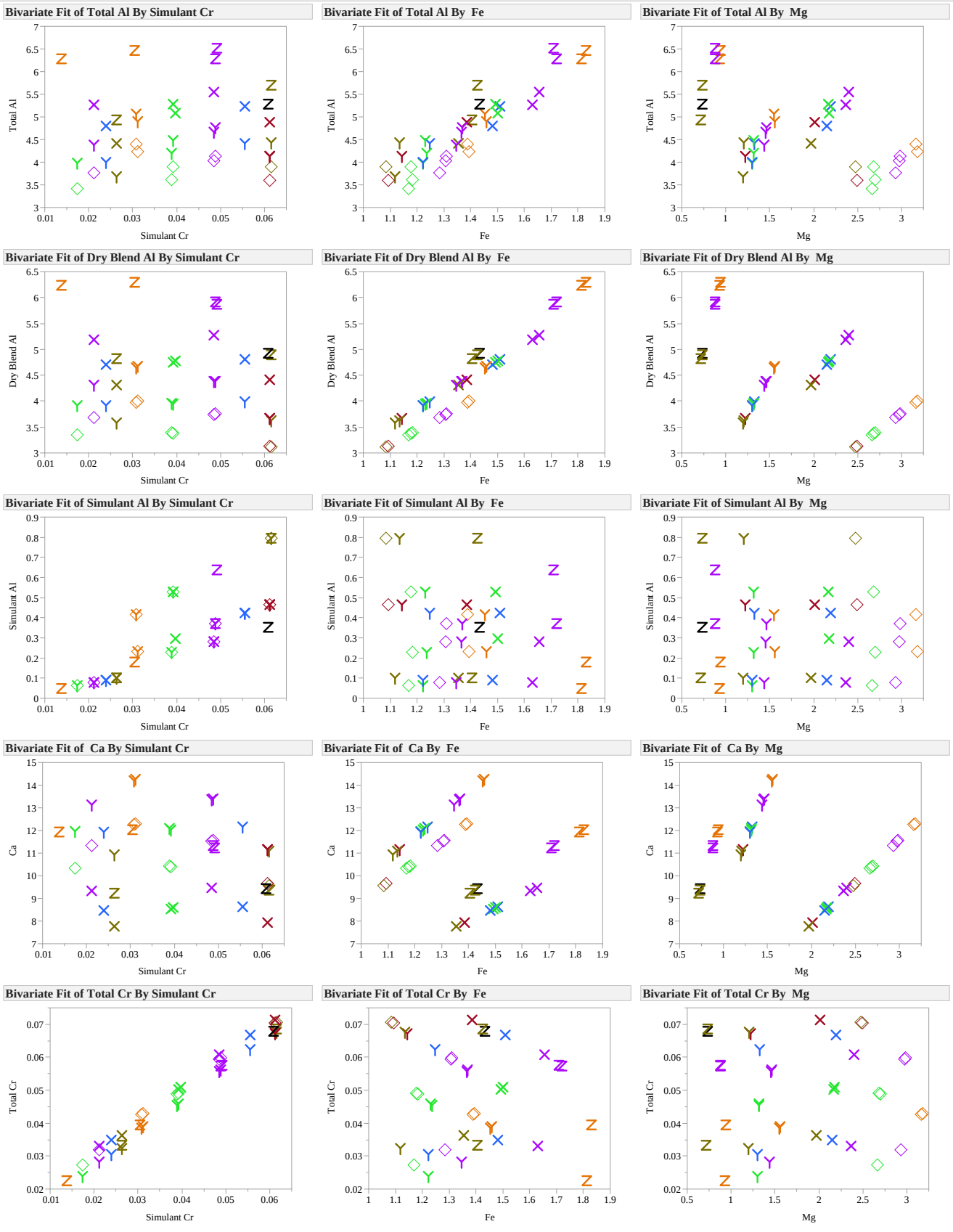


Bivariate Fit of Total Cr By Total Cr

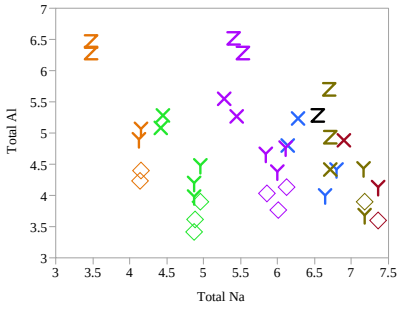


Bivariate Fit of Total Cr By Dry Blend Cr

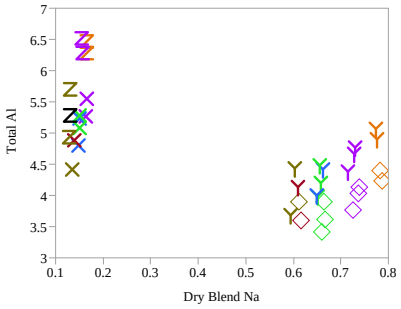



Bivariate Fit of Total Al By Simulant Cr
Total Al
Simulant Cr
Bivariate Fit of Total Al By Fe
Total Al
Fe
Bivariate Fit of Total Al By Mg
Total Al
Mg
Bivariate Fit of Dry Blend Al By Simulant Cr
Dry Blend Al
Simulant Cr
Bivariate Fit of Dry Blend Al By Fe
Dry Blend Al
Fe
Bivariate Fit of Dry Blend Al By Mg
Dry Blend Al
Mg
Bivariate Fit of Simulant Al By Simulant Cr
Simulant Al
Simulant Cr
Bivariate Fit of Simulant Al By Fe
Simulant Al
Fe
Bivariate Fit of Simulant Al By Mg
Simulant Al
Mg
Bivariate Fit of Ca By Simulant Cr
Ca
Simulant Cr
Bivariate Fit of Ca By Fe
Ca
Fe
Bivariate Fit of Ca By Mg
Ca
Mg
Bivariate Fit of Total Cr By Simulant Cr
Total Cr
Simulant Cr
Bivariate Fit of Total Cr By Fe
Total Cr
Fe
Bivariate Fit of Total Cr By Mg
Total Cr
Mg

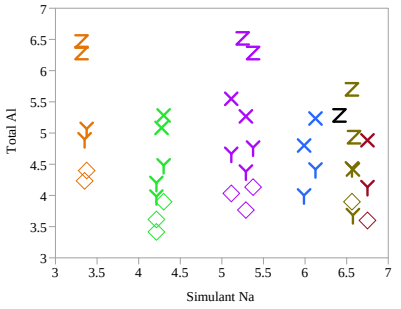
Bivariate Fit of Total Al By Total Na



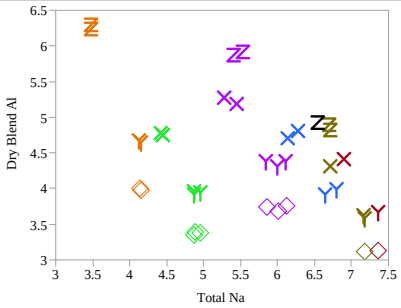
Bivariate Fit of Total Al By Dry Blend Na



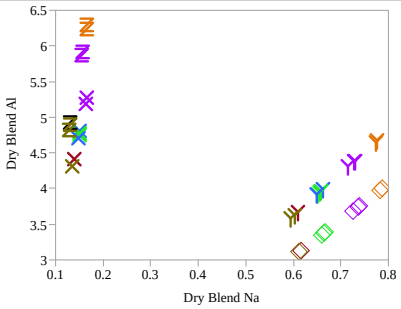
Bivariate Fit of Total Al By Simulant Na



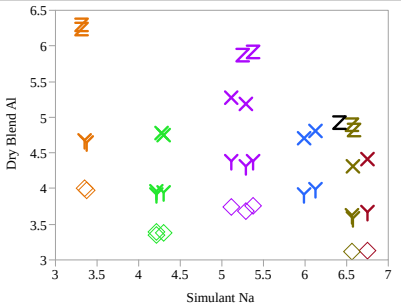
Bivariate Fit of Dry Blend Al By Total Na



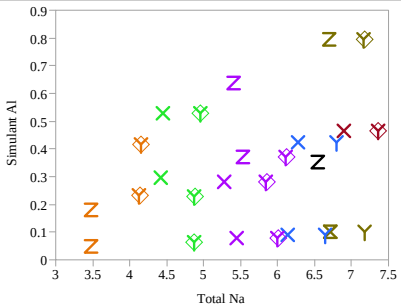
Bivariate Fit of Dry Blend Al By Dry Blend Na



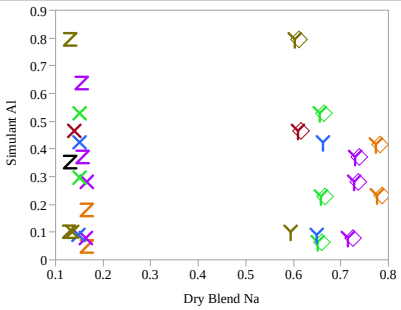
Bivariate Fit of Dry Blend Al By Simulant Na



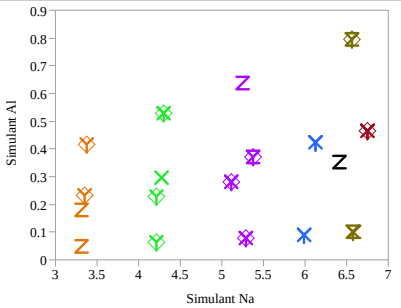
Bivariate Fit of Simulant Al By Total Na



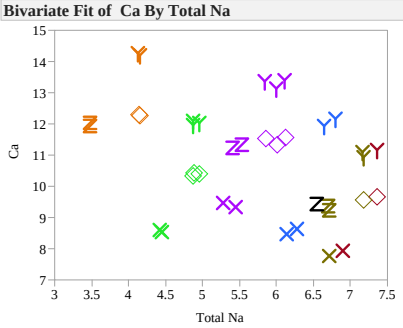
Bivariate Fit of Simulant Al By Dry Blend Na



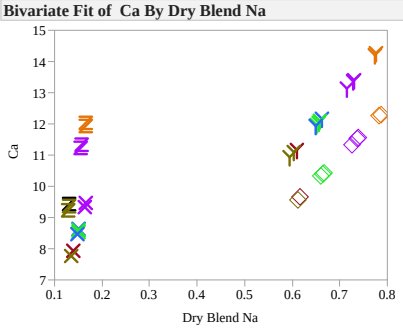
Bivariate Fit of Simulant Al By Simulant Na



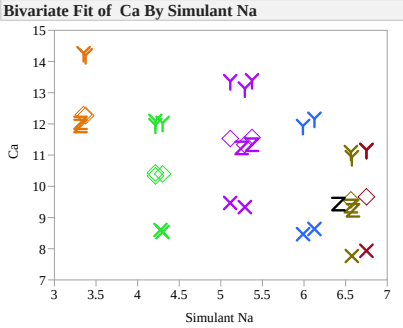
Bivariate Fit of Ca By Total Na



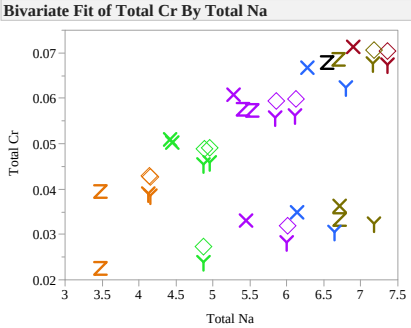
Bivariate Fit of Ca By Dry Blend Na



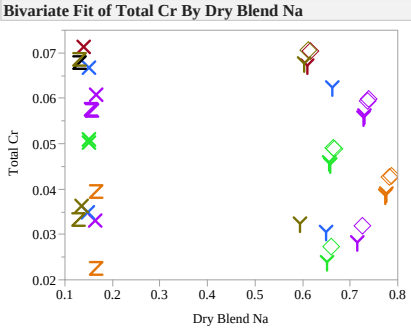
Bivariate Fit of Ca By Simulant Na



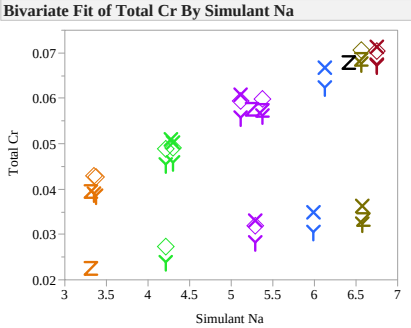
Bivariate Fit of Total Cr By Total Na



Bivariate Fit of Total Cr By Dry Blend Na



Bivariate Fit of Total Cr By Simulant Na




Bivariate Fit of Total Al By P
Total Al
P
Bivariate Fit of Total Al By Total S
Total Al
Total S
Bivariate Fit of Total Al By Dry Blend S
Total Al
Dry Blend S
Bivariate Fit of Dry Blend Al By P
Dry Blend Al
P
Bivariate Fit of Dry Blend Al By Total S
Dry Blend Al
Total S
Bivariate Fit of Dry Blend Al By Dry Blend S
Dry Blend Al
Dry Blend S
Bivariate Fit of Simulant Al By P
Simulant Al
P
Bivariate Fit of Simulant Al By Total S
Simulant Al
Total S
Bivariate Fit of Simulant Al By Dry Blend S
Simulant Al
Dry Blend S
Bivariate Fit of Ca By P
Ca
P
Bivariate Fit of Ca By Total S
Ca
Total S
Bivariate Fit of Ca By Dry Blend S
Ca
Dry Blend S
Bivariate Fit of Total Cr By P
Total Cr
P
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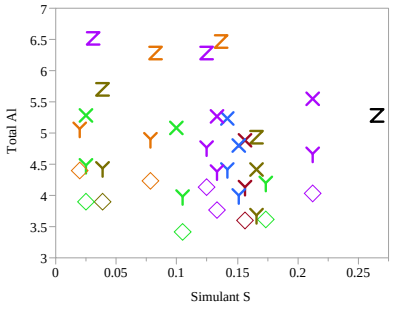
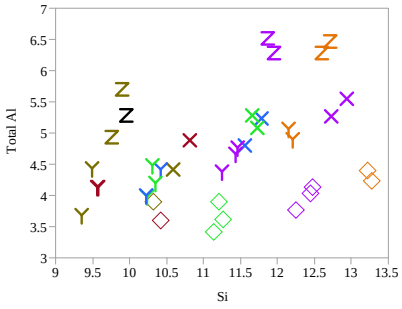
Total Cr
Total S
Bivariate Fit of Total Cr By Dry Blend S
Total Cr
Dry Blend S

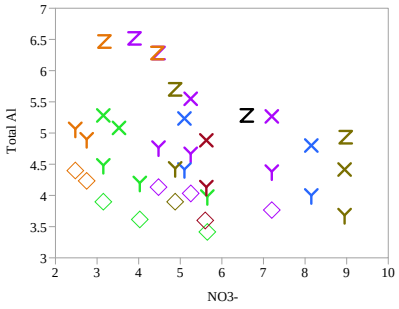
Bivariate Fit of Total Al By Simulant S



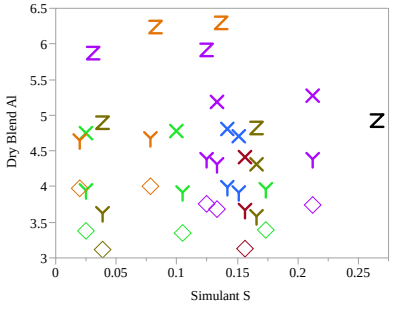
Bivariate Fit of Total Al By Si



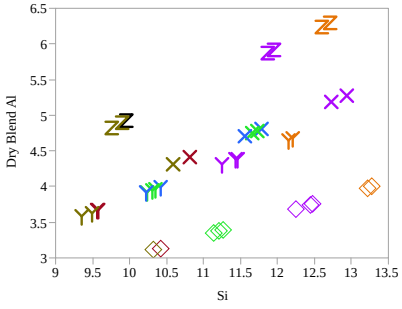
Bivariate Fit of Total Al By NO3-



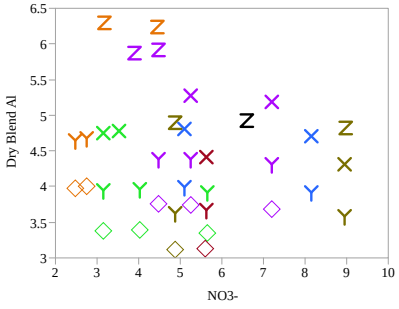
Bivariate Fit of Dry Blend Al By Simulant S



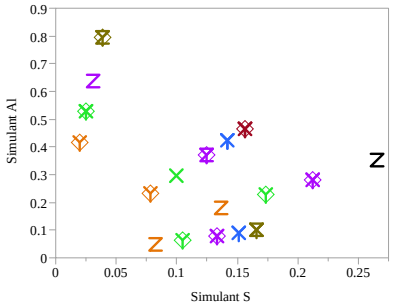
Bivariate Fit of Dry Blend Al By Si



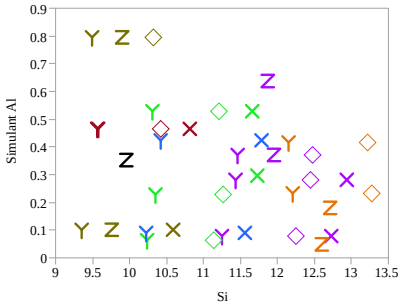
Bivariate Fit of Dry Blend Al By NO3-



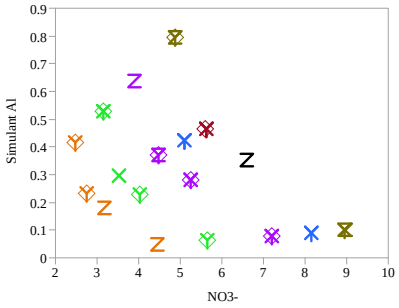
Bivariate Fit of Simulant Al By Simulant S



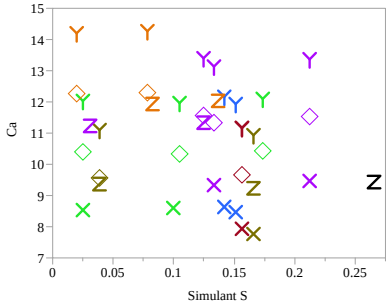
Bivariate Fit of Simulant Al By Si



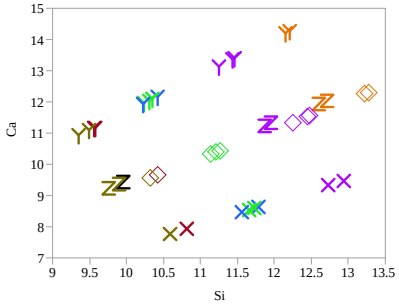
Bivariate Fit of Simulant Al By NO3-



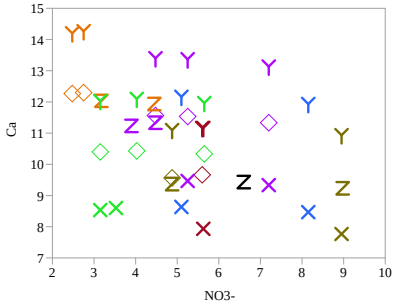
Bivariate Fit of Ca By Simulant S



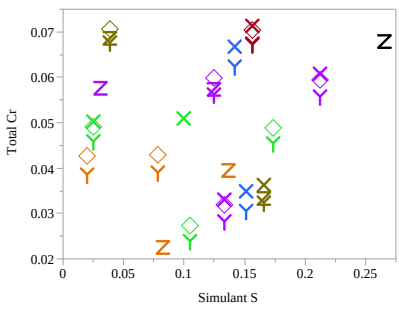
Bivariate Fit of Ca By Si



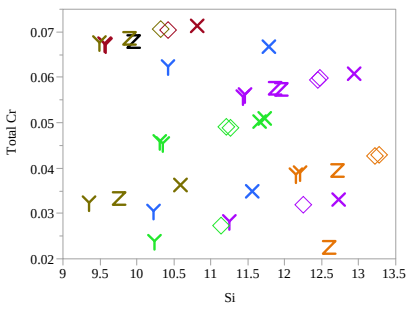
Bivariate Fit of Ca By NO3-



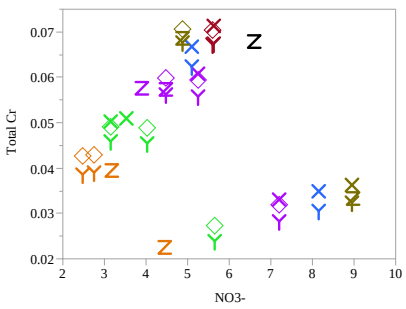
Bivariate Fit of Total Cr By Simulant S



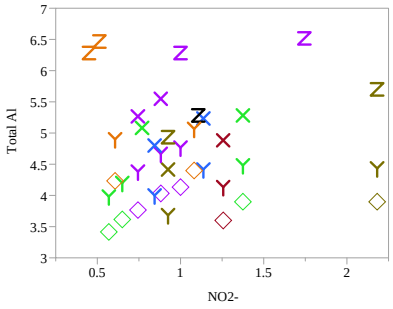
Bivariate Fit of Total Cr By Si



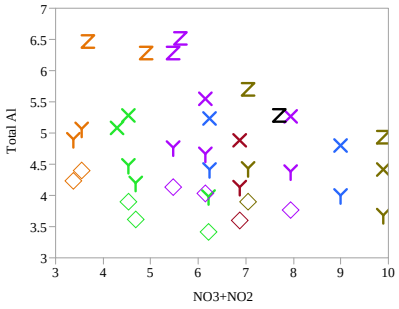
Bivariate Fit of Total Cr By NO3-



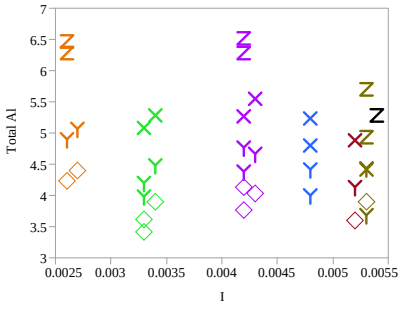
Bivariate Fit of Total Al By NO2-



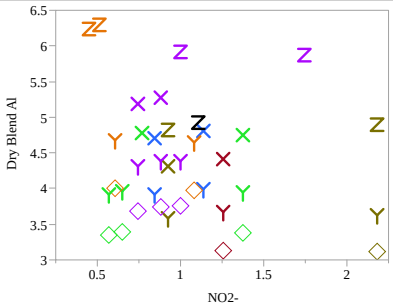
Bivariate Fit of Total Al By NO3+NO2



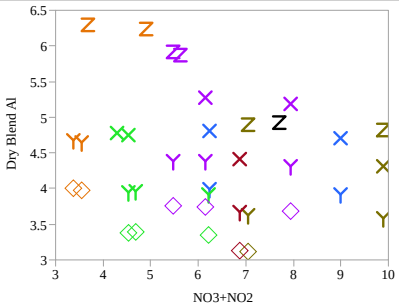
Bivariate Fit of Total Al By I



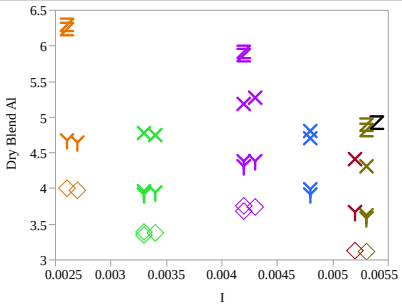
Bivariate Fit of Dry Blend Al By NO2-



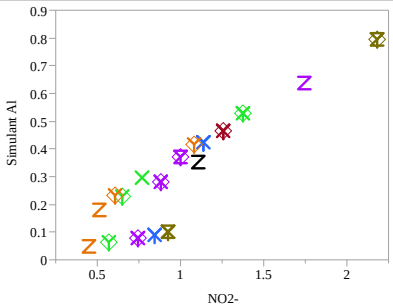
Bivariate Fit of Dry Blend Al By NO3+NO2



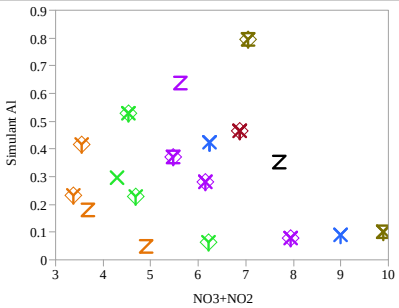
Bivariate Fit of Dry Blend Al By I



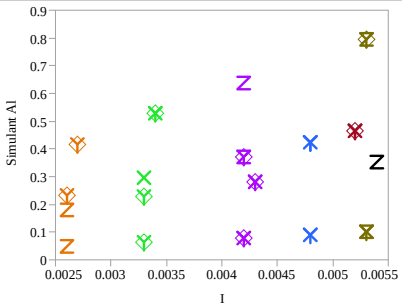
Bivariate Fit of Simulant Al By NO2-



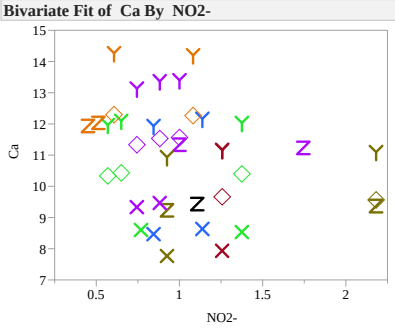
Bivariate Fit of Simulant Al By NO3+NO2



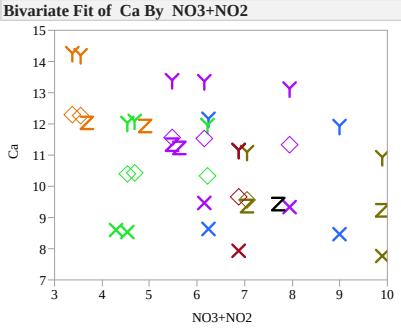
Bivariate Fit of Simulant Al By I



Bivariate Fit of Ca By NO2-



Bivariate Fit of Ca By NO3+NO2



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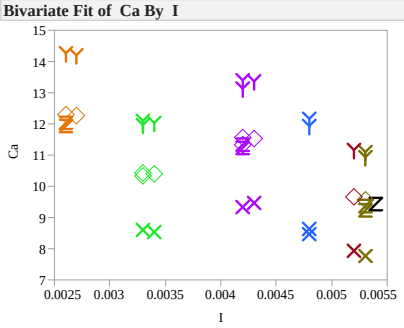
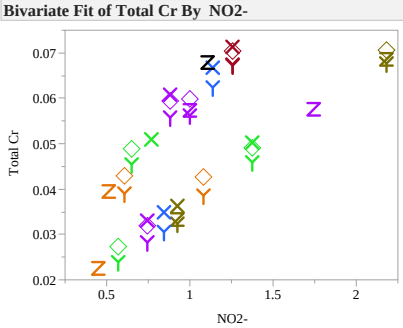
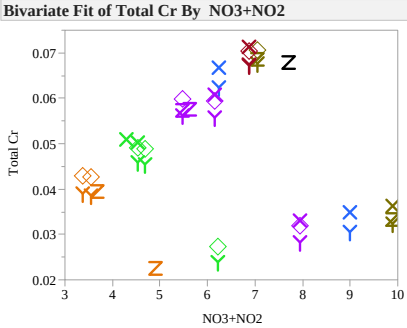


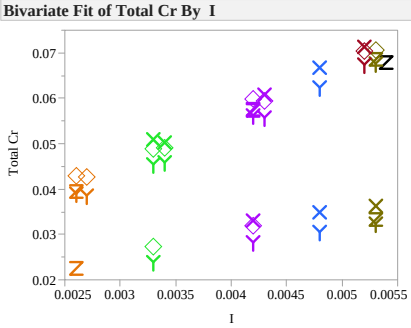
Bivariate Fit of Total Cr By NO2-



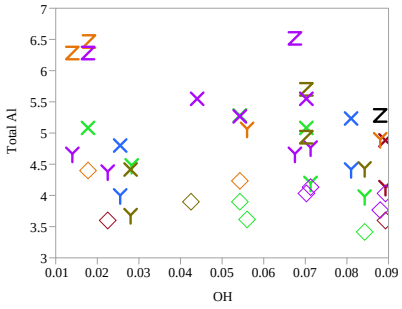
Bivariate Fit of Total Cr By NO3+NO2



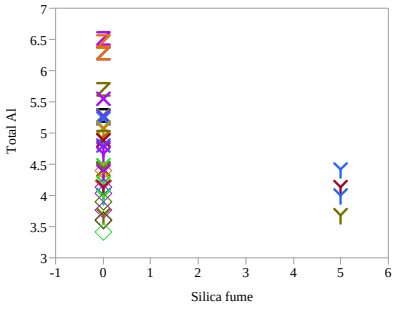
Bivariate Fit of Total Cr By I



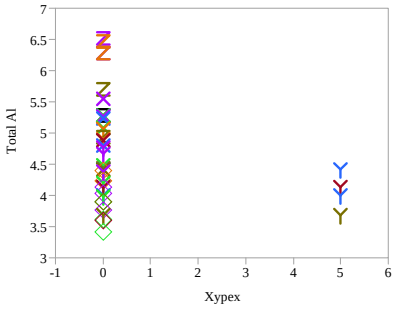
Bivariate Fit of Total Al By OH



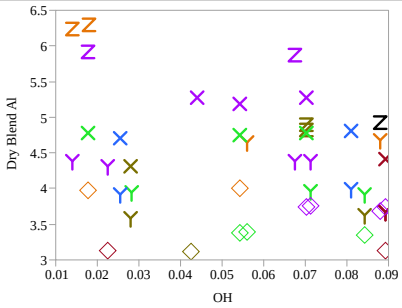
Bivariate Fit of Total Al By Silica fume



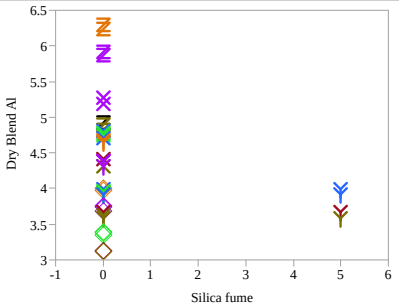
Bivariate Fit of Total Al By Xypex



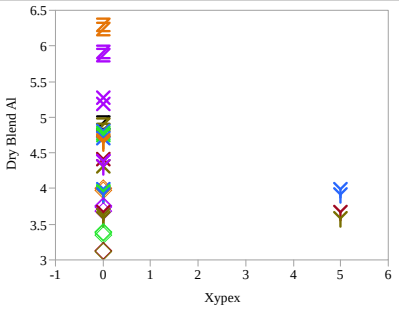
Bivariate Fit of Dry Blend Al By OH



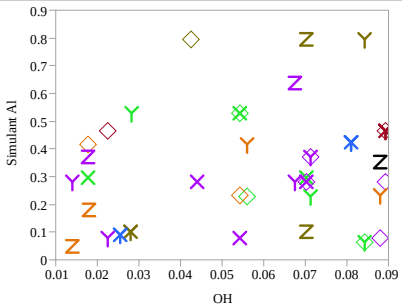
Bivariate Fit of Dry Blend Al By Silica fume



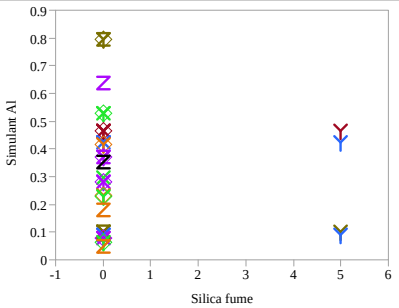
Bivariate Fit of Dry Blend Al By Xypex



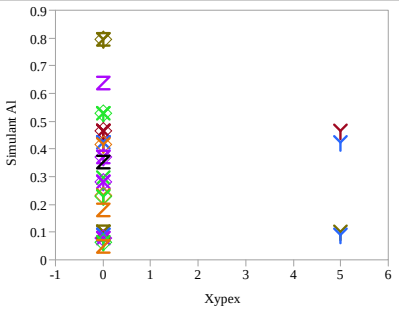
Bivariate Fit of Simulant Al By OH



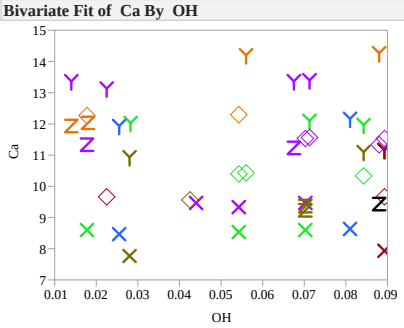
Bivariate Fit of Simulant Al By Silica fume



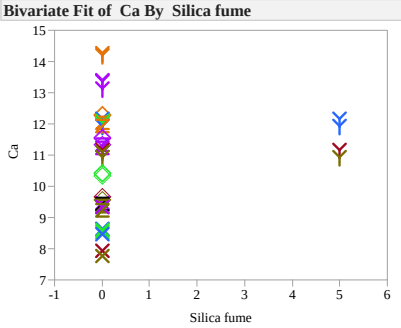
Bivariate Fit of Simulant Al By Xypex



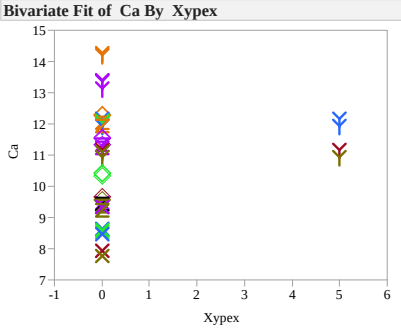
Bivariate Fit of Ca By OH



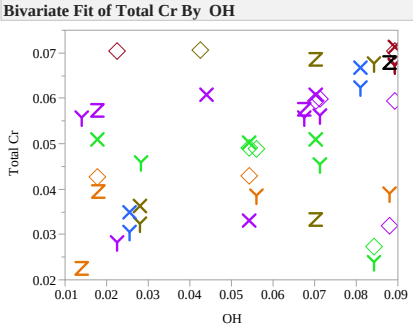
Bivariate Fit of Ca By Silica fume



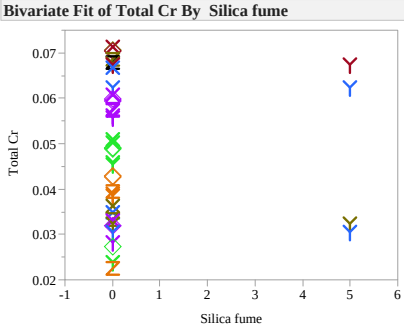
Bivariate Fit of Ca By Xypex



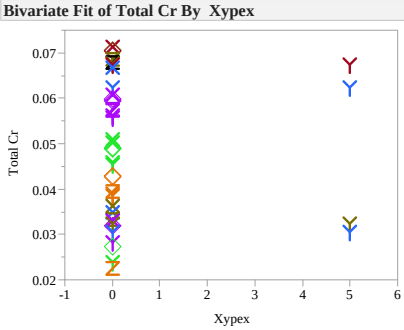
Bivariate Fit of Total Cr By OH



Bivariate Fit of Total Cr By Silica fume

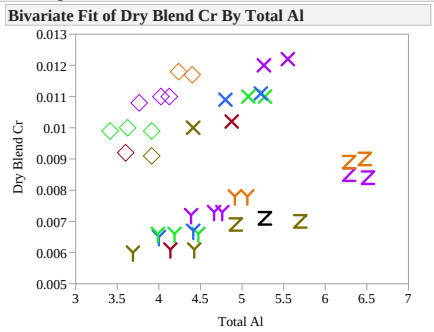


Bivariate Fit of Total Cr By Xypex

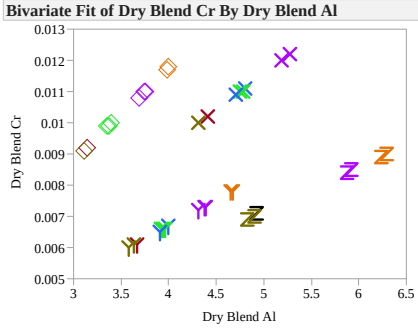


Fit Group

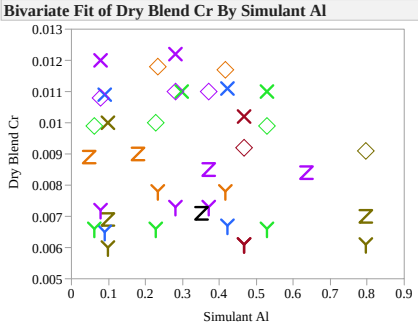
Bivariate Fit of Dry Blend Cr By Total Al



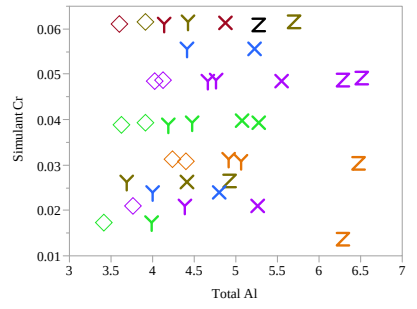
Bivariate Fit of Dry Blend Cr By Dry Blend Al



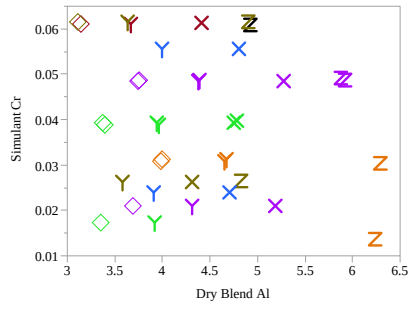
Bivariate Fit of Dry Blend Cr By Simulant Al



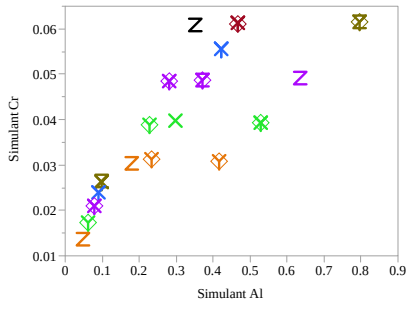
Bivariate Fit of Simulant Cr By Total Al



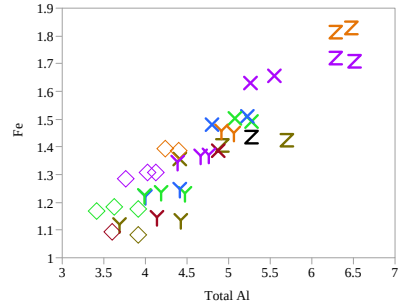
Bivariate Fit of Simulant Cr By Dry Blend Al



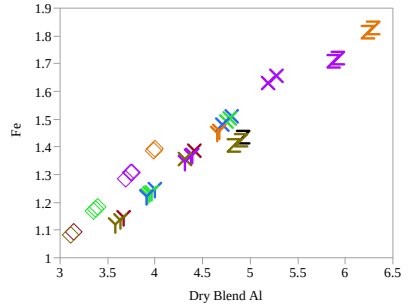
Bivariate Fit of Simulant Cr By Simulant Al



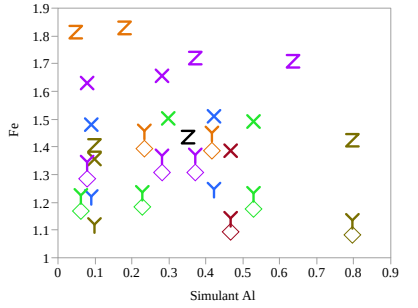
Bivariate Fit of Fe By Total Al



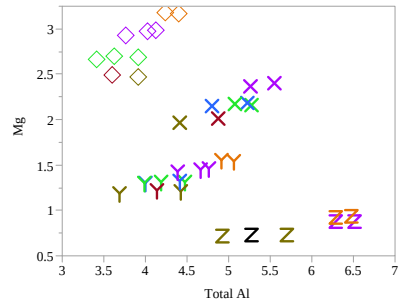
Bivariate Fit of Fe By Dry Blend Al



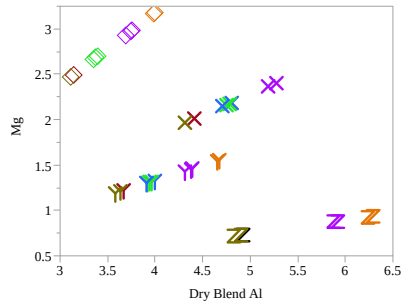
Bivariate Fit of Fe By Simulant Al



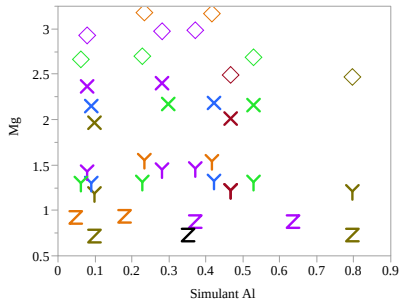
Bivariate Fit of Mg By Total Al



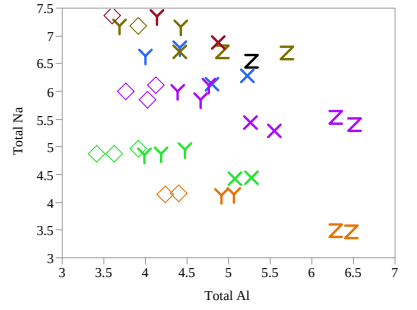
Bivariate Fit of Mg By Dry Blend Al



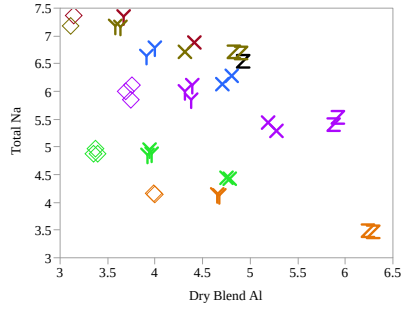
Bivariate Fit of Mg By Simulant Al



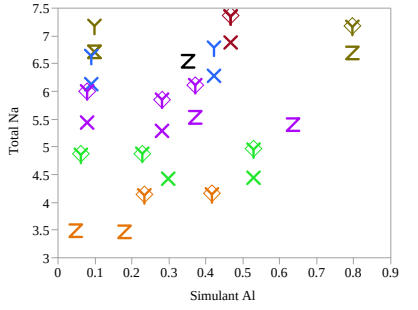
Bivariate Fit of Total Na By Total Al

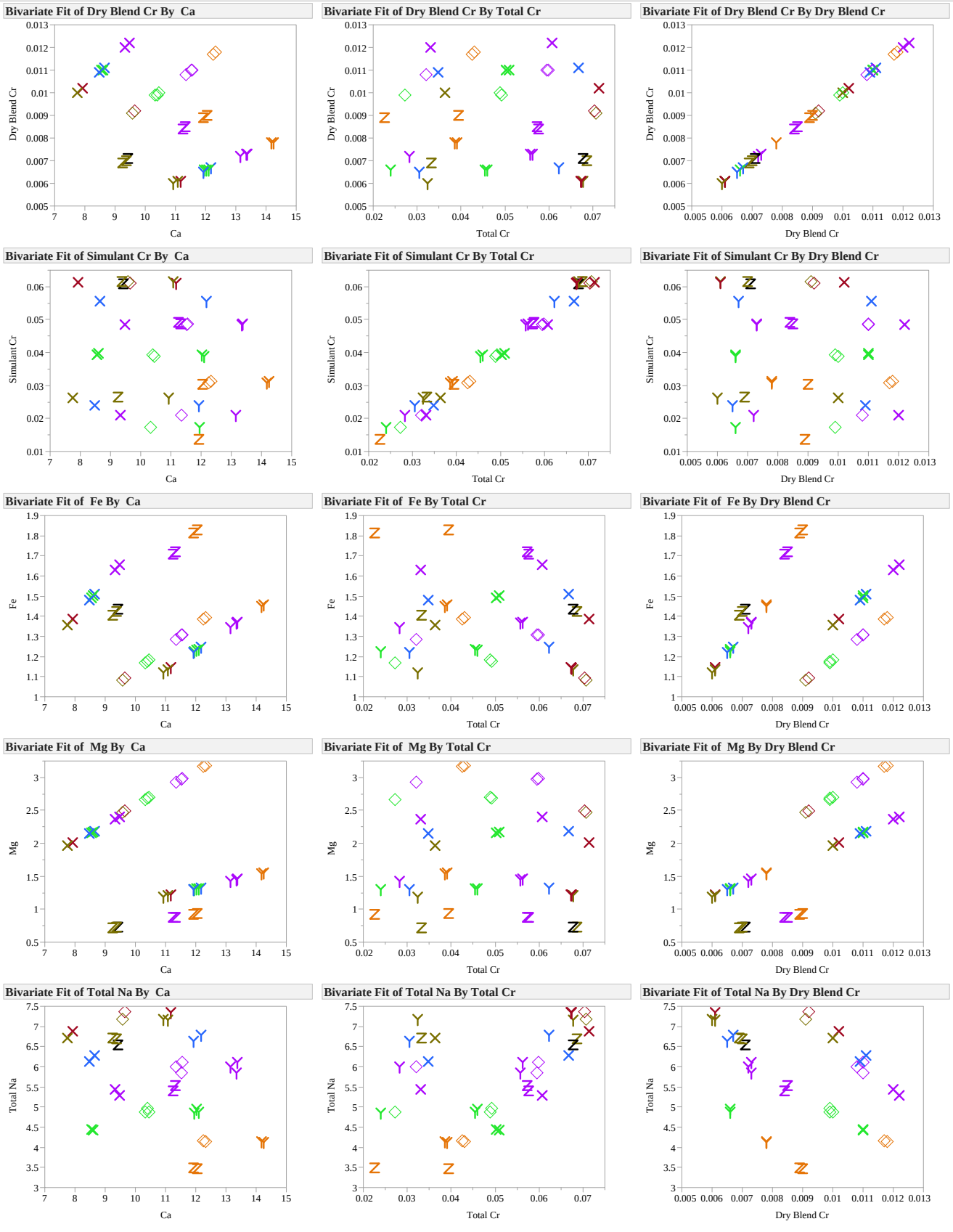


Bivariate Fit of Total Na By Dry Blend Al



Bivariate Fit of Total Na By Simulant Al




Bivariate Fit of Dry Blend Cr By Ca
Dry Blend Cr
Ca
Bivariate Fit of Dry Blend Cr By Total Cr
Dry Blend Cr
Total Cr
Bivariate Fit of Dry Blend Cr By Dry Blend Cr
Dry Blend Cr
Dry Blend Cr
Bivariate Fit of Simulant Cr By Ca
Simulant Cr
Ca
Bivariate Fit of Simulant Cr By Total Cr
Simulant Cr
Total Cr
Bivariate Fit of Simulant Cr By Dry Blend Cr
Simulant Cr
Dry Blend Cr
Bivariate Fit of Fe By Ca
Fe
Ca
Bivariate Fit of Fe By Total Cr
Fe
Total Cr
Bivariate Fit of Fe By Dry Blend Cr
Fe
Dry Blend Cr
Bivariate Fit of Mg By Ca
Mg
Ca
Bivariate Fit of Mg By Total Cr
Mg
Total Cr
Bivariate Fit of Mg By Dry Blend Cr
Mg
Dry Blend Cr
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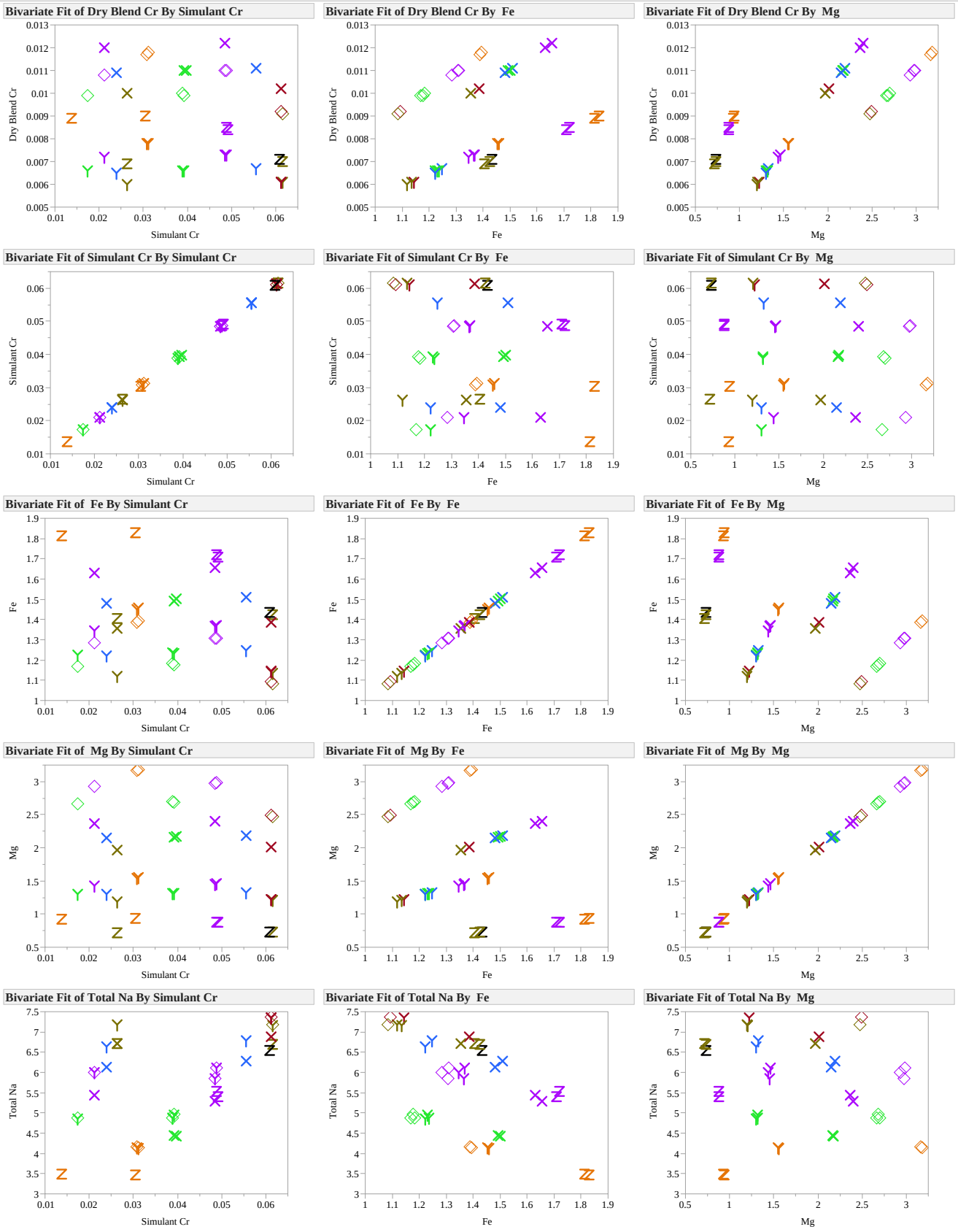
Total Na
Dry Blend Cr


Bivariate Fit of Dry Blend Cr By Simulant Cr
Dry Blend Cr
Simulant Cr
Bivariate Fit of Dry Blend Cr By Fe
Dry Blend Cr
Fe
Bivariate Fit of Dry Blend Cr By Mg
Dry Blend Cr
Mg
Bivariate Fit of Simulant Cr By Simulant Cr
Simulant Cr
Simulant Cr
Bivariate Fit of Simulant Cr By Fe
Simulant Cr
Fe
Bivariate Fit of Simulant Cr By Mg
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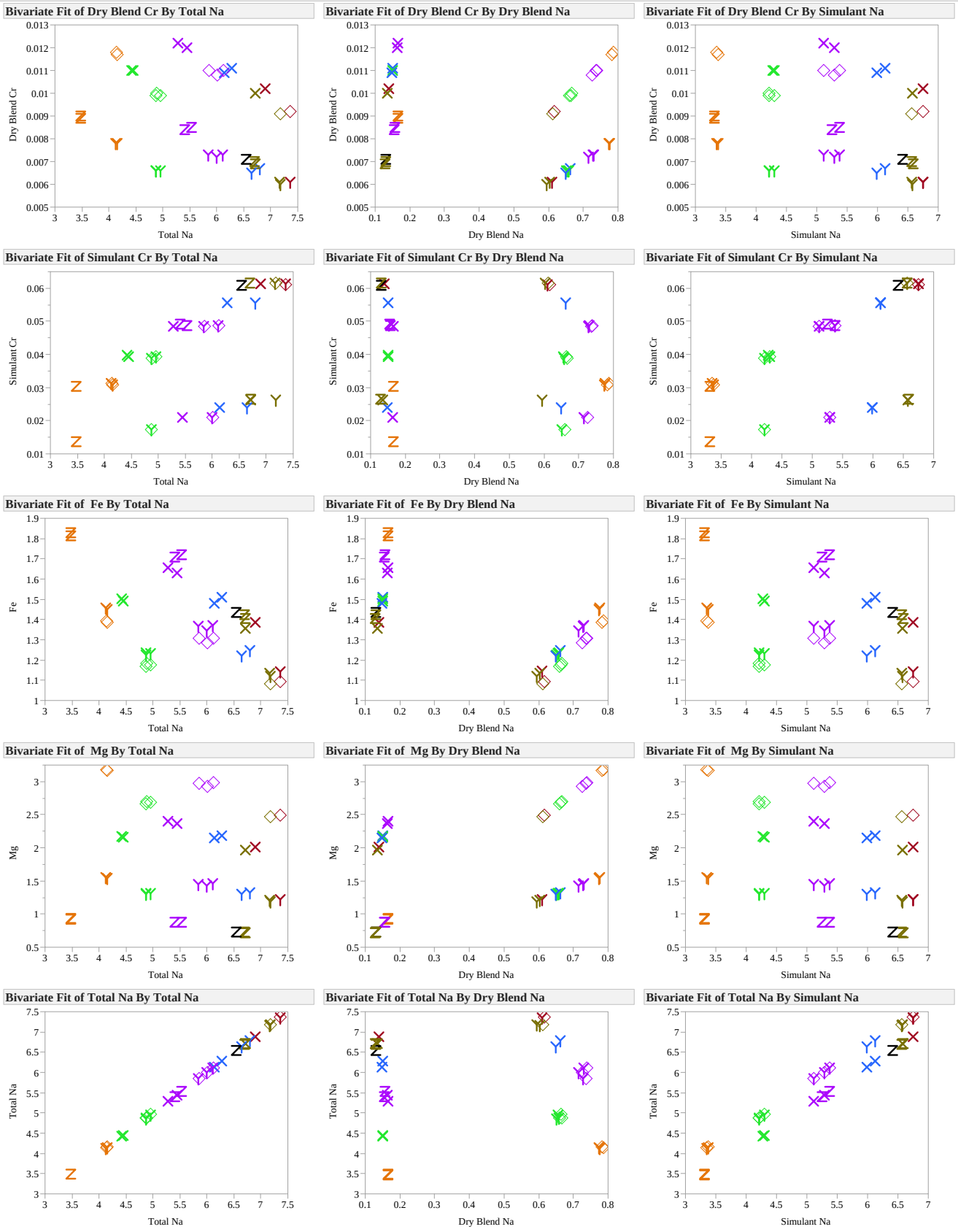
Bivariate Fit of Dry Blend Cr By Total Na
Dry Blend Cr
Total Na
Bivariate Fit of Dry Blend Cr By Dry Blend Na
Dry Blend Cr
Dry Blend Na
Bivariate Fit of Dry Blend Cr By Simulant Na
Dry Blend Cr
Simulant Na
Bivariate Fit of Simulant Cr By Total Na
Simulant Cr
Total Na
Bivariate Fit of Simulant Cr By Dry Blend Na
Simulant Cr
Dry Blend Na
Bivariate Fit of Simulant Cr By Simulant Na
Simulant Cr
Simulant Na
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Total Na
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Dry Blend Na
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Dry Blend Na
Bivariate Fit of Total Na By Simulant Na
Total Na
Simulant Na


Bivariate Fit of Dry Blend Cr By P
Dry Blend Cr
P
Bivariate Fit of Dry Blend Cr By Total S
Dry Blend Cr
Total S
Bivariate Fit of Dry Blend Cr By Dry Blend S
Dry Blend Cr
Dry Blend S
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Total S
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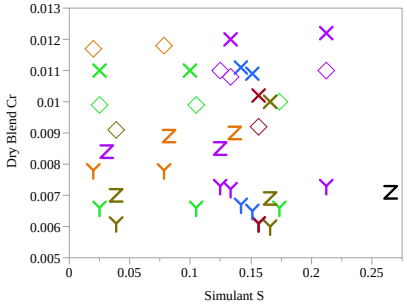
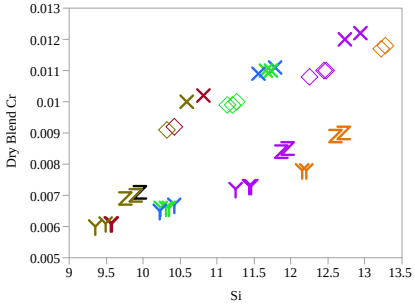
Dry Blend S

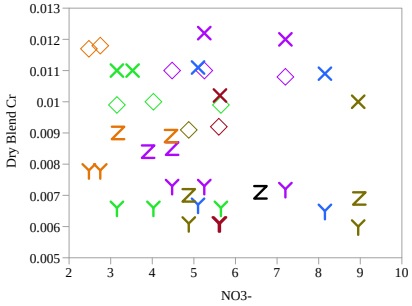
Bivariate Fit of Dry Blend Cr By Simulant S



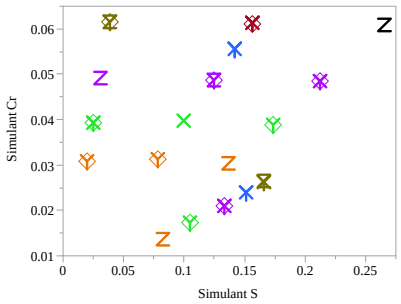
Bivariate Fit of Dry Blend Cr By Si



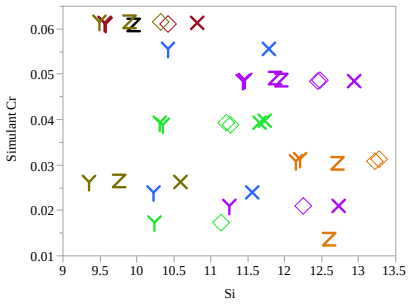
Bivariate Fit of Dry Blend Cr By NO3-



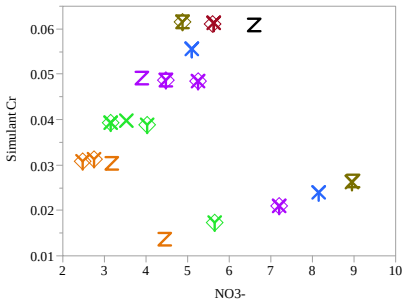
Bivariate Fit of Simulant Cr By Simulant S



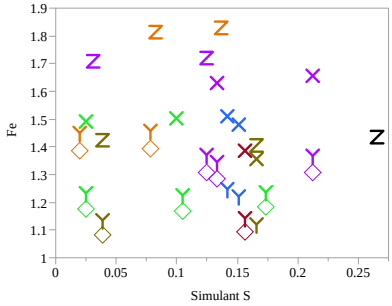
Bivariate Fit of Simulant Cr By Si



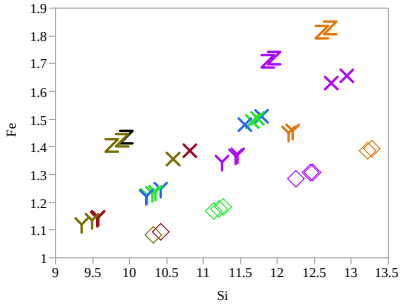
Bivariate Fit of Simulant Cr By NO3-



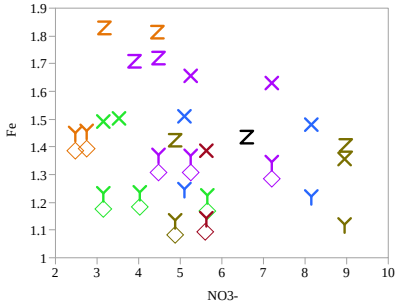
Bivariate Fit of Fe By Simulant S



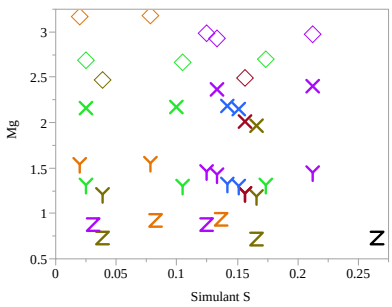
Bivariate Fit of Fe By Si



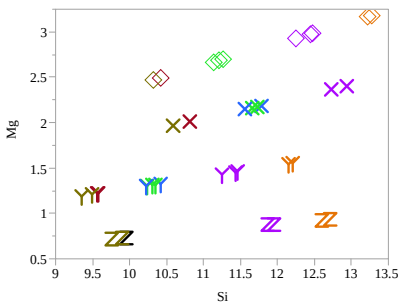
Bivariate Fit of Fe By NO3-



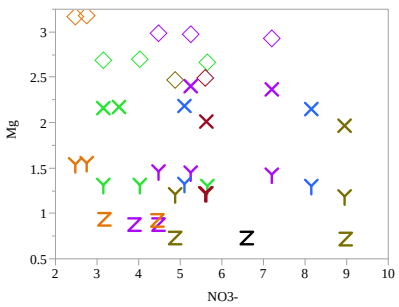
Bivariate Fit of Mg By Simulant S



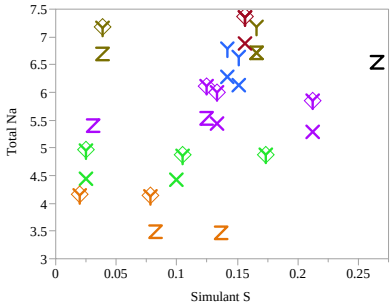
Bivariate Fit of Mg By Si



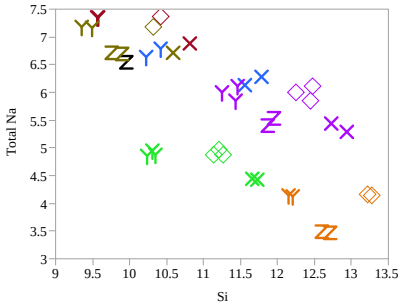
Bivariate Fit of Mg By NO3-



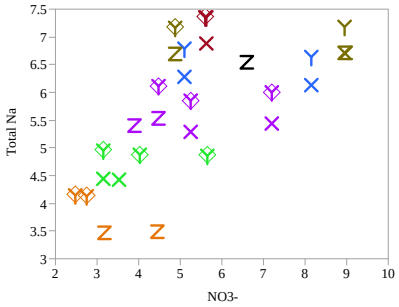
Bivariate Fit of Total Na By Simulant S

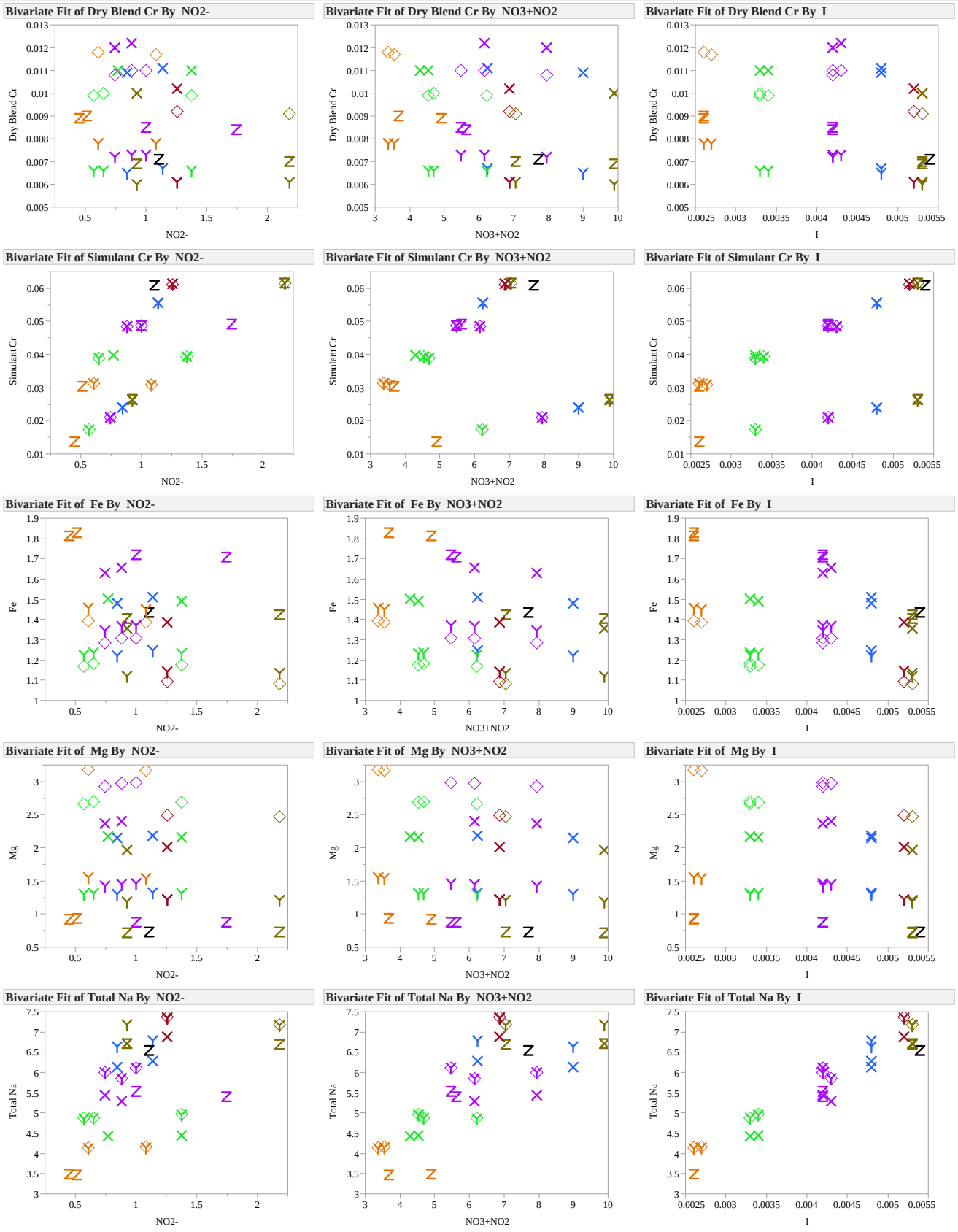


Bivariate Fit of Total Na By Si



Bivariate Fit of Total Na By NO3-




Bivariate Fit of Dry Blend Cr By NO2-
Dry Blend Cr
NO2-
Bivariate Fit of Dry Blend Cr By NO3+NO2
Dry Blend Cr
NO3+NO2
Bivariate Fit of Dry Blend Cr By I
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Bivariate Fit of Simulant Cr By NO3+NO2
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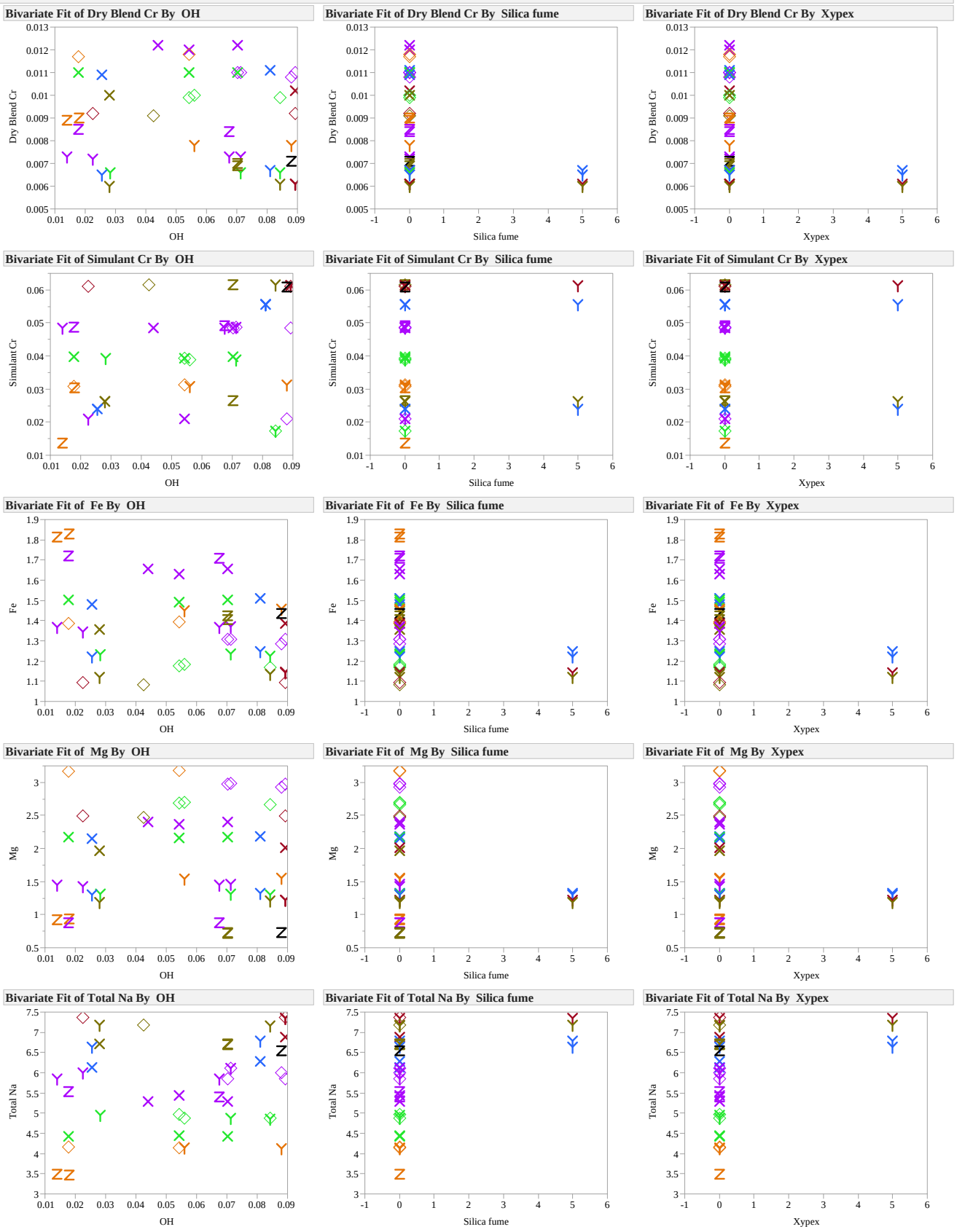
Bivariate Fit of Dry Blend Cr By OH
Dry Blend Cr
OH
Bivariate Fit of Dry Blend Cr By Silica fume
Dry Blend Cr
Silica fume
Bivariate Fit of Dry Blend Cr By Xypex
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Fit Group


Bivariate Fit of Dry Blend Na By Total Al
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Bivariate Fit of Dry Blend Na By Dry Blend Al
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Dry Blend Al
Bivariate Fit of Dry Blend Na By Simulant Al
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Bivariate Fit of Simulant Na By Total Al
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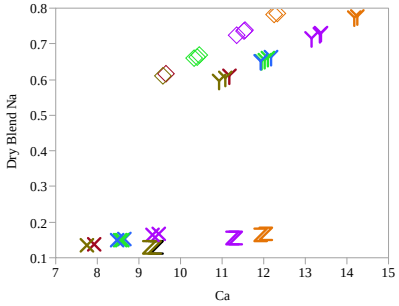
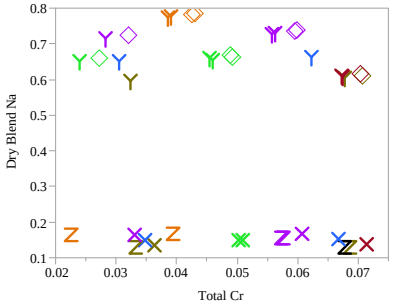
Simulant Al

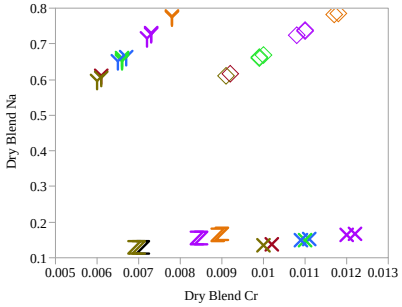
Bivariate Fit of Dry Blend Na By Ca



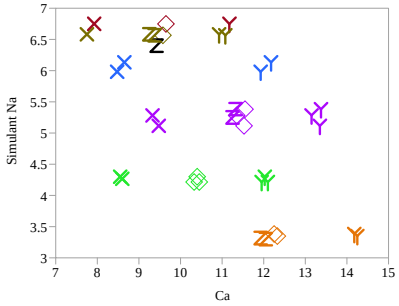
Bivariate Fit of Dry Blend Na By Total Cr



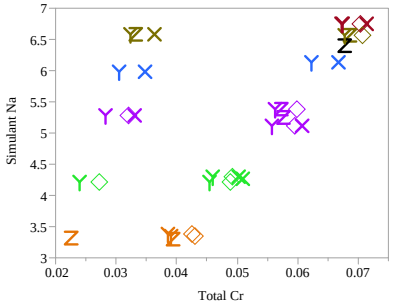
Bivariate Fit of Dry Blend Na By Dry Blend Cr



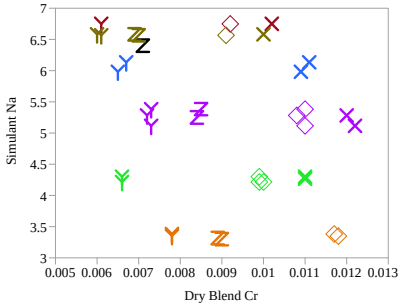
Bivariate Fit of Simulant Na By Ca



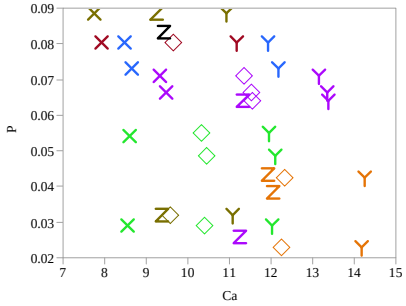
Bivariate Fit of Simulant Na By Total Cr



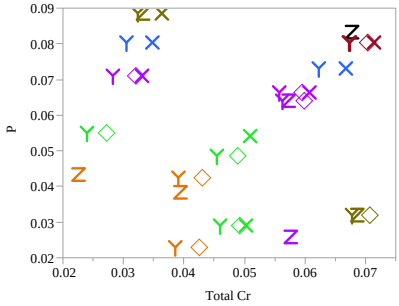
Bivariate Fit of Simulant Na By Dry Blend Cr



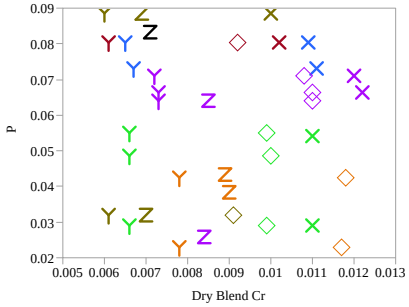
Bivariate Fit of P By Ca



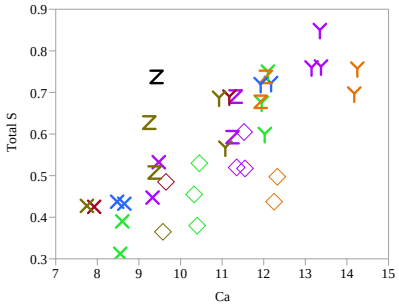
Bivariate Fit of P By Total Cr



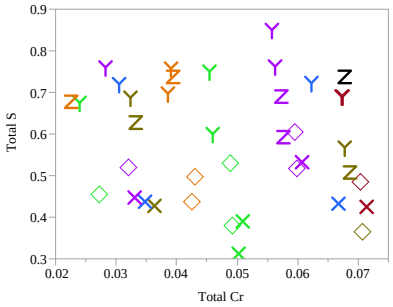
Bivariate Fit of P By Dry Blend Cr



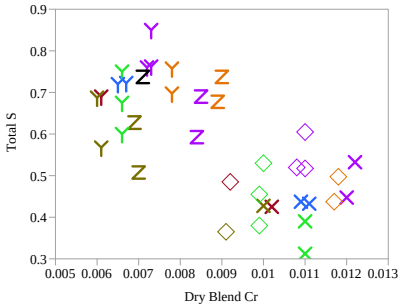
Bivariate Fit of Total S By Ca



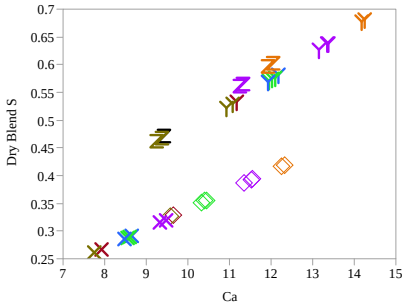
Bivariate Fit of Total S By Total Cr



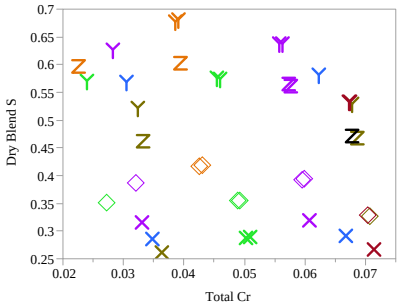
Bivariate Fit of Total S By Dry Blend Cr



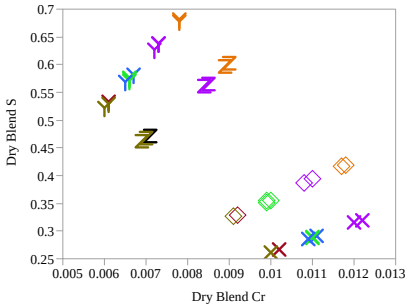
Bivariate Fit of Dry Blend S By Ca



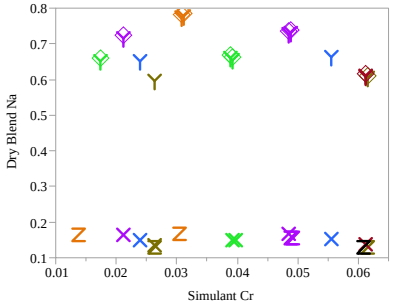
Bivariate Fit of Dry Blend S By Total Cr



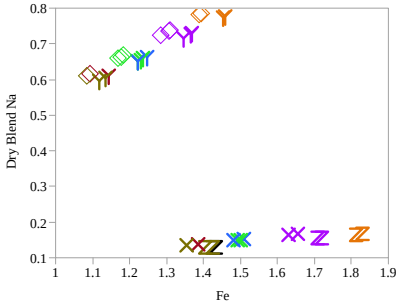
Bivariate Fit of Dry Blend S By Dry Blend Cr



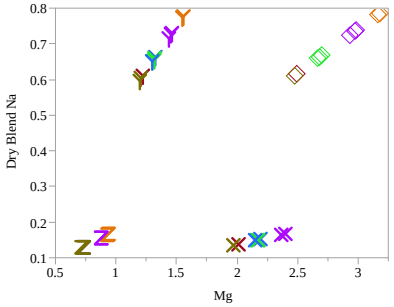
Bivariate Fit of Dry Blend Na By Simulant Cr



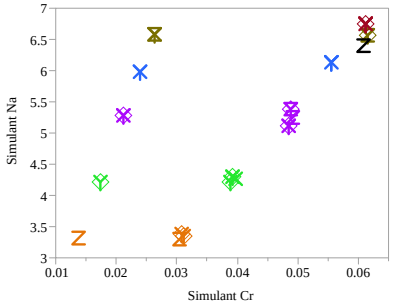
Bivariate Fit of Dry Blend Na By Fe



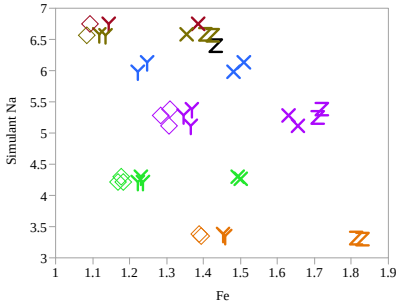
Bivariate Fit of Dry Blend Na By Mg



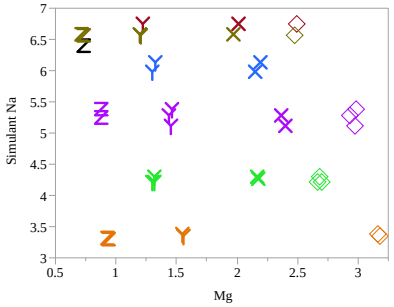
Bivariate Fit of Simulant Na By Simulant Cr



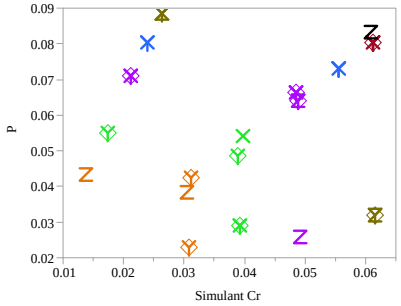
Bivariate Fit of Simulant Na By Fe



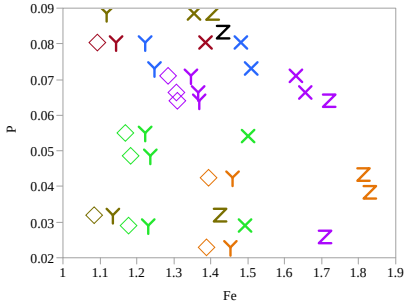
Bivariate Fit of Simulant Na By Mg



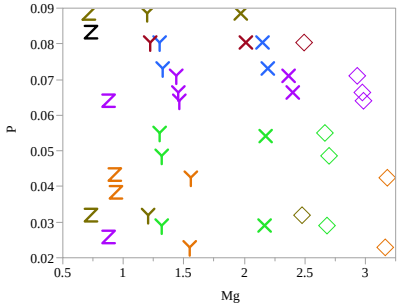
Bivariate Fit of P By Simulant Cr



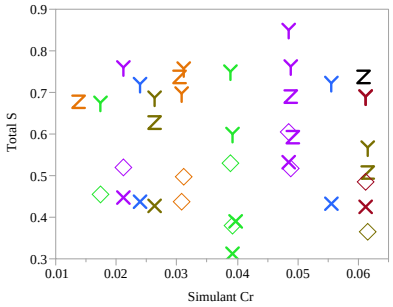
Bivariate Fit of P By Fe



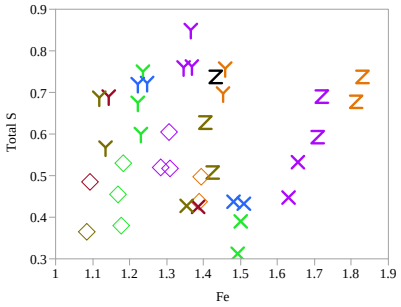
Bivariate Fit of P By Mg



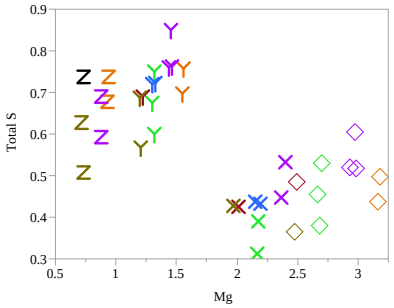
Bivariate Fit of Total S By Simulant Cr



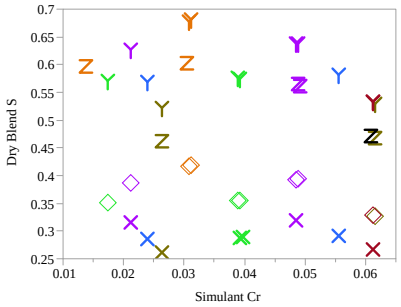
Bivariate Fit of Total S By Fe



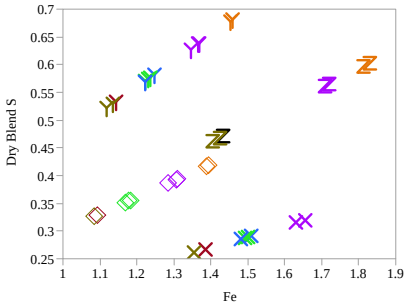
Bivariate Fit of Total S By Mg



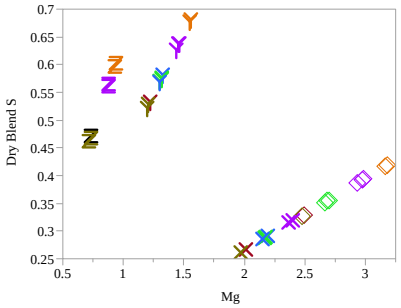
Bivariate Fit of Dry Blend S By Simulant Cr

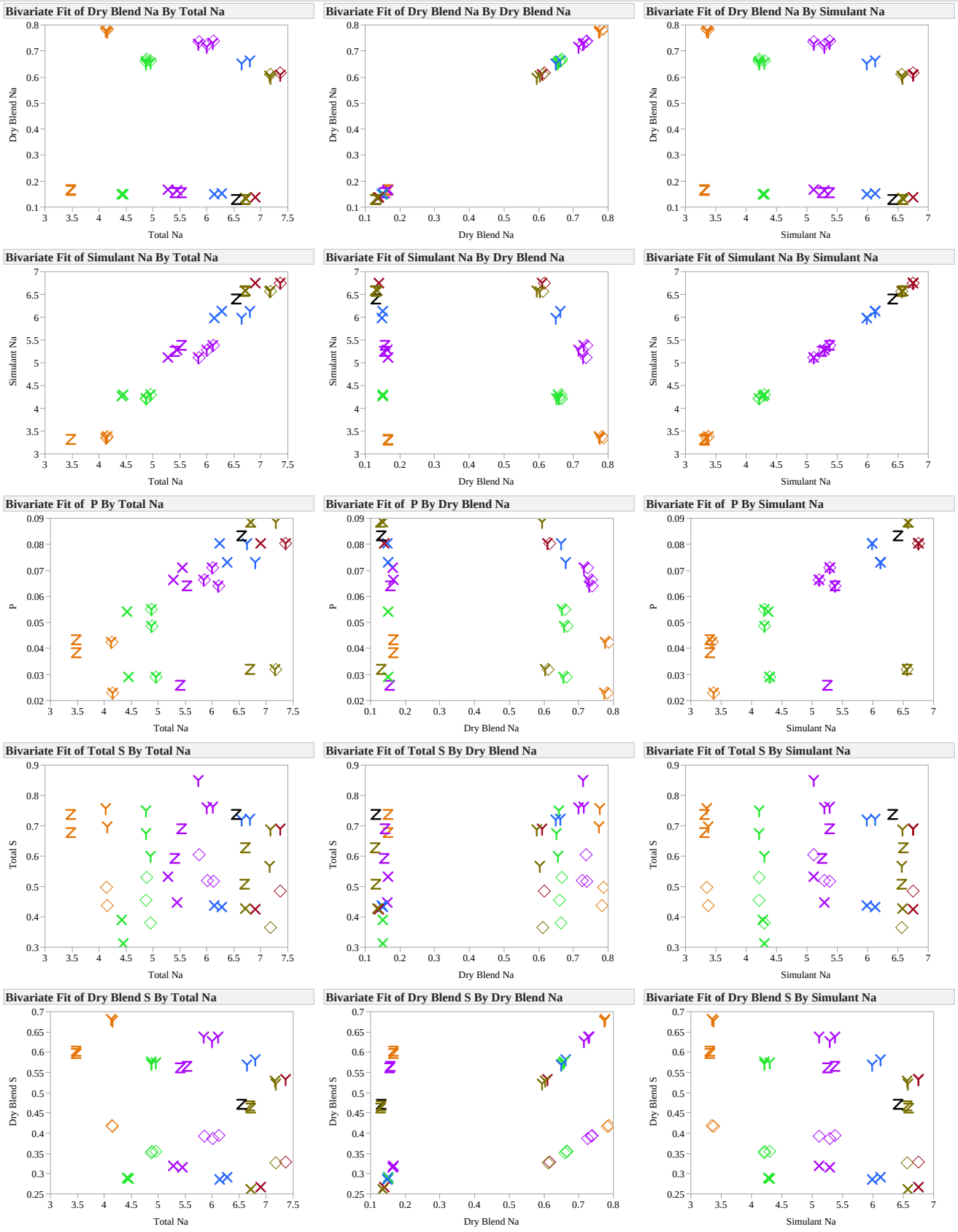


Bivariate Fit of Dry Blend S By Fe



Bivariate Fit of Dry Blend S By Mg




Bivariate Fit of Dry Blend Na By Total Na
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Bivariate Fit of Dry Blend Na By Dry Blend Na
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Dry Blend Na
Bivariate Fit of Dry Blend Na By Simulant Na
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Bivariate Fit of Simulant Na By Total Na
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Bivariate Fit of Simulant Na By Simulant Na
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Bivariate Fit of P By Total Na
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Simulant Na


Bivariate Fit of Dry Blend Na By P
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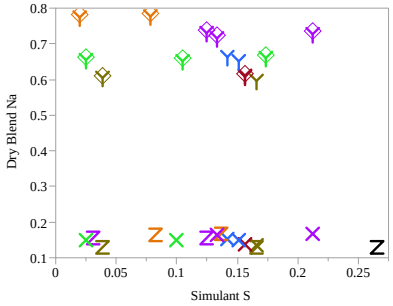
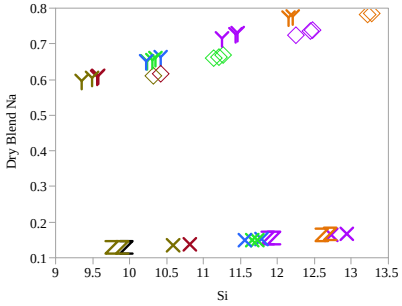
Dry Blend S

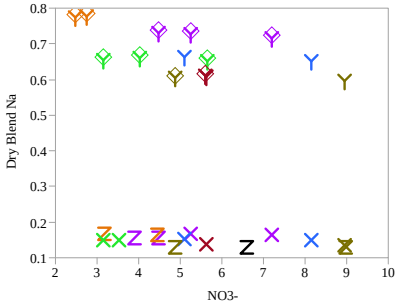
Bivariate Fit of Dry Blend Na By Simulant S



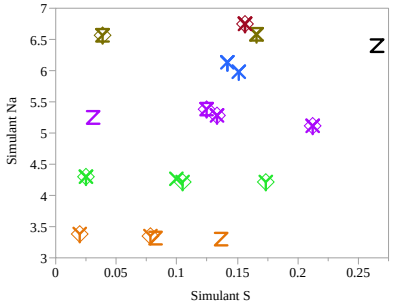
Bivariate Fit of Dry Blend Na By Si



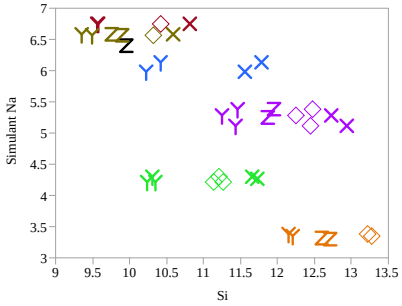
Bivariate Fit of Dry Blend Na By NO3-



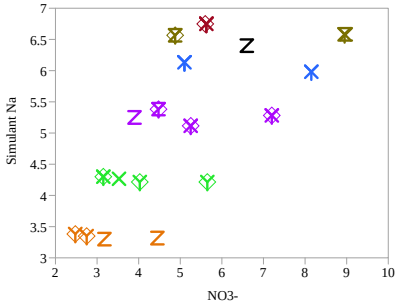
Bivariate Fit of Simulant Na By Simulant S



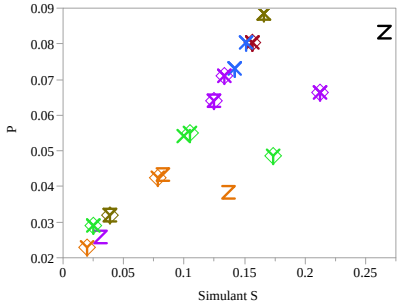
Bivariate Fit of Simulant Na By Si



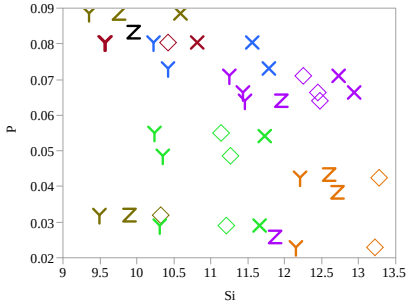
Bivariate Fit of Simulant Na By NO3-



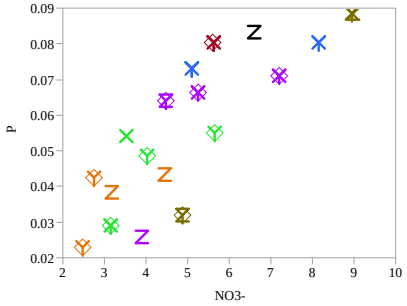
Bivariate Fit of P By Simulant S



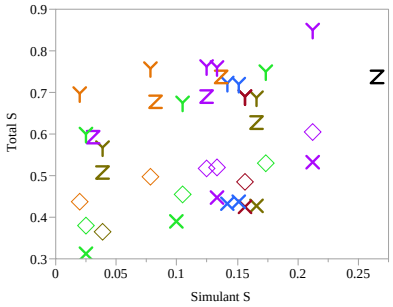
Bivariate Fit of P By Si



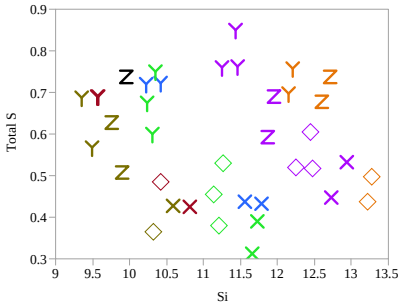
Bivariate Fit of P By NO3-



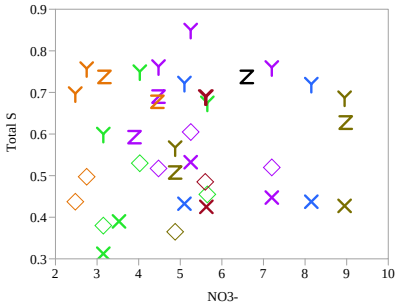
Bivariate Fit of Total S By Simulant S



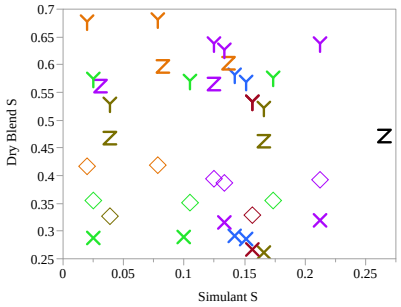
Bivariate Fit of Total S By Si



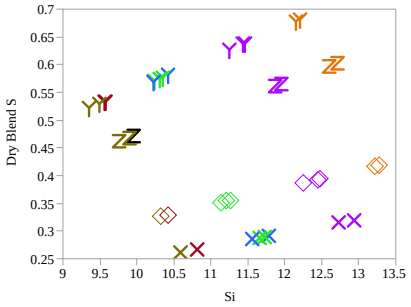
Bivariate Fit of Total S By NO3-



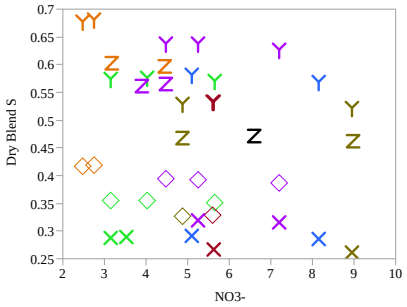
Bivariate Fit of Dry Blend S By Simulant S

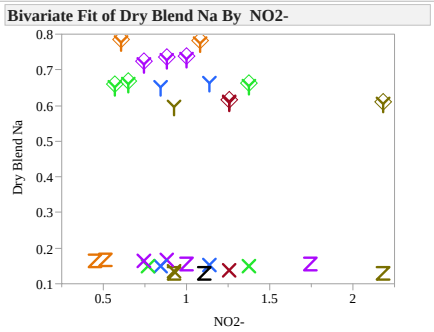


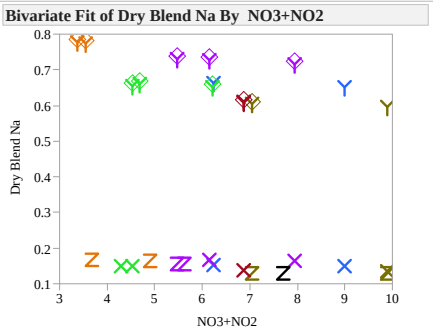
Bivariate Fit of Dry Blend S By Si

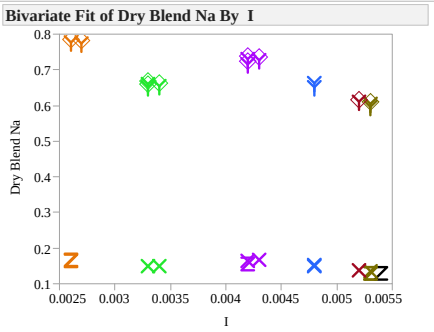


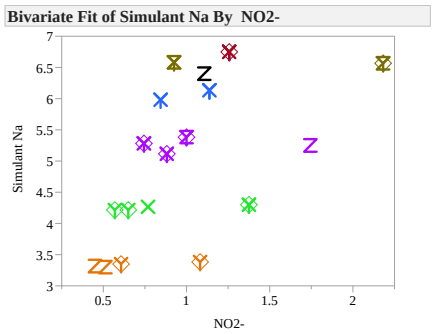
Bivariate Fit of Dry Blend S By NO3-

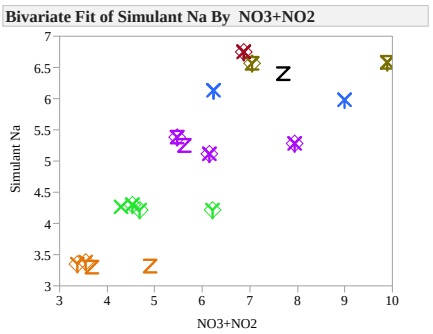


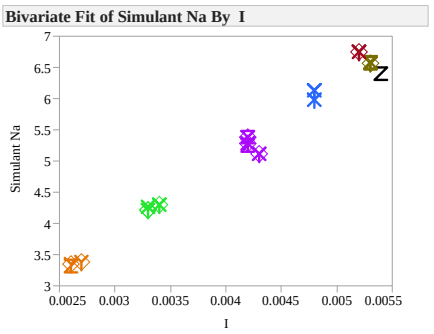

Bivariate Fit of Dry Blend Na By NO2-
Dry Blend Na
NO2-

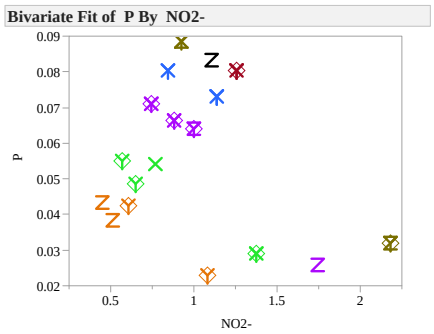

Bivariate Fit of Dry Blend Na By NO3+NO2
Dry Blend Na
NO3+NO2

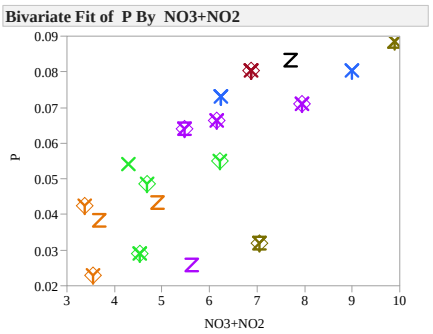

Bivariate Fit of Dry Blend Na By I
Dry Blend Na
I

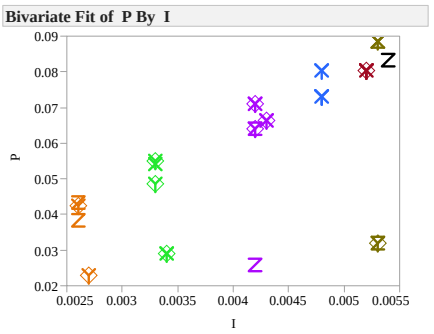

Bivariate Fit of Simulant Na By NO2-
Simulant Na
NO2-

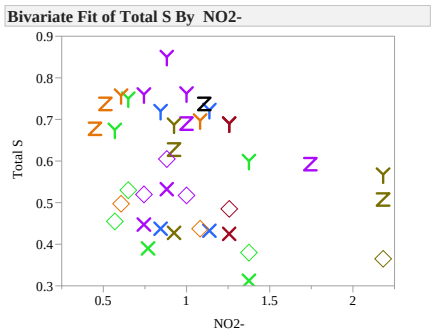

Bivariate Fit of Simulant Na By NO3+NO2
Simulant Na
NO3+NO2

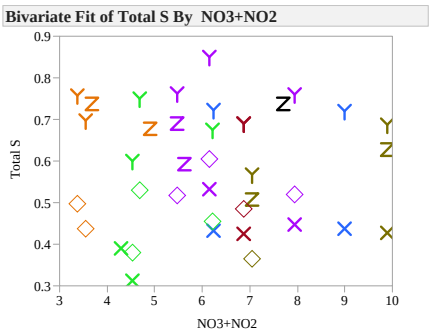

Bivariate Fit of Simulant Na By I
Simulant Na
I

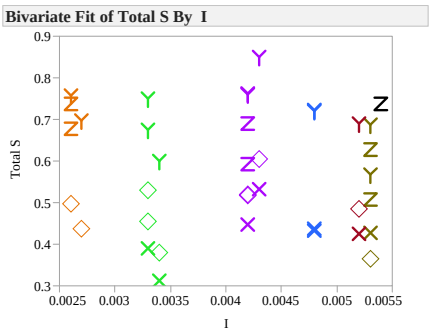

Bivariate Fit of P By NO2-
P
NO2-


Bivariate Fit of P By NO3+NO2
P
NO3+NO2


Bivariate Fit of P By I
P
I


Bivariate Fit of Total S By NO2-
Total S
NO2-


Bivariate Fit of Total S By NO3+NO2
Total S
NO3+NO2


Bivariate Fit of Total S By I
Total S
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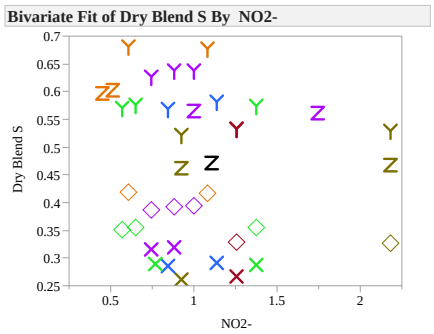
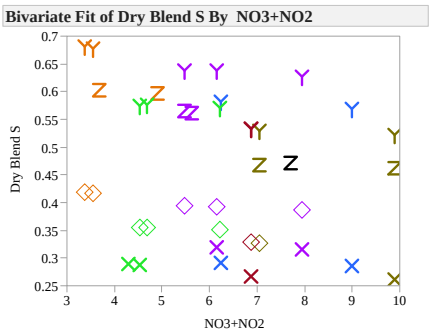
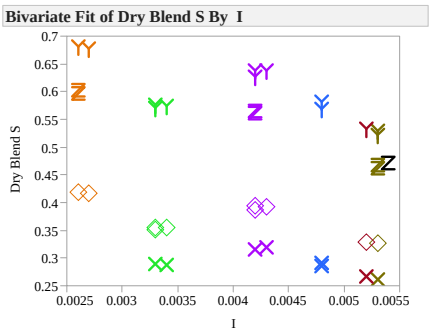

Bivariate Fit of Dry Blend S By NO2-
Dry Blend S
NO2-


Bivariate Fit of Dry Blend S By NO3+NO2
Dry Blend S
NO3+NO2


Bivariate Fit of Dry Blend S By I
Dry Blend S
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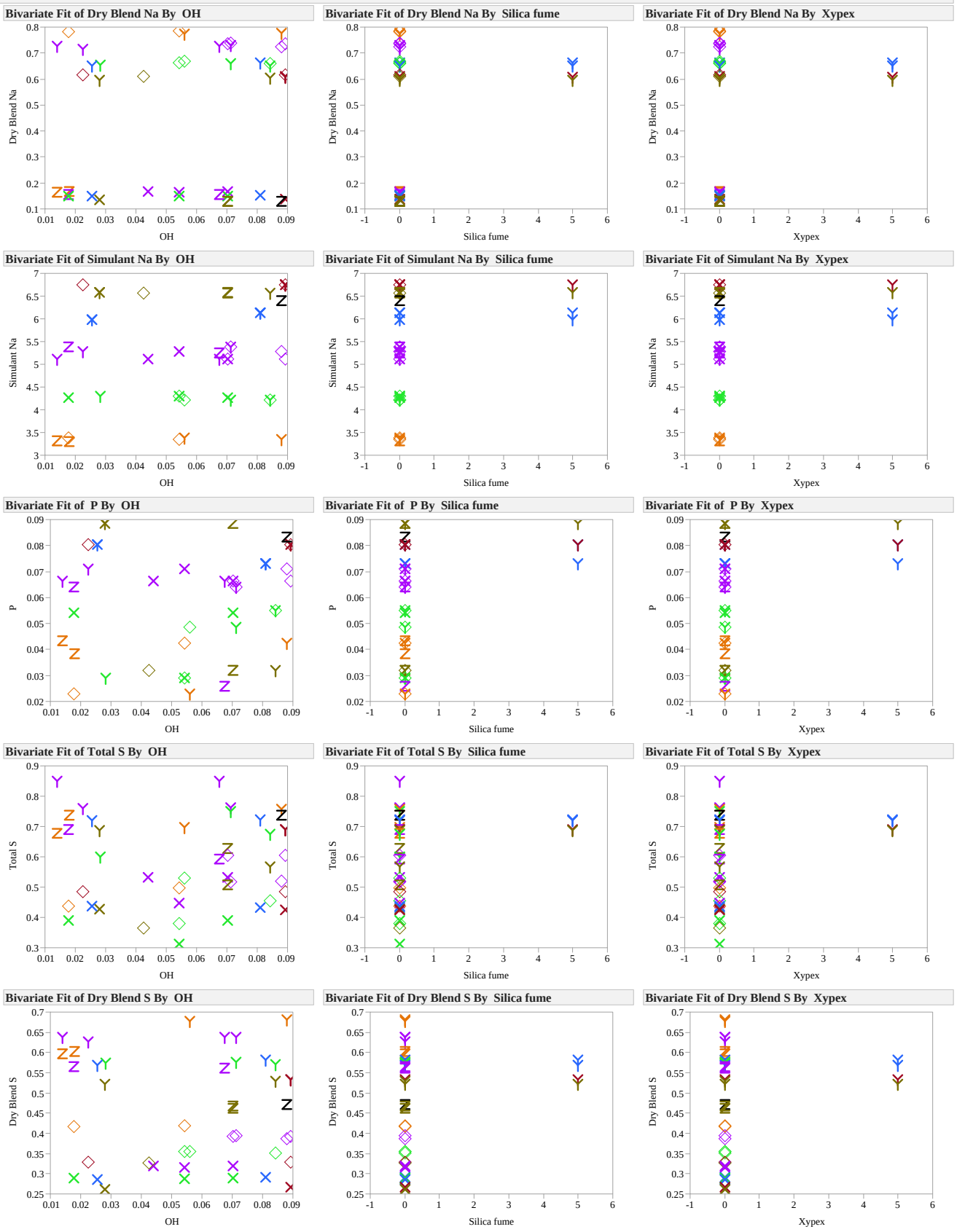
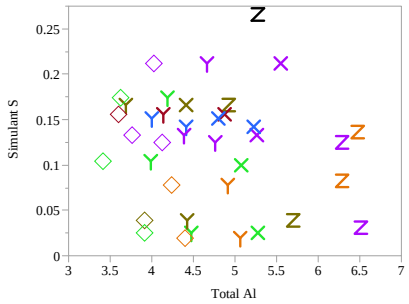
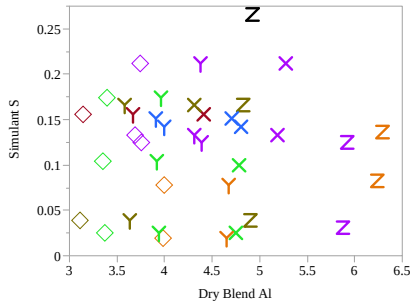

Bivariate Fit of Dry Blend Na By OH
Dry Blend Na
OH
Bivariate Fit of Dry Blend Na By Silica fume
Dry Blend Na
Silica fume
Bivariate Fit of Dry Blend Na By Xypex
Dry Blend Na
Xypex
Bivariate Fit of Simulant Na By OH
Simulant Na
OH
Bivariate Fit of Simulant Na By Silica fume
Simulant Na
Silica fume
Bivariate Fit of Simulant Na By Xypex
Simulant Na
Xypex
Bivariate Fit of P By OH
P
OH
Bivariate Fit of P By Silica fume
P
Silica fume
Bivariate Fit of P By Xypex
P
Xypex
Bivariate Fit of Total S By OH
Total S
OH
Bivariate Fit of Total S By Silica fume
Total S
Silica fume
Bivariate Fit of Total S By Xypex
Total S
Xypex
Bivariate Fit of Dry Blend S By OH
Dry Blend S
OH
Bivariate Fit of Dry Blend S By Silica fume
Dry Blend S
Silica fume
Bivariate Fit of Dry Blend S By Xypex
Dry Blend S
Xypex

Fit Group

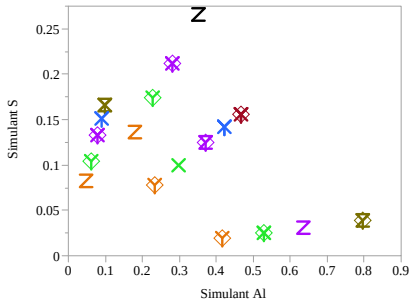
Bivariate Fit of Simulant S By Total Al



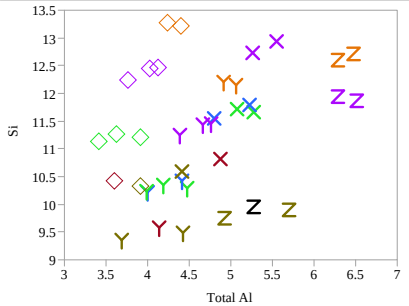
Bivariate Fit of Simulant S By Dry Blend Al



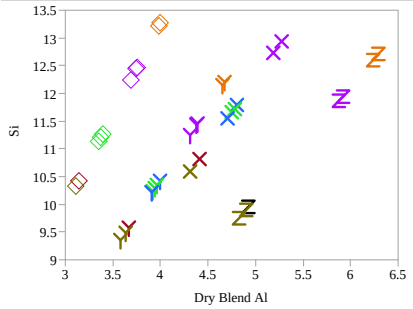
Bivariate Fit of Simulant S By Simulant Al



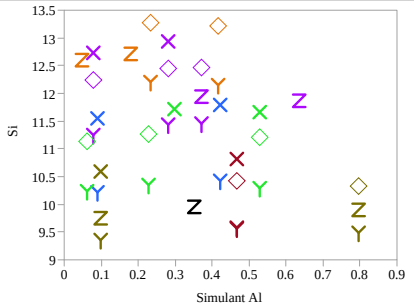
Bivariate Fit of Si By Total Al



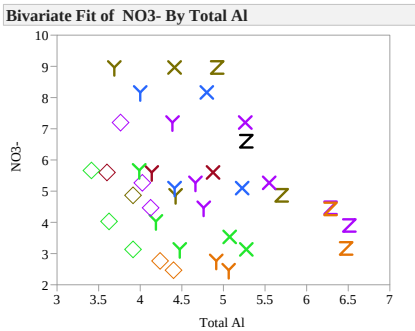
Bivariate Fit of Si By Dry Blend Al



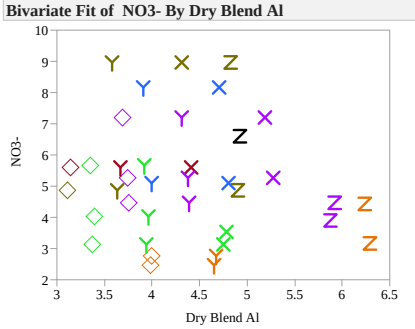
Bivariate Fit of Si By Simulant Al



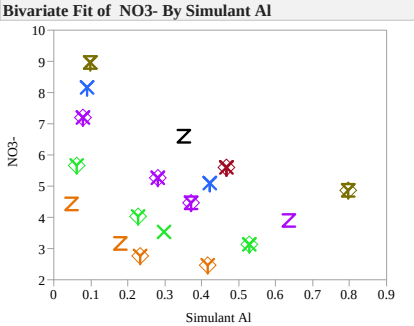
Bivariate Fit of NO3- By Total Al



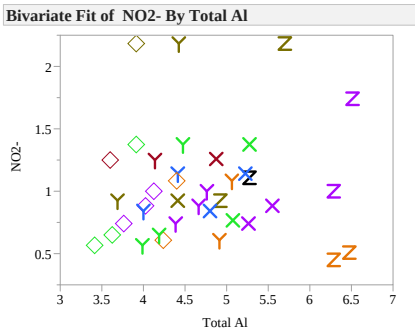
Bivariate Fit of NO3- By Dry Blend Al



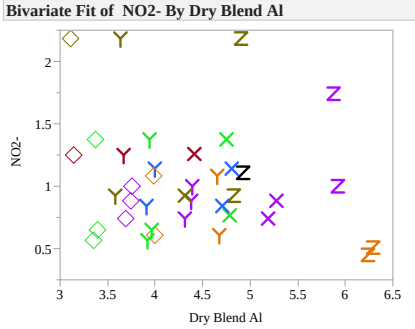
Bivariate Fit of NO3- By Simulant Al



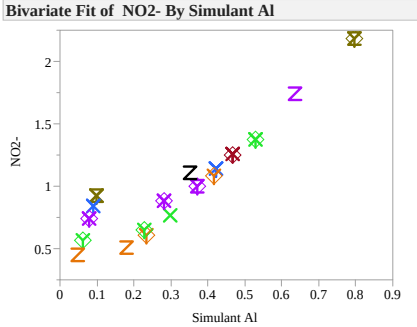
Bivariate Fit of NO2- By Total Al



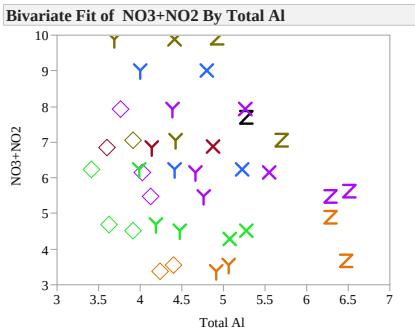
Bivariate Fit of NO2- By Dry Blend Al



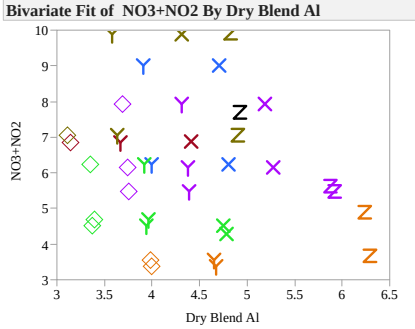
Bivariate Fit of NO2- By Simulant Al



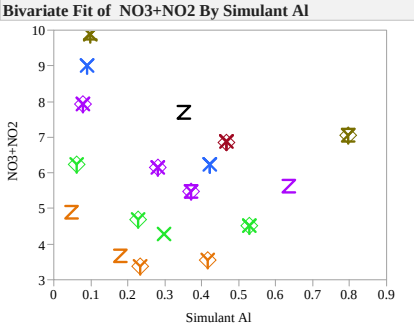
Bivariate Fit of NO3+NO2 By Total Al



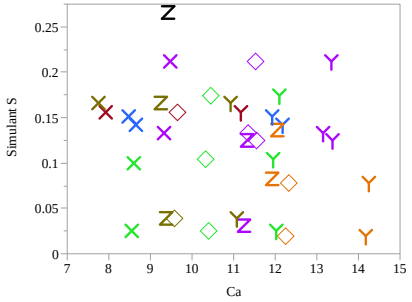
Bivariate Fit of NO3+NO2 By Dry Blend Al



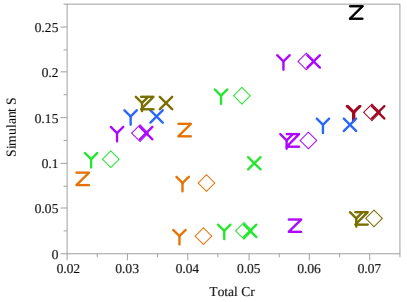
Bivariate Fit of NO3+NO2 By Simulant Al



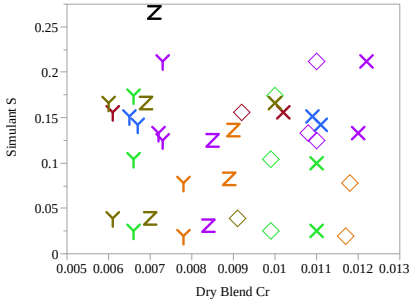
Bivariate Fit of Simulant S By Ca



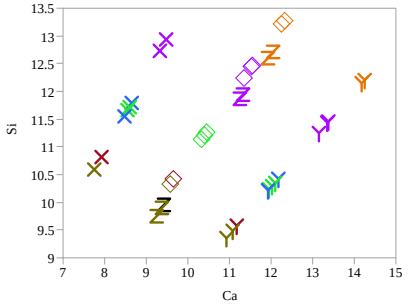
Bivariate Fit of Simulant S By Total Cr



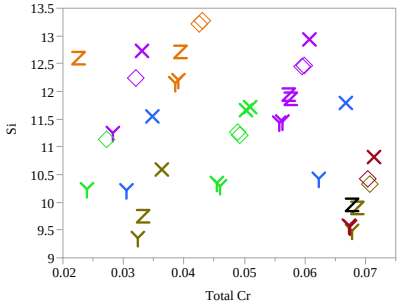
Bivariate Fit of Simulant S By Dry Blend Cr



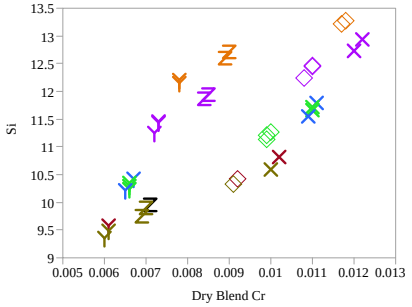
Bivariate Fit of Si By Ca



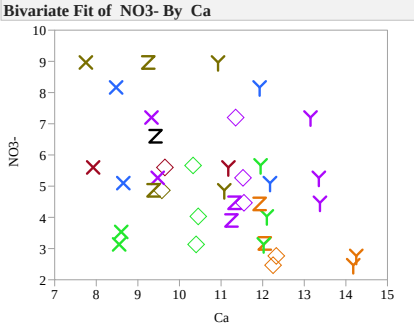
Bivariate Fit of Si By Total Cr



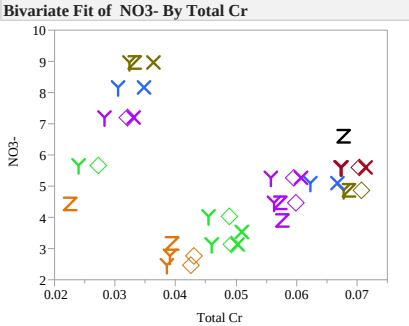
Bivariate Fit of Si By Dry Blend Cr



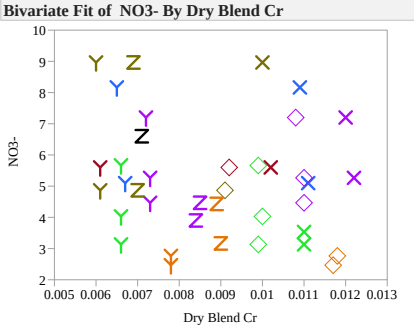
Bivariate Fit of NO3- By Ca



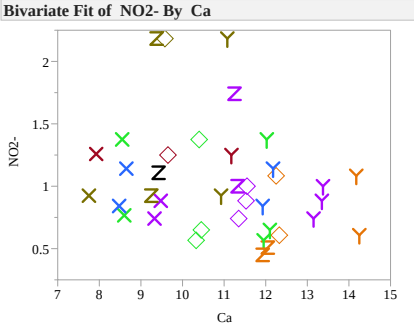
Bivariate Fit of NO3- By Total Cr



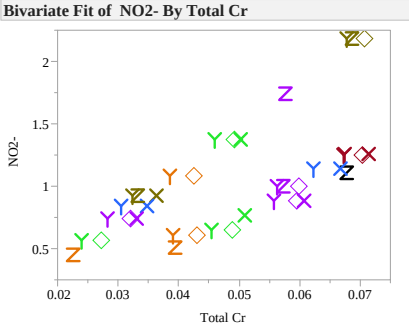
Bivariate Fit of NO3- By Dry Blend Cr



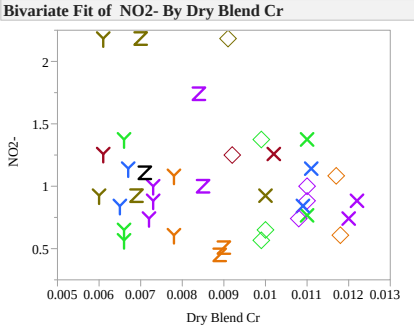
Bivariate Fit of NO2- By Ca



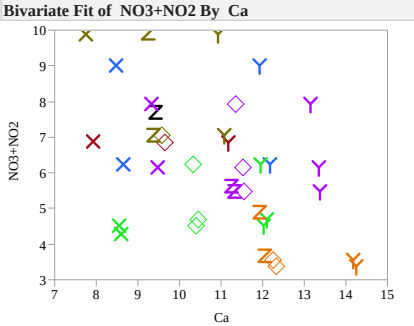
Bivariate Fit of NO2- By Total Cr



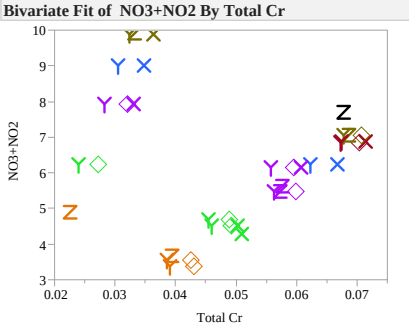
Bivariate Fit of NO2- By Dry Blend Cr



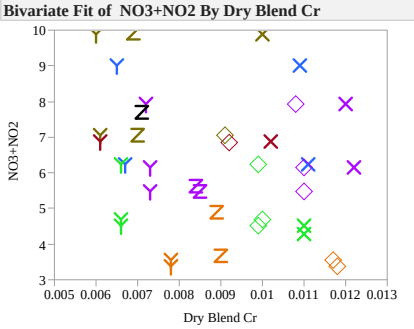
Bivariate Fit of NO3+NO2 By Ca



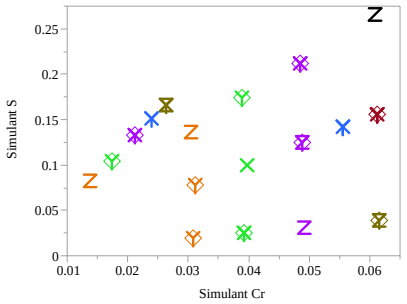
Bivariate Fit of NO3+NO2 By Total Cr



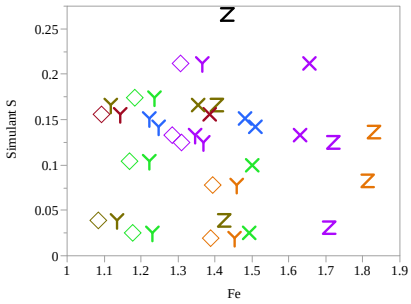
Bivariate Fit of NO3+NO2 By Dry Blend Cr



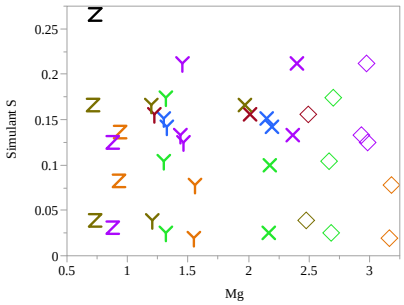
Bivariate Fit of Simulant S By Simulant Cr



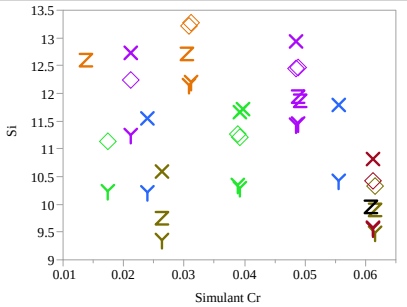
Bivariate Fit of Simulant S By Fe



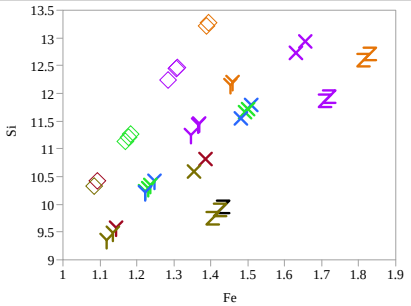
Bivariate Fit of Simulant S By Mg



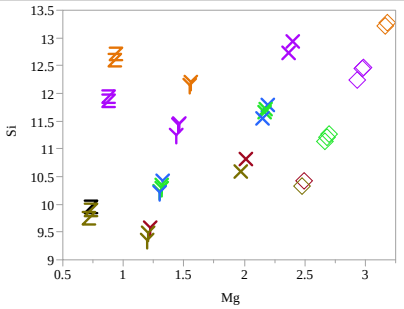
Bivariate Fit of Si By Simulant Cr



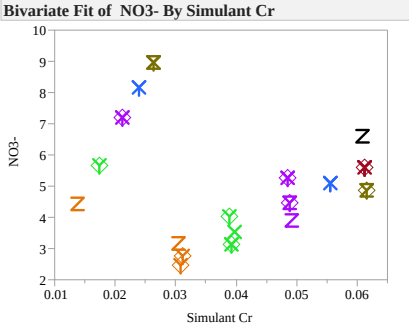
Bivariate Fit of Si By Fe



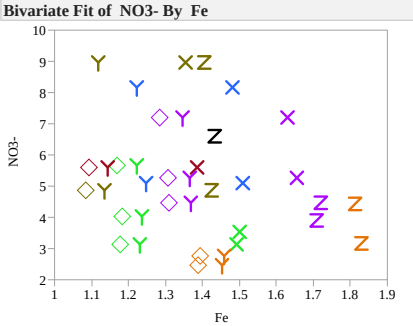
Bivariate Fit of Si By Mg



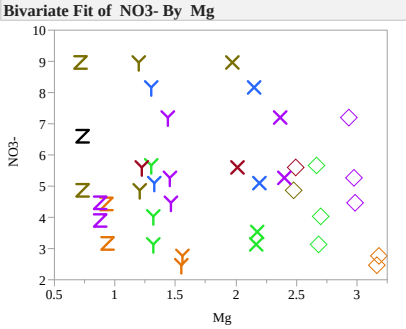
Bivariate Fit of NO3- By Simulant Cr



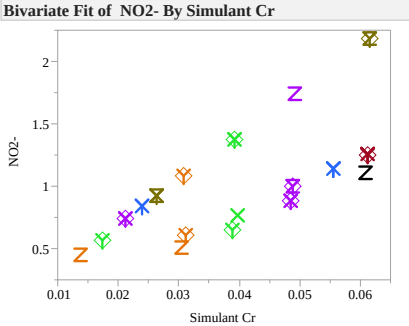
Bivariate Fit of NO3- By Fe



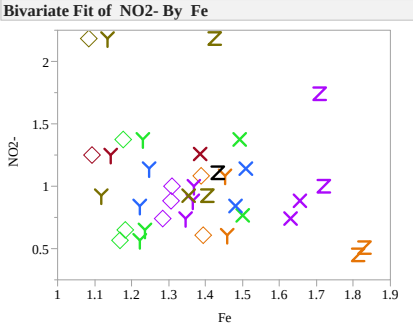
Bivariate Fit of NO3- By Mg



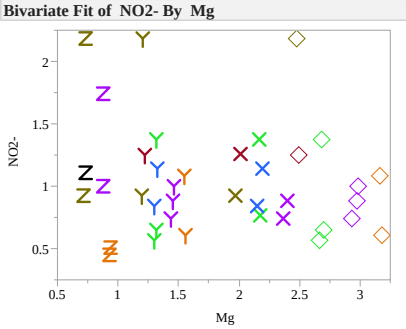
Bivariate Fit of NO2- By Simulant Cr



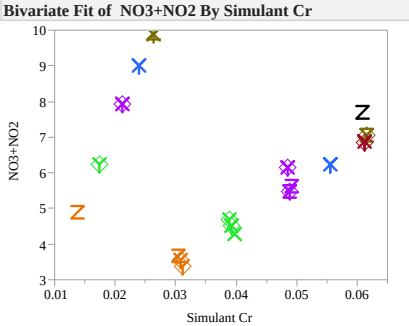
Bivariate Fit of NO2- By Fe



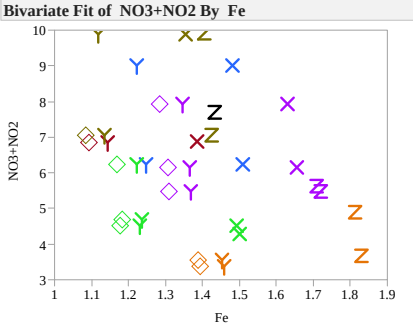
Bivariate Fit of NO2- By Mg



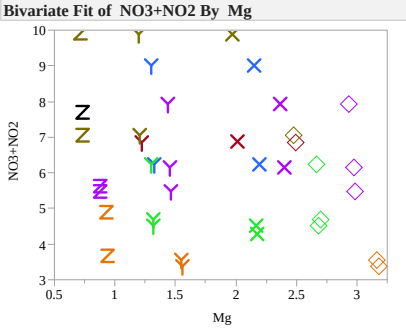
Bivariate Fit of NO3+NO2 By Simulant Cr



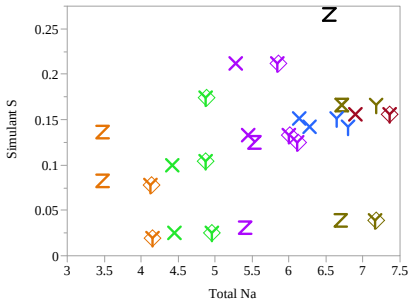
Bivariate Fit of NO3+NO2 By Fe



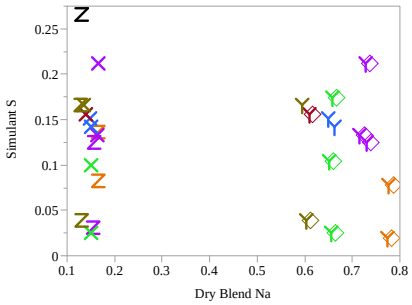
Bivariate Fit of NO3+NO2 By Mg



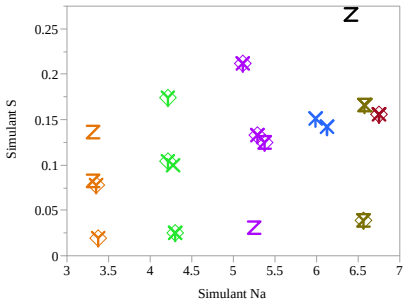
Bivariate Fit of Simulant S By Total Na



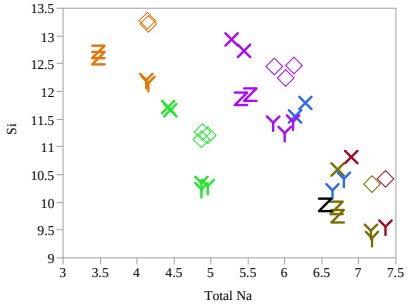
Bivariate Fit of Simulant S By Dry Blend Na



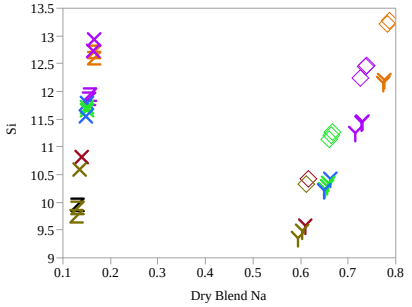
Bivariate Fit of Simulant S By Simulant Na



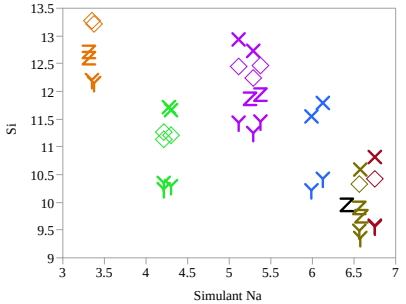
Bivariate Fit of Si By Total Na



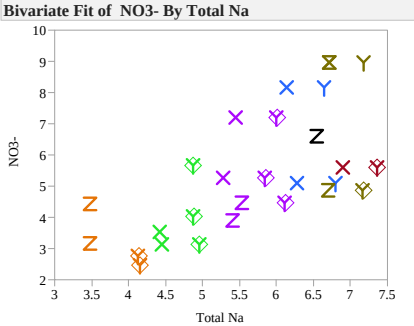
Bivariate Fit of Si By Dry Blend Na



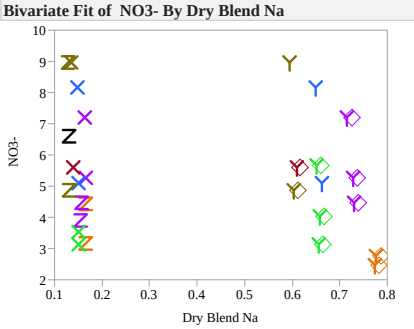
Bivariate Fit of Si By Simulant Na



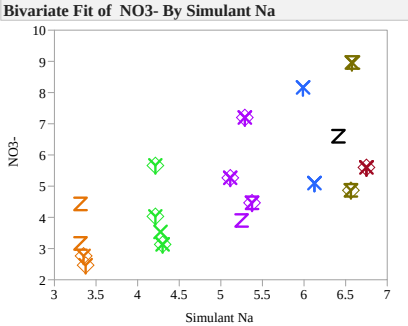
Bivariate Fit of NO3- By Total Na



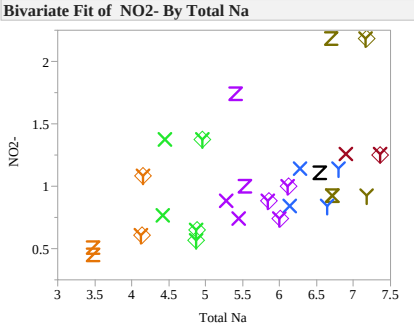
Bivariate Fit of NO3- By Dry Blend Na



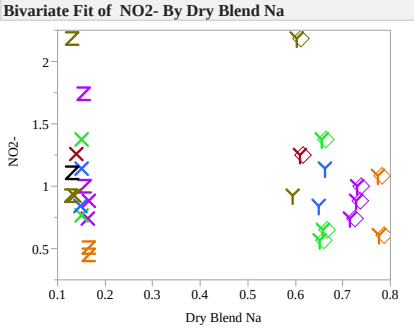
Bivariate Fit of NO3- By Simulant Na



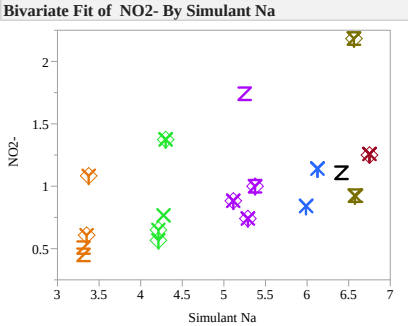
Bivariate Fit of NO2- By Total Na



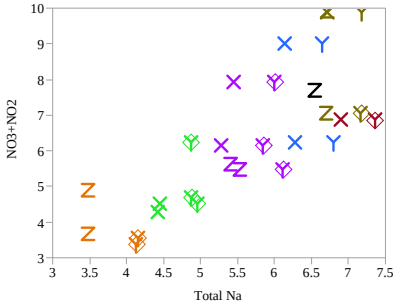
Bivariate Fit of NO2- By Dry Blend Na



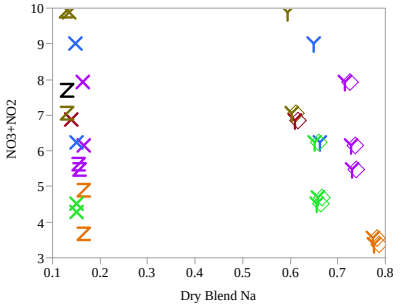
Bivariate Fit of NO2- By Simulant Na



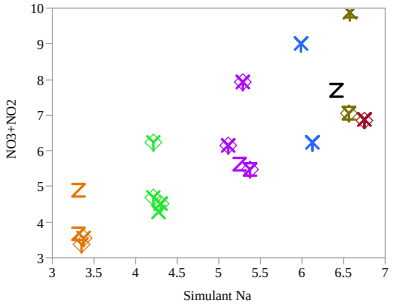
Bivariate Fit of NO3+NO2 By Total Na



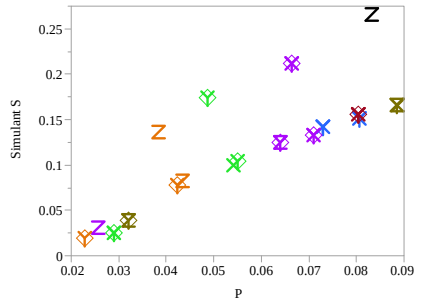
Bivariate Fit of NO3+NO2 By Dry Blend Na



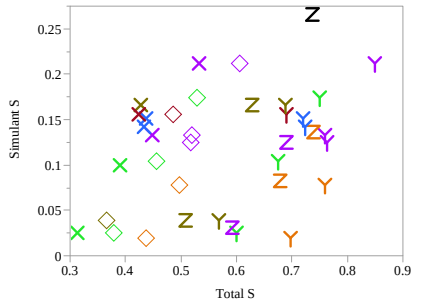
Bivariate Fit of NO3+NO2 By Simulant Na



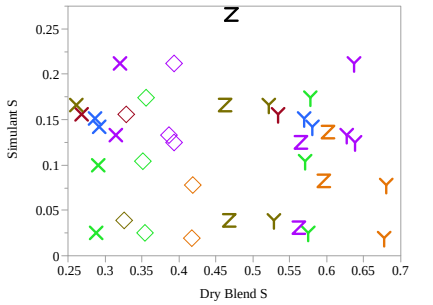
Bivariate Fit of Simulant S By P



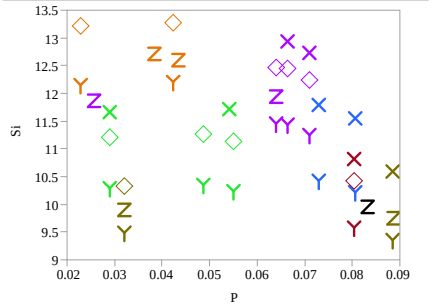
Bivariate Fit of Simulant S By Total S



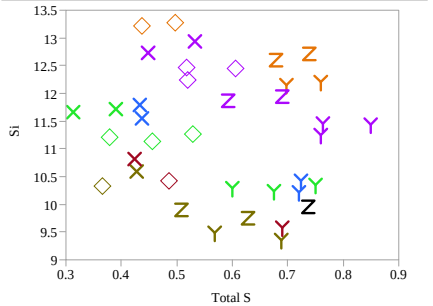
Bivariate Fit of Simulant S By Dry Blend S



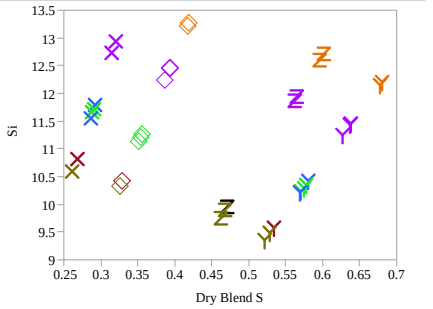
Bivariate Fit of Si By P



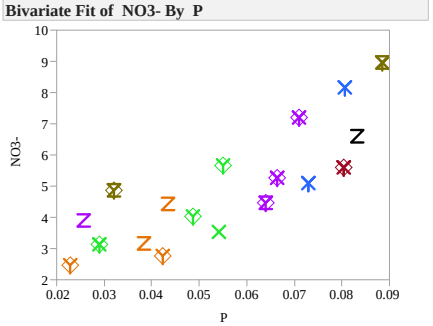
Bivariate Fit of Si By Total S



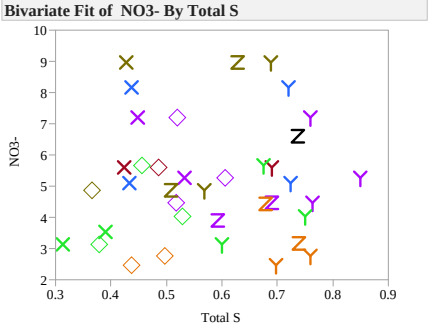
Bivariate Fit of Si By Dry Blend S



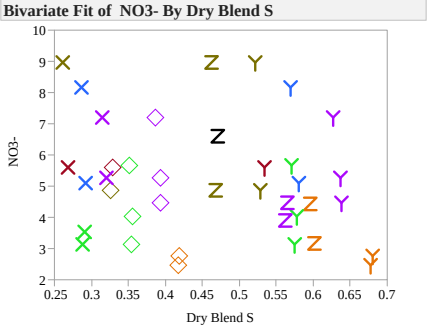
Bivariate Fit of NO3- By P



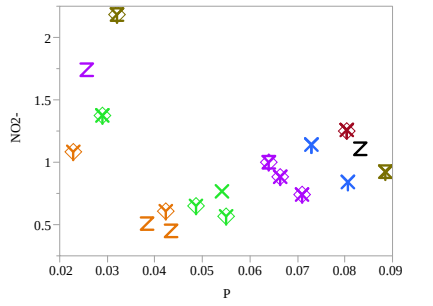
Bivariate Fit of NO3- By Total S



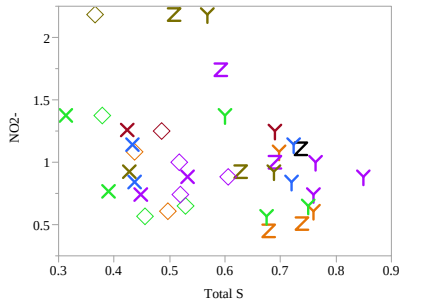
Bivariate Fit of NO3- By Dry Blend S



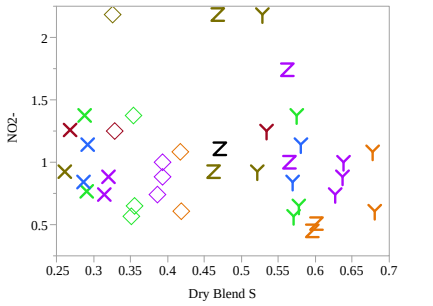
Bivariate Fit of NO2- By P



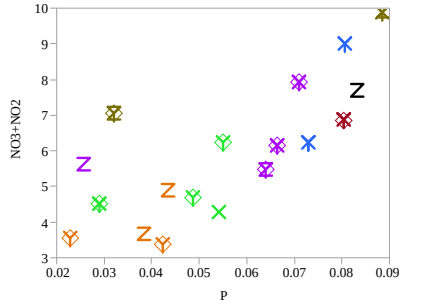
Bivariate Fit of NO2- By Total S



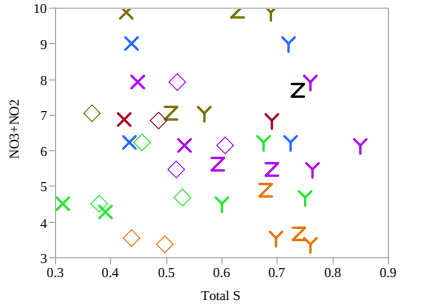
Bivariate Fit of NO2- By Dry Blend S



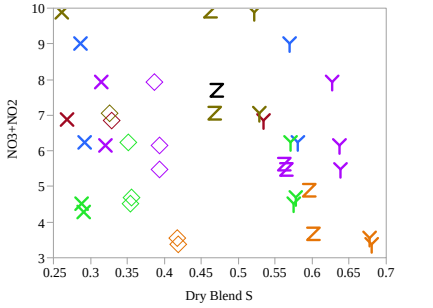
Bivariate Fit of NO3+NO2 By P

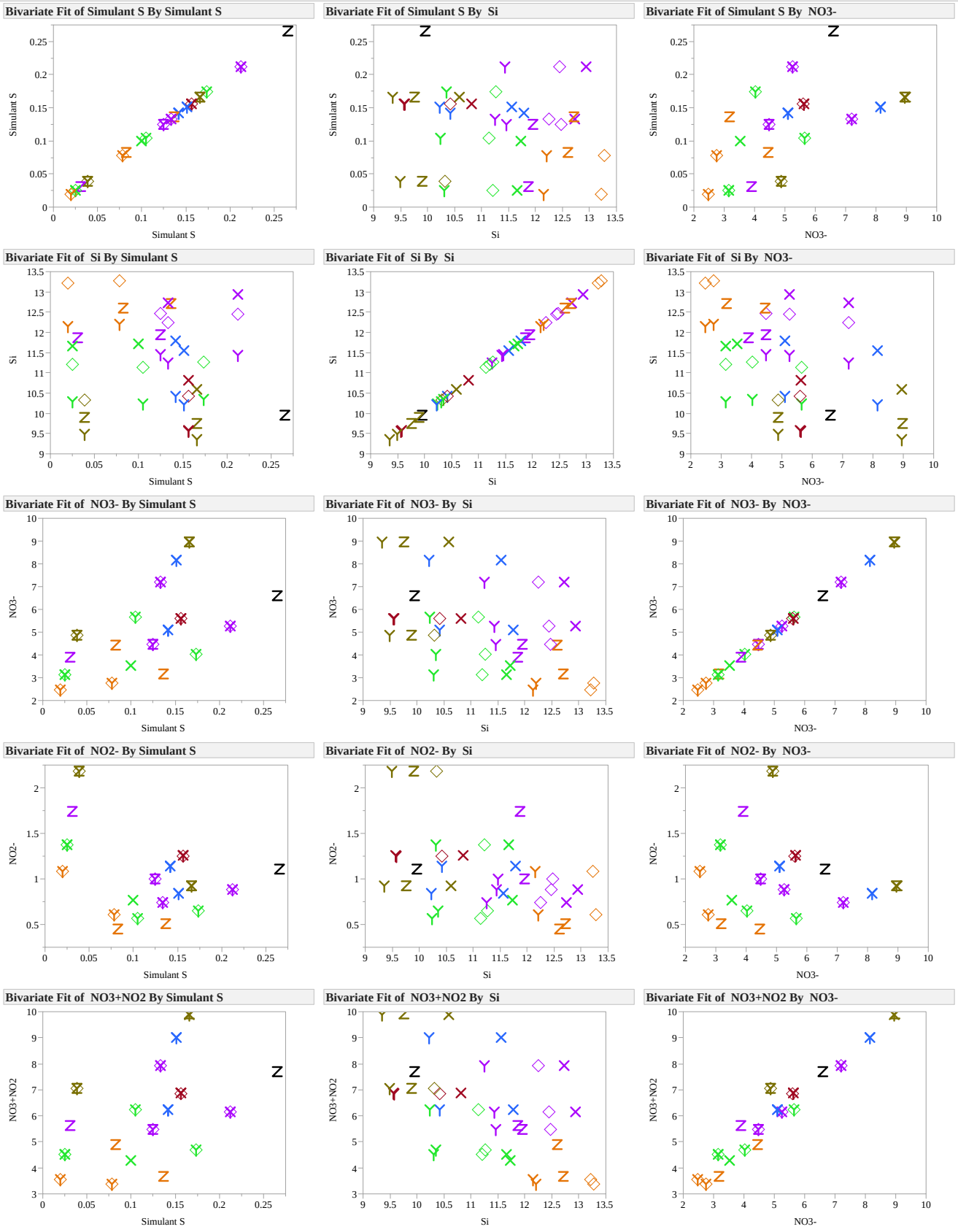


Bivariate Fit of NO3+NO2 By Total S



Bivariate Fit of NO3+NO2 By Dry Blend S




Bivariate Fit of Simulant S By Simulant S
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Bivariate Fit of NO3+NO2 By Si
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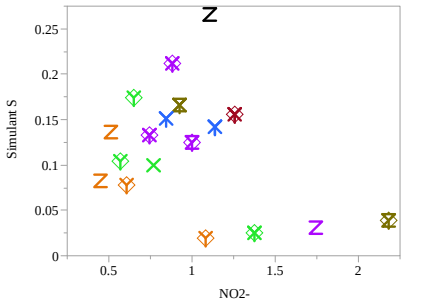
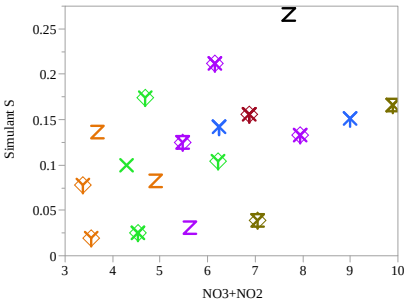
NO3+NO2
NO3-

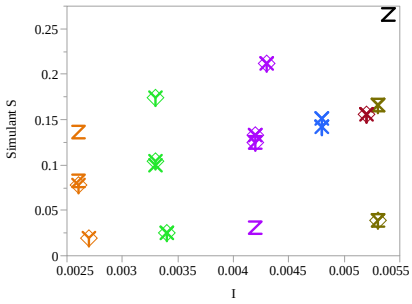
Bivariate Fit of Simulant S By NO2-



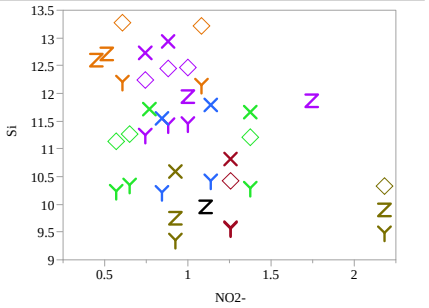
Bivariate Fit of Simulant S By NO3+NO2



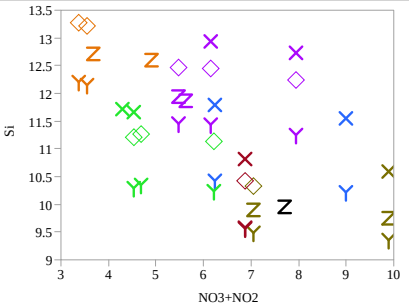
Bivariate Fit of Simulant S By I



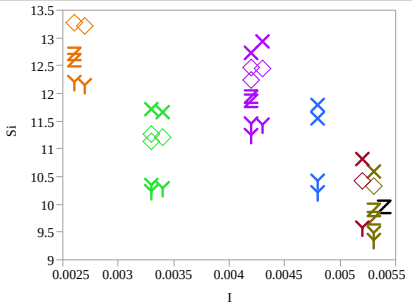
Bivariate Fit of Si By NO2-



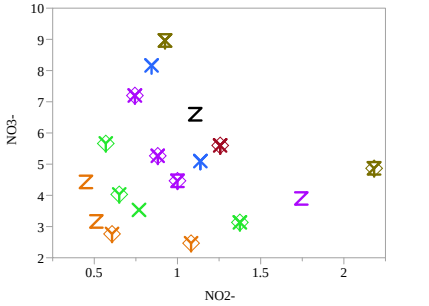
Bivariate Fit of Si By NO3+NO2



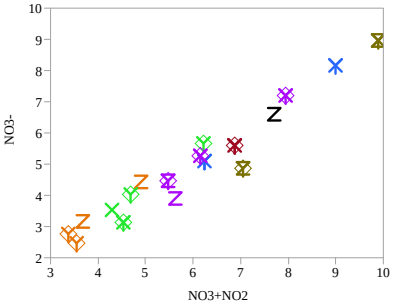
Bivariate Fit of Si By I



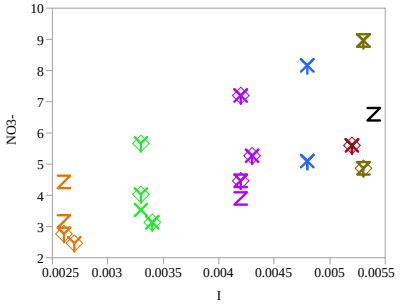
Bivariate Fit of NO3- By NO2-



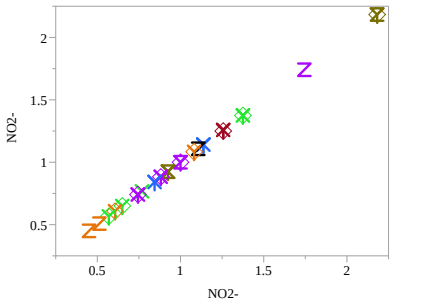
Bivariate Fit of NO3- By NO3+NO2



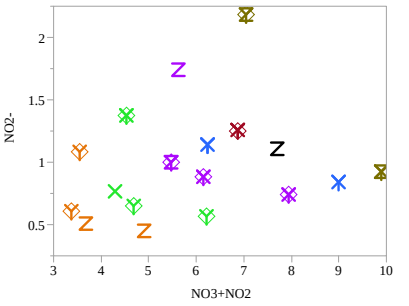
Bivariate Fit of NO3- By I



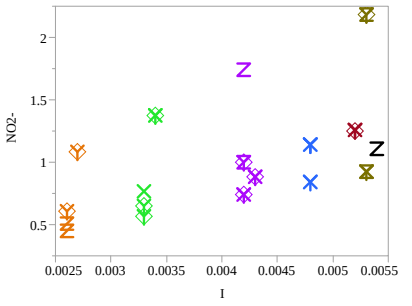
Bivariate Fit of NO2- By NO2-



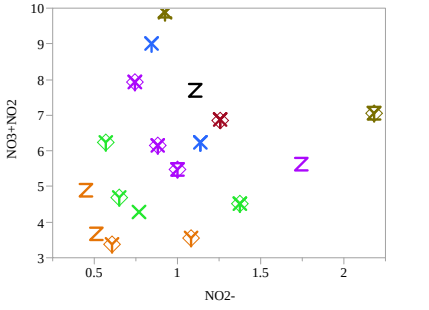
Bivariate Fit of NO2- By NO3+NO2



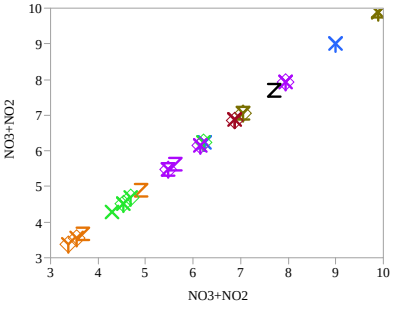
Bivariate Fit of NO2- By I



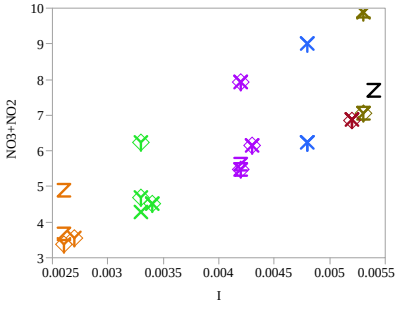
Bivariate Fit of NO3+NO2 By NO2-

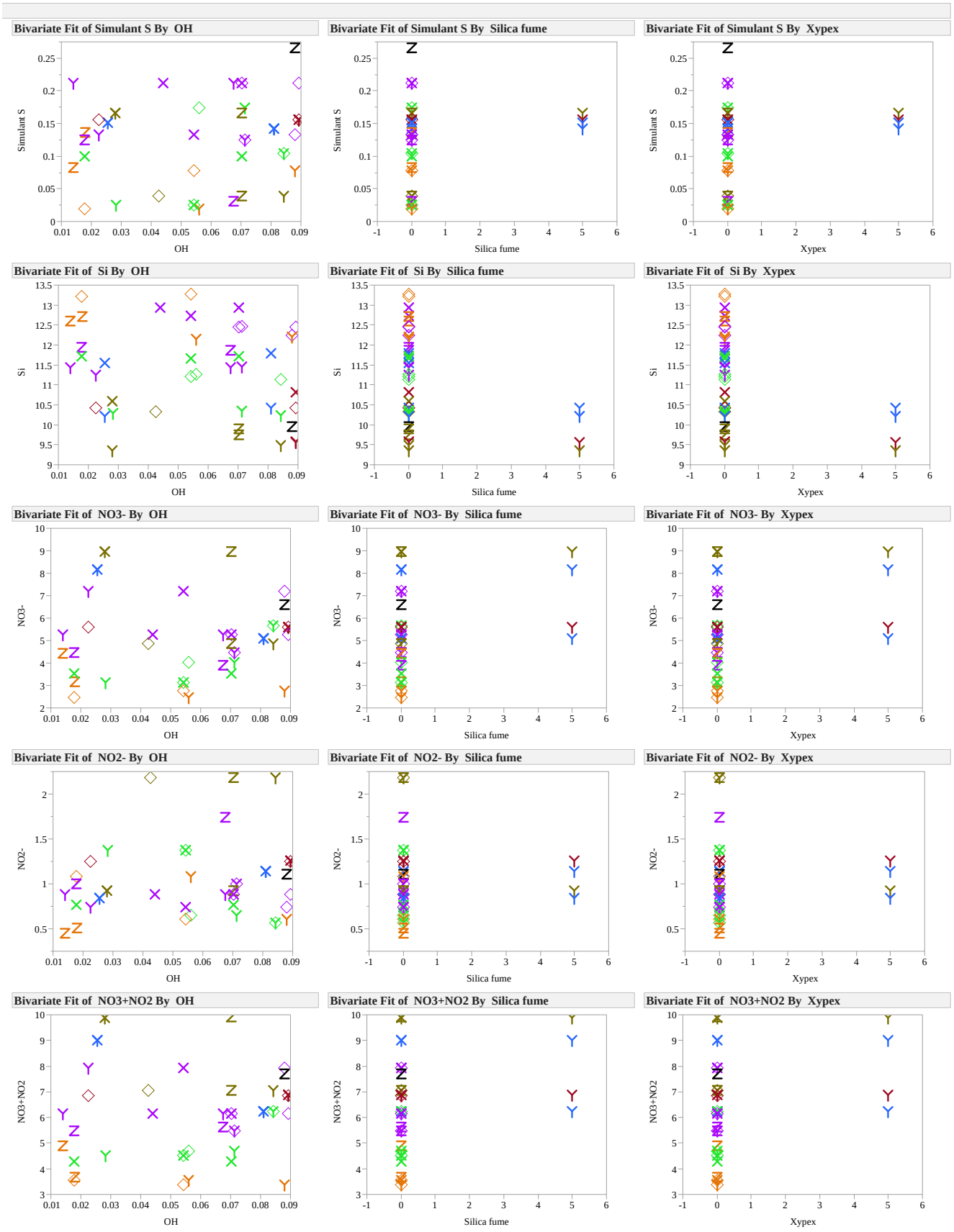


Bivariate Fit of NO3+NO2 By NO3+NO2



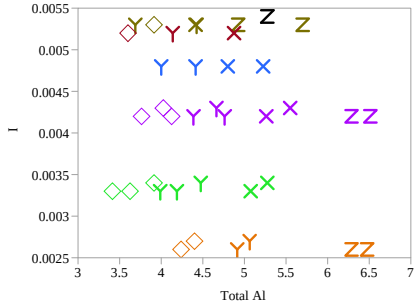
Bivariate Fit of NO3+NO2 By I



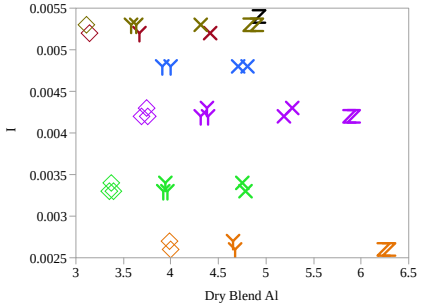

Bivariate Fit of Simulant S By OH
Simulant S
OH
Bivariate Fit of Simulant S By Silica fume
Simulant S
Silica fume
Bivariate Fit of Simulant S By Xypex
Simulant S
Xypex
Bivariate Fit of Si By OH
Si
OH
Bivariate Fit of Si By Silica fume
Si
Silica fume
Bivariate Fit of Si By Xypex
Si
Xypex
Bivariate Fit of NO3- By OH
NO3-
OH
Bivariate Fit of NO3- By Silica fume
NO3-
Silica fume
Bivariate Fit of NO3- By Xypex
NO3-
Xypex
Bivariate Fit of NO2- By OH
NO2-
OH
Bivariate Fit of NO2- By Silica fume
NO2-
Silica fume
Bivariate Fit of NO2- By Xypex
NO2-
Xypex
Bivariate Fit of NO3+NO2 By OH
NO3+NO2
OH
Bivariate Fit of NO3+NO2 By Silica fume
NO3+NO2
Silica fume
Bivariate Fit of NO3+NO2 By Xypex
NO3+NO2
Xypex

Fit Group

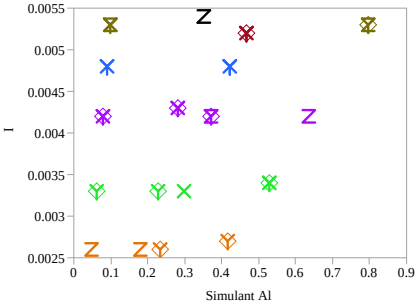
Bivariate Fit of I By Total Al



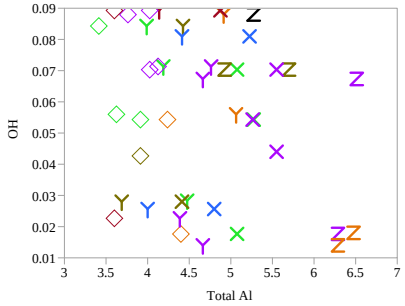
Bivariate Fit of I By Dry Blend Al



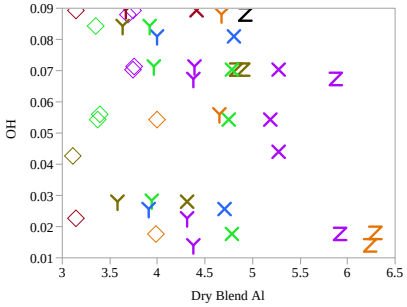
Bivariate Fit of I By Simulant Al



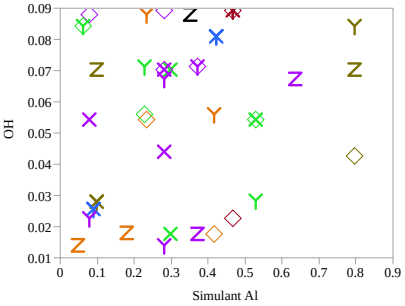
Bivariate Fit of OH By Total Al



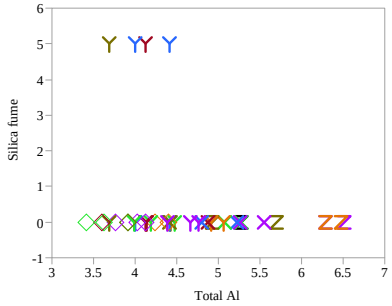
Bivariate Fit of OH By Dry Blend Al



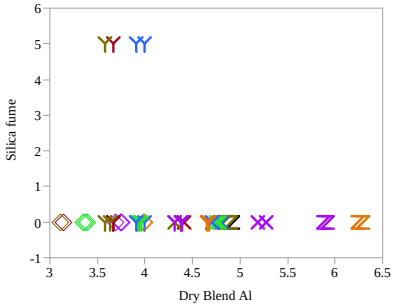
Bivariate Fit of OH By Simulant Al



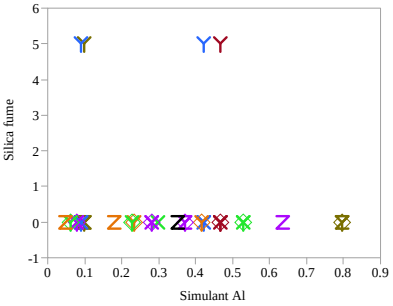
Bivariate Fit of Silica fume By Total Al



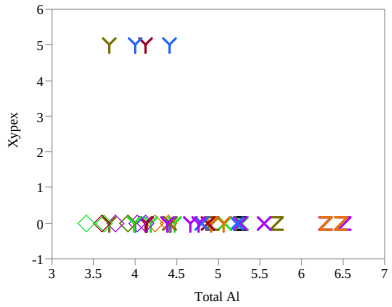
Bivariate Fit of Silica fume By Dry Blend Al



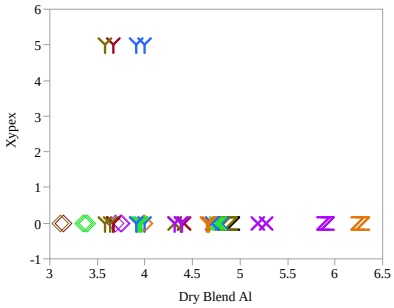
Bivariate Fit of Silica fume By Simulant Al



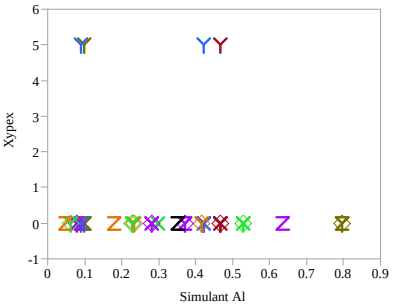
Bivariate Fit of Xypex By Total Al

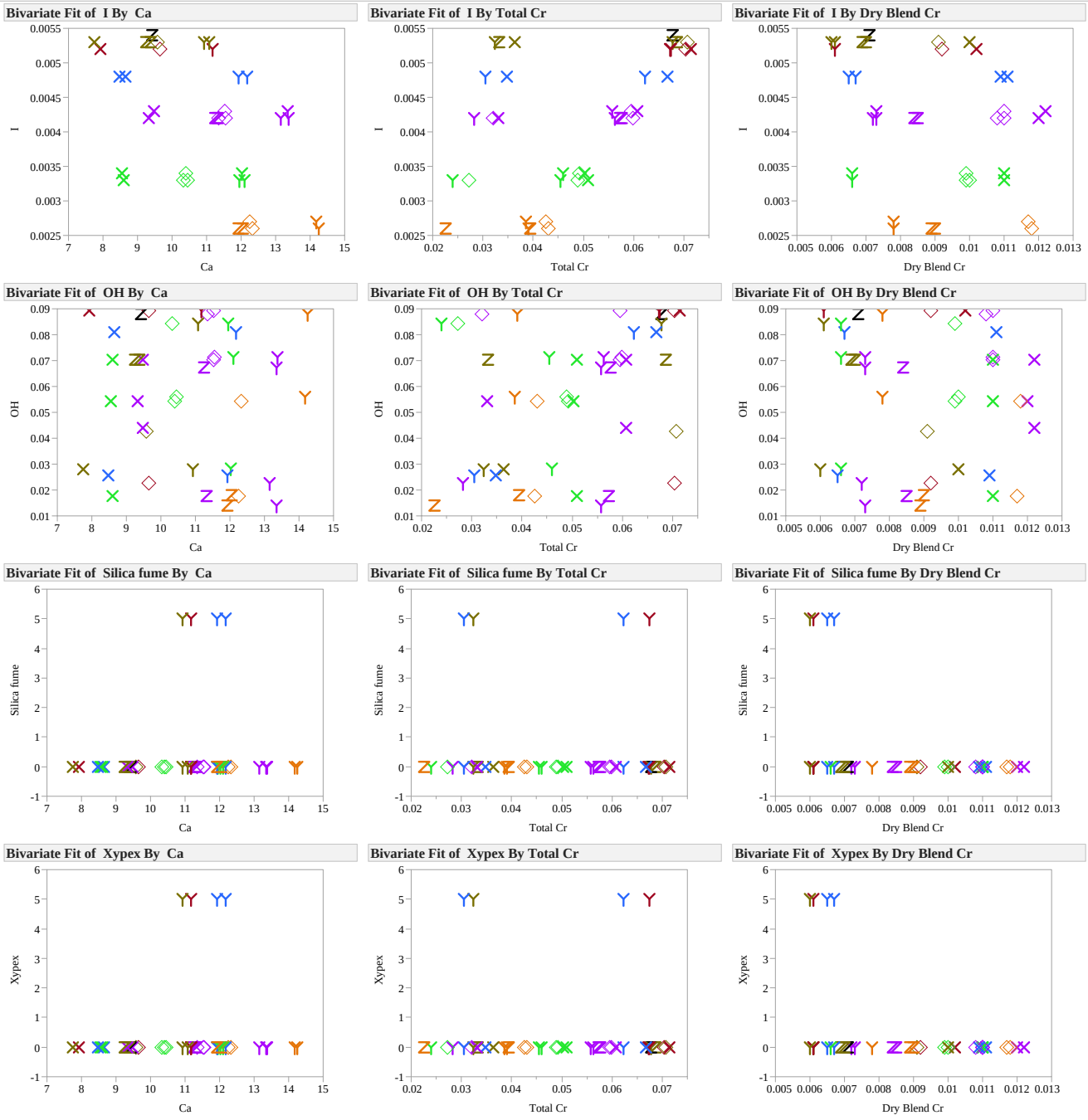


Bivariate Fit of Xypex By Dry Blend Al

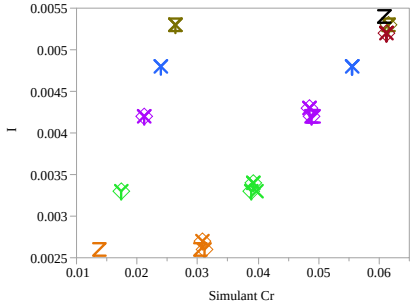


Bivariate Fit of Xypex By Simulant Al

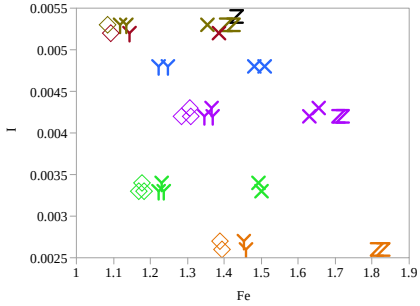



Bivariate Fit of I By Ca
I
Ca
Bivariate Fit of I By Total Cr
I
Total Cr
Bivariate Fit of I By Dry Blend Cr
I
Dry Blend Cr
Bivariate Fit of OH By Ca
OH
Ca
Bivariate Fit of OH By Total Cr
OH
Total Cr
Bivariate Fit of OH By Dry Blend Cr
OH
Dry Blend Cr
Bivariate Fit of Silica fume By Ca
Silica fume
Ca
Bivariate Fit of Silica fume By Total Cr
Silica fume
Total Cr
Bivariate Fit of Silica fume By Dry Blend Cr
Silica fume
Dry Blend Cr
Bivariate Fit of Xypex By Ca
Xypex
Ca
Bivariate Fit of Xypex By Total Cr
Xypex
Total Cr
Bivariate Fit of Xypex By Dry Blend Cr
Xypex
Dry Blend Cr

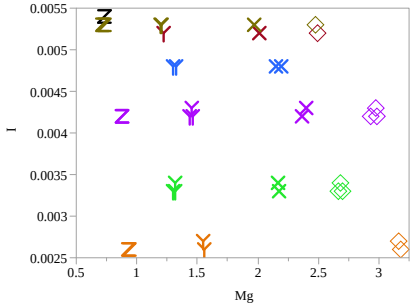
Bivariate Fit of I By Simulant Cr



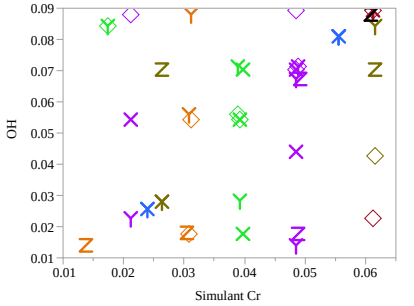
Bivariate Fit of I By Fe



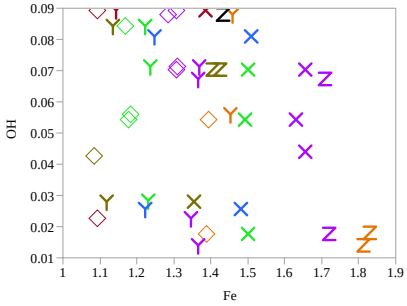
Bivariate Fit of I By Mg



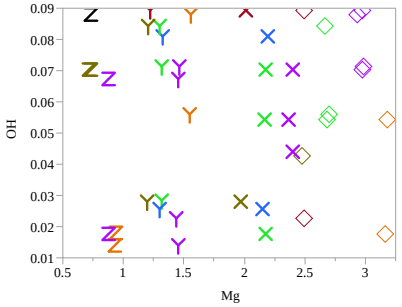
Bivariate Fit of OH By Simulant Cr



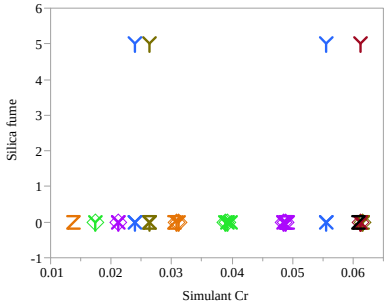
Bivariate Fit of OH By Fe



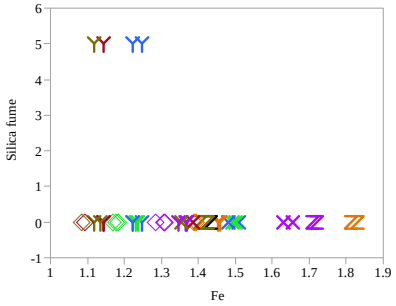
Bivariate Fit of OH By Mg



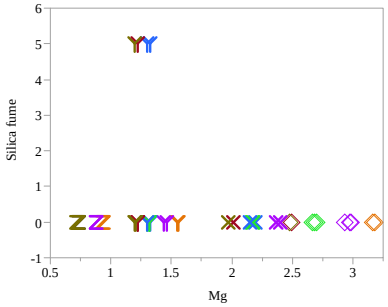
Bivariate Fit of Silica fume By Simulant Cr



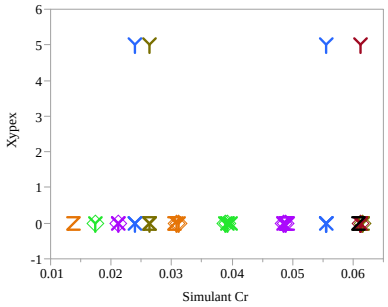
Bivariate Fit of Silica fume By Fe



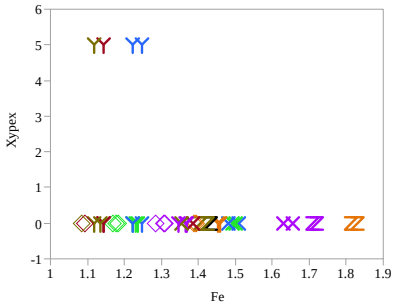
Bivariate Fit of Silica fume By Mg



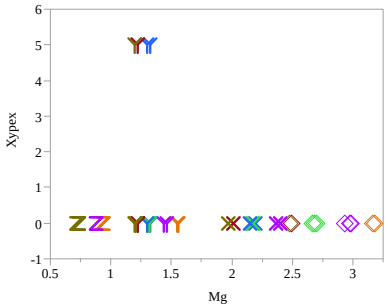
Bivariate Fit of Xypex By Simulant Cr



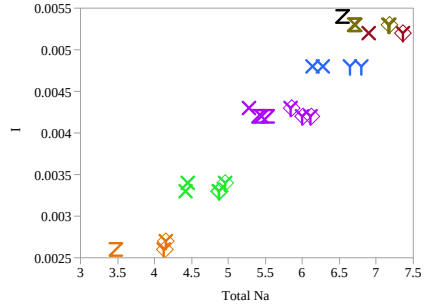
Bivariate Fit of Xypex By Fe



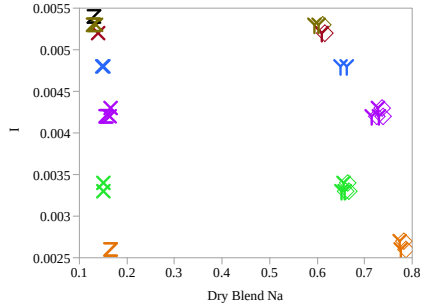
Bivariate Fit of Xypex By Mg



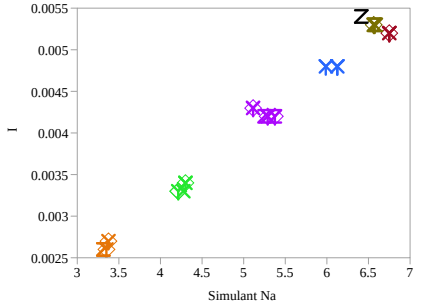
Bivariate Fit of I By Total Na



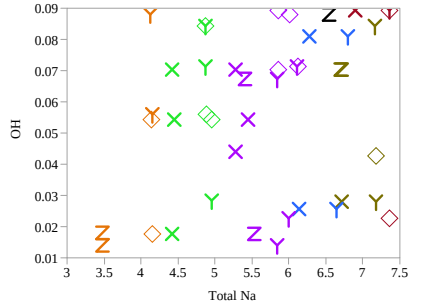
Bivariate Fit of I By Dry Blend Na



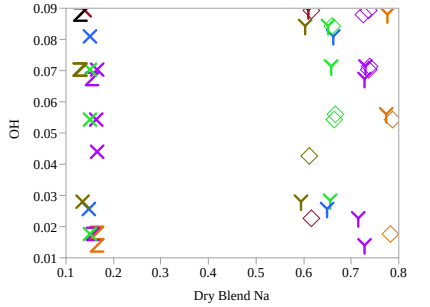
Bivariate Fit of I By Simulant Na



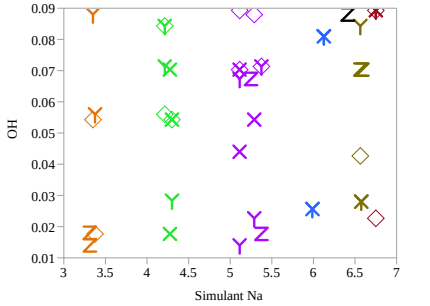
Bivariate Fit of OH By Total Na



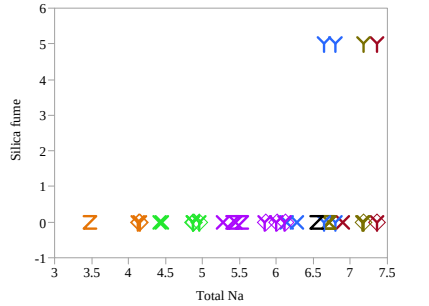
Bivariate Fit of OH By Dry Blend Na



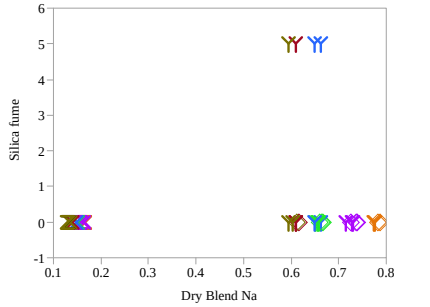
Bivariate Fit of OH By Simulant Na



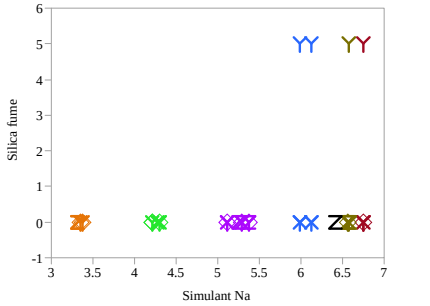
Bivariate Fit of Silica fume By Total Na



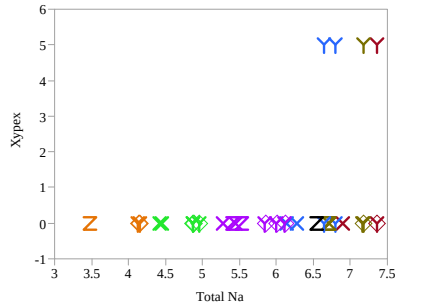
Bivariate Fit of Silica fume By Dry Blend Na



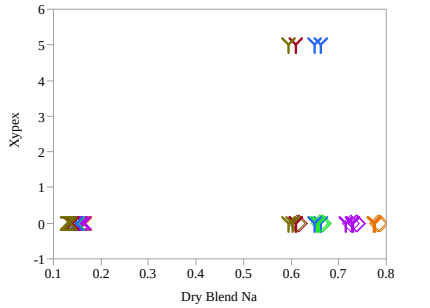
Bivariate Fit of Silica fume By Simulant Na



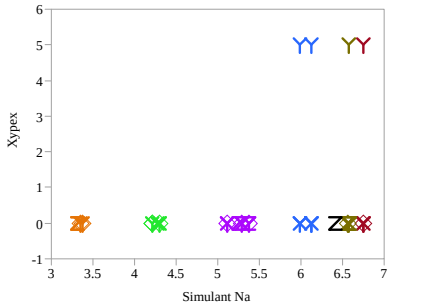
Bivariate Fit of Xypex By Total Na

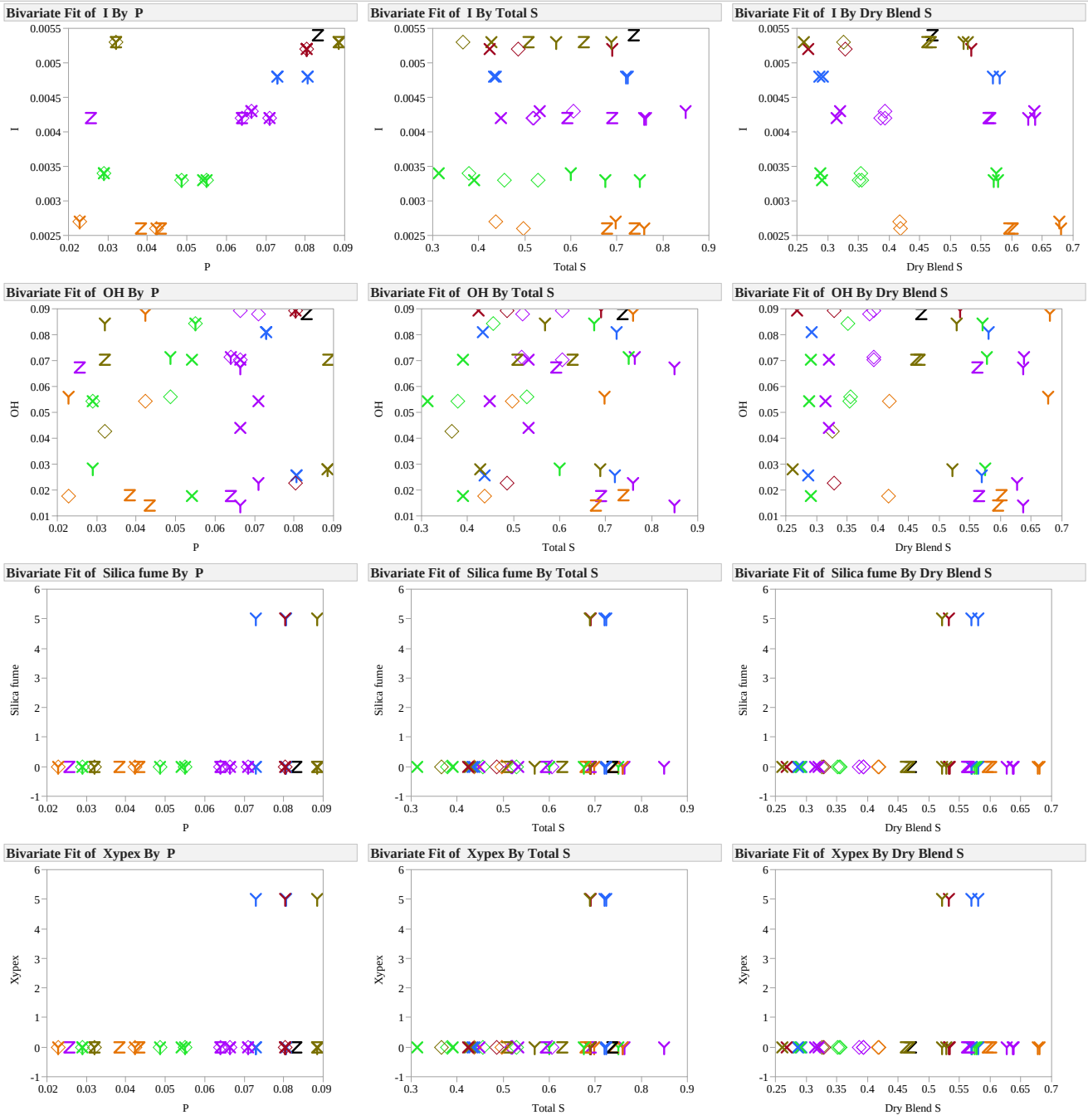


Bivariate Fit of Xypex By Dry Blend Na

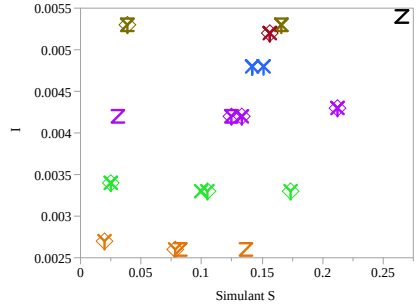


Bivariate Fit of Xypex By Simulant Na

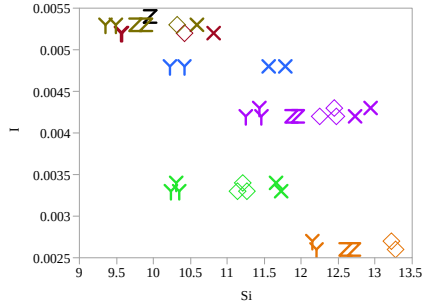



Bivariate Fit of I By P
I
P
Bivariate Fit of I By Total S
I
Total S
Bivariate Fit of I By Dry Blend S
I
Dry Blend S
Bivariate Fit of OH By P
OH
P
Bivariate Fit of OH By Total S
OH
Total S
Bivariate Fit of OH By Dry Blend S
OH
Dry Blend S
Bivariate Fit of Silica fume By P
Silica fume
P
Bivariate Fit of Silica fume By Total S
Silica fume
Total S
Bivariate Fit of Silica fume By Dry Blend S
Silica fume
Dry Blend S
Bivariate Fit of Xypex By P
Xypex
P
Bivariate Fit of Xypex By Total S
Xypex
Total S
Bivariate Fit of Xypex By Dry Blend S
Xypex
Dry Blend S

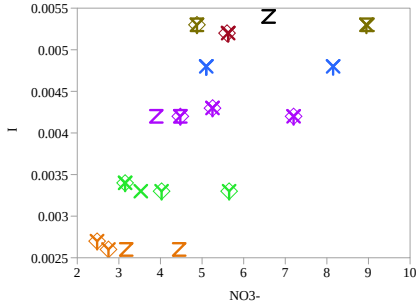
Bivariate Fit of I By Simulant S



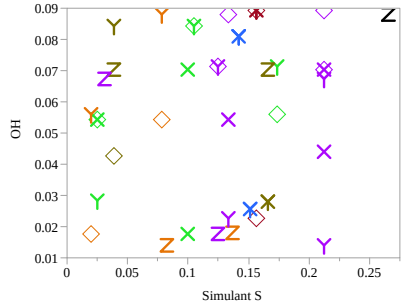
Bivariate Fit of I By Si



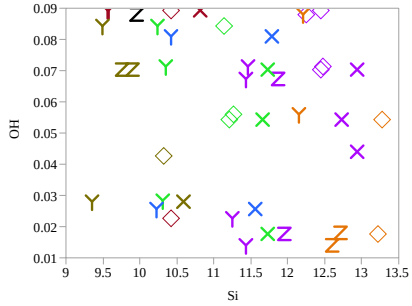
Bivariate Fit of I By NO3-



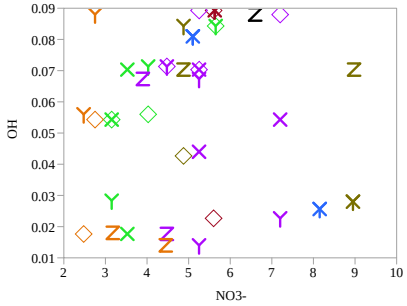
Bivariate Fit of OH By Simulant S



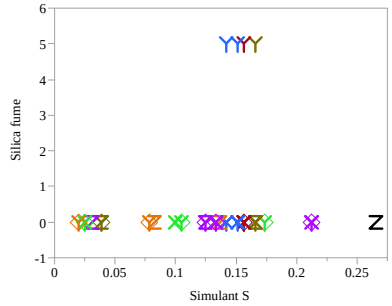
Bivariate Fit of OH By Si



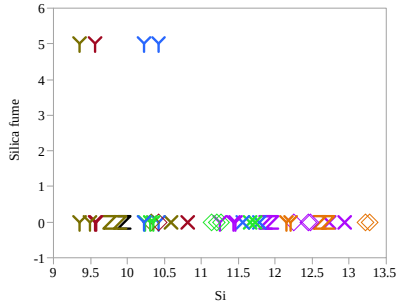
Bivariate Fit of OH By NO3-



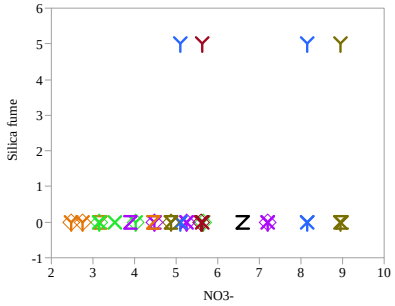
Bivariate Fit of Silica fume By Simulant S



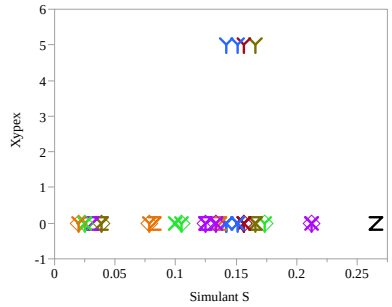
Bivariate Fit of Silica fume By Si



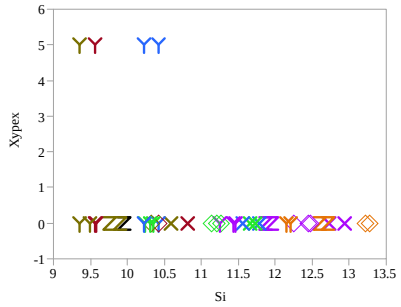
Bivariate Fit of Silica fume By NO3-



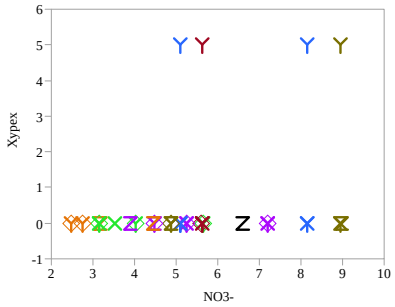
Bivariate Fit of Xypex By Simulant S

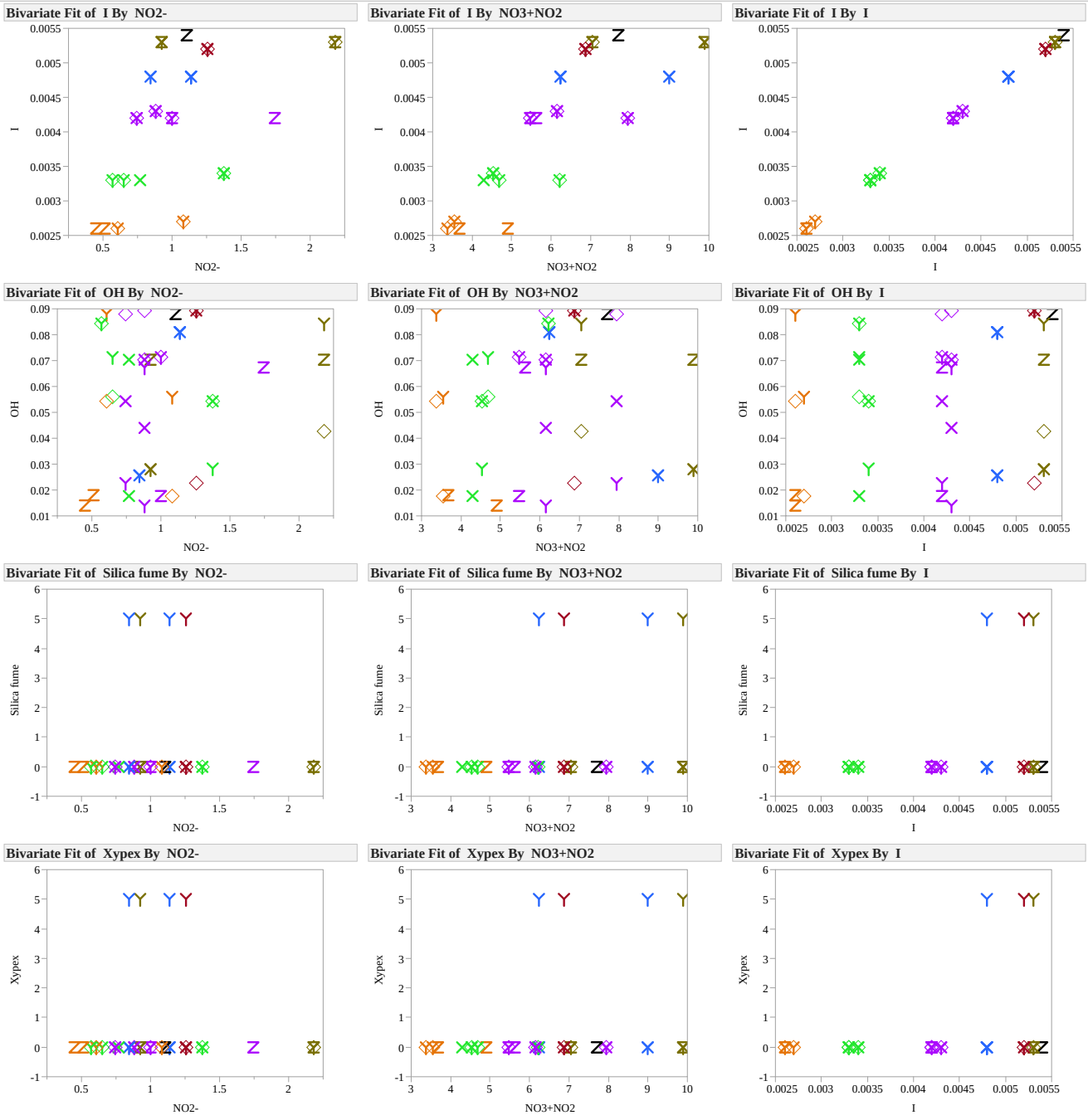


Bivariate Fit of Xypex By Si



Bivariate Fit of Xypex By NO3-




Bivariate Fit of I By NO2-
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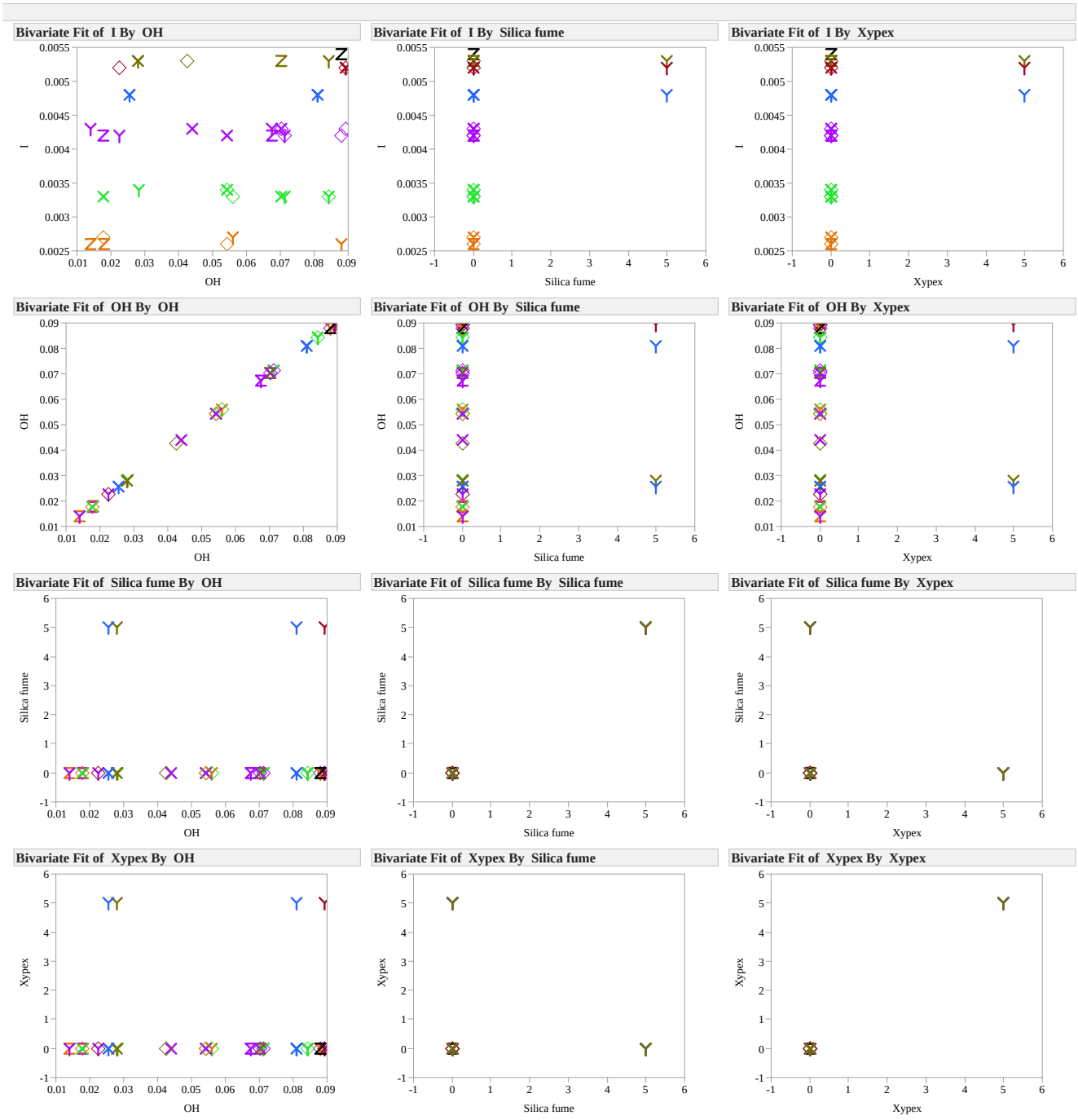
Bivariate Fit of I By OH
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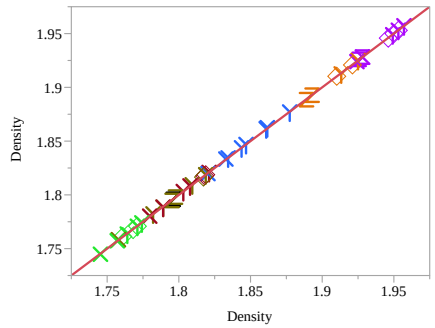
Fit Group

Bivariate Fit of Density By Density



Linear Fit

Linear Fit

Density = 0 + 1*Density

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	1.847407
Observations (or Sum Wgts)	54

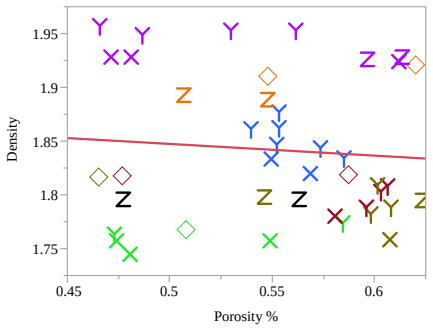
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.25250704	0.252507	.
Error	52	0.00000000	0.000000	Prob > F
C. Total	53	0.25250704		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
Density	1	0	.	.

Bivariate Fit of Density By Porosity %



Linear Fit

Linear Fit

Density = 1.9018091 - 0.1088301*Porosity %

Summary of Fit

RSquare	0.007116
RSquare Adj	-0.01771
Root Mean Square Error	0.066403
Mean of Response	1.841881
Observations (or Sum Wgts)	42

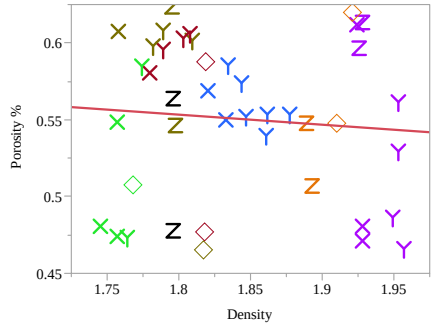
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00126401	0.001264	0.2867
Error	40	0.17637240	0.004409	Prob > F
C. Total	41	0.17763640		0.5953

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.9018091	0.112397	16.92	<.0001*
Porosity %	-0.10883	0.203263	-0.54	0.5953

Bivariate Fit of Porosity % By Density



Linear Fit

Linear Fit

Porosity % = 0.6710869 - 0.0653836*Density

Summary of Fit

RSquare	0.007116
RSquare Adj	-0.01771
Root Mean Square Error	0.051469
Mean of Response	0.550658
Observations (or Sum Wgts)	42

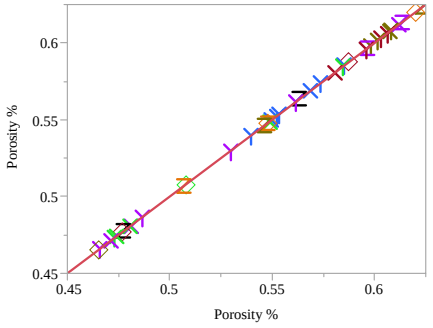
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00075940	0.000759	0.2867
Error	40	0.10596209	0.002649	Prob > F
C. Total	41	0.10672149		0.5953

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.6710869	0.225067	2.98	0.0049*
Density	-0.065384	0.122118	-0.54	0.5953

Bivariate Fit of Porosity % By Porosity %



Linear Fit

Linear Fit

Porosity % = 0 + 1*Porosity %

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	0.550658
Observations (or Sum Wgts)	42

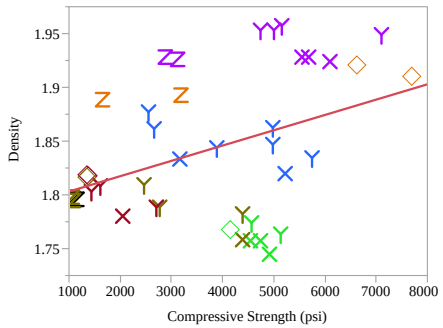
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.10672149	0.106721	.
Error	40	0.00000000	0.000000	Prob > F
C. Total	41	0.10672149		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
Porosity %	1	0	.	.

Bivariate Fit of Density By Compressive Strength (psi)



Linear Fit

Linear Fit

Density = 1.7888963 + 1.4258e-5*Compressive Strength (psi)

Summary of Fit

RSquare	0.158233
RSquare Adj	0.137189
Root Mean Square Error	0.061141
Mean of Response	1.841881
Observations (or Sum Wgts)	42

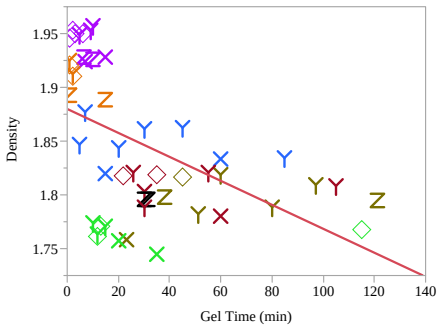
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.02810791	0.028108	7.5191
Error	40	0.14952849	0.003738	Prob > F
C. Total	41	0.17763640		0.0091*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.7888963	0.021503	83.19	<.0001*
Compressive Strength (psi)	1.4258e-5	5.2e-6	2.74	0.0091*

Bivariate Fit of Density By Gel Time (min)



Linear Fit

Linear Fit

Density = 1.8800286 - 0.0011156*Gel Time (min)

Summary of Fit

RSquare	0.245954
RSquare Adj	0.231453
Root Mean Square Error	0.060511
Mean of Response	1.847407
Observations (or Sum Wgts)	54

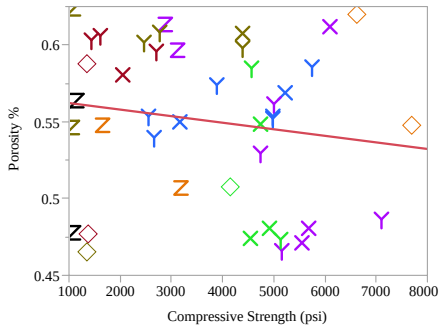
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.06210516	0.062105	16.9613
Error	52	0.19040188	0.003662	Prob > F
C. Total	53	0.25250704		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8800286	0.011426	164.54	<.0001*
Gel Time (min)	-0.001116	0.000271	-4.12	0.0001*

Bivariate Fit of Porosity % By Compressive Strength (psi)



Linear Fit

Linear Fit

Porosity % = 0.566546 - 4.2755e-6*Compressive Strength (psi)

Summary of Fit

RSquare	0.023682
RSquare Adj	-0.00073
Root Mean Square Error	0.051038
Mean of Response	0.550658
Observations (or Sum Wgts)	42

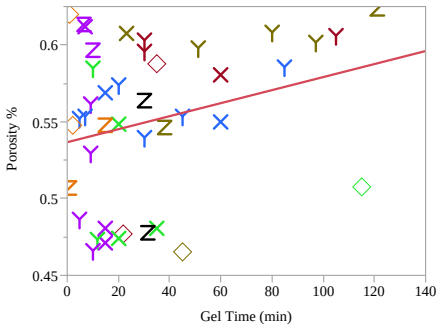
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00252737	0.002527	0.9703
Error	40	0.10419411	0.002605	Prob > F
C. Total	41	0.10672149		0.3305

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.566546	0.01795	31.56	<.0001*
Compressive Strength (psi)	-4.275e-6	4.341e-6	-0.99	0.3305

Bivariate Fit of Porosity % By Gel Time (min)



Linear Fit

Linear Fit

Porosity % = 0.5366945 + 0.0004241*Gel Time (min)

Summary of Fit

RSquare	0.071843
RSquare Adj	0.048639
Root Mean Square Error	0.049763
Mean of Response	0.550658
Observations (or Sum Wgts)	42

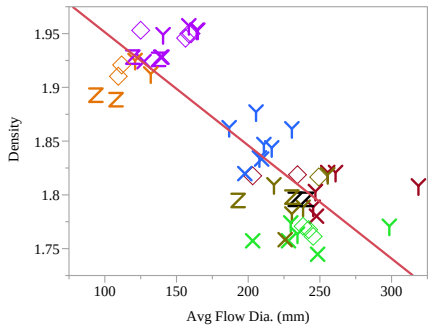
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00766717	0.007667	3.0961
Error	40	0.09905432	0.002476	Prob > F
C. Total	41	0.10672149		0.0861

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5366945	0.011042	48.60	<.0001*
Gel Time (min)	0.0004241	0.000241	1.76	0.0861

Bivariate Fit of Density By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

Density = 2.0565407 - 0.001053*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.663485
RSquare Adj	0.657014
Root Mean Square Error	0.040424
Mean of Response	1.847407
Observations (or Sum Wgts)	54

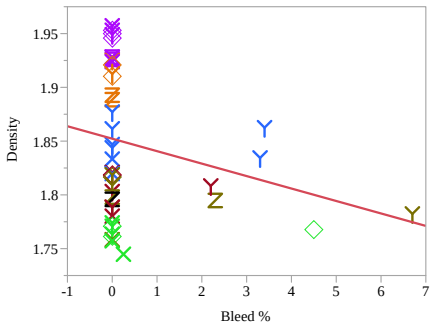
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.16753474	0.167535	102.5252
Error	52	0.08497230	0.001634	Prob > F
C. Total	53	0.25250704		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.0565407	0.021374	96.22	<.0001*
Avg Flow Dia. (mm)	-0.001053	0.000104	-10.13	<.0001*

Bivariate Fit of Density By Bleed %



Linear Fit

Linear Fit

Density = 1.852268 - 0.0115882*Bleed %

Summary of Fit

RSquare	0.046949
RSquare Adj	0.028621
Root Mean Square Error	0.068029
Mean of Response	1.847407
Observations (or Sum Wgts)	54

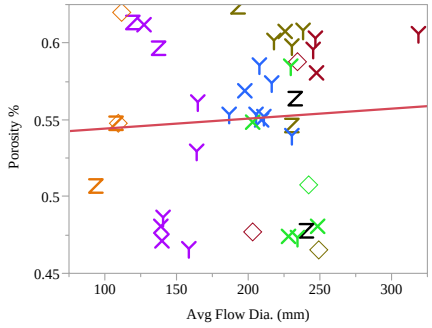
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01185502	0.011855	2.5616
Error	52	0.24065202	0.004628	Prob > F
C. Total	53	0.25250704		0.1155

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.852268	0.009743	190.11	<.0001*
Bleed %	-0.011588	0.00724	-1.60	0.1155

Bivariate Fit of Porosity % By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

Porosity % = 0.5378179 + 6.4833e-5*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.004191
RSquare Adj	-0.0207
Root Mean Square Error	0.051545
Mean of Response	0.550658
Observations (or Sum Wgts)	42

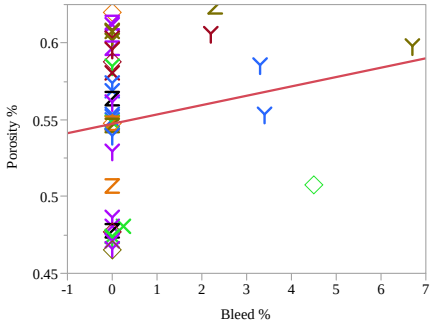
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00044724	0.000447	0.1683
Error	40	0.10627425	0.002657	Prob > F
C. Total	41	0.10672149		0.6838

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5378179	0.03229	16.66	<.0001*
Avg Flow Dia. (mm)	6.4833e-5	0.000158	0.41	0.6838

Bivariate Fit of Porosity % By Bleed %



Linear Fit

Linear Fit

Porosity % = 0.5473686 + 0.0060996*Bleed %

Summary of Fit

RSquare	0.02983
RSquare Adj	0.005576
Root Mean Square Error	0.050877
Mean of Response	0.550658
Observations (or Sum Wgts)	42

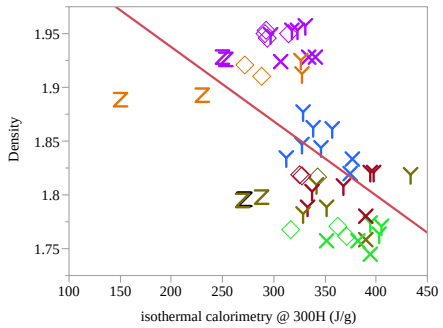
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00318354	0.003184	1.2299
Error	40	0.10353795	0.002588	Prob > F
C. Total	41	0.10672149		0.2740

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5473686	0.008392	65.22	<.0001*
Bleed %	0.0060996	0.0055	1.11	0.2740

Bivariate Fit of Density By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

Density = 2.0753438 - 0.0006898*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.260325
RSquare Adj	0.246101
Root Mean Square Error	0.059932
Mean of Response	1.847407
Observations (or Sum Wgts)	54

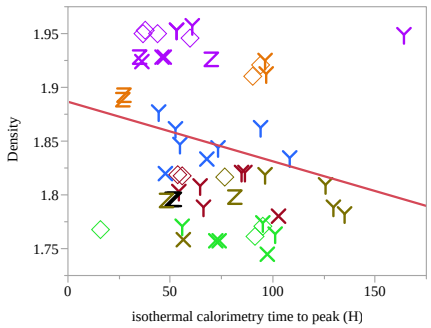
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.06573391	0.065734	18.3012
Error	52	0.18677312	0.003592	Prob > F
C. Total	53	0.25250704		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.0753438	0.053902	38.50	<.0001*
isothermal calorimetry @ 300H (J/g)	-0.00069	0.000161	-4.28	<.0001*

Bivariate Fit of Density By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

Density = 1.8867466 - 0.0005541*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.058029
RSquare Adj	0.039914
Root Mean Square Error	0.067632
Mean of Response	1.847407
Observations (or Sum Wgts)	54

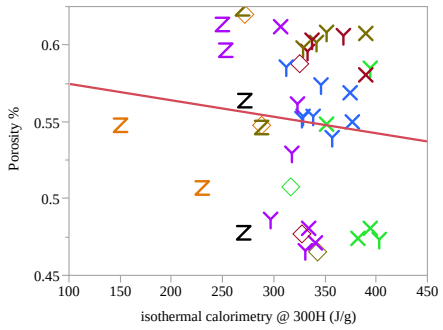
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01465272	0.014653	3.2034
Error	52	0.23785431	0.004574	Prob > F
C. Total	53	0.25250704		0.0793

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8867466	0.023829	79.18	<.0001*
isothermal calorimetry time to peak (H)	-0.000554	0.00031	-1.79	0.0793

Bivariate Fit of Porosity % By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

Porosity % = 0.5853814 - 0.000107*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.011214
RSquare Adj	-0.01351
Root Mean Square Error	0.051363
Mean of Response	0.550658
Observations (or Sum Wgts)	42

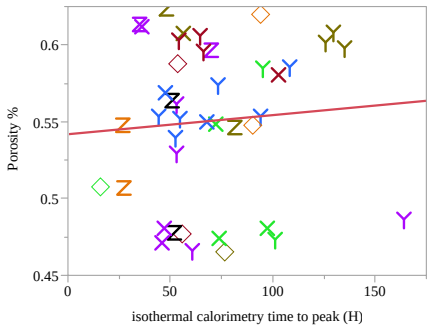
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00119678	0.001197	0.4536
Error	40	0.10552471	0.002638	Prob > F
C. Total	41	0.10672149		0.5045

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5853814	0.05216	11.22	<.0001*
isothermal calorimetry @ 300H (J/g)	-0.000107	0.000159	-0.67	0.5045

Bivariate Fit of Porosity % By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

Porosity % = 0.5419274 + 0.0001242*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.005922
RSquare Adj	-0.01893
Root Mean Square Error	0.0515
Mean of Response	0.550658
Observations (or Sum Wgts)	42

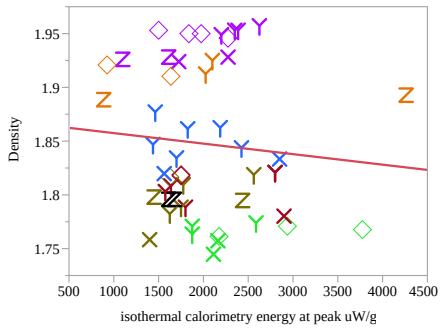
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00063201	0.000632	0.2383
Error	40	0.10608947	0.002652	Prob > F
C. Total	41	0.10672149		0.6281

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5419274	0.019571	27.69	<.0001*
isothermal calorimetry time to peak (H)	0.0001242	0.000254	0.49	0.6281

Bivariate Fit of Density By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

Density = 1.8672963 - 9.7641e-6*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.007754
RSquare Adj	-0.01133
Root Mean Square Error	0.069414
Mean of Response	1.847407
Observations (or Sum Wgts)	54

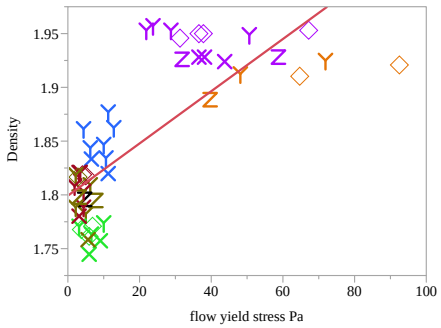
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00195785	0.001958	0.4063
Error	52	0.25054919	0.004818	Prob > F
C. Total	53	0.25250704		0.5266

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8672963	0.032599	57.28	<.0001*
isothermal calorimetry energy at peak uW/g	-9.764e-6	1.532e-5	-0.64	0.5266

Bivariate Fit of Density By flow yield stress Pa



Linear Fit

Linear Fit

Density = 1.7992964 + 0.0024288*flow yield stress Pa

Summary of Fit

RSquare	0.59159
RSquare Adj	0.583581
Root Mean Square Error	0.044779
Mean of Response	1.846547
Observations (or Sum Wgts)	53

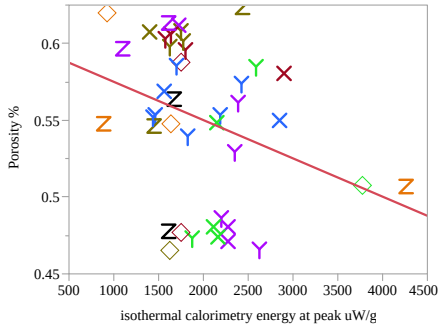
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.14812758	0.148128	73.8744
Error	51	0.10226155	0.002005	Prob > F
C. Total	52	0.25038913		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.7992964	0.00825	218.11	<.0001*
flow yield stress Pa	0.0024288	0.000283	8.60	<.0001*

Bivariate Fit of Porosity % By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

Porosity % = 0.599957 - 0.0000249*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.102906
RSquare Adj	0.080479
Root Mean Square Error	0.048923
Mean of Response	0.550658
Observations (or Sum Wgts)	42

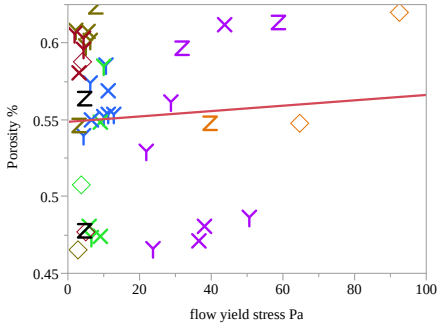
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01098233	0.010982	4.5884
Error	40	0.09573915	0.002393	Prob > F
C. Total	41	0.10672149		0.0383*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.599957	0.024221	24.77	<.0001*
isothermal calorimetry energy at peak uW/g	-0.000025	1.163e-5	-2.14	0.0383*

Bivariate Fit of Porosity % By flow yield stress Pa



Linear Fit

Linear Fit

Porosity % = 0.5486734 + 0.0001755*flow yield stress Pa

Summary of Fit

RSquare	0.004961
RSquare Adj	-0.02055
Root Mean Square Error	0.051696
Mean of Response	0.551729
Observations (or Sum Wgts)	41

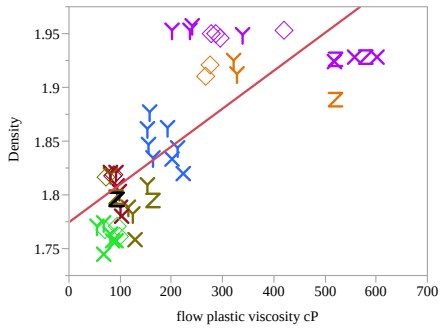
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00051965	0.000520	0.1944
Error	39	0.10422699	0.002672	Prob > F
C. Total	40	0.10474664		0.6617

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5486734	0.010639	51.57	<.0001*
flow yield stress Pa	0.0001755	0.000398	0.44	0.6617

Bivariate Fit of Density By flow plastic viscosity cP



Linear Fit

Linear Fit

Density = 1.7746488 + 0.0003522*flow plastic viscosity cP

Summary of Fit

RSquare	0.592668
RSquare Adj	0.584681
Root Mean Square Error	0.044719
Mean of Response	1.846547
Observations (or Sum Wgts)	53

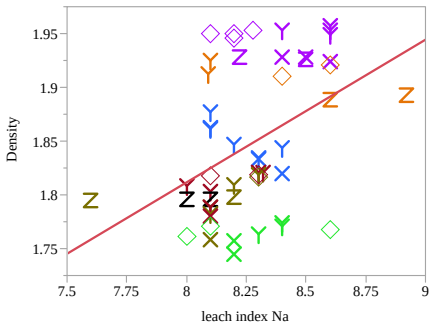
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.14839768	0.148398	74.2051
Error	51	0.10199145	0.002000	Prob > F
C. Total	52	0.25038913		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.7746488	0.010363	171.25	<.0001*
flow plastic viscosity cP	0.0003522	4.089e-5	8.61	<.0001*

Bivariate Fit of Density By leach index Na



Linear Fit

Linear Fit

Density = 0.7501966 + 0.1326885*leach index Na

Summary of Fit

RSquare	0.17878
RSquare Adj	0.162988
Root Mean Square Error	0.063149
Mean of Response	1.847407
Observations (or Sum Wgts)	54

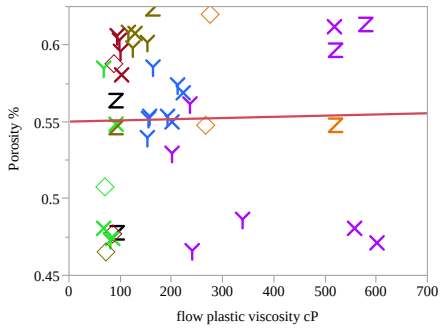
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.04514332	0.045143	11.3205
Error	52	0.20736372	0.003988	Prob > F
C. Total	53	0.25250704		0.0014*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.7501966	0.326219	2.30	0.0255*
leach index Na	0.1326885	0.039437	3.36	0.0014*

Bivariate Fit of Porosity % By flow plastic viscosity cP



Linear Fit

Linear Fit

Porosity % = 0.5501327 + 7.8022e-6*flow plastic viscosity cP

Summary of Fit

RSquare	0.000587
RSquare Adj	-0.02504
Root Mean Square Error	0.05181
Mean of Response	0.551729
Observations (or Sum Wgts)	41

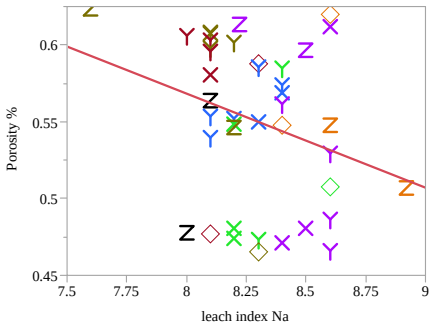
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00006146	0.000061	0.0229
Error	39	0.10468518	0.002684	Prob > F
C. Total	40	0.10474664		0.8805

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5501327	0.013295	41.38	<.0001*
flow plastic viscosity cP	7.8022e-6	5.156e-5	0.15	0.8805

Bivariate Fit of Porosity % By leach index Na



Linear Fit

Linear Fit

Porosity % = 1.0580927 - 0.0612175*leach index Na

Summary of Fit

RSquare	0.08167
RSquare Adj	0.058712
Root Mean Square Error	0.049499
Mean of Response	0.550658
Observations (or Sum Wgts)	42

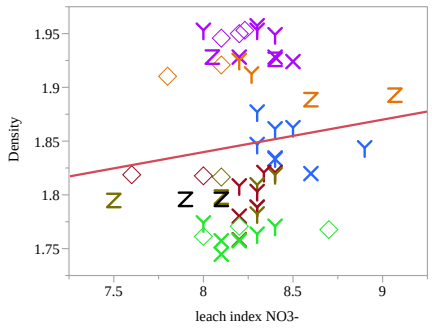
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00871598	0.008716	3.5573
Error	40	0.09800551	0.002450	Prob > F
C. Total	41	0.10672149		0.0666

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.0580927	0.269149	3.93	0.0003*
leach index Na	-0.061217	0.032457	-1.89	0.0666

Bivariate Fit of Density By leach index NO3-



Linear Fit

Linear Fit

Density = 1.5981044 + 0.0302077*leach index NO3-

Summary of Fit

RSquare	0.013311
RSquare Adj	-0.00566
Root Mean Square Error	0.069219
Mean of Response	1.847407
Observations (or Sum Wgts)	54

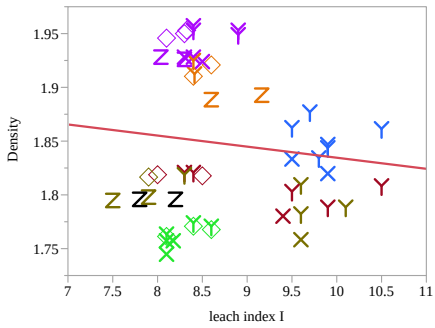
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00336105	0.003361	0.7015
Error	52	0.24914598	0.004791	Prob > F
C. Total	53	0.25250704		0.4061

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.5981044	0.297805	5.37	<.0001*
leach index NO3-	0.0302077	0.036067	0.84	0.4061

Bivariate Fit of Density By leach index I



Linear Fit

Linear Fit

Density = 1.9375798 - 0.0102943*leach index I

Summary of Fit

RSquare	0.012656
RSquare Adj	-0.00633
Root Mean Square Error	0.069242
Mean of Response	1.847407
Observations (or Sum Wgts)	54

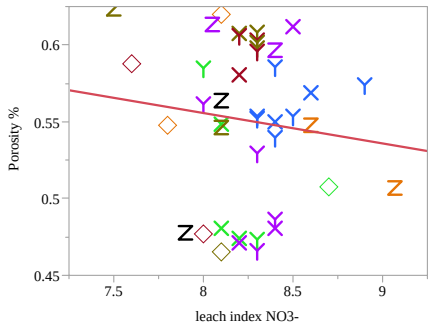
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00319564	0.003196	0.6665
Error	52	0.24931140	0.004794	Prob > F
C. Total	53	0.25250704		0.4180

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.9375798	0.110851	17.48	<.0001*
leach index I	-0.010294	0.012609	-0.82	0.4180

Bivariate Fit of Porosity % By leach index NO3-



Linear Fit

Linear Fit

Porosity % = 0.7142039 - 0.0198112*leach index NO3-

Summary of Fit

RSquare	0.012913
RSquare Adj	-0.01176
Root Mean Square Error	0.051318
Mean of Response	0.550658
Observations (or Sum Wgts)	42

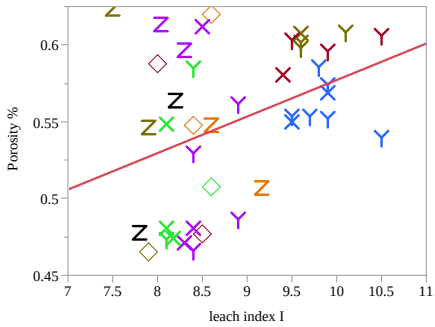
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00137810	0.001378	0.5233
Error	40	0.10534338	0.002634	Prob > F
C. Total	41	0.10672149		0.4737

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.7142039	0.226224	3.16	0.0030*
leach index NO3-	-0.019811	0.027387	-0.72	0.4737

Bivariate Fit of Porosity % By leach index I



Linear Fit

Linear Fit

Porosity % = 0.3394179 + 0.0237806*leach index I

Summary of Fit

RSquare	0.143462
RSquare Adj	0.122048
Root Mean Square Error	0.047805
Mean of Response	0.550658
Observations (or Sum Wgts)	42

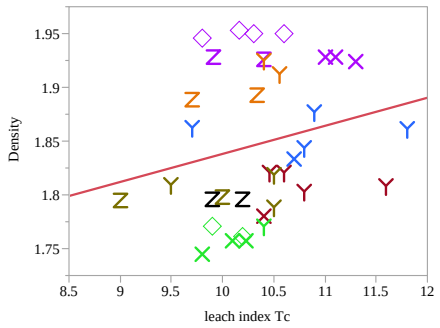
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01531045	0.015310	6.6996
Error	40	0.09141104	0.002285	Prob > F
C. Total	41	0.10672149		0.0134*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.3394179	0.081944	4.14	0.0002*
leach index I	0.0237806	0.009188	2.59	0.0134*

Bivariate Fit of Density By leach index Tc



Linear Fit

Linear Fit

Density = 1.5769921 + 0.0261144*leach index Tc

Summary of Fit

RSquare	0.048684
RSquare Adj	0.020704
Root Mean Square Error	0.067048
Mean of Response	1.847972
Observations (or Sum Wgts)	36

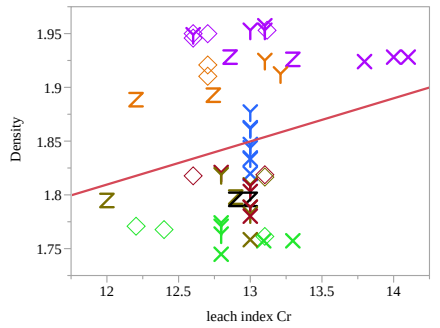
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00782195	0.007822	1.7400
Error	34	0.15284702	0.004496	Prob > F
C. Total	35	0.16066897		0.1960

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.5769921	0.205736	7.67	<.0001*
leach index Tc	0.0261144	0.019798	1.32	0.1960

Bivariate Fit of Density By leach index Cr



Linear Fit

Linear Fit

Density = 1.3278626 + 0.0401468*leach index Cr

Summary of Fit

RSquare	0.044085
RSquare Adj	0.025702
Root Mean Square Error	0.068131
Mean of Response	1.847407
Observations (or Sum Wgts)	54

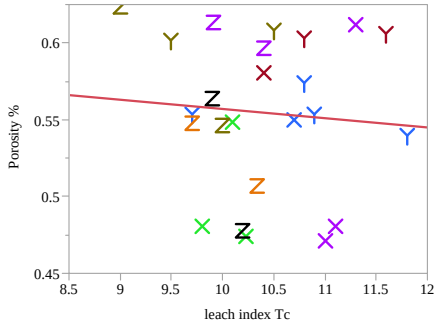
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01113174	0.011132	2.3981
Error	52	0.24137530	0.004642	Prob > F
C. Total	53	0.25250704		0.1275

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.3278626	0.335623	3.96	0.0002*
leach index Cr	0.0401468	0.025925	1.55	0.1275

Bivariate Fit of Porosity % By leach index Tc



Linear Fit

Linear Fit

Porosity % = 0.6172659 - 0.0060171*leach index Tc

Summary of Fit

RSquare	0.006718
RSquare Adj	-0.03843
Root Mean Square Error	0.050911
Mean of Response	0.554668
Observations (or Sum Wgts)	24

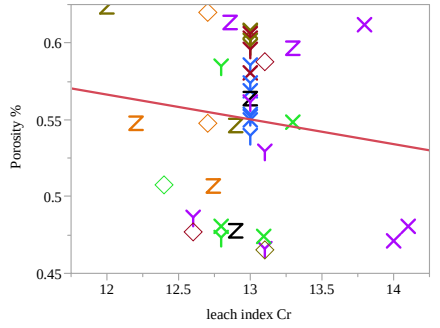
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00038567	0.000386	0.1488
Error	22	0.05702269	0.002592	Prob > F
C. Total	23	0.05740837		0.7034

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.6172659	0.162612	3.80	0.0010*
leach index Tc	-0.006017	0.015599	-0.39	0.7034

Bivariate Fit of Porosity % By leach index Cr



Linear Fit

Linear Fit

Porosity % = 0.7597773 - 0.0161159*leach index Cr

Summary of Fit

RSquare	0.014069
RSquare Adj	-0.01058
Root Mean Square Error	0.051288
Mean of Response	0.550658
Observations (or Sum Wgts)	42

Analysis of Variance

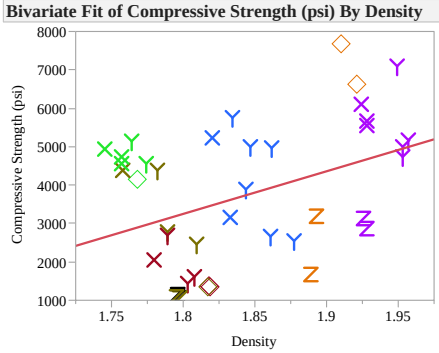
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00150146	0.001501	0.5708
Error	40	0.10522003	0.002631	Prob > F
C. Total	41	0.10672149		0.4544

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.7597773	0.276907	2.74	0.0090*
leach index Cr	-0.016116	0.021331	-0.76	0.4544

Fit Group

Bivariate Fit of Compressive Strength (psi) By Density



Linear Fit

Linear Fit

Compressive Strength (psi) = -16724.57 + 11097.711*Density

Summary of Fit

RSquare	0.158233
RSquare Adj	0.137189
Root Mean Square Error	1705.757
Mean of Response	3716.095
Observations (or Sum Wgts)	42

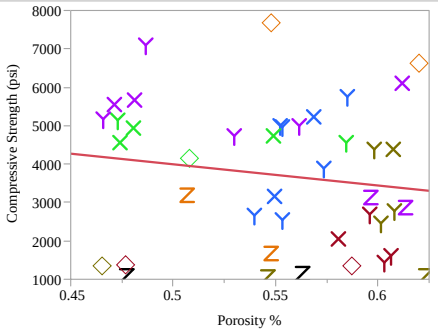
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	21877555	21877555	7.5191
Error	40	116384240	2909606	Prob > F
C. Total	41	138261796		0.0091*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-16724.57	7459.045	-2.24	0.0306*
Density	11097.711	4047.167	2.74	0.0091*

Bivariate Fit of Compressive Strength (psi) By Porosity %



Linear Fit

Linear Fit

Compressive Strength (psi) = 6766.2073 - 5539.0316*Porosity %

Summary of Fit

RSquare	0.023682
RSquare Adj	-0.00073
Root Mean Square Error	1837.032
Mean of Response	3716.095
Observations (or Sum Wgts)	42

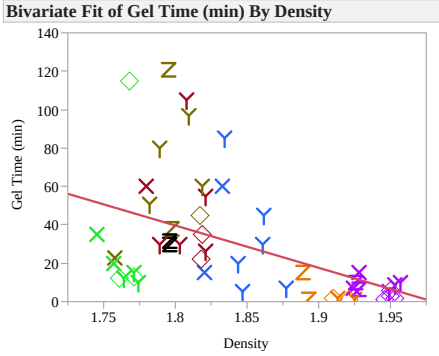
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3274308	3274308	0.9703
Error	40	134987488	3374687	Prob > F
C. Total	41	138261796		0.3305

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6766.2073	3109.459	2.18	0.0355*
Porosity %	-5539.032	5623.295	-0.99	0.3305

Bivariate Fit of Gel Time (min) By Density



Linear Fit

Linear Fit

Gel Time (min) = 436.53185 - 220.46632*Density

Summary of Fit

RSquare	0.245954
RSquare Adj	0.231453
Root Mean Square Error	26.8998
Mean of Response	29.24074
Observations (or Sum Wgts)	54

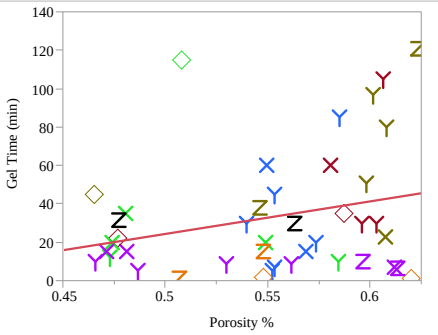
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	12273.205	12273.2	16.9613
Error	52	37627.166	723.6	Prob > F
C. Total	53	49900.370		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	436.53185	98.96288	4.41	<.0001*
Density	-220.4663	53.53186	-4.12	0.0001*

Bivariate Fit of Gel Time (min) By Porosity %



Linear Fit

Linear Fit

Gel Time (min) = -60.36301 + 169.41836*Porosity %

Summary of Fit

RSquare	0.071843
RSquare Adj	0.048639
Root Mean Square Error	31.45398
Mean of Response	32.92857
Observations (or Sum Wgts)	42

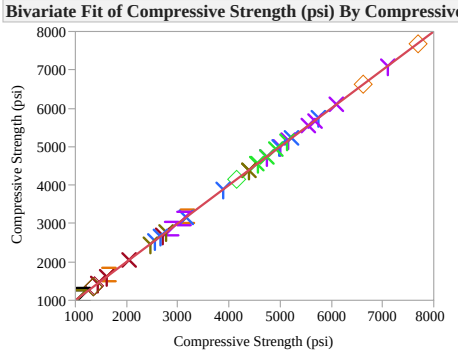
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3063.182	3063.18	3.0961
Error	40	39574.104	989.35	Prob > F
C. Total	41	42637.286		0.0861

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-60.36301	53.24069	-1.13	0.2636
Porosity %	169.41836	96.283	1.76	0.0861

Bivariate Fit of Compressive Strength (psi) By Compressive Strength (psi)



Linear Fit

Linear Fit

Compressive Strength (psi) = 0 + 1*Compressive Strength (psi)

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	3716.095
Observations (or Sum Wgts)	42

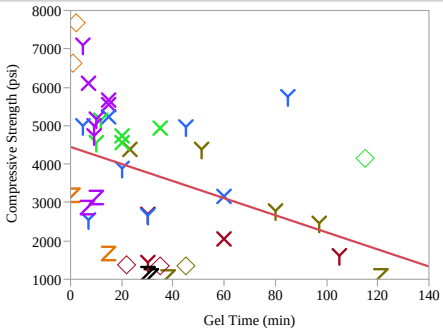
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	138261796	138261796	.
Error	40	0	0	Prob > F
C. Total	41	138261796		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
Compressive Strength (psi)	1	0	.	.

Bivariate Fit of Compressive Strength (psi) By Gel Time (min)



Linear Fit

Linear Fit

Compressive Strength (psi) = 4447.7335 - 22.21895*Gel Time (min)

Summary of Fit

RSquare	0.152242
RSquare Adj	0.131048
Root Mean Square Error	1711.816
Mean of Response	3716.095
Observations (or Sum Wgts)	42

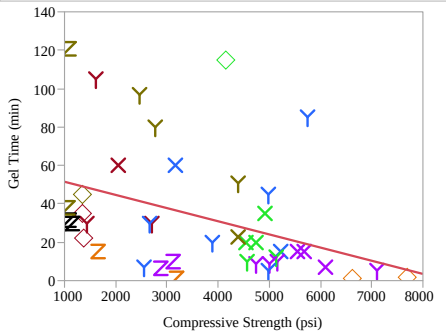
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	21049249	21049249	7.1833
Error	40	117212546	2930313.7	Prob > F
C. Total	41	138261796		0.0106*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4447.7335	379.8538	11.71	<.0001*
Gel Time (min)	-22.21895	8.290148	-2.68	0.0106*

Bivariate Fit of Gel Time (min) By Compressive Strength (psi)



Linear Fit

Linear Fit

Gel Time (min) = 58.390877 - 0.0068519*Compressive Strength (psi)

Summary of Fit

RSquare	0.152242
RSquare Adj	0.131048
Root Mean Square Error	30.06081
Mean of Response	32.92857
Observations (or Sum Wgts)	42

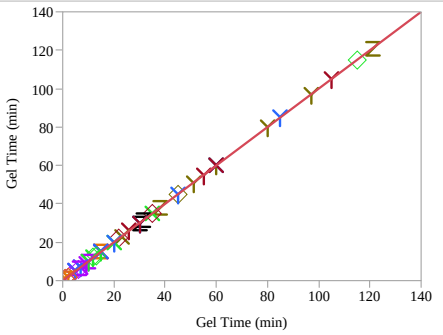
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6491.185	6491.18	7.1833
Error	40	36146.101	903.65	Prob > F
C. Total	41	42637.286		0.0106*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	58.390877	10.57218	5.52	<.0001*
Compressive Strength (psi)	-0.006852	0.002557	-2.68	0.0106*

Bivariate Fit of Gel Time (min) By Gel Time (min)



Linear Fit

Linear Fit

Gel Time (min) = 0 + 1*Gel Time (min)

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	29.24074
Observations (or Sum Wgts)	54

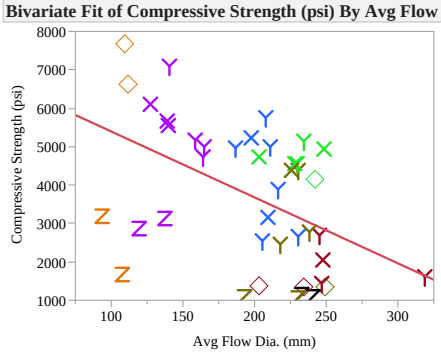
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	49900.370	49900.4	.
Error	52	0.000	0.0	Prob > F
C. Total	53	49900.370		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
Gel Time (min)	1	0	.	.

Bivariate Fit of Compressive Strength (psi) By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

Compressive Strength (psi) = 7116.4264 - 17.169054*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.226851
RSquare Adj	0.207523
Root Mean Square Error	1634.755
Mean of Response	3716.095
Observations (or Sum Wgts)	42

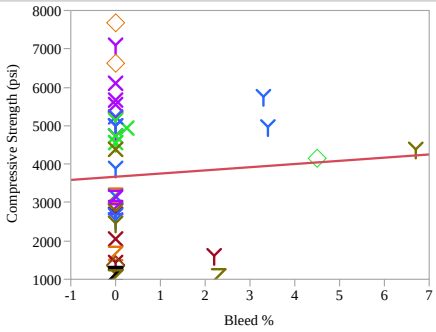
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	31364885	31364885	11.7365
Error	40	106896911	2672422.8	Prob > F
C. Total	41	138261796		0.0014*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7116.4264	1024.101	6.95	<.0001*
Avg Flow Dia. (mm)	-17.16905	5.011608	-3.43	0.0014*

Bivariate Fit of Compressive Strength (psi) By Bleed %



Linear Fit

Linear Fit

Compressive Strength (psi) = 3671.4519 + 82.782342*Bleed %

Summary of Fit

RSquare	0.004241
RSquare Adj	-0.02065
Root Mean Square Error	1855.232
Mean of Response	3716.095
Observations (or Sum Wgts)	42

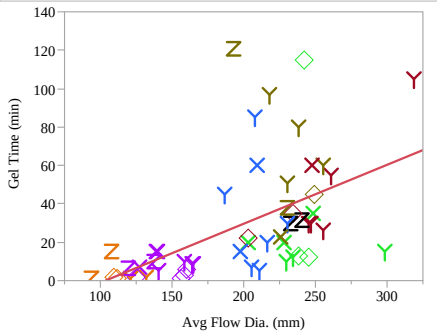
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	586388	586388	0.1704
Error	40	137675407	3441885	Prob > F
C. Total	41	138261796		0.6820

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3671.4519	306.0196	12.00	<.0001*
Bleed %	82.782342	200.5595	0.41	0.6820

Bivariate Fit of Gel Time (min) By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

Gel Time (min) = -31.76745 + 0.307177*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.285714
RSquare Adj	0.271977
Root Mean Square Error	26.18101
Mean of Response	29.24074
Observations (or Sum Wgts)	54

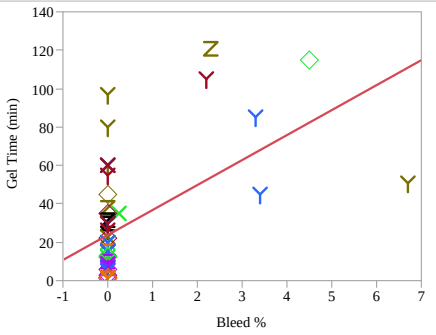
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	14257.213	14257.2	20.7999
Error	52	35643.157	685.4	Prob > F
C. Total	53	49900.370		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-31.76745	13.84328	-2.29	0.0258*
Avg Flow Dia. (mm)	0.307177	0.067353	4.56	<.0001*

Bivariate Fit of Gel Time (min) By Bleed %



Linear Fit

Linear Fit

Gel Time (min) = 23.784256 + 13.008837*Bleed %

Summary of Fit

RSquare	0.299396
RSquare Adj	0.285923
Root Mean Square Error	25.92905
Mean of Response	29.24074
Observations (or Sum Wgts)	54

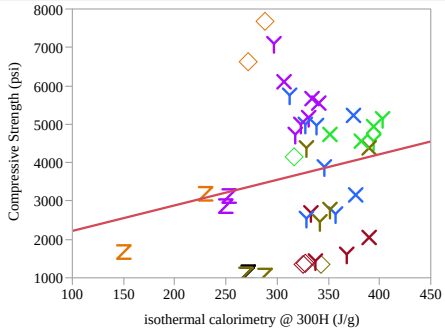
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	14939.963	14940.0	22.2217
Error	52	34960.408	672.3	Prob > F
C. Total	53	49900.370		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	23.784256	3.713505	6.40	<.0001*
Bleed %	13.008837	2.759626	4.71	<.0001*

Bivariate Fit of Compressive Strength (psi) By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

Compressive Strength (psi) = 1555.9104 + 6.6545716*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.0335
RSquare Adj	0.009338
Root Mean Square Error	1827.772
Mean of Response	3716.095
Observations (or Sum Wgts)	42

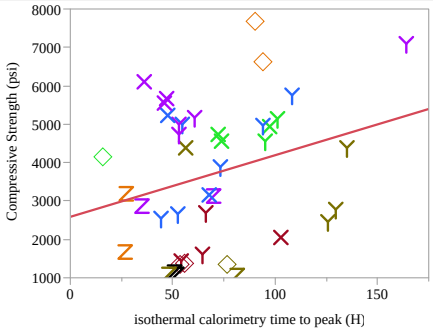
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4631818	4631818	1.3865
Error	40	133629978	3340749	Prob > F
C. Total	41	138261796		0.2460

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1555.9104	1856.134	0.84	0.4069
isothermal calorimetry @ 300H (J/g)	6.6545716	5.651534	1.18	0.2460

Bivariate Fit of Compressive Strength (psi) By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

Compressive Strength (psi) = 2587.5602 + 16.051989*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.076378
RSquare Adj	0.053287
Root Mean Square Error	1786.769
Mean of Response	3716.095
Observations (or Sum Wgts)	42

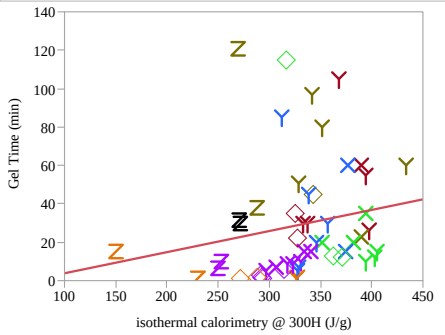
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	10560107	10560107	3.3077
Error	40	127701688	3192542.2	Prob > F
C. Total	41	138261796		0.0764

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2587.5602	679.0039	3.81	0.0005*
isothermal calorimetry time to peak (H)	16.051989	8.825981	1.82	0.0764

Bivariate Fit of Gel Time (min) By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

Gel Time (min) = -7.084924 + 0.1099365*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.033457
RSquare Adj	0.01487
Root Mean Square Error	30.45516
Mean of Response	29.24074
Observations (or Sum Wgts)	54

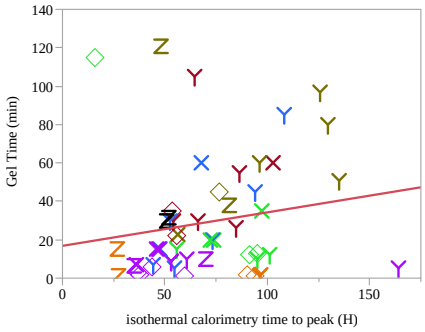
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1669.511	1669.51	1.8000
Error	52	48230.860	927.52	Prob > F
C. Total	53	49900.370		0.1855

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-7.084924	27.39106	-0.26	0.7969
isothermal calorimetry @ 300H (J/g)	0.1099365	0.081942	1.34	0.1855

Bivariate Fit of Gel Time (min) By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

Gel Time (min) = 16.875068 + 0.1741776*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.029014
RSquare Adj	0.010341
Root Mean Square Error	30.52508
Mean of Response	29.24074
Observations (or Sum Wgts)	54

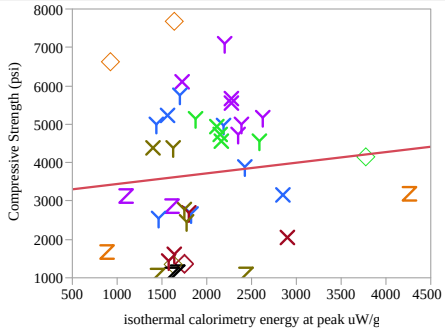
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1447.785	1447.78	1.5538
Error	52	48452.586	931.78	Prob > F
C. Total	53	49900.370		0.2182

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	16.875068	10.75484	1.57	0.1227
isothermal calorimetry time to peak (H)	0.1741776	0.139732	1.25	0.2182

Bivariate Fit of Compressive Strength (psi) By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

Compressive Strength (psi) = 3166.2199 + 0.2778017*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.009882
RSquare Adj	-0.01487
Root Mean Square Error	1849.97
Mean of Response	3716.095
Observations (or Sum Wgts)	42

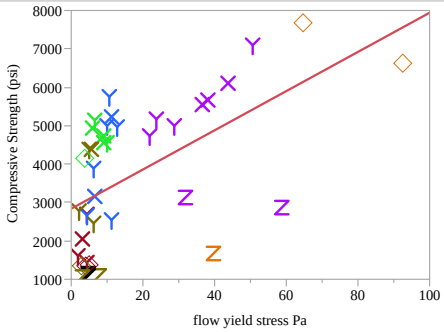
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1366301	1366301	0.3992
Error	40	136895495	3422387	Prob > F
C. Total	41	138261796		0.5311

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3166.2199	915.8936	3.46	0.0013*
isothermal calorimetry energy at peak uW/g	0.2778017	0.439669	0.63	0.5311

Bivariate Fit of Compressive Strength (psi) By flow yield stress Pa



Linear Fit

Linear Fit

Compressive Strength (psi) = 2840.6351 + 51.038052*flow yield stress Pa

Summary of Fit

RSquare	0.318519
RSquare Adj	0.301045
Root Mean Square Error	1552.677
Mean of Response	3729.195
Observations (or Sum Wgts)	41

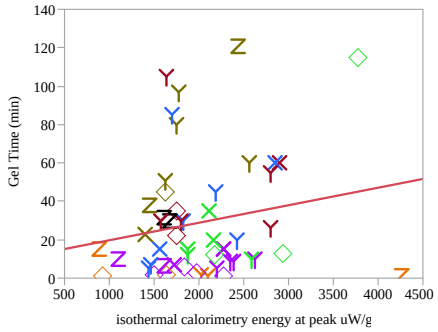
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	43944830	43944830	18.2283
Error	39	94021458	2410806.6	Prob > F
C. Total	40	137966288		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2840.6351	319.553	8.89	<.0001*
flow yield stress Pa	51.038052	11.95422	4.27	0.0001*

Bivariate Fit of Gel Time (min) By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

Gel Time (min) = 10.690464 + 0.0091069*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.034132
RSquare Adj	0.015557
Root Mean Square Error	30.44453
Mean of Response	29.24074
Observations (or Sum Wgts)	54

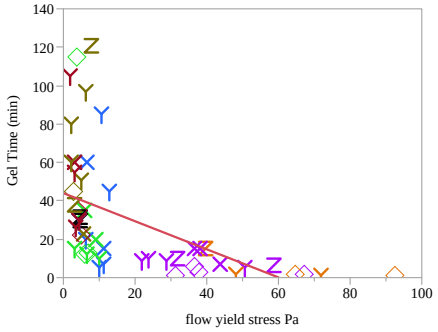
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1703.177	1703.18	1.8376
Error	52	48197.193	926.87	Prob > F
C. Total	53	49900.370		0.1811

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.690464	14.29792	0.75	0.4580
isothermal calorimetry energy at peak uW/g	0.0091069	0.006718	1.36	0.1811

Bivariate Fit of Gel Time (min) By flow yield stress Pa



Linear Fit

Linear Fit

Gel Time (min) = 44.00529 - 0.7315298*flow yield stress Pa

Summary of Fit

RSquare	0.273753
RSquare Adj	0.259513
Root Mean Square Error	26.43892
Mean of Response	29.77358
Observations (or Sum Wgts)	53

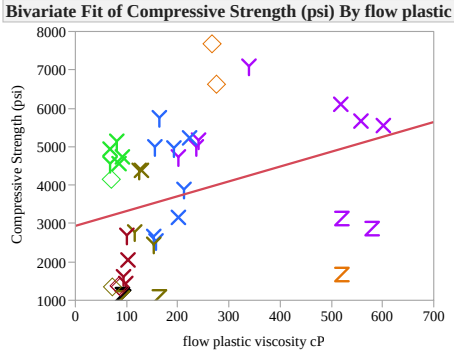
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	13437.942	13437.9	19.2241
Error	51	35649.841	699.0	Prob > F
C. Total	52	49087.783		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	44.00529	4.870813	9.03	<.0001*
flow yield stress Pa	-0.73153	0.166844	-4.38	<.0001*

Bivariate Fit of Compressive Strength (psi) By flow plastic viscosity cP



Linear Fit

Linear Fit

Compressive Strength (psi) = 2937.7726 + 3.868422*flow plastic viscosity cP

Summary of Fit

RSquare	0.109514
RSquare Adj	0.086681
Root Mean Square Error	1774.875
Mean of Response	3729.195
Observations (or Sum Wgts)	41

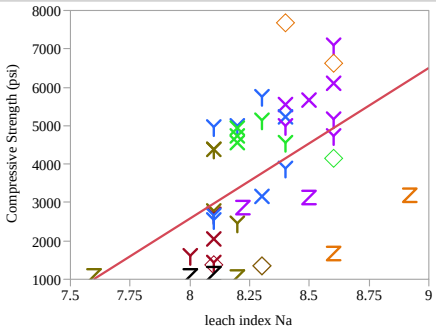
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	15109187	15109187	4.7963
Error	39	122857101	3150182.1	Prob > F
C. Total	40	137966288		0.0346*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2937.7726	455.4384	6.45	<.0001*
flow plastic viscosity cP	3.868422	1.766368	2.19	0.0346*

Bivariate Fit of Compressive Strength (psi) By leach index Na



Linear Fit

Linear Fit

Compressive Strength (psi) = -28819.16 + 3925.0896*leach index Na

Summary of Fit

RSquare	0.259157
RSquare Adj	0.240635
Root Mean Square Error	1600.237
Mean of Response	3716.095
Observations (or Sum Wgts)	42

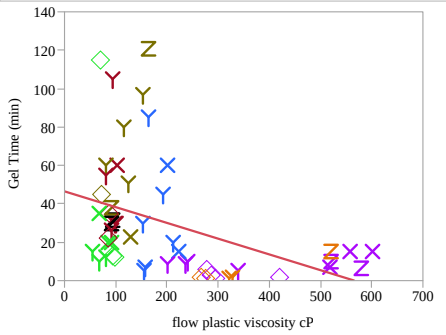
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	35831451	35831451	13.9925
Error	40	102430344	2560758.6	Prob > F
C. Total	41	138261796		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-28819.16	8701.242	-3.31	0.0020*
leach index Na	3925.0896	1049.305	3.74	0.0006*

Bivariate Fit of Gel Time (min) By flow plastic viscosity cP



Linear Fit

Linear Fit

Gel Time (min) = 46.565777 - 0.0822614*flow plastic viscosity cP

Summary of Fit

RSquare	0.164904
RSquare Adj	0.148529
Root Mean Square Error	28.3511
Mean of Response	29.77358
Observations (or Sum Wgts)	53

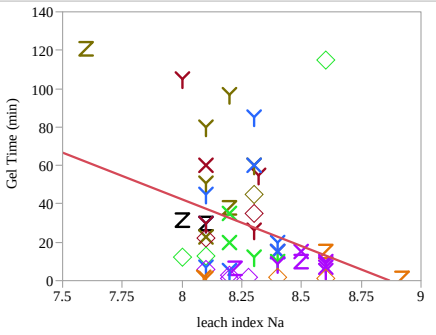
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8094.763	8094.76	10.0708
Error	51	40993.020	803.78	Prob > F
C. Total	52	49087.783		0.0026*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	46.565777	6.570027	7.09	<.0001*
flow plastic viscosity cP	-0.082261	0.025922	-3.17	0.0026*

Bivariate Fit of Gel Time (min) By leach index Na



Linear Fit

Linear Fit

Gel Time (min) = 432.29471 - 48.742334*leach index Na

Summary of Fit

RSquare	0.122078
RSquare Adj	0.105194
Root Mean Square Error	29.0254
Mean of Response	29.24074
Observations (or Sum Wgts)	54

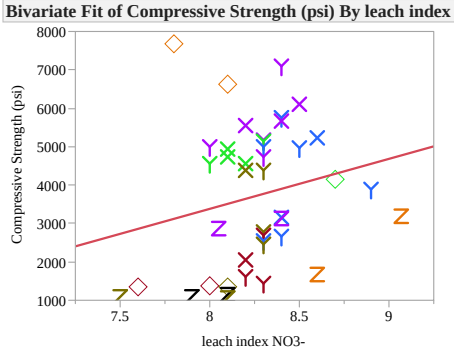
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6091.718	6091.72	7.2307
Error	52	43808.653	842.47	Prob > F
C. Total	53	49900.370		0.0096*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	432.29471	149.9417	2.88	0.0057*
leach index Na	-48.74233	18.12653	-2.69	0.0096*

Bivariate Fit of Compressive Strength (psi) By leach index NO3-



Linear Fit

Linear Fit

Compressive Strength (psi) = -7025.864 + 1301.2295*leach index NO3-

Summary of Fit

RSquare	0.043
RSquare Adj	0.019075
Root Mean Square Error	1818.767
Mean of Response	3716.095
Observations (or Sum Wgts)	42

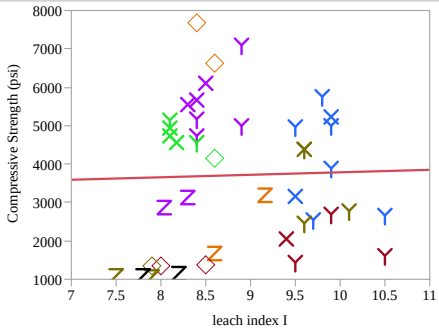
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5945238	5945238	1.7973
Error	40	132316557	3307914	Prob > F
C. Total	41	138261796		0.1876

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-7025.864	8017.56	-0.88	0.3861
leach index NO3-	1301.2295	970.6136	1.34	0.1876

Bivariate Fit of Compressive Strength (psi) By leach index I



Linear Fit

Linear Fit

Compressive Strength (psi) = 3147.8089 + 63.975626*leach index I

Summary of Fit

RSquare	0.000801
RSquare Adj	-0.02418
Root Mean Square Error	1858.433
Mean of Response	3716.095
Observations (or Sum Wgts)	42

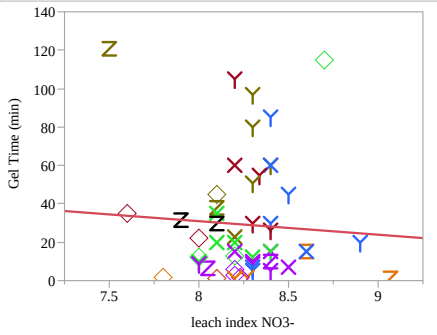
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	110808	110808	0.0321
Error	40	138150988	3453775	Prob > F
C. Total	41	138261796		0.8587

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3147.8089	3185.636	0.99	0.3290
leach index I	63.975626	357.1715	0.18	0.8587

Bivariate Fit of Gel Time (min) By leach index NO3-



Linear Fit

Linear Fit

Gel Time (min) = 87.460138 - 7.0543631*leach index NO3-

Summary of Fit

RSquare	0.003673
RSquare Adj	-0.01549
Root Mean Square Error	30.92083
Mean of Response	29.24074
Observations (or Sum Wgts)	54

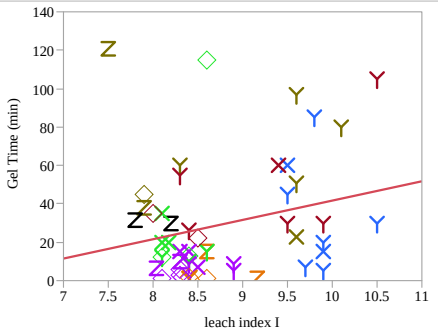
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	183.297	183.297	0.1917
Error	52	49717.073	956.098	Prob > F
C. Total	53	49900.370		0.6633

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	87.460138	133.0327	0.66	0.5138
leach index NO3-	-7.054363	16.11132	-0.44	0.6633

Bivariate Fit of Gel Time (min) By leach index I



Linear Fit

Linear Fit

Gel Time (min) = -58.92432 + 10.065142*leach index I

Summary of Fit

RSquare	0.061221
RSquare Adj	0.043167
Root Mean Square Error	30.01456
Mean of Response	29.24074
Observations (or Sum Wgts)	54

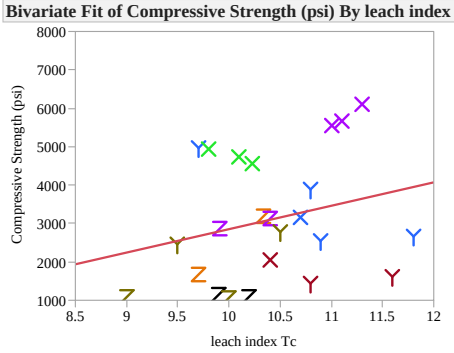
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3054.944	3054.94	3.3911
Error	52	46845.426	900.87	Prob > F
C. Total	53	49900.370		0.0713

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-58.92432	48.05089	-1.23	0.2256
leach index I	10.065142	5.465756	1.84	0.0713

Bivariate Fit of Compressive Strength (psi) By leach index Tc



Linear Fit

Linear Fit

Compressive Strength (psi) = -3238.09 + 609.07626*leach index Tc

Summary of Fit

RSquare	0.066901
RSquare Adj	0.024487
Root Mean Square Error	1582.819
Mean of Response	3098.333
Observations (or Sum Wgts)	24

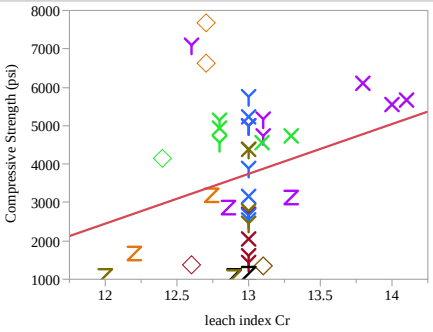
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3951738	3951738	1.5773
Error	22	55116978	2505317	Prob > F
C. Total	23	59068715		0.2223

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-3238.09	5055.571	-0.64	0.5285
leach index Tc	609.07626	484.9634	1.26	0.2223

Bivariate Fit of Compressive Strength (psi) By leach index Cr



Linear Fit

Linear Fit

Compressive Strength (psi) = -13111.07 + 1296.7965*leach index Cr

Summary of Fit

RSquare	0.070315
RSquare Adj	0.047072
Root Mean Square Error	1792.624
Mean of Response	3716.095
Observations (or Sum Wgts)	42

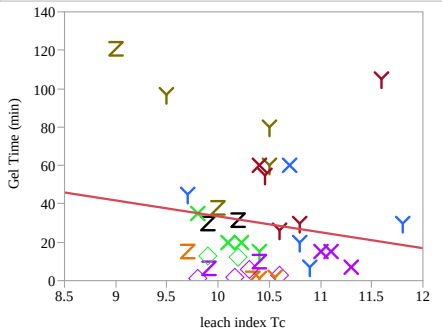
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	9721819	9721819	3.0253
Error	40	128539976	3213499	Prob > F
C. Total	41	138261796		0.0897

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-13111.07	9678.407	-1.35	0.1831
leach index Cr	1296.7965	745.5679	1.74	0.0897

Bivariate Fit of Gel Time (min) By leach index Tc



Linear Fit

Linear Fit

Gel Time (min) = 116.50289 - 8.2961342*leach index Tc

Summary of Fit

RSquare	0.02338
RSquare Adj	-0.00534
Root Mean Square Error	31.14285
Mean of Response	30.41667
Observations (or Sum Wgts)	36

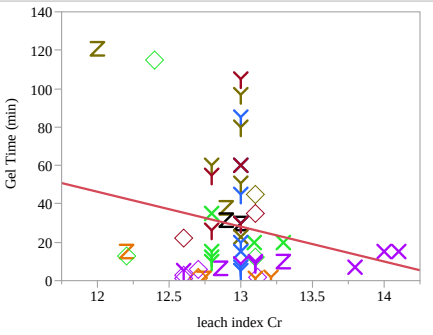
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	789.419	789.419	0.8139
Error	34	32975.831	969.877	Prob > F
C. Total	35	33765.250		0.3733

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	116.50289	95.56084	1.22	0.2312
leach index Tc	-8.296134	9.195609	-0.90	0.3733

Bivariate Fit of Gel Time (min) By leach index Cr



Linear Fit

Linear Fit

Gel Time (min) = 264.34838 - 18.1675*leach index Cr

Summary of Fit

RSquare	0.045682
RSquare Adj	0.02733
Root Mean Square Error	30.26194
Mean of Response	29.24074
Observations (or Sum Wgts)	54

Analysis of Variance

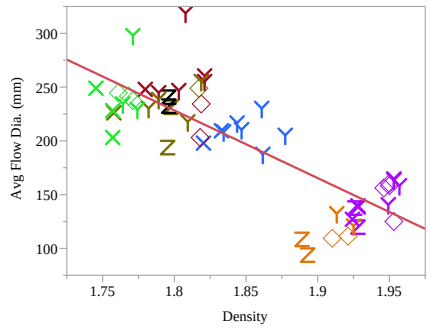
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2279.557	2279.56	2.4892
Error	52	47620.813	915.78	Prob > F
C. Total	53	49900.370		0.1207

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	264.34838	149.0747	1.77	0.0820
leach index Cr	-18.1675	11.51507	-1.58	0.1207

Fit Group

Bivariate Fit of Avg Flow Dia. (mm) By Density



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 1362.6557 - 630.09731*Density

Summary of Fit

RSquare	0.663485
RSquare Adj	0.657014
Root Mean Square Error	31.27008
Mean of Response	198.6093
Observations (or Sum Wgts)	54

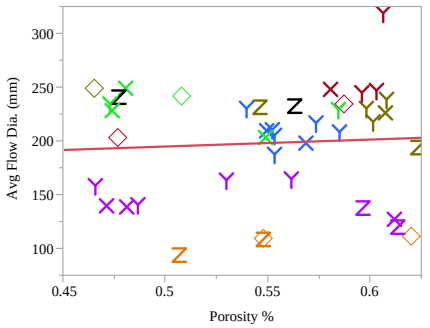
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	100251.00	100251	102.5252
Error	52	50846.52	978	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1362.6557	115.0409	11.84	<.0001*
Density	-630.0973	62.22891	-10.13	<.0001*

Bivariate Fit of Avg Flow Dia. (mm) By Porosity %



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 162.45621 + 64.638642*Porosity %

Summary of Fit

RSquare	0.004191
RSquare Adj	-0.0207
Root Mean Square Error	51.46756
Mean of Response	198.05
Observations (or Sum Wgts)	42

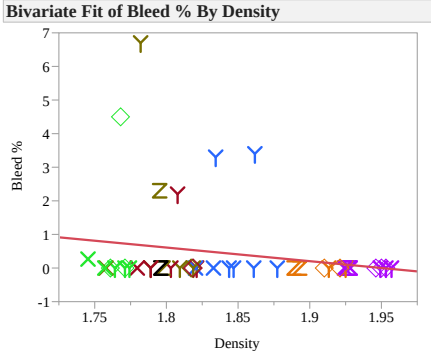
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	445.90	445.90	0.1683
Error	40	105956.39	2648.91	Prob > F
C. Total	41	106402.28		0.6838

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	162.45621	87.11675	1.86	0.0696
Porosity %	64.638642	157.5461	0.41	0.6838

Bivariate Fit of Bleed % By Density



Linear Fit

Linear Fit

Bleed % = 7.9041828 - 4.0514822*Density

Summary of Fit

RSquare	0.046949
RSquare Adj	0.028621
Root Mean Square Error	1.272016
Mean of Response	0.419444
Observations (or Sum Wgts)	54

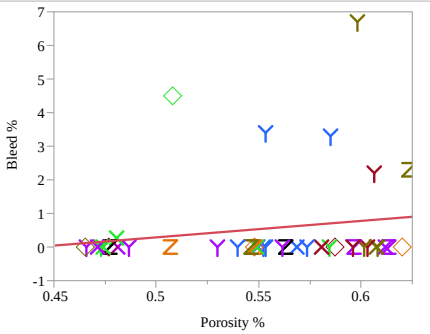
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4.144779	4.14478	2.5616
Error	52	84.137304	1.61803	Prob > F
C. Total	53	88.282083		0.1155

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.9041828	4.679677	1.69	0.0972
Density	-4.051482	2.531371	-1.60	0.1155

Bivariate Fit of Bleed % By Porosity %



Linear Fit

Linear Fit

Bleed % = -2.153736 + 4.8905515*Porosity %

Summary of Fit

RSquare	0.02983
RSquare Adj	0.005576
Root Mean Square Error	1.440618
Mean of Response	0.539286
Observations (or Sum Wgts)	42

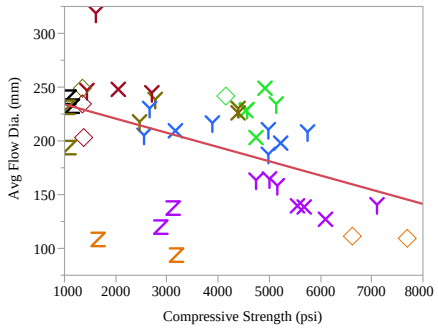
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.552511	2.55251	1.2299
Error	40	83.015168	2.07538	Prob > F
C. Total	41	85.567679		0.2740

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-2.153736	2.438467	-0.88	0.3824
Porosity %	4.8905515	4.40984	1.11	0.2740

Bivariate Fit of Avg Flow Dia. (mm) By Compressive Strength (psi)



Linear Fit

Avg Flow Dia. (mm) = 247.15005 - 0.0132128*Compressive Strength (psi)

Summary of Fit

RSquare	0.226851
RSquare Adj	0.207523
Root Mean Square Error	45.34997
Mean of Response	198.05
Observations (or Sum Wgts)	42

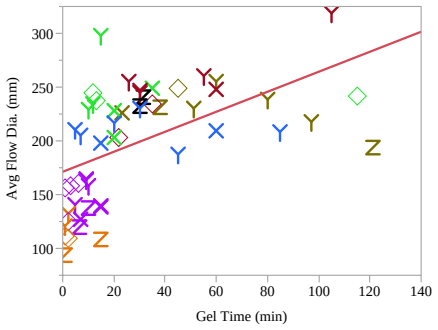
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	24137.51	24137.5	11.7365
Error	40	82264.78	2056.6	Prob > F
C. Total	41	106402.28		0.0014*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	247.15005	15.94926	15.50	<.0001*
Compressive Strength (psi)	-0.013213	0.003857	-3.43	0.0014*

Bivariate Fit of Avg Flow Dia. (mm) By Gel Time (min)



Linear Fit

Avg Flow Dia. (mm) = 171.41166 + 0.930127*Gel Time (min)

Summary of Fit

RSquare	0.285714
RSquare Adj	0.271977
Root Mean Square Error	45.55785
Mean of Response	198.6093
Observations (or Sum Wgts)	54

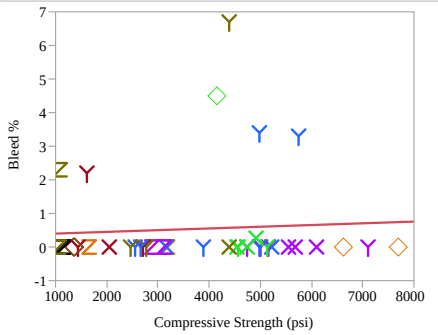
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	43170.61	43170.6	20.7999
Error	52	107926.91	2075.5	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	171.41166	8.602243	19.93	<.0001*
Gel Time (min)	0.930127	0.203944	4.56	<.0001*

Bivariate Fit of Bleed % By Compressive Strength (psi)



Linear Fit

Bleed % = 0.348901 + 5.1232e-5*Compressive Strength (psi)

Summary of Fit

RSquare	0.004241
RSquare Adj	-0.02065
Root Mean Square Error	1.459493
Mean of Response	0.539286
Observations (or Sum Wgts)	42

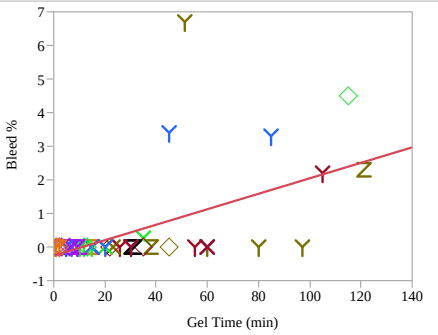
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.362905	0.36290	0.1704
Error	40	85.204774	2.13012	Prob > F
C. Total	41	85.567679		0.6820

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.348901	0.513293	0.68	0.5006
Compressive Strength (psi)	5.1232e-5	0.000124	0.41	0.6820

Bivariate Fit of Bleed % By Gel Time (min)



Linear Fit

Bleed % = -0.253525 + 0.0230148*Gel Time (min)

Summary of Fit

RSquare	0.299396
RSquare Adj	0.285923
Root Mean Square Error	1.090614
Mean of Response	0.419444
Observations (or Sum Wgts)	54

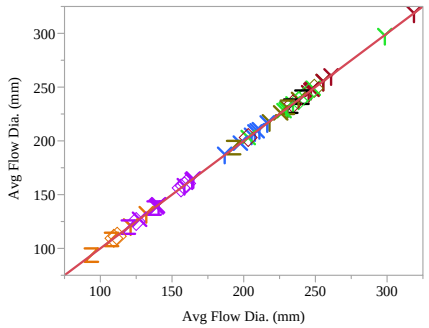
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	26.431287	26.4313	22.2217
Error	52	61.850796	1.1894	Prob > F
C. Total	53	88.282083		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.253525	0.20593	-1.23	0.2238
Gel Time (min)	0.0230148	0.004882	4.71	<.0001*

Bivariate Fit of Avg Flow Dia. (mm) By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 0 + 1*Avg Flow Dia. (mm)

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	198.6093
Observations (or Sum Wgts)	54

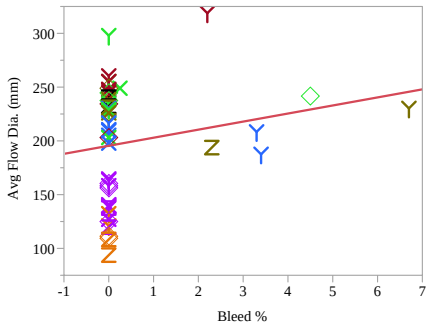
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	151097.53	151098	.
Error	52	0.00	0	Prob > F
C. Total	53	151097.53		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
Avg Flow Dia. (mm)	1	0	.	.

Bivariate Fit of Avg Flow Dia. (mm) By Bleed %



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 195.45808 + 7.5127393*Bleed %

Summary of Fit

RSquare	0.032977
RSquare Adj	0.01438
Root Mean Square Error	53.00849
Mean of Response	198.6093
Observations (or Sum Wgts)	54

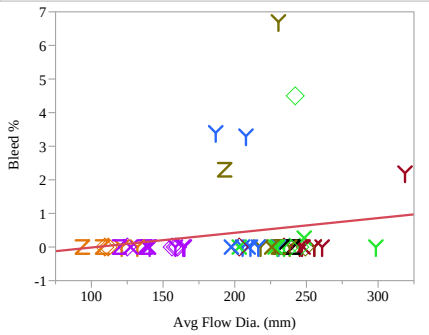
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4982.75	4982.75	1.7733
Error	52	146114.77	2809.90	Prob > F
C. Total	53	151097.53		0.1888

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	195.45808	7.591766	25.75	<.0001*
Bleed %	7.5127393	5.641689	1.33	0.1888

Bivariate Fit of Bleed % By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

Bleed % = -0.452348 + 0.0043895*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.032977
RSquare Adj	0.01438
Root Mean Square Error	1.281306
Mean of Response	0.419444
Observations (or Sum Wgts)	54

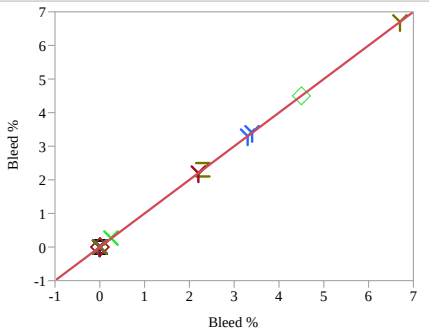
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.911283	2.91128	1.7733
Error	52	85.370800	1.64175	Prob > F
C. Total	53	88.282083		0.1888

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.452348	0.677494	-0.67	0.5073
Avg Flow Dia. (mm)	0.0043895	0.003296	1.33	0.1888

Bivariate Fit of Bleed % By Bleed %



Linear Fit

Linear Fit

Bleed % = 0 + 1*Bleed %

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	0.419444
Observations (or Sum Wgts)	54

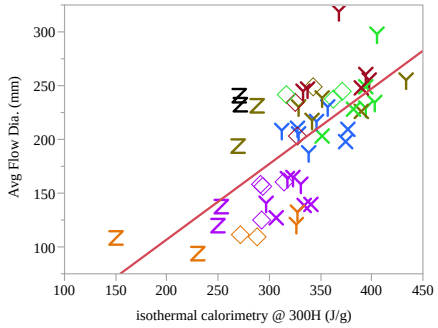
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	88.282083	88.2821	.
Error	52	0.000000	0.0000	Prob > F
C. Total	53	88.282083		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
Bleed %	1	0	.	.

Bivariate Fit of Avg Flow Dia. (mm) By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = -33.33909 + 0.7019717*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.450492
RSquare Adj	0.439925
Root Mean Square Error	39.95894
Mean of Response	198.6093
Observations (or Sum Wgts)	54

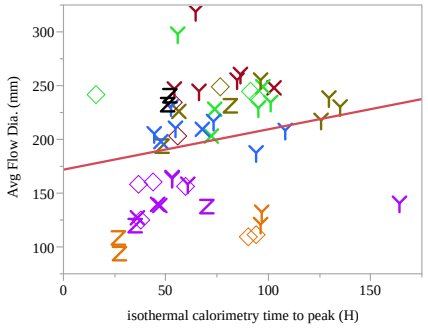
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	68068.26	68068.3	42.6301
Error	52	83029.27	1596.7	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-33.33909	35.93866	-0.93	0.3579
isothermal calorimetry @ 300H (J/g)	0.7019717	0.107513	6.53	<.0001*

Bivariate Fit of Avg Flow Dia. (mm) By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 171.96399 + 0.3753139*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.044489
RSquare Adj	0.026114
Root Mean Square Error	52.69202
Mean of Response	198.6093
Observations (or Sum Wgts)	54

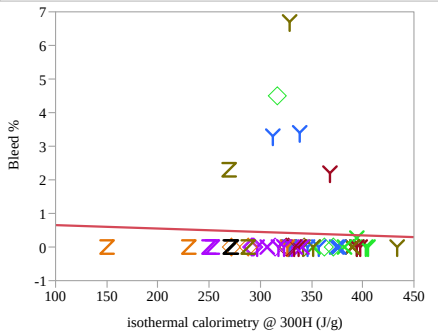
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6722.16	6722.16	2.4211
Error	52	144375.36	2776.45	Prob > F
C. Total	53	151097.53		0.1258

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	171.96399	18.56487	9.26	<.0001*
isothermal calorimetry time to peak (H)	0.3753139	0.241204	1.56	0.1258

Bivariate Fit of Bleed % By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

Bleed % = 0.7587184 - 0.0010268*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.00165
RSquare Adj	-0.01755
Root Mean Square Error	1.301895
Mean of Response	0.419444
Observations (or Sum Wgts)	54

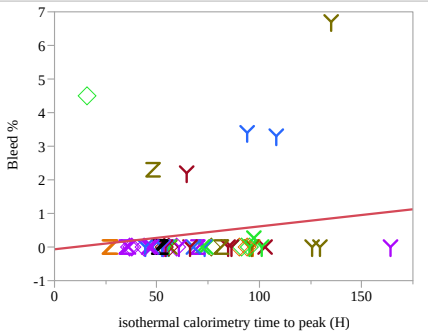
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.145634	0.14563	0.0859
Error	52	88.136449	1.69493	Prob > F
C. Total	53	88.282083		0.7706

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.7587184	1.170912	0.65	0.5199
isothermal calorimetry @ 300H (J/g)	-0.001027	0.003503	-0.29	0.7706

Bivariate Fit of Bleed % By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

Bleed % = -0.062729 + 0.0067917*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.024935
RSquare Adj	0.006183
Root Mean Square Error	1.286624
Mean of Response	0.419444
Observations (or Sum Wgts)	54

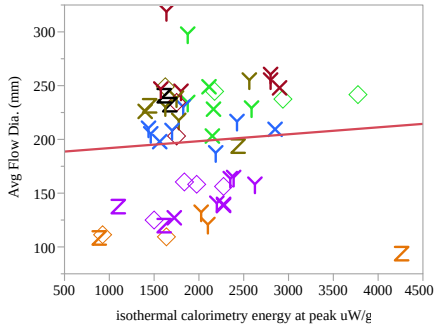
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.201279	2.20128	1.3298
Error	52	86.080805	1.65540	Prob > F
C. Total	53	88.282083		0.2541

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.062729	0.453313	-0.14	0.8905
isothermal calorimetry time to peak (H)	0.0067917	0.00589	1.15	0.2541

Bivariate Fit of Avg Flow Dia. (mm) By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 185.46842 + 0.0064513*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.005656
RSquare Adj	-0.01347
Root Mean Square Error	53.75207
Mean of Response	198.6093
Observations (or Sum Wgts)	54

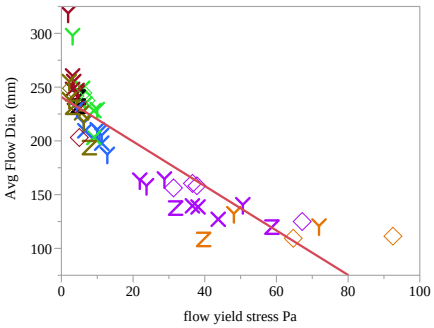
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	854.68	854.68	0.2958
Error	52	150242.84	2889.29	Prob > F
C. Total	53	151097.53		0.5888

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	185.46842	25.24404	7.35	<.0001*
isothermal calorimetry energy at peak uW/g	0.0064513	0.011861	0.54	0.5888

Bivariate Fit of Avg Flow Dia. (mm) By flow yield stress Pa



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 240.8736 - 2.070508*flow yield stress Pa

Summary of Fit

RSquare	0.769817
RSquare Adj	0.765304
Root Mean Square Error	25.12284
Mean of Response	200.5925
Observations (or Sum Wgts)	53

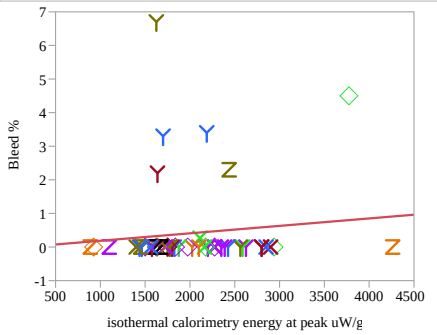
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	107652.10	107652	170.5631
Error	51	32189.01	631	Prob > F
C. Total	52	139841.12		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	240.8736	4.628353	52.04	<.0001*
flow yield stress Pa	-2.070508	0.158538	-13.06	<.0001*

Bivariate Fit of Bleed % By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

Bleed % = -0.032861 + 0.0002221*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.01147
RSquare Adj	-0.00754
Root Mean Square Error	1.295477
Mean of Response	0.419444
Observations (or Sum Wgts)	54

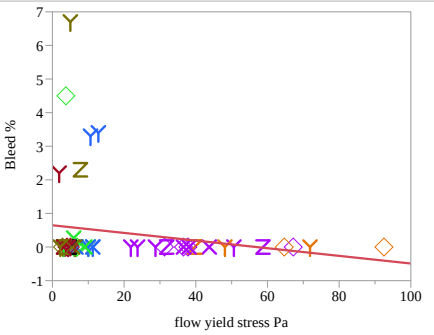
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.012566	1.01257	0.6033
Error	52	87.269517	1.67826	Prob > F
C. Total	53	88.282083		0.4408

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.032861	0.608406	-0.05	0.9571
isothermal calorimetry energy at peak uW/g	0.0002221	0.000286	0.78	0.4408

Bivariate Fit of Bleed % By flow yield stress Pa



Linear Fit

Linear Fit

Bleed % = 0.6489686 - 0.0113911*flow yield stress Pa

Summary of Fit

RSquare	0.036984
RSquare Adj	0.018101
Root Mean Square Error	1.289813
Mean of Response	0.427358
Observations (or Sum Wgts)	53

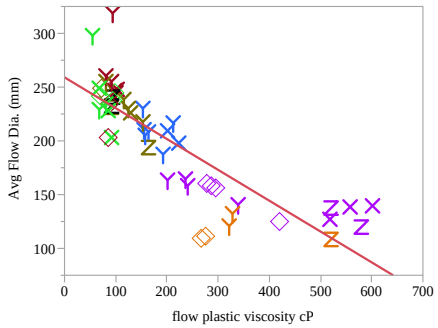
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.258352	3.25835	1.9586
Error	51	84.844478	1.66362	Prob > F
C. Total	52	88.102830		0.1677

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.6489686	0.237621	2.73	0.0086*
flow yield stress Pa	-0.011391	0.008139	-1.40	0.1677

Bivariate Fit of Avg Flow Dia. (mm) By flow plastic viscosity cP



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 259.19797 - 0.2870961*flow plastic viscosity cP

Summary of Fit

RSquare	0.705069
RSquare Adj	0.699286
Root Mean Square Error	28.43759
Mean of Response	200.5925
Observations (or Sum Wgts)	53

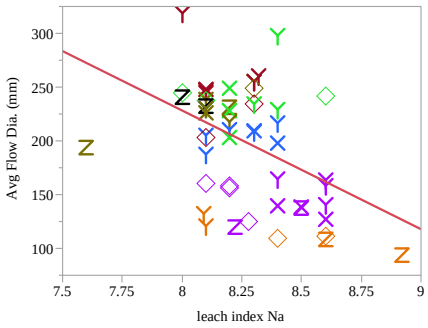
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	98597.59	98597.6	121.9216
Error	51	41243.53	808.7	Prob > F
C. Total	52	139841.12		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	259.19797	6.590072	39.33	<.0001*
flow plastic viscosity cP	-0.287096	0.026001	-11.04	<.0001*

Bivariate Fit of Avg Flow Dia. (mm) By leach index Na



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 1111.3699 - 110.38245*leach index Na

Summary of Fit

RSquare	0.206762
RSquare Adj	0.191507
Root Mean Square Error	48.00969
Mean of Response	198.6093
Observations (or Sum Wgts)	54

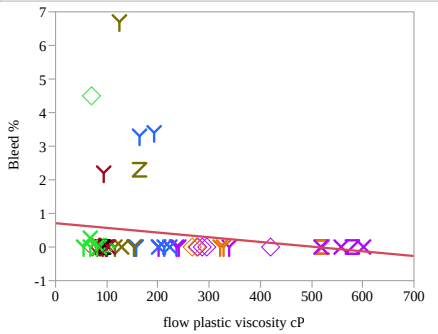
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	31241.16	31241.2	13.5541
Error	52	119856.36	2304.9	Prob > F
C. Total	53	151097.53		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1111.3699	248.0121	4.48	<.0001*
leach index Na	-110.3825	29.98233	-3.68	0.0006*

Bivariate Fit of Bleed % By flow plastic viscosity cP



Linear Fit

Linear Fit

Bleed % = 0.7113227 - 0.0013911*flow plastic viscosity cP

Summary of Fit

RSquare	0.026274
RSquare Adj	0.007181
Root Mean Square Error	1.296965
Mean of Response	0.427358
Observations (or Sum Wgts)	53

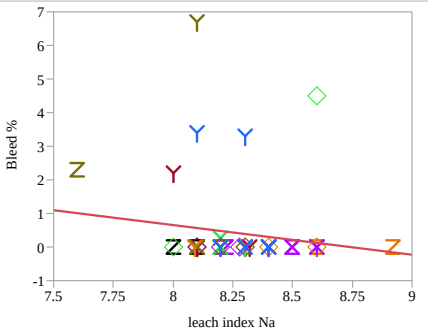
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.314816	2.31482	1.3761
Error	51	85.788014	1.68212	Prob > F
C. Total	52	88.102830		0.2462

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.7113227	0.300556	2.37	0.0218*
flow plastic viscosity cP	-0.001391	0.001186	-1.17	0.2462

Bivariate Fit of Bleed % By leach index Na



Linear Fit

Linear Fit

Bleed % = 7.7225473 - 0.8831827*leach index Na

Summary of Fit

RSquare	0.022655
RSquare Adj	0.003859
Root Mean Square Error	1.288127
Mean of Response	0.419444
Observations (or Sum Wgts)	54

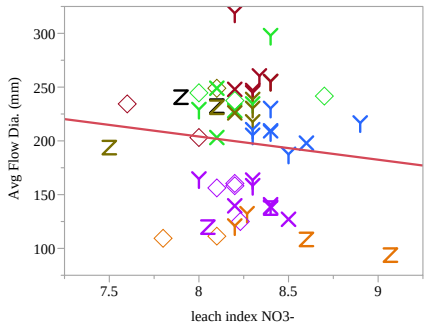
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.999992	1.99999	1.2053
Error	52	86.282092	1.65927	Prob > F
C. Total	53	88.282083		0.2773

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.7225473	6.654305	1.16	0.2511
leach index Na	-0.883183	0.804443	-1.10	0.2773

Bivariate Fit of Avg Flow Dia. (mm) By leach index NO3-



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 376.71785 - 21.58117*leach index NO3-

Summary of Fit

RSquare	0.011354
RSquare Adj	-0.00766
Root Mean Square Error	53.59787
Mean of Response	198.6093
Observations (or Sum Wgts)	54

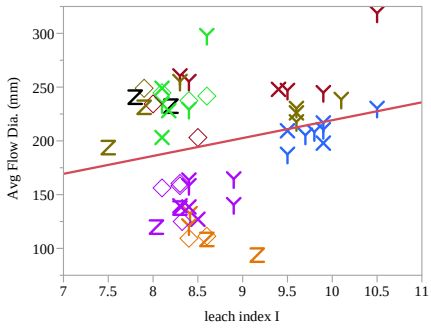
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1715.50	1715.50	0.5972
Error	52	149382.03	2872.73	Prob > F
C. Total	53	151097.53		0.4432

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	376.71785	230.5975	1.63	0.1084
leach index NO3-	-21.58117	27.9272	-0.77	0.4432

Bivariate Fit of Avg Flow Dia. (mm) By leach index I



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 52.982132 + 16.625156*leach index I

Summary of Fit

RSquare	0.055162
RSquare Adj	0.036992
Root Mean Square Error	52.39692
Mean of Response	198.6093
Observations (or Sum Wgts)	54

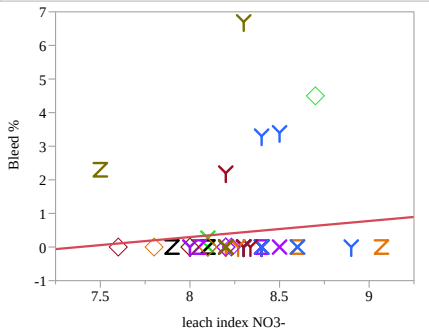
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8334.79	8334.79	3.0359
Error	52	142762.73	2745.44	Prob > F
C. Total	53	151097.53		0.0874

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	52.982132	83.88326	0.63	0.5304
leach index I	16.625156	9.541662	1.74	0.0874

Bivariate Fit of Bleed % By leach index NO3-



Linear Fit

Linear Fit

Bleed % = -3.536135 + 0.4792921*leach index NO3-

Summary of Fit

RSquare	0.009584
RSquare Adj	-0.00946
Root Mean Square Error	1.296711
Mean of Response	0.419444
Observations (or Sum Wgts)	54

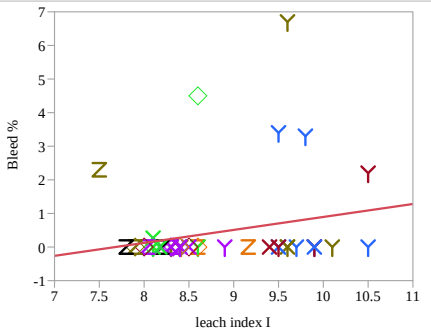
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.846137	0.84614	0.5032
Error	52	87.435946	1.68146	Prob > F
C. Total	53	88.282083		0.4813

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-3.536135	5.578925	-0.63	0.5290
leach index NO3-	0.4792921	0.675652	0.71	0.4813

Bivariate Fit of Bleed % By leach index I



Linear Fit

Linear Fit

Bleed % = -2.959855 + 0.3857892*leach index I

Summary of Fit

RSquare	0.050838
RSquare Adj	0.032585
Root Mean Square Error	1.269418
Mean of Response	0.419444
Observations (or Sum Wgts)	54

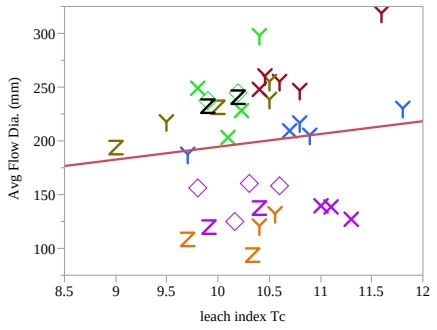
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4.488111	4.48811	2.7852
Error	52	83.793972	1.61142	Prob > F
C. Total	53	88.282083		0.1012

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-2.959855	2.032237	-1.46	0.1513
leach index I	0.3857892	0.231165	1.67	0.1012

Bivariate Fit of Avg Flow Dia. (mm) By leach index Tc



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 75.534376 + 11.906688*leach index Tc

Summary of Fit

RSquare	0.014
RSquare Adj	-0.015
Root Mean Square Error	58.03592
Mean of Response	199.0861
Observations (or Sum Wgts)	36

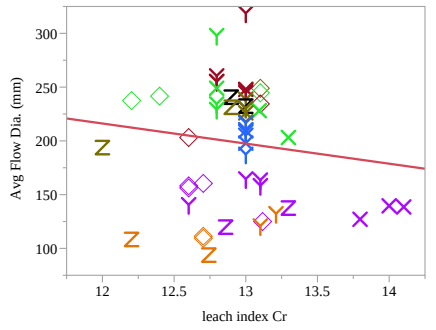
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1626.06	1626.06	0.4828
Error	34	114517.70	3368.17	Prob > F
C. Total	35	116143.76		0.4919

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	75.534376	178.0813	0.42	0.6741
leach index Tc	11.906688	17.13637	0.69	0.4919

Bivariate Fit of Avg Flow Dia. (mm) By leach index Cr



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 440.18716 - 18.667477*leach index Cr

Summary of Fit

RSquare	0.015928
RSquare Adj	-0.003
Root Mean Square Error	53.47371
Mean of Response	198.6093
Observations (or Sum Wgts)	54

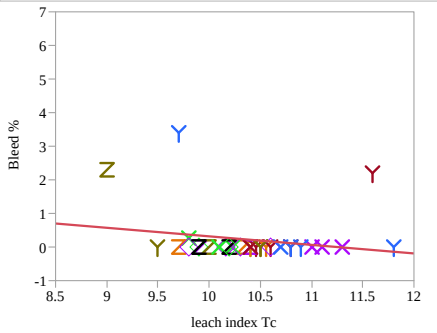
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2406.75	2406.75	0.8417
Error	52	148690.77	2859.44	Prob > F
C. Total	53	151097.53		0.3632

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	440.18716	263.4193	1.67	0.1007
leach index Cr	-18.66748	20.34746	-0.92	0.3632

Bivariate Fit of Bleed % By leach index Tc



Linear Fit

Linear Fit

Bleed % = 2.8679465 - 0.2545671*leach index Tc

Summary of Fit

RSquare	0.037337
RSquare Adj	0.009024
Root Mean Square Error	0.750767
Mean of Response	0.226389
Observations (or Sum Wgts)	36

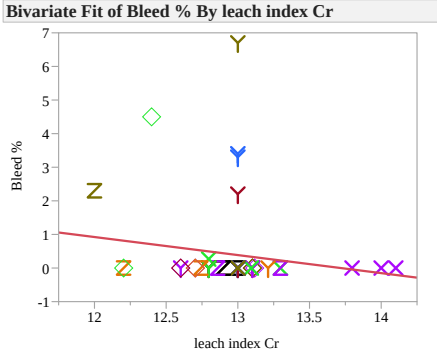
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.743293	0.743293	1.3187
Error	34	19.164137	0.563651	Prob > F
C. Total	35	19.907431		0.2588

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.8679465	2.303704	1.24	0.2217
leach index Tc	-0.254567	0.22168	-1.15	0.2588

Bivariate Fit of Bleed % By leach index Cr



Linear Fit

Linear Fit

Bleed % = 7.3826087 - 0.5380654*leach index Cr

Summary of Fit

RSquare	0.022649
RSquare Adj	0.003854
Root Mean Square Error	1.28813
Mean of Response	0.419444
Observations (or Sum Wgts)	54

Analysis of Variance

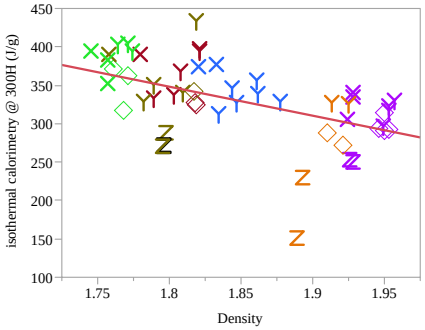
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.999541	1.99954	1.2051
Error	52	86.282543	1.65928	Prob > F
C. Total	53	88.282083		0.2774

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.3826087	6.345518	1.16	0.2500
leach index Cr	-0.538065	0.490151	-1.10	0.2774

Fit Group

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Density



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 1027.5908 - 377.37574*Density

Summary of Fit

RSquare	0.260325
RSquare Adj	0.246101
Root Mean Square Error	44.32732
Mean of Response	330.4241
Observations (or Sum Wgts)	54

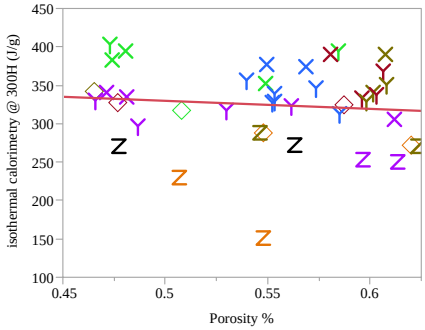
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	35960.15	35960.1	18.3012
Error	52	102175.39	1964.9	Prob > F
C. Total	53	138135.54		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1027.5908	163.0778	6.30	<.0001*
Density	-377.3757	88.21344	-4.28	<.0001*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Porosity %



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 382.34549 - 104.83608*Porosity %

Summary of Fit

RSquare	0.011214
RSquare Adj	-0.01351
Root Mean Square Error	50.84834
Mean of Response	324.6167
Observations (or Sum Wgts)	42

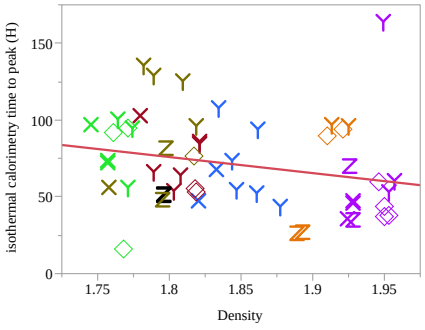
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1172.93	1172.93	0.4536
Error	40	103422.14	2585.55	Prob > F
C. Total	41	104595.08		0.5045

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	382.34549	86.06863	4.44	<.0001*
Porosity %	-104.8361	155.6506	-0.67	0.5045

Bivariate Fit of isothermal calorimetry time to peak (H) By Density



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 264.46219 - 104.72382*Density

Summary of Fit

RSquare	0.058029
RSquare Adj	0.039914
Root Mean Square Error	29.402
Mean of Response	70.99463
Observations (or Sum Wgts)	54

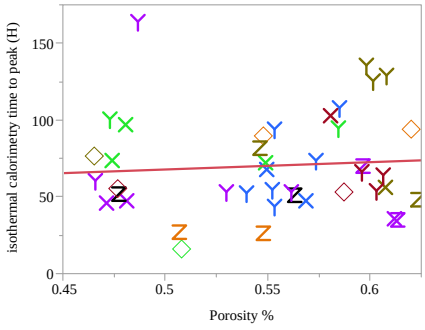
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2769.265	2769.26	3.2034
Error	52	44952.837	864.48	Prob > F
C. Total	53	47722.102		0.0793

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	264.46219	108.1683	2.44	0.0179*
Density	-104.7238	58.51135	-1.79	0.0793

Bivariate Fit of isothermal calorimetry time to peak (H) By Porosity %



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 44.044775 + 47.68881*Porosity %

Summary of Fit

RSquare	0.005922
RSquare Adj	-0.01893
Root Mean Square Error	31.91432
Mean of Response	70.305
Observations (or Sum Wgts)	42

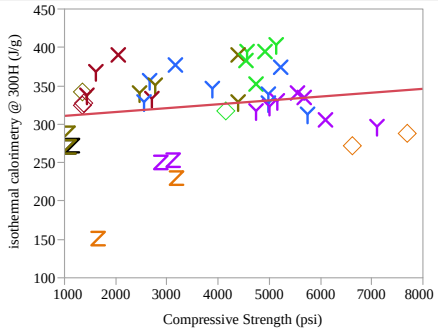
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	242.708	242.71	0.2383
Error	40	40740.941	1018.52	Prob > F
C. Total	41	40983.650		0.6281

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	44.044775	54.01988	0.82	0.4197
Porosity %	47.68881	97.69214	0.49	0.6281

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Compressive Strength (psi)



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 305.90916 + 0.0050342*Compressive Strength (psi)

Summary of Fit

RSquare	0.0335
RSquare Adj	0.009338
Root Mean Square Error	50.27204
Mean of Response	324.6167
Observations (or Sum Wgts)	42

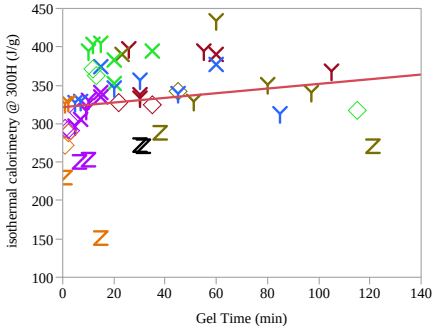
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3503.97	3503.97	1.3865
Error	40	101091.11	2527.28	Prob > F
C. Total	41	104595.08		0.2460

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	305.90916	17.68032	17.30	<.0001*
Compressive Strength (psi)	0.0050342	0.004275	1.18	0.2460

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Gel Time (min)



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 321.52526 + 0.3043291*Gel Time (min)

Summary of Fit

RSquare	0.033457
RSquare Adj	0.01487
Root Mean Square Error	50.67125
Mean of Response	330.4241
Observations (or Sum Wgts)	54

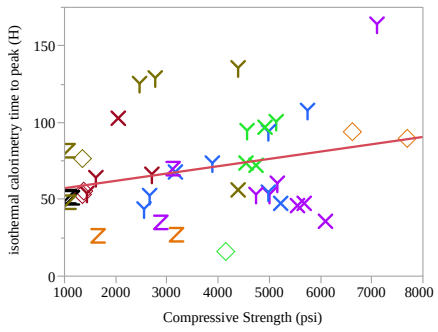
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4621.58	4621.58	1.8000
Error	52	133513.95	2567.58	Prob > F
C. Total	53	138135.54		0.1855

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	321.52526	9.567758	33.61	<.0001*
Gel Time (min)	0.3043291	0.226835	1.34	0.1855

Bivariate Fit of isothermal calorimetry time to peak (H) By Compressive Strength (psi)



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 52.623296 + 0.0047581*Compressive Strength (psi)

Summary of Fit

RSquare	0.076378
RSquare Adj	0.053287
Root Mean Square Error	30.76256
Mean of Response	70.305
Observations (or Sum Wgts)	42

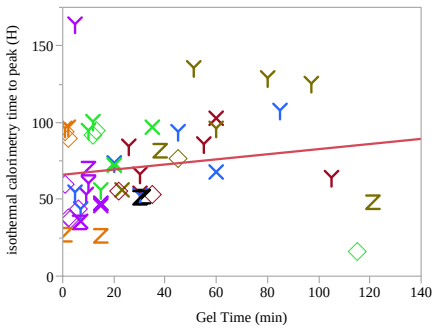
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3130.234	3130.23	3.3077
Error	40	37853.416	946.34	Prob > F
C. Total	41	40983.650		0.0764

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	52.623296	10.81898	4.86	<.0001*
Compressive Strength (psi)	0.0047581	0.002616	1.82	0.0764

Bivariate Fit of isothermal calorimetry time to peak (H) By Gel Time (min)



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 66.123873 + 0.1665743*Gel Time (min)

Summary of Fit

RSquare	0.029014
RSquare Adj	0.010341
Root Mean Square Error	29.8514
Mean of Response	70.99463
Observations (or Sum Wgts)	54

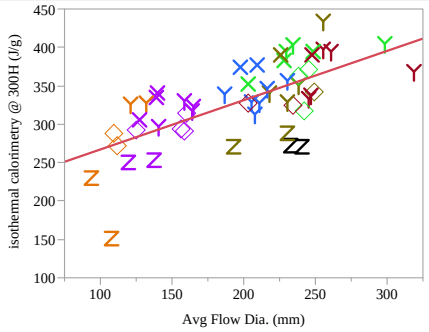
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1384.586	1384.59	1.5538
Error	52	46337.516	891.11	Prob > F
C. Total	53	47722.102		0.2182

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	66.123873	5.636548	11.73	<.0001*
Gel Time (min)	0.1665743	0.133633	1.25	0.2182

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 202.96605 + 0.6417527*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.450492
RSquare Adj	0.439925
Root Mean Square Error	38.20656
Mean of Response	330.4241
Observations (or Sum Wgts)	54

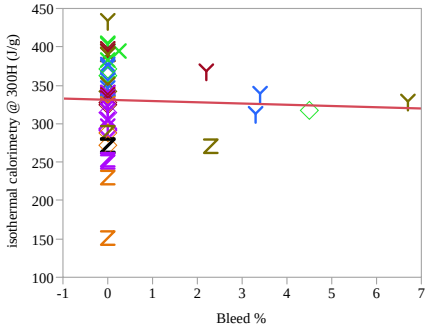
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	62228.98	62229.0	42.6301
Error	52	75906.56	1459.7	Prob > F
C. Total	53	138135.54		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	202.96605	20.20182	10.05	<.0001*
Avg Flow Dia. (mm)	0.6417527	0.09829	6.53	<.0001*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Bleed %



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 331.09796 - 1.6066145*Bleed %

Summary of Fit

RSquare	0.00165
RSquare Adj	-0.01755
Root Mean Square Error	51.49826
Mean of Response	330.4241
Observations (or Sum Wgts)	54

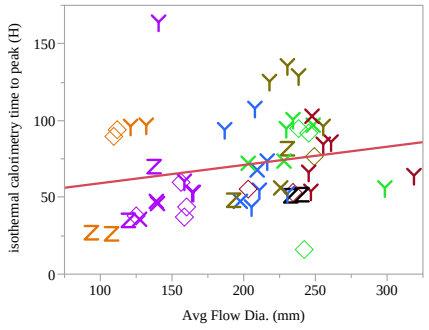
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	227.87	227.87	0.0859
Error	52	137907.66	2652.07	Prob > F
C. Total	53	138135.54		0.7706

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	331.09796	7.375474	44.89	<.0001*
Bleed %	-1.606615	5.480955	-0.29	0.7706

Bivariate Fit of isothermal calorimetry time to peak (H) By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 47.451923 + 0.1185378*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.044489
RSquare Adj	0.026114
Root Mean Square Error	29.61256
Mean of Response	70.99463
Observations (or Sum Wgts)	54

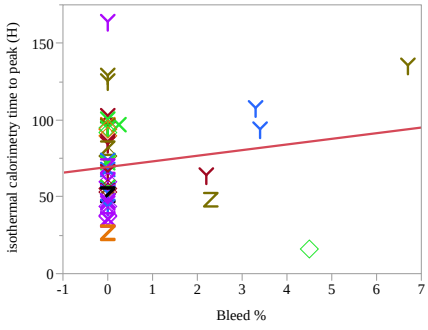
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2123.103	2123.10	2.4211
Error	52	45598.998	876.90	Prob > F
C. Total	53	47722.102		0.1258

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	47.451923	15.65772	3.03	0.0038*
Avg Flow Dia. (mm)	0.1185378	0.076181	1.56	0.1258

Bivariate Fit of isothermal calorimetry time to peak (H) By Bleed %



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 69.454706 + 3.6713411*Bleed %

Summary of Fit

RSquare	0.024935
RSquare Adj	0.006183
Root Mean Square Error	29.91403
Mean of Response	70.99463
Observations (or Sum Wgts)	54

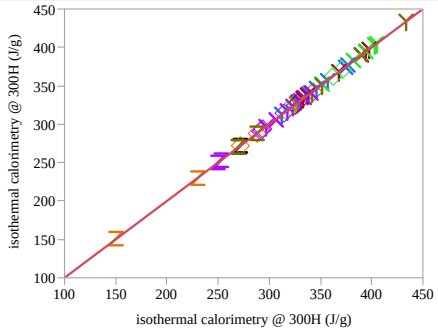
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1189.932	1189.93	1.3298
Error	52	46532.170	894.85	Prob > F
C. Total	53	47722.102		0.2541

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	69.454706	4.284226	16.21	<.0001*
Bleed %	3.6713411	3.183748	1.15	0.2541

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 0 + 1*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	330.4241
Observations (or Sum Wgts)	54

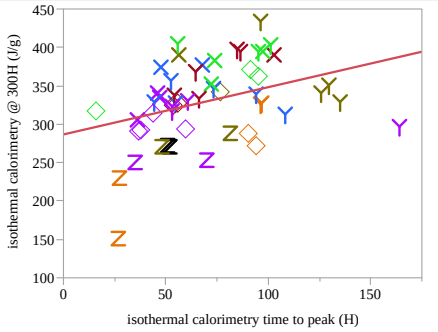
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	138135.54	138136	.
Error	52	0.00	0	Prob > F
C. Total	53	138135.54		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
isothermal calorimetry @ 300H (J/g)	1	0	.	.

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 286.69453 + 0.6159556*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.131073
RSquare Adj	0.114363
Root Mean Square Error	48.04439
Mean of Response	330.4241
Observations (or Sum Wgts)	54

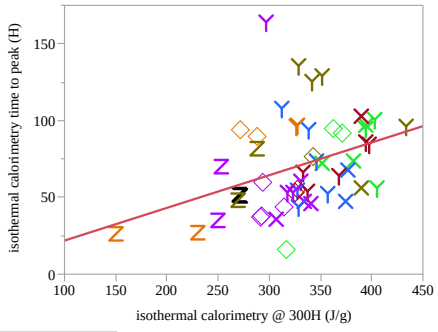
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	18105.83	18105.8	7.8439
Error	52	120029.71	2308.3	Prob > F
C. Total	53	138135.54		0.0071*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	286.69453	16.92738	16.94	<.0001*
isothermal calorimetry time to peak (H)	0.6159556	0.219929	2.80	0.0071*

Bivariate Fit of isothermal calorimetry time to peak (H) By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 0.6816895 + 0.2127961*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.131073
RSquare Adj	0.114363
Root Mean Square Error	28.23903
Mean of Response	70.99463
Observations (or Sum Wgts)	54

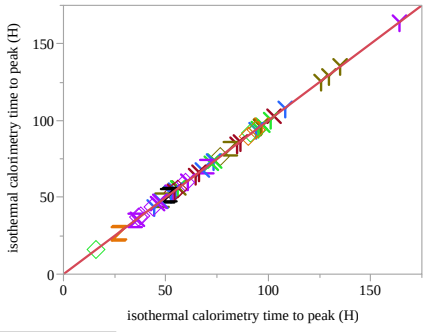
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6255.076	6255.08	7.8439
Error	52	41467.026	797.44	Prob > F
C. Total	53	47722.102		0.0071*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.6816895	25.3979	0.03	0.9787
isothermal calorimetry @ 300H (J/g)	0.2127961	0.07598	2.80	0.0071*

Bivariate Fit of isothermal calorimetry time to peak (H) By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 0 + 1*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	70.99463
Observations (or Sum Wgts)	54

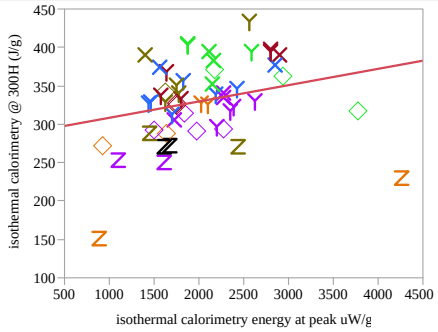
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	47722.102	47722.1	.
Error	52	0.000	0.0	Prob > F
C. Total	53	47722.102		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
isothermal calorimetry time to peak (H)	1	0	.	.

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By isothermal calorimetry energy at peak uW/g



Linear Fit

isothermal calorimetry @ 300H (J/g) = 287.05785 + 0.0212898*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.067384
RSquare Adj	0.049449
Root Mean Square Error	49.77399
Mean of Response	330.4241
Observations (or Sum Wgts)	54

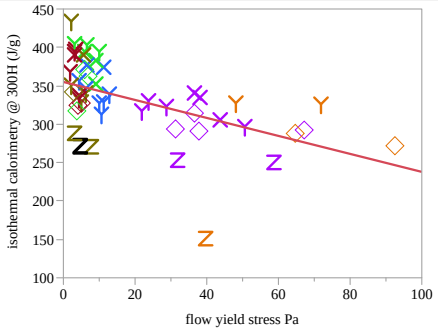
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	9308.12	9308.12	3.7571
Error	52	128827.41	2477.45	Prob > F
C. Total	53	138135.54		0.0580

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	287.05785	23.37578	12.28	<.0001*
isothermal calorimetry energy at peak uW/g	0.0212898	0.010984	1.94	0.0580

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By flow yield stress Pa



Linear Fit

isothermal calorimetry @ 300H (J/g) = 355.10431 - 1.1712037*flow yield stress Pa

Summary of Fit

RSquare	0.2694
RSquare Adj	0.255075
Root Mean Square Error	42.7979
Mean of Response	332.3189
Observations (or Sum Wgts)	53

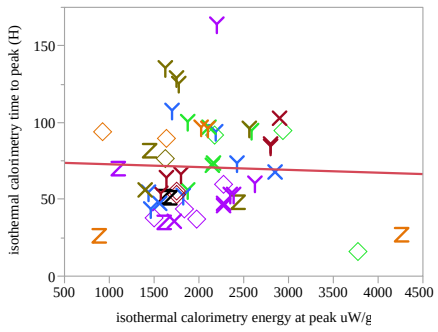
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	34445.59	34445.6	18.8057
Error	51	93414.67	1831.7	Prob > F
C. Total	52	127860.26		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	355.10431	7.884609	45.04	<.0001*
flow yield stress Pa	-1.171204	0.270077	-4.34	<.0001*

Bivariate Fit of isothermal calorimetry time to peak (H) By isothermal calorimetry energy at peak uW/g



Linear Fit

isothermal calorimetry time to peak (H) = 74.710158 - 0.0018241*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.001432
RSquare Adj	-0.01777
Root Mean Square Error	30.27241
Mean of Response	70.99463
Observations (or Sum Wgts)	54

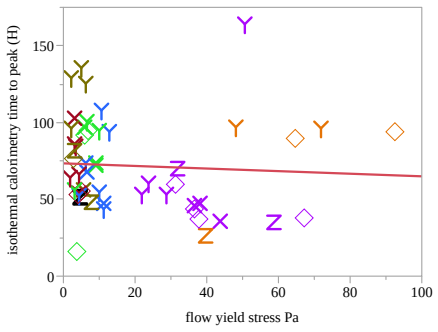
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	68.328	68.328	0.0746
Error	52	47653.773	916.419	Prob > F
C. Total	53	47722.102		0.7859

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	74.710158	14.21709	5.25	<.0001*
isothermal calorimetry energy at peak uW/g	-0.001824	0.00668	-0.27	0.7859

Bivariate Fit of isothermal calorimetry time to peak (H) By flow yield stress Pa



Linear Fit

isothermal calorimetry time to peak (H) = 73.453754 - 0.0840257*flow yield stress Pa

Summary of Fit

RSquare	0.003873
RSquare Adj	-0.01566
Root Mean Square Error	29.90166
Mean of Response	71.81906
Observations (or Sum Wgts)	53

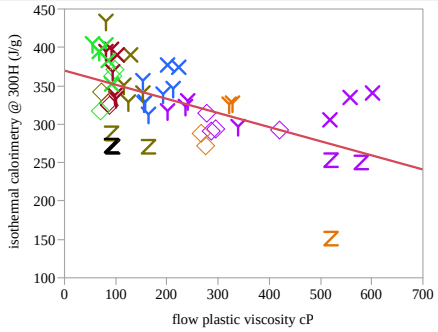
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	177.294	177.294	0.1983
Error	51	45599.564	894.109	Prob > F
C. Total	52	45776.858		0.6580

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	73.453754	5.508749	13.33	<.0001*
flow yield stress Pa	-0.084026	0.188695	-0.45	0.6580

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By flow plastic viscosity cP



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 369.84541 - 0.1838346*flow plastic viscosity cP

Summary of Fit

RSquare	0.316177
RSquare Adj	0.302769
Root Mean Square Error	41.40516
Mean of Response	332.3189
Observations (or Sum Wgts)	53

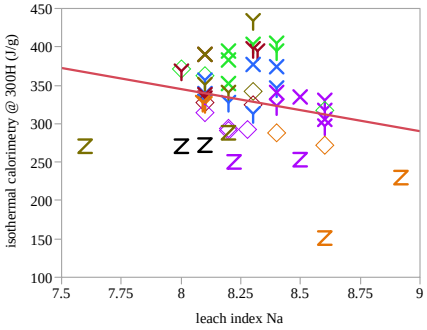
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	40426.53	40426.5	23.5807
Error	51	87433.74	1714.4	Prob > F
C. Total	52	127860.26		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	369.84541	9.595149	38.55	<.0001*
flow plastic viscosity cP	-0.183835	0.037857	-4.86	<.0001*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By leach index Na



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 783.23282 - 54.759304*leach index Na

Summary of Fit

RSquare	0.055659
RSquare Adj	0.037499
Root Mean Square Error	50.08589
Mean of Response	330.4241
Observations (or Sum Wgts)	54

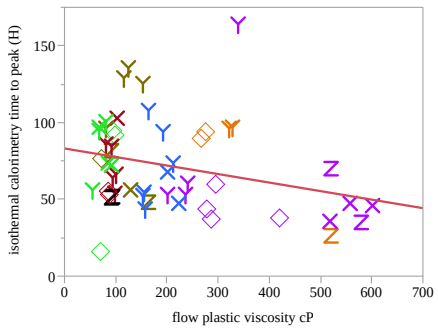
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7688.52	7688.52	3.0649
Error	52	130447.02	2508.60	Prob > F
C. Total	53	138135.54		0.0859

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	783.23282	258.7376	3.03	0.0038*
leach index Na	-54.7593	31.27893	-1.75	0.0859

Bivariate Fit of isothermal calorimetry time to peak (H) By flow plastic viscosity cP



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 83.158968 - 0.0555518*flow plastic viscosity cP

Summary of Fit

RSquare	0.080642
RSquare Adj	0.062616
Root Mean Square Error	28.72633
Mean of Response	71.81906
Observations (or Sum Wgts)	53

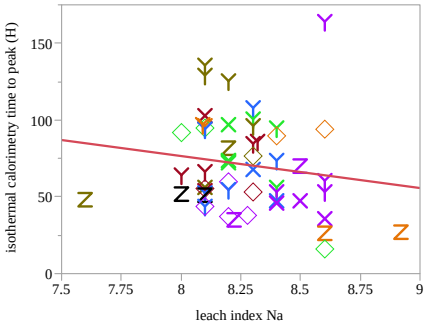
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3691.549	3691.55	4.4735
Error	51	42085.309	825.20	Prob > F
C. Total	52	45776.858		0.0393*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	83.158968	6.656983	12.49	<.0001*
flow plastic viscosity cP	-0.055552	0.026265	-2.12	0.0393*

Bivariate Fit of isothermal calorimetry time to peak (H) By leach index Na



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 243.47464 - 20.858443*leach index Na

Summary of Fit

RSquare	0.023376
RSquare Adj	0.004595
Root Mean Square Error	29.93793
Mean of Response	70.99463
Observations (or Sum Wgts)	54

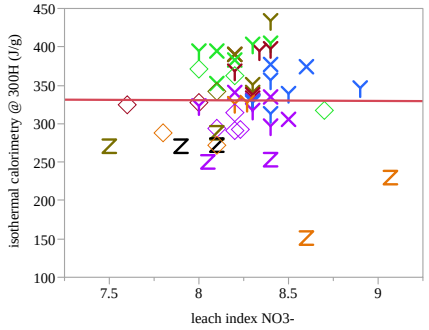
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1115.555	1115.55	1.2447
Error	52	46606.547	896.28	Prob > F
C. Total	53	47722.102		0.2697

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	243.47464	154.6557	1.57	0.1215
leach index Na	-20.85844	18.69641	-1.12	0.2697

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By leach index NO3-



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 337.6789 - 0.8790566*leach index NO3-

Summary of Fit

RSquare	2.06e-5
RSquare Adj	-0.01921
Root Mean Square Error	51.54026
Mean of Response	330.4241
Observations (or Sum Wgts)	54

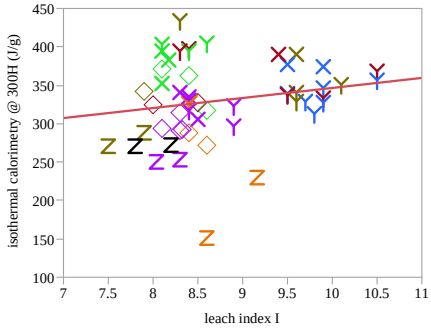
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.85	2.85	0.0011
Error	52	138132.69	2656.40	Prob > F
C. Total	53	138135.54		0.9740

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	337.6789	221.745	1.52	0.1339
leach index NO3-	-0.879057	26.85508	-0.03	0.9740

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By leach index I



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 216.25616 + 13.033694*leach index I

Summary of Fit

RSquare	0.037085
RSquare Adj	0.018567
Root Mean Square Error	50.57607
Mean of Response	330.4241
Observations (or Sum Wgts)	54

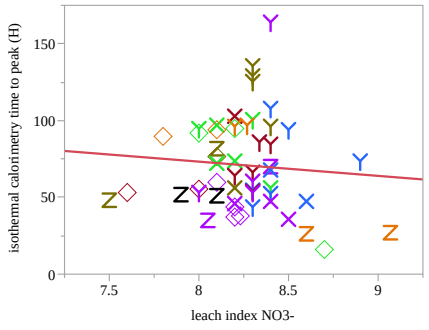
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5122.69	5122.69	2.0027
Error	52	133012.84	2557.94	Prob > F
C. Total	53	138135.54		0.1630

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	216.25616	80.96823	2.67	0.0101*
leach index I	13.033694	9.21008	1.42	0.1630

Bivariate Fit of isothermal calorimetry time to peak (H) By leach index NO3-



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 147.45615 - 9.2647356*leach index NO3-

Summary of Fit

RSquare	0.006625
RSquare Adj	-0.01248
Root Mean Square Error	30.19359
Mean of Response	70.99463
Observations (or Sum Wgts)	54

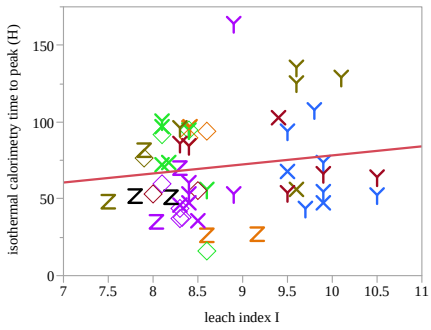
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	316.159	316.159	0.3468
Error	52	47405.942	911.653	Prob > F
C. Total	53	47722.102		0.5585

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	147.45615	129.9038	1.14	0.2615
leach index NO3-	-9.264736	15.73239	-0.59	0.5585

Bivariate Fit of isothermal calorimetry time to peak (H) By leach index I



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 19.377328 + 5.8927597*leach index I

Summary of Fit

RSquare	0.021942
RSquare Adj	0.003133
Root Mean Square Error	29.9599
Mean of Response	70.99463
Observations (or Sum Wgts)	54

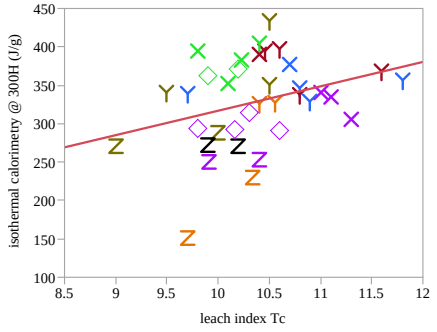
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1047.131	1047.13	1.1666
Error	52	46674.971	897.60	Prob > F
C. Total	53	47722.102		0.2851

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	19.377328	47.96339	0.40	0.6879
leach index I	5.8927597	5.455803	1.08	0.2851

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By leach index Tc



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = -1.027858 + 31.789279*leach index Tc

Summary of Fit

RSquare	0.09994
RSquare Adj	0.073467
Root Mean Square Error	55.40977
Mean of Response	328.8389
Observations (or Sum Wgts)	36

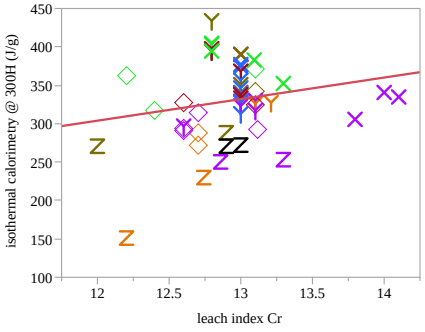
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11590.90	11590.9	3.7752
Error	34	104388.24	3070.2	Prob > F
C. Total	35	115979.15		0.0603

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-1.027858	170.0231	-0.01	0.9952
leach index Tc	31.789279	16.36095	1.94	0.0603

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By leach index Cr



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = -33.22109 + 28.099995*leach index Cr

Summary of Fit

RSquare	0.039479
RSquare Adj	0.021008
Root Mean Square Error	50.51315
Mean of Response	330.4241
Observations (or Sum Wgts)	54

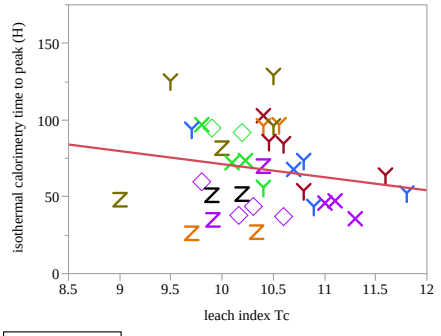
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5453.47	5453.47	2.1373
Error	52	132682.07	2551.58	Prob > F
C. Total	53	138135.54		0.1498

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-33.22109	248.8352	-0.13	0.8943
leach index Cr	28.099995	19.22093	1.46	0.1498

Bivariate Fit of isothermal calorimetry time to peak (H) By leach index Tc



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 156.31602 - 8.4975821*leach index Tc

Summary of Fit

RSquare	0.032487
RSquare Adj	0.004031
Root Mean Square Error	26.93427
Mean of Response	68.13944
Observations (or Sum Wgts)	36

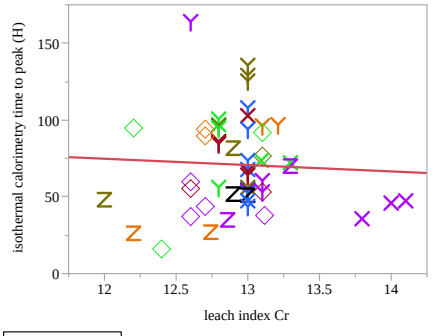
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	828.222	828.222	1.1417
Error	34	24665.468	725.455	Prob > F
C. Total	35	25493.689		0.2928

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	156.31602	82.64693	1.89	0.0671
leach index Tc	-8.497582	7.952933	-1.07	0.2928

Bivariate Fit of isothermal calorimetry time to peak (H) By leach index Cr



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 124.42717 - 4.1288989*leach index Cr

Summary of Fit

RSquare	0.002467
RSquare Adj	-0.01672
Root Mean Square Error	30.25671
Mean of Response	70.99463
Observations (or Sum Wgts)	54

Analysis of Variance

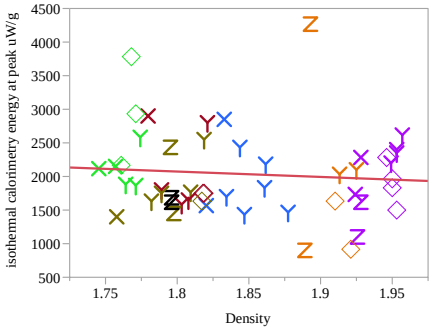
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	117.741	117.741	0.1286
Error	52	47604.360	915.468	Prob > F
C. Total	53	47722.102		0.7213

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	124.42717	149.049	0.83	0.4076
leach index Cr	-4.128899	11.51308	-0.36	0.7213

Fit Group

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Density



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 3503.9702 - 794.09976*Density

Summary of Fit

RSquare	0.007754
RSquare Adj	-0.01133
Root Mean Square Error	625.9891
Mean of Response	2036.944
Observations (or Sum Wgts)	54

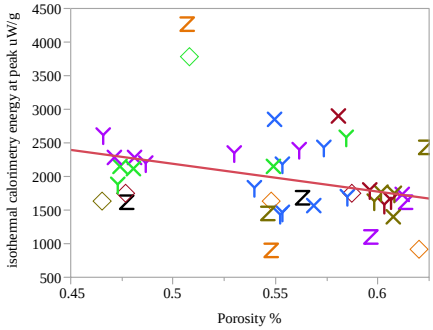
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	159230	159230	0.4063
Error	52	20376841	391862	Prob > F
C. Total	53	20536071		0.5266

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3503.9702	2302.979	1.52	0.1342
Density	-794.0998	1245.747	-0.64	0.5266

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Porosity %



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 4254.5603 - 4131.7467*Porosity %

Summary of Fit

RSquare	0.102906
RSquare Adj	0.080479
Root Mean Square Error	630.1256
Mean of Response	1979.381
Observations (or Sum Wgts)	42

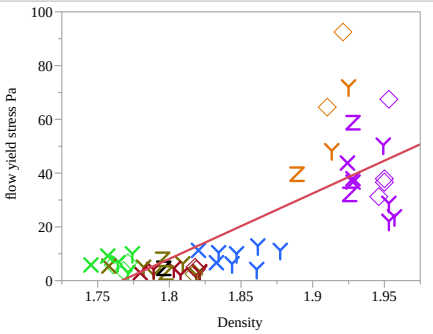
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1821878	1821878	4.5884
Error	40	15882332	397058	Prob > F
C. Total	41	17704210		0.0383*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4254.5603	1066.584	3.99	0.0003*
Porosity %	-4131.747	1928.862	-2.14	0.0383*

Bivariate Fit of flow yield stress Pa By Density



Linear Fit

Linear Fit

flow yield stress Pa = -430.3223 + 243.57732*Density

Summary of Fit

RSquare	0.59159
RSquare Adj	0.583581
Root Mean Square Error	14.1807
Mean of Response	19.45472
Observations (or Sum Wgts)	53

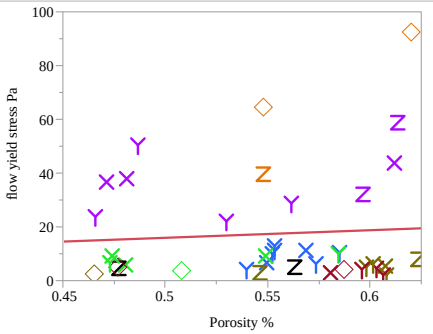
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	14855.565	14855.6	73.8744
Error	51	10255.707	201.1	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-430.3223	52.3662	-8.22	<.0001*
Density	243.57732	28.33936	8.60	<.0001*

Bivariate Fit of flow yield stress Pa By Porosity %



Linear Fit

Linear Fit

flow yield stress Pa = 1.8141242 + 28.266839*Porosity %

Summary of Fit

RSquare	0.004961
RSquare Adj	-0.02055
Root Mean Square Error	20.74663
Mean of Response	17.40976
Observations (or Sum Wgts)	41

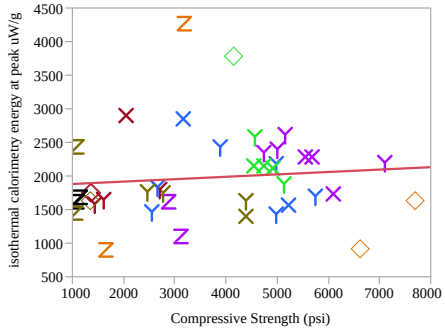
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	83.694	83.694	0.1944
Error	39	16786.482	430.423	Prob > F
C. Total	40	16870.176		0.6617

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8141242	35.51551	0.05	0.9595
Porosity %	28.266839	64.10287	0.44	0.6617

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Compressive Strength (psi)



Linear Fit

isothermal calorimetry energy at peak uW/g = 1847.1917 + 0.0355721*Compressive Strength (psi)

Summary of Fit

RSquare	0.009882
RSquare Adj	-0.01487
Root Mean Square Error	661.9905
Mean of Response	1979.381
Observations (or Sum Wgts)	42

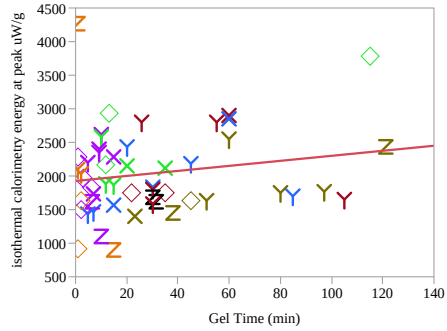
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	174953	174953	0.3992
Error	40	17529257	438231	Prob > F
C. Total	41	17704210		0.5311

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1847.1917	232.8174	7.93	<.0001*
Compressive Strength (psi)	0.0355721	0.056299	0.63	0.5311

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Gel Time (min)



Linear Fit

isothermal calorimetry energy at peak uW/g = 1927.3539 + 3.7478724*Gel Time (min)

Summary of Fit

RSquare	0.034132
RSquare Adj	0.015557
Root Mean Square Error	617.6124
Mean of Response	2036.944
Observations (or Sum Wgts)	54

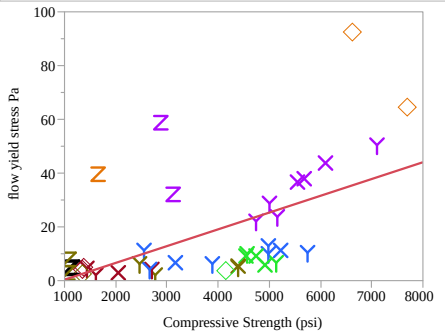
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	700928	700928	1.8376
Error	52	19835143	381445	Prob > F
C. Total	53	20536071		0.1811

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1927.3539	116.6177	16.53	<.0001*
Gel Time (min)	3.7478724	2.764802	1.36	0.1811

Bivariate Fit of flow yield stress Pa By Compressive Strength (psi)



Linear Fit

flow yield stress Pa = -5.863429 + 0.0062408*Compressive Strength (psi)

Summary of Fit

RSquare	0.318519
RSquare Adj	0.301045
Root Mean Square Error	17.16938
Mean of Response	17.40976
Observations (or Sum Wgts)	41

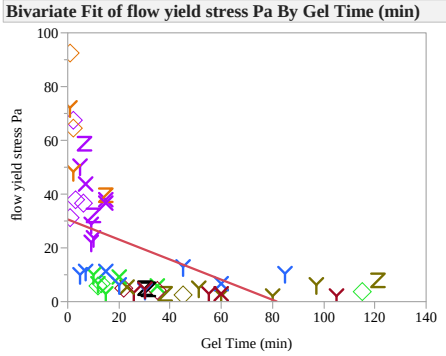
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5373.465	5373.47	18.2283
Error	39	11496.711	294.79	Prob > F
C. Total	40	16870.176		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-5.863429	6.07489	-0.97	0.3404
Compressive Strength (psi)	0.0062408	0.001462	4.27	0.0001*

Bivariate Fit of flow yield stress Pa By Gel Time (min)



Linear Fit

flow yield stress Pa = 30.596596 - 0.3742203*Gel Time (min)

Summary of Fit

RSquare	0.273753
RSquare Adj	0.259513
Root Mean Square Error	18.90999
Mean of Response	19.45472
Observations (or Sum Wgts)	53

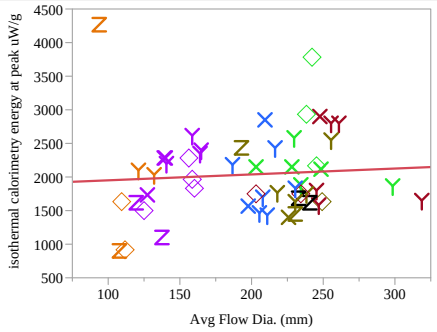
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6874.293	6874.29	19.2241
Error	51	18236.978	357.59	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	30.596596	3.633806	8.42	<.0001*
Gel Time (min)	-0.37422	0.08535	-4.38	<.0001*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 1862.8025 + 0.8768067*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.005656
RSquare Adj	-0.01347
Root Mean Square Error	626.6503
Mean of Response	2036.944
Observations (or Sum Wgts)	54

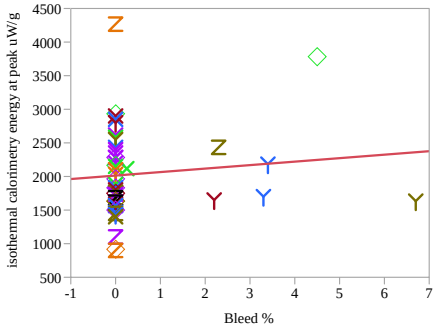
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	116162	116162	0.2958
Error	52	20419909	392691	Prob > F
C. Total	53	20536071		0.5888

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1862.8025	331.3429	5.62	<.0001*
Avg Flow Dia. (mm)	0.8768067	1.612117	0.54	0.5888

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Bleed %



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2015.2788 + 51.653271*Bleed %

Summary of Fit

RSquare	0.01147
RSquare Adj	-0.00754
Root Mean Square Error	624.8158
Mean of Response	2036.944
Observations (or Sum Wgts)	54

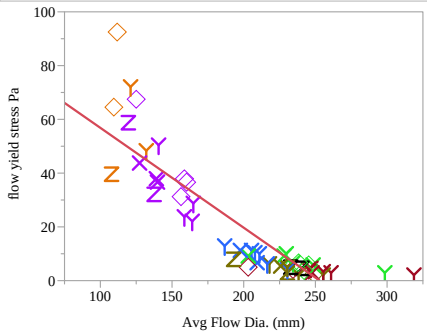
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	235542	235542	0.6033
Error	52	20300529	390395	Prob > F
C. Total	53	20536071		0.4408

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2015.2788	89.48483	22.52	<.0001*
Bleed %	51.653271	66.49909	0.78	0.4408

Bivariate Fit of flow yield stress Pa By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

flow yield stress Pa = 94.035222 - 0.3718012*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.769817
RSquare Adj	0.765304
Root Mean Square Error	10.64598
Mean of Response	19.45472
Observations (or Sum Wgts)	53

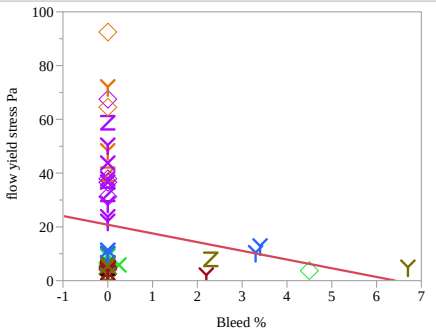
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	19331.090	19331.1	170.5631
Error	51	5780.181	113.3	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	94.035222	5.894874	15.95	<.0001*
Avg Flow Dia. (mm)	-0.371801	0.028469	-13.06	<.0001*

Bivariate Fit of flow yield stress Pa By Bleed %



Linear Fit

Linear Fit

flow yield stress Pa = 20.842226 - 3.24671*Bleed %

Summary of Fit

RSquare	0.036984
RSquare Adj	0.018101
Root Mean Square Error	21.7754
Mean of Response	19.45472
Observations (or Sum Wgts)	53

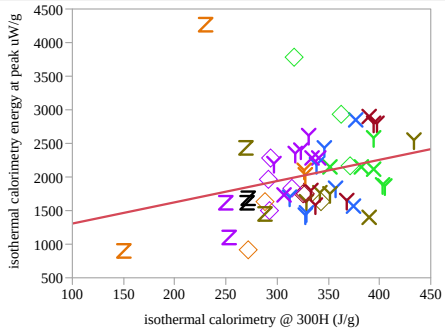
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	928.703	928.703	1.9586
Error	51	24182.568	474.168	Prob > F
C. Total	52	25111.271		0.1677

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	20.842226	3.151112	6.61	<.0001*
Bleed %	-3.24671	2.31991	-1.40	0.1677

Bivariate Fit of isothermal calorimetry energy at peak uW/g By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 991.12667 + 3.1650774*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.067384
RSquare Adj	0.049449
Root Mean Square Error	606.8878
Mean of Response	2036.944
Observations (or Sum Wgts)	54

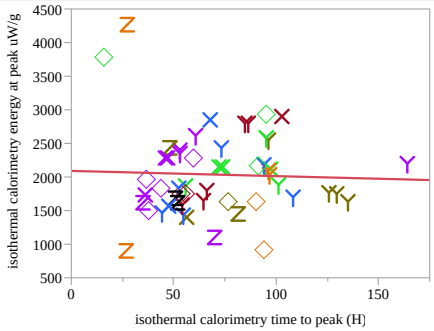
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1383802	1383802	3.7571
Error	52	19152268	368313	Prob > F
C. Total	53	20536071		0.0580

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	991.12667	545.8288	1.82	0.0752
isothermal calorimetry @ 300H (J/g)	3.1650774	1.632885	1.94	0.0580

Bivariate Fit of isothermal calorimetry energy at peak uW/g By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2092.6713 - 0.784945*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.001432
RSquare Adj	-0.01777
Root Mean Square Error	627.9801
Mean of Response	2036.944
Observations (or Sum Wgts)	54

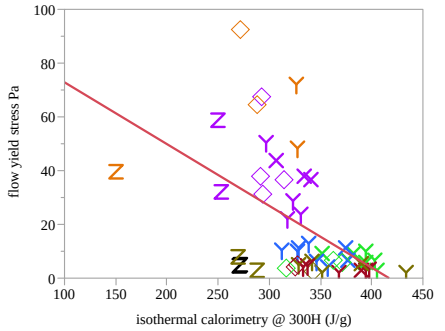
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	29403	29403	0.0746
Error	52	20506667	394359	Prob > F
C. Total	53	20536071		0.7859

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2092.6713	221.2549	9.46	<.0001*
isothermal calorimetry time to peak (H)	-0.784945	2.874657	-0.27	0.7859

Bivariate Fit of flow yield stress Pa By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

flow yield stress Pa = 95.894696 - 0.23002*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.2694
RSquare Adj	0.255075
Root Mean Square Error	18.96658
Mean of Response	19.45472
Observations (or Sum Wgts)	53

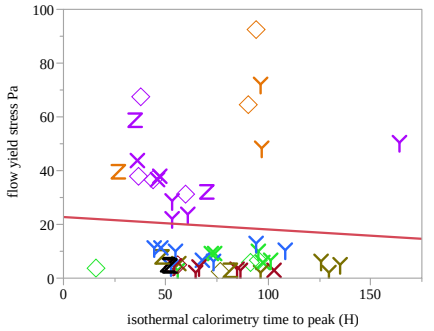
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6764.983	6764.98	18.8057
Error	51	18346.288	359.73	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	95.894696	17.8184	5.38	<.0001*
isothermal calorimetry @ 300H (J/g)	-0.23002	0.053042	-4.34	<.0001*

Bivariate Fit of flow yield stress Pa By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

flow yield stress Pa = 22.765074 - 0.046093*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.003873
RSquare Adj	-0.01566
Root Mean Square Error	22.14658
Mean of Response	19.45472
Observations (or Sum Wgts)	53

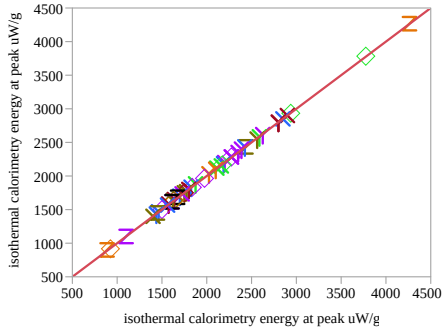
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	97.256	97.256	0.1983
Error	51	25014.015	490.471	Prob > F
C. Total	52	25111.271		0.6580

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	22.765074	8.032355	2.83	0.0066*
isothermal calorimetry time to peak (H)	-0.046093	0.10351	-0.45	0.6580

Bivariate Fit of isothermal calorimetry energy at peak uW/g By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 0 + 1*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	2036.944
Observations (or Sum Wgts)	54

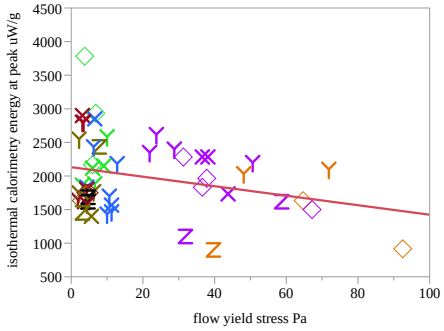
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	20536071	20536071	.
Error	52	0	0	Prob > F
C. Total	53	20536071		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
isothermal calorimetry energy at peak uW/g	1	0	.	.

Bivariate Fit of isothermal calorimetry energy at peak uW/g By flow yield stress Pa



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2132.8758 - 7.0860393*flow yield stress Pa

Summary of Fit

RSquare	0.081319
RSquare Adj	0.063306
Root Mean Square Error	528.492
Mean of Response	1995.019
Observations (or Sum Wgts)	53

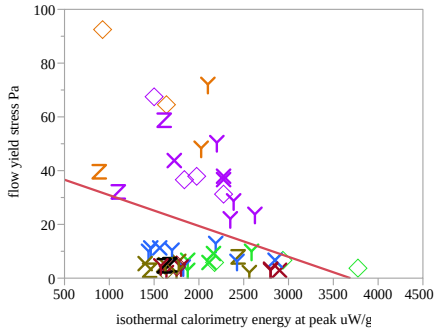
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1260886	1260886	4.5144
Error	51	14244493	279304	Prob > F
C. Total	52	15505379		0.0385*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2132.8758	97.36349	21.91	<.0001*
flow yield stress Pa	-7.086039	3.335063	-2.12	0.0385*

Bivariate Fit of flow yield stress Pa By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

flow yield stress Pa = 42.349518 - 0.011476*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.081319
RSquare Adj	0.063306
Root Mean Square Error	21.26824
Mean of Response	19.45472
Observations (or Sum Wgts)	53

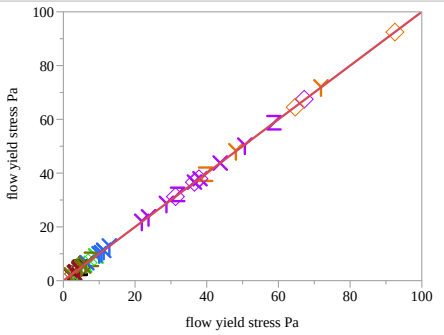
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2042.030	2042.03	4.5144
Error	51	23069.241	452.34	Prob > F
C. Total	52	25111.271		0.0385*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	42.349518	11.1645	3.79	0.0004*
isothermal calorimetry energy at peak uW/g	-0.011476	0.005401	-2.12	0.0385*

Bivariate Fit of flow yield stress Pa By flow yield stress Pa



Linear Fit

Linear Fit

flow yield stress Pa = 0 + 1*flow yield stress Pa

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	19.45472
Observations (or Sum Wgts)	53

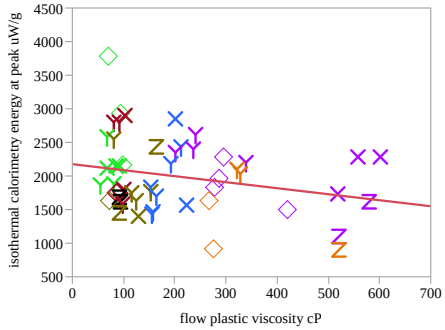
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	25111.271	25111.3	.
Error	51	0.000	0.0	Prob > F
C. Total	52	25111.271		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
flow yield stress Pa	1	0	.	.

Bivariate Fit of isothermal calorimetry energy at peak uW/g By flow plastic viscosity cP



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2177.8982 - 0.8958873*flow plastic viscosity cP

Summary of Fit

RSquare	0.061921
RSquare Adj	0.043527
Root Mean Square Error	534.0426
Mean of Response	1995.019
Observations (or Sum Wgts)	53

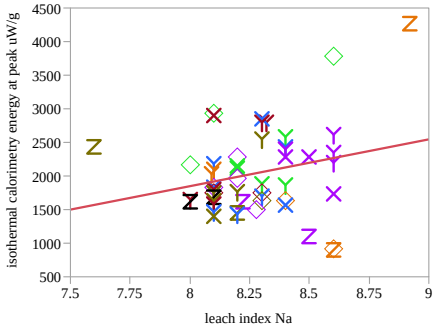
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	960105	960105	3.3664
Error	51	14545274	285201	Prob > F
C. Total	52	15505379		0.0724

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2177.8982	123.758	17.60	<.0001*
flow plastic viscosity cP	-0.895887	0.488281	-1.83	0.0724

Bivariate Fit of isothermal calorimetry energy at peak uW/g By leach index Na



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = -3714.19 + 695.49917*leach index Na

Summary of Fit

RSquare	0.060395
RSquare Adj	0.042326
Root Mean Square Error	609.1575
Mean of Response	2036.944
Observations (or Sum Wgts)	54

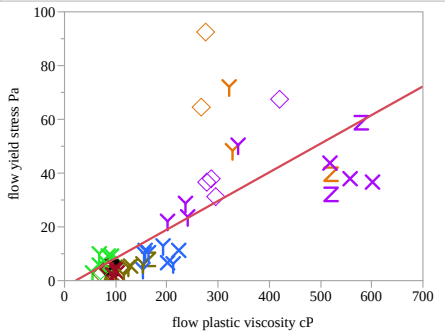
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1240282	1240282	3.3424
Error	52	19295789	371073	Prob > F
C. Total	53	20536071		0.0733

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-3714.19	3146.833	-1.18	0.2433
leach index Na	695.49917	380.4224	1.83	0.0733

Bivariate Fit of flow yield stress Pa By flow plastic viscosity cP



Linear Fit

Linear Fit

flow yield stress Pa = -2.28821 + 0.106514*flow plastic viscosity cP

Summary of Fit

RSquare	0.540451
RSquare Adj	0.531441
Root Mean Square Error	15.04233
Mean of Response	19.45472
Observations (or Sum Wgts)	53

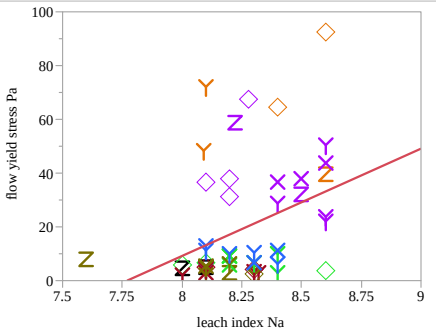
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	13571.421	13571.4	59.9785
Error	51	11539.850	226.3	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-2.28821	3.485879	-0.66	0.5145
flow plastic viscosity cP	0.106514	0.013753	7.74	<.0001*

Bivariate Fit of flow yield stress Pa By leach index Na



Linear Fit

Linear Fit

flow yield stress Pa = -310.2947 + 39.936743*leach index Na

Summary of Fit

RSquare	0.135437
RSquare Adj	0.118484
Root Mean Square Error	20.6323
Mean of Response	19.45472
Observations (or Sum Wgts)	53

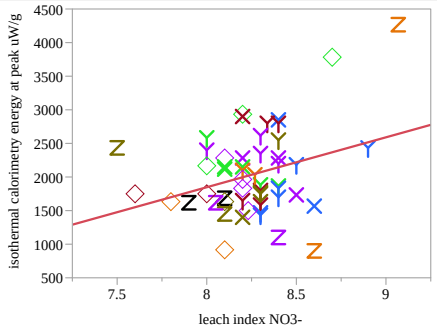
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3400.985	3400.99	7.9893
Error	51	21710.286	425.69	Prob > F
C. Total	52	25111.271		0.0067*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-310.2947	116.6964	-2.66	0.0104*
leach index Na	39.936743	14.12921	2.83	0.0067*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By leach index NO3-



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = -4090.969 + 742.51069*leach index NO3-

Summary of Fit

RSquare	0.098885
RSquare Adj	0.081555
Root Mean Square Error	596.5505
Mean of Response	2036.944
Observations (or Sum Wgts)	54

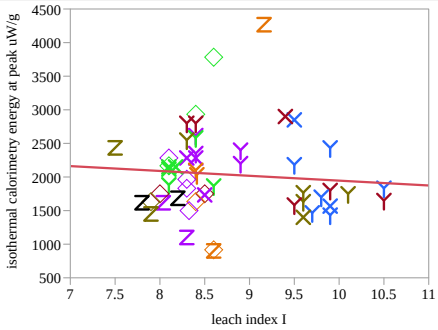
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2030699	2030699	5.7063
Error	52	18505372	355873	Prob > F
C. Total	53	20536071		0.0206*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-4090.969	2566.578	-1.59	0.1170
leach index NO3-	742.51069	310.833	2.39	0.0206*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By leach index I



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2669.8121 - 72.249749*leach index I

Summary of Fit

RSquare	0.007665
RSquare Adj	-0.01142
Root Mean Square Error	626.017
Mean of Response	2036.944
Observations (or Sum Wgts)	54

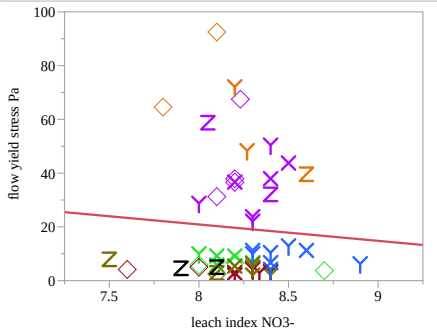
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	157411	157411	0.4017
Error	52	20378659	391897	Prob > F
C. Total	53	20536071		0.5290

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2669.8121	1002.203	2.66	0.0103*
leach index I	-72.24975	113.9999	-0.63	0.5290

Bivariate Fit of flow yield stress Pa By leach index NO3-



Linear Fit

Linear Fit

flow yield stress Pa = 69.713305 - 6.1011594*leach index NO3-

Summary of Fit

RSquare	0.004452
RSquare Adj	-0.01507
Root Mean Square Error	22.14014
Mean of Response	19.45472
Observations (or Sum Wgts)	53

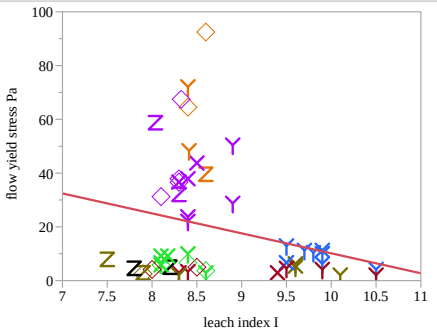
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	111.791	111.791	0.2281
Error	51	24999.480	490.186	Prob > F
C. Total	52	25111.271		0.6350

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	69.713305	105.2856	0.66	0.5109
leach index NO3-	-6.101159	12.77585	-0.48	0.6350

Bivariate Fit of flow yield stress Pa By leach index I



Linear Fit

Linear Fit

flow yield stress Pa = 84.345636 - 7.4145062*leach index I

Summary of Fit

RSquare	0.06566
RSquare Adj	0.047339
Root Mean Square Error	21.44874
Mean of Response	19.45472
Observations (or Sum Wgts)	53

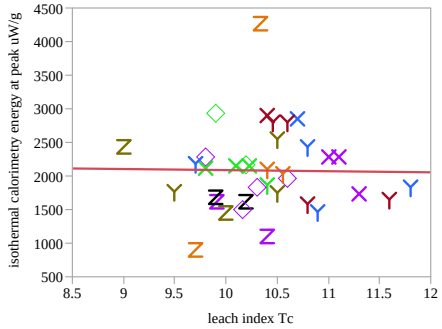
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1648.797	1648.80	3.5840
Error	51	23462.474	460.05	Prob > F
C. Total	52	25111.271		0.0640

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	84.345636	34.40333	2.45	0.0177*
leach index I	-7.414506	3.916521	-1.89	0.0640

Bivariate Fit of isothermal calorimetry energy at peak uW/g By leach index Tc



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2250.4633 - 16.133092*leach index Tc

Summary of Fit

RSquare	0.000222
RSquare Adj	-0.02918
Root Mean Square Error	628.8947
Mean of Response	2083.056
Observations (or Sum Wgts)	36

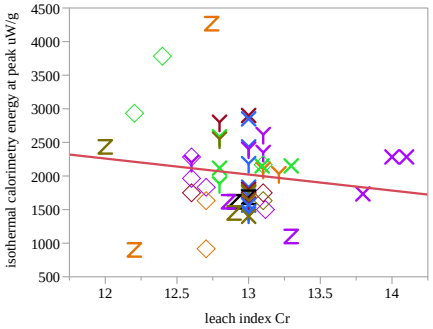
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2985	2985	0.0075
Error	34	13447291	395509	Prob > F
C. Total	35	13450276		0.9313

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2250.4633	1929.743	1.17	0.2516
leach index Tc	-16.13309	185.6949	-0.09	0.9313

Bivariate Fit of isothermal calorimetry energy at peak uW/g By leach index Cr



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 5121.8226 - 238.37815*leach index Cr

Summary of Fit

RSquare	0.019111
RSquare Adj	0.000247
Root Mean Square Error	622.3963
Mean of Response	2036.944
Observations (or Sum Wgts)	54

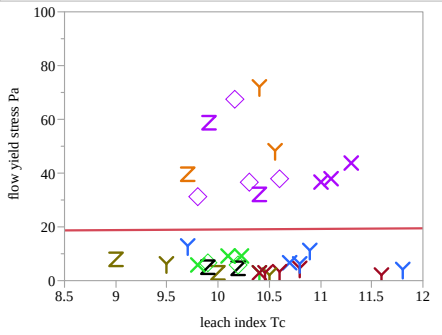
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	392458	392458	1.0131
Error	52	20143613	387377	Prob > F
C. Total	53	20536071		0.3188

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	5121.8226	3066.015	1.67	0.1008
leach index Cr	-238.3782	236.8301	-1.01	0.3188

Bivariate Fit of flow yield stress Pa By leach index Tc



Linear Fit

Linear Fit

flow yield stress Pa = 16.919335 + 0.2134334*leach index Tc

Summary of Fit

RSquare	3.581e-5
RSquare Adj	-0.03027
Root Mean Square Error	21.02554
Mean of Response	19.13429
Observations (or Sum Wgts)	35

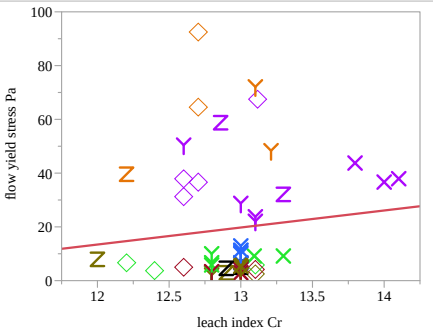
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.522	0.522	0.0012
Error	33	14588.416	442.073	Prob > F
C. Total	34	14588.939		0.9728

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	16.919335	64.52927	0.26	0.7948
leach index Tc	0.2134334	6.208624	0.03	0.9728

Bivariate Fit of flow yield stress Pa By leach index Cr



Linear Fit

Linear Fit

flow yield stress Pa = -62.65674 + 6.3431486*leach index Cr

Summary of Fit

RSquare	0.011
RSquare Adj	-0.00839
Root Mean Square Error	22.06721
Mean of Response	19.45472
Observations (or Sum Wgts)	53

Analysis of Variance

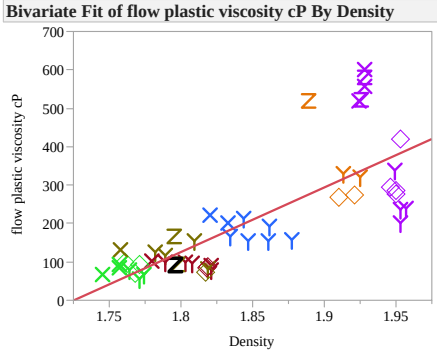
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	276.230	276.230	0.5673
Error	51	24835.041	486.962	Prob > F
C. Total	52	25111.271		0.4548

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-62.65674	109.0645	-0.57	0.5682
leach index Cr	6.3431486	8.422031	0.75	0.4548

Fit Group

Bivariate Fit of flow plastic viscosity cP By Density



Linear Fit

Linear Fit

flow plastic viscosity cP = -2903.034 + 1682.6895*Density

Summary of Fit

RSquare	0.592668
RSquare Adj	0.584681
Root Mean Square Error	97.74509
Mean of Response	204.1321
Observations (or Sum Wgts)	53

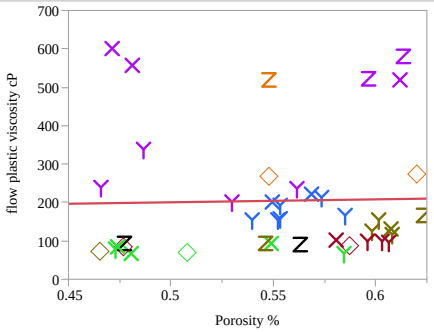
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	708962.8	708963	74.2051
Error	51	487259.3	9554	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-2903.034	360.951	-8.04	<.0001*
Density	1682.6895	195.3382	8.61	<.0001*

Bivariate Fit of flow plastic viscosity cP By Porosity %



Linear Fit

Linear Fit

flow plastic viscosity cP = 163.09249 + 75.205192*Porosity %

Summary of Fit

RSquare	0.000587
RSquare Adj	-0.02504
Root Mean Square Error	160.8522
Mean of Response	204.5854
Observations (or Sum Wgts)	41

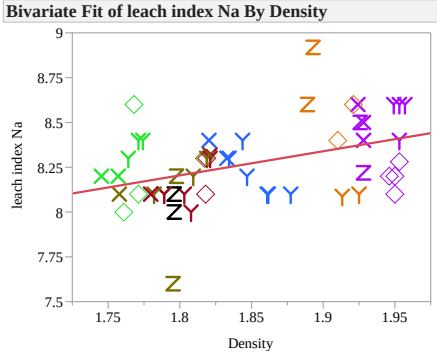
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	592.4	592.4	0.0229
Error	39	1009063.5	25873.4	Prob > F
C. Total	40	1009656.0		0.8805

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	163.09249	275.3579	0.59	0.5571
Porosity %	75.205192	497.0006	0.15	0.8805

Bivariate Fit of leach index Na By Density



Linear Fit

Linear Fit

leach index Na = 5.779933 + 1.3473699*Density

Summary of Fit

RSquare	0.17878
RSquare Adj	0.162988
Root Mean Square Error	0.201229
Mean of Response	8.269074
Observations (or Sum Wgts)	54

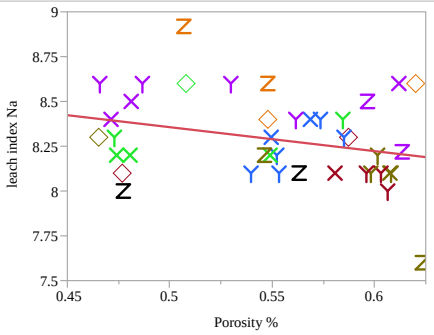
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4584027	0.458403	11.3205
Error	52	2.1056510	0.040493	Prob > F
C. Total	53	2.5640537		0.0014*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	5.779933	0.740312	7.81	<.0001*
Density	1.3473699	0.400456	3.36	0.0014*

Bivariate Fit of leach index Na By Porosity %



Linear Fit

Linear Fit

leach index Na = 9.0236813 - 1.3341015*Porosity %

Summary of Fit

RSquare	0.08167
RSquare Adj	0.058712
Root Mean Square Error	0.231074
Mean of Response	8.289048
Observations (or Sum Wgts)	42

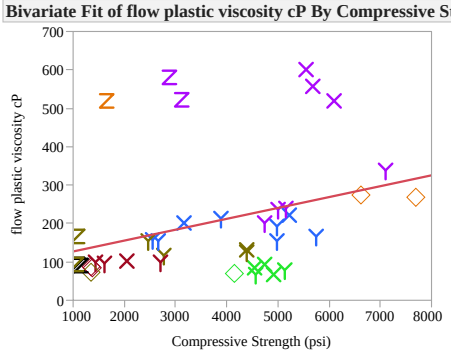
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1899458	0.189946	3.5573
Error	40	2.1358161	0.053395	Prob > F
C. Total	41	2.3257619		0.0666

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.0236813	0.391129	23.07	<.0001*
Porosity %	-1.334102	0.707336	-1.89	0.0666

Bivariate Fit of flow plastic viscosity cP By Compressive Strength (psi)



Linear Fit

Linear Fit

flow plastic viscosity cP = 99.013212 + 0.0283096*Compressive Strength (psi)

Summary of Fit

RSquare	0.109514
RSquare Adj	0.086681
Root Mean Square Error	151.8337
Mean of Response	204.5854
Observations (or Sum Wgts)	41

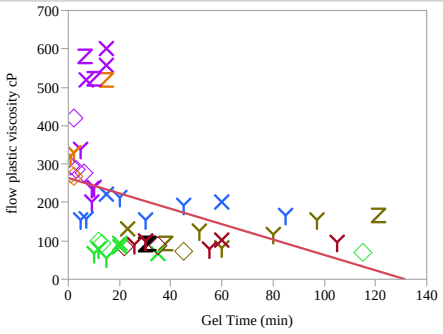
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	110571.1	110571	4.7963
Error	39	899084.9	23053	Prob > F
C. Total	40	1009656.0		0.0346*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	99.013212	53.72197	1.84	0.0729
Compressive Strength (psi)	0.0283096	0.012927	2.19	0.0346*

Bivariate Fit of flow plastic viscosity cP By Gel Time (min)



Linear Fit

Linear Fit

flow plastic viscosity cP = 263.81714 - 2.0046315*Gel Time (min)

Summary of Fit

RSquare	0.164904
RSquare Adj	0.148529
Root Mean Square Error	139.9552
Mean of Response	204.1321
Observations (or Sum Wgts)	53

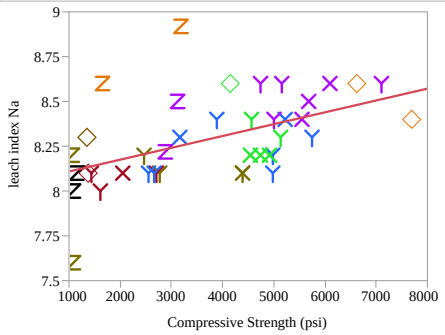
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	197261.6	197262	10.0708
Error	51	998960.5	19587	Prob > F
C. Total	52	1196222.1		0.0026*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	263.81714	26.89425	9.81	<.0001*
Gel Time (min)	-2.004631	0.631688	-3.17	0.0026*

Bivariate Fit of leach index Na By Compressive Strength (psi)



Linear Fit

Linear Fit

leach index Na = 8.04369 + 6.6026e-5*Compressive Strength (psi)

Summary of Fit

RSquare	0.259157
RSquare Adj	0.240635
Root Mean Square Error	0.207547
Mean of Response	8.289048
Observations (or Sum Wgts)	42

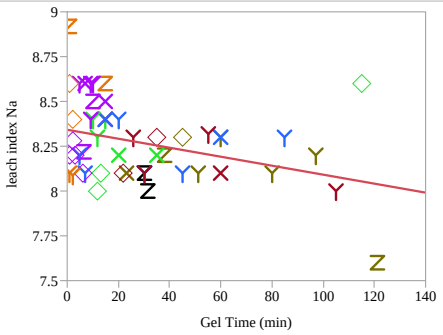
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.6027365	0.602736	13.9925
Error	40	1.7230255	0.043076	Prob > F
C. Total	41	2.3257619		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.04369	0.072993	110.20	<.0001*
Compressive Strength (psi)	6.6026e-5	1.765e-5	3.74	0.0006*

Bivariate Fit of leach index Na By Gel Time (min)



Linear Fit

Linear Fit

leach index Na = 8.342309 - 0.0025045*Gel Time (min)

Summary of Fit

RSquare	0.122078
RSquare Adj	0.105194
Root Mean Square Error	0.208061
Mean of Response	8.269074
Observations (or Sum Wgts)	54

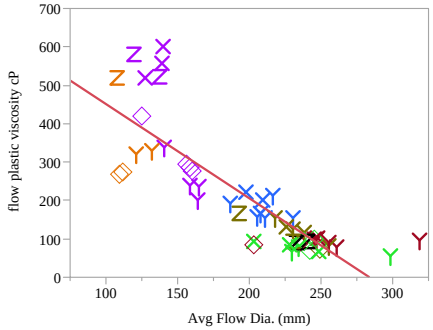
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3130135	0.313014	7.2307
Error	52	2.2510402	0.043289	Prob > F
C. Total	53	2.5640537		0.0096*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.342309	0.039286	212.35	<.0001*
Gel Time (min)	-0.002505	0.000931	-2.69	0.0096*

Bivariate Fit of flow plastic viscosity cP By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

flow plastic viscosity cP = 696.75969 - 2.4558632*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.705069
RSquare Adj	0.699286
Root Mean Square Error	83.17279
Mean of Response	204.1321
Observations (or Sum Wgts)	53

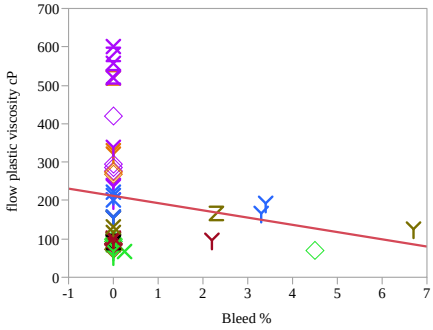
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	843418.7	843419	121.9216
Error	51	352803.4	6918	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	696.75969	46.0543	15.13	<.0001*
Avg Flow Dia. (mm)	-2.455863	0.222415	-11.04	<.0001*

Bivariate Fit of flow plastic viscosity cP By Bleed %



Linear Fit

Linear Fit

flow plastic viscosity cP = 212.20381 - 18.887492*Bleed %

Summary of Fit

RSquare	0.026274
RSquare Adj	0.007181
Root Mean Square Error	151.126
Mean of Response	204.1321
Observations (or Sum Wgts)	53

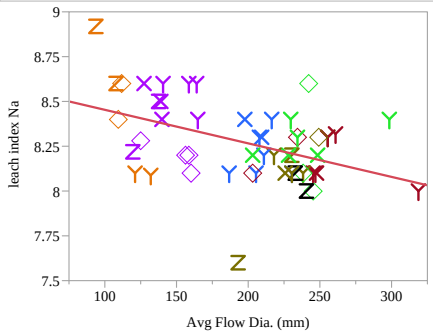
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	31429.6	31429.6	1.3761
Error	51	1164792.5	22839.1	Prob > F
C. Total	52	1196222.1		0.2462

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	212.20381	21.8694	9.70	<.0001*
Bleed %	-18.88749	16.10068	-1.17	0.2462

Bivariate Fit of leach index Na By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

leach index Na = 8.6410967 - 0.0018731*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.206762
RSquare Adj	0.191507
Root Mean Square Error	0.197772
Mean of Response	8.269074
Observations (or Sum Wgts)	54

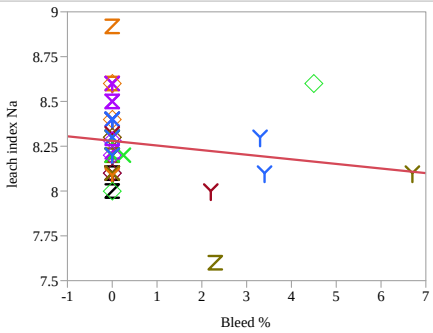
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.5301478	0.530148	13.5541
Error	52	2.0339059	0.039114	Prob > F
C. Total	53	2.5640537		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.6410967	0.104572	82.63	<.0001*
Avg Flow Dia. (mm)	-0.001873	0.000509	-3.68	0.0006*

Bivariate Fit of leach index Na By Bleed %



Linear Fit

Linear Fit

leach index Na = 8.2798333 - 0.025651*Bleed %

Summary of Fit

RSquare	0.022655
RSquare Adj	0.003859
Root Mean Square Error	0.219526
Mean of Response	8.269074
Observations (or Sum Wgts)	54

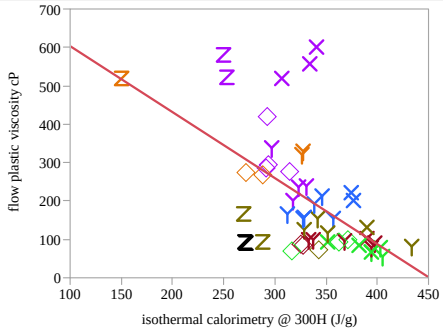
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0580875	0.058088	1.2053
Error	52	2.5059662	0.048192	Prob > F
C. Total	53	2.5640537		0.2773

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2798333	0.03144	263.35	<.0001*
Bleed %	-0.025651	0.023364	-1.10	0.2773

Bivariate Fit of flow plastic viscosity cP By isothermal calorimetry @ 300H (J/g)



Linear Fit

flow plastic viscosity cP = 775.68774 - 1.7199013*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.316177
RSquare Adj	0.302769
Root Mean Square Error	126.6463
Mean of Response	204.1321
Observations (or Sum Wgts)	53

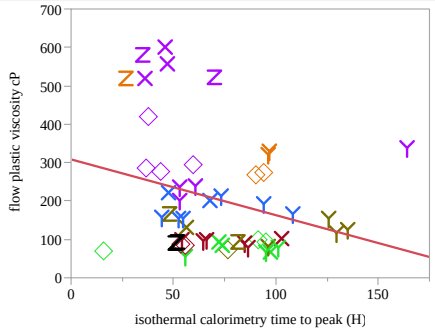
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	378218.4	378218	23.5807
Error	51	818003.7	16039	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	775.68774	118.9795	6.52	<.0001*
isothermal calorimetry @ 300H (J/g)	-1.719901	0.354181	-4.86	<.0001*

Bivariate Fit of flow plastic viscosity cP By isothermal calorimetry time to peak (H)



Linear Fit

flow plastic viscosity cP = 308.38877 - 1.4516578*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.080642
RSquare Adj	0.062616
Root Mean Square Error	146.8463
Mean of Response	204.1321
Observations (or Sum Wgts)	53

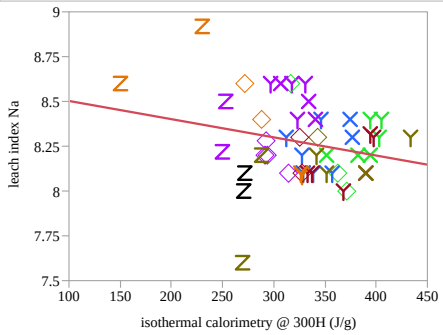
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	96466.0	96466.0	4.4735
Error	51	1099756.0	21563.8	Prob > F
C. Total	52	1196222.1		0.0393*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	308.38877	53.25978	5.79	<.0001*
isothermal calorimetry time to peak (H)	-1.451658	0.686341	-2.12	0.0393*

Bivariate Fit of leach index Na By isothermal calorimetry @ 300H (J/g)



Linear Fit

leach index Na = 8.6049287 - 0.0010164*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.055659
RSquare Adj	0.037499
Root Mean Square Error	0.215787
Mean of Response	8.269074
Observations (or Sum Wgts)	54

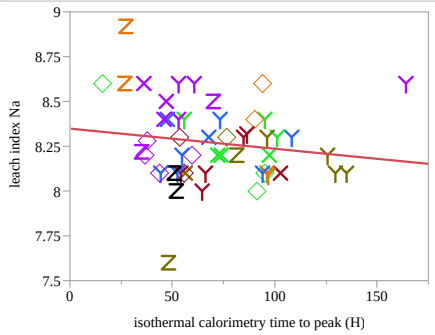
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1427134	0.142713	3.0649
Error	52	2.4213403	0.046564	Prob > F
C. Total	53	2.5640537		0.0859

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.6049287	0.194077	44.34	<.0001*
isothermal calorimetry @ 300H (J/g)	-0.001016	0.000581	-1.75	0.0859

Bivariate Fit of leach index Na By isothermal calorimetry time to peak (H)



Linear Fit

leach index Na = 8.3486378 - 0.0011207*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.023376
RSquare Adj	0.004595
Root Mean Square Error	0.219445
Mean of Response	8.269074
Observations (or Sum Wgts)	54

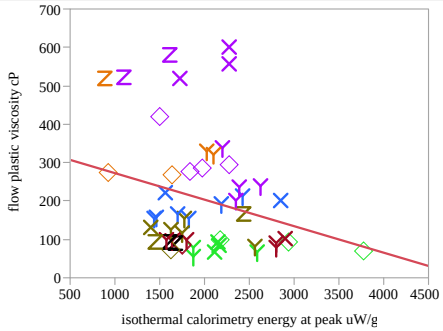
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0599375	0.059937	1.2447
Error	52	2.5041162	0.048156	Prob > F
C. Total	53	2.5640537		0.2697

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3486378	0.077317	107.98	<.0001*
isothermal calorimetry time to peak (H)	-0.001121	0.001005	-1.12	0.2697

Bivariate Fit of flow plastic viscosity cP By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

flow plastic viscosity cP = 342.02113 - 0.0691167*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.061921
RSquare Adj	0.043527
Root Mean Square Error	148.334
Mean of Response	204.1321
Observations (or Sum Wgts)	53

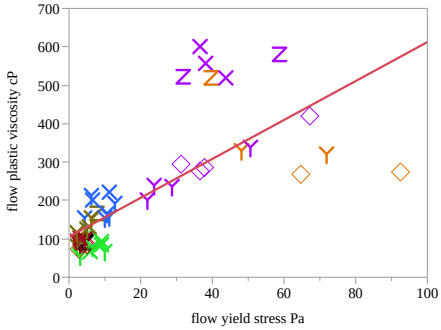
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	74071.0	74071.0	3.3664
Error	51	1122151.1	22003.0	Prob > F
C. Total	52	1196222.1		0.0724

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	342.02113	77.86608	4.39	<.0001*
isothermal calorimetry energy at peak uW/g	-0.069117	0.03767	-1.83	0.0724

Bivariate Fit of flow plastic viscosity cP By flow yield stress Pa



Linear Fit

Linear Fit

flow plastic viscosity cP = 105.41898 + 5.0739931*flow yield stress Pa

Summary of Fit

RSquare	0.540451
RSquare Adj	0.531441
Root Mean Square Error	103.8213
Mean of Response	204.1321
Observations (or Sum Wgts)	53

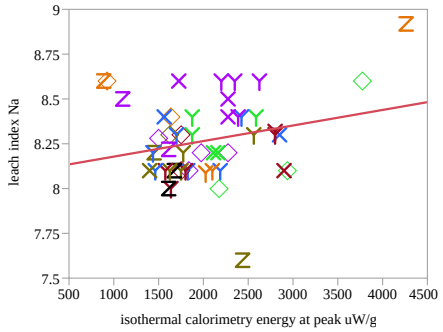
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	646499.9	646500	59.9785
Error	51	549722.2	10779	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	105.41898	19.12689	5.51	<.0001*
flow yield stress Pa	5.0739931	0.655167	7.74	<.0001*

Bivariate Fit of leach index Na By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

leach index Na = 8.0921913 + 8.6837e-5*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.060395
RSquare Adj	0.042326
Root Mean Square Error	0.215246
Mean of Response	8.269074
Observations (or Sum Wgts)	54

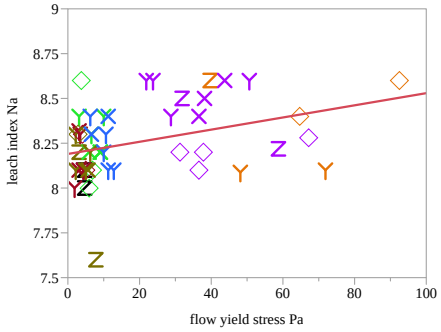
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1548567	0.154857	3.3424
Error	52	2.4091970	0.046331	Prob > F
C. Total	53	2.5640537		0.0733

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.0921913	0.101088	80.05	<.0001*
isothermal calorimetry energy at peak uW/g	8.6837e-5	4.75e-5	1.83	0.0733

Bivariate Fit of leach index Na By flow yield stress Pa



Linear Fit

Linear Fit

leach index Na = 8.1908161 + 0.0033913*flow yield stress Pa

Summary of Fit

RSquare	0.135437
RSquare Adj	0.118484
Root Mean Square Error	0.190127
Mean of Response	8.256792
Observations (or Sum Wgts)	53

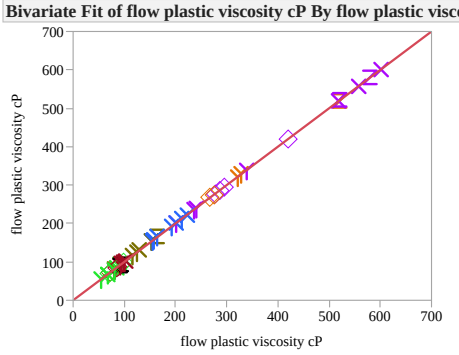
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2887989	0.288799	7.9893
Error	51	1.8435559	0.036148	Prob > F
C. Total	52	2.1323547		0.0067*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.1908161	0.035027	233.84	<.0001*
flow yield stress Pa	0.0033913	0.0012	2.83	0.0067*

Bivariate Fit of flow plastic viscosity cP By flow plastic viscosity cP



Linear Fit

Linear Fit

flow plastic viscosity cP = 2.842e-14 + 1*flow plastic viscosity cP

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	2.137e-6
Mean of Response	204.1321
Observations (or Sum Wgts)	53

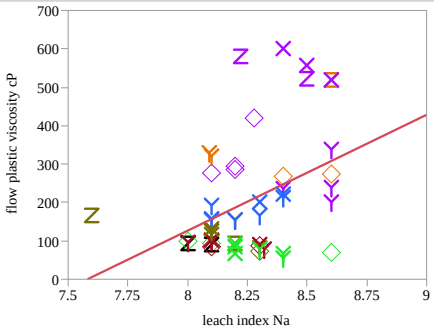
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1196222.1	1196222	2.62e+17
Error	51	2.3283e-10	4.57e-12	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.842e-14	4.951e-7	0.00	1.0000
flow plastic viscosity cP	1	1.954e-9	5.1e+8	<.0001*

Bivariate Fit of flow plastic viscosity cP By leach index Na



Linear Fit

Linear Fit

flow plastic viscosity cP = -2287.411 + 301.75676*leach index Na

Summary of Fit

RSquare	0.162316
RSquare Adj	0.145891
Root Mean Square Error	140.1719
Mean of Response	204.1321
Observations (or Sum Wgts)	53

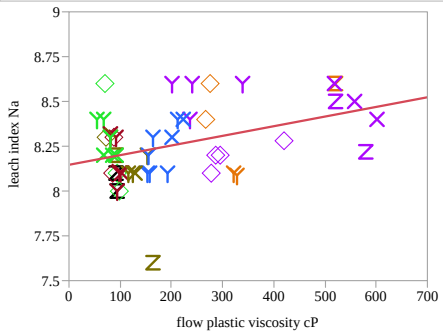
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	194166.1	194166	9.8822
Error	51	1002055.9	19648	Prob > F
C. Total	52	1196222.1		0.0028*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-2287.411	792.8128	-2.89	0.0057*
leach index Na	301.75676	95.99114	3.14	0.0028*

Bivariate Fit of leach index Na By flow plastic viscosity cP



Linear Fit

Linear Fit

leach index Na = 8.146989 + 0.0005379*flow plastic viscosity cP

Summary of Fit

RSquare	0.162316
RSquare Adj	0.145891
Root Mean Square Error	0.187148
Mean of Response	8.256792
Observations (or Sum Wgts)	53

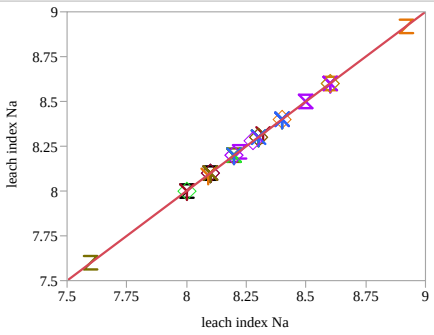
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3461155	0.346116	9.8822
Error	51	1.7862392	0.035024	Prob > F
C. Total	52	2.1323547		0.0028*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.146989	0.043369	187.85	<.0001*
flow plastic viscosity cP	0.0005379	0.000171	3.14	0.0028*

Bivariate Fit of leach index Na By leach index Na



Linear Fit

Linear Fit

leach index Na = 0 + 1*leach index Na

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	8.269074
Observations (or Sum Wgts)	54

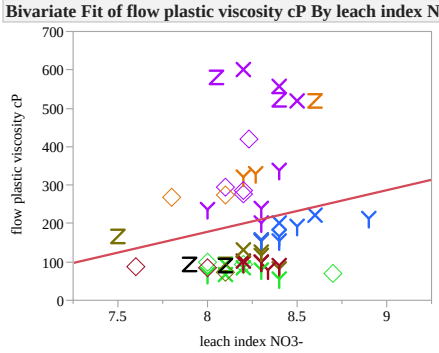
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.5640537	2.56405	.
Error	52	0.0000000	0.00000	Prob > F
C. Total	53	2.5640537		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
leach index Na	1	0	.	.

Bivariate Fit of flow plastic viscosity cP By leach index NO3-



Linear Fit

Linear Fit

flow plastic viscosity cP = -687.6998 + 108.26426*leach index NO3-

Summary of Fit

RSquare	0.029427
RSquare Adj	0.010396
Root Mean Square Error	150.8812
Mean of Response	204.1321
Observations (or Sum Wgts)	53

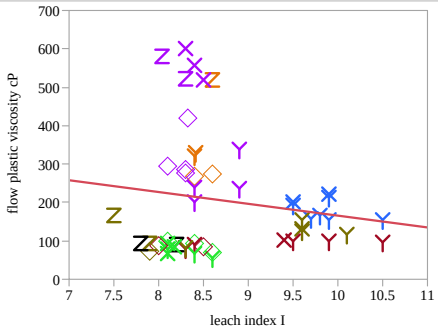
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	35200.7	35200.7	1.5463
Error	51	1161021.3	22765.1	Prob > F
C. Total	52	1196222.1		0.2194

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-687.6998	717.5025	-0.96	0.3424
leach index NO3-	108.26426	87.06513	1.24	0.2194

Bivariate Fit of flow plastic viscosity cP By leach index I



Linear Fit

Linear Fit

flow plastic viscosity cP = 473.23071 - 30.7475*leach index I

Summary of Fit

RSquare	0.023703
RSquare Adj	0.00456
Root Mean Square Error	151.3254
Mean of Response	204.1321
Observations (or Sum Wgts)	53

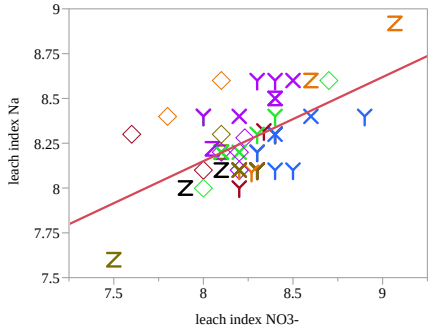
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	28354.5	28354.5	1.2382
Error	51	1167867.6	22899.4	Prob > F
C. Total	52	1196222.1		0.2710

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	473.23071	242.7227	1.95	0.0567
leach index I	-30.7475	27.63188	-1.11	0.2710

Bivariate Fit of leach index Na By leach index NO3-



Linear Fit

Linear Fit

leach index Na = 4.3987296 + 0.4689642*leach index NO3-

Summary of Fit

RSquare	0.315931
RSquare Adj	0.302776
Root Mean Square Error	0.183659
Mean of Response	8.269074
Observations (or Sum Wgts)	54

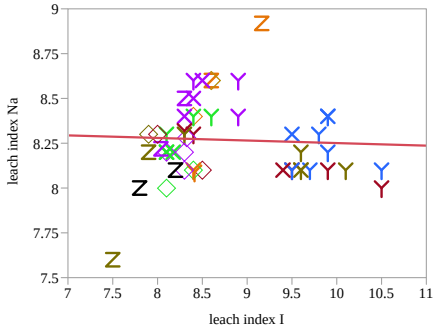
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.8100645	0.810065	24.0157
Error	52	1.7539892	0.033731	Prob > F
C. Total	53	2.5640537		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4.3987296	0.790167	5.57	<.0001*
leach index NO3-	0.4689642	0.095696	4.90	<.0001*

Bivariate Fit of leach index Na By leach index I



Linear Fit

Linear Fit

leach index Na = 8.3940458 - 0.0142671*leach index I

Summary of Fit

RSquare	0.002394
RSquare Adj	-0.01679
Root Mean Square Error	0.22179
Mean of Response	8.269074
Observations (or Sum Wgts)	54

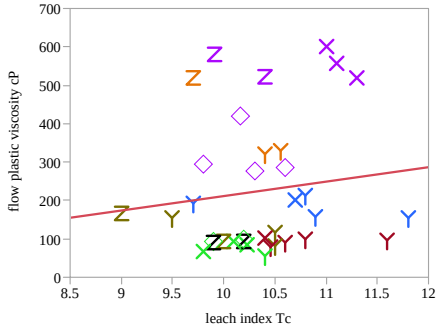
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0061381	0.006138	0.1248
Error	52	2.5579156	0.049191	Prob > F
C. Total	53	2.5640537		0.7253

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3940458	0.355068	23.64	<.0001*
leach index I	-0.014267	0.040389	-0.35	0.7253

Bivariate Fit of flow plastic viscosity cP By leach index Tc



Linear Fit

Linear Fit

flow plastic viscosity cP = -164.9709 + 37.643805*leach index Tc

Summary of Fit

RSquare	0.015823
RSquare Adj	-0.014
Root Mean Square Error	175.0155
Mean of Response	225.6857
Observations (or Sum Wgts)	35

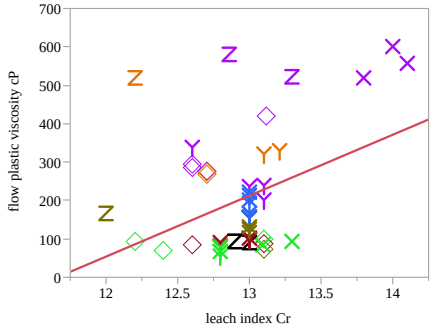
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	16251.4	16251.4	0.5306
Error	33	1010804.2	30630.4	Prob > F
C. Total	34	1027055.5		0.4715

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-164.9709	537.1384	-0.31	0.7607
leach index Tc	37.643805	51.68027	0.73	0.4715

Bivariate Fit of flow plastic viscosity cP By leach index Cr



Linear Fit

Linear Fit

flow plastic viscosity cP = -1849.637 + 158.65465*leach index Cr

Summary of Fit

RSquare	0.144462
RSquare Adj	0.127687
Root Mean Square Error	141.6578
Mean of Response	204.1321
Observations (or Sum Wgts)	53

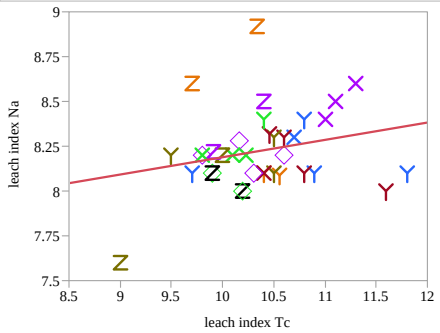
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	172809.1	172809	8.6116
Error	51	1023412.9	20067	Prob > F
C. Total	52	1196222.1		0.0050*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-1849.637	700.1265	-2.64	0.0109*
leach index Cr	158.65465	54.06421	2.93	0.0050*

Bivariate Fit of leach index Na By leach index Tc



Linear Fit

Linear Fit

leach index Na = 7.2224365 + 0.0966974*leach index Tc

Summary of Fit

RSquare	0.061016
RSquare Adj	0.033399
Root Mean Square Error	0.220322
Mean of Response	8.225833
Observations (or Sum Wgts)	36

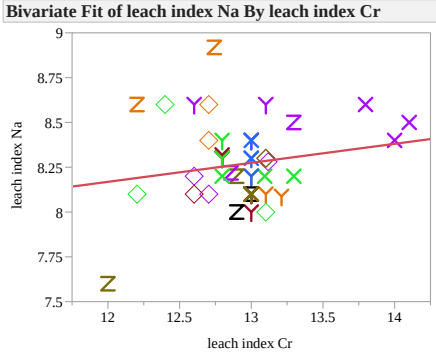
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1072471	0.107247	2.2094
Error	34	1.6504279	0.048542	Prob > F
C. Total	35	1.7576750		0.1464

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.2224365	0.676052	10.68	<.0001*
leach index Tc	0.0966974	0.065055	1.49	0.1464

Bivariate Fit of leach index Na By leach index Cr



Linear Fit

Linear Fit

leach index Na = 6.8971982 + 0.1060091*leach index Cr

Summary of Fit

RSquare	0.03027
RSquare Adj	0.011622
Root Mean Square Error	0.218669
Mean of Response	8.269074
Observations (or Sum Wgts)	54

Analysis of Variance

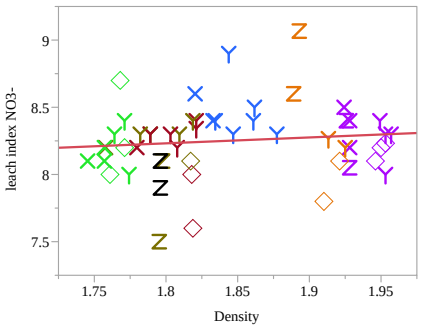
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0776152	0.077615	1.6232
Error	52	2.4864385	0.047816	Prob > F
C. Total	53	2.5640537		0.2083

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6.8971982	1.077195	6.40	<.0001*
leach index Cr	0.1060091	0.083206	1.27	0.2083

Fit Group

Bivariate Fit of leach index NO3- By Density



Linear Fit

Linear Fit

leach index NO3- = 7.4389205 + 0.4406405*Density

Summary of Fit

RSquare	0.013311
RSquare Adj	-0.00566
Root Mean Square Error	0.264368
Mean of Response	8.252963
Observations (or Sum Wgts)	54

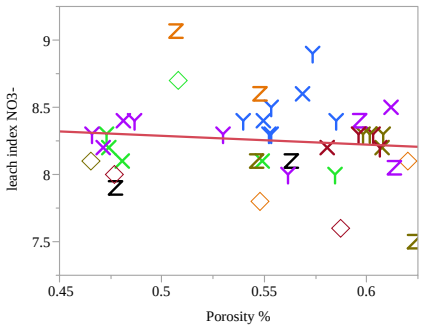
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0490278	0.049028	0.7015
Error	52	3.6342981	0.069890	Prob > F
C. Total	53	3.6833259		0.4061

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.4389205	0.972595	7.65	<.0001*
Density	0.4406405	0.526104	0.84	0.4061

Bivariate Fit of leach index NO3- By Porosity %



Linear Fit

Linear Fit

leach index NO3- = 8.6141614 - 0.6518081*Porosity %

Summary of Fit

RSquare	0.012913
RSquare Adj	-0.01176
Root Mean Square Error	0.29436
Mean of Response	8.255238
Observations (or Sum Wgts)	42

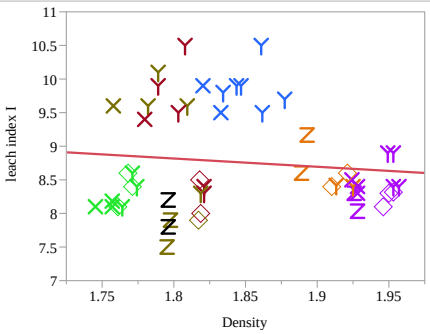
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0453410	0.045341	0.5233
Error	40	3.4659066	0.086648	Prob > F
C. Total	41	3.5112476		0.4737

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.6141614	0.498249	17.29	<.0001*
Porosity %	-0.651808	0.901057	-0.72	0.4737

Bivariate Fit of leach index I By Density



Linear Fit

Linear Fit

leach index I = 11.030615 - 1.2293827*Density

Summary of Fit

RSquare	0.012656
RSquare Adj	-0.00633
Root Mean Square Error	0.756684
Mean of Response	8.759444
Observations (or Sum Wgts)	54

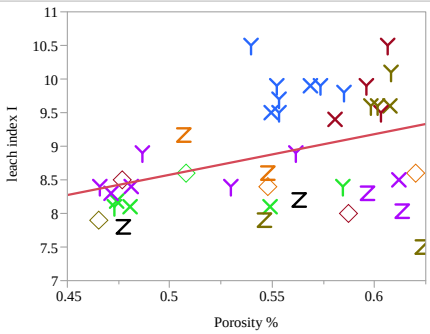
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.381635	0.381635	0.6665
Error	52	29.773649	0.572570	Prob > F
C. Total	53	30.155283		0.4180

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	11.030615	2.783797	3.96	0.0002*
Density	-1.229383	1.505836	-0.82	0.4180

Bivariate Fit of leach index I By Porosity %



Linear Fit

Linear Fit

leach index I = 5.560898 + 6.0327084*Porosity %

Summary of Fit

RSquare	0.143462
RSquare Adj	0.122048
Root Mean Square Error	0.761401
Mean of Response	8.882857
Observations (or Sum Wgts)	42

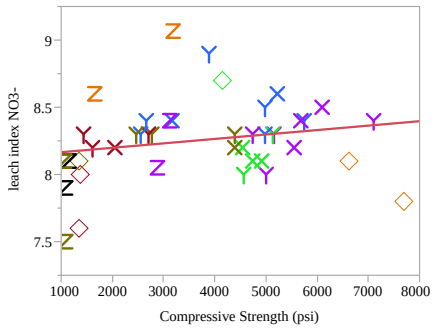
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.883976	3.88398	6.6996
Error	40	23.189281	0.57973	Prob > F
C. Total	41	27.073257		0.0134*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	5.560898	1.288789	4.31	0.0001*
Porosity %	6.0327084	2.330707	2.59	0.0134*

Bivariate Fit of leach index NO3- By Compressive Strength (psi)



Linear Fit

Linear Fit

leach index NO3- = 8.1324376 + 3.3046e-5*Compressive Strength (psi)

Summary of Fit

RSquare	0.043
RSquare Adj	0.019075
Root Mean Square Error	0.289839
Mean of Response	8.255238
Observations (or Sum Wgts)	42

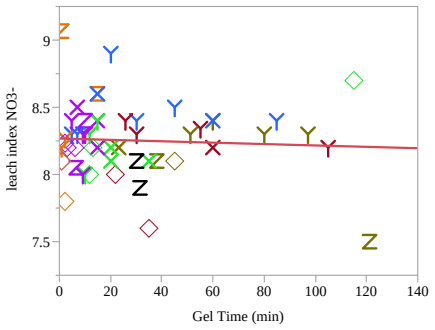
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1509832	0.150983	1.7973
Error	40	3.3602645	0.084007	Prob > F
C. Total	41	3.5112476		0.1876

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.1324376	0.101934	79.78	<.0001*
Compressive Strength (psi)	3.3046e-5	2.465e-5	1.34	0.1876

Bivariate Fit of leach index NO3- By Gel Time (min)



Linear Fit

Linear Fit

leach index NO3- = 8.2681888 - 0.0005207*Gel Time (min)

Summary of Fit

RSquare	0.003673
RSquare Adj	-0.01549
Root Mean Square Error	0.265656
Mean of Response	8.252963
Observations (or Sum Wgts)	54

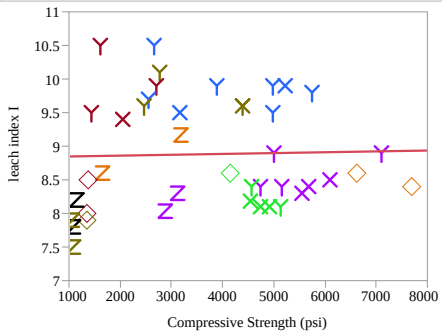
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0135298	0.013530	0.1917
Error	52	3.6697961	0.070573	Prob > F
C. Total	53	3.6833259		0.6633

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2681888	0.050161	164.83	<.0001*
Gel Time (min)	-0.000521	0.001189	-0.44	0.6633

Bivariate Fit of leach index I By Compressive Strength (psi)



Linear Fit

Linear Fit

leach index I = 8.836305 + 1.2527e-5*Compressive Strength (psi)

Summary of Fit

RSquare	0.000801
RSquare Adj	-0.02418
Root Mean Square Error	0.822368
Mean of Response	8.882857
Observations (or Sum Wgts)	42

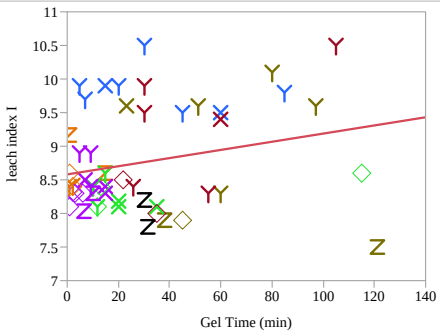
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.021697	0.021697	0.0321
Error	40	27.051560	0.676289	Prob > F
C. Total	41	27.073257		0.8587

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.836305	0.289221	30.55	<.0001*
Compressive Strength (psi)	1.2527e-5	0.00007	0.18	0.8587

Bivariate Fit of leach index I By Gel Time (min)



Linear Fit

Linear Fit

leach index I = 8.5815887 + 0.0060825*Gel Time (min)

Summary of Fit

RSquare	0.061221
RSquare Adj	0.043167
Root Mean Square Error	0.737839
Mean of Response	8.759444
Observations (or Sum Wgts)	54

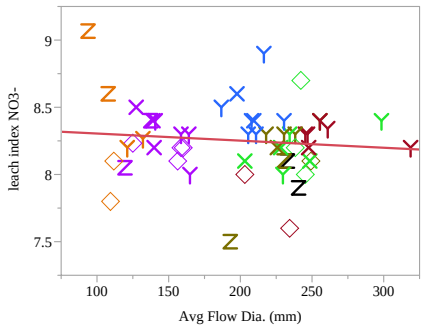
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.846133	1.84613	3.3911
Error	52	28.309151	0.54441	Prob > F
C. Total	53	30.155283		0.0713

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.5815887	0.139319	61.60	<.0001*
Gel Time (min)	0.0060825	0.003303	1.84	0.0713

Bivariate Fit of leach index NO3- By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

leach index NO3- = 8.3574488 - 0.0005261*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.011354
RSquare Adj	-0.00766
Root Mean Square Error	0.26463
Mean of Response	8.252963
Observations (or Sum Wgts)	54

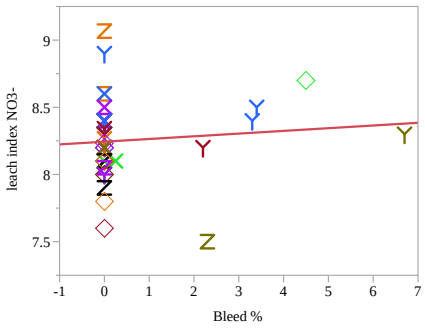
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0418189	0.041819	0.5972
Error	52	3.6415070	0.070029	Prob > F
C. Total	53	3.6833259		0.4432

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3574488	0.139924	59.73	<.0001*
Avg Flow Dia. (mm)	-0.000526	0.000681	-0.77	0.4432

Bivariate Fit of leach index NO3- By Bleed %



Linear Fit

Linear Fit

leach index NO3- = 8.2445753 + 0.0199971*Bleed %

Summary of Fit

RSquare	0.009584
RSquare Adj	-0.00946
Root Mean Square Error	0.264867
Mean of Response	8.252963
Observations (or Sum Wgts)	54

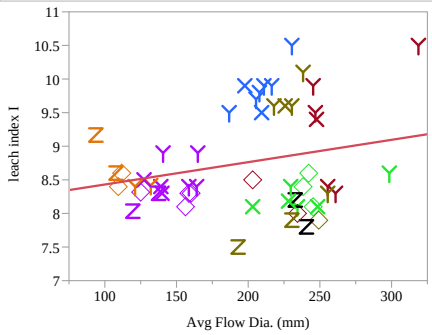
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0353027	0.035303	0.5032
Error	52	3.6480232	0.070154	Prob > F
C. Total	53	3.6833259		0.4813

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2445753	0.037934	217.34	<.0001*
Bleed %	0.0199971	0.02819	0.71	0.4813

Bivariate Fit of leach index I By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

leach index I = 8.1004659 + 0.003318*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.055162
RSquare Adj	0.036992
Root Mean Square Error	0.740217
Mean of Response	8.759444
Observations (or Sum Wgts)	54

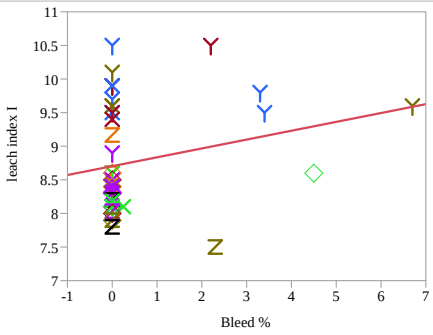
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.663416	1.66342	3.0359
Error	52	28.491867	0.54792	Prob > F
C. Total	53	30.155283		0.0874

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.1004659	0.391391	20.70	<.0001*
Avg Flow Dia. (mm)	0.003318	0.001904	1.74	0.0874

Bivariate Fit of leach index I By Bleed %



Linear Fit

Linear Fit

leach index I = 8.7041711 + 0.1317774*Bleed %

Summary of Fit

RSquare	0.050838
RSquare Adj	0.032585
Root Mean Square Error	0.741908
Mean of Response	8.759444
Observations (or Sum Wgts)	54

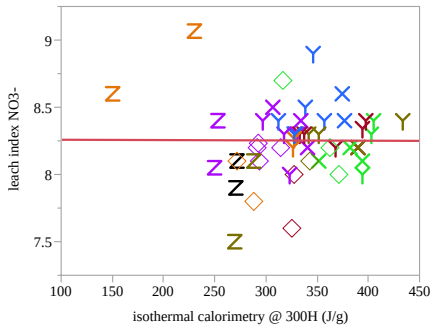
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.533043	1.53304	2.7852
Error	52	28.622240	0.55043	Prob > F
C. Total	53	30.155283		0.1012

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.7041711	0.106255	81.92	<.0001*
Bleed %	0.1317774	0.078961	1.67	0.1012

Bivariate Fit of leach index NO3- By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

leach index NO3- = 8.260708 - 2.344e-5*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	2.06e-5
RSquare Adj	-0.01921
Root Mean Square Error	0.266142
Mean of Response	8.252963
Observations (or Sum Wgts)	54

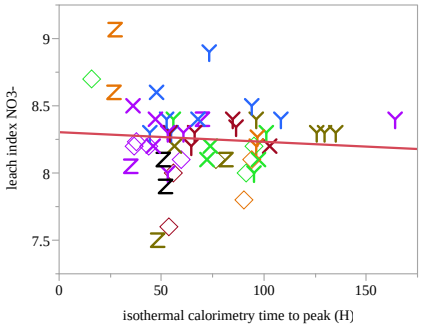
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0000759	0.000076	0.0011
Error	52	3.6832500	0.070832	Prob > F
C. Total	53	3.6833259		0.9740

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.260708	0.239366	34.51	<.0001*
isothermal calorimetry @ 300H (J/g)	-2.344e-5	0.000716	-0.03	0.9740

Bivariate Fit of leach index NO3- By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

leach index NO3- = 8.3037297 - 0.0007151*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.006625
RSquare Adj	-0.01248
Root Mean Square Error	0.265262
Mean of Response	8.252963
Observations (or Sum Wgts)	54

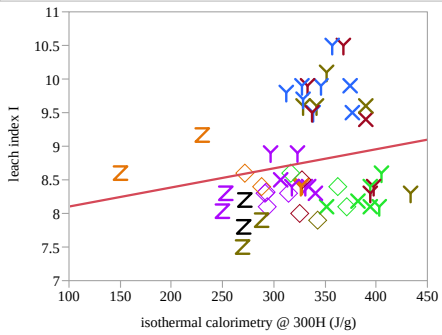
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0244021	0.024402	0.3468
Error	52	3.6589238	0.070364	Prob > F
C. Total	53	3.6833259		0.5585

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3037297	0.093459	88.85	<.0001*
isothermal calorimetry time to peak (H)	-0.000715	0.001214	-0.59	0.5585

Bivariate Fit of leach index I By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

leach index I = 7.8192944 + 0.0028453*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.037085
RSquare Adj	0.018567
Root Mean Square Error	0.747264
Mean of Response	8.759444
Observations (or Sum Wgts)	54

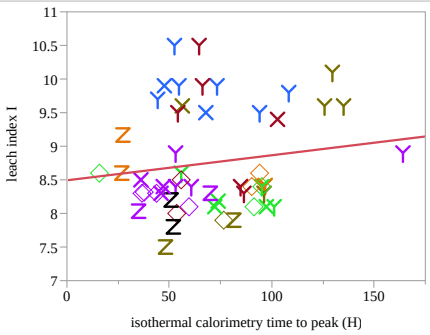
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.118295	1.11830	2.0027
Error	52	29.036988	0.55840	Prob > F
C. Total	53	30.155283		0.1630

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.8192944	0.672082	11.63	<.0001*
isothermal calorimetry @ 300H (J/g)	0.0028453	0.002011	1.42	0.1630

Bivariate Fit of leach index I By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

leach index I = 8.4950891 + 0.0037236*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.021942
RSquare Adj	0.003133
Root Mean Square Error	0.753117
Mean of Response	8.759444
Observations (or Sum Wgts)	54

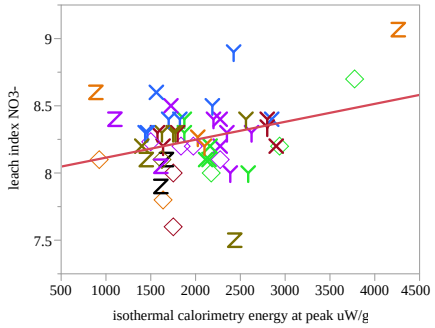
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.661675	0.661675	1.1666
Error	52	29.493608	0.567185	Prob > F
C. Total	53	30.155283		0.2851

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4950891	0.265344	32.02	<.0001*
isothermal calorimetry time to peak (H)	0.0037236	0.003447	1.08	0.2851

Bivariate Fit of leach index NO3- By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

leach index NO3- = 7.9816911 + 0.0001332*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.098885
RSquare Adj	0.081555
Root Mean Square Error	0.252644
Mean of Response	8.252963
Observations (or Sum Wgts)	54

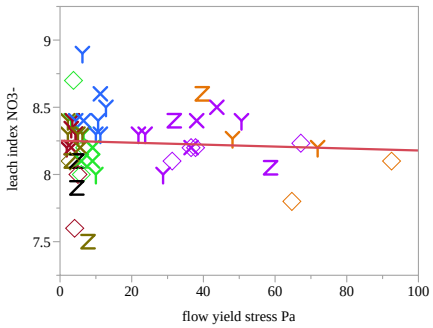
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3642238	0.364224	5.7063
Error	52	3.3191021	0.063829	Prob > F
C. Total	53	3.6833259		0.0206*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.9816911	0.118651	67.27	<.0001*
isothermal calorimetry energy at peak uW/g	0.0001332	5.575e-5	2.39	0.0206*

Bivariate Fit of leach index NO3- By flow yield stress Pa



Linear Fit

Linear Fit

leach index NO3- = 8.2517427 - 0.0007297*flow yield stress Pa

Summary of Fit

RSquare	0.004452
RSquare Adj	-0.01507
Root Mean Square Error	0.242123
Mean of Response	8.237547
Observations (or Sum Wgts)	53

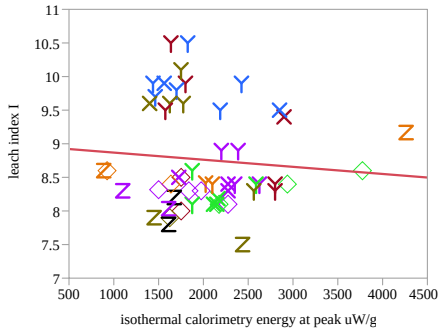
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0133696	0.013370	0.2281
Error	51	2.9898115	0.058624	Prob > F
C. Total	52	3.0031811		0.6350

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2517427	0.044606	184.99	<.0001*
flow yield stress Pa	-0.00073	0.001528	-0.48	0.6350

Bivariate Fit of leach index I By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

leach index I = 8.9755478 - 0.0001061*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.007665
RSquare Adj	-0.01142
Root Mean Square Error	0.758594
Mean of Response	8.759444
Observations (or Sum Wgts)	54

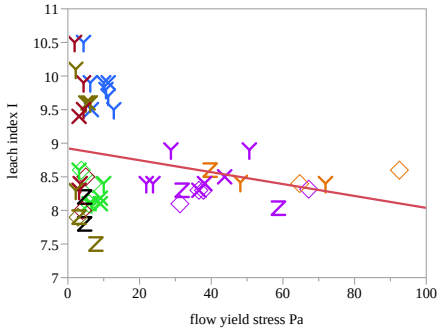
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.231144	0.231144	0.4017
Error	52	29.924140	0.575464	Prob > F
C. Total	53	30.155283		0.5290

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.9755478	0.356265	25.19	<.0001*
isothermal calorimetry energy at peak uW/g	-0.000106	0.000167	-0.63	0.5290

Bivariate Fit of leach index I By flow yield stress Pa



Linear Fit

Linear Fit

leach index I = 8.9241693 - 0.0088556*flow yield stress Pa

Summary of Fit

RSquare	0.06566
RSquare Adj	0.047339
Root Mean Square Error	0.741257
Mean of Response	8.751887
Observations (or Sum Wgts)	53

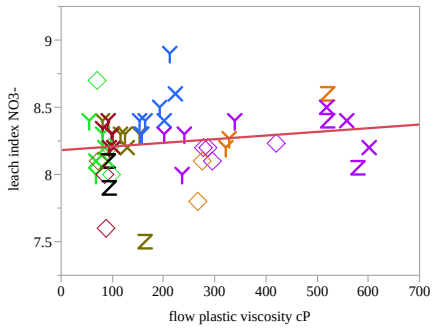
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.969251	1.96925	3.5840
Error	51	28.022560	0.54946	Prob > F
C. Total	52	29.991811		0.0640

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.9241693	0.136561	65.35	<.0001*
flow yield stress Pa	-0.008856	0.004678	-1.89	0.0640

Bivariate Fit of leach index NO3- By flow plastic viscosity cP



Linear Fit

Linear Fit

leach index NO3- = 8.1820634 + 0.0002718*flow plastic viscosity cP

Summary of Fit

RSquare	0.029427
RSquare Adj	0.010396
Root Mean Square Error	0.239067
Mean of Response	8.237547
Observations (or Sum Wgts)	53

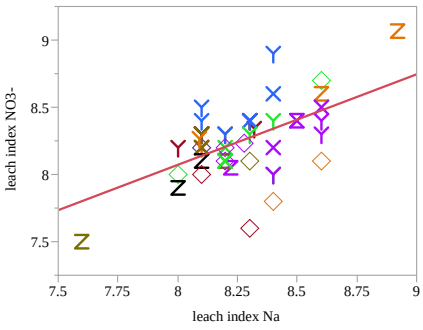
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0883734	0.088373	1.5463
Error	51	2.9148078	0.057153	Prob > F
C. Total	52	3.0031811		0.2194

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.1820634	0.055401	147.69	<.0001*
flow plastic viscosity cP	0.0002718	0.000219	1.24	0.2194

Bivariate Fit of leach index NO3- By leach index Na



Linear Fit

Linear Fit

leach index NO3- = 2.6822646 + 0.6736786*leach index Na

Summary of Fit

RSquare	0.315931
RSquare Adj	0.302776
Root Mean Square Error	0.220124
Mean of Response	8.252963
Observations (or Sum Wgts)	54

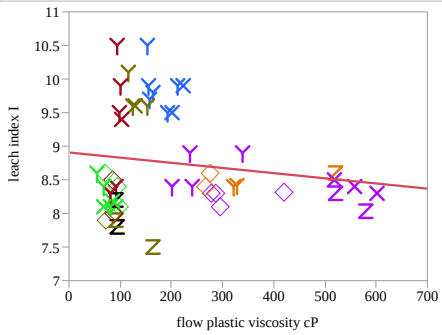
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.1636775	1.16368	24.0157
Error	52	2.5196484	0.04845	Prob > F
C. Total	53	3.6833259		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.6822646	1.137136	2.36	0.0221*
leach index Na	0.6736786	0.137469	4.90	<.0001*

Bivariate Fit of leach index I By flow plastic viscosity cP



Linear Fit

Linear Fit

leach index I = 8.9092532 - 0.0007709*flow plastic viscosity cP

Summary of Fit

RSquare	0.023703
RSquare Adj	0.00456
Root Mean Square Error	0.757717
Mean of Response	8.751887
Observations (or Sum Wgts)	53

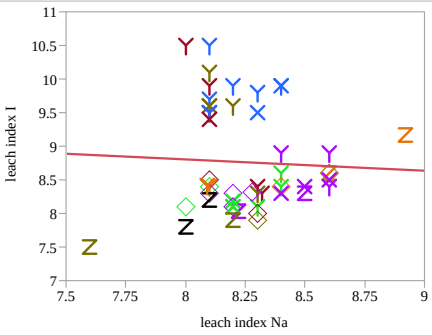
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.710908	0.710908	1.2382
Error	51	29.280904	0.574135	Prob > F
C. Total	52	29.991811		0.2710

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.9092532	0.175592	50.74	<.0001*
flow plastic viscosity cP	-0.000771	0.000693	-1.11	0.2710

Bivariate Fit of leach index I By leach index Na



Linear Fit

Linear Fit

leach index I = 10.146929 - 0.167792*leach index Na

Summary of Fit

RSquare	0.002394
RSquare Adj	-0.01679
Root Mean Square Error	0.760606
Mean of Response	8.759444
Observations (or Sum Wgts)	54

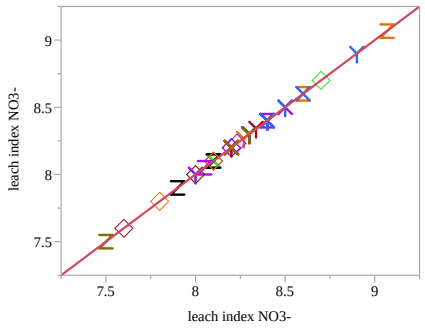
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.072189	0.072189	0.1248
Error	52	30.083095	0.578521	Prob > F
C. Total	53	30.155283		0.7253

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.146929	3.929196	2.58	0.0127*
leach index Na	-0.167792	0.475003	-0.35	0.7253

Bivariate Fit of leach index NO3- By leach index NO3-



Linear Fit

Linear Fit

leach index NO3- = 0 + 1*leach index NO3-

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	8.252963
Observations (or Sum Wgts)	54

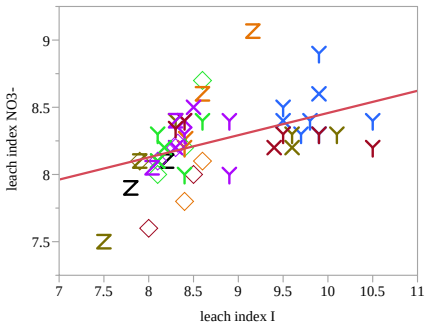
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.6833259	3.68333	.
Error	52	0.0000000	0.00000	Prob > F
C. Total	53	3.6833259		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
leach index NO3-	1	0	.	.

Bivariate Fit of leach index NO3- By leach index I



Linear Fit

Linear Fit

leach index NO3- = 6.8059504 + 0.1651946*leach index I

Summary of Fit

RSquare	0.223416
RSquare Adj	0.208482
Root Mean Square Error	0.234538
Mean of Response	8.252963
Observations (or Sum Wgts)	54

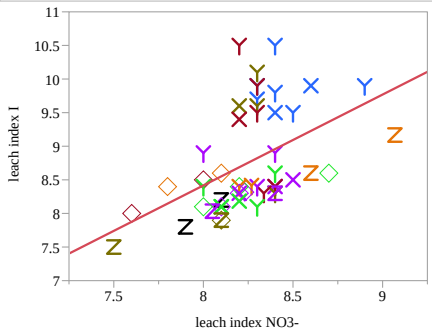
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.8229149	0.822915	14.9599
Error	52	2.8604110	0.055008	Prob > F
C. Total	53	3.6833259		0.0003*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6.8059504	0.375476	18.13	<.0001*
leach index I	0.1651946	0.04271	3.87	0.0003*

Bivariate Fit of leach index I By leach index NO3-



Linear Fit

Linear Fit

leach index I = -2.402219 + 1.3524431*leach index NO3-

Summary of Fit

RSquare	0.223416
RSquare Adj	0.208482
Root Mean Square Error	0.67108
Mean of Response	8.759444
Observations (or Sum Wgts)	54

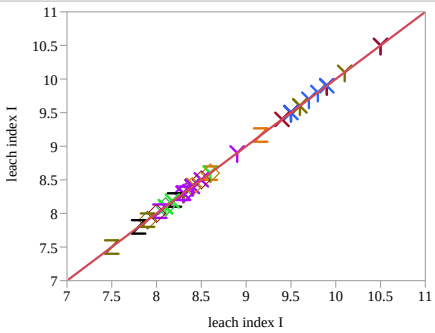
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6.737180	6.73718	14.9599
Error	52	23.418103	0.45035	Prob > F
C. Total	53	30.155283		0.0003*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-2.402219	2.88723	-0.83	0.4092
leach index NO3-	1.3524431	0.349667	3.87	0.0003*

Bivariate Fit of leach index I By leach index I



Linear Fit

Linear Fit

leach index I = 0 + 1*leach index I

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	8.759444
Observations (or Sum Wgts)	54

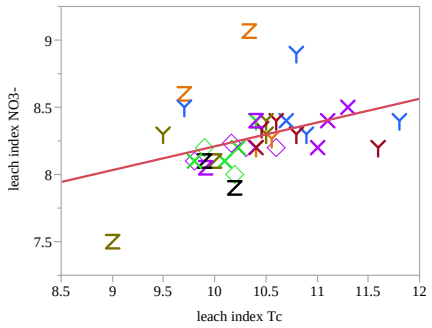
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	30.155283	30.1553	.
Error	52	0.000000	0.0000	Prob > F
C. Total	53	30.155283		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
leach index I	1	0	.	.

Bivariate Fit of leach index NO3- By leach index Tc



Linear Fit

Linear Fit

leach index NO3- = 6.4418555 + 0.1768209*leach index Tc

Summary of Fit

RSquare	0.148604
RSquare Adj	0.123563
Root Mean Square Error	0.245823
Mean of Response	8.276667
Observations (or Sum Wgts)	36

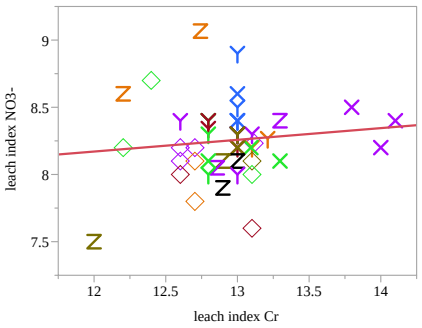
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3586104	0.358610	5.9344
Error	34	2.0545896	0.060429	Prob > F
C. Total	35	2.4132000		0.0202*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6.4418555	0.754301	8.54	<.0001*
leach index Tc	0.1768209	0.072585	2.44	0.0202*

Bivariate Fit of leach index NO3- By leach index Cr



Linear Fit

Linear Fit

leach index NO3- = 7.1221137 + 0.0873842*leach index Cr

Summary of Fit

RSquare	0.014318
RSquare Adj	-0.00464
Root Mean Square Error	0.264233
Mean of Response	8.252963
Observations (or Sum Wgts)	54

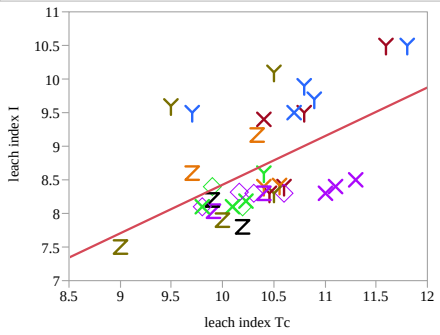
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0527383	0.052738	0.7554
Error	52	3.6305876	0.069819	Prob > F
C. Total	53	3.6833259		0.3888

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.1221137	1.30165	5.47	<.0001*
leach index Cr	0.0873842	0.100544	0.87	0.3888

Bivariate Fit of leach index I By leach index Tc



Linear Fit

Linear Fit

leach index I = 1.1956246 + 0.7232239*leach index Tc

Summary of Fit

RSquare	0.282905
RSquare Adj	0.261814
Root Mean Square Error	0.668774
Mean of Response	8.700278
Observations (or Sum Wgts)	36

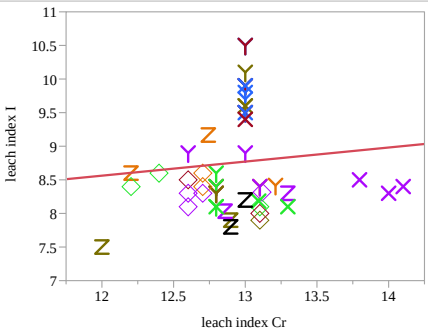
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5.999311	5.99931	13.4135
Error	34	15.206786	0.44726	Prob > F
C. Total	35	21.206097		0.0008*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.1956246	2.052111	0.58	0.5640
leach index Tc	0.7232239	0.19747	3.66	0.0008*

Bivariate Fit of leach index I By leach index Cr



Linear Fit

Linear Fit

leach index I = 6.0452563 + 0.2097338*leach index Cr

Summary of Fit

RSquare	0.010075
RSquare Adj	-0.00896
Root Mean Square Error	0.757672
Mean of Response	8.759444
Observations (or Sum Wgts)	54

Analysis of Variance

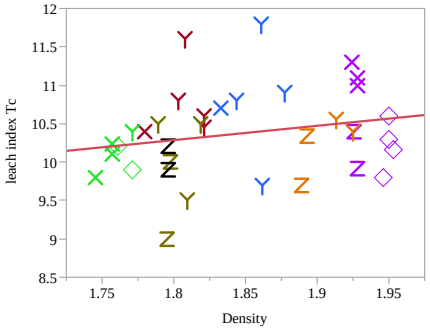
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.303806	0.303806	0.5292
Error	52	29.851477	0.574067	Prob > F
C. Total	53	30.155283		0.4702

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6.0452563	3.732403	1.62	0.1114
leach index Cr	0.2097338	0.288304	0.73	0.4702

Fit Group

Bivariate Fit of leach index Tc By Density



Linear Fit

Linear Fit

leach index Tc = 6.9315898 + 1.8642471*Density

Summary of Fit

RSquare	0.048684
RSquare Adj	0.020704
Root Mean Square Error	0.566501
Mean of Response	10.37667
Observations (or Sum Wgts)	36

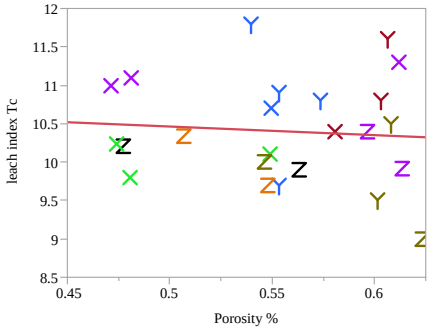
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.558392	0.558392	1.7400
Error	34	10.911408	0.320924	Prob > F
C. Total	35	11.469800		0.1960

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6.9315898	2.613449	2.65	0.0121*
Density	1.8642471	1.413302	1.32	0.1960

Bivariate Fit of leach index Tc By Porosity %



Linear Fit

Linear Fit

leach index Tc = 11.022618 - 1.1164968*Porosity %

Summary of Fit

RSquare	0.006718
RSquare Adj	-0.03843
Root Mean Square Error	0.693501
Mean of Response	10.40333
Observations (or Sum Wgts)	24

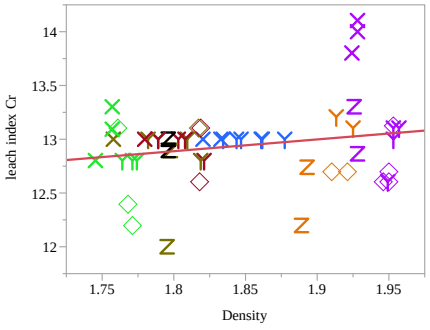
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.071563	0.071563	0.1488
Error	22	10.580770	0.480944	Prob > F
C. Total	23	10.652333		0.7034

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	11.022618	1.611664	6.84	<.0001*
Porosity %	-1.116497	2.894408	-0.39	0.7034

Bivariate Fit of leach index Cr By Density



Linear Fit

Linear Fit

leach index Cr = 10.912491 + 1.0980904*Density

Summary of Fit

RSquare	0.044085
RSquare Adj	0.025702
Root Mean Square Error	0.356318
Mean of Response	12.94111
Observations (or Sum Wgts)	54

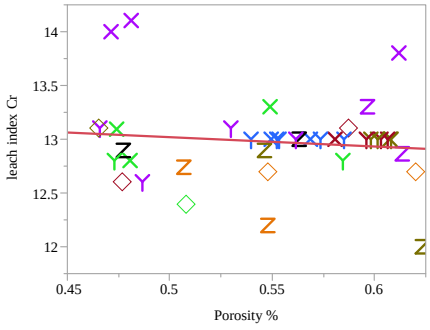
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3044736	0.304474	2.3981
Error	52	6.6020597	0.126963	Prob > F
C. Total	53	6.9065333		0.1275

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.912491	1.310875	8.32	<.0001*
Density	1.0980904	0.70909	1.55	0.1275

Bivariate Fit of leach index Cr By Porosity %



Linear Fit

Linear Fit

leach index Cr = 13.456669 - 0.8729852*Porosity %

Summary of Fit

RSquare	0.014069
RSquare Adj	-0.01058
Root Mean Square Error	0.377481
Mean of Response	12.97595
Observations (or Sum Wgts)	42

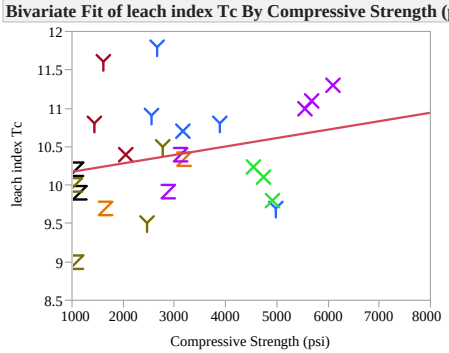
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0813328	0.081333	0.5708
Error	40	5.6996791	0.142492	Prob > F
C. Total	41	5.7810119		0.4544

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.456669	0.638945	21.06	<.0001*
Porosity %	-0.872985	1.155498	-0.76	0.4544

Bivariate Fit of leach index Tc By Compressive Strength (psi)



Linear Fit

Linear Fit

leach index Tc = 10.063014 + 0.0001098*Compressive Strength (psi)

Summary of Fit

RSquare	0.066901
RSquare Adj	0.024487
Root Mean Square Error	0.672164
Mean of Response	10.40333
Observations (or Sum Wgts)	24

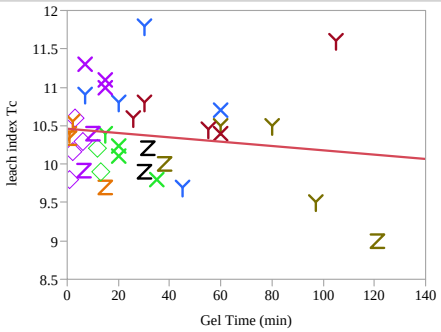
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.712648	0.712648	1.5773
Error	22	9.939685	0.451804	Prob > F
C. Total	23	10.652333		0.2223

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.063014	0.303728	33.13	<.0001*
Compressive Strength (psi)	0.0001098	8.746e-5	1.26	0.2223

Bivariate Fit of leach index Tc By Gel Time (min)



Linear Fit

Linear Fit

leach index Tc = 10.462385 - 0.0028181*Gel Time (min)

Summary of Fit

RSquare	0.02338
RSquare Adj	-0.00534
Root Mean Square Error	0.573986
Mean of Response	10.37667
Observations (or Sum Wgts)	36

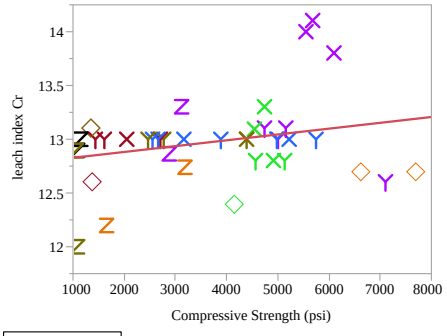
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.268160	0.268160	0.8139
Error	34	11.201640	0.329460	Prob > F
C. Total	35	11.469800		0.3733

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.462385	0.134829	77.60	<.0001*
Gel Time (min)	-0.002818	0.003124	-0.90	0.3733

Bivariate Fit of leach index Cr By Compressive Strength (psi)



Linear Fit

Linear Fit

leach index Cr = 12.774459 + 5.4222e-5*Compressive Strength (psi)

Summary of Fit

RSquare	0.070315
RSquare Adj	0.047072
Root Mean Square Error	0.366556
Mean of Response	12.97595
Observations (or Sum Wgts)	42

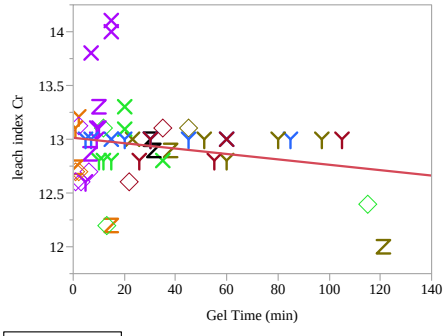
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4064894	0.406489	3.0253
Error	40	5.3745225	0.134363	Prob > F
C. Total	41	5.7810119		0.0897

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.774459	0.128915	99.09	<.0001*
Compressive Strength (psi)	5.4222e-5	3.117e-5	1.74	0.0897

Bivariate Fit of leach index Cr By Gel Time (min)



Linear Fit

Linear Fit

leach index Cr = 13.014637 - 0.0025145*Gel Time (min)

Summary of Fit

RSquare	0.045682
RSquare Adj	0.02733
Root Mean Square Error	0.35602
Mean of Response	12.94111
Observations (or Sum Wgts)	54

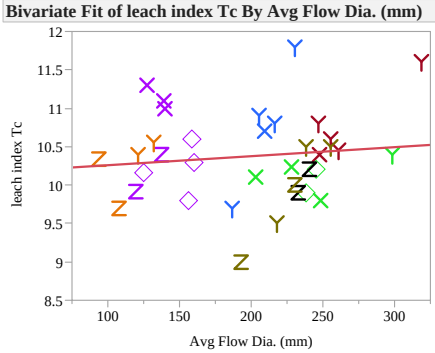
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3155054	0.315505	2.4892
Error	52	6.5910279	0.126751	Prob > F
C. Total	53	6.9065333		0.1207

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.014637	0.067224	193.60	<.0001*
Gel Time (min)	-0.002514	0.001594	-1.58	0.1207

Bivariate Fit of leach index Tc By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

leach index Tc = 10.142572 + 0.0011758*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.014
RSquare Adj	-0.015
Root Mean Square Error	0.576736
Mean of Response	10.37667
Observations (or Sum Wgts)	36

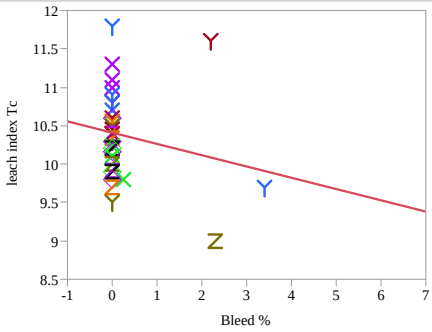
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.160582	0.160582	0.4828
Error	34	11.309218	0.332624	Prob > F
C. Total	35	11.469800		0.4919

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.142572	0.350358	28.95	<.0001*
Avg Flow Dia. (mm)	0.0011758	0.001692	0.69	0.4919

Bivariate Fit of leach index Tc By Bleed %



Linear Fit

Linear Fit

leach index Tc = 10.409871 - 0.1466705*Bleed %

Summary of Fit

RSquare	0.037337
RSquare Adj	0.009024
Root Mean Square Error	0.56987
Mean of Response	10.37667
Observations (or Sum Wgts)	36

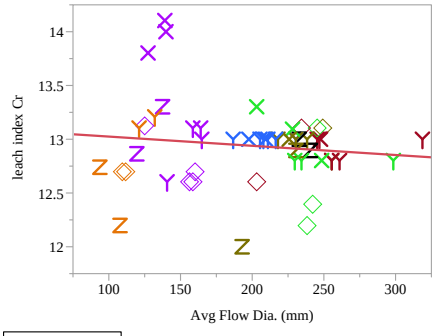
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.428253	0.428253	1.3187
Error	34	11.041547	0.324751	Prob > F
C. Total	35	11.469800		0.2588

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.409871	0.099282	104.85	<.0001*
Bleed %	-0.146671	0.127723	-1.15	0.2588

Bivariate Fit of leach index Cr By Avg Flow Dia. (mm)



Linear Fit

Linear Fit

leach index Cr = 13.110579 - 0.0008533*Avg Flow Dia. (mm)

Summary of Fit

RSquare	0.015928
RSquare Adj	-0.003
Root Mean Square Error	0.361528
Mean of Response	12.94111
Observations (or Sum Wgts)	54

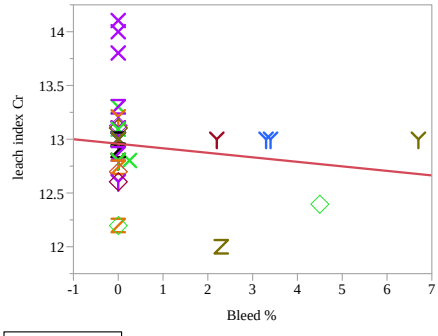
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1100105	0.110011	0.8417
Error	52	6.7965228	0.130702	Prob > F
C. Total	53	6.9065333		0.3632

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.110579	0.191159	68.58	<.0001*
Avg Flow Dia. (mm)	-0.000853	0.00093	-0.92	0.3632

Bivariate Fit of leach index Cr By Bleed %



Linear Fit

Linear Fit

leach index Cr = 12.958767 - 0.0420942*Bleed %

Summary of Fit

RSquare	0.022649
RSquare Adj	0.003854
Root Mean Square Error	0.360291
Mean of Response	12.94111
Observations (or Sum Wgts)	54

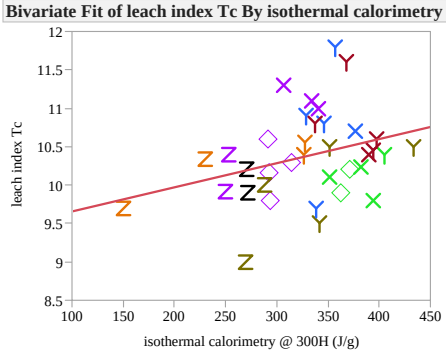
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1564292	0.156429	1.2051
Error	52	6.7501041	0.129810	Prob > F
C. Total	53	6.9065333		0.2774

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.958767	0.0516	251.14	<.0001*
Bleed %	-0.042094	0.038346	-1.10	0.2774

Bivariate Fit of leach index Tc By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

leach index Tc = 9.3428589 + 0.0031438*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.09994
RSquare Adj	0.073467
Root Mean Square Error	0.551029
Mean of Response	10.37667
Observations (or Sum Wgts)	36

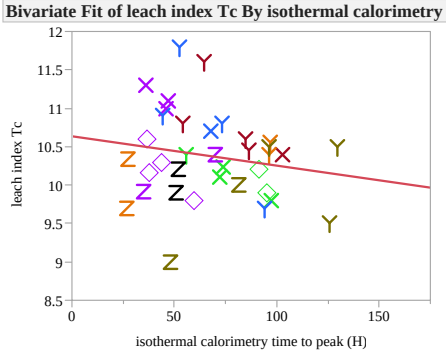
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.146286	1.14629	3.7752
Error	34	10.323514	0.30363	Prob > F
C. Total	35	11.469800		0.0603

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.3428589	0.539936	17.30	<.0001*
isothermal calorimetry @ 300H (J/g)	0.0031438	0.001618	1.94	0.0603

Bivariate Fit of leach index Tc By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

leach index Tc = 10.637172 - 0.0038231*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.032487
RSquare Adj	0.004031
Root Mean Square Error	0.571303
Mean of Response	10.37667
Observations (or Sum Wgts)	36

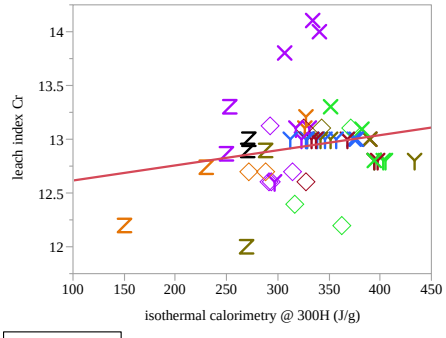
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.372623	0.372623	1.1417
Error	34	11.097177	0.326388	Prob > F
C. Total	35	11.469800		0.2928

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.637172	0.261742	40.64	<.0001*
isothermal calorimetry time to peak (H)	-0.003823	0.003578	-1.07	0.2928

Bivariate Fit of leach index Cr By isothermal calorimetry @ 300H (J/g)



Linear Fit

Linear Fit

leach index Cr = 12.476882 + 0.001405*isothermal calorimetry @ 300H (J/g)

Summary of Fit

RSquare	0.039479
RSquare Adj	0.021008
Root Mean Square Error	0.357176
Mean of Response	12.94111
Observations (or Sum Wgts)	54

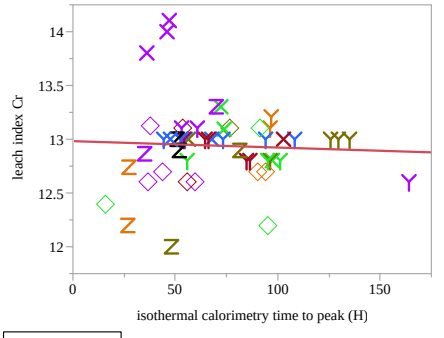
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2726637	0.272664	2.1373
Error	52	6.6338696	0.127574	Prob > F
C. Total	53	6.9065333		0.1498

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.476882	0.32124	38.84	<.0001*
isothermal calorimetry @ 300H (J/g)	0.001405	0.000961	1.46	0.1498

Bivariate Fit of leach index Cr By isothermal calorimetry time to peak (H)



Linear Fit

Linear Fit

leach index Cr = 12.983534 - 0.0005976*isothermal calorimetry time to peak (H)

Summary of Fit

RSquare	0.002467
RSquare Adj	-0.01672
Root Mean Square Error	0.363992
Mean of Response	12.94111
Observations (or Sum Wgts)	54

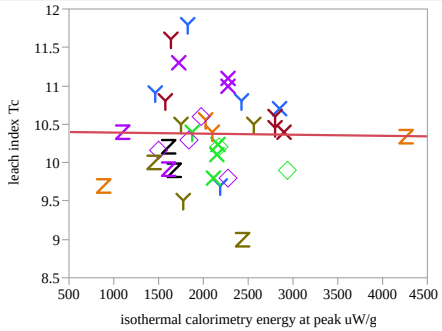
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0170400	0.017040	0.1286
Error	52	6.8894934	0.132490	Prob > F
C. Total	53	6.9065333		0.7213

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.983534	0.128245	101.24	<.0001*
isothermal calorimetry time to peak (H)	-0.000598	0.001666	-0.36	0.7213

Bivariate Fit of leach index Tc By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

leach index Tc = 10.405324 - 1.3758e-5*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.000222
RSquare Adj	-0.02918
Root Mean Square Error	0.580751
Mean of Response	10.37667
Observations (or Sum Wgts)	36

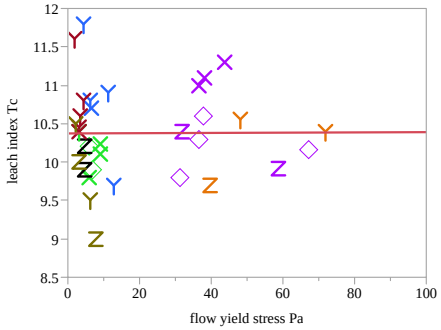
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.002546	0.002546	0.0075
Error	34	11.467254	0.337272	Prob > F
C. Total	35	11.469800		0.9313

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.405324	0.343765	30.27	<.0001*
isothermal calorimetry energy at peak uW/g	-1.376e-5	0.000158	-0.09	0.9313

Bivariate Fit of leach index Tc By flow yield stress Pa



Linear Fit

Linear Fit

leach index Tc = 10.374504 + 0.0001678*flow yield stress Pa

Summary of Fit

RSquare	3.581e-5
RSquare Adj	-0.03027
Root Mean Square Error	0.589504
Mean of Response	10.37771
Observations (or Sum Wgts)	35

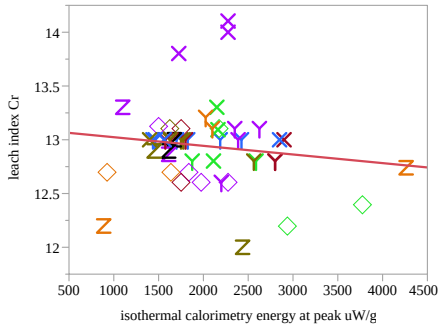
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.000411	0.000411	0.0012
Error	33	11.468006	0.347515	Prob > F
C. Total	34	11.468417		0.9728

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.374504	0.136566	75.97	<.0001*
flow yield stress Pa	0.0001678	0.004881	0.03	0.9728

Bivariate Fit of leach index Cr By isothermal calorimetry energy at peak uW/g



Linear Fit

Linear Fit

leach index Cr = 13.104412 - 8.017e-5*isothermal calorimetry energy at peak uW/g

Summary of Fit

RSquare	0.019111
RSquare Adj	0.000247
Root Mean Square Error	0.360943
Mean of Response	12.94111
Observations (or Sum Wgts)	54

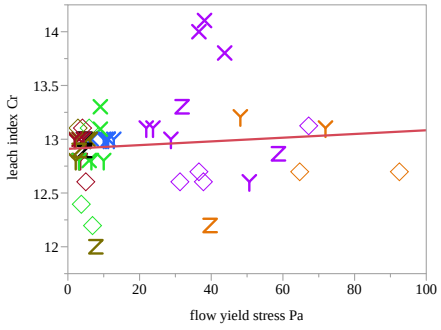
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1319884	0.131988	1.0131
Error	52	6.7745449	0.130280	Prob > F
C. Total	53	6.9065333		0.3188

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.104412	0.169513	77.31	<.0001*
isothermal calorimetry energy at peak uW/g	-8.017e-5	7.965e-5	-1.01	0.3188

Bivariate Fit of leach index Cr By flow yield stress Pa



Linear Fit

Linear Fit

leach index Cr = 12.911167 + 0.0017342*flow yield stress Pa

Summary of Fit

RSquare	0.011
RSquare Adj	-0.00839
Root Mean Square Error	0.364875
Mean of Response	12.94491
Observations (or Sum Wgts)	53

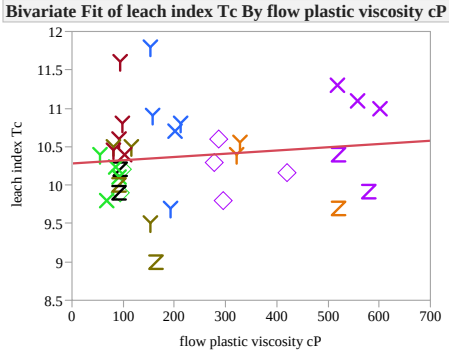
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0755202	0.075520	0.5673
Error	51	6.7898043	0.133133	Prob > F
C. Total	52	6.8653245		0.4548

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.911167	0.06722	192.07	<.0001*
flow yield stress Pa	0.0017342	0.002303	0.75	0.4548

Bivariate Fit of leach index Tc By flow plastic viscosity cP



Linear Fit

Linear Fit

leach index Tc = 10.282849 + 0.0004203*flow plastic viscosity cP

Summary of Fit

RSquare	0.015823
RSquare Adj	-0.014
Root Mean Square Error	0.584832
Mean of Response	10.37771
Observations (or Sum Wgts)	35

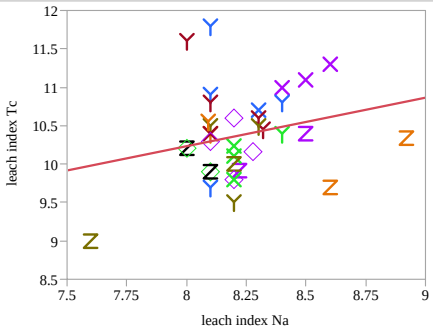
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.181468	0.181468	0.5306
Error	33	11.286949	0.342029	Prob > F
C. Total	34	11.468417		0.4715

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.282849	0.163506	62.89	<.0001*
flow plastic viscosity cP	0.0004203	0.000577	0.73	0.4715

Bivariate Fit of leach index Tc By leach index Na



Linear Fit

Linear Fit

leach index Tc = 5.1861327 + 0.631004*leach index Na

Summary of Fit

RSquare	0.061016
RSquare Adj	0.033399
Root Mean Square Error	0.562817
Mean of Response	10.37667
Observations (or Sum Wgts)	36

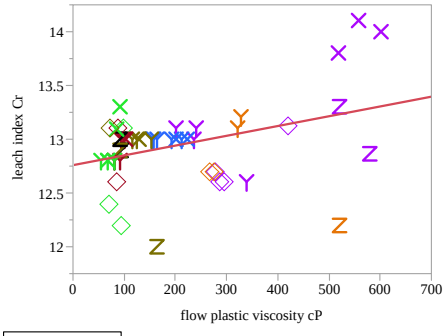
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.699847	0.699847	2.2094
Error	34	10.769953	0.316763	Prob > F
C. Total	35	11.469800		0.1464

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	5.1861327	3.49329	1.48	0.1469
leach index Na	0.631004	0.42452	1.49	0.1464

Bivariate Fit of leach index Cr By flow plastic viscosity cP



Linear Fit

Linear Fit

leach index Cr = 12.759034 + 0.0009105*flow plastic viscosity cP

Summary of Fit

RSquare	0.144462
RSquare Adj	0.127687
Root Mean Square Error	0.339363
Mean of Response	12.94491
Observations (or Sum Wgts)	53

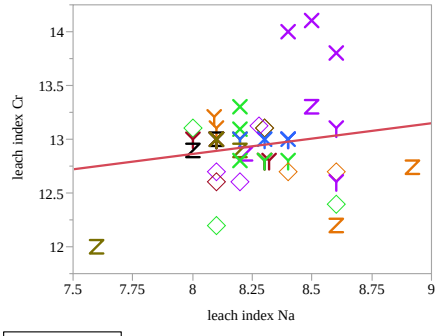
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.9917814	0.991781	8.6116
Error	51	5.8735432	0.115168	Prob > F
C. Total	52	6.8653245		0.0050*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.759034	0.078643	162.24	<.0001*
flow plastic viscosity cP	0.0009105	0.00031	2.93	0.0050*

Bivariate Fit of leach index Cr By leach index Na



Linear Fit

Linear Fit

leach index Cr = 10.579909 + 0.2855461*leach index Na

Summary of Fit

RSquare	0.03027
RSquare Adj	0.011622
Root Mean Square Error	0.358884
Mean of Response	12.94111
Observations (or Sum Wgts)	54

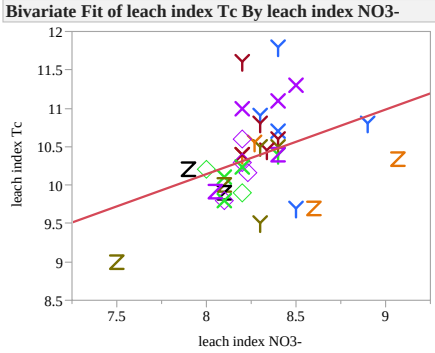
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2090642	0.209064	1.6232
Error	52	6.6974692	0.128797	Prob > F
C. Total	53	6.9065333		0.2083

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.579909	1.853949	5.71	<.0001*
leach index Na	0.2855461	0.224125	1.27	0.2083

Bivariate Fit of leach index Tc By leach index NO3-



Linear Fit

Linear Fit

leach index Tc = 3.4207958 + 0.8404194*leach index NO3-

Summary of Fit

RSquare	0.148604
RSquare Adj	0.123563
Root Mean Square Error	0.535925
Mean of Response	10.37667
Observations (or Sum Wgts)	36

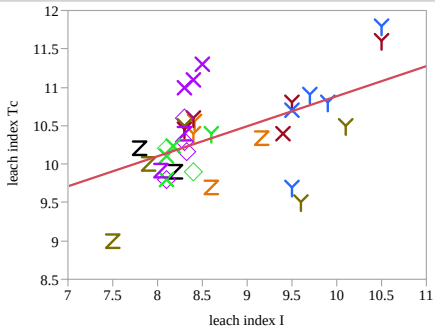
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.704455	1.70445	5.9344
Error	34	9.765345	0.28722	Prob > F
C. Total	35	11.469800		0.0202*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3.4207958	2.856772	1.20	0.2394
leach index NO3-	0.8404194	0.344991	2.44	0.0202*

Bivariate Fit of leach index Tc By leach index I



Linear Fit

Linear Fit

leach index Tc = 6.9733608 + 0.3911721*leach index I

Summary of Fit

RSquare	0.282905
RSquare Adj	0.261814
Root Mean Square Error	0.491843
Mean of Response	10.37667
Observations (or Sum Wgts)	36

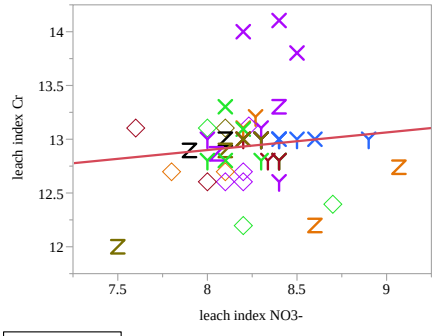
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.244864	3.24486	13.4135
Error	34	8.224936	0.24191	Prob > F
C. Total	35	11.469800		0.0008*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6.9733608	0.932852	7.48	<.0001*
leach index I	0.3911721	0.106806	3.66	0.0008*

Bivariate Fit of leach index Cr By leach index NO3-



Linear Fit

Linear Fit

leach index Cr = 11.588842 + 0.1638525*leach index NO3-

Summary of Fit

RSquare	0.014318
RSquare Adj	-0.00464
Root Mean Square Error	0.361823
Mean of Response	12.94111
Observations (or Sum Wgts)	54

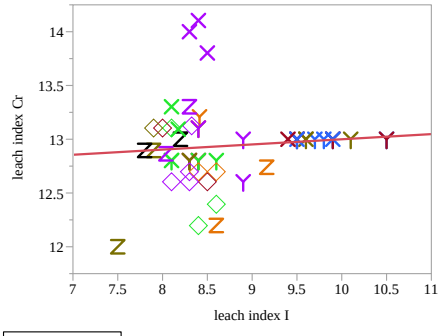
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0988886	0.098889	0.7554
Error	52	6.8076447	0.130916	Prob > F
C. Total	53	6.9065333		0.3888

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	11.588842	1.556696	7.44	<.0001*
leach index NO3-	0.1638525	0.188528	0.87	0.3888

Bivariate Fit of leach index Cr By leach index I



Linear Fit

Linear Fit

leach index Cr = 12.520344 + 0.0480358*leach index I

Summary of Fit

RSquare	0.010075
RSquare Adj	-0.00896
Root Mean Square Error	0.362601
Mean of Response	12.94111
Observations (or Sum Wgts)	54

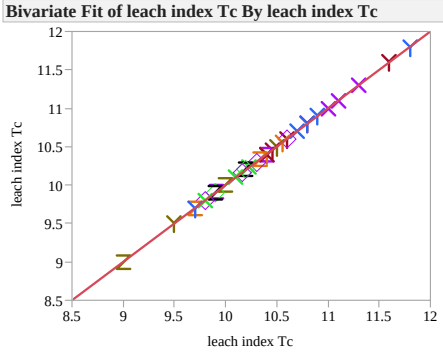
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0695815	0.069581	0.5292
Error	52	6.8369519	0.131480	Prob > F
C. Total	53	6.9065333		0.4702

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.520344	0.580496	21.57	<.0001*
leach index I	0.0480358	0.066031	0.73	0.4702

Bivariate Fit of leach index Tc By leach index Tc



Linear Fit

Linear Fit

leach index Tc = 1.776e-15 + 1*leach index Tc

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	7.228e-9
Mean of Response	10.37667
Observations (or Sum Wgts)	36

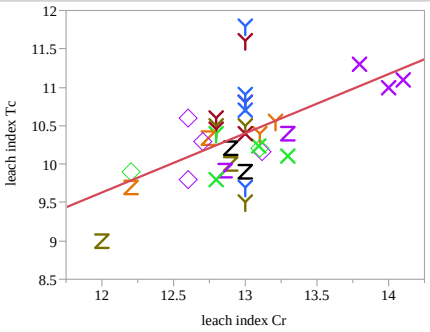
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11.469800	11.4698	2.2e+17
Error	34	1.7764e-15	5.22e-17	Prob > F
C. Total	35	11.469800		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.776e-15	2.218e-8	0.00	1.0000
leach index Tc	1	2.134e-9	4.7e+8	<.0001*

Bivariate Fit of leach index Tc By leach index Cr



Linear Fit

Linear Fit

leach index Tc = 0.3784102 + 0.7710407*leach index Cr

Summary of Fit

RSquare	0.314886
RSquare Adj	0.294736
Root Mean Square Error	0.480751
Mean of Response	10.37667
Observations (or Sum Wgts)	36

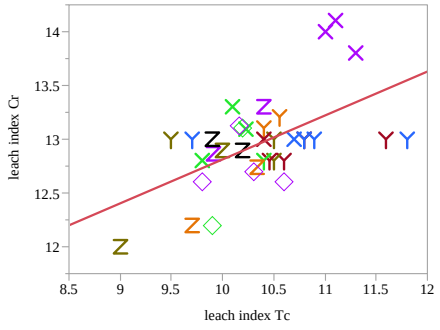
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.611683	3.61168	15.6268
Error	34	7.858117	0.23112	Prob > F
C. Total	35	11.469800		0.0004*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.3784102	2.530504	0.15	0.8820
leach index Cr	0.7710407	0.195048	3.95	0.0004*

Bivariate Fit of leach index Cr By leach index Tc



Linear Fit

Linear Fit

leach index Cr = 8.7294817 + 0.4083913*leach index Tc

Summary of Fit

RSquare	0.314886
RSquare Adj	0.294736
Root Mean Square Error	0.34988
Mean of Response	12.96722
Observations (or Sum Wgts)	36

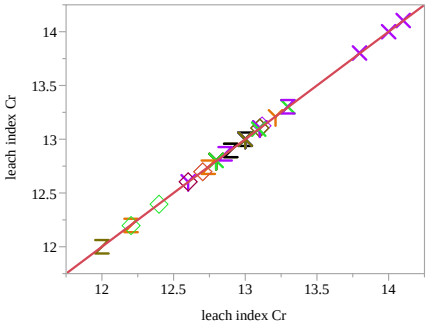
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.9129730	1.91297	15.6268
Error	34	4.1621493	0.12242	Prob > F
C. Total	35	6.0751222		0.0004*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.7294817	1.073596	8.13	<.0001*
leach index Tc	0.4083913	0.10331	3.95	0.0004*

Bivariate Fit of leach index Cr By leach index Cr



Linear Fit

Linear Fit

leach index Cr = 0 + 1*leach index Cr

Summary of Fit

RSquare	1
RSquare Adj	1
Root Mean Square Error	0
Mean of Response	12.94111
Observations (or Sum Wgts)	54

Analysis of Variance

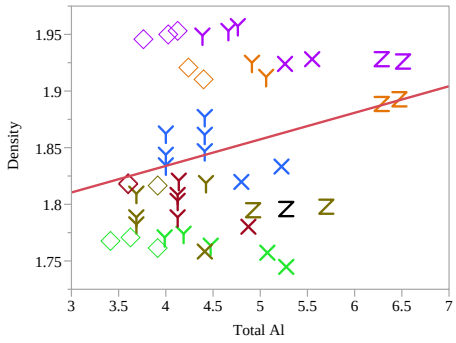
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6.9065333	6.90653	.
Error	52	0.0000000	0.00000	Prob > F
C. Total	53	6.9065333		.

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0	0	.	.
leach index Cr	1	0	.	.

Fit Group

Bivariate Fit of Density By Total Al



Linear Fit

Linear Fit

Density = 1.7402881 + 0.0234212*Total Al

Summary of Fit

RSquare	0.068571
RSquare Adj	0.050659
Root Mean Square Error	0.067253
Mean of Response	1.847407
Observations (or Sum Wgts)	54

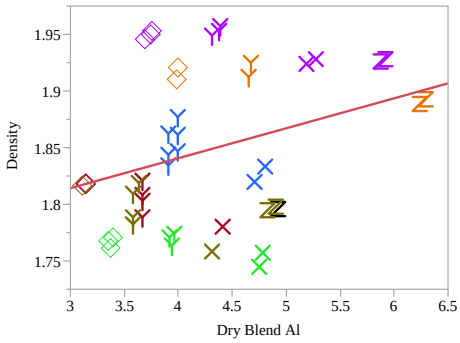
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01731465	0.017315	3.8282
Error	52	0.23519239	0.004523	Prob > F
C. Total	53	0.25250704		0.0558

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.7402881	0.055508	31.35	<.0001*
Total Al	0.0234212	0.011971	1.96	0.0558

Bivariate Fit of Density By Dry Blend Al



Linear Fit

Linear Fit

Density = 1.7350078 + 0.0264309*Dry Blend Al

Summary of Fit

RSquare	0.086951
RSquare Adj	0.069392
Root Mean Square Error	0.066586
Mean of Response	1.847407
Observations (or Sum Wgts)	54

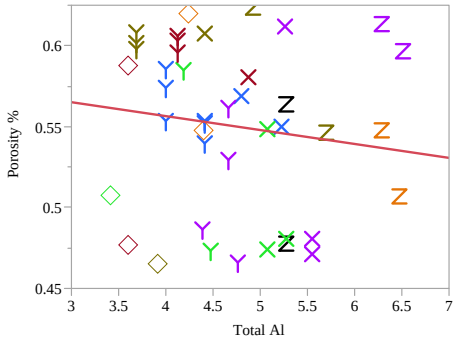
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.02195567	0.021956	4.9520
Error	52	0.23055137	0.004434	Prob > F
C. Total	53	0.25250704		0.0304*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.7350078	0.051316	33.81	<.0001*
Dry Blend Al	0.0264309	0.011877	2.23	0.0304*

Bivariate Fit of Porosity % By Total Al



Linear Fit

Linear Fit

Porosity % = 0.5910071 - 0.0086091*Total Al

Summary of Fit

RSquare	0.018828
RSquare Adj	-0.0057
Root Mean Square Error	0.051164
Mean of Response	0.550658
Observations (or Sum Wgts)	42

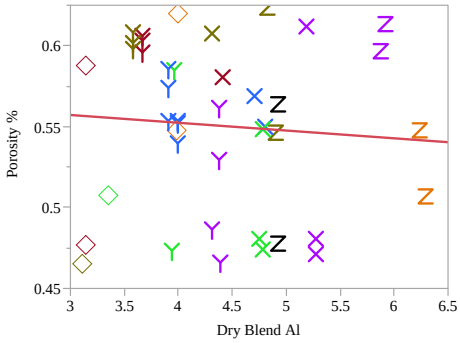
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00200938	0.002009	0.7676
Error	40	0.10471211	0.002618	Prob > F
C. Total	41	0.10672149		0.3862

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5910071	0.046726	12.65	<.0001*
Total Al	-0.008609	0.009826	-0.88	0.3862

Bivariate Fit of Porosity % By Dry Blend Al



Linear Fit

Linear Fit

Porosity % = 0.5716471 - 0.0047983*Dry Blend Al

Summary of Fit

RSquare	0.005761
RSquare Adj	-0.01909
Root Mean Square Error	0.051504
Mean of Response	0.550658
Observations (or Sum Wgts)	42

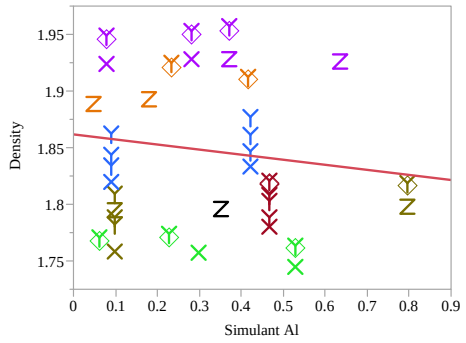
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00061487	0.000615	0.2318
Error	40	0.10610661	0.002653	Prob > F
C. Total	41	0.10672149		0.6328

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5716471	0.044314	12.90	<.0001*
Dry Blend Al	-0.004798	0.009966	-0.48	0.6328

Bivariate Fit of Density By Simulant Al



Linear Fit

Linear Fit

Density = 1.8617467 - 0.0446676*Simulant Al

Summary of Fit

RSquare	0.01618
RSquare Adj	-0.00274
Root Mean Square Error	0.069118
Mean of Response	1.847407
Observations (or Sum Wgts)	54

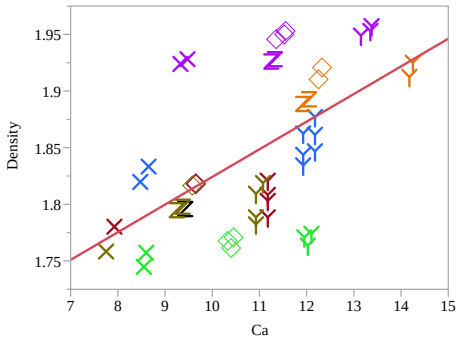
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00408560	0.004086	0.8552
Error	52	0.24842144	0.004777	Prob > F
C. Total	53	0.25250704		0.3594

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8617467	0.018136	102.66	<.0001*
Simulant Al	-0.044668	0.048301	-0.92	0.3594

Bivariate Fit of Density By Ca



Linear Fit

Linear Fit

Density = 1.5801685 + 0.0244076* Ca

Summary of Fit

RSquare	0.313834
RSquare Adj	0.300638
Root Mean Square Error	0.057723
Mean of Response	1.847407
Observations (or Sum Wgts)	54

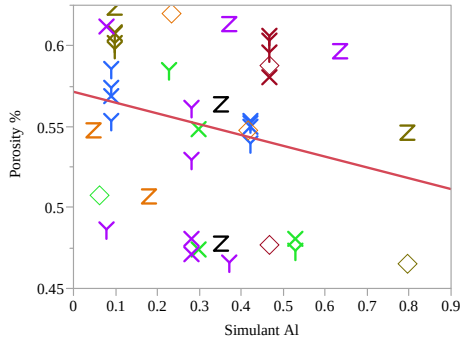
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.07924522	0.079245	23.7834
Error	52	0.17326181	0.003332	Prob > F
C. Total	53	0.25250704		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.5801685	0.055358	28.54	<.0001*
Ca	0.0244076	0.005005	4.88	<.0001*

Bivariate Fit of Porosity % By Simulant Al



Linear Fit

Linear Fit

Porosity % = 0.5715101 - 0.0667215*Simulant Al

Summary of Fit

RSquare	0.065794
RSquare Adj	0.042439
Root Mean Square Error	0.049925
Mean of Response	0.550658
Observations (or Sum Wgts)	42

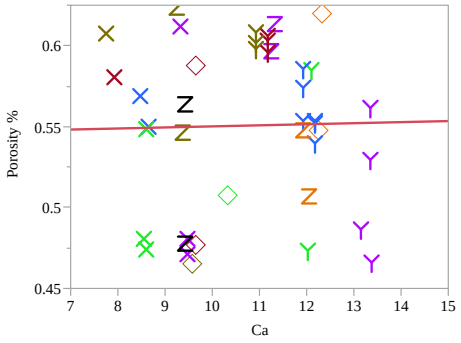
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00702163	0.007022	2.8171
Error	40	0.09969985	0.002492	Prob > F
C. Total	41	0.10672149		0.1011

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5715101	0.014618	39.10	<.0001*
Simulant Al	-0.066721	0.039752	-1.68	0.1011

Bivariate Fit of Porosity % By Ca



Linear Fit

Linear Fit

Porosity % = 0.5437176 + 0.0006469* Ca

Summary of Fit

RSquare	0.000418
RSquare Adj	-0.02457
Root Mean Square Error	0.051642
Mean of Response	0.550658
Observations (or Sum Wgts)	42

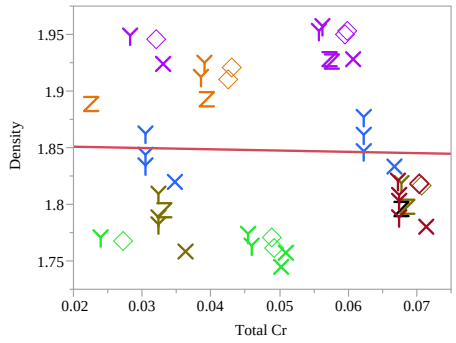
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00004463	0.000045	0.0167
Error	40	0.10667685	0.002667	Prob > F
C. Total	41	0.10672149		0.8977

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5437176	0.054238	10.02	<.0001*
Ca	0.0006469	0.005001	0.13	0.8977

Bivariate Fit of Density By Total Cr



Linear Fit

Linear Fit

Density = 1.8531453 - 0.1133929*Total Cr

Summary of Fit

RSquare	0.000624
RSquare Adj	-0.01859
Root Mean Square Error	0.069663
Mean of Response	1.847407
Observations (or Sum Wgts)	54

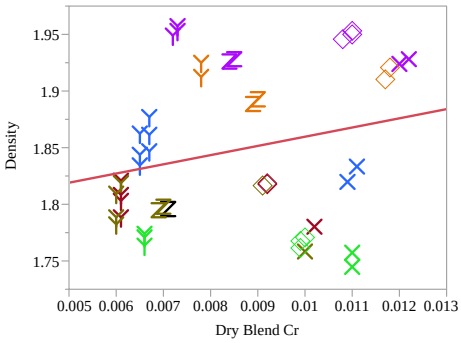
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00015764	0.000158	0.0325
Error	52	0.25234939	0.004853	Prob > F
C. Total	53	0.25250704		0.8577

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8531453	0.033217	55.79	<.0001*
Total Cr	-0.113393	0.62914	-0.18	0.8577

Bivariate Fit of Density By Dry Blend Cr



Linear Fit

Linear Fit

Density = 1.7785216 + 8.1254576*Dry Blend Cr

Summary of Fit

RSquare	0.060319
RSquare Adj	0.042249
Root Mean Square Error	0.06755
Mean of Response	1.847407
Observations (or Sum Wgts)	54

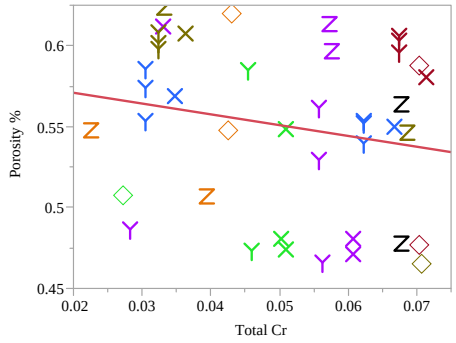
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01523108	0.015231	3.3380
Error	52	0.23727596	0.004563	Prob > F
C. Total	53	0.25250704		0.0734

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.7785216	0.038809	45.83	<.0001*
Dry Blend Cr	8.1254576	4.447415	1.83	0.0734

Bivariate Fit of Porosity % By Total Cr



Linear Fit

Linear Fit

Porosity % = 0.584376 - 0.6681239*Total Cr

Summary of Fit

RSquare	0.041115
RSquare Adj	0.017143
Root Mean Square Error	0.05058
Mean of Response	0.550658
Observations (or Sum Wgts)	42

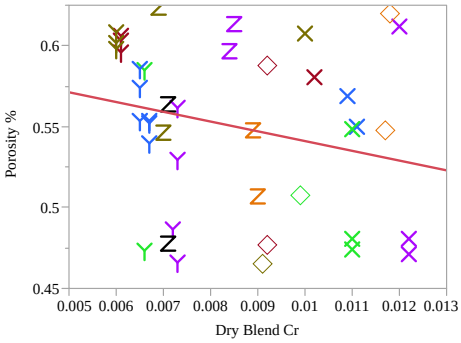
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00438782	0.004388	1.7151
Error	40	0.10233367	0.002558	Prob > F
C. Total	41	0.10672149		0.1978

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.584376	0.026903	21.72	<.0001*
Total Cr	-0.668124	0.510167	-1.31	0.1978

Bivariate Fit of Porosity % By Dry Blend Cr



Linear Fit

Linear Fit

Porosity % = 0.6014827 - 6.0368756*Dry Blend Cr

Summary of Fit

RSquare	0.061578
RSquare Adj	0.038118
Root Mean Square Error	0.050037
Mean of Response	0.550658
Observations (or Sum Wgts)	42

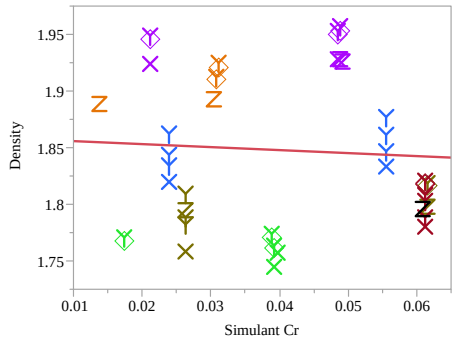
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00657173	0.006572	2.6248
Error	40	0.10014975	0.002504	Prob > F
C. Total	41	0.10672149		0.1131

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.6014827	0.032307	18.62	<.0001*
Dry Blend Cr	-6.036876	3.726209	-1.62	0.1131

Bivariate Fit of Density By Simulant Cr



Linear Fit

Linear Fit

Density = 1.8585563 - 0.2647018*Simulant Cr

Summary of Fit

RSquare	0.003475
RSquare Adj	-0.01569
Root Mean Square Error	0.069563
Mean of Response	1.847407
Observations (or Sum Wgts)	54

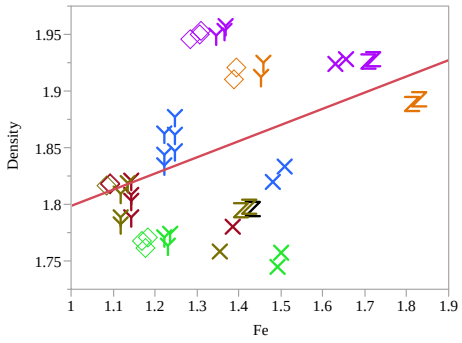
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00087741	0.000877	0.1813
Error	52	0.25162963	0.004839	Prob > F
C. Total	53	0.25250704		0.6720

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8585563	0.027841	66.76	<.0001*
Simulant Cr	-0.264702	0.621634	-0.43	0.6720

Bivariate Fit of Density By Fe



Linear Fit

Linear Fit

Density = 1.6557265 + 0.142983* Fe

Summary of Fit

RSquare	0.160057
RSquare Adj	0.143904
Root Mean Square Error	0.063865
Mean of Response	1.847407
Observations (or Sum Wgts)	54

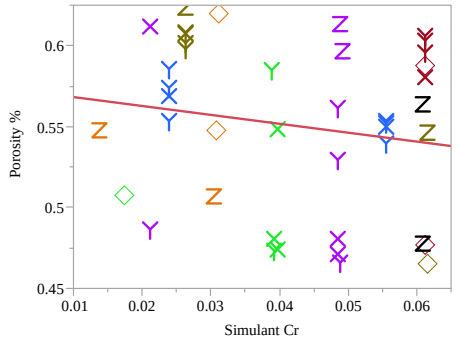
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.04041554	0.040416	9.9090
Error	52	0.21209149	0.004079	Prob > F
C. Total	53	0.25250704		0.0027*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.6557265	0.06151	26.92	<.0001*
Fe	0.142983	0.045422	3.15	0.0027*

Bivariate Fit of Porosity % By Simulant Cr



Linear Fit

Linear Fit

Porosity % = 0.5737448 - 0.5490633*Simulant Cr

Summary of Fit

RSquare	0.028162
RSquare Adj	0.003866
Root Mean Square Error	0.050921
Mean of Response	0.550658
Observations (or Sum Wgts)	42

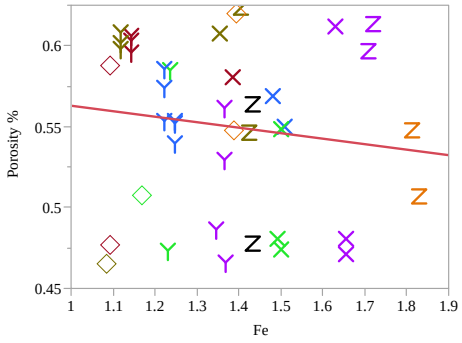
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00300546	0.003005	1.1591
Error	40	0.10371603	0.002593	Prob > F
C. Total	41	0.10672149		0.2881

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5737448	0.022838	25.12	<.0001*
Simulant Cr	-0.549063	0.509988	-1.08	0.2881

Bivariate Fit of Porosity % By Fe



Linear Fit

Linear Fit

Porosity % = 0.5969563 - 0.0339552* Fe

Summary of Fit

RSquare	0.018768
RSquare Adj	-0.00576
Root Mean Square Error	0.051166
Mean of Response	0.550658
Observations (or Sum Wgts)	42

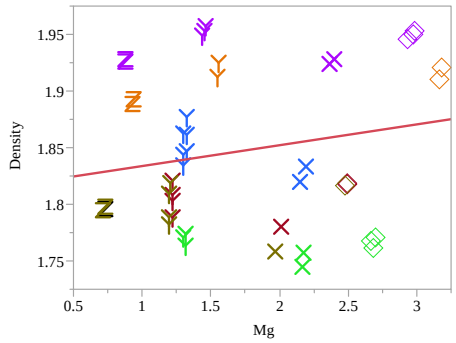
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00200292	0.002003	0.7651
Error	40	0.10471857	0.002618	Prob > F
C. Total	41	0.10672149		0.3870

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5969563	0.053517	11.15	<.0001*
Fe	-0.033955	0.03882	-0.87	0.3870

Bivariate Fit of Density By Mg



Linear Fit

Linear Fit

Density = 1.8154852 + 0.0183656* Mg

Summary of Fit

RSquare	0.037757
RSquare Adj	0.019252
Root Mean Square Error	0.068356
Mean of Response	1.847407
Observations (or Sum Wgts)	54

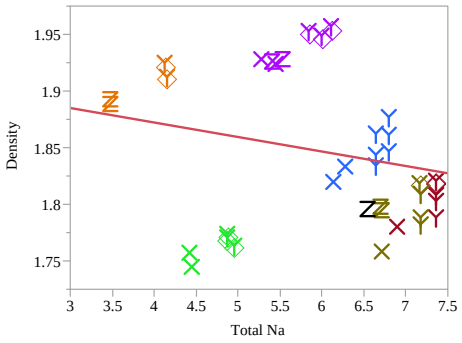
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00953384	0.009534	2.0404
Error	52	0.24297320	0.004673	Prob > F
C. Total	53	0.25250704		0.1591

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8154852	0.024207	75.00	<.0001*
Mg	0.0183656	0.012857	1.43	0.1591

Bivariate Fit of Density By Total Na



Linear Fit

Linear Fit

Density = 1.9236186 - 0.0128216*Total Na

Summary of Fit

RSquare	0.044841
RSquare Adj	0.026473
Root Mean Square Error	0.068104
Mean of Response	1.847407
Observations (or Sum Wgts)	54

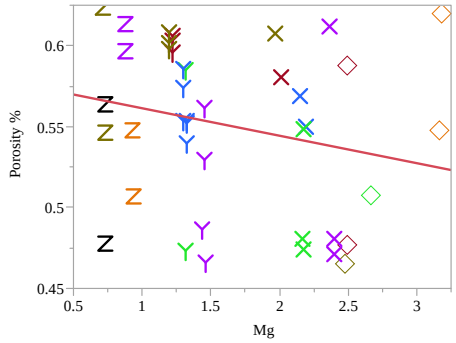
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01132276	0.011323	2.4412
Error	52	0.24118428	0.004638	Prob > F
C. Total	53	0.25250704		0.1243

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.9236186	0.04965	38.74	<.0001*
Total Na	-0.012822	0.008206	-1.56	0.1243

Bivariate Fit of Porosity % By Mg



Linear Fit

Linear Fit

Porosity % = 0.5783934 - 0.0169926* Mg

Summary of Fit

RSquare	0.050986
RSquare Adj	0.02726
Root Mean Square Error	0.050319
Mean of Response	0.550658
Observations (or Sum Wgts)	42

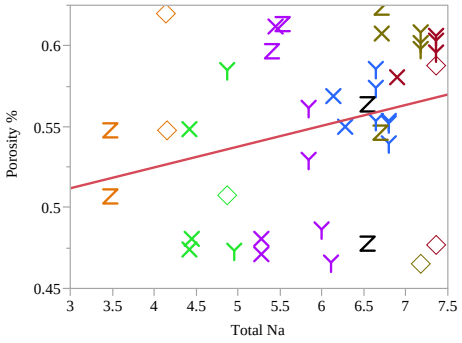
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00544127	0.005441	2.1490
Error	40	0.10128022	0.002532	Prob > F
C. Total	41	0.10672149		0.1505

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5783934	0.020451	28.28	<.0001*
Mg	-0.016993	0.011592	-1.47	0.1505

Bivariate Fit of Porosity % By Total Na



Linear Fit

Linear Fit

Porosity % = 0.4733404 + 0.0128717*Total Na

Summary of Fit

RSquare	0.082927
RSquare Adj	0.06
Root Mean Square Error	0.049465
Mean of Response	0.550658
Observations (or Sum Wgts)	42

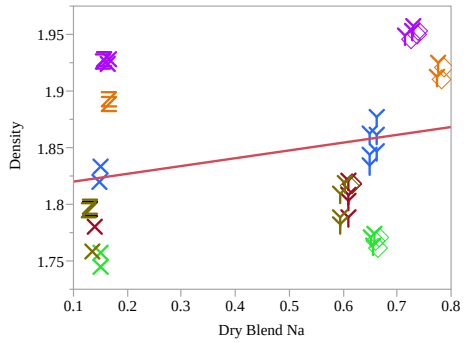
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00885010	0.008850	3.6170
Error	40	0.09787139	0.002447	Prob > F
C. Total	41	0.10672149		0.0644

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.4733404	0.041364	11.44	<.0001*
Total Na	0.0128717	0.006768	1.90	0.0644

Bivariate Fit of Density By Dry Blend Na



Linear Fit

Linear Fit

Density = 1.8132849 + 0.0687142*Dry Blend Na

Summary of Fit

RSquare	0.063451
RSquare Adj	0.04544
Root Mean Square Error	0.067437
Mean of Response	1.847407
Observations (or Sum Wgts)	54

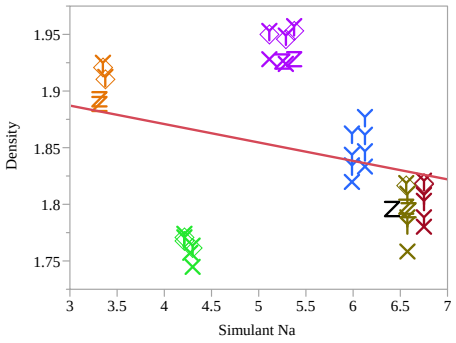
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01602171	0.016022	3.5230
Error	52	0.23648532	0.004548	Prob > F
C. Total	53	0.25250704		0.0661

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8132849	0.020365	89.04	<.0001*
Dry Blend Na	0.0687142	0.036609	1.88	0.0661

Bivariate Fit of Density By Simulant Na



Linear Fit

Linear Fit

Density = 1.9359939 - 0.0162622*Simulant Na

Summary of Fit

RSquare	0.071892
RSquare Adj	0.054043
Root Mean Square Error	0.067133
Mean of Response	1.847407
Observations (or Sum Wgts)	54

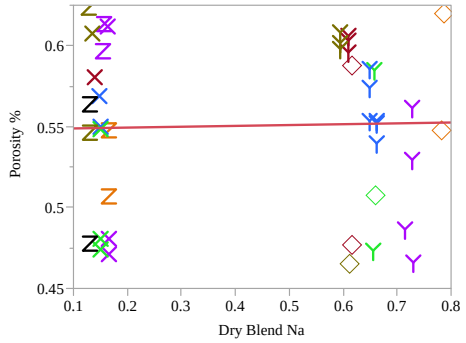
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01815317	0.018153	4.0279
Error	52	0.23435387	0.004507	Prob > F
C. Total	53	0.25250704		0.0500*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.9359939	0.045075	42.95	<.0001*
Simulant Na	-0.016262	0.008103	-2.01	0.0500*

Bivariate Fit of Porosity % By Dry Blend Na



Linear Fit

Linear Fit

Porosity % = 0.5483624 + 0.0052049*Dry Blend Na

Summary of Fit

RSquare	0.000702
RSquare Adj	-0.02428
Root Mean Square Error	0.051635
Mean of Response	0.550658
Observations (or Sum Wgts)	42

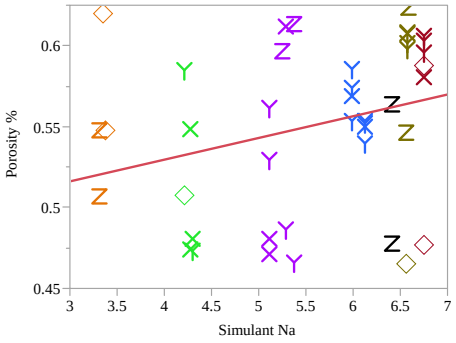
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00007489	0.000075	0.0281
Error	40	0.10664659	0.002666	Prob > F
C. Total	41	0.10672149		0.8677

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5483624	0.015845	34.61	<.0001*
Dry Blend Na	0.0052049	0.031055	0.17	0.8677

Bivariate Fit of Porosity % By Simulant Na



Linear Fit

Linear Fit

Porosity % = 0.4759497 + 0.0134229*Simulant Na

Summary of Fit

RSquare	0.084667
RSquare Adj	0.061784
Root Mean Square Error	0.049418
Mean of Response	0.550658
Observations (or Sum Wgts)	42

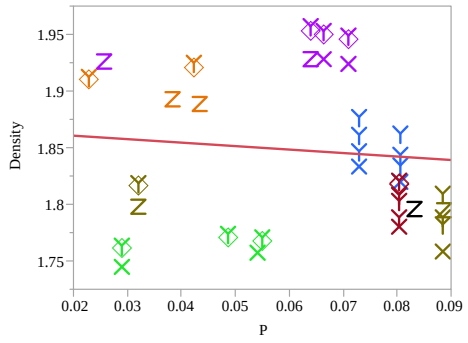
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00903580	0.009036	3.6999
Error	40	0.09768569	0.002442	Prob > F
C. Total	41	0.10672149		0.0616

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.4759497	0.039581	12.02	<.0001*
Simulant Na	0.0134229	0.006978	1.92	0.0616

Bivariate Fit of Density By P



Linear Fit

Linear Fit

Density = 1.8667422 - 0.3065776* P

Summary of Fit

RSquare	0.008133
RSquare Adj	-0.01094
Root Mean Square Error	0.0694
Mean of Response	1.847407
Observations (or Sum Wgts)	54

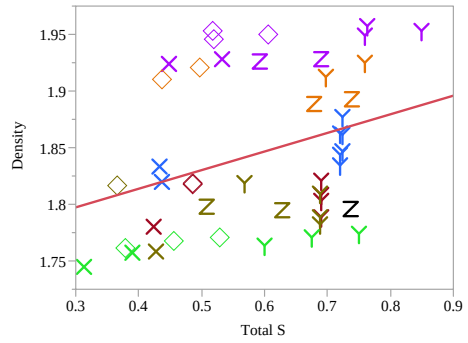
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00205375	0.002054	0.4264
Error	52	0.25045328	0.004816	Prob > F
C. Total	53	0.25250704		0.5166

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8667422	0.031079	60.06	<.0001*
P	-0.306578	0.469492	-0.65	0.5166

Bivariate Fit of Density By Total S



Linear Fit

Linear Fit

Density = 1.7481318 + 0.1642789*Total S

Summary of Fit

RSquare	0.106451
RSquare Adj	0.089267
Root Mean Square Error	0.065871
Mean of Response	1.847407
Observations (or Sum Wgts)	54

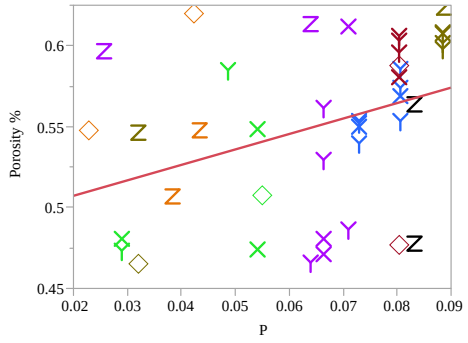
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.02687950	0.026880	6.1949
Error	52	0.22562753	0.004339	Prob > F
C. Total	53	0.25250704		0.0161*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.7481318	0.040881	42.76	<.0001*
Total S	0.1642789	0.066003	2.49	0.0161*

Bivariate Fit of Porosity % By P



Linear Fit

Linear Fit

Porosity % = 0.4881607 + 0.9555121* P

Summary of Fit

RSquare	0.141182
RSquare Adj	0.119712
Root Mean Square Error	0.047868
Mean of Response	0.550658
Observations (or Sum Wgts)	42

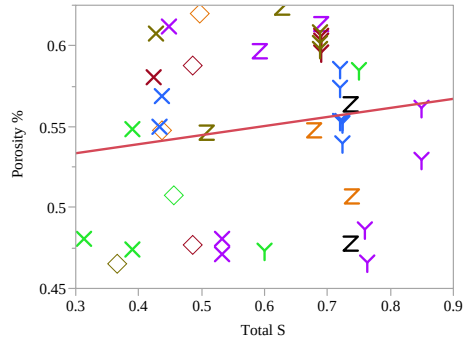
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01506717	0.015067	6.5757
Error	40	0.09165431	0.002291	Prob > F
C. Total	41	0.10672149		0.0142*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.4881607	0.025467	19.17	<.0001*
P	0.9555121	0.37262	2.56	0.0142*

Bivariate Fit of Porosity % By Total S



Linear Fit

Linear Fit

Porosity % = 0.5167589 + 0.056059*Total S

Summary of Fit

RSquare	0.025676
RSquare Adj	0.001318
Root Mean Square Error	0.050986
Mean of Response	0.550658
Observations (or Sum Wgts)	42

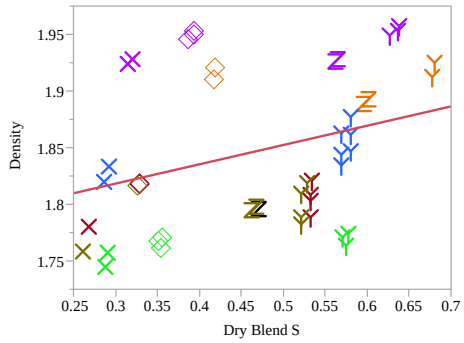
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00274014	0.002740	1.0541
Error	40	0.10398135	0.002600	Prob > F
C. Total	41	0.10672149		0.3107

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5167589	0.033942	15.22	<.0001*
Total S	0.056059	0.054602	1.03	0.3107

Bivariate Fit of Density By Dry Blend S



Linear Fit

Linear Fit

Density = 1.767311 + 0.17022*Dry Blend S

Summary of Fit

RSquare	0.09476
RSquare Adj	0.077352
Root Mean Square Error	0.066301
Mean of Response	1.847407
Observations (or Sum Wgts)	54

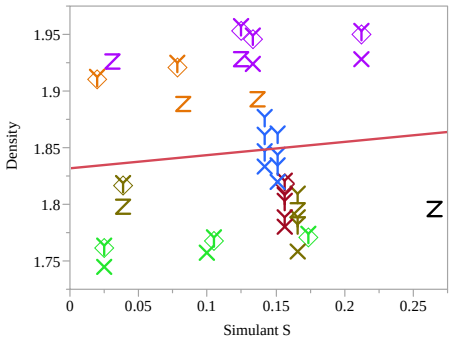
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.02392761	0.023928	5.4433
Error	52	0.22857943	0.004396	Prob > F
C. Total	53	0.25250704		0.0235*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.767311	0.035496	49.79	<.0001*
Dry Blend S	0.17022	0.072959	2.33	0.0235*

Bivariate Fit of Density By Simulant S



Linear Fit

Linear Fit

Density = 1.8317942 + 0.11672*Simulant S

Summary of Fit

RSquare	0.010645
RSquare Adj	-0.00838
Root Mean Square Error	0.069312
Mean of Response	1.847407
Observations (or Sum Wgts)	54

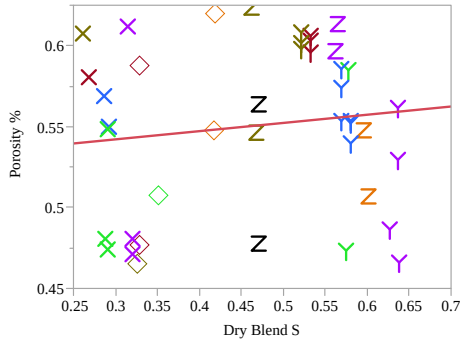
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00268788	0.002688	0.5595
Error	52	0.24981916	0.004804	Prob > F
C. Total	53	0.25250704		0.4578

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8317942	0.022906	79.97	<.0001*
Simulant S	0.11672	0.156046	0.75	0.4578

Bivariate Fit of Porosity % By Dry Blend S



Linear Fit

Linear Fit

Porosity % = 0.5269494 + 0.05078*Dry Blend S

Summary of Fit

RSquare	0.016079
RSquare Adj	-0.00852
Root Mean Square Error	0.051236
Mean of Response	0.550658
Observations (or Sum Wgts)	42

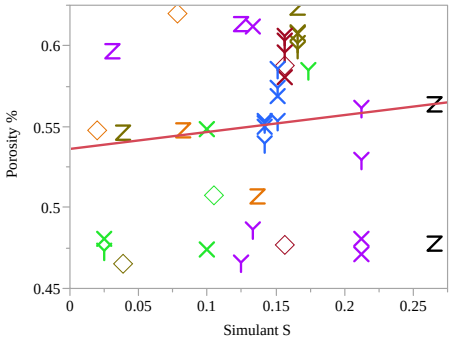
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00171599	0.001716	0.6537
Error	40	0.10500549	0.002625	Prob > F
C. Total	41	0.10672149		0.4236

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5269494	0.030371	17.35	<.0001*
Dry Blend S	0.05078	0.062807	0.81	0.4236

Bivariate Fit of Porosity % By Simulant S



Linear Fit

Linear Fit

Porosity % = 0.5362211 + 0.1047561*Simulant S

Summary of Fit

RSquare	0.014808
RSquare Adj	-0.00982
Root Mean Square Error	0.051269
Mean of Response	0.550658
Observations (or Sum Wgts)	42

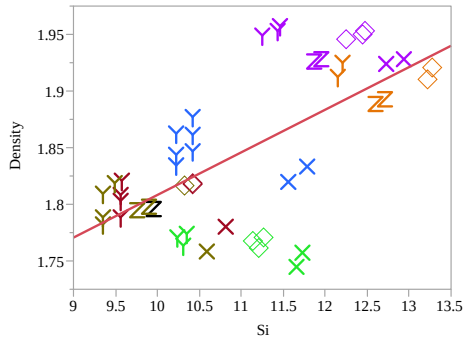
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00158032	0.001580	0.6012
Error	40	0.10514116	0.002629	Prob > F
C. Total	41	0.10672149		0.4427

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5362211	0.02023	26.51	<.0001*
Simulant S	0.1047561	0.135102	0.78	0.4427

Bivariate Fit of Density By Si



Linear Fit

Linear Fit

Density = 1.431964 + 0.037632* Si

Summary of Fit

RSquare	0.407339
RSquare Adj	0.395942
Root Mean Square Error	0.053646
Mean of Response	1.847407
Observations (or Sum Wgts)	54

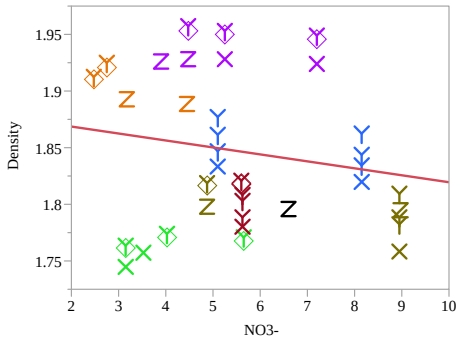
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.10285602	0.102856	35.7399
Error	52	0.14965102	0.002878	Prob > F
C. Total	53	0.25250704		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.431964	0.069874	20.49	<.0001*
Si	0.037632	0.006295	5.98	<.0001*

Bivariate Fit of Density By NO3-



Linear Fit

Linear Fit

Density = 1.880915 - 0.0061363* NO3-

Summary of Fit

RSquare	0.026206
RSquare Adj	0.007479
Root Mean Square Error	0.068765
Mean of Response	1.847407
Observations (or Sum Wgts)	54

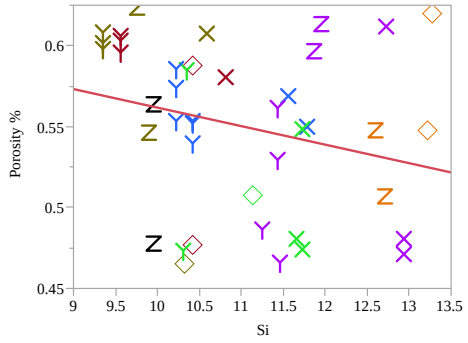
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00661715	0.006617	1.3994
Error	52	0.24588989	0.004729	Prob > F
C. Total	53	0.25250704		0.2422

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.880915	0.029831	63.05	<.0001*
NO3-	-0.006136	0.005187	-1.18	0.2422

Bivariate Fit of Porosity % By Si



Linear Fit

Linear Fit

Porosity % = 0.6762026 - 0.0114416* Si

Summary of Fit

RSquare	0.06748
RSquare Adj	0.044167
Root Mean Square Error	0.04988
Mean of Response	0.550658
Observations (or Sum Wgts)	42

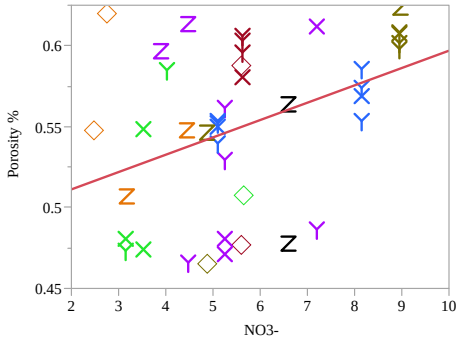
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00720153	0.007202	2.8945
Error	40	0.09951995	0.002488	Prob > F
C. Total	41	0.10672149		0.0966

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.6762026	0.074193	9.11	<.0001*
Si	-0.011442	0.006725	-1.70	0.0966

Bivariate Fit of Porosity % By NO3-



Linear Fit

Linear Fit

Porosity % = 0.48983 + 0.0107105* NO3-

Summary of Fit

RSquare	0.156548
RSquare Adj	0.135461
Root Mean Square Error	0.047438
Mean of Response	0.550658
Observations (or Sum Wgts)	42

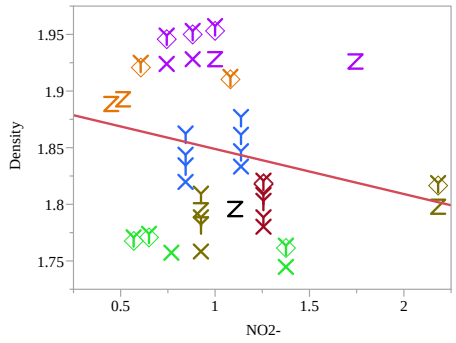
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01670698	0.016707	7.4241
Error	40	0.09001450	0.002250	Prob > F
C. Total	41	0.10672149		0.0095*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.48983	0.023494	20.85	<.0001*
NO3-	0.0107105	0.003931	2.72	0.0095*

Bivariate Fit of Density By NO2-



Linear Fit

Linear Fit

Density = 1.8886455 - 0.0397192* NO2-

Summary of Fit

RSquare	0.048181
RSquare Adj	0.029876
Root Mean Square Error	0.067985
Mean of Response	1.847407
Observations (or Sum Wgts)	54

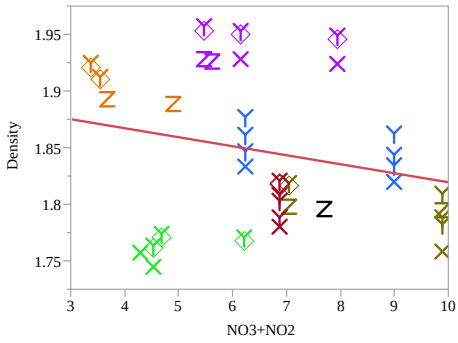
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01216594	0.012166	2.6322
Error	52	0.24034110	0.004622	Prob > F
C. Total	53	0.25250704		0.1108

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8886455	0.027049	69.82	<.0001*
NO2-	-0.039719	0.024482	-1.62	0.1108

Bivariate Fit of Density By NO3+NO2



Linear Fit

Linear Fit

Density = 1.8991164 - 0.0079567* NO3+NO2

Summary of Fit

RSquare	0.043632
RSquare Adj	0.025241
Root Mean Square Error	0.068147
Mean of Response	1.847407
Observations (or Sum Wgts)	54

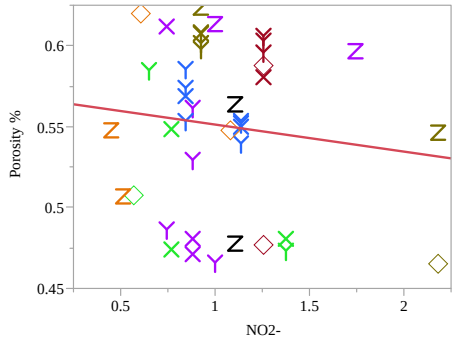
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01101751	0.011018	2.3724
Error	52	0.24148953	0.004644	Prob > F
C. Total	53	0.25250704		0.1296

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8991164	0.034829	54.53	<.0001*
NO3+NO2	-0.007957	0.005166	-1.54	0.1296

Bivariate Fit of Porosity % By NO2-



Linear Fit

Linear Fit

Porosity % = 0.5680015 - 0.0167143* NO2-

Summary of Fit

RSquare	0.014391
RSquare Adj	-0.01025
Root Mean Square Error	0.05128
Mean of Response	0.550658
Observations (or Sum Wgts)	42

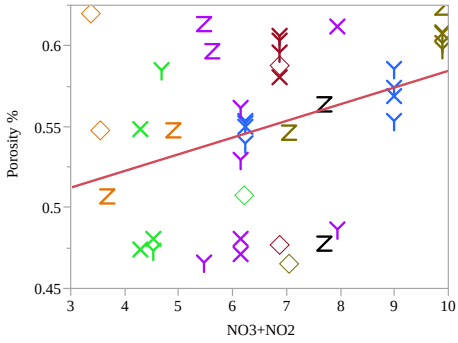
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00153579	0.001536	0.5840
Error	40	0.10518569	0.002630	Prob > F
C. Total	41	0.10672149		0.4492

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5680015	0.024034	23.63	<.0001*
NO2-	-0.016714	0.021871	-0.76	0.4492

Bivariate Fit of Porosity % By NO3+NO2



Linear Fit

Linear Fit

Porosity % = 0.4813931 + 0.0103119* NO3+NO2

Summary of Fit

RSquare	0.141844
RSquare Adj	0.12039
Root Mean Square Error	0.04785
Mean of Response	0.550658
Observations (or Sum Wgts)	42

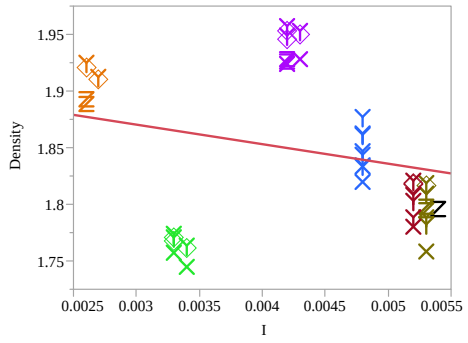
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01513781	0.015138	6.6116
Error	40	0.09158367	0.002290	Prob > F
C. Total	41	0.10672149		0.0140*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.4813931	0.027931	17.23	<.0001*
NO3+NO2	0.0103119	0.00401	2.57	0.0140*

Bivariate Fit of Density By I



Linear Fit

Linear Fit

Density = 1.9221338 - 17.229834* I

Summary of Fit

RSquare	0.051737
RSquare Adj	0.033501
Root Mean Square Error	0.067858
Mean of Response	1.847407
Observations (or Sum Wgts)	54

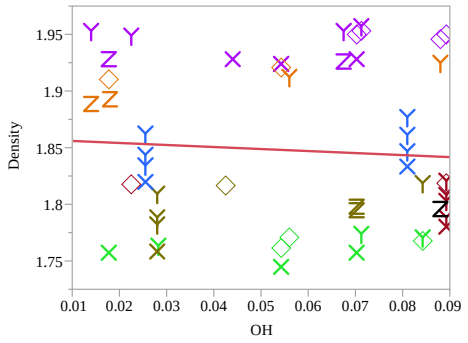
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.01306392	0.013064	2.8371
Error	52	0.23944312	0.004605	Prob > F
C. Total	53	0.25250704		0.0981

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.9221338	0.045315	42.42	<.0001*
I	-17.22983	10.22925	-1.68	0.0981

Bivariate Fit of Density By OH



Linear Fit

Linear Fit

Density = 1.857726 - 0.1771441* OH

Summary of Fit

RSquare	0.004854
RSquare Adj	-0.01428
Root Mean Square Error	0.069515
Mean of Response	1.847407
Observations (or Sum Wgts)	54

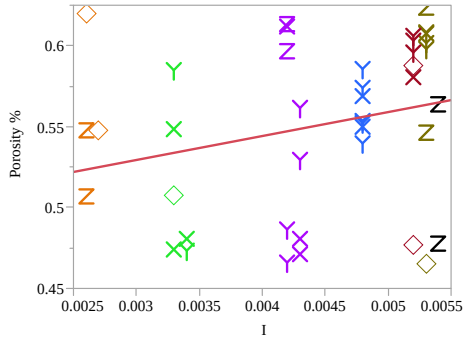
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00122555	0.001226	0.2536
Error	52	0.25128148	0.004832	Prob > F
C. Total	53	0.25250704		0.6167

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.857726	0.022568	82.32	<.0001*
OH	-0.177144	0.351754	-0.50	0.6167

Bivariate Fit of Porosity % By I



Linear Fit

Linear Fit

Porosity % = 0.4849819 + 14.81417* I

Summary of Fit

RSquare	0.066695
RSquare Adj	0.043363
Root Mean Square Error	0.049901
Mean of Response	0.550658
Observations (or Sum Wgts)	42

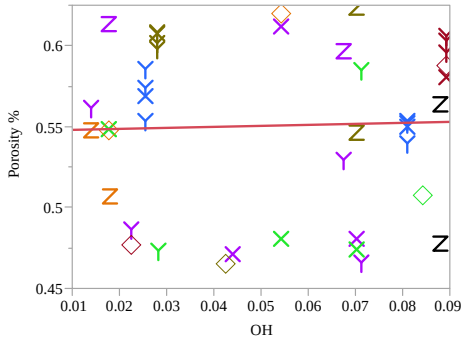
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00711781	0.007118	2.8585
Error	40	0.09960368	0.002490	Prob > F
C. Total	41	0.10672149		0.0987

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.4849819	0.039601	12.25	<.0001*
I	14.81417	8.762175	1.69	0.0987

Bivariate Fit of Porosity % By OH



Linear Fit

Linear Fit

Porosity % = 0.5474034 + 0.0614195* OH

Summary of Fit

RSquare	0.001116
RSquare Adj	-0.02386
Root Mean Square Error	0.051624
Mean of Response	0.550658
Observations (or Sum Wgts)	42

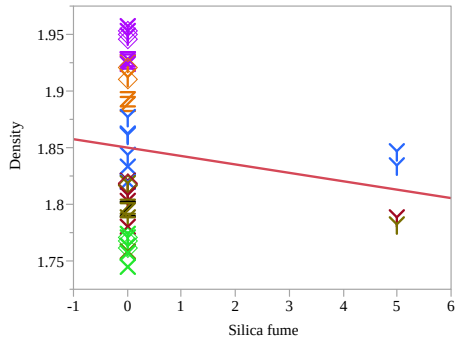
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00011909	0.000119	0.0447
Error	40	0.10660240	0.002665	Prob > F
C. Total	41	0.10672149		0.8337

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5474034	0.017335	31.58	<.0001*
OH	0.0614195	0.290552	0.21	0.8337

Bivariate Fit of Density By Silica fume



Linear Fit

Linear Fit

Density = 1.85016 - 0.007432* Silica fume

Summary of Fit

RSquare	0.020254
RSquare Adj	0.001413
Root Mean Square Error	0.068975
Mean of Response	1.847407
Observations (or Sum Wgts)	54

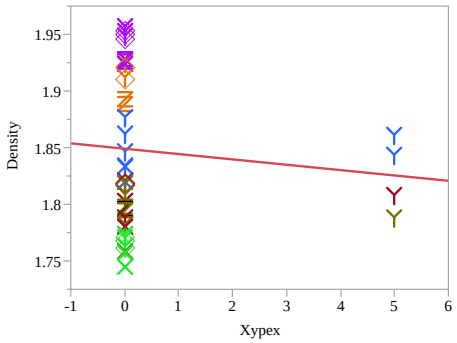
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00511432	0.005114	1.0750
Error	52	0.24739272	0.004758	Prob > F
C. Total	53	0.25250704		0.3046

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.85016	0.009755	189.67	<.0001*
Silica fume	-0.007432	0.007168	-1.04	0.3046

Bivariate Fit of Density By Xypex



Linear Fit

Linear Fit

Density = 1.84916 - 0.004732* Xypex

Summary of Fit

RSquare	0.008211
RSquare Adj	-0.01086
Root Mean Square Error	0.069398
Mean of Response	1.847407
Observations (or Sum Wgts)	54

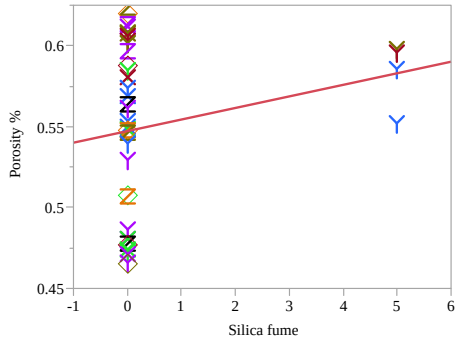
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00207332	0.002073	0.4305
Error	52	0.25043372	0.004816	Prob > F
C. Total	53	0.25250704		0.5146

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.84916	0.009814	188.41	<.0001*
Xypex	-0.004732	0.007212	-0.66	0.5146

Bivariate Fit of Porosity % By Silica fume



Linear Fit

Linear Fit

Porosity % = 0.5472524 + 0.0071518* Silica fume

Summary of Fit

RSquare	0.043362
RSquare Adj	0.019446
Root Mean Square Error	0.050521
Mean of Response	0.550658
Observations (or Sum Wgts)	42

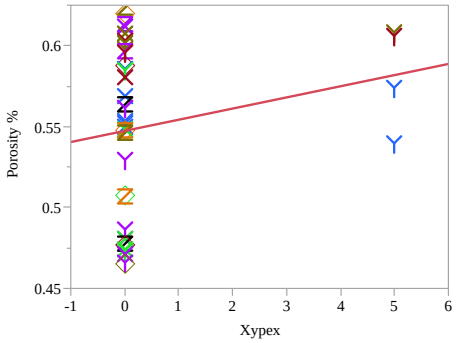
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00462769	0.004628	1.8131
Error	40	0.10209379	0.002552	Prob > F
C. Total	41	0.10672149		0.1857

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5472524	0.008196	66.77	<.0001*
Silica fume	0.0071518	0.005311	1.35	0.1857

Bivariate Fit of Porosity % By Xypex



Linear Fit

Linear Fit

Porosity % = 0.5473749 + 0.0068945* Xypex

Summary of Fit

RSquare	0.040298
RSquare Adj	0.016306
Root Mean Square Error	0.050602
Mean of Response	0.550658
Observations (or Sum Wgts)	42

Analysis of Variance

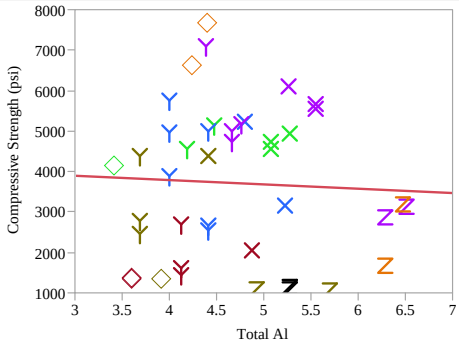
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.00430067	0.004301	1.6796
Error	40	0.10242081	0.002561	Prob > F
C. Total	41	0.10672149		0.2024

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.5473749	0.008209	66.68	<.0001*
Xypex	0.0068945	0.00532	1.30	0.2024

Fit Group

Bivariate Fit of Compressive Strength (psi) By Total Al



Linear Fit

Linear Fit

Compressive Strength (psi) = 4218.8536 - 107.27093*Total Al

Summary of Fit

RSquare	0.002256
RSquare Adj	-0.02269
Root Mean Square Error	1857.08
Mean of Response	3716.095
Observations (or Sum Wgts)	42

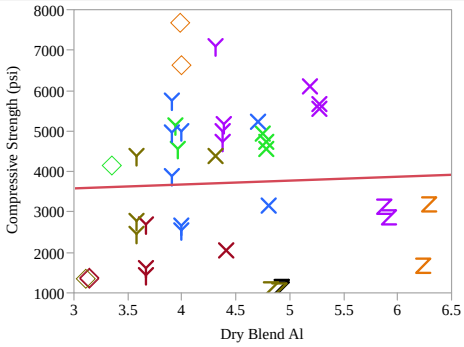
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	311971	311971	0.0905
Error	40	137949825	3448746	Prob > F
C. Total	41	138261796		0.7652

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4218.8536	1695.986	2.49	0.0171*
Total Al	-107.2709	356.6611	-0.30	0.7652

Bivariate Fit of Compressive Strength (psi) By Dry Blend Al



Linear Fit

Linear Fit

Compressive Strength (psi) = 3294.9113 + 96.286028*Dry Blend Al

Summary of Fit

RSquare	0.001791
RSquare Adj	-0.02316
Root Mean Square Error	1857.513
Mean of Response	3716.095
Observations (or Sum Wgts)	42

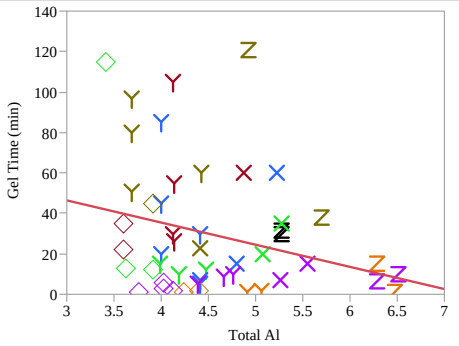
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	247594	247594	0.0718
Error	40	138014202	3450355	Prob > F
C. Total	41	138261796		0.7902

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3294.9113	1598.206	2.06	0.0458*
Dry Blend Al	96.286028	359.4392	0.27	0.7902

Bivariate Fit of Gel Time (min) By Total Al



Linear Fit

Linear Fit

Gel Time (min) = 79.300472 - 10.94538*Total Al

Summary of Fit

RSquare	0.075779
RSquare Adj	0.058006
Root Mean Square Error	29.78091
Mean of Response	29.24074
Observations (or Sum Wgts)	54

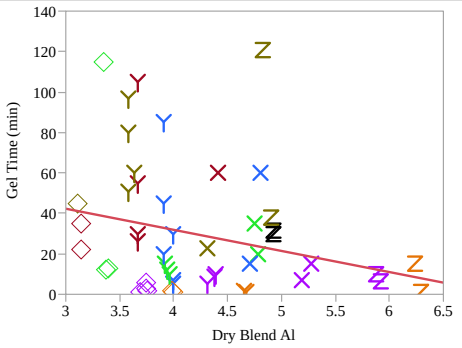
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3781.423	3781.42	4.2636
Error	52	46118.947	886.90	Prob > F
C. Total	53	49900.370		0.0439*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	79.300472	24.58009	3.23	0.0022*
Total Al	-10.94538	5.300798	-2.06	0.0439*

Bivariate Fit of Gel Time (min) By Dry Blend Al



Linear Fit

Linear Fit

Gel Time (min) = 73.638928 - 10.440295*Dry Blend Al

Summary of Fit

RSquare	0.068651
RSquare Adj	0.05074
Root Mean Square Error	29.89555
Mean of Response	29.24074
Observations (or Sum Wgts)	54

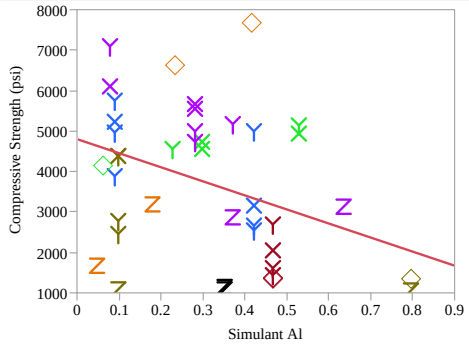
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3425.687	3425.69	3.8330
Error	52	46474.684	893.74	Prob > F
C. Total	53	49900.370		0.0556

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	73.638928	23.03967	3.20	0.0024*
Dry Blend Al	-10.4403	5.33268	-1.96	0.0556

Bivariate Fit of Compressive Strength (psi) By Simulant Al



Linear Fit

Compressive Strength (psi) = 4802.0453 - 3474.7755*Simulant Al

Summary of Fit

RSquare	0.137739
RSquare Adj	0.116183
Root Mean Square Error	1726.396
Mean of Response	3716.095
Observations (or Sum Wgts)	42

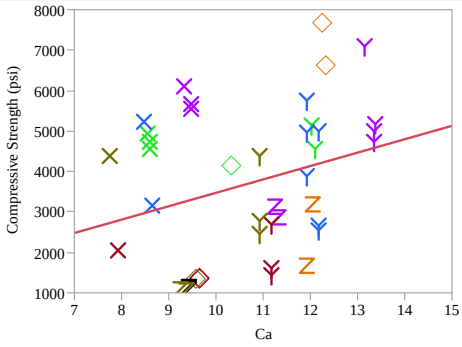
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	19044094	19044094	6.3897
Error	40	119217702	2980442.5	Prob > F
C. Total	41	138261796		0.0155*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4802.0453	505.4938	9.50	<.0001*
Simulant Al	-3474.776	1374.634	-2.53	0.0155*

Bivariate Fit of Compressive Strength (psi) By Ca



Linear Fit

Compressive Strength (psi) = 164.82906 + 331.02324* Ca

Summary of Fit

RSquare	0.084516
RSquare Adj	0.061629
Root Mean Square Error	1778.88
Mean of Response	3716.095
Observations (or Sum Wgts)	42

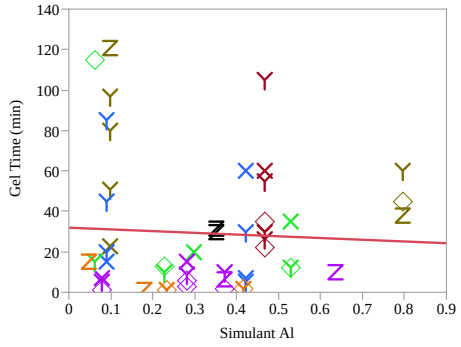
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11685299	11685299	3.6927
Error	40	126576496	3164412.4	Prob > F
C. Total	41	138261796		0.0618

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	164.82906	1868.307	0.09	0.9301
Ca	331.02324	172.2603	1.92	0.0618

Bivariate Fit of Gel Time (min) By Simulant Al



Linear Fit

Gel Time (min) = 31.958325 - 8.4654083*Simulant Al

Summary of Fit

RSquare	0.002941
RSquare Adj	-0.01623
Root Mean Square Error	30.93219
Mean of Response	29.24074
Observations (or Sum Wgts)	54

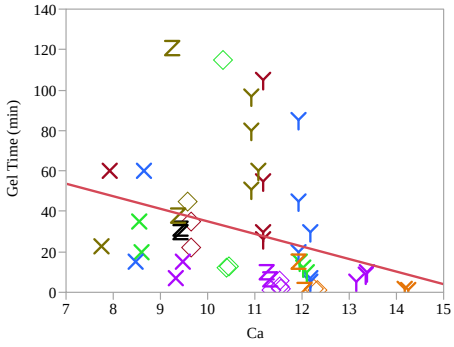
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	146.746	146.746	0.1534
Error	52	49753.625	956.800	Prob > F
C. Total	53	49900.370		0.6969

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	31.958325	8.11612	3.94	0.0002*
Simulant Al	-8.465408	21.61603	-0.39	0.6969

Bivariate Fit of Gel Time (min) By Ca



Linear Fit

Gel Time (min) = 97.186697 - 6.2056737* Ca

Summary of Fit

RSquare	0.102659
RSquare Adj	0.085403
Root Mean Square Error	29.34465
Mean of Response	29.24074
Observations (or Sum Wgts)	54

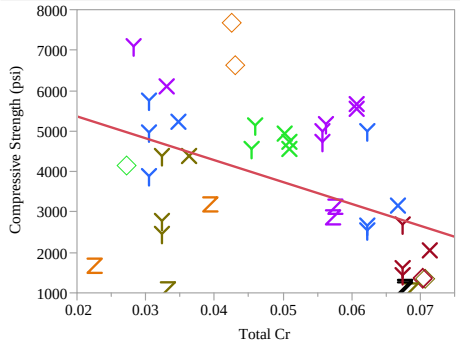
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5122.725	5122.73	5.9490
Error	52	44777.645	861.11	Prob > F
C. Total	53	49900.370		0.0182*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	97.186697	28.14225	3.45	0.0011*
Ca	-6.205674	2.544294	-2.44	0.0182*

Bivariate Fit of Compressive Strength (psi) By Total Cr



Linear Fit

Linear Fit

Compressive Strength (psi) = 6444.9082 - 54071.591*Total Cr

Summary of Fit

RSquare	0.20786
RSquare Adj	0.188056
Root Mean Square Error	1654.711
Mean of Response	3716.095
Observations (or Sum Wgts)	42

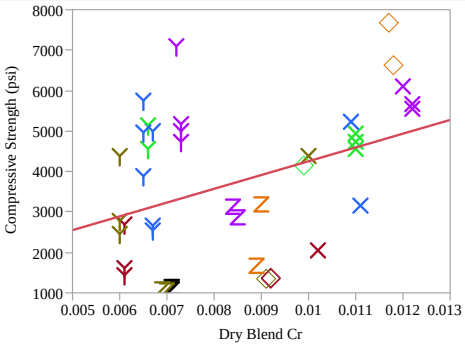
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	28739087	28739087	10.4961
Error	40	109522709	2738067.7	Prob > F
C. Total	41	138261796		0.0024*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6444.9082	880.1347	7.32	<.0001*
Total Cr	-54071.59	16689.94	-3.24	0.0024*

Bivariate Fit of Compressive Strength (psi) By Dry Blend Cr



Linear Fit

Linear Fit

Compressive Strength (psi) = 849.35619 + 340506.34*Dry Blend Cr

Summary of Fit

RSquare	0.151218
RSquare Adj	0.129998
Root Mean Square Error	1712.849
Mean of Response	3716.095
Observations (or Sum Wgts)	42

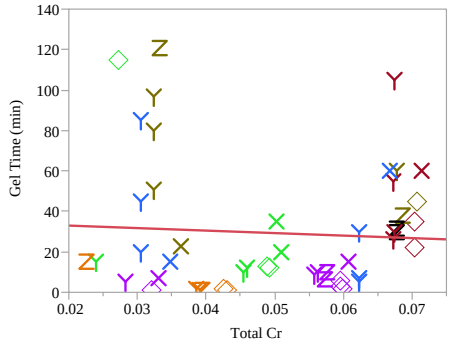
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	20907676	20907676	7.1264
Error	40	117354120	2933853	Prob > F
C. Total	41	138261796		0.0109*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	849.35619	1105.923	0.77	0.4470
Dry Blend Cr	340506.34	127553.2	2.67	0.0109*

Bivariate Fit of Gel Time (min) By Total Cr



Linear Fit

Linear Fit

Gel Time (min) = 35.533059 - 124.34956*Total Cr

Summary of Fit

RSquare	0.003799
RSquare Adj	-0.01536
Root Mean Square Error	30.91887
Mean of Response	29.24074
Observations (or Sum Wgts)	54

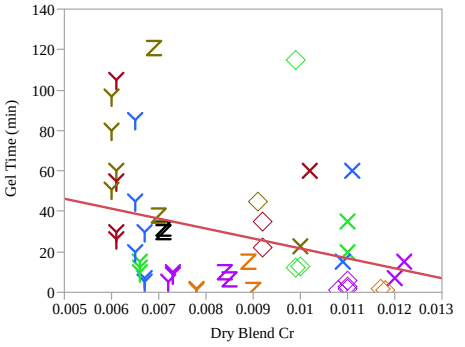
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	189.580	189.580	0.1983
Error	52	49710.790	955.977	Prob > F
C. Total	53	49900.370		0.6579

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	35.533059	14.74301	2.41	0.0195*
Total Cr	-124.3496	279.2361	-0.45	0.6579

Bivariate Fit of Gel Time (min) By Dry Blend Cr



Linear Fit

Linear Fit

Gel Time (min) = 70.892606 - 4913.064*Dry Blend Cr

Summary of Fit

RSquare	0.111593
RSquare Adj	0.094508
Root Mean Square Error	29.19821
Mean of Response	29.24074
Observations (or Sum Wgts)	54

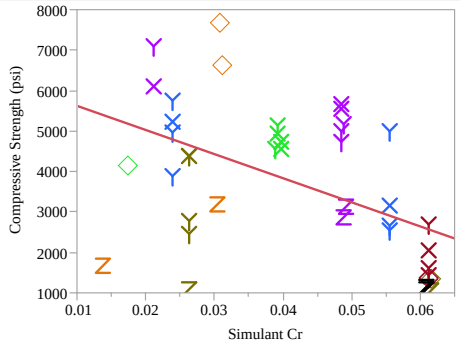
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5568.521	5568.52	6.5317
Error	52	44331.849	852.54	Prob > F
C. Total	53	49900.370		0.0136*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	70.892606	16.77486	4.23	<.0001*
Dry Blend Cr	-4913.064	1922.378	-2.56	0.0136*

Bivariate Fit of Compressive Strength (psi) By Simulant Cr



Linear Fit

Linear Fit

Compressive Strength (psi) = 6221.9378 - 59595.349*Simulant Cr

Summary of Fit

RSquare	0.256087
RSquare Adj	0.23749
Root Mean Square Error	1603.548
Mean of Response	3716.095
Observations (or Sum Wgts)	42

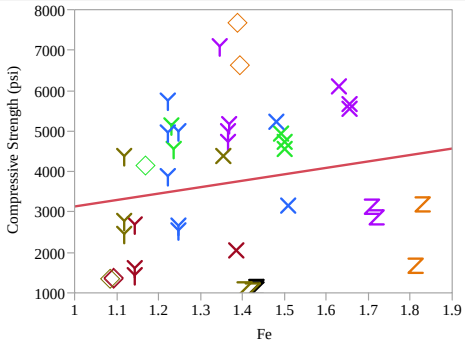
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	35407110	35407110	13.7698
Error	40	102854686	2571367.1	Prob > F
C. Total	41	138261796		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6221.9378	719.1941	8.65	<.0001*
Simulant Cr	-59595.35	16060.13	-3.71	0.0006*

Bivariate Fit of Compressive Strength (psi) By Fe



Linear Fit

Linear Fit

Compressive Strength (psi) = 1546.7197 + 1591.0206* Fe

Summary of Fit

RSquare	0.031805
RSquare Adj	0.007601
Root Mean Square Error	1829.374
Mean of Response	3716.095
Observations (or Sum Wgts)	42

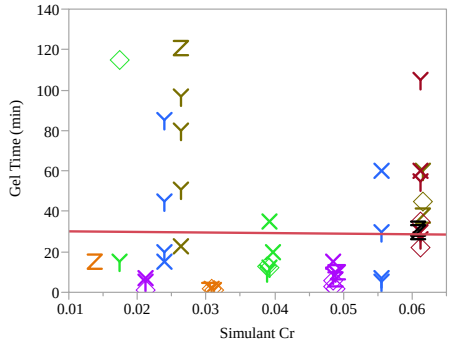
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4397469	4397469	1.3140
Error	40	133864327	3346608	Prob > F
C. Total	41	138261796		0.2585

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1546.7197	1913.436	0.81	0.4237
Fe	1591.0206	1387.96	1.15	0.2585

Bivariate Fit of Gel Time (min) By Simulant Cr



Linear Fit

Linear Fit

Gel Time (min) = 30.491408 - 29.693997*Simulant Cr

Summary of Fit

RSquare	0.000221
RSquare Adj	-0.01901
Root Mean Square Error	30.97435
Mean of Response	29.24074
Observations (or Sum Wgts)	54

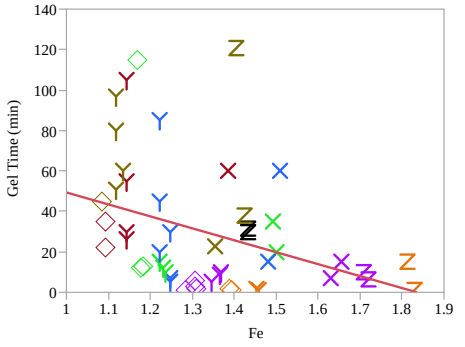
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11.041	11.041	0.0115
Error	52	49889.329	959.410	Prob > F
C. Total	53	49900.370		0.9150

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	30.491408	12.39678	2.46	0.0173*
Simulant Cr	-29.694	276.7948	-0.11	0.9150

Bivariate Fit of Gel Time (min) By Fe



Linear Fit

Linear Fit

Gel Time (min) = 108.45402 - 59.088584* Fe

Summary of Fit

RSquare	0.138319
RSquare Adj	0.121749
Root Mean Square Error	28.75566
Mean of Response	29.24074
Observations (or Sum Wgts)	54

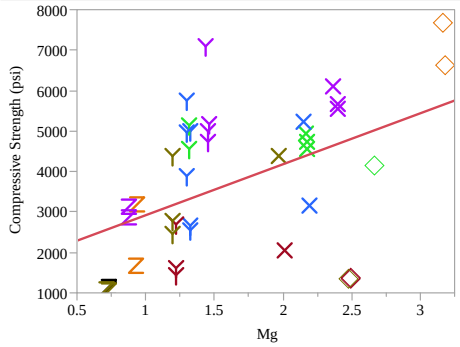
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6902.185	6902.19	8.3472
Error	52	42998.185	826.89	Prob > F
C. Total	53	49900.370		0.0056*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	108.45402	27.69536	3.92	0.0003*
Fe	-59.08858	20.4519	-2.89	0.0056*

Bivariate Fit of Compressive Strength (psi) By Mg



Linear Fit

Linear Fit

Compressive Strength (psi) = 1659.7505 + 1259.8571* Mg

Summary of Fit

RSquare	0.216332
RSquare Adj	0.19674
Root Mean Square Error	1645.839
Mean of Response	3716.095
Observations (or Sum Wgts)	42

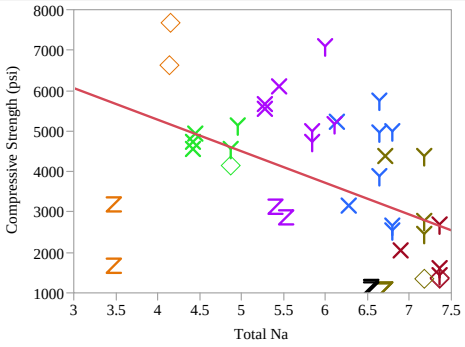
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	29910406	29910406	11.0420
Error	40	108351389	2708784.7	Prob > F
C. Total	41	138261796		0.0019*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1659.7505	668.9145	2.48	0.0174*
Mg	1259.8571	379.1381	3.32	0.0019*

Bivariate Fit of Compressive Strength (psi) By Total Na



Linear Fit

Linear Fit

Compressive Strength (psi) = 8407.616 - 781.03742*Total Na

Summary of Fit

RSquare	0.235677
RSquare Adj	0.216569
Root Mean Square Error	1625.398
Mean of Response	3716.095
Observations (or Sum Wgts)	42

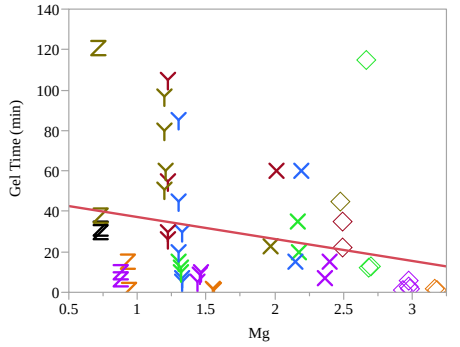
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	32585096	32585096	12.3339
Error	40	105676700	2641917.5	Prob > F
C. Total	41	138261796		0.0011*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8407.616	1359.209	6.19	<.0001*
Total Na	-781.0374	222.3934	-3.51	0.0011*

Bivariate Fit of Gel Time (min) By Mg



Linear Fit

Linear Fit

Gel Time (min) = 48.058823 - 10.826489* Mg

Summary of Fit

RSquare	0.066394
RSquare Adj	0.04844
Root Mean Square Error	29.93174
Mean of Response	29.24074
Observations (or Sum Wgts)	54

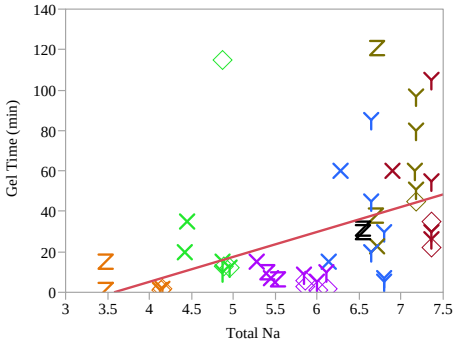
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3313.092	3313.09	3.6980
Error	52	46587.278	895.91	Prob > F
C. Total	53	49900.370		0.0600

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	48.058823	10.59954	4.53	<.0001*
Mg	-10.82649	5.629929	-1.92	0.0600

Bivariate Fit of Gel Time (min) By Total Na



Linear Fit

Linear Fit

Gel Time (min) = -44.20446 + 12.356244*Total Na

Summary of Fit

RSquare	0.210735
RSquare Adj	0.195557
Root Mean Square Error	27.52083
Mean of Response	29.24074
Observations (or Sum Wgts)	54

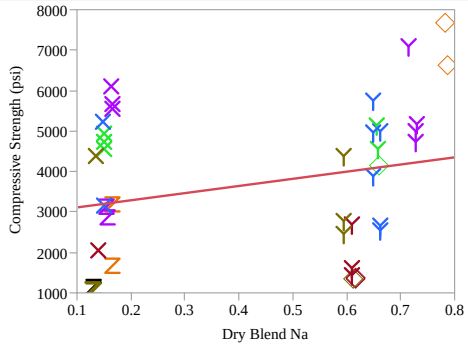
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	10515.779	10515.8	13.8841
Error	52	39384.591	757.4	Prob > F
C. Total	53	49900.370		0.0005*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-44.20446	20.06343	-2.20	0.0320*
Total Na	12.356244	3.316097	3.73	0.0005*

Bivariate Fit of Compressive Strength (psi) By Dry Blend Na



Linear Fit

Linear Fit

Compressive Strength (psi) = 2935.5051 + 1769.8929*Dry Blend Na

Summary of Fit

RSquare	0.062634
RSquare Adj	0.0392
Root Mean Square Error	1800.013
Mean of Response	3716.095
Observations (or Sum Wgts)	42

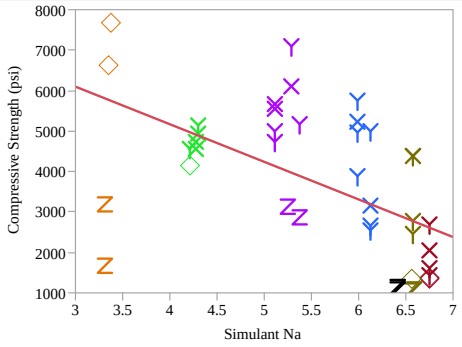
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8659937	8659937	2.6728
Error	40	129601858	3240046	Prob > F
C. Total	41	138261796		0.1099

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2935.5051	552.3736	5.31	<.0001*
Dry Blend Na	1769.8929	1082.593	1.63	0.1099

Bivariate Fit of Compressive Strength (psi) By Simulant Na



Linear Fit

Linear Fit

Compressive Strength (psi) = 8889.2756 - 929.46609*Simulant Na

Summary of Fit

RSquare	0.313359
RSquare Adj	0.296193
Root Mean Square Error	1540.587
Mean of Response	3716.095
Observations (or Sum Wgts)	42

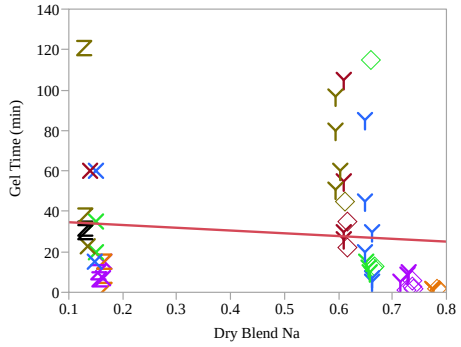
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	43325524	43325524	18.2546
Error	40	94936272	2373406.8	Prob > F
C. Total	41	138261796		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8889.2756	1233.913	7.20	<.0001*
Simulant Na	-929.4661	217.5443	-4.27	0.0001*

Bivariate Fit of Gel Time (min) By Dry Blend Na



Linear Fit

Linear Fit

Gel Time (min) = 36.016365 - 13.644435*Dry Blend Na

Summary of Fit

RSquare	0.01266
RSquare Adj	-0.00633
Root Mean Square Error	30.78107
Mean of Response	29.24074
Observations (or Sum Wgts)	54

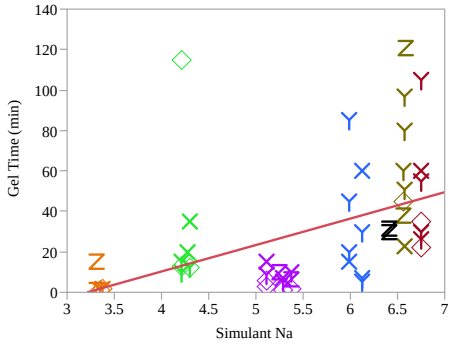
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	631.723	631.723	0.6667
Error	52	49268.647	947.474	Prob > F
C. Total	53	49900.370		0.4179

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	36.016365	9.295235	3.87	0.0003*
Dry Blend Na	-13.64444	16.70998	-0.82	0.4179

Bivariate Fit of Gel Time (min) By Simulant Na



Linear Fit

Linear Fit

Gel Time (min) = -41.97042 + 13.07251*Simulant Na

Summary of Fit

RSquare	0.235077
RSquare Adj	0.220367
Root Mean Square Error	27.09312
Mean of Response	29.24074
Observations (or Sum Wgts)	54

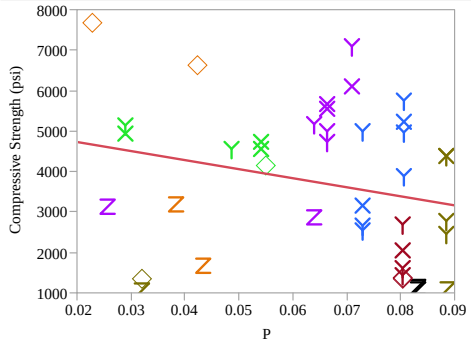
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11730.430	11730.4	15.9807
Error	52	38169.940	734.0	Prob > F
C. Total	53	49900.370		0.0002*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-41.97042	18.19108	-2.31	0.0251*
Simulant Na	13.07251	3.2701	4.00	0.0002*

Bivariate Fit of Compressive Strength (psi) By P



Linear Fit

Linear Fit

Compressive Strength (psi) = 5176.6696 - 22330.502* P

Summary of Fit

RSquare	0.059519
RSquare Adj	0.036007
Root Mean Square Error	1803.002
Mean of Response	3716.095
Observations (or Sum Wgts)	42

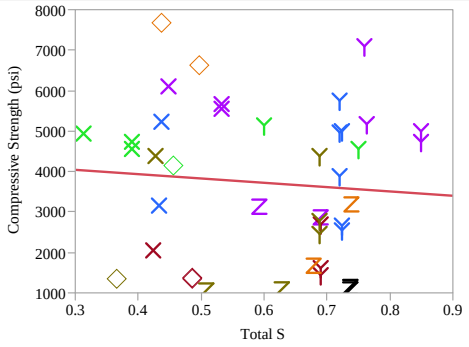
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8229177	8229177	2.5314
Error	40	130032619	3250815	Prob > F
C. Total	41	138261796		0.1195

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	5176.6696	959.229	5.40	<.0001*
P	-22330.5	14035.13	-1.59	0.1195

Bivariate Fit of Compressive Strength (psi) By Total S



Linear Fit

Linear Fit

Compressive Strength (psi) = 4361.3446 - 1067.0486*Total S

Summary of Fit

RSquare	0.00718
RSquare Adj	-0.01764
Root Mean Square Error	1852.492
Mean of Response	3716.095
Observations (or Sum Wgts)	42

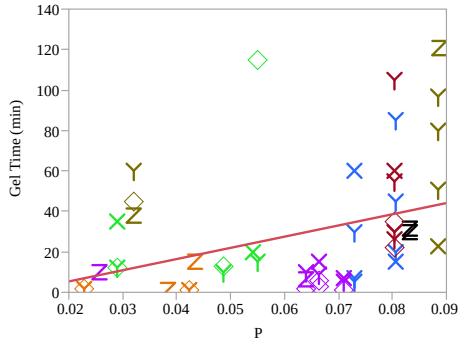
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	992776	992776	0.2893
Error	40	137269020	3431725	Prob > F
C. Total	41	138261796		0.5937

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4361.3446	1233.245	3.54	0.0010*
Total S	-1067.049	1983.878	-0.54	0.5937

Bivariate Fit of Gel Time (min) By P



Linear Fit

Linear Fit

Gel Time (min) = -5.703071 + 554.07735* P

Summary of Fit

RSquare	0.134433
RSquare Adj	0.117787
Root Mean Square Error	28.82044
Mean of Response	29.24074
Observations (or Sum Wgts)	54

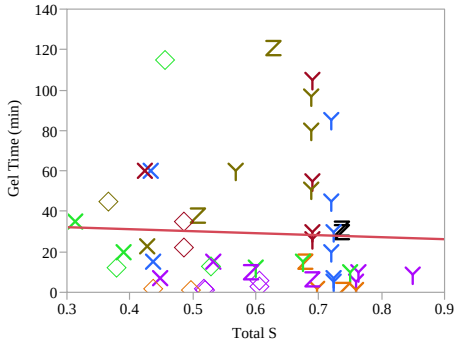
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6708.233	6708.23	8.0762
Error	52	43192.137	830.62	Prob > F
C. Total	53	49900.370		0.0064*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-5.703071	12.90641	-0.44	0.6604
P	554.07735	194.9696	2.84	0.0064*

Bivariate Fit of Gel Time (min) By Total S



Linear Fit

Linear Fit

Gel Time (min) = 35.184123 - 9.8349716*Total S

Summary of Fit

RSquare	0.001931
RSquare Adj	-0.01726
Root Mean Square Error	30.94786
Mean of Response	29.24074
Observations (or Sum Wgts)	54

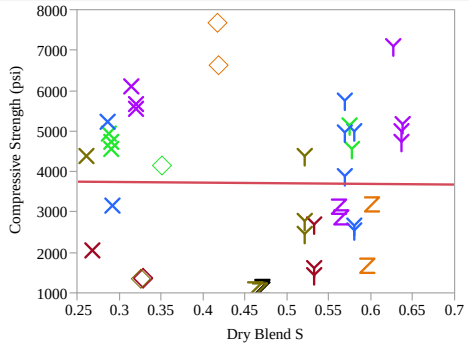
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	96.339	96.339	0.1006
Error	52	49804.031	957.770	Prob > F
C. Total	53	49900.370		0.7524

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	35.184123	19.20709	1.83	0.0727
Total S	-9.834972	31.01	-0.32	0.7524

Bivariate Fit of Compressive Strength (psi) By Dry Blend S



Linear Fit

Linear Fit

Compressive Strength (psi) = 3793.177 - 165.09692*Dry Blend S

Summary of Fit

RSquare	0.000131
RSquare Adj	-0.02487
Root Mean Square Error	1859.057
Mean of Response	3716.095
Observations (or Sum Wgts)	42

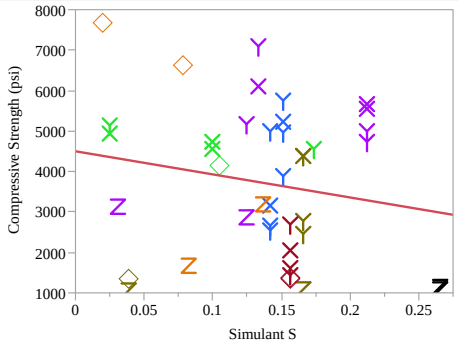
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	18139	18139	0.0052
Error	40	138243657	3456091	Prob > F
C. Total	41	138261796		0.9426

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3793.177	1101.986	3.44	0.0014*
Dry Blend S	-165.0969	2278.909	-0.07	0.9426

Bivariate Fit of Compressive Strength (psi) By Simulant S



Linear Fit

Linear Fit

Compressive Strength (psi) = 4502.2715 - 5704.6066*Simulant S

Summary of Fit

RSquare	0.033895
RSquare Adj	0.009742
Root Mean Square Error	1827.398
Mean of Response	3716.095
Observations (or Sum Wgts)	42

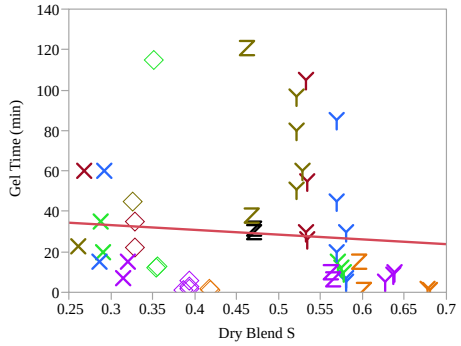
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4686396	4686396	1.4034
Error	40	133575400	3339385	Prob > F
C. Total	41	138261796		0.2432

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4502.2715	721.0614	6.24	<.0001*
Simulant S	-5704.607	4815.479	-1.18	0.2432

Bivariate Fit of Gel Time (min) By Dry Blend S



Linear Fit

Linear Fit

Gel Time (min) = 40.306382 - 23.516583*Dry Blend S

Summary of Fit

RSquare	0.009152
RSquare Adj	-0.0099
Root Mean Square Error	30.83569
Mean of Response	29.24074
Observations (or Sum Wgts)	54

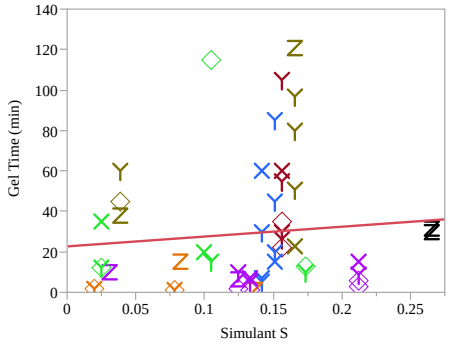
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	456.696	456.696	0.4803
Error	52	49443.675	950.840	Prob > F
C. Total	53	49900.370		0.4914

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	40.306382	16.50896	2.44	0.0181*
Dry Blend S	-23.51658	33.93239	-0.69	0.4914

Bivariate Fit of Gel Time (min) By Simulant S



Linear Fit

Linear Fit

Gel Time (min) = 22.705149 + 48.858146*Simulant S

Summary of Fit

RSquare	0.009438
RSquare Adj	-0.00961
Root Mean Square Error	30.83124
Mean of Response	29.24074
Observations (or Sum Wgts)	54

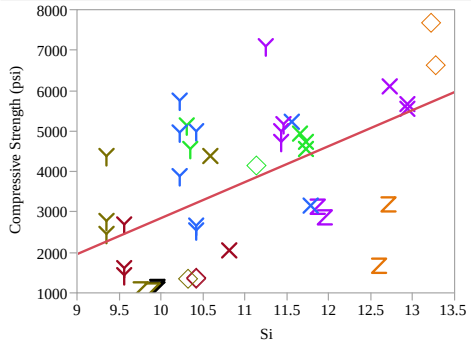
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	470.970	470.970	0.4955
Error	52	49429.401	950.565	Prob > F
C. Total	53	49900.370		0.4846

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	22.705149	10.18888	2.23	0.0302*
Simulant S	48.858146	69.41151	0.70	0.4846

Bivariate Fit of Compressive Strength (psi) By Si



Linear Fit

Linear Fit

Compressive Strength (psi) = -6052.77 + 890.29033* Si

Summary of Fit

RSquare	0.315366
RSquare Adj	0.29825
Root Mean Square Error	1538.333
Mean of Response	3716.095
Observations (or Sum Wgts)	42

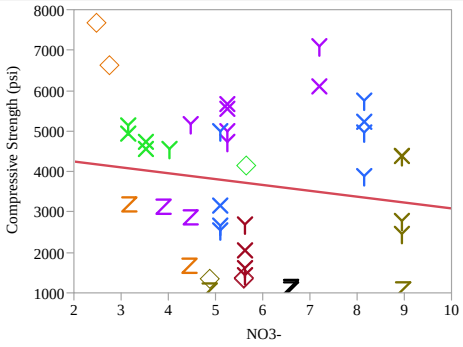
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	43603083	43603083	18.4254
Error	40	94658712	2366467.8	Prob > F
C. Total	41	138261796		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-6052.77	2288.155	-2.65	0.0116*
Si	890.29033	207.407	4.29	0.0001*

Bivariate Fit of Compressive Strength (psi) By NO3-



Linear Fit

Linear Fit

Compressive Strength (psi) = 4538.8302 - 144.8658* NO3-

Summary of Fit

RSquare	0.022106
RSquare Adj	-0.00234
Root Mean Square Error	1838.514
Mean of Response	3716.095
Observations (or Sum Wgts)	42

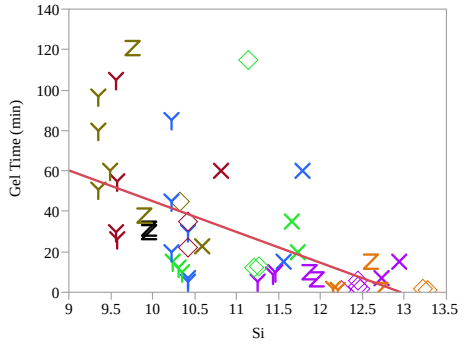
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3056405	3056405	0.9042
Error	40	135205391	3380135	Prob > F
C. Total	41	138261796		0.3474

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	4538.8302	910.5316	4.98	<.0001*
NO3-	-144.8658	152.3447	-0.95	0.3474

Bivariate Fit of Gel Time (min) By Si



Linear Fit

Linear Fit

Gel Time (min) = 197.54592 - 15.24554* Si

Summary of Fit

RSquare	0.338296
RSquare Adj	0.325571
Root Mean Square Error	25.19892
Mean of Response	29.24074
Observations (or Sum Wgts)	54

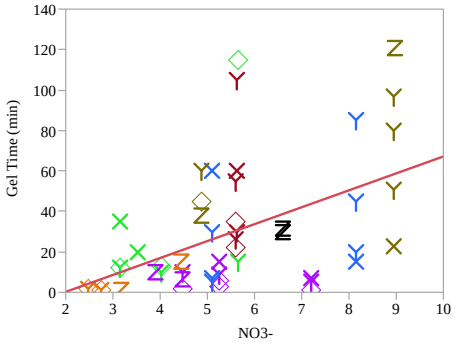
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	16881.110	16881.1	26.5850
Error	52	33019.261	635.0	Prob > F
C. Total	53	49900.370		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	197.54592	32.82179	6.02	<.0001*
Si	-15.24554	2.956816	-5.16	<.0001*

Bivariate Fit of Gel Time (min) By NO3-



Linear Fit

Linear Fit

Gel Time (min) = -16.44378 + 8.3662429* NO3-

Summary of Fit

RSquare	0.246501
RSquare Adj	0.23201
Root Mean Square Error	26.89005
Mean of Response	29.24074
Observations (or Sum Wgts)	54

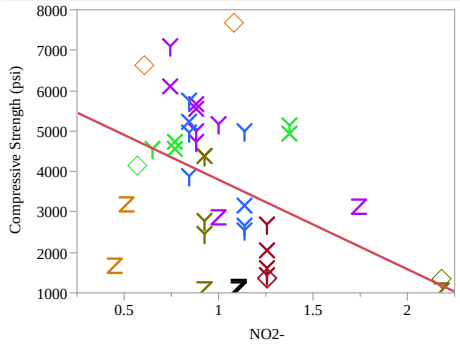
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	12300.482	12300.5	17.0114
Error	52	37599.888	723.1	Prob > F
C. Total	53	49900.370		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-16.44378	11.66522	-1.41	0.1646
NO3-	8.3662429	2.028435	4.12	0.0001*

Bivariate Fit of Compressive Strength (psi) By NO2-



Linear Fit

Linear Fit

Compressive Strength (psi) = 6010.9836 - 2211.6209* NO2-

Summary of Fit

RSquare	0.194482
RSquare Adj	0.174344
Root Mean Square Error	1668.625
Mean of Response	3716.095
Observations (or Sum Wgts)	42

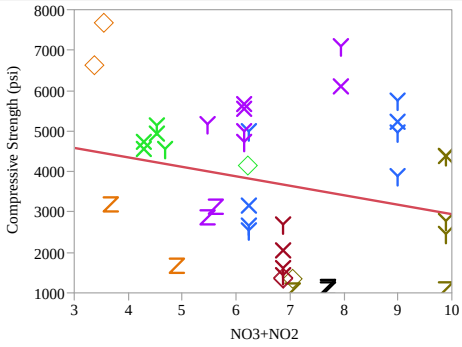
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	26889365	26889365	9.6575
Error	40	111372430	2784310.8	Prob > F
C. Total	41	138261796		0.0035*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	6010.9836	782.0641	7.69	<.0001*
NO2-	-2211.621	711.671	-3.11	0.0035*

Bivariate Fit of Compressive Strength (psi) By NO3+NO2



Linear Fit

Linear Fit

Compressive Strength (psi) = 5285.2179 - 233.60634* NO3+NO2

Summary of Fit

RSquare	0.056189
RSquare Adj	0.032593
Root Mean Square Error	1806.191
Mean of Response	3716.095
Observations (or Sum Wgts)	42

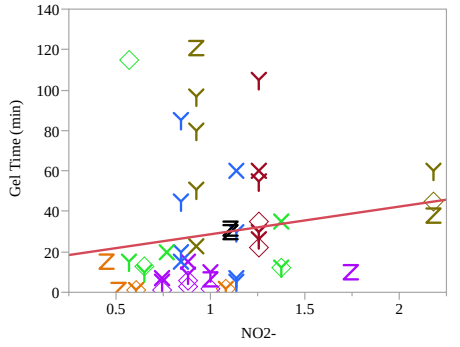
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7768744	7768744	2.3814
Error	40	130493052	3262326	Prob > F
C. Total	41	138261796		0.1307

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	5285.2179	1054.326	5.01	<.0001*
NO3+NO2	-233.6063	151.3815	-1.54	0.1307

Bivariate Fit of Gel Time (min) By NO2-



Linear Fit

Linear Fit

Gel Time (min) = 15.044083 + 13.673762* NO2-

Summary of Fit

RSquare	0.028895
RSquare Adj	0.01022
Root Mean Square Error	30.52695
Mean of Response	29.24074
Observations (or Sum Wgts)	54

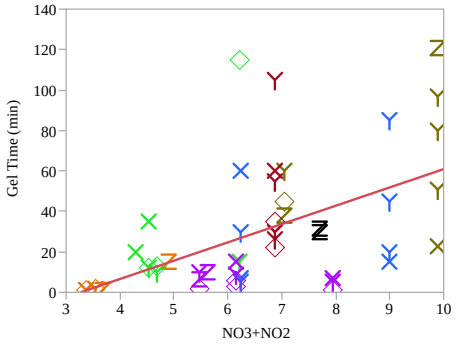
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1441.853	1441.85	1.5472
Error	52	48458.518	931.89	Prob > F
C. Total	53	49900.370		0.2191

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	15.044083	12.14576	1.24	0.2210
NO2-	13.673762	10.99287	1.24	0.2191

Bivariate Fit of Gel Time (min) By NO3+NO2



Linear Fit

Linear Fit

Gel Time (min) = -29.60126 + 9.0542537* NO3+NO2

Summary of Fit

RSquare	0.285906
RSquare Adj	0.272173
Root Mean Square Error	26.17749
Mean of Response	29.24074
Observations (or Sum Wgts)	54

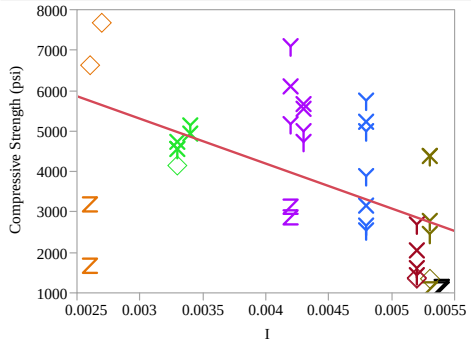
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	14266.808	14266.8	20.8195
Error	52	35633.562	685.3	Prob > F
C. Total	53	49900.370		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-29.60126	13.37888	-2.21	0.0313*
NO3+NO2	9.0542537	1.984345	4.56	<.0001*

Bivariate Fit of Compressive Strength (psi) By I



Linear Fit

Linear Fit

Compressive Strength (psi) = 8637.9473 - 1110192.2* I

Summary of Fit

RSquare	0.289125
RSquare Adj	0.271353
Root Mean Square Error	1567.537
Mean of Response	3716.095
Observations (or Sum Wgts)	42

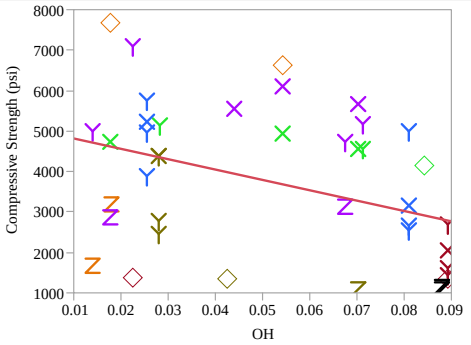
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	39974949	39974949	16.2687
Error	40	98286846	2457171.2	Prob > F
C. Total	41	138261796		0.0002*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8637.9473	1244.001	6.94	<.0001*
I	-1110192	275246.6	-4.03	0.0002*

Bivariate Fit of Compressive Strength (psi) By OH



Linear Fit

Linear Fit

Compressive Strength (psi) = 5073.434 - 25614.769* OH

Summary of Fit

RSquare	0.149809
RSquare Adj	0.128554
Root Mean Square Error	1714.271
Mean of Response	3716.095
Observations (or Sum Wgts)	42

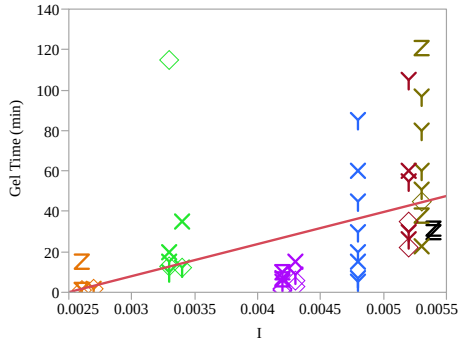
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	20712857	20712857	7.0482
Error	40	117548939	2938723.5	Prob > F
C. Total	41	138261796		0.0113*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	5073.434	575.6417	8.81	<.0001*
OH	-25614.77	9648.278	-2.65	0.0113*

Bivariate Fit of Gel Time (min) By I



Linear Fit

Linear Fit

Gel Time (min) = -39.4643 + 15841.469* I

Summary of Fit

RSquare	0.221309
RSquare Adj	0.206334
Root Mean Square Error	27.33587
Mean of Response	29.24074
Observations (or Sum Wgts)	54

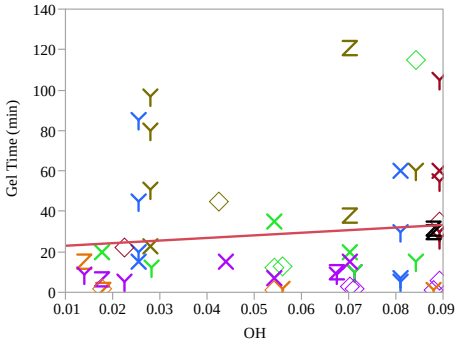
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11043.382	11043.4	14.7787
Error	52	38856.989	747.2	Prob > F
C. Total	53	49900.370		0.0003*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-39.4643	18.25493	-2.16	0.0353*
I	15841.469	4120.76	3.84	0.0003*

Bivariate Fit of Gel Time (min) By OH



Linear Fit

Linear Fit

Gel Time (min) = 21.731074 + 128.92132* OH

Summary of Fit

RSquare	0.013008
RSquare Adj	-0.00597
Root Mean Square Error	30.77563
Mean of Response	29.24074
Observations (or Sum Wgts)	54

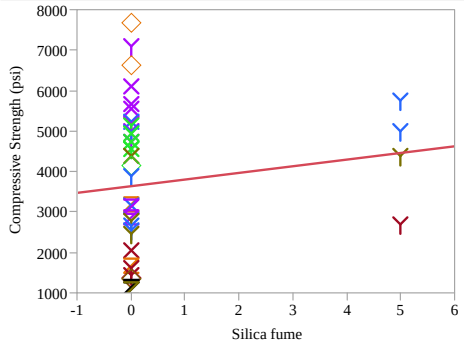
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	649.125	649.125	0.6854
Error	52	49251.245	947.139	Prob > F
C. Total	53	49900.370		0.4115

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	21.731074	9.991284	2.18	0.0342*
OH	128.92132	155.7283	0.83	0.4115

Bivariate Fit of Compressive Strength (psi) By Silica fume



Linear Fit

Linear Fit

Compressive Strength (psi) = 3637.9211 + 164.16579* Silica fume

Summary of Fit

RSquare	0.017636
RSquare Adj	-0.00692
Root Mean Square Error	1842.711
Mean of Response	3716.095
Observations (or Sum Wgts)	42

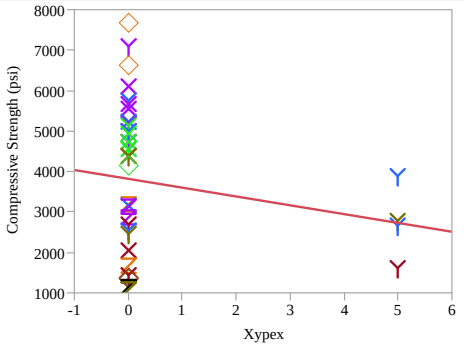
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2438370	2438370	0.7181
Error	40	135823426	3395586	Prob > F
C. Total	41	138261796		0.4018

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3637.9211	298.9273	12.17	<.0001*
Silica fume	164.16579	193.727	0.85	0.4018

Bivariate Fit of Compressive Strength (psi) By Xypex



Linear Fit

Linear Fit

Compressive Strength (psi) = 3820 - 218.2* Xypex

Summary of Fit

RSquare	0.031156
RSquare Adj	0.006935
Root Mean Square Error	1829.987
Mean of Response	3716.095
Observations (or Sum Wgts)	42

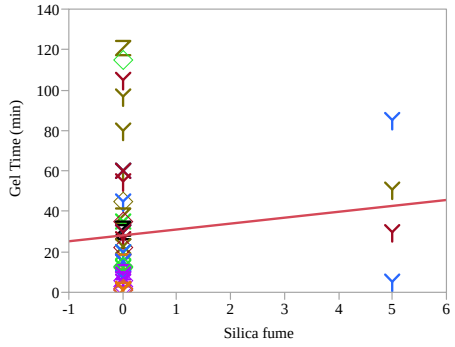
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4307684	4307684	1.2863
Error	40	133954112	3348853	Prob > F
C. Total	41	138261796		0.2635

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3820	296.8631	12.87	<.0001*
Xypex	-218.2	192.3893	-1.13	0.2635

Bivariate Fit of Gel Time (min) By Silica fume



Linear Fit

Linear Fit

Gel Time (min) = 28.16 + 2.918* Silica fume

Summary of Fit

RSquare	0.015799
RSquare Adj	-0.00313
Root Mean Square Error	30.73208
Mean of Response	29.24074
Observations (or Sum Wgts)	54

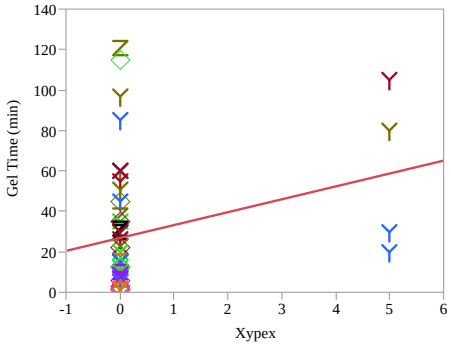
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	788.400	788.400	0.8348
Error	52	49111.970	944.461	Prob > F
C. Total	53	49900.370		0.3651

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	28.16	4.346173	6.48	<.0001*
Silica fume	2.918	3.193772	0.91	0.3651

Bivariate Fit of Gel Time (min) By Xypex



Linear Fit

Linear Fit

Gel Time (min) = 26.88 + 6.374* Xypex

Summary of Fit

RSquare	0.075387
RSquare Adj	0.057606
Root Mean Square Error	29.78724
Mean of Response	29.24074
Observations (or Sum Wgts)	54

Analysis of Variance

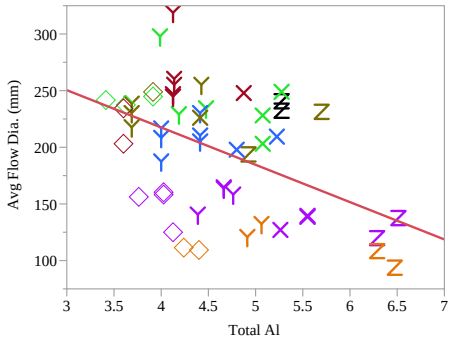
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3761.840	3761.84	4.2397
Error	52	46138.530	887.28	Prob > F
C. Total	53	49900.370		0.0445*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	26.88	4.212551	6.38	<.0001*
Xypex	6.374	3.09558	2.06	0.0445*

Fit Group

Bivariate Fit of Avg Flow Dia. (mm) By Total Al



Linear Fit

Avg Flow Dia. (mm) = 349.32655 - 32.953795*Total Al

Summary of Fit

RSquare	0.226854
RSquare Adj	0.211986
Root Mean Square Error	47.39774
Mean of Response	198.6093
Observations (or Sum Wgts)	54

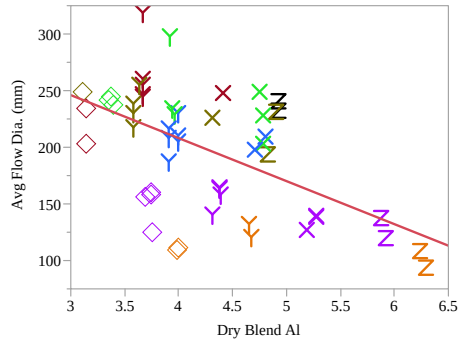
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	34277.13	34277.1	15.2577
Error	52	116820.39	2246.5	Prob > F
C. Total	53	151097.53		0.0003*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	349.32655	39.12039	8.93	<.0001*
Total Al	-32.95379	8.436472	-3.91	0.0003*

Bivariate Fit of Avg Flow Dia. (mm) By Dry Blend Al



Linear Fit

Avg Flow Dia. (mm) = 360.08494 - 37.97123*Dry Blend Al

Summary of Fit

RSquare	0.299898
RSquare Adj	0.286435
Root Mean Square Error	45.10322
Mean of Response	198.6093
Observations (or Sum Wgts)	54

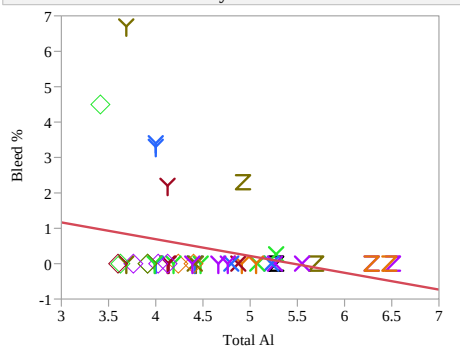
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	45313.90	45313.9	22.2749
Error	52	105783.63	2034.3	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	360.08494	34.7598	10.36	<.0001*
Dry Blend Al	-37.97123	8.045379	-4.72	<.0001*

Bivariate Fit of Bleed % By Total Al



Linear Fit

Bleed % = 2.5884707 - 0.4742498*Total Al

Summary of Fit

RSquare	0.080415
RSquare Adj	0.06273
Root Mean Square Error	1.249484
Mean of Response	0.419444
Observations (or Sum Wgts)	54

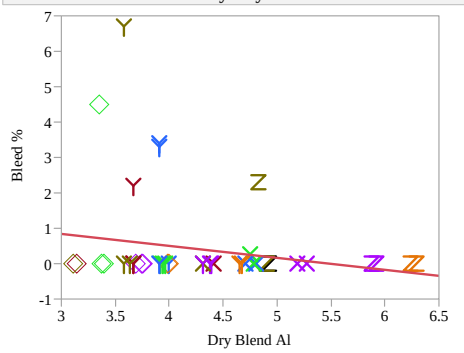
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7.099175	7.09918	4.5472
Error	52	81.182908	1.56121	Prob > F
C. Total	53	88.282083		0.0377*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.5884707	1.031279	2.51	0.0152*
Total Al	-0.47425	0.2224	-2.13	0.0377*

Bivariate Fit of Bleed % By Dry Blend Al



Linear Fit

Bleed % = 1.8592823 - 0.3385799*Dry Blend Al

Summary of Fit

RSquare	0.04081
RSquare Adj	0.022365
Root Mean Square Error	1.276106
Mean of Response	0.419444
Observations (or Sum Wgts)	54

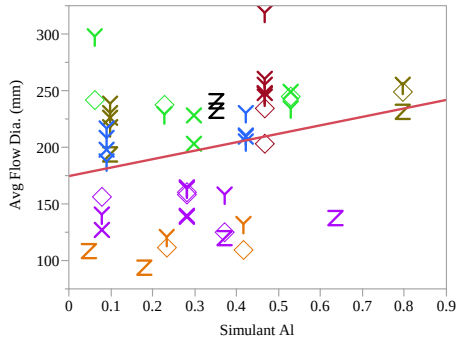
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.602835	3.60283	2.2124
Error	52	84.679249	1.62845	Prob > F
C. Total	53	88.282083		0.1429

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.8592823	0.98346	1.89	0.0643
Dry Blend Al	-0.33858	0.227628	-1.49	0.1429

Bivariate Fit of Avg Flow Dia. (mm) By Simulant Al



Linear Fit

Avg Flow Dia. (mm) = 174.58447 + 74.838408*Simulant Al

Summary of Fit

RSquare	0.075903
RSquare Adj	0.058132
Root Mean Square Error	51.8186
Mean of Response	198.6093
Observations (or Sum Wgts)	54

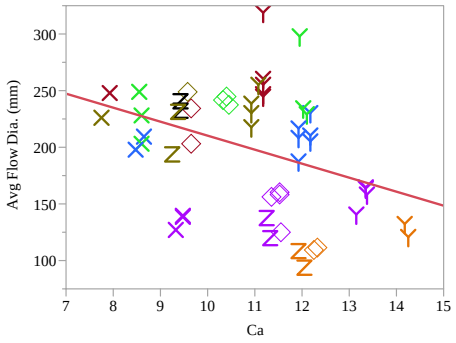
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11468.81	11468.8	4.2712
Error	52	139628.71	2685.2	Prob > F
C. Total	53	151097.53		0.0438*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	174.58447	13.59638	12.84	<.0001*
Simulant Al	74.838408	36.21187	2.07	0.0438*

Bivariate Fit of Avg Flow Dia. (mm) By Ca



Linear Fit

Avg Flow Dia. (mm) = 333.84542 - 12.351456* Ca

Summary of Fit

RSquare	0.134308
RSquare Adj	0.11766
Root Mean Square Error	50.15436
Mean of Response	198.6093
Observations (or Sum Wgts)	54

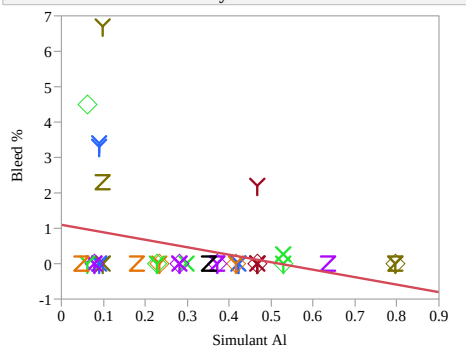
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	20293.62	20293.6	8.0676
Error	52	130803.91	2515.5	Prob > F
C. Total	53	151097.53		0.0064*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	333.84542	48.09928	6.94	<.0001*
Ca	-12.35146	4.348576	-2.84	0.0064*

Bivariate Fit of Bleed % By Simulant Al



Linear Fit

Bleed % = 1.0979451 - 2.1135629*Simulant Al

Summary of Fit

RSquare	0.103616
RSquare Adj	0.086378
Root Mean Square Error	1.233621
Mean of Response	0.419444
Observations (or Sum Wgts)	54

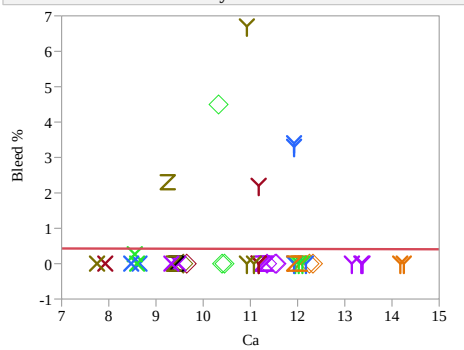
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	9.147444	9.14744	6.0109
Error	52	79.134639	1.52182	Prob > F
C. Total	53	88.282083		0.0176*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.0979451	0.323683	3.39	0.0013*
Simulant Al	-2.113563	0.862079	-2.45	0.0176*

Bivariate Fit of Bleed % By Ca



Linear Fit

Bleed % = 0.4485986 - 0.0026627* Ca

Summary of Fit

RSquare	1.068e-5
RSquare Adj	-0.01922
Root Mean Square Error	1.302964
Mean of Response	0.419444
Observations (or Sum Wgts)	54

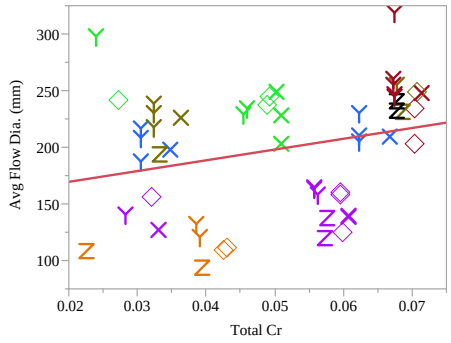
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.000943	0.00094	0.0006
Error	52	88.281140	1.69771	Prob > F
C. Total	53	88.282083		0.9813

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.4485986	1.249575	0.36	0.7210
Ca	-0.002663	0.112972	-0.02	0.9813

Bivariate Fit of Avg Flow Dia. (mm) By Total Cr



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 150.50696 + 950.60347*Total Cr

Summary of Fit

RSquare	0.073324
RSquare Adj	0.055503
Root Mean Square Error	51.89087
Mean of Response	198.6093
Observations (or Sum Wgts)	54

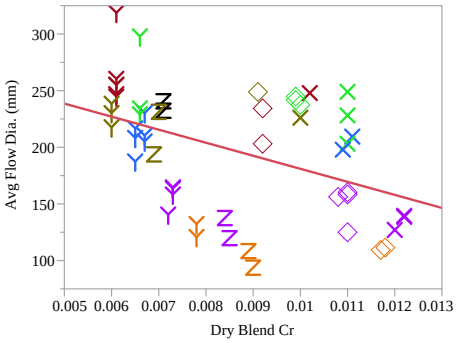
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11079.06	11079.1	4.1145
Error	52	140018.46	2692.7	Prob > F
C. Total	53	151097.53		0.0477*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	150.50696	24.74306	6.08	<.0001*
Total Cr	950.60347	468.6394	2.03	0.0477*

Bivariate Fit of Avg Flow Dia. (mm) By Dry Blend Cr



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 296.2035 - 11511.771*Dry Blend Cr

Summary of Fit

RSquare	0.202331
RSquare Adj	0.186991
Root Mean Square Error	48.14358
Mean of Response	198.6093
Observations (or Sum Wgts)	54

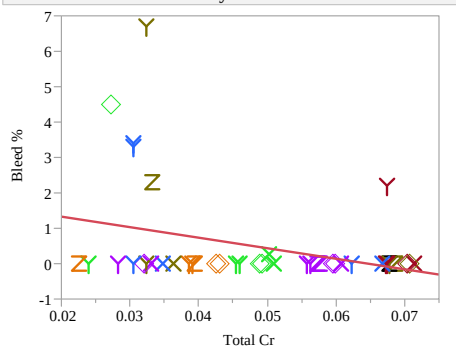
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	30571.68	30571.7	13.1899
Error	52	120525.84	2317.8	Prob > F
C. Total	53	151097.53		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	296.2035	27.65929	10.71	<.0001*
Dry Blend Cr	-11511.77	3169.72	-3.63	0.0006*

Bivariate Fit of Bleed % By Total Cr



Linear Fit

Linear Fit

Bleed % = 1.9263161 - 29.778983*Total Cr

Summary of Fit

RSquare	0.123155
RSquare Adj	0.106292
Root Mean Square Error	1.220102
Mean of Response	0.419444
Observations (or Sum Wgts)	54

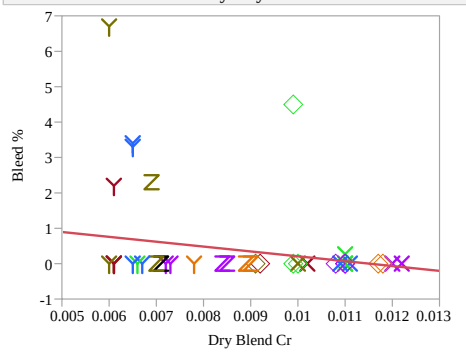
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	10.872365	10.8724	7.3035
Error	52	77.409719	1.4886	Prob > F
C. Total	53	88.282083		0.0093*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.9263161	0.58178	3.31	0.0017*
Total Cr	-29.77898	11.01904	-2.70	0.0093*

Bivariate Fit of Bleed % By Dry Blend Cr



Linear Fit

Linear Fit

Bleed % = 1.5837179 - 137.33239*Dry Blend Cr

Summary of Fit

RSquare	0.049284
RSquare Adj	0.031001
Root Mean Square Error	1.270457
Mean of Response	0.419444
Observations (or Sum Wgts)	54

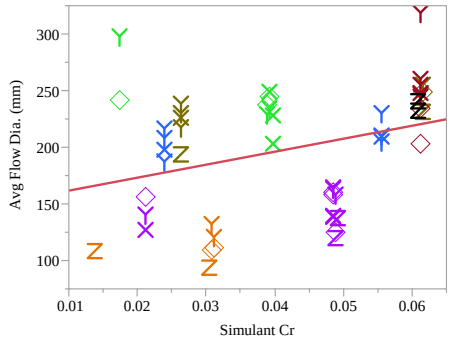
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4.350919	4.35092	2.6956
Error	52	83.931164	1.61406	Prob > F
C. Total	53	88.282083		0.1067

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.5837179	0.729899	2.17	0.0346*
Dry Blend Cr	-137.3324	83.64547	-1.64	0.1067

Bivariate Fit of Avg Flow Dia. (mm) By Simulant Cr



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 150.33156 + 1146.2344*Simulant Cr

Summary of Fit

RSquare	0.108887
RSquare Adj	0.091751
Root Mean Square Error	50.88541
Mean of Response	198.6093
Observations (or Sum Wgts)	54

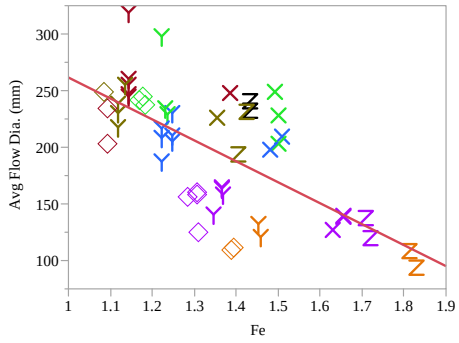
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	16452.63	16452.6	6.3540
Error	52	134644.90	2589.3	Prob > F
C. Total	53	151097.53		0.0148*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	150.33156	20.36574	7.38	<.0001*
Simulant Cr	1146.2344	454.7253	2.52	0.0148*

Bivariate Fit of Avg Flow Dia. (mm) By Fe



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 446.7647 - 185.10979* Fe

Summary of Fit

RSquare	0.448312
RSquare Adj	0.437703
Root Mean Square Error	40.03811
Mean of Response	198.6093
Observations (or Sum Wgts)	54

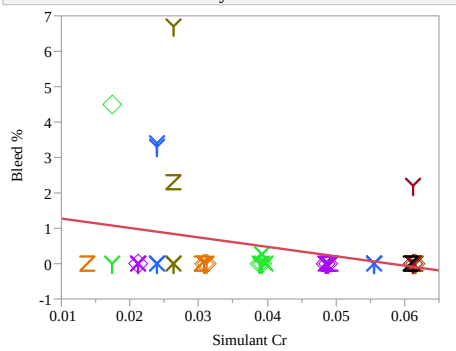
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	67738.91	67738.9	42.2563
Error	52	83358.62	1603.1	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	446.7647	38.56179	11.59	<.0001*
Fe	-185.1098	28.47632	-6.50	<.0001*

Bivariate Fit of Bleed % By Simulant Cr



Linear Fit

Linear Fit

Bleed % = 1.540379 - 26.613818*Simulant Cr

Summary of Fit

RSquare	0.100469
RSquare Adj	0.08317
Root Mean Square Error	1.235785
Mean of Response	0.419444
Observations (or Sum Wgts)	54

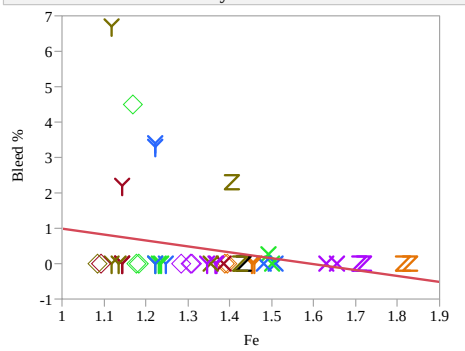
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8.869572	8.86957	5.8079
Error	52	79.412511	1.52716	Prob > F
C. Total	53	88.282083		0.0195*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1.540379	0.494595	3.11	0.0030*
Simulant Cr	-26.61382	11.04329	-2.41	0.0195*

Bivariate Fit of Bleed % By Fe



Linear Fit

Linear Fit

Bleed % = 2.6600875 - 1.6713918* Fe

Summary of Fit

RSquare	0.062555
RSquare Adj	0.044527
Root Mean Square Error	1.261559
Mean of Response	0.419444
Observations (or Sum Wgts)	54

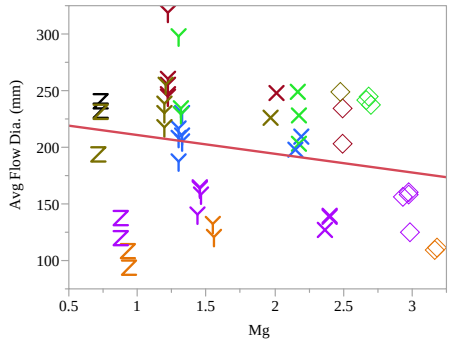
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5.522503	5.52250	3.4699
Error	52	82.759580	1.59153	Prob > F
C. Total	53	88.282083		0.0681

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2.6600875	1.215041	2.19	0.0331*
Fe	-1.671392	0.897259	-1.86	0.0681

Bivariate Fit of Avg Flow Dia. (mm) By Mg



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 227.34222 - 16.530753* Mg

Summary of Fit

RSquare	0.051119
RSquare Adj	0.032872
Root Mean Square Error	52.50888
Mean of Response	198.6093
Observations (or Sum Wgts)	54

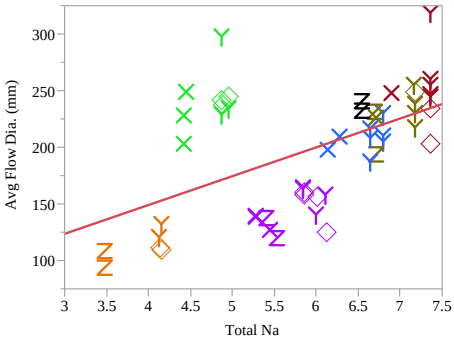
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7724.02	7724.02	2.8014
Error	52	143373.50	2757.18	Prob > F
C. Total	53	151097.53		0.1002

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	227.34222	18.59464	12.23	<.0001*
Mg	-16.53075	9.876513	-1.67	0.1002

Bivariate Fit of Avg Flow Dia. (mm) By Total Na



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 47.40246 + 25.438671*Total Na

Summary of Fit

RSquare	0.294985
RSquare Adj	0.281427
Root Mean Square Error	45.26121
Mean of Response	198.6093
Observations (or Sum Wgts)	54

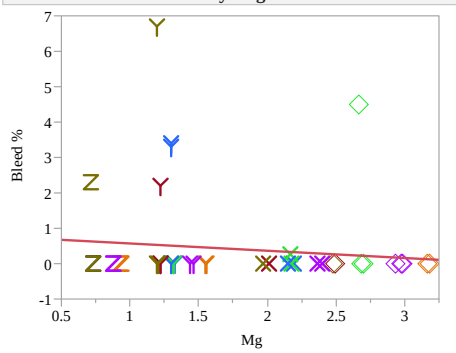
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	44571.51	44571.5	21.7573
Error	52	106526.02	2048.6	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	47.40246	32.99666	1.44	0.1568
Total Na	25.438671	5.453709	4.66	<.0001*

Bivariate Fit of Bleed % By Mg



Linear Fit

Linear Fit

Bleed % = 0.7755802 - 0.2048934* Mg

Summary of Fit

RSquare	0.013441
RSquare Adj	-0.00553
Root Mean Square Error	1.294184
Mean of Response	0.419444
Observations (or Sum Wgts)	54

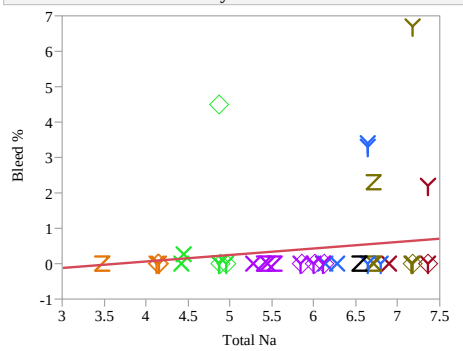
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.186627	1.18663	0.7085
Error	52	87.095457	1.67491	Prob > F
C. Total	53	88.282083		0.4038

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.7755802	0.458301	1.69	0.0966
Mg	-0.204893	0.243426	-0.84	0.4038

Bivariate Fit of Bleed % By Total Na



Linear Fit

Linear Fit

Bleed % = -0.668138 + 0.1829722*Total Na

Summary of Fit

RSquare	0.02612
RSquare Adj	0.007391
Root Mean Square Error	1.285841
Mean of Response	0.419444
Observations (or Sum Wgts)	54

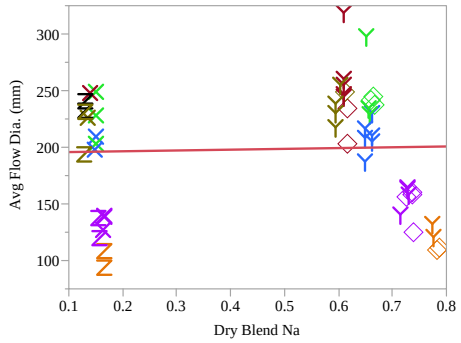
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.305892	2.30589	1.3946
Error	52	85.976192	1.65339	Prob > F
C. Total	53	88.282083		0.2430

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.668138	0.937413	-0.71	0.4792
Total Na	0.1829722	0.154936	1.18	0.2430

Bivariate Fit of Avg Flow Dia. (mm) By Dry Blend Na



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 195.11467 + 7.0372442*Dry Blend Na

Summary of Fit

RSquare	0.001112
RSquare Adj	-0.0181
Root Mean Square Error	53.87476
Mean of Response	198.6093
Observations (or Sum Wgts)	54

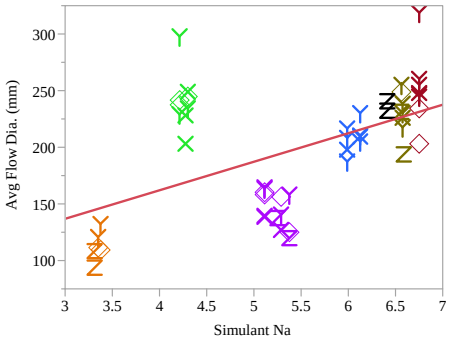
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	168.04	168.04	0.0579
Error	52	150929.48	2902.49	Prob > F
C. Total	53	151097.53		0.8108

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	195.11467	16.26905	11.99	<.0001*
Dry Blend Na	7.0372442	29.24675	0.24	0.8108

Bivariate Fit of Avg Flow Dia. (mm) By Simulant Na



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 61.459475 + 25.177118*Simulant Na

Summary of Fit

RSquare	0.287972
RSquare Adj	0.274279
Root Mean Square Error	45.48576
Mean of Response	198.6093
Observations (or Sum Wgts)	54

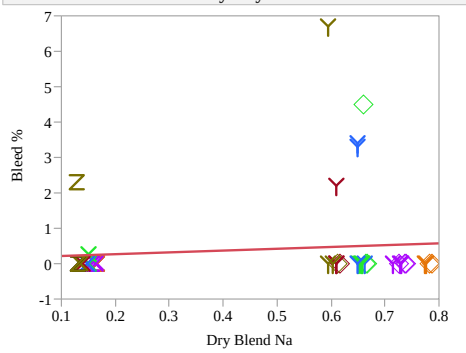
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	43511.90	43511.9	21.0309
Error	52	107585.63	2069.0	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	61.459475	30.54041	2.01	0.0494*
Simulant Na	25.177118	5.490065	4.59	<.0001*

Bivariate Fit of Bleed % By Dry Blend Na



Linear Fit

Linear Fit

Bleed % = 0.1653118 + 0.5117605*Dry Blend Na

Summary of Fit

RSquare	0.010066
RSquare Adj	-0.00897
Root Mean Square Error	1.296396
Mean of Response	0.419444
Observations (or Sum Wgts)	54

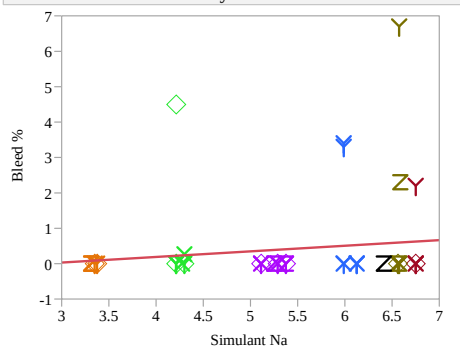
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.888688	0.88869	0.5288
Error	52	87.393396	1.68064	Prob > F
C. Total	53	88.282083		0.4704

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.1653118	0.391484	0.42	0.6746
Dry Blend Na	0.5117605	0.703768	0.73	0.4704

Bivariate Fit of Bleed % By Simulant Na



Linear Fit

Linear Fit

Bleed % = -0.442803 + 0.158286*Simulant Na

Summary of Fit

RSquare	0.019481
RSquare Adj	0.000625
Root Mean Square Error	1.290217
Mean of Response	0.419444
Observations (or Sum Wgts)	54

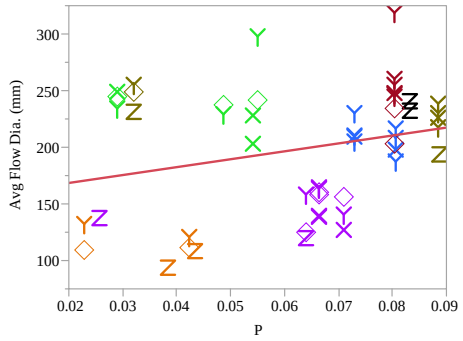
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.719813	1.71981	1.0331
Error	52	86.562270	1.66466	Prob > F
C. Total	53	88.282083		0.3141

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.442803	0.866288	-0.51	0.6114
Simulant Na	0.158286	0.155727	1.02	0.3141

Bivariate Fit of Avg Flow Dia. (mm) By P



Linear Fit

Avg Flow Dia. (mm) = 154.66888 + 696.72903* P

Summary of Fit

RSquare	0.0702
RSquare Adj	0.052319
Root Mean Square Error	51.97826
Mean of Response	198.6093
Observations (or Sum Wgts)	54

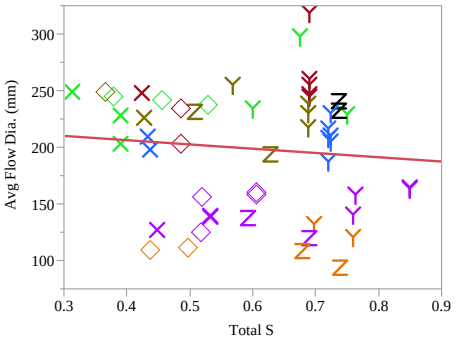
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	10607.06	10607.1	3.9260
Error	52	140490.46	2701.7	Prob > F
C. Total	53	151097.53		0.0528

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	154.66888	23.27698	6.64	<.0001*
P	696.72903	351.6317	1.98	0.0528

Bivariate Fit of Avg Flow Dia. (mm) By Total S



Linear Fit

Avg Flow Dia. (mm) = 221.33846 - 37.611755*Total S

Summary of Fit

RSquare	0.009325
RSquare Adj	-0.00973
Root Mean Square Error	53.65283
Mean of Response	198.6093
Observations (or Sum Wgts)	54

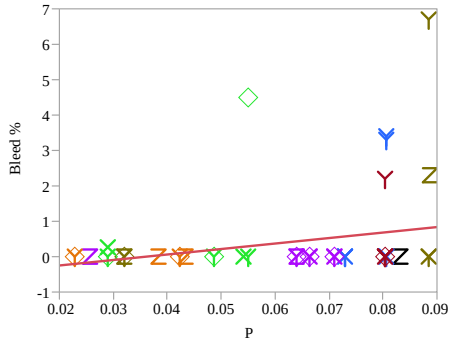
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1408.98	1408.98	0.4895
Error	52	149688.55	2878.63	Prob > F
C. Total	53	151097.53		0.4873

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	221.33846	33.29842	6.65	<.0001*
Total S	-37.61175	53.76056	-0.70	0.4873

Bivariate Fit of Bleed % By P



Linear Fit

Bleed % = -0.560377 + 15.536273* P

Summary of Fit

RSquare	0.059743
RSquare Adj	0.041661
Root Mean Square Error	1.263449
Mean of Response	0.419444
Observations (or Sum Wgts)	54

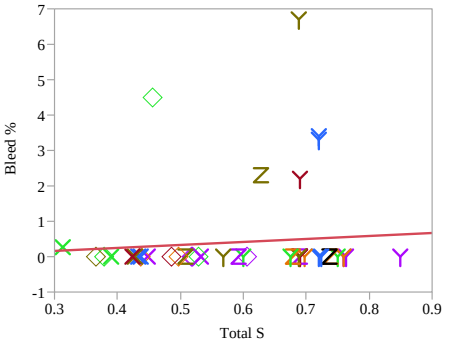
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5.274254	5.27425	3.3040
Error	52	83.007829	1.59630	Prob > F
C. Total	53	88.282083		0.0749

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.560377	0.5658	-0.99	0.3266
P	15.536273	8.547206	1.82	0.0749

Bivariate Fit of Bleed % By Total S



Linear Fit

Bleed % = -0.0892 + 0.8416933*Total S

Summary of Fit

RSquare	0.007993
RSquare Adj	-0.01108
Root Mean Square Error	1.297753
Mean of Response	0.419444
Observations (or Sum Wgts)	54

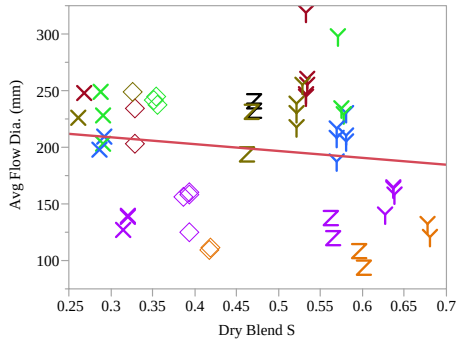
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.705611	0.70561	0.4190
Error	52	87.576472	1.68416	Prob > F
C. Total	53	88.282083		0.5203

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.0892	0.805421	-0.11	0.9122
Total S	0.8416933	1.300359	0.65	0.5203

Bivariate Fit of Avg Flow Dia. (mm) By Dry Blend S



Linear Fit

Avg Flow Dia. (mm) = 227.05624 - 60.455228*Dry Blend S

Summary of Fit

RSquare	0.019975
RSquare Adj	0.001128
Root Mean Square Error	53.36365
Mean of Response	198.6093
Observations (or Sum Wgts)	54

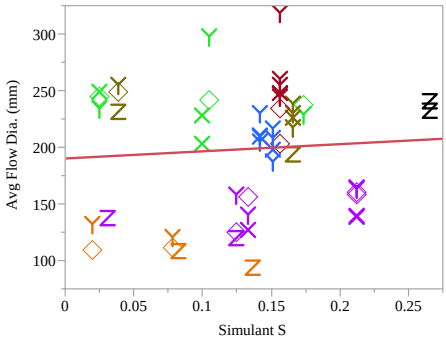
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3018.19	3018.19	1.0599
Error	52	148079.34	2847.68	Prob > F
C. Total	53	151097.53		0.3080

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	227.05624	28.57008	7.95	<.0001*
Dry Blend S	-60.45523	58.72275	-1.03	0.3080

Bivariate Fit of Avg Flow Dia. (mm) By Simulant S



Linear Fit

Avg Flow Dia. (mm) = 190.1354 + 63.348092*Simulant S

Summary of Fit

RSquare	0.00524
RSquare Adj	-0.01389
Root Mean Square Error	53.76333
Mean of Response	198.6093
Observations (or Sum Wgts)	54

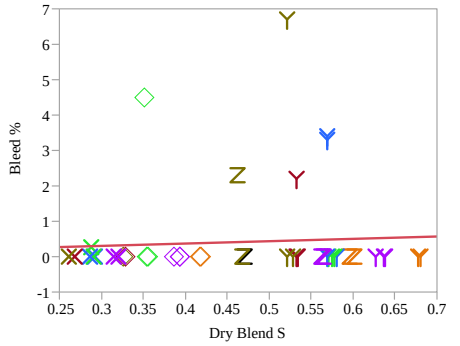
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	791.75	791.75	0.2739
Error	52	150305.78	2890.50	Prob > F
C. Total	53	151097.53		0.6029

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	190.1354	17.76731	10.70	<.0001*
Simulant S	63.348092	121.0394	0.52	0.6029

Bivariate Fit of Bleed % By Dry Blend S



Linear Fit

Bleed % = 0.1097506 + 0.6581581*Dry Blend S

Summary of Fit

RSquare	0.004052
RSquare Adj	-0.0151
Root Mean Square Error	1.300328
Mean of Response	0.419444
Observations (or Sum Wgts)	54

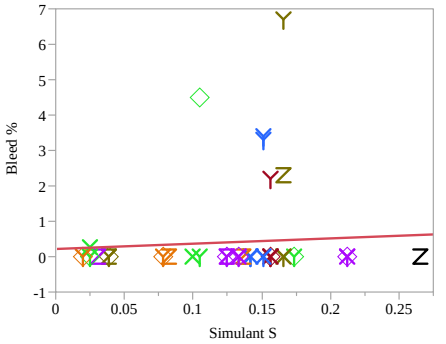
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.357716	0.35772	0.2116
Error	52	87.924367	1.69085	Prob > F
C. Total	53	88.282083		0.6475

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.1097506	0.696176	0.16	0.8753
Dry Blend S	0.6581581	1.430915	0.46	0.6475

Bivariate Fit of Bleed % By Simulant S



Linear Fit

Bleed % = 0.2194416 + 1.495162*Simulant S

Summary of Fit

RSquare	0.004996
RSquare Adj	-0.01414
Root Mean Square Error	1.299712
Mean of Response	0.419444
Observations (or Sum Wgts)	54

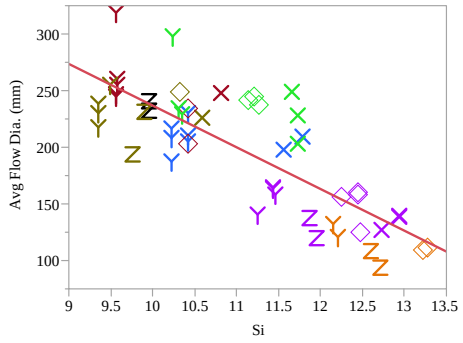
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.441058	0.44106	0.2611
Error	52	87.841025	1.68925	Prob > F
C. Total	53	88.282083		0.6115

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.2194416	0.429519	0.51	0.6116
Simulant S	1.495162	2.926089	0.51	0.6115

Bivariate Fit of Avg Flow Dia. (mm) By Si



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 605.08755 - 36.819909* Si

Summary of Fit

RSquare	0.651664
RSquare Adj	0.644965
Root Mean Square Error	31.8146
Mean of Response	198.6093
Observations (or Sum Wgts)	54

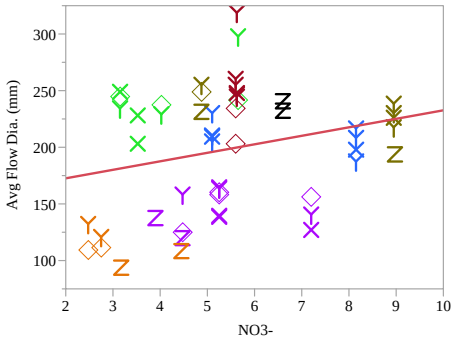
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	98464.75	98464.7	97.2810
Error	52	52632.78	1012.2	Prob > F
C. Total	53	151097.53		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	605.08755	41.43876	14.60	<.0001*
Si	-36.81991	3.733093	-9.86	<.0001*

Bivariate Fit of Avg Flow Dia. (mm) By NO3-



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 157.64707 + 7.5014379* NO3-

Summary of Fit

RSquare	0.065447
RSquare Adj	0.047475
Root Mean Square Error	52.11093
Mean of Response	198.6093
Observations (or Sum Wgts)	54

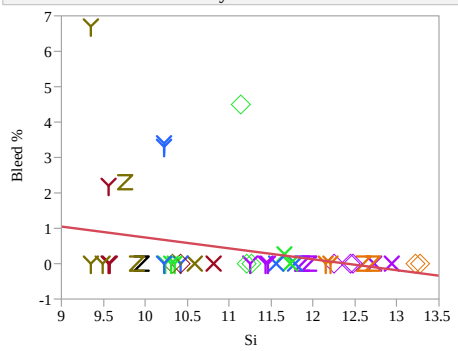
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	9888.95	9888.95	3.6416
Error	52	141208.57	2715.55	Prob > F
C. Total	53	151097.53		0.0619

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	157.64707	22.60635	6.97	<.0001*
NO3-	7.5014379	3.930957	1.91	0.0619

Bivariate Fit of Bleed % By Si



Linear Fit

Linear Fit

Bleed % = 3.821756 - 0.3081906* Si

Summary of Fit

RSquare	0.078141
RSquare Adj	0.060413
Root Mean Square Error	1.251027
Mean of Response	0.419444
Observations (or Sum Wgts)	54

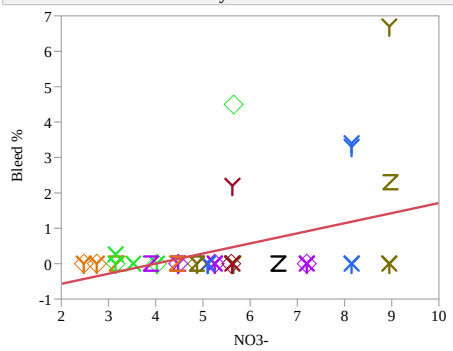
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6.898493	6.89849	4.4078
Error	52	81.383590	1.56507	Prob > F
C. Total	53	88.282083		0.0406*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	3.821756	1.629473	2.35	0.0229*
Si	-0.308191	0.146794	-2.10	0.0406*

Bivariate Fit of Bleed % By NO3-



Linear Fit

Linear Fit

Bleed % = -1.14018 + 0.2856152* NO3-

Summary of Fit

RSquare	0.162387
RSquare Adj	0.146279
Root Mean Square Error	1.192494
Mean of Response	0.419444
Observations (or Sum Wgts)	54

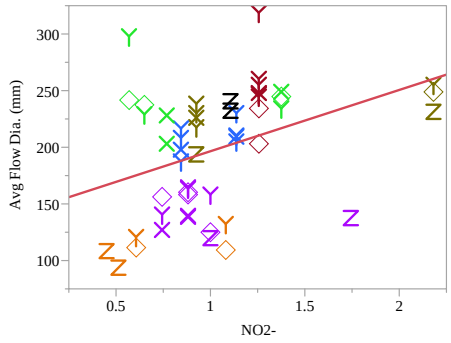
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	14.335867	14.3359	10.0812
Error	52	73.946217	1.4220	Prob > F
C. Total	53	88.282083		0.0025*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-1.14018	0.517318	-2.20	0.0320*
NO3-	0.2856152	0.089955	3.18	0.0025*

Bivariate Fit of Avg Flow Dia. (mm) By NO2-



Linear Fit

Avg Flow Dia. (mm) = 142.39865 + 54.140247* NO2-

Summary of Fit

RSquare	0.149599
RSquare Adj	0.133245
Root Mean Square Error	49.70945
Mean of Response	198.6093
Observations (or Sum Wgts)	54

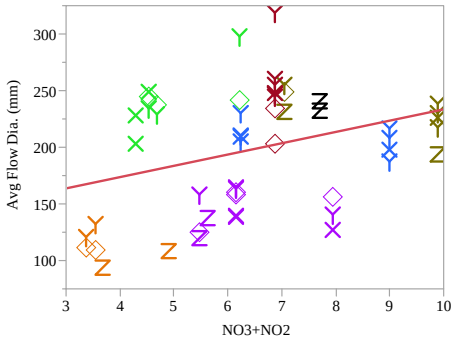
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	22604.00	22604.0	9.1476
Error	52	128493.53	2471.0	Prob > F
C. Total	53	151097.53		0.0039*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	142.39865	19.7779	7.20	<.0001*
NO2-	54.140247	17.90056	3.02	0.0039*

Bivariate Fit of Avg Flow Dia. (mm) By NO3+NO2



Linear Fit

Avg Flow Dia. (mm) = 133.78907 + 9.9741418* NO3+NO2

Summary of Fit

RSquare	0.114582
RSquare Adj	0.097554
Root Mean Square Error	50.72257
Mean of Response	198.6093
Observations (or Sum Wgts)	54

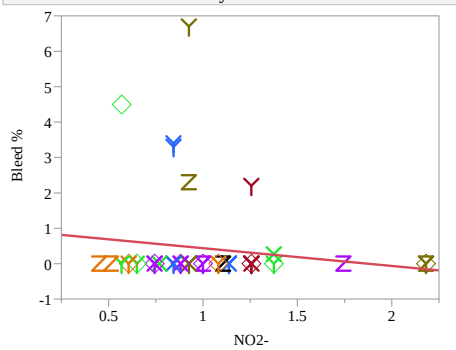
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	17313.01	17313.0	6.7293
Error	52	133784.52	2572.8	Prob > F
C. Total	53	151097.53		0.0123*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	133.78907	25.92347	5.16	<.0001*
NO3+NO2	9.9741418	3.844948	2.59	0.0123*

Bivariate Fit of Bleed % By NO2-



Linear Fit

Bleed % = 0.9407499 - 0.5021046* NO2-

Summary of Fit

RSquare	0.022022
RSquare Adj	0.003215
Root Mean Square Error	1.288544
Mean of Response	0.419444
Observations (or Sum Wgts)	54

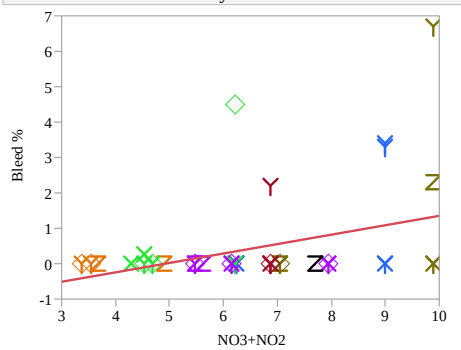
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.944165	1.94417	1.1709
Error	52	86.337918	1.66034	Prob > F
C. Total	53	88.282083		0.2842

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.9407499	0.512673	1.83	0.0722
NO2-	-0.502105	0.464009	-1.08	0.2842

Bivariate Fit of Bleed % By NO3+NO2



Linear Fit

Bleed % = -1.310353 + 0.2661709* NO3+NO2

Summary of Fit

RSquare	0.139659
RSquare Adj	0.123114
Root Mean Square Error	1.208564
Mean of Response	0.419444
Observations (or Sum Wgts)	54

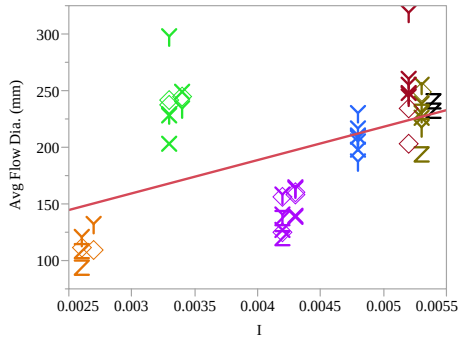
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	12.329421	12.3294	8.4412
Error	52	75.952662	1.4606	Prob > F
C. Total	53	88.282083		0.0054*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-1.310353	0.617677	-2.12	0.0387*
NO3+NO2	0.2661709	0.091613	2.91	0.0054*

Bivariate Fit of Avg Flow Dia. (mm) By I



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 71.177514 + 29382.213* I

Summary of Fit

RSquare	0.251433
RSquare Adj	0.237038
Root Mean Square Error	46.63825
Mean of Response	198.6093
Observations (or Sum Wgts)	54

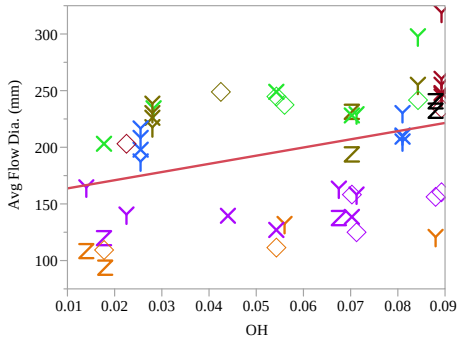
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	37990.95	37991.0	17.4661
Error	52	113106.57	2175.1	Prob > F
C. Total	53	151097.53		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	71.177514	31.14508	2.29	0.0264*
I	29382.213	7030.507	4.18	0.0001*

Bivariate Fit of Avg Flow Dia. (mm) By OH



Linear Fit

Linear Fit

Avg Flow Dia. (mm) = 156.58392 + 721.46511* OH

Summary of Fit

RSquare	0.13454
RSquare Adj	0.117897
Root Mean Square Error	50.14763
Mean of Response	198.6093
Observations (or Sum Wgts)	54

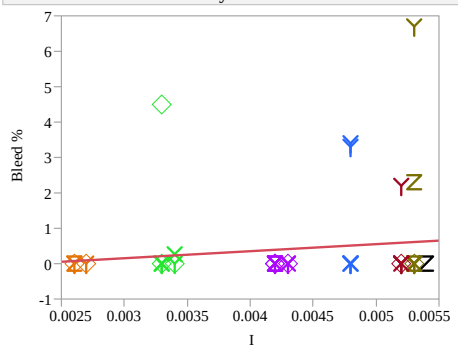
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	20328.70	20328.7	8.0837
Error	52	130768.82	2514.8	Prob > F
C. Total	53	151097.53		0.0064*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	156.58392	16.28039	9.62	<.0001*
OH	721.46511	253.7528	2.84	0.0064*

Bivariate Fit of Bleed % By I



Linear Fit

Linear Fit

Bleed % = -0.444506 + 199.20297* I

Summary of Fit

RSquare	0.01978
RSquare Adj	0.00093
Root Mean Square Error	1.29002
Mean of Response	0.419444
Observations (or Sum Wgts)	54

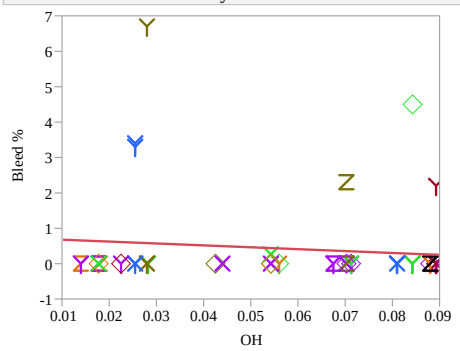
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.746235	1.74624	1.0493
Error	52	86.535848	1.66415	Prob > F
C. Total	53	88.282083		0.3104

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-0.444506	0.861477	-0.52	0.6081
I	199.20297	194.4647	1.02	0.3104

Bivariate Fit of Bleed % By OH



Linear Fit

Linear Fit

Bleed % = 0.730757 - 5.3444207* OH

Summary of Fit

RSquare	0.012636
RSquare Adj	-0.00635
Root Mean Square Error	1.294712
Mean of Response	0.419444
Observations (or Sum Wgts)	54

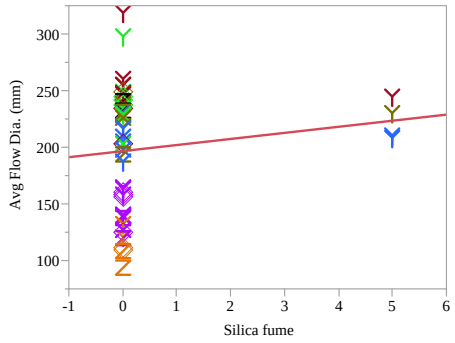
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.115528	1.11553	0.6655
Error	52	87.166556	1.67628	Prob > F
C. Total	53	88.282083		0.4184

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.730757	0.420327	1.74	0.0880
OH	-5.344421	6.551395	-0.82	0.4184

Bivariate Fit of Avg Flow Dia. (mm) By Silica fume



Linear Fit

Avg Flow Dia. (mm) = 196.618 + 5.3764* Silica fume

Summary of Fit

RSquare	0.017713
RSquare Adj	-0.00118
Root Mean Square Error	53.42519
Mean of Response	198.6093
Observations (or Sum Wgts)	54

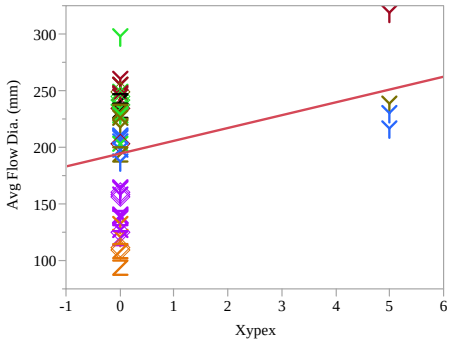
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2676.45	2676.45	0.9377
Error	52	148421.07	2854.25	Prob > F
C. Total	53	151097.53		0.3374

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	196.618	7.555463	26.02	<.0001*
Silica fume	5.3764	5.552109	0.97	0.3374

Bivariate Fit of Avg Flow Dia. (mm) By Xypex



Linear Fit

Avg Flow Dia. (mm) = 194.418 + 11.3164* Xypex

Summary of Fit

RSquare	0.078476
RSquare Adj	0.060754
Root Mean Square Error	51.74643
Mean of Response	198.6093
Observations (or Sum Wgts)	54

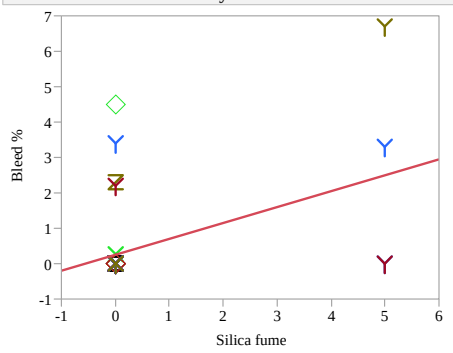
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11857.49	11857.5	4.4282
Error	52	139240.03	2677.7	Prob > F
C. Total	53	151097.53		0.0402*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	194.418	7.31805	26.57	<.0001*
Xypex	11.3164	5.377647	2.10	0.0402*

Bivariate Fit of Bleed % By Silica fume



Linear Fit

Bleed % = 0.253 + 0.4494* Silica fume

Summary of Fit

RSquare	0.211821
RSquare Adj	0.196664
Root Mean Square Error	1.15677
Mean of Response	0.419444
Observations (or Sum Wgts)	54

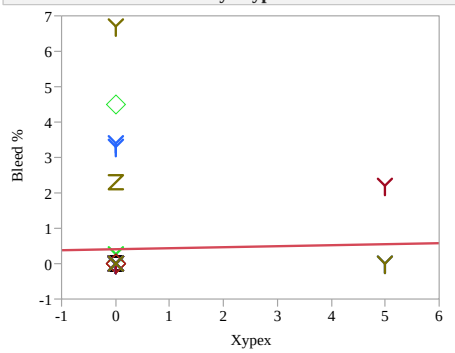
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	18.700033	18.7000	13.9749
Error	52	69.582050	1.3381	Prob > F
C. Total	53	88.282083		0.0005*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.253	0.163592	1.55	0.1280
Silica fume	0.4494	0.120215	3.74	0.0005*

Bivariate Fit of Bleed % By Xypex



Linear Fit

Bleed % = 0.409 + 0.0282* Xypex

Summary of Fit

RSquare	0.000834
RSquare Adj	-0.01838
Root Mean Square Error	1.302427
Mean of Response	0.419444
Observations (or Sum Wgts)	54

Analysis of Variance

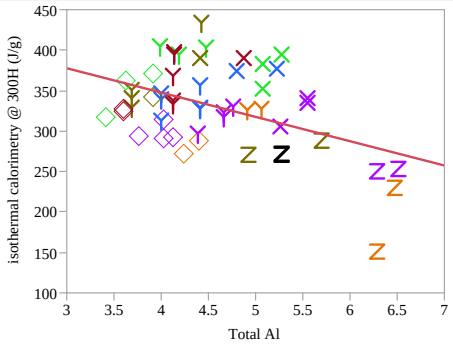
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.073633	0.07363	0.0434
Error	52	88.208450	1.69632	Prob > F
C. Total	53	88.282083		0.8358

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.409	0.184191	2.22	0.0308*
Xypex	0.0282	0.135352	0.21	0.8358

Fit Group

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Total Al



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 467.81128 - 30.039219*Total Al

Summary of Fit

RSquare	0.206189
RSquare Adj	0.190923
Root Mean Square Error	45.92082
Mean of Response	330.4241
Observations (or Sum Wgts)	54

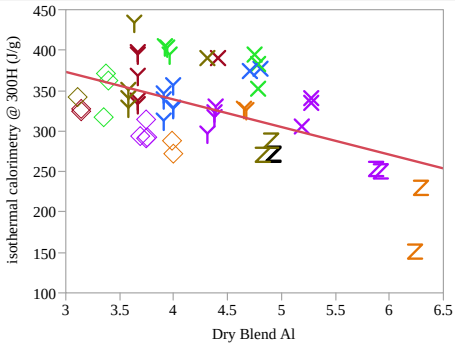
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	28482.02	28482.0	13.5068
Error	52	109653.51	2108.7	Prob > F
C. Total	53	138135.54		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	467.81128	37.90139	12.34	<.0001*
Total Al	-30.03922	8.173589	-3.68	0.0006*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Dry Blend Al



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 475.29501 - 34.066602*Dry Blend Al

Summary of Fit

RSquare	0.264043
RSquare Adj	0.24989
Root Mean Square Error	44.21578
Mean of Response	330.4241
Observations (or Sum Wgts)	54

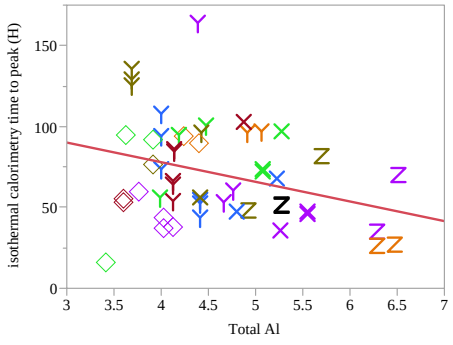
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	36473.69	36473.7	18.6563
Error	52	101661.85	1955.0	Prob > F
C. Total	53	138135.54		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	475.29501	34.07588	13.95	<.0001*
Dry Blend Al	-34.0666	7.887081	-4.32	<.0001*

Bivariate Fit of isothermal calorimetry time to peak (H) By Total Al



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 126.48962 - 12.133781*Total Al

Summary of Fit

RSquare	0.097379
RSquare Adj	0.080021
Root Mean Square Error	28.78132
Mean of Response	70.99463
Observations (or Sum Wgts)	54

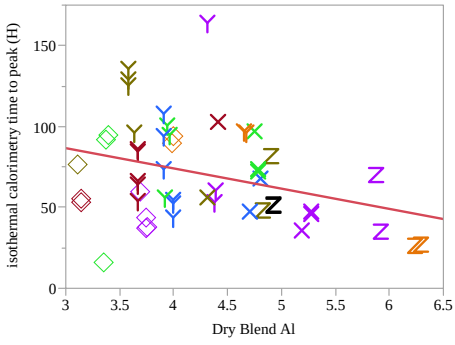
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4647.141	4647.14	5.6100
Error	52	43074.960	828.36	Prob > F
C. Total	53	47722.102		0.0216*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	126.48962	23.75507	5.32	<.0001*
Total Al	-12.13378	5.122878	-2.37	0.0216*

Bivariate Fit of isothermal calorimetry time to peak (H) By Dry Blend Al



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 124.18012 - 12.506642*Dry Blend Al

Summary of Fit

RSquare	0.103011
RSquare Adj	0.085761
Root Mean Square Error	28.69139
Mean of Response	70.99463
Observations (or Sum Wgts)	54

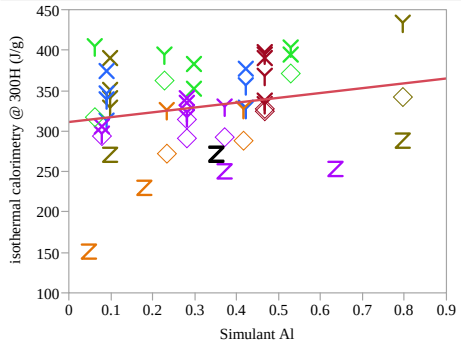
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4915.906	4915.91	5.9717
Error	52	42806.196	823.20	Prob > F
C. Total	53	47722.102		0.0180*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	124.18012	22.11166	5.62	<.0001*
Dry Blend Al	-12.50664	5.117886	-2.44	0.0180*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Simulant Al



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 311.22071 + 59.81943*Simulant Al

Summary of Fit

RSquare	0.053045
RSquare Adj	0.034835
Root Mean Square Error	50.15516
Mean of Response	330.4241
Observations (or Sum Wgts)	54

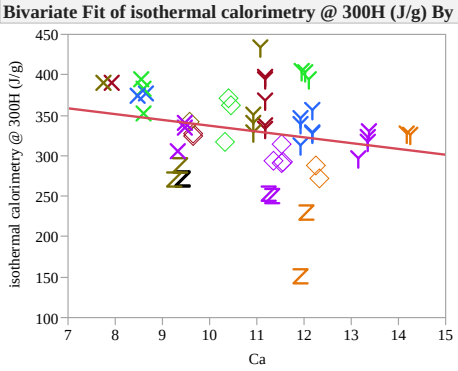
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7327.47	7327.47	2.9129
Error	52	130808.07	2515.54	Prob > F
C. Total	53	138135.54		0.0938

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	311.22071	13.15992	23.65	<.0001*
Simulant Al	59.81943	35.04943	1.71	0.0938

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Ca



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 408.8937 - 7.1668263* Ca

Summary of Fit

RSquare	0.049462
RSquare Adj	0.031182
Root Mean Square Error	50.24997
Mean of Response	330.4241
Observations (or Sum Wgts)	54

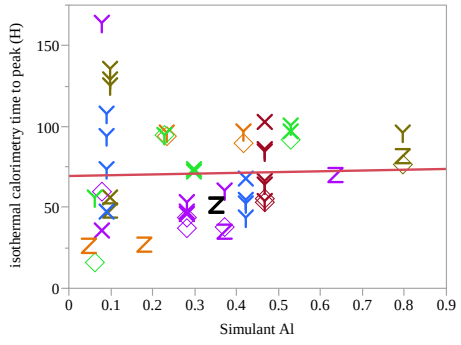
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6832.46	6832.46	2.7059
Error	52	131303.08	2525.06	Prob > F
C. Total	53	138135.54		0.1060

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	408.8937	48.19097	8.48	<.0001*
Ca	-7.166826	4.356866	-1.64	0.1060

Bivariate Fit of isothermal calorimetry time to peak (H) By Simulant Al



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 69.414469 + 4.9222768*Simulant Al

Summary of Fit

RSquare	0.00104
RSquare Adj	-0.01817
Root Mean Square Error	30.27835
Mean of Response	70.99463
Observations (or Sum Wgts)	54

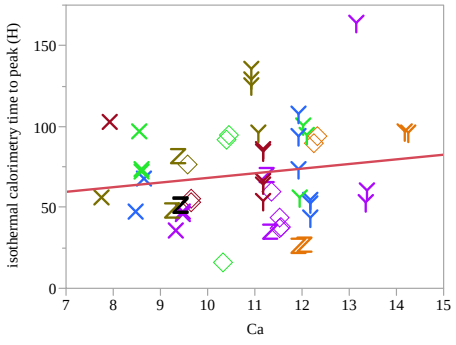
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	49.614	49.614	0.0541
Error	52	47672.488	916.779	Prob > F
C. Total	53	47722.102		0.8170

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	69.414469	7.944562	8.74	<.0001*
Simulant Al	4.9222768	21.15912	0.23	0.8170

Bivariate Fit of isothermal calorimetry time to peak (H) By Ca



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 39.591768 + 2.8681017* Ca

Summary of Fit

RSquare	0.022929
RSquare Adj	0.00414
Root Mean Square Error	29.94478
Mean of Response	70.99463
Observations (or Sum Wgts)	54

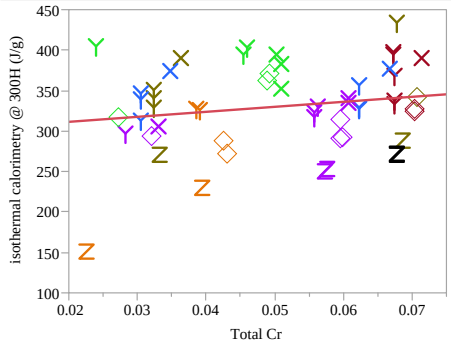
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1094.239	1094.24	1.2203
Error	52	46627.862	896.69	Prob > F
C. Total	53	47722.102		0.2744

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	39.591768	28.71779	1.38	0.1739
Ca	2.8681017	2.596328	1.10	0.2744

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Total Cr



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 299.11492 + 618.73543*Total Cr

Summary of Fit

RSquare	0.033979
RSquare Adj	0.015402
Root Mean Square Error	50.65757
Mean of Response	330.4241
Observations (or Sum Wgts)	54

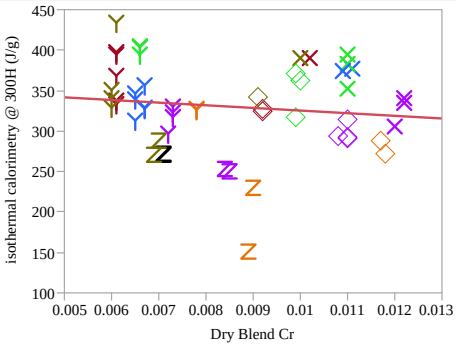
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4693.69	4693.69	1.8290
Error	52	133441.85	2566.19	Prob > F
C. Total	53	138135.54		0.1821

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	299.11492	24.15499	12.38	<.0001*
Total Cr	618.73543	457.5012	1.35	0.1821

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Dry Blend Cr



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 357.99698 - 3252.3745*Dry Blend Cr

Summary of Fit

RSquare	0.017666
RSquare Adj	-0.00123
Root Mean Square Error	51.08351
Mean of Response	330.4241
Observations (or Sum Wgts)	54

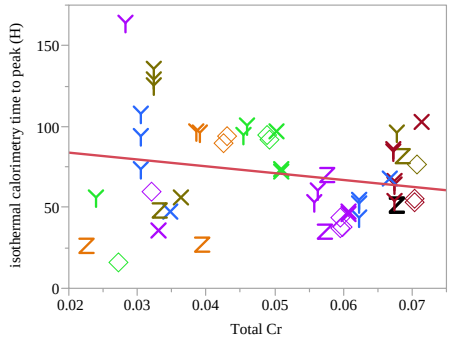
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2440.26	2440.26	0.9351
Error	52	135695.28	2609.52	Prob > F
C. Total	53	138135.54		0.3380

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	357.99698	29.34833	12.20	<.0001*
Dry Blend Cr	-3252.374	3363.281	-0.97	0.3380

Bivariate Fit of isothermal calorimetry time to peak (H) By Total Cr



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 92.340938 - 421.84837*Total Cr

Summary of Fit

RSquare	0.045719
RSquare Adj	0.027368
Root Mean Square Error	29.59349
Mean of Response	70.99463
Observations (or Sum Wgts)	54

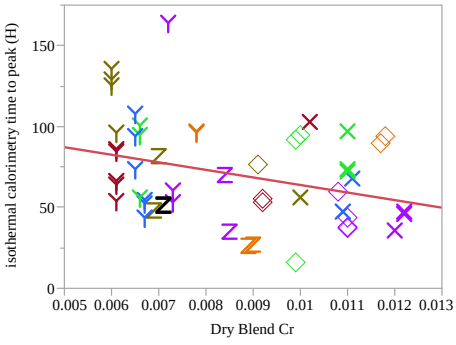
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2181.811	2181.81	2.4913
Error	52	45540.291	875.77	Prob > F
C. Total	53	47722.102		0.1205

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	92.340938	14.11103	6.54	<.0001*
Total Cr	-421.8484	267.2662	-1.58	0.1205

Bivariate Fit of isothermal calorimetry time to peak (H) By Dry Blend Cr



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 110.55239 - 4666.0535*Dry Blend Cr

Summary of Fit

RSquare	0.105248
RSquare Adj	0.088041
Root Mean Square Error	28.65559
Mean of Response	70.99463
Observations (or Sum Wgts)	54

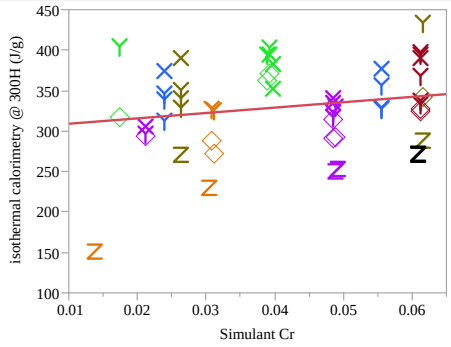
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5022.668	5022.67	6.1167
Error	52	42699.433	821.14	Prob > F
C. Total	53	47722.102		0.0167*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	110.55239	16.46312	6.72	<.0001*
Dry Blend Cr	-4666.054	1886.652	-2.47	0.0167*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Simulant Cr



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 302.37448 + 665.96831*Simulant Cr

Summary of Fit

RSquare	0.040206
RSquare Adj	0.021748
Root Mean Square Error	50.49403
Mean of Response	330.4241
Observations (or Sum Wgts)	54

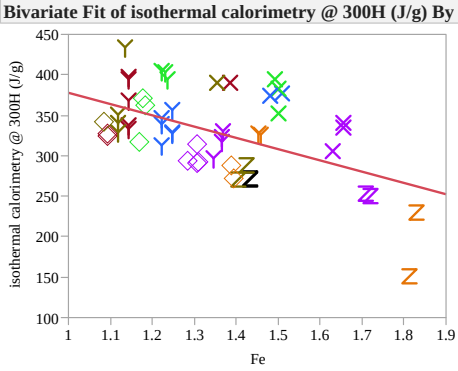
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5553.87	5553.87	2.1783
Error	52	132581.67	2549.65	Prob > F
C. Total	53	138135.54		0.1460

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	302.37448	20.2091	14.96	<.0001*
Simulant Cr	665.96831	451.2279	1.48	0.1460

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Fe



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 517.27616 - 139.38098* Fe

Summary of Fit

RSquare	0.278023
RSquare Adj	0.264139
Root Mean Square Error	43.7938
Mean of Response	330.4241
Observations (or Sum Wgts)	54

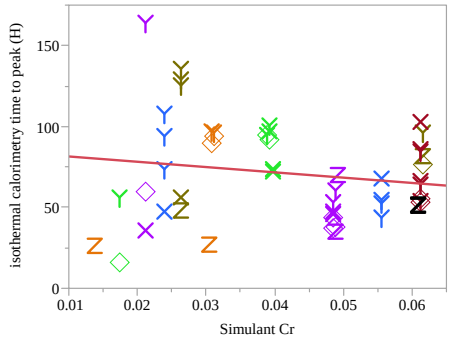
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	38404.89	38404.9	20.0245
Error	52	99730.65	1917.9	Prob > F
C. Total	53	138135.54		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	517.27616	42.179	12.26	<.0001*
Fe	-139.381	31.14748	-4.47	<.0001*

Bivariate Fit of isothermal calorimetry time to peak (H) By Simulant Cr



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 84.777337 - 327.23628*Simulant Cr

Summary of Fit

RSquare	0.028099
RSquare Adj	0.009409
Root Mean Square Error	29.86545
Mean of Response	70.99463
Observations (or Sum Wgts)	54

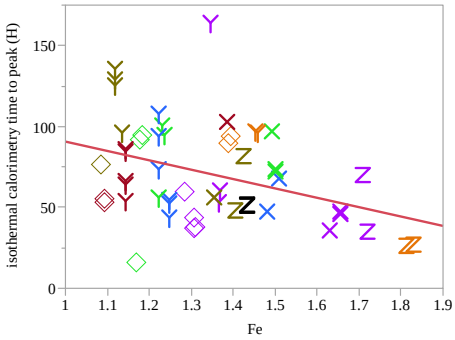
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1340.946	1340.95	1.5034
Error	52	46381.156	891.95	Prob > F
C. Total	53	47722.102		0.2257

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	84.777337	11.95297	7.09	<.0001*
Simulant Cr	-327.2363	266.8855	-1.23	0.2257

Bivariate Fit of isothermal calorimetry time to peak (H) By Fe



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 148.54841 - 57.850688* Fe

Summary of Fit

RSquare	0.138636
RSquare Adj	0.122072
Root Mean Square Error	28.11586
Mean of Response	70.99463
Observations (or Sum Wgts)	54

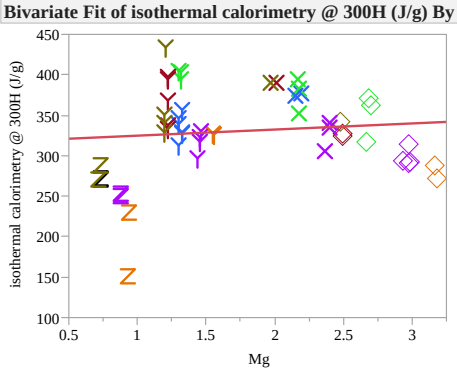
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6616.015	6616.02	8.3694
Error	52	41106.086	790.50	Prob > F
C. Total	53	47722.102		0.0056*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	148.54841	27.07915	5.49	<.0001*
Fe	-57.85069	19.99685	-2.89	0.0056*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Mg



Linear Fit

isothermal calorimetry @ 300H (J/g) = 317.30354 + 7.5485549* Mg

Summary of Fit

RSquare	0.01166
RSquare Adj	-0.00735
Root Mean Square Error	51.23944
Mean of Response	330.4241
Observations (or Sum Wgts)	54

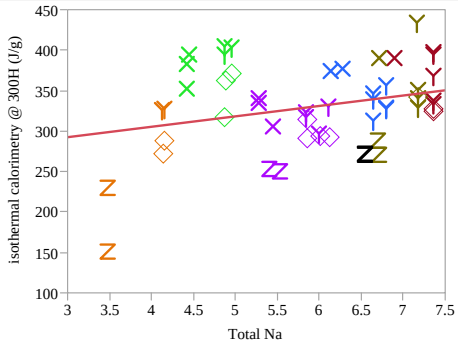
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1610.59	1610.59	0.6134
Error	52	136524.95	2625.48	Prob > F
C. Total	53	138135.54		0.4370

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	317.30354	18.1451	17.49	<.0001*
Mg	7.5485549	9.63774	0.78	0.4370

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Total Na



Linear Fit

isothermal calorimetry @ 300H (J/g) = 253.96978 + 12.862488*Total Na

Summary of Fit

RSquare	0.082492
RSquare Adj	0.064848
Root Mean Square Error	49.36918
Mean of Response	330.4241
Observations (or Sum Wgts)	54

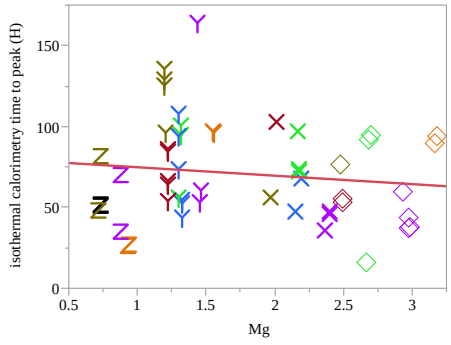
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	11395.11	11395.1	4.6753
Error	52	126740.43	2437.3	Prob > F
C. Total	53	138135.54		0.0352*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	253.96978	35.99148	7.06	<.0001*
Total Na	12.862488	5.948695	2.16	0.0352*

Bivariate Fit of isothermal calorimetry time to peak (H) By Mg



Linear Fit

isothermal calorimetry time to peak (H) = 80.004104 - 5.1833643* Mg

Summary of Fit

RSquare	0.015913
RSquare Adj	-0.00301
Root Mean Square Error	30.0521
Mean of Response	70.99463
Observations (or Sum Wgts)	54

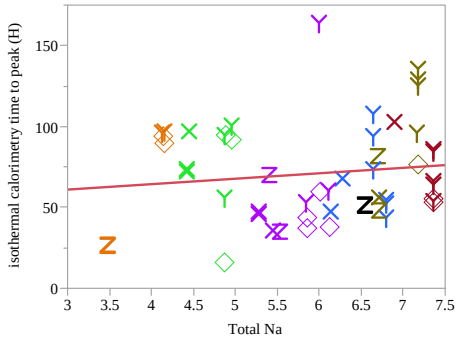
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	759.419	759.419	0.8409
Error	52	46962.682	903.129	Prob > F
C. Total	53	47722.102		0.3634

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	80.004104	10.64216	7.52	<.0001*
Mg	-5.183364	5.652566	-0.92	0.3634

Bivariate Fit of isothermal calorimetry time to peak (H) By Total Na



Linear Fit

isothermal calorimetry time to peak (H) = 51.012464 + 3.3617519*Total Na

Summary of Fit

RSquare	0.016311
RSquare Adj	-0.00261
Root Mean Square Error	30.04602
Mean of Response	70.99463
Observations (or Sum Wgts)	54

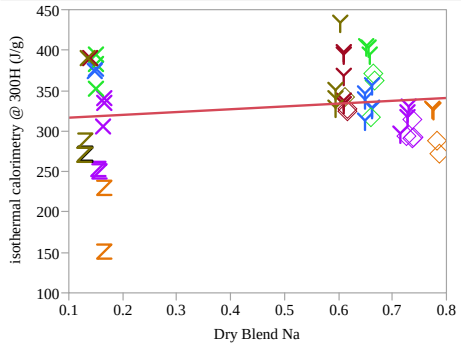
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	778.395	778.395	0.8622
Error	52	46943.707	902.764	Prob > F
C. Total	53	47722.102		0.3574

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	51.012464	21.90437	2.33	0.0238*
Total Na	3.3617519	3.620369	0.93	0.3574

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Dry Blend Na



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 313.17491 + 34.73555*Dry Blend Na

Summary of Fit

RSquare	0.029639
RSquare Adj	0.010978
Root Mean Square Error	50.77124
Mean of Response	330.4241
Observations (or Sum Wgts)	54

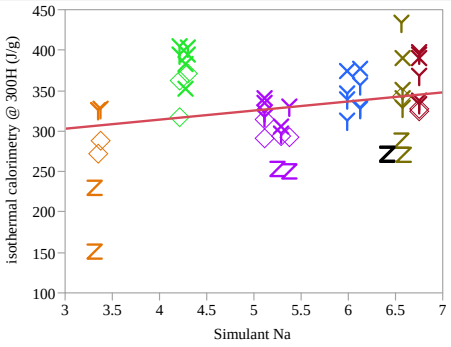
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4094.15	4094.15	1.5883
Error	52	134041.39	2577.72	Prob > F
C. Total	53	138135.54		0.2132

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	313.17491	15.33185	20.43	<.0001*
Dry Blend Na	34.73555	27.56195	1.26	0.2132

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Simulant Na



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 269.47176 + 11.189253*Simulant Na

Summary of Fit

RSquare	0.062215
RSquare Adj	0.04418
Root Mean Square Error	49.91175
Mean of Response	330.4241
Observations (or Sum Wgts)	54

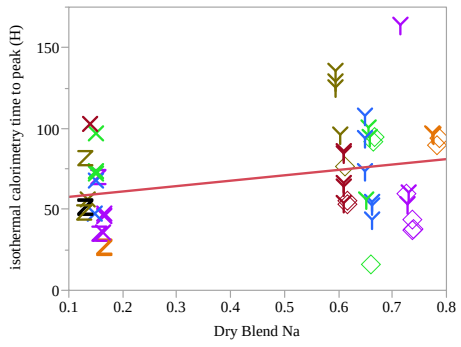
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8594.06	8594.06	3.4498
Error	52	129541.48	2491.18	Prob > F
C. Total	53	138135.54		0.0689

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	269.47176	33.51214	8.04	<.0001*
Simulant Na	11.189253	6.024275	1.86	0.0689

Bivariate Fit of isothermal calorimetry time to peak (H) By Dry Blend Na



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 54.479447 + 33.257501*Dry Blend Na

Summary of Fit

RSquare	0.078646
RSquare Adj	0.060927
Root Mean Square Error	29.07846
Mean of Response	70.99463
Observations (or Sum Wgts)	54

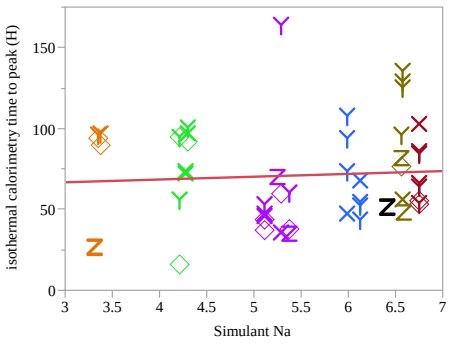
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3753.141	3753.14	4.4387
Error	52	43968.961	845.56	Prob > F
C. Total	53	47722.102		0.0400*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	54.479447	8.781085	6.20	<.0001*
Dry Blend Na	33.257501	15.78569	2.11	0.0400*

Bivariate Fit of isothermal calorimetry time to peak (H) By Simulant Na



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 61.575624 + 1.7290834*Simulant Na

Summary of Fit

RSquare	0.0043
RSquare Adj	-0.01485
Root Mean Square Error	30.2289
Mean of Response	70.99463
Observations (or Sum Wgts)	54

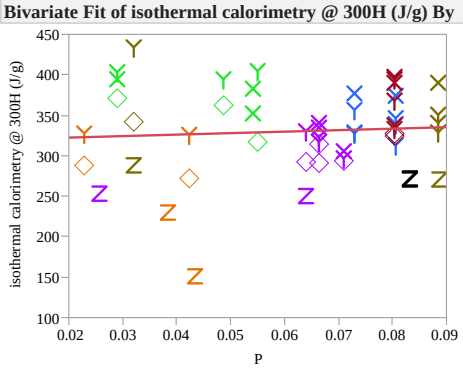
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	205.224	205.224	0.2246
Error	52	47516.878	913.786	Prob > F
C. Total	53	47722.102		0.6376

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	61.575624	20.29653	3.03	0.0038*
Simulant Na	1.7290834	3.648583	0.47	0.6376

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By P



Linear Fit

isothermal calorimetry @ 300H (J/g) = 318.86297 + 183.31564* P

Summary of Fit

RSquare	0.005316
RSquare Adj	-0.01381
Root Mean Square Error	51.40362
Mean of Response	330.4241
Observations (or Sum Wgts)	54

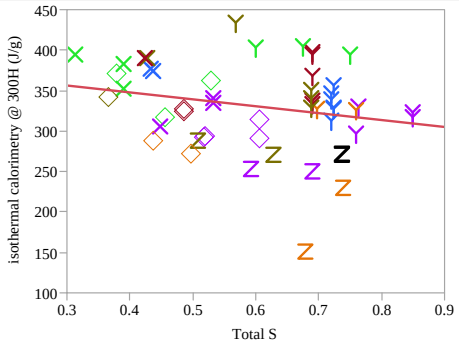
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	734.29	734.29	0.2779
Error	52	137401.25	2642.33	Prob > F
C. Total	53	138135.54		0.6003

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	318.86297	23.01964	13.85	<.0001*
P	183.31564	347.7443	0.53	0.6003

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Total S



Linear Fit

isothermal calorimetry @ 300H (J/g) = 381.93712 - 85.242598*Total S

Summary of Fit

RSquare	0.052392
RSquare Adj	0.034169
Root Mean Square Error	50.17246
Mean of Response	330.4241
Observations (or Sum Wgts)	54

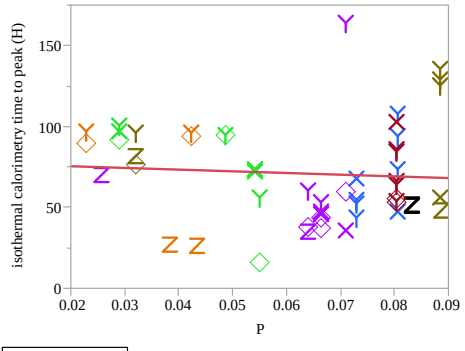
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7237.21	7237.21	2.8750
Error	52	130898.33	2517.28	Prob > F
C. Total	53	138135.54		0.0959

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	381.93712	31.13841	12.27	<.0001*
Total S	-85.2426	50.2732	-1.70	0.0959

Bivariate Fit of isothermal calorimetry time to peak (H) By P



Linear Fit

isothermal calorimetry time to peak (H) = 77.499776 - 103.14715* P

Summary of Fit

RSquare	0.004871
RSquare Adj	-0.01427
Root Mean Square Error	30.22022
Mean of Response	70.99463
Observations (or Sum Wgts)	54

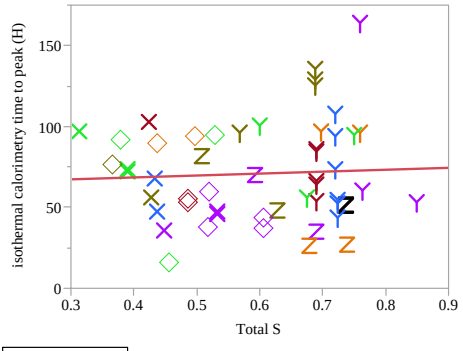
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	232.478	232.478	0.2546
Error	52	47489.624	913.262	Prob > F
C. Total	53	47722.102		0.6160

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	77.499776	13.53327	5.73	<.0001*
P	-103.1471	204.4391	-0.50	0.6160

Bivariate Fit of isothermal calorimetry time to peak (H) By Total S



Linear Fit

isothermal calorimetry time to peak (H) = 63.808563 + 11.891337*Total S

Summary of Fit

RSquare	0.002951
RSquare Adj	-0.01622
Root Mean Square Error	30.24937
Mean of Response	70.99463
Observations (or Sum Wgts)	54

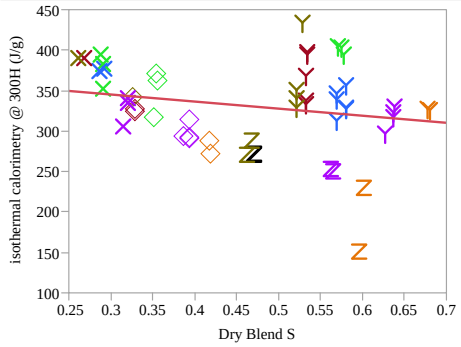
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	140.838	140.838	0.1539
Error	52	47581.264	915.024	Prob > F
C. Total	53	47722.102		0.6964

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	63.808563	18.77359	3.40	0.0013*
Total S	11.891337	30.31011	0.39	0.6964

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Dry Blend S



Linear Fit

isothermal calorimetry @ 300H (J/g) = 371.53852 - 87.375991*Dry Blend S

Summary of Fit

RSquare	0.045641
RSquare Adj	0.027288
Root Mean Square Error	50.35086
Mean of Response	330.4241
Observations (or Sum Wgts)	54

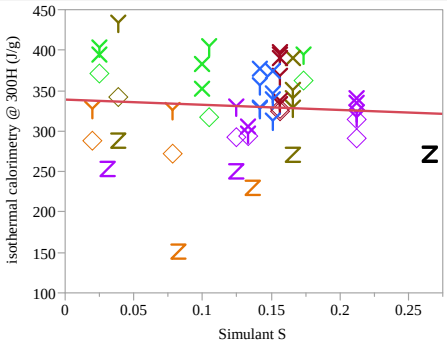
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6304.67	6304.67	2.4868
Error	52	131830.86	2535.21	Prob > F
C. Total	53	138135.54		0.1209

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	371.53852	26.95708	13.78	<.0001*
Dry Blend S	-87.37599	55.40739	-1.58	0.1209

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Simulant S



Linear Fit

isothermal calorimetry @ 300H (J/g) = 339.0502 - 64.48638*Simulant S

Summary of Fit

RSquare	0.005939
RSquare Adj	-0.01318
Root Mean Square Error	51.3875
Mean of Response	330.4241
Observations (or Sum Wgts)	54

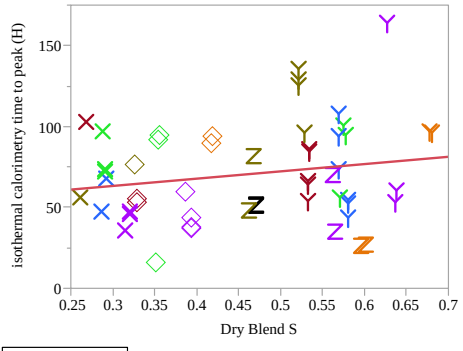
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	820.46	820.46	0.3107
Error	52	137315.08	2640.67	Prob > F
C. Total	53	138135.54		0.5796

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	339.0502	16.98216	19.97	<.0001*
Simulant S	-64.48638	115.6906	-0.56	0.5796

Bivariate Fit of isothermal calorimetry time to peak (H) By Dry Blend S



Linear Fit

isothermal calorimetry time to peak (H) = 49.853649 + 44.928588*Dry Blend S

Summary of Fit

RSquare	0.03493
RSquare Adj	0.016371
Root Mean Square Error	29.76031
Mean of Response	70.99463
Observations (or Sum Wgts)	54

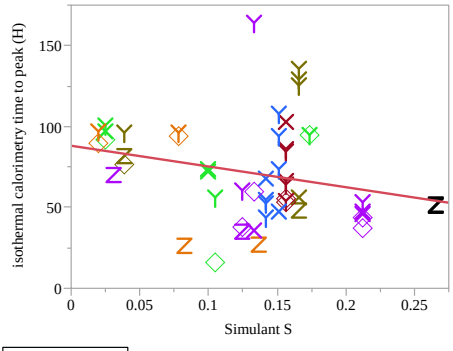
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1666.955	1666.96	1.8821
Error	52	46055.146	885.68	Prob > F
C. Total	53	47722.102		0.1760

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	49.853649	15.93321	3.13	0.0029*
Dry Blend S	44.928588	32.74901	1.37	0.1760

Bivariate Fit of isothermal calorimetry time to peak (H) By Simulant S



Linear Fit

isothermal calorimetry time to peak (H) = 88.112066 - 127.96489*Simulant S

Summary of Fit

RSquare	0.067699
RSquare Adj	0.04977
Root Mean Square Error	29.2507
Mean of Response	70.99463
Observations (or Sum Wgts)	54

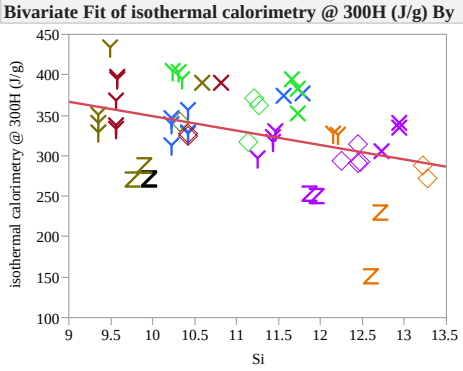
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3230.730	3230.73	3.7760
Error	52	44491.372	855.60	Prob > F
C. Total	53	47722.102		0.0574

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	88.112066	9.666554	9.12	<.0001*
Simulant S	-127.9649	65.85317	-1.94	0.0574

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Si



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 527.49648 - 17.851354* Si

Summary of Fit

RSquare	0.167553
RSquare Adj	0.151544
Root Mean Square Error	47.02506
Mean of Response	330.4241
Observations (or Sum Wgts)	54

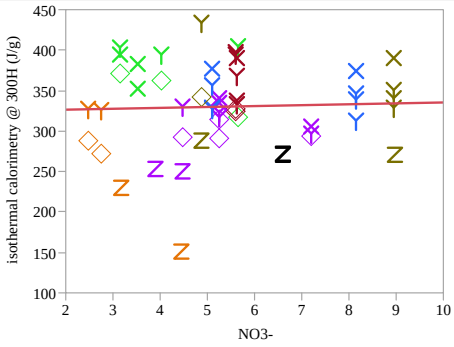
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	23145.03	23145.0	10.4664
Error	52	114990.51	2211.4	Prob > F
C. Total	53	138135.54		0.0021*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	527.49648	61.2505	8.61	<.0001*
Si	-17.85135	5.517872	-3.24	0.0021*

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By NO3-



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 324.37059 + 1.108579* NO3-

Summary of Fit

RSquare	0.001563
RSquare Adj	-0.01764
Root Mean Square Error	51.50048
Mean of Response	330.4241
Observations (or Sum Wgts)	54

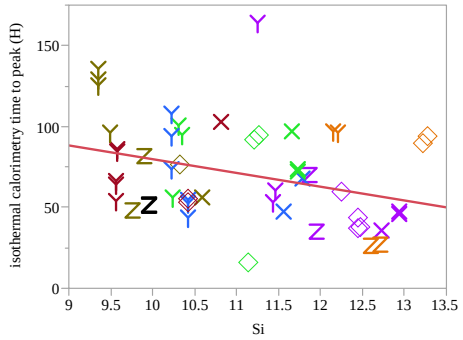
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	215.97	215.97	0.0814
Error	52	137919.57	2652.30	Prob > F
C. Total	53	138135.54		0.7765

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	324.37059	22.34152	14.52	<.0001*
NO3-	1.108579	3.884907	0.29	0.7765

Bivariate Fit of isothermal calorimetry time to peak (H) By Si



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 164.65621 - 8.4841208* Si

Summary of Fit

RSquare	0.109549
RSquare Adj	0.092425
Root Mean Square Error	28.58664
Mean of Response	70.99463
Observations (or Sum Wgts)	54

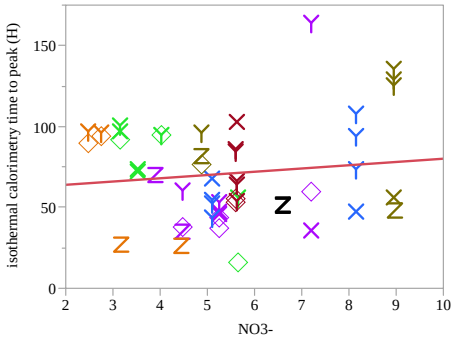
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5227.921	5227.92	6.3974
Error	52	42494.180	817.20	Prob > F
C. Total	53	47722.102		0.0145*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	164.65621	37.23431	4.42	<.0001*
Si	-8.484121	3.354327	-2.53	0.0145*

Bivariate Fit of isothermal calorimetry time to peak (H) By NO3-



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 60.023021 + 2.0092396* NO3-

Summary of Fit

RSquare	0.014866
RSquare Adj	-0.00408
Root Mean Square Error	30.06808
Mean of Response	70.99463
Observations (or Sum Wgts)	54

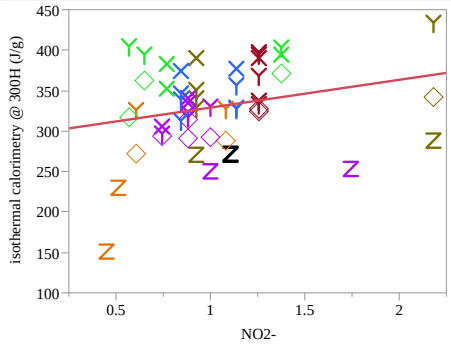
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	709.455	709.455	0.7847
Error	52	47012.647	904.089	Prob > F
C. Total	53	47722.102		0.3798

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	60.023021	13.04389	4.60	<.0001*
NO3-	2.0092396	2.268167	0.89	0.3798

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By NO2-



Linear Fit

isothermal calorimetry @ 300H (J/g) = 294.84386 + 34.269712* NO2-

Summary of Fit

RSquare	0.065563
RSquare Adj	0.047593
Root Mean Square Error	49.82256
Mean of Response	330.4241
Observations (or Sum Wgts)	54

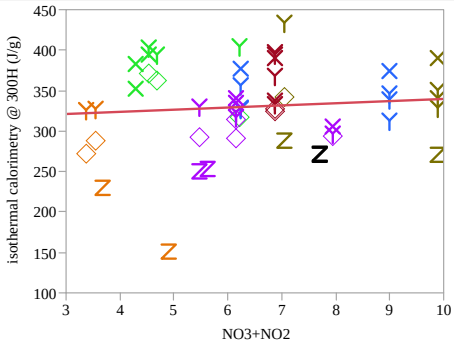
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	9056.61	9056.61	3.6485
Error	52	129078.93	2482.29	Prob > F
C. Total	53	138135.54		0.0616

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	294.84386	19.8229	14.87	<.0001*
NO2-	34.269712	17.94129	1.91	0.0616

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By NO3+NO2



Linear Fit

isothermal calorimetry @ 300H (J/g) = 313.2801 + 2.6380118* NO3+NO2

Summary of Fit

RSquare	0.008767
RSquare Adj	-0.01029
Root Mean Square Error	51.31435
Mean of Response	330.4241
Observations (or Sum Wgts)	54

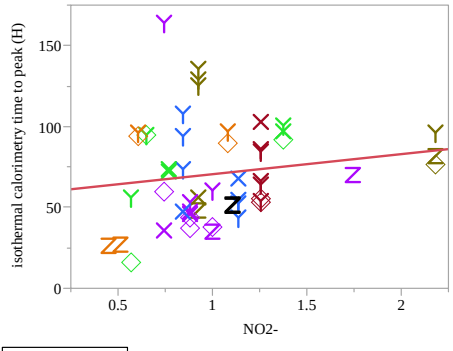
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1211.09	1211.09	0.4599
Error	52	136924.45	2633.16	Prob > F
C. Total	53	138135.54		0.5007

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	313.2801	26.22592	11.95	<.0001*
NO3+NO2	2.6380118	3.889807	0.68	0.5007

Bivariate Fit of isothermal calorimetry time to peak (H) By NO2-



Linear Fit

isothermal calorimetry time to peak (H) = 58.105146 + 12.414735* NO2-

Summary of Fit

RSquare	0.024906
RSquare Adj	0.006154
Root Mean Square Error	29.91448
Mean of Response	70.99463
Observations (or Sum Wgts)	54

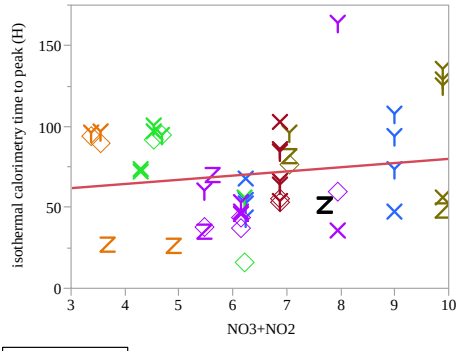
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1188.556	1188.56	1.3282
Error	52	46533.545	894.88	Prob > F
C. Total	53	47722.102		0.2544

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	58.105146	11.90207	4.88	<.0001*
NO2-	12.414735	10.77231	1.15	0.2544

Bivariate Fit of isothermal calorimetry time to peak (H) By NO3+NO2



Linear Fit

isothermal calorimetry time to peak (H) = 54.233485 + 2.5791042* NO3+NO2

Summary of Fit

RSquare	0.024257
RSquare Adj	0.005493
Root Mean Square Error	29.92442
Mean of Response	70.99463
Observations (or Sum Wgts)	54

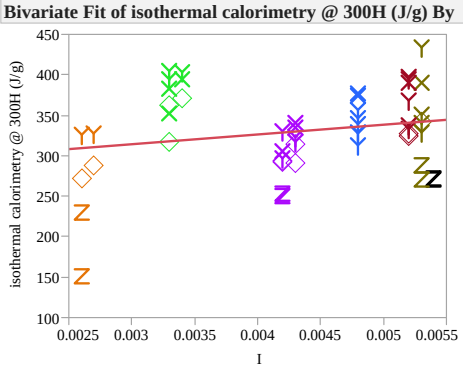
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1157.602	1157.60	1.2927
Error	52	46564.500	895.47	Prob > F
C. Total	53	47722.102		0.2608

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	54.233485	15.29388	3.55	0.0008*
NO3+NO2	2.5791042	2.268376	1.14	0.2608

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By I



Linear Fit

isothermal calorimetry @ 300H (J/g) = 278.15682 + 12051.374* I

Summary of Fit

RSquare	0.046268
RSquare Adj	0.027927
Root Mean Square Error	50.33433
Mean of Response	330.4241
Observations (or Sum Wgts)	54

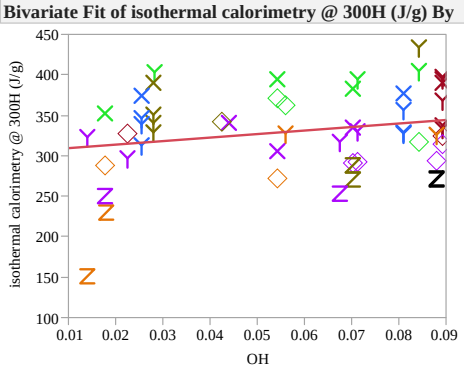
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6391.23	6391.23	2.5226
Error	52	131744.31	2533.54	Prob > F
C. Total	53	138135.54		0.1183

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	278.15682	33.61332	8.28	<.0001*
I	12051.374	7587.674	1.59	0.1183

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By OH



Linear Fit

isothermal calorimetry @ 300H (J/g) = 305.0527 + 435.56014* OH

Summary of Fit

RSquare	0.053638
RSquare Adj	0.035438
Root Mean Square Error	50.13947
Mean of Response	330.4241
Observations (or Sum Wgts)	54

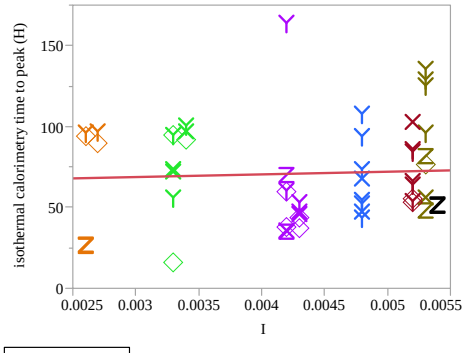
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7409.27	7409.27	2.9472
Error	52	130726.27	2513.97	Prob > F
C. Total	53	138135.54		0.0920

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	305.0527	16.27774	18.74	<.0001*
OH	435.56014	253.7116	1.72	0.0920

Bivariate Fit of isothermal calorimetry time to peak (H) By I



Linear Fit

isothermal calorimetry time to peak (H) = 63.738192 + 1673.1324* I

Summary of Fit

RSquare	0.002581
RSquare Adj	-0.0166
Root Mean Square Error	30.25498
Mean of Response	70.99463
Observations (or Sum Wgts)	54

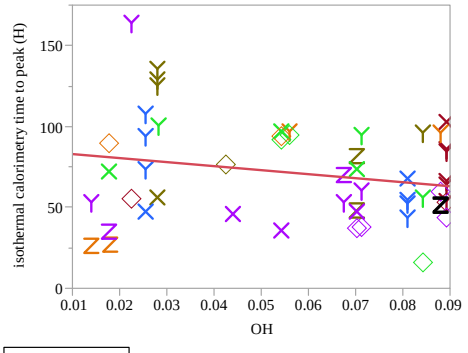
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	123.189	123.189	0.1346
Error	52	47598.913	915.364	Prob > F
C. Total	53	47722.102		0.7152

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	63.738192	20.20431	3.15	0.0027*
I	1673.1324	4560.802	0.37	0.7152

Bivariate Fit of isothermal calorimetry time to peak (H) By OH



Linear Fit

isothermal calorimetry time to peak (H) = 85.431577 - 247.84458* OH

Summary of Fit

RSquare	0.050271
RSquare Adj	0.032007
Root Mean Square Error	29.52283
Mean of Response	70.99463
Observations (or Sum Wgts)	54

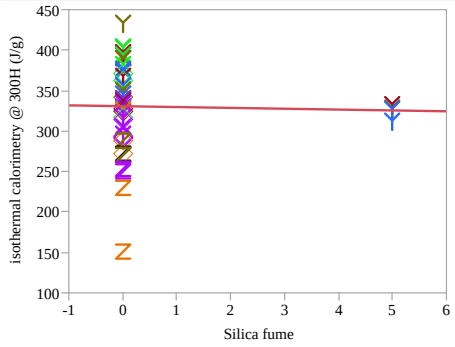
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2399.042	2399.04	2.7525
Error	52	45323.059	871.60	Prob > F
C. Total	53	47722.102		0.1031

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	85.431577	9.584563	8.91	<.0001*
OH	-247.8446	149.3889	-1.66	0.1031

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Silica fume



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 330.814 - 1.0528* Silica fume

Summary of Fit

RSquare	0.000743
RSquare Adj	-0.01847
Root Mean Square Error	51.52164
Mean of Response	330.4241
Observations (or Sum Wgts)	54

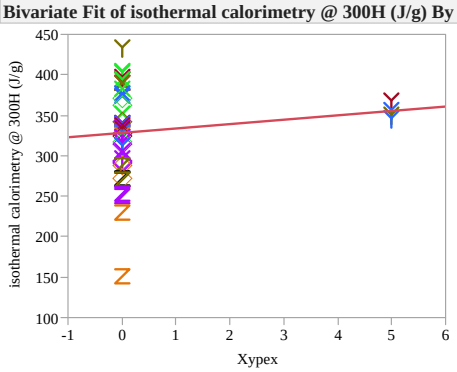
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	102.63	102.63	0.0387
Error	52	138032.91	2654.48	Prob > F
C. Total	53	138135.54		0.8449

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	330.814	7.28626	45.40	<.0001*
Silica fume	-1.0528	5.354286	-0.20	0.8449

Bivariate Fit of isothermal calorimetry @ 300H (J/g) By Xypex



Linear Fit

Linear Fit

isothermal calorimetry @ 300H (J/g) = 328.412 + 5.4326* Xypex

Summary of Fit

RSquare	0.019783
RSquare Adj	0.000932
Root Mean Square Error	51.02843
Mean of Response	330.4241
Observations (or Sum Wgts)	54

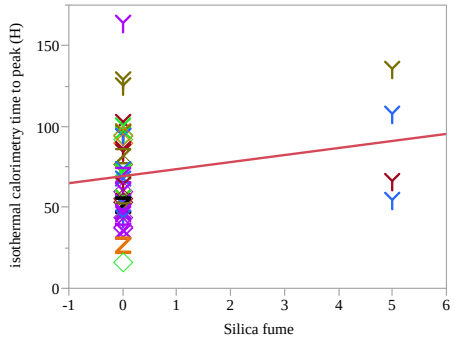
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2732.70	2732.70	1.0495
Error	52	135402.84	2603.90	Prob > F
C. Total	53	138135.54		0.3104

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	328.412	7.21651	45.51	<.0001*
Xypex	5.4326	5.30303	1.02	0.3104

Bivariate Fit of isothermal calorimetry time to peak (H) By Silica fume



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 69.3864 + 4.34222* Silica fume

Summary of Fit

RSquare	0.036583
RSquare Adj	0.018056
Root Mean Square Error	29.73482
Mean of Response	70.99463
Observations (or Sum Wgts)	54

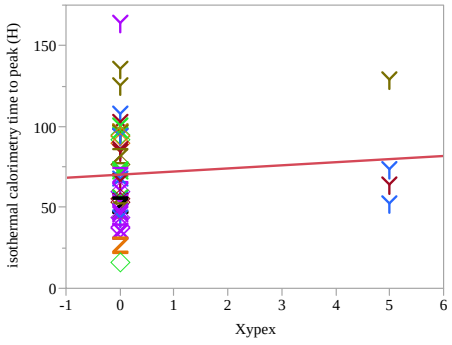
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1745.822	1745.82	1.9746
Error	52	45976.280	884.16	Prob > F
C. Total	53	47722.102		0.1659

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	69.3864	4.205138	16.50	<.0001*
Silica fume	4.34222	3.090133	1.41	0.1659

Bivariate Fit of isothermal calorimetry time to peak (H) By Xypex



Linear Fit

Linear Fit

isothermal calorimetry time to peak (H) = 70.2804 + 1.92842* Xypex

Summary of Fit

RSquare	0.007215
RSquare Adj	-0.01188
Root Mean Square Error	30.18461
Mean of Response	70.99463
Observations (or Sum Wgts)	54

Analysis of Variance

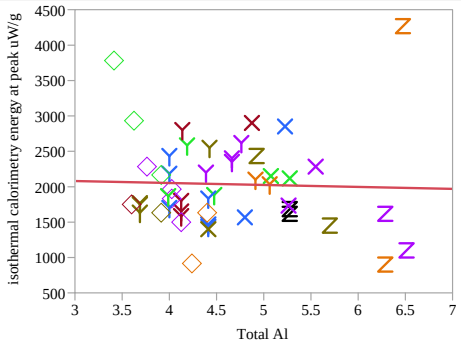
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	344.334	344.334	0.3779
Error	52	47377.768	911.111	Prob > F
C. Total	53	47722.102		0.5414

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	70.2804	4.268749	16.46	<.0001*
Xypex	1.92842	3.136877	0.61	0.5414

Fit Group

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Total Al



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2161.908 - 27.32284*Total Al

Summary of Fit

RSquare	0.001147
RSquare Adj	-0.01806
Root Mean Square Error	628.0695
Mean of Response	2036.944
Observations (or Sum Wgts)	54

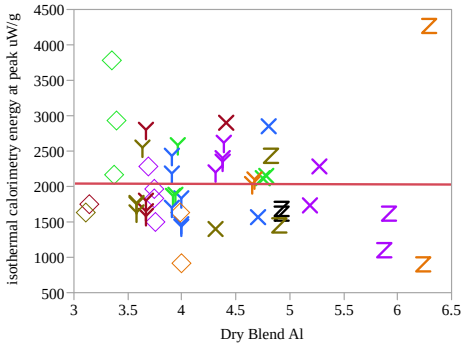
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	23564	23564	0.0597
Error	52	20512507	394471	Prob > F
C. Total	53	20536071		0.8079

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2161.908	518.386	4.17	0.0001*
Total Al	-27.32284	111.792	-0.24	0.8079

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Dry Blend Al



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2053.7837 - 3.959763*Dry Blend Al

Summary of Fit

RSquare	0.000024
RSquare Adj	-0.01921
Root Mean Square Error	628.4226
Mean of Response	2036.944
Observations (or Sum Wgts)	54

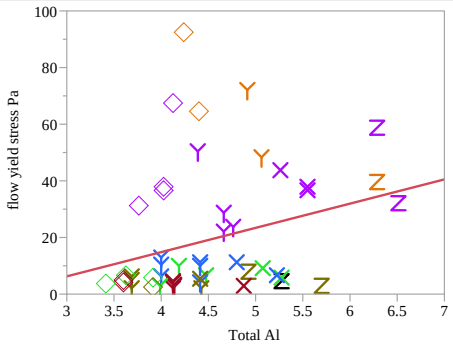
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	493	493	0.0012
Error	52	20535578	394915	Prob > F
C. Total	53	20536071		0.9720

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2053.7837	484.3079	4.24	<.0001*
Dry Blend Al	-3.959763	112.0962	-0.04	0.9720

Bivariate Fit of flow yield stress Pa By Total Al



Linear Fit

Linear Fit

flow yield stress Pa = -19.41711 + 8.5662301*Total Al

Summary of Fit

RSquare	0.08152
RSquare Adj	0.063511
Root Mean Square Error	21.26591
Mean of Response	19.45472
Observations (or Sum Wgts)	53

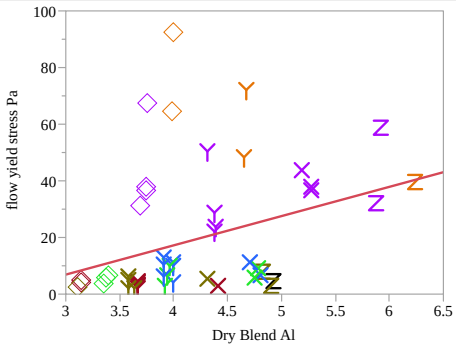
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2047.076	2047.08	4.5265
Error	51	23064.195	452.24	Prob > F
C. Total	52	25111.271		0.0382*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-19.41711	18.5026	-1.05	0.2989
Total Al	8.5662301	4.026306	2.13	0.0382*

Bivariate Fit of flow yield stress Pa By Dry Blend Al



Linear Fit

Linear Fit

flow yield stress Pa = -24.04984 + 10.323565*Dry Blend Al

Summary of Fit

RSquare	0.115403
RSquare Adj	0.098058
Root Mean Square Error	20.86998
Mean of Response	19.45472
Observations (or Sum Wgts)	53

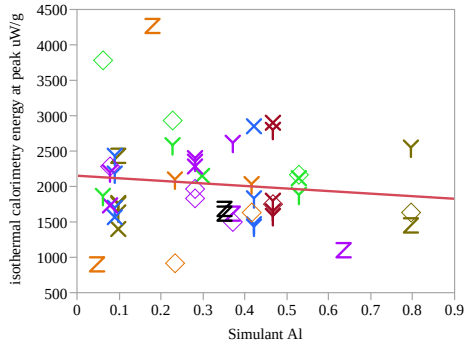
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2897.918	2897.92	6.6534
Error	51	22213.354	435.56	Prob > F
C. Total	52	25111.271		0.0128*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-24.04984	17.10795	-1.41	0.1659
Dry Blend Al	10.323565	4.002291	2.58	0.0128*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Simulant Al



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2152.6489 - 360.42507*Simulant Al

Summary of Fit

RSquare	0.012953
RSquare Adj	-0.00603
Root Mean Square Error	624.3467
Mean of Response	2036.944
Observations (or Sum Wgts)	54

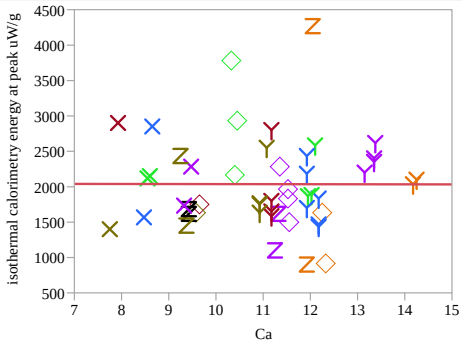
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	266011	266011	0.6824
Error	52	20270060	389809	Prob > F
C. Total	53	20536071		0.4125

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2152.6489	163.8187	13.14	<.0001*
Simulant Al	-360.4251	436.306	-0.83	0.4125

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Ca



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2044.8659 - 0.7234874* Ca

Summary of Fit

RSquare	3.391e-6
RSquare Adj	-0.01923
Root Mean Square Error	628.4291
Mean of Response	2036.944
Observations (or Sum Wgts)	54

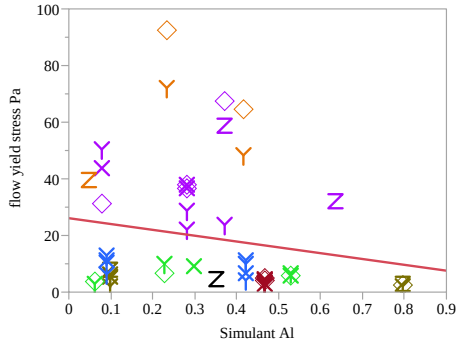
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	70	70	0.0002
Error	52	20536001	394923	Prob > F
C. Total	53	20536071		0.9895

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2044.8659	602.6791	3.39	0.0013*
Ca	-0.723487	54.48722	-0.01	0.9895

Bivariate Fit of flow yield stress Pa By Simulant Al



Linear Fit

Linear Fit

flow yield stress Pa = 26.120558 - 20.592412*Simulant Al

Summary of Fit

RSquare	0.034232
RSquare Adj	0.015295
Root Mean Square Error	21.80649
Mean of Response	19.45472
Observations (or Sum Wgts)	53

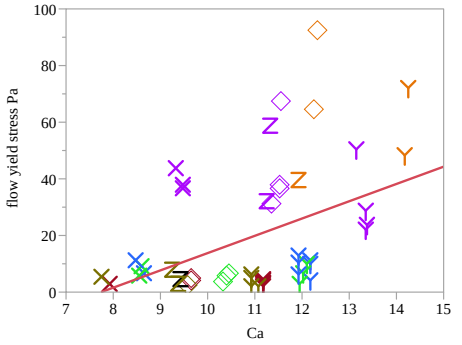
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	859.601	859.601	1.8077
Error	51	24251.670	475.523	Prob > F
C. Total	52	25111.271		0.1847

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	26.120558	5.792432	4.51	<.0001*
Simulant Al	-20.59241	15.31597	-1.34	0.1847

Bivariate Fit of flow yield stress Pa By Ca



Linear Fit

Linear Fit

flow yield stress Pa = -47.21453 + 6.1005411* Ca

Summary of Fit

RSquare	0.195349
RSquare Adj	0.179572
Root Mean Square Error	19.90458
Mean of Response	19.45472
Observations (or Sum Wgts)	53

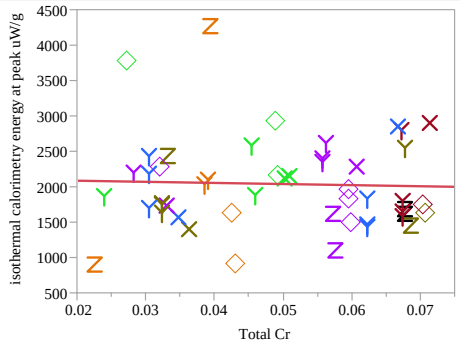
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4905.465	4905.47	12.3815
Error	51	20205.806	396.19	Prob > F
C. Total	52	25111.271		0.0009*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-47.21453	19.14317	-2.47	0.0170*
Ca	6.1005411	1.733729	3.52	0.0009*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Total Cr



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2116.4322 - 1570.8468*Total Cr

Summary of Fit

RSquare	0.001473
RSquare Adj	-0.01773
Root Mean Square Error	627.9671
Mean of Response	2036.944
Observations (or Sum Wgts)	54

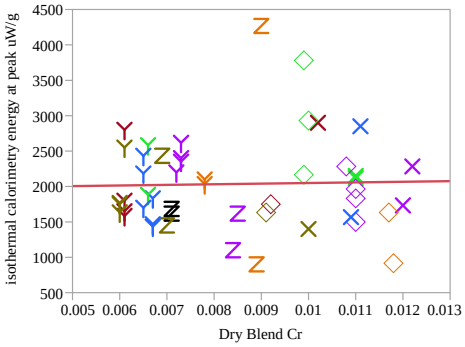
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	30253	30253	0.0767
Error	52	20505818	394343	Prob > F
C. Total	53	20536071		0.7829

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2116.4322	299.4328	7.07	<.0001*
Total Cr	-1570.847	5671.328	-0.28	0.7829

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Dry Blend Cr



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 1963.1179 + 8708.2418*Dry Blend Cr

Summary of Fit

RSquare	0.000852
RSquare Adj	-0.01836
Root Mean Square Error	628.1624
Mean of Response	2036.944
Observations (or Sum Wgts)	54

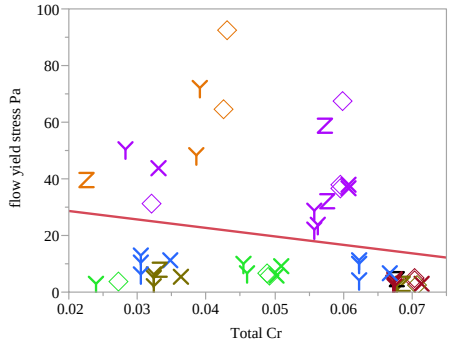
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	17494	17494	0.0443
Error	52	20518577	394588	Prob > F
C. Total	53	20536071		0.8341

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1963.1179	360.8898	5.44	<.0001*
Dry Blend Cr	8708.2418	41357.51	0.21	0.8341

Bivariate Fit of flow yield stress Pa By Total Cr



Linear Fit

Linear Fit

flow yield stress Pa = 34.64694 - 298.99289*Total Cr

Summary of Fit

RSquare	0.0432
RSquare Adj	0.024439
Root Mean Square Error	21.705
Mean of Response	19.45472
Observations (or Sum Wgts)	53

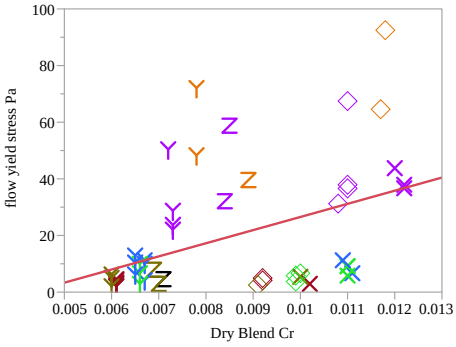
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1084.813	1084.81	2.3027
Error	51	24026.459	471.11	Prob > F
C. Total	52	25111.271		0.1353

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	34.64694	10.4461	3.32	0.0017*
Total Cr	-298.9929	197.0349	-1.52	0.1353

Bivariate Fit of flow yield stress Pa By Dry Blend Cr



Linear Fit

Linear Fit

flow yield stress Pa = -19.83481 + 4639.8057*Dry Blend Cr

Summary of Fit

RSquare	0.197534
RSquare Adj	0.1818
Root Mean Square Error	19.87753
Mean of Response	19.45472
Observations (or Sum Wgts)	53

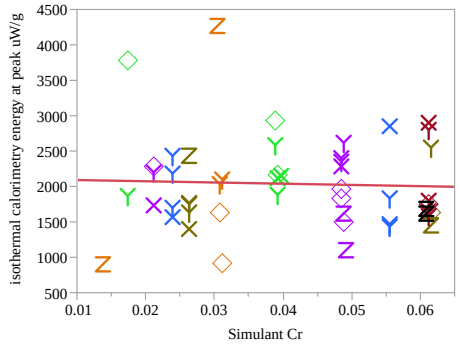
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4960.337	4960.34	12.5541
Error	51	20150.934	395.12	Prob > F
C. Total	52	25111.271		0.0009*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-19.83481	11.41998	-1.74	0.0885
Dry Blend Cr	4639.8057	1309.504	3.54	0.0009*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Simulant Cr



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2108.838 - 1706.9338*Simulant Cr

Summary of Fit

RSquare	0.001777
RSquare Adj	-0.01742
Root Mean Square Error	627.8716
Mean of Response	2036.944
Observations (or Sum Wgts)	54

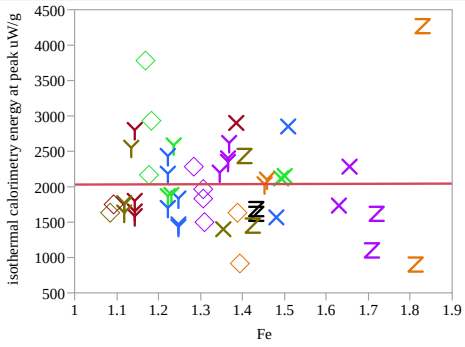
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	36486	36486	0.0926
Error	52	20499585	394223	Prob > F
C. Total	53	20536071		0.7622

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2108.838	251.2914	8.39	<.0001*
Simulant Cr	-1706.934	5610.825	-0.30	0.7622

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Fe



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2017.2016 + 14.727001* Fe

Summary of Fit

RSquare	2.088e-5
RSquare Adj	-0.01921
Root Mean Square Error	628.4236
Mean of Response	2036.944
Observations (or Sum Wgts)	54

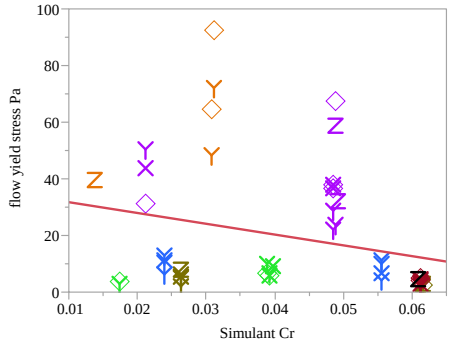
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	429	429	0.0011
Error	52	20535642	394916	Prob > F
C. Total	53	20536071		0.9738

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2017.2016	605.2518	3.33	0.0016*
Fe	14.727001	446.9539	0.03	0.9738

Bivariate Fit of flow yield stress Pa By Simulant Cr



Linear Fit

Linear Fit

flow yield stress Pa = 35.580364 - 380.88118*Simulant Cr

Summary of Fit

RSquare	0.071549
RSquare Adj	0.053344
Root Mean Square Error	21.38104
Mean of Response	19.45472
Observations (or Sum Wgts)	53

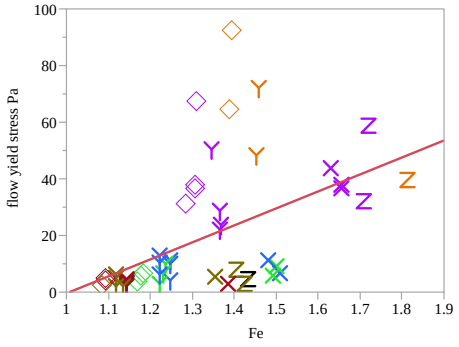
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1796.681	1796.68	3.9302
Error	51	23314.590	457.15	Prob > F
C. Total	52	25111.271		0.0528

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	35.580364	8.648082	4.11	0.0001*
Simulant Cr	-380.8812	192.1245	-1.98	0.0528

Bivariate Fit of flow yield stress Pa By Fe



Linear Fit

Linear Fit

flow yield stress Pa = -60.43362 + 60.005554* Fe

Summary of Fit

RSquare	0.248453
RSquare Adj	0.233717
Root Mean Square Error	19.23655
Mean of Response	19.45472
Observations (or Sum Wgts)	53

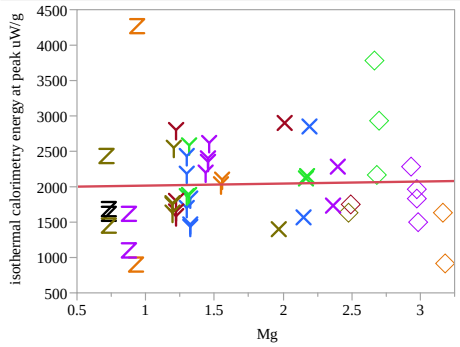
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6238.983	6238.98	16.8601
Error	51	18872.288	370.04	Prob > F
C. Total	52	25111.271		0.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-60.43362	19.63462	-3.08	0.0034*
Fe	60.005554	14.61375	4.11	0.0001*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Mg



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 1987.6045 + 28.38646* Mg

Summary of Fit

RSquare	0.001109
RSquare Adj	-0.0181
Root Mean Square Error	628.0816
Mean of Response	2036.944
Observations (or Sum Wgts)	54

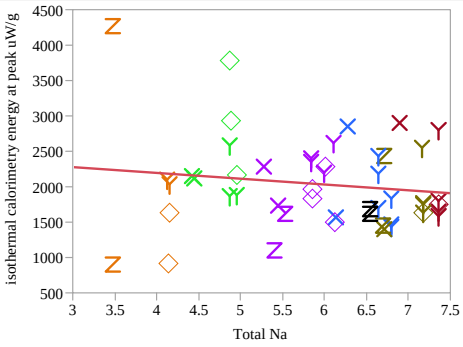
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	22776	22776	0.0577
Error	52	20513295	394486	Prob > F
C. Total	53	20536071		0.8111

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1987.6045	222.4186	8.94	<.0001*
Mg	28.38646	118.1373	0.24	0.8111

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Total Na



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2522.776 - 81.735133*Total Na

Summary of Fit

RSquare	0.022406
RSquare Adj	0.003606
Root Mean Square Error	621.3499
Mean of Response	2036.944
Observations (or Sum Wgts)	54

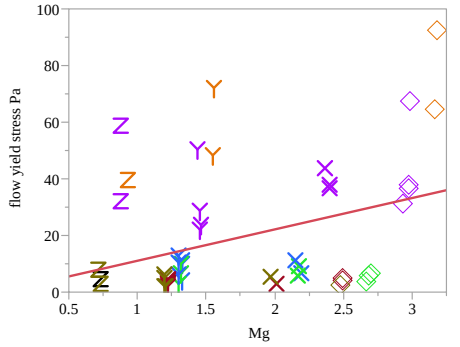
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	460136	460136	1.1918
Error	52	20075935	386076	Prob > F
C. Total	53	20536071		0.2800

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2522.776	452.981	5.57	<.0001*
Total Na	-81.73513	74.86899	-1.09	0.2800

Bivariate Fit of flow yield stress Pa By Mg



Linear Fit

Linear Fit

flow yield stress Pa = 0.0301821 + 11.078986* Mg

Summary of Fit

RSquare	0.134962
RSquare Adj	0.118
Root Mean Square Error	20.63797
Mean of Response	19.45472
Observations (or Sum Wgts)	53

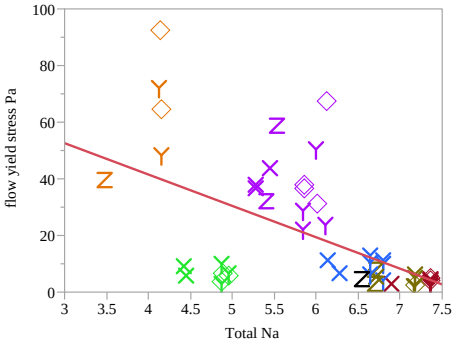
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3389.062	3389.06	7.9569
Error	51	21722.210	425.93	Prob > F
C. Total	52	25111.271		0.0068*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.0301821	7.446857	0.00	0.9968
Mg	11.078986	3.927599	2.82	0.0068*

Bivariate Fit of flow yield stress Pa By Total Na



Linear Fit

Linear Fit

flow yield stress Pa = 85.857889 - 11.084607*Total Na

Summary of Fit

RSquare	0.306596
RSquare Adj	0.293
Root Mean Square Error	18.47746
Mean of Response	19.45472
Observations (or Sum Wgts)	53

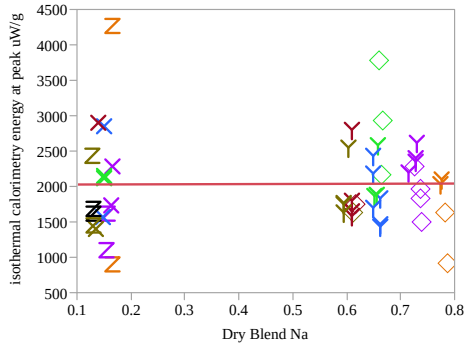
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7699.028	7699.03	22.5502
Error	51	17412.244	341.42	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	85.857889	14.21188	6.04	<.0001*
Total Na	-11.08461	2.334235	-4.75	<.0001*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Dry Blend Na



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2027.9672 + 18.077915*Dry Blend Na

Summary of Fit

RSquare	0.000054
RSquare Adj	-0.01918
Root Mean Square Error	628.4132
Mean of Response	2036.944
Observations (or Sum Wgts)	54

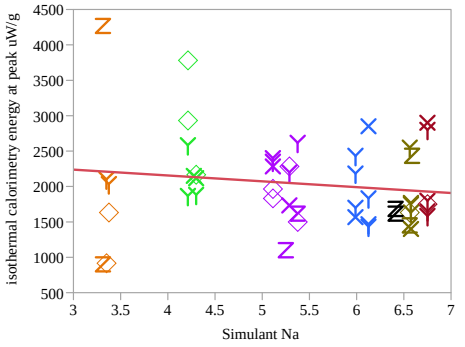
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1109	1109	0.0028
Error	52	20534962	394903	Prob > F
C. Total	53	20536071		0.9579

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2027.9672	189.7676	10.69	<.0001*
Dry Blend Na	18.077915	341.1438	0.05	0.9579

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Simulant Na



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2488.5676 - 82.906212*Simulant Na

Summary of Fit

RSquare	0.022975
RSquare Adj	0.004186
Root Mean Square Error	621.1691
Mean of Response	2036.944
Observations (or Sum Wgts)	54

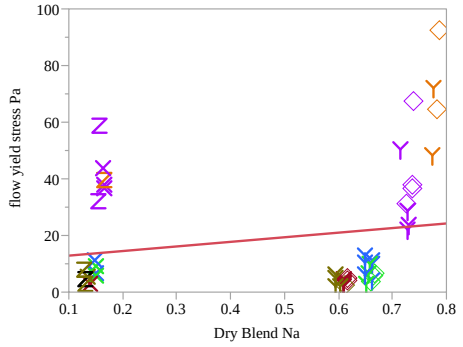
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	471813	471813	1.2228
Error	52	20064258	385851	Prob > F
C. Total	53	20536071		0.2739

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2488.5676	417.0703	5.97	<.0001*
Simulant Na	-82.90621	74.9742	-1.11	0.2739

Bivariate Fit of flow yield stress Pa By Dry Blend Na



Linear Fit

Linear Fit

flow yield stress Pa = 11.288287 + 16.24154*Dry Blend Na

Summary of Fit

RSquare	0.03448
RSquare Adj	0.015548
Root Mean Square Error	21.80369
Mean of Response	19.45472
Observations (or Sum Wgts)	53

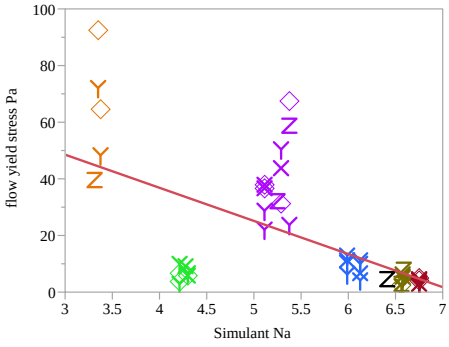
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	865.831	865.831	1.8213
Error	51	24245.440	475.401	Prob > F
C. Total	52	25111.271		0.1831

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	11.288287	6.751855	1.67	0.1007
Dry Blend Na	16.24154	12.03485	1.35	0.1831

Bivariate Fit of flow yield stress Pa By Simulant Na



Linear Fit

Linear Fit

flow yield stress Pa = 83.605285 - 11.68973*Simulant Na

Summary of Fit

RSquare	0.348153
RSquare Adj	0.335371
Root Mean Square Error	17.91522
Mean of Response	19.45472
Observations (or Sum Wgts)	53

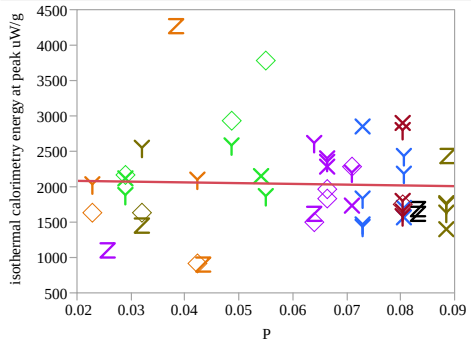
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8742.557	8742.56	27.2392
Error	51	16368.714	320.96	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	83.605285	12.53538	6.67	<.0001*
Simulant Na	-11.68973	2.239791	-5.22	<.0001*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By P



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2103.6238 - 1057.2839* P

Summary of Fit

RSquare	0.001189
RSquare Adj	-0.01802
Root Mean Square Error	628.0563
Mean of Response	2036.944
Observations (or Sum Wgts)	54

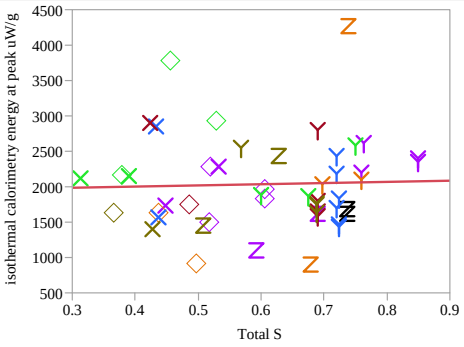
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	24426	24426	0.0619
Error	52	20511645	394455	Prob > F
C. Total	53	20536071		0.8045

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2103.6238	281.2571	7.48	<.0001*
P	-1057.284	4248.786	-0.25	0.8045

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Total S



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 1935.9584 + 167.1093*Total S

Summary of Fit

RSquare	0.001354
RSquare Adj	-0.01785
Root Mean Square Error	628.0044
Mean of Response	2036.944
Observations (or Sum Wgts)	54

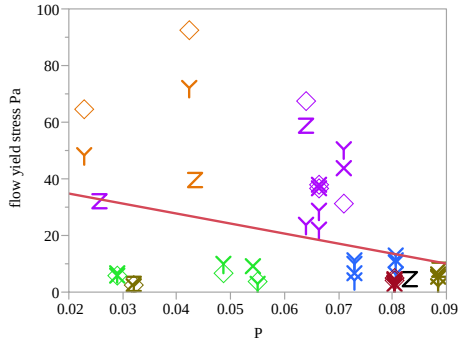
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	27814	27814	0.0705
Error	52	20508257	394390	Prob > F
C. Total	53	20536071		0.7916

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1935.9584	389.7568	4.97	<.0001*
Total S	167.1093	629.2654	0.27	0.7916

Bivariate Fit of flow yield stress Pa By P



Linear Fit

Linear Fit

flow yield stress Pa = 41.898661 - 353.25899* P

Summary of Fit

RSquare	0.105483
RSquare Adj	0.087943
Root Mean Square Error	20.98667
Mean of Response	19.45472
Observations (or Sum Wgts)	53

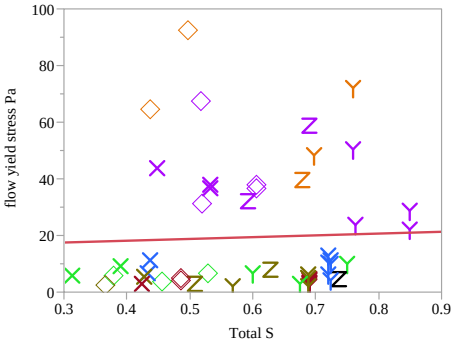
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2648.813	2648.81	6.0140
Error	51	22462.458	440.44	Prob > F
C. Total	52	25111.271		0.0177*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	41.898661	9.595296	4.37	<.0001*
P	-353.259	144.0493	-2.45	0.0177*

Bivariate Fit of flow yield stress Pa By Total S



Linear Fit

Linear Fit

flow yield stress Pa = 15.643034 + 6.3339229*Total S

Summary of Fit

RSquare	0.001562
RSquare Adj	-0.01802
Root Mean Square Error	22.17225
Mean of Response	19.45472
Observations (or Sum Wgts)	53

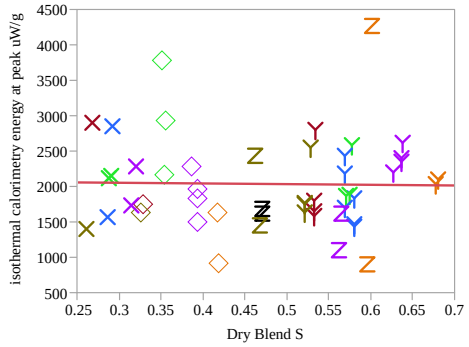
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	39.227	39.227	0.0798
Error	51	25072.044	491.609	Prob > F
C. Total	52	25111.271		0.7787

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	15.643034	13.83316	1.13	0.2634
Total S	6.3339229	22.4227	0.28	0.7787

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Dry Blend S



Linear Fit

isothermal calorimetry energy at peak uW/g = 2081.8972 - 95.533204*Dry Blend S

Summary of Fit

RSquare	0.000367
RSquare Adj	-0.01886
Root Mean Square Error	628.3148
Mean of Response	2036.944
Observations (or Sum Wgts)	54

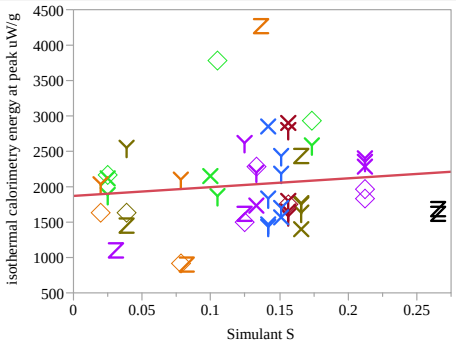
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	7537	7537	0.0191
Error	52	20528534	394780	Prob > F
C. Total	53	20536071		0.8906

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2081.8972	336.3901	6.19	<.0001*
Dry Blend S	-95.5332	691.4139	-0.14	0.8906

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Simulant S



Linear Fit

isothermal calorimetry energy at peak uW/g = 1870.6872 + 1242.8903*Simulant S

Summary of Fit

RSquare	0.014841
RSquare Adj	-0.0041
Root Mean Square Error	623.7494
Mean of Response	2036.944
Observations (or Sum Wgts)	54

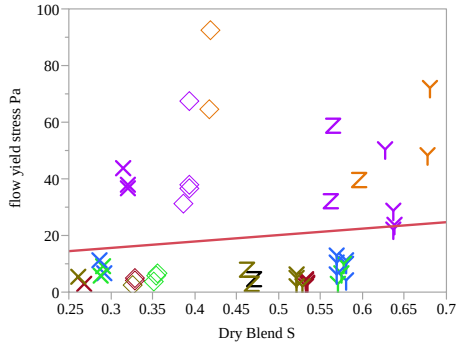
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	304779	304779	0.7834
Error	52	20231292	389063	Prob > F
C. Total	53	20536071		0.3802

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1870.6872	206.1321	9.08	<.0001*
Simulant S	1242.8903	1404.27	0.89	0.3802

Bivariate Fit of flow yield stress Pa By Dry Blend S



Linear Fit

flow yield stress Pa = 8.8429076 + 22.671242*Dry Blend S

Summary of Fit

RSquare	0.016545
RSquare Adj	-0.00274
Root Mean Square Error	22.00526
Mean of Response	19.45472
Observations (or Sum Wgts)	53

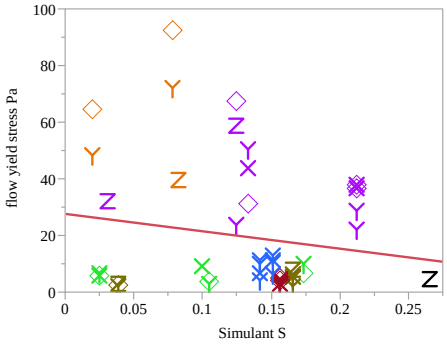
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	415.458	415.458	0.8580
Error	51	24695.813	484.232	Prob > F
C. Total	52	25111.271		0.3587

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.8429076	11.84855	0.75	0.4589
Dry Blend S	22.671242	24.47588	0.93	0.3587

Bivariate Fit of flow yield stress Pa By Simulant S



Linear Fit

flow yield stress Pa = 27.677209 - 61.490886*Simulant S

Summary of Fit

RSquare	0.029707
RSquare Adj	0.010682
Root Mean Square Error	21.85751
Mean of Response	19.45472
Observations (or Sum Wgts)	53

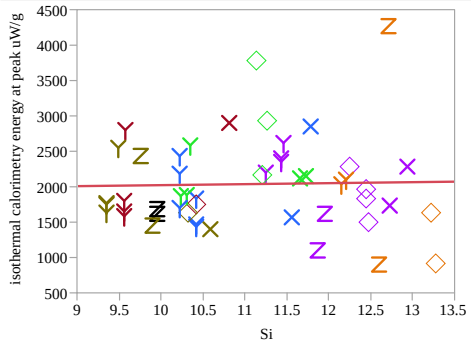
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	745.978	745.978	1.5614
Error	51	24365.293	477.751	Prob > F
C. Total	52	25111.271		0.2172

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	27.677209	7.232814	3.83	0.0004*
Simulant S	-61.49089	49.20944	-1.25	0.2172

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Si



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 1879.9626 + 14.219842* Si

Summary of Fit

RSquare	0.000715
RSquare Adj	-0.0185
Root Mean Square Error	628.2054
Mean of Response	2036.944
Observations (or Sum Wgts)	54

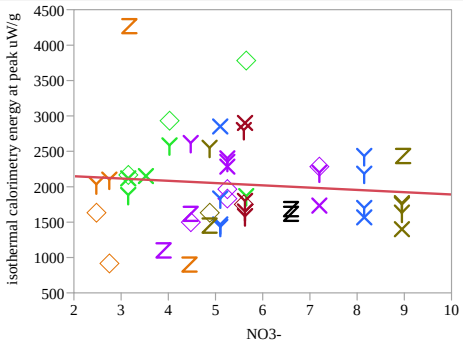
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	14686	14686	0.0372
Error	52	20521385	394642	Prob > F
C. Total	53	20536071		0.8478

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1879.9626	818.2423	2.30	0.0256*
Si	14.219842	73.71298	0.19	0.8478

Bivariate Fit of isothermal calorimetry energy at peak uW/g By NO3-



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2211.7057 - 32.004173* NO3-

Summary of Fit

RSquare	0.008765
RSquare Adj	-0.0103
Root Mean Square Error	625.6699
Mean of Response	2036.944
Observations (or Sum Wgts)	54

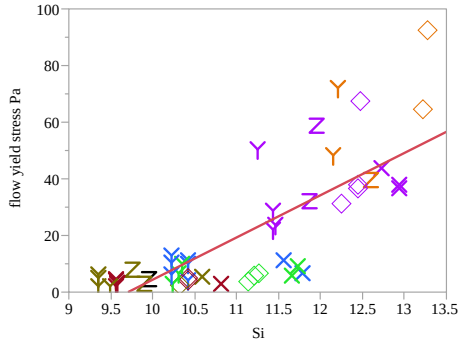
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	180001	180001	0.4598
Error	52	20356070	391463	Prob > F
C. Total	53	20536071		0.5007

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2211.7057	271.4231	8.15	<.0001*
NO3-	-32.00417	47.19703	-0.68	0.5007

Bivariate Fit of flow yield stress Pa By Si



Linear Fit

Linear Fit

flow yield stress Pa = -144.768 + 14.918344* Si

Summary of Fit

RSquare	0.618496
RSquare Adj	0.611016
Root Mean Square Error	13.70562
Mean of Response	19.45472
Observations (or Sum Wgts)	53

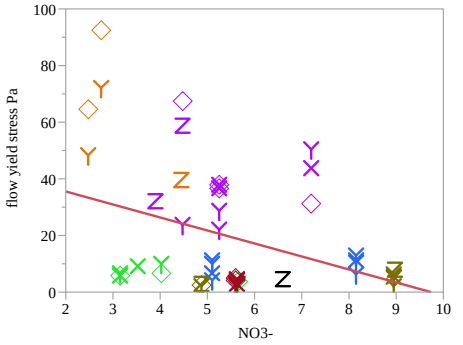
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	15531.232	15531.2	82.6816
Error	51	9580.040	187.8	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-144.768	18.15832	-7.97	<.0001*
Si	14.918344	1.640651	9.09	<.0001*

Bivariate Fit of flow yield stress Pa By NO3-



Linear Fit

Linear Fit

flow yield stress Pa = 44.72641 - 4.5915864* NO3-

Summary of Fit

RSquare	0.14303
RSquare Adj	0.126227
Root Mean Square Error	20.54149
Mean of Response	19.45472
Observations (or Sum Wgts)	53

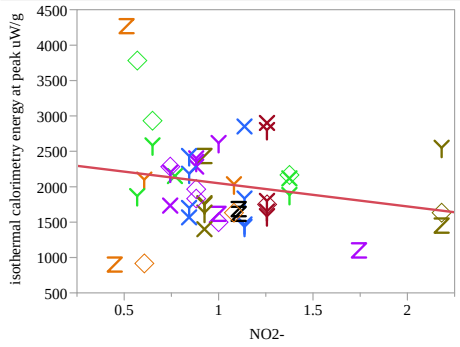
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3591.674	3591.67	8.5120
Error	51	21519.597	421.95	Prob > F
C. Total	52	25111.271		0.0052*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	44.72641	9.109968	4.91	<.0001*
NO3-	-4.591586	1.573788	-2.92	0.0052*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By NO2-



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2376.6946 - 327.23642* NO2-

Summary of Fit

RSquare	0.040212
RSquare Adj	0.021754
Root Mean Square Error	615.6654
Mean of Response	2036.944
Observations (or Sum Wgts)	54

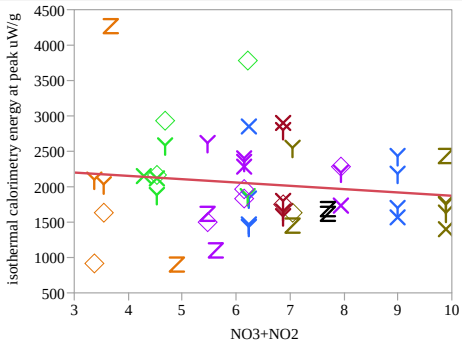
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	825787	825787	2.1786
Error	52	19710284	379044	Prob > F
C. Total	53	20536071		0.1460

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2376.6946	244.9548	9.70	<.0001*
NO2-	-327.2364	221.7034	-1.48	0.1460

Bivariate Fit of isothermal calorimetry energy at peak uW/g By NO3+NO2



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2341.2259 - 46.820996* NO3+NO2

Summary of Fit

RSquare	0.018577
RSquare Adj	-0.0003
Root Mean Square Error	622.5655
Mean of Response	2036.944
Observations (or Sum Wgts)	54

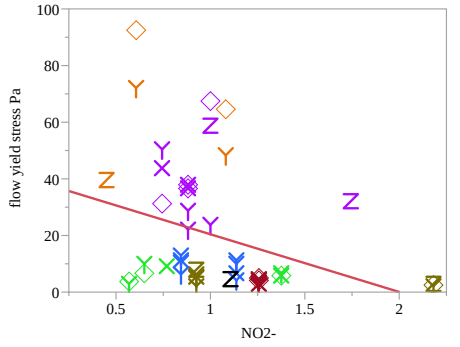
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	381507	381507	0.9843
Error	52	20154564	387588	Prob > F
C. Total	53	20536071		0.3257

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2341.2259	318.183	7.36	<.0001*
NO3+NO2	-46.821	47.19264	-0.99	0.3257

Bivariate Fit of flow yield stress Pa By NO2-



Linear Fit

Linear Fit

flow yield stress Pa = 40.822436 - 20.385742* NO2-

Summary of Fit

RSquare	0.122954
RSquare Adj	0.105757
Root Mean Square Error	20.78072
Mean of Response	19.45472
Observations (or Sum Wgts)	53

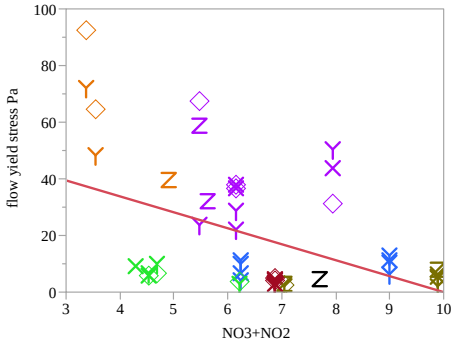
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3087.520	3087.52	7.1497
Error	51	22023.751	431.84	Prob > F
C. Total	52	25111.271		0.0100*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	40.822436	8.485735	4.81	<.0001*
NO2-	-20.38574	7.623988	-2.67	0.0100*

Bivariate Fit of flow yield stress Pa By NO3+NO2



Linear Fit

Linear Fit

flow yield stress Pa = 56.328045 - 5.6277196* NO3+NO2

Summary of Fit

RSquare	0.20925
RSquare Adj	0.193745
Root Mean Square Error	19.7319
Mean of Response	19.45472
Observations (or Sum Wgts)	53

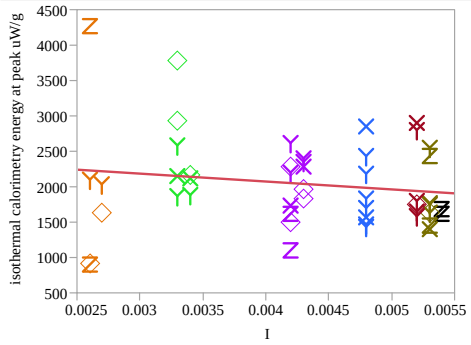
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5254.527	5254.53	13.4957
Error	51	19856.744	389.35	Prob > F
C. Total	52	25111.271		0.0006*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	56.328045	10.39675	5.42	<.0001*
NO3+NO2	-5.62772	1.531915	-3.67	0.0006*

Bivariate Fit of isothermal calorimetry energy at peak uW/g By I



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2519.8961 - 111355.2* I

Summary of Fit

RSquare	0.026571
RSquare Adj	0.007852
Root Mean Square Error	620.0248
Mean of Response	2036.944
Observations (or Sum Wgts)	54

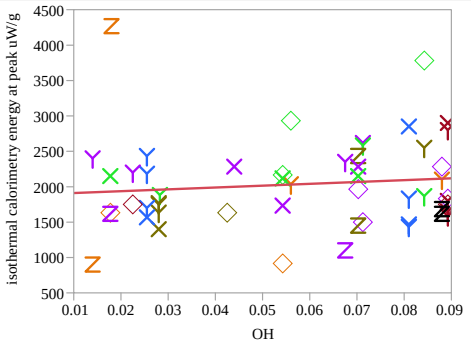
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	545673	545673	1.4194
Error	52	19990398	384431	Prob > F
C. Total	53	20536071		0.2389

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2519.8961	414.0533	6.09	<.0001*
I	-111355.2	93465.96	-1.19	0.2389

Bivariate Fit of isothermal calorimetry energy at peak uW/g By OH



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 1886.2068 + 2587.7709* OH

Summary of Fit

RSquare	0.012735
RSquare Adj	-0.00625
Root Mean Square Error	624.4157
Mean of Response	2036.944
Observations (or Sum Wgts)	54

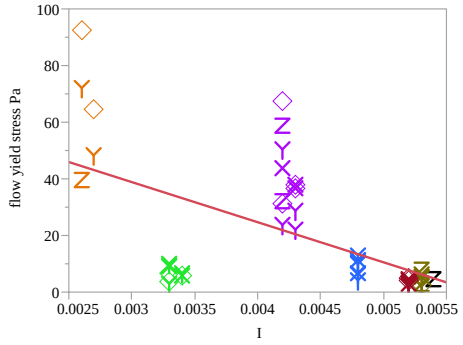
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	261536	261536	0.6708
Error	52	20274535	389895	Prob > F
C. Total	53	20536071		0.4165

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	1886.2068	202.7161	9.30	<.0001*
OH	2587.7709	3159.616	0.82	0.4165

Bivariate Fit of flow yield stress Pa By I



Linear Fit

Linear Fit

flow yield stress Pa = 81.35469 - 14165.365* I

Summary of Fit

RSquare	0.327074
RSquare Adj	0.31388
Root Mean Square Error	18.20257
Mean of Response	19.45472
Observations (or Sum Wgts)	53

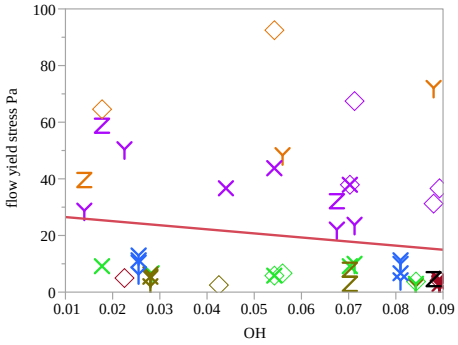
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	8213.255	8213.26	24.7885
Error	51	16898.016	331.33	Prob > F
C. Total	52	25111.271		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	81.35469	12.68163	6.42	<.0001*
I	-14165.37	2845.135	-4.98	<.0001*

Bivariate Fit of flow yield stress Pa By OH



Linear Fit

Linear Fit

flow yield stress Pa = 27.979844 - 144.46596* OH

Summary of Fit

RSquare	0.031081
RSquare Adj	0.012082
Root Mean Square Error	21.84203
Mean of Response	19.45472
Observations (or Sum Wgts)	53

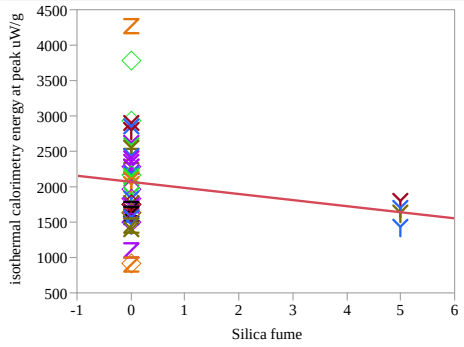
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	780.478	780.478	1.6360
Error	51	24330.794	477.074	Prob > F
C. Total	52	25111.271		0.2067

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	27.979844	7.309336	3.83	0.0004*
OH	-144.466	112.9479	-1.28	0.2067

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Silica fume



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2068.64 - 85.578* Silica fume

Summary of Fit

RSquare	0.03302
RSquare Adj	0.014425
Root Mean Square Error	617.9675
Mean of Response	2036.944
Observations (or Sum Wgts)	54

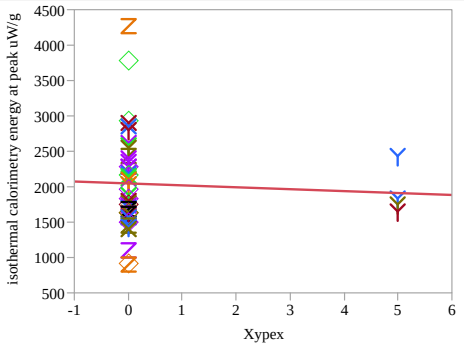
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	678111	678111	1.7757
Error	52	19857960	381884	Prob > F
C. Total	53	20536071		0.1885

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2068.64	87.3938	23.67	<.0001*
Silica fume	-85.578	64.22107	-1.33	0.1885

Bivariate Fit of isothermal calorimetry energy at peak uW/g By Xypex



Linear Fit

Linear Fit

isothermal calorimetry energy at peak uW/g = 2047.04 - 27.258* Xypex

Summary of Fit

RSquare	0.00335
RSquare Adj	-0.01582
Root Mean Square Error	627.3766
Mean of Response	2036.944
Observations (or Sum Wgts)	54

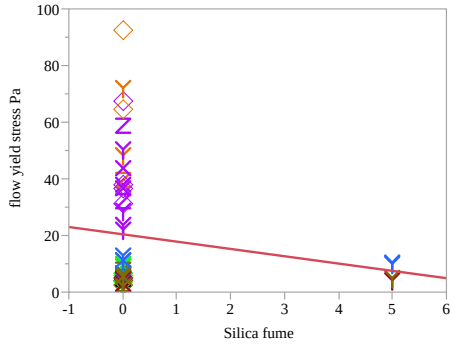
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	68796	68796	0.1748
Error	52	20467275	393601	Prob > F
C. Total	53	20536071		0.6776

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	2047.04	88.72445	23.07	<.0001*
Xypex	-27.258	65.19889	-0.42	0.6776

Bivariate Fit of flow yield stress Pa By Silica fume



Linear Fit

Linear Fit

flow yield stress Pa = 20.430612 - 2.5861224* Silica fume

Summary of Fit

RSquare	0.024623
RSquare Adj	0.005498
Root Mean Square Error	21.91469
Mean of Response	19.45472
Observations (or Sum Wgts)	53

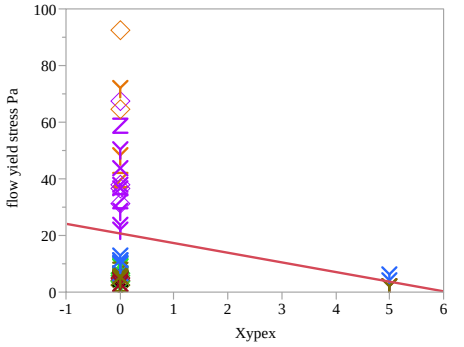
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	618.327	618.327	1.2875
Error	51	24492.944	480.254	Prob > F
C. Total	52	25111.271		0.2618

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	20.430612	3.130671	6.53	<.0001*
Silica fume	-2.586122	2.279163	-1.13	0.2618

Bivariate Fit of flow yield stress Pa By Xypex



Linear Fit

Linear Fit

flow yield stress Pa = 20.740816 - 3.4081633* Xypex

Summary of Fit

RSquare	0.042765
RSquare Adj	0.023996
Root Mean Square Error	21.70993
Mean of Response	19.45472
Observations (or Sum Wgts)	53

Analysis of Variance

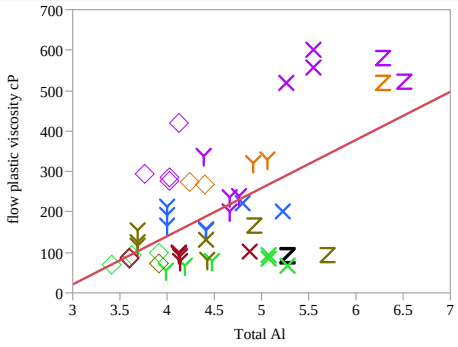
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1073.893	1073.89	2.2785
Error	51	24037.378	471.32	Prob > F
C. Total	52	25111.271		0.1374

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	20.740816	3.101419	6.69	<.0001*
Xypex	-3.408163	2.257867	-1.51	0.1374

Fit Group

Bivariate Fit of flow plastic viscosity cP By Total Al



Linear Fit

Linear Fit

flow plastic viscosity cP = -335.8698 + 119.00087*Total Al

Summary of Fit

RSquare	0.33025
RSquare Adj	0.317118
Root Mean Square Error	125.3364
Mean of Response	204.1321
Observations (or Sum Wgts)	53

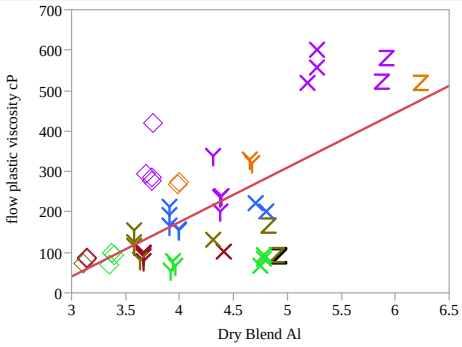
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	395052.5	395052	25.1478
Error	51	801169.6	15709	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-335.8698	109.0501	-3.08	0.0033*
Total Al	119.00087	23.73012	5.01	<.0001*

Bivariate Fit of flow plastic viscosity cP By Dry Blend Al



Linear Fit

Linear Fit

flow plastic viscosity cP = -363.5353 + 134.7066*Dry Blend Al

Summary of Fit

RSquare	0.41247
RSquare Adj	0.40095
Root Mean Square Error	117.3913
Mean of Response	204.1321
Observations (or Sum Wgts)	53

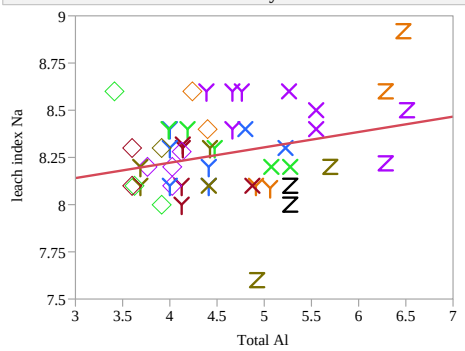
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	493405.9	493406	35.8041
Error	51	702816.1	13781	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-363.5353	96.23031	-3.78	0.0004*
Dry Blend Al	134.7066	22.51243	5.98	<.0001*

Bivariate Fit of leach index Na By Total Al



Linear Fit

Linear Fit

leach index Na = 7.8966322 + 0.0814331*Total Al

Summary of Fit

RSquare	0.081633
RSquare Adj	0.063973
Root Mean Square Error	0.212799
Mean of Response	8.269074
Observations (or Sum Wgts)	54

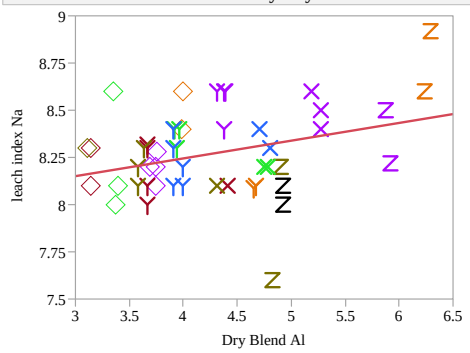
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2093125	0.209313	4.6223
Error	52	2.3547412	0.045283	Prob > F
C. Total	53	2.5640537		0.0362*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.8966322	0.175637	44.96	<.0001*
Total Al	0.0814331	0.037877	2.15	0.0362*

Bivariate Fit of leach index Na By Dry Blend Al



Linear Fit

Linear Fit

leach index Na = 7.8691281 + 0.0940478*Dry Blend Al

Summary of Fit

RSquare	0.108416
RSquare Adj	0.09127
Root Mean Square Error	0.209673
Mean of Response	8.269074
Observations (or Sum Wgts)	54

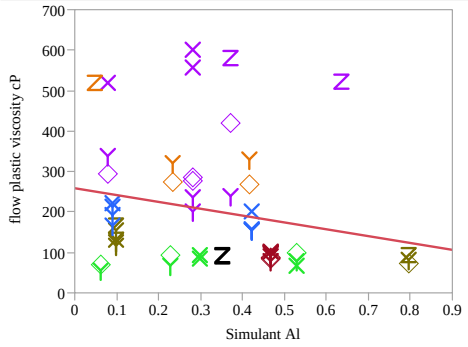
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2779840	0.277984	6.3232
Error	52	2.2860697	0.043963	Prob > F
C. Total	53	2.5640537		0.0150*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.8691281	0.161589	48.70	<.0001*
Dry Blend Al	0.0940478	0.037401	2.51	0.0150*

Bivariate Fit of flow plastic viscosity cP By Simulant Al



Linear Fit

flow plastic viscosity cP = 258.9282 - 169.27861*Simulant Al

Summary of Fit

RSquare	0.04856
RSquare Adj	0.029904
Root Mean Square Error	149.3866
Mean of Response	204.1321
Observations (or Sum Wgts)	53

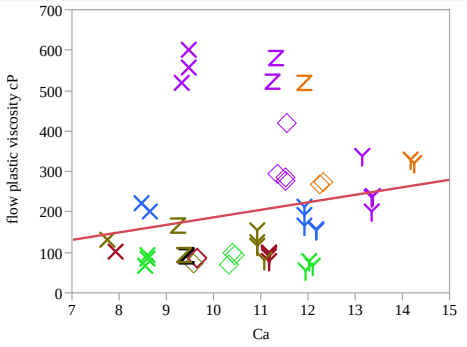
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	58088.0	58088.0	2.6029
Error	51	1138134.0	22316.4	Prob > F
C. Total	52	1196222.1		0.1128

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	258.9282	39.68139	6.53	<.0001*
Simulant Al	-169.2786	104.9229	-1.61	0.1128

Bivariate Fit of flow plastic viscosity cP By Ca



Linear Fit

flow plastic viscosity cP = 0.8931432 + 18.597293* Ca

Summary of Fit

RSquare	0.038109
RSquare Adj	0.019249
Root Mean Square Error	150.2048
Mean of Response	204.1321
Observations (or Sum Wgts)	53

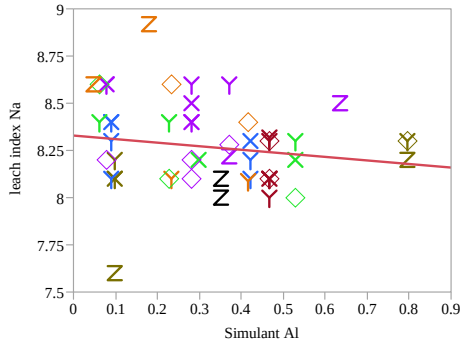
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	45587.2	45587.2	2.0206
Error	51	1150634.9	22561.5	Prob > F
C. Total	52	1196222.1		0.1613

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	0.8931432	144.4589	0.01	0.9951
Ca	18.597293	13.08314	1.42	0.1613

Bivariate Fit of leach index Na By Simulant Al



Linear Fit

leach index Na = 8.3295104 - 0.188262*Simulant Al

Summary of Fit

RSquare	0.028305
RSquare Adj	0.009619
Root Mean Square Error	0.21889
Mean of Response	8.269074
Observations (or Sum Wgts)	54

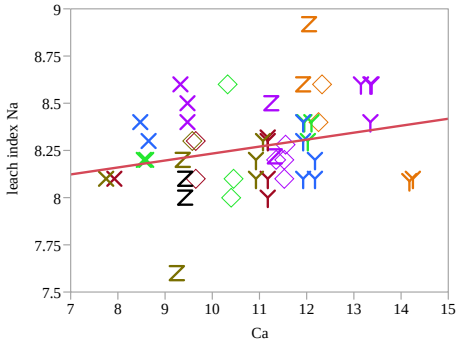
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0725763	0.072576	1.5148
Error	52	2.4914774	0.047913	Prob > F
C. Total	53	2.5640537		0.2240

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3295104	0.057433	145.03	<.0001*
Simulant Al	-0.188262	0.152965	-1.23	0.2240

Bivariate Fit of leach index Na By Ca



Linear Fit

leach index Na = 7.8653602 + 0.0368722* Ca

Summary of Fit

RSquare	0.070533
RSquare Adj	0.052659
Root Mean Square Error	0.214081
Mean of Response	8.269074
Observations (or Sum Wgts)	54

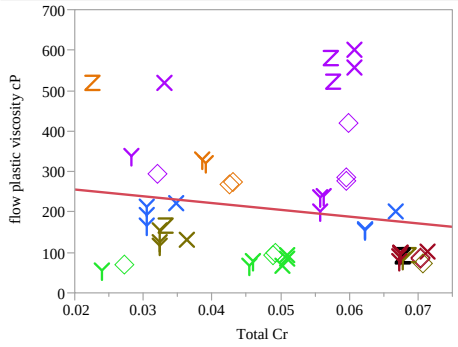
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1808511	0.180851	3.9461
Error	52	2.3832026	0.045831	Prob > F
C. Total	53	2.5640537		0.0523

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.8653602	0.205309	38.31	<.0001*
Ca	0.0368722	0.018562	1.99	0.0523

Bivariate Fit of flow plastic viscosity cP By Total Cr



Linear Fit

Linear Fit

flow plastic viscosity cP = 289.40713 - 1678.2689*Total Cr

Summary of Fit

RSquare	0.028572
RSquare Adj	0.009525
Root Mean Square Error	150.9476
Mean of Response	204.1321
Observations (or Sum Wgts)	53

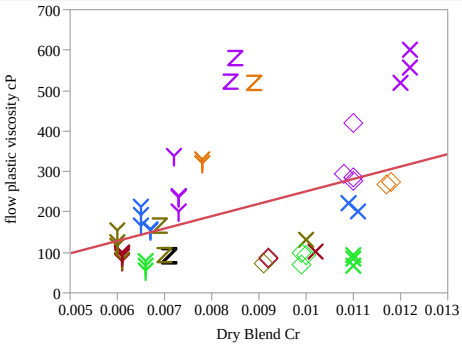
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	34178.7	34178.7	1.5000
Error	51	1162043.3	22785.2	Prob > F
C. Total	52	1196222.1		0.2263

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	289.40713	72.64748	3.98	0.0002*
Total Cr	-1678.269	1370.281	-1.22	0.2263

Bivariate Fit of flow plastic viscosity cP By Dry Blend Cr



Linear Fit

Linear Fit

flow plastic viscosity cP = -55.45356 + 30655.166*Dry Blend Cr

Summary of Fit

RSquare	0.181012
RSquare Adj	0.164953
Root Mean Square Error	138.5988
Mean of Response	204.1321
Observations (or Sum Wgts)	53

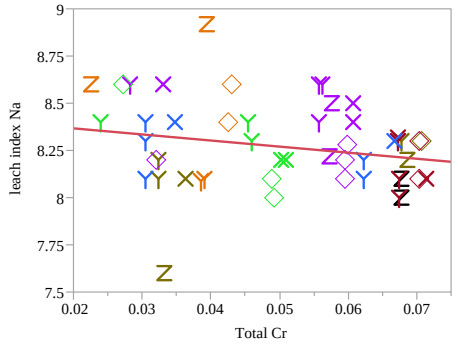
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	216530.5	216530	11.2720
Error	51	979691.6	19210	Prob > F
C. Total	52	1196222.1		0.0015*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-55.45356	79.6274	-0.70	0.4893
Dry Blend Cr	30655.166	9130.694	3.36	0.0015*

Bivariate Fit of leach index Na By Total Cr



Linear Fit

Linear Fit

leach index Na = 8.4319644 - 3.2190581*Total Cr

Summary of Fit

RSquare	0.049549
RSquare Adj	0.031271
Root Mean Square Error	0.216484
Mean of Response	8.269074
Observations (or Sum Wgts)	54

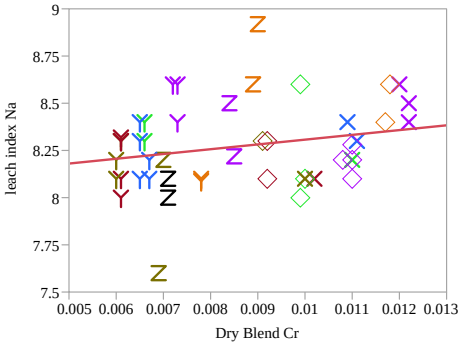
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1270463	0.127046	2.7109
Error	52	2.4370074	0.046866	Prob > F
C. Total	53	2.5640537		0.1057

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4319644	0.103226	81.68	<.0001*
Total Cr	-3.219058	1.955125	-1.65	0.1057

Bivariate Fit of leach index Na By Dry Blend Cr



Linear Fit

Linear Fit

leach index Na = 8.0540223 + 25.366528*Dry Blend Cr

Summary of Fit

RSquare	0.057894
RSquare Adj	0.039776
Root Mean Square Error	0.215532
Mean of Response	8.269074
Observations (or Sum Wgts)	54

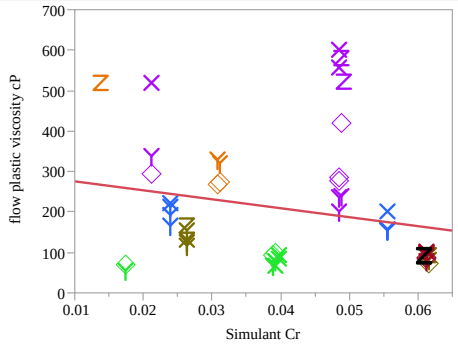
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1484421	0.148442	3.1955
Error	52	2.4156116	0.046454	Prob > F
C. Total	53	2.5640537		0.0797

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.0540223	0.123827	65.04	<.0001*
Dry Blend Cr	25.366528	14.19039	1.79	0.0797

Bivariate Fit of flow plastic viscosity cP By Simulant Cr



Linear Fit

Linear Fit

flow plastic viscosity cP = 298.10414 - 2219.5818*Simulant Cr

Summary of Fit

RSquare	0.051006
RSquare Adj	0.032398
Root Mean Square Error	149.1944
Mean of Response	204.1321
Observations (or Sum Wgts)	53

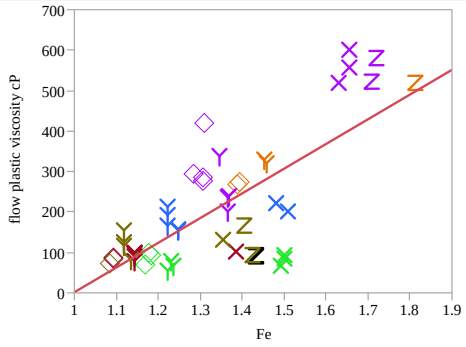
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	61014.7	61014.7	2.7411
Error	51	1135207.4	22259.0	Prob > F
C. Total	52	1196222.1		0.1039

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	298.10414	60.34531	4.94	<.0001*
Simulant Cr	-2219.582	1340.623	-1.66	0.1039

Bivariate Fit of flow plastic viscosity cP By Fe



Linear Fit

Linear Fit

flow plastic viscosity cP = -608.8685 + 610.6592* Fe

Summary of Fit

RSquare	0.540153
RSquare Adj	0.531137
Root Mean Square Error	103.855
Mean of Response	204.1321
Observations (or Sum Wgts)	53

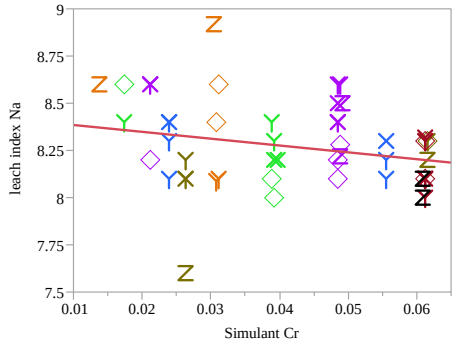
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	646143.1	646143	59.9065
Error	51	550079.0	10786	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-608.8685	106.0041	-5.74	<.0001*
Fe	610.6592	78.89727	7.74	<.0001*

Bivariate Fit of leach index Na By Simulant Cr



Linear Fit

Linear Fit

leach index Na = 8.4217614 - 3.6251834*Simulant Cr

Summary of Fit

RSquare	0.064183
RSquare Adj	0.046187
Root Mean Square Error	0.214811
Mean of Response	8.269074
Observations (or Sum Wgts)	54

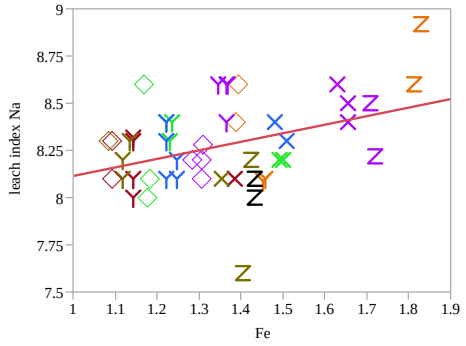
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1645691	0.164569	3.5664
Error	52	2.3994846	0.046144	Prob > F
C. Total	53	2.5640537		0.0645

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4217614	0.085973	97.96	<.0001*
Simulant Cr	-3.625183	1.919611	-1.89	0.0645

Bivariate Fit of leach index Na By Fe



Linear Fit

Linear Fit

leach index Na = 7.66155 + 0.4531783* Fe

Summary of Fit

RSquare	0.15834
RSquare Adj	0.142154
Root Mean Square Error	0.203718
Mean of Response	8.269074
Observations (or Sum Wgts)	54

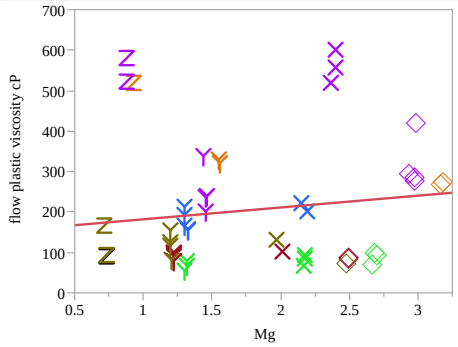
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4059921	0.405992	9.7827
Error	52	2.1580616	0.041501	Prob > F
C. Total	53	2.5640537		0.0029*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.66155	0.196207	39.05	<.0001*
Fe	0.4531783	0.144891	3.13	0.0029*

Bivariate Fit of flow plastic viscosity cP By Mg



Linear Fit

flow plastic viscosity cP = 153.03261 + 29.145113* Mg

Summary of Fit

RSquare	0.019606
RSquare Adj	0.000383
Root Mean Square Error	151.6425
Mean of Response	204.1321
Observations (or Sum Wgts)	53

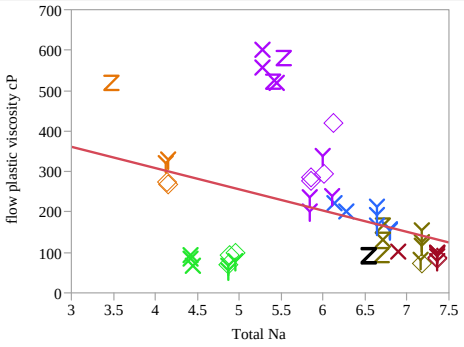
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	23453.7	23453.7	1.0199
Error	51	1172768.4	22995.5	Prob > F
C. Total	52	1196222.1		0.3173

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	153.03261	54.71762	2.80	0.0073*
Mg	29.145113	28.859	1.01	0.3173

Bivariate Fit of flow plastic viscosity cP By Total Na



Linear Fit

flow plastic viscosity cP = 519.10829 - 52.578623*Total Na

Summary of Fit

RSquare	0.144811
RSquare Adj	0.128043
Root Mean Square Error	141.6289
Mean of Response	204.1321
Observations (or Sum Wgts)	53

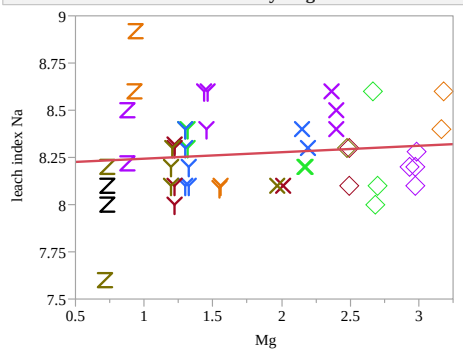
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	173226.3	173226	8.6359
Error	51	1022995.8	20059	Prob > F
C. Total	52	1196222.1		0.0049*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	519.10829	108.9334	4.77	<.0001*
Total Na	-52.57862	17.89181	-2.94	0.0049*

Bivariate Fit of leach index Na By Mg



Linear Fit

leach index Na = 8.210133 + 0.0339102* Mg

Summary of Fit

RSquare	0.012676
RSquare Adj	-0.00631
Root Mean Square Error	0.220644
Mean of Response	8.269074
Observations (or Sum Wgts)	54

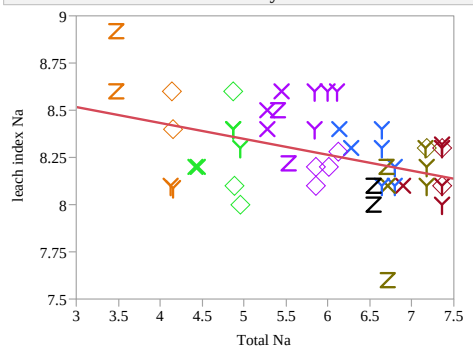
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0325026	0.032503	0.6676
Error	52	2.5315511	0.048684	Prob > F
C. Total	53	2.5640537		0.4176

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.210133	0.078135	105.08	<.0001*
Mg	0.0339102	0.041501	0.82	0.4176

Bivariate Fit of leach index Na By Total Na



Linear Fit

leach index Na = 8.7695608 - 0.0842007*Total Na

Summary of Fit

RSquare	0.190446
RSquare Adj	0.174878
Root Mean Square Error	0.199795
Mean of Response	8.269074
Observations (or Sum Wgts)	54

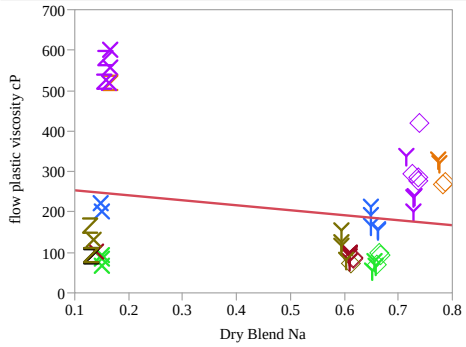
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4883147	0.488315	12.2329
Error	52	2.0757390	0.039918	Prob > F
C. Total	53	2.5640537		0.0010*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.7695608	0.145656	60.21	<.0001*
Total Na	-0.084201	0.024074	-3.50	0.0010*

Bivariate Fit of flow plastic viscosity cP By Dry Blend Na



Linear Fit

flow plastic viscosity cP = 266.05621 - 123.15582*Dry Blend Na

Summary of Fit

RSquare	0.041618
RSquare Adj	0.022826
Root Mean Square Error	149.9306
Mean of Response	204.1321
Observations (or Sum Wgts)	53

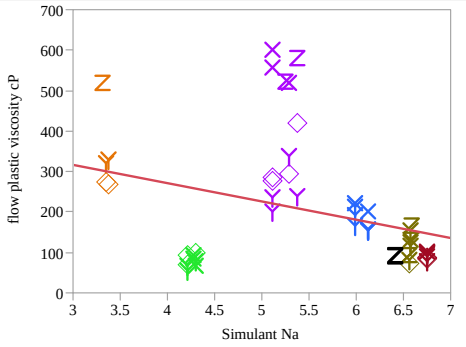
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	49783.9	49783.9	2.2147
Error	51	1146438.2	22479.2	Prob > F
C. Total	52	1196222.1		0.1429

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	266.05621	46.42836	5.73	<.0001*
Dry Blend Na	-123.1558	82.75626	-1.49	0.1429

Bivariate Fit of flow plastic viscosity cP By Simulant Na



Linear Fit

flow plastic viscosity cP = 452.05668 - 45.177645*Simulant Na

Summary of Fit

RSquare	0.10916
RSquare Adj	0.091693
Root Mean Square Error	144.5508
Mean of Response	204.1321
Observations (or Sum Wgts)	53

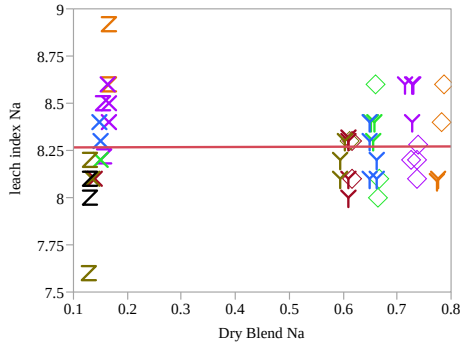
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	130580.0	130580	6.2494
Error	51	1065642.1	20895	Prob > F
C. Total	52	1196222.1		0.0157*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	452.05668	101.143	4.47	<.0001*
Simulant Na	-45.17765	18.07198	-2.50	0.0157*

Bivariate Fit of leach index Na By Dry Blend Na



Linear Fit

leach index Na = 8.2656039 + 0.0069881*Dry Blend Na

Summary of Fit

RSquare	6.463e-5
RSquare Adj	-0.01916
Root Mean Square Error	0.222049
Mean of Response	8.269074
Observations (or Sum Wgts)	54

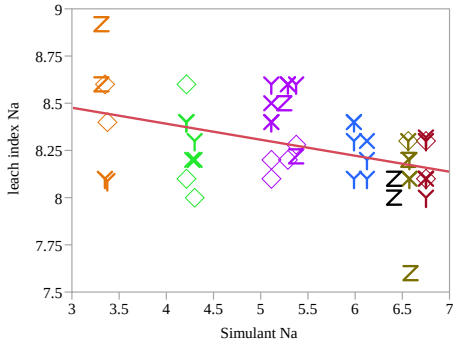
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0001657	0.000166	0.0034
Error	52	2.5638880	0.049306	Prob > F
C. Total	53	2.5640537		0.9540

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2656039	0.067054	123.27	<.0001*
Dry Blend Na	0.0069881	0.120542	0.06	0.9540

Bivariate Fit of leach index Na By Simulant Na



Linear Fit

leach index Na = 8.7311875 - 0.084832*Simulant Na

Summary of Fit

RSquare	0.192658
RSquare Adj	0.177133
Root Mean Square Error	0.199522
Mean of Response	8.269074
Observations (or Sum Wgts)	54

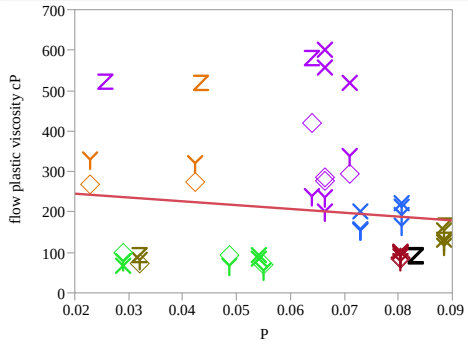
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4939864	0.493986	12.4089
Error	52	2.0700673	0.039809	Prob > F
C. Total	53	2.5640537		0.0009*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.7311875	0.133965	65.18	<.0001*
Simulant Na	-0.084832	0.024082	-3.52	0.0009*

Bivariate Fit of flow plastic viscosity cP By P



Linear Fit

Linear Fit

flow plastic viscosity cP = 264.05619 - 943.1824* P

Summary of Fit

RSquare	0.015785
RSquare Adj	-0.00351
Root Mean Square Error	151.9378
Mean of Response	204.1321
Observations (or Sum Wgts)	53

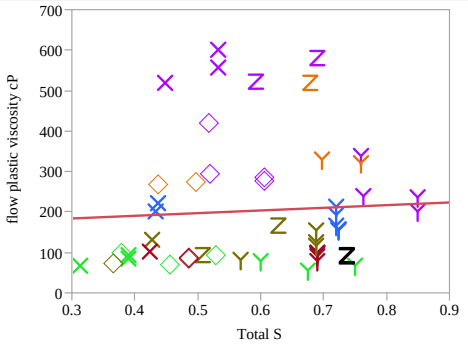
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	18882.4	18882.4	0.8179
Error	51	1177339.7	23085.1	Prob > F
C. Total	52	1196222.1		0.3700

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	264.05619	69.46733	3.80	0.0004*
P	-943.1824	1042.878	-0.90	0.3700

Bivariate Fit of flow plastic viscosity cP By Total S



Linear Fit

Linear Fit

flow plastic viscosity cP = 164.44062 + 65.955803*Total S

Summary of Fit

RSquare	0.003556
RSquare Adj	-0.01598
Root Mean Square Error	152.8788
Mean of Response	204.1321
Observations (or Sum Wgts)	53

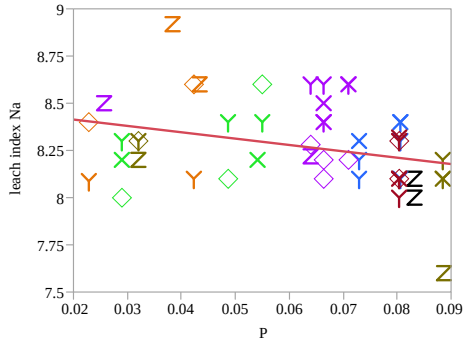
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4253.5	4253.5	0.1820
Error	51	1191968.5	23371.9	Prob > F
C. Total	52	1196222.1		0.6715

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	164.44062	95.38033	1.72	0.0908
Total S	65.955803	154.6056	0.43	0.6715

Bivariate Fit of leach index Na By P



Linear Fit

Linear Fit

leach index Na = 8.4811108 - 3.3621042* P

Summary of Fit

RSquare	0.09633
RSquare Adj	0.078952
Root Mean Square Error	0.21109
Mean of Response	8.269074
Observations (or Sum Wgts)	54

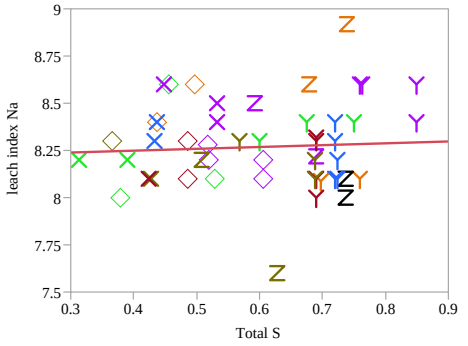
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2469959	0.246996	5.5431
Error	52	2.3170578	0.044559	Prob > F
C. Total	53	2.5640537		0.0224*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4811108	0.09453	89.72	<.0001*
P	-3.362104	1.428016	-2.35	0.0224*

Bivariate Fit of leach index Na By Total S



Linear Fit

Linear Fit

leach index Na = 8.2099627 + 0.0978162*Total S

Summary of Fit

RSquare	0.003717
RSquare Adj	-0.01544
Root Mean Square Error	0.221643
Mean of Response	8.269074
Observations (or Sum Wgts)	54

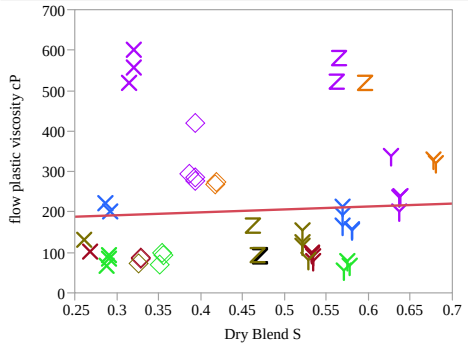
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0095297	0.009530	0.1940
Error	52	2.5545240	0.049125	Prob > F
C. Total	53	2.5640537		0.6614

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2099627	0.137558	59.68	<.0001*
Total S	0.0978162	0.222088	0.44	0.6614

Bivariate Fit of flow plastic viscosity cP By Dry Blend S



Linear Fit

Linear Fit

flow plastic viscosity cP = 170.16942 + 72.558375*Dry Blend S

Summary of Fit

RSquare	0.003557
RSquare Adj	-0.01598
Root Mean Square Error	152.8787
Mean of Response	204.1321
Observations (or Sum Wgts)	53

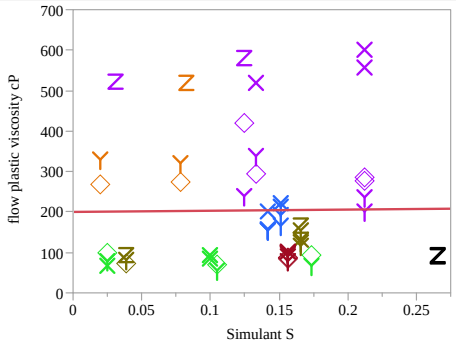
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4255.5	4255.5	0.1821
Error	51	1191966.6	23371.9	Prob > F
C. Total	52	1196222.1		0.6714

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	170.16942	82.31624	2.07	0.0438*
Dry Blend S	72.558375	170.0429	0.43	0.6714

Bivariate Fit of flow plastic viscosity cP By Simulant S



Linear Fit

Linear Fit

flow plastic viscosity cP = 200.21623 + 29.284169*Simulant S

Summary of Fit

RSquare	0.000141
RSquare Adj	-0.01946
Root Mean Square Error	153.1405
Mean of Response	204.1321
Observations (or Sum Wgts)	53

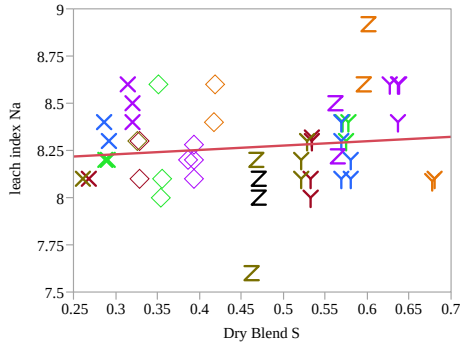
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	169.2	169.2	0.0072
Error	51	1196052.9	23452.0	Prob > F
C. Total	52	1196222.1		0.9326

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	200.21623	50.67534	3.95	0.0002*
Simulant S	29.284169	344.7766	0.08	0.9326

Bivariate Fit of leach index Na By Dry Blend S



Linear Fit

Linear Fit

leach index Na = 8.1603306 + 0.2311005*Dry Blend S

Summary of Fit

RSquare	0.017201
RSquare Adj	-0.0017
Root Mean Square Error	0.220138
Mean of Response	8.269074
Observations (or Sum Wgts)	54

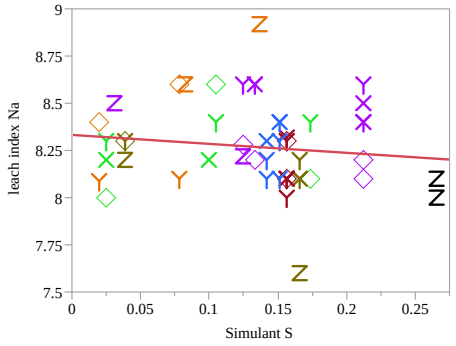
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0441042	0.044104	0.9101
Error	52	2.5199495	0.048461	Prob > F
C. Total	53	2.5640537		0.3445

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.1603306	0.117858	69.24	<.0001*
Dry Blend S	0.2311005	0.242245	0.95	0.3445

Bivariate Fit of leach index Na By Simulant S



Linear Fit

Linear Fit

leach index Na = 8.3325555 - 0.4745687*Simulant S

Summary of Fit

RSquare	0.01733
RSquare Adj	-0.00157
Root Mean Square Error	0.220123
Mean of Response	8.269074
Observations (or Sum Wgts)	54

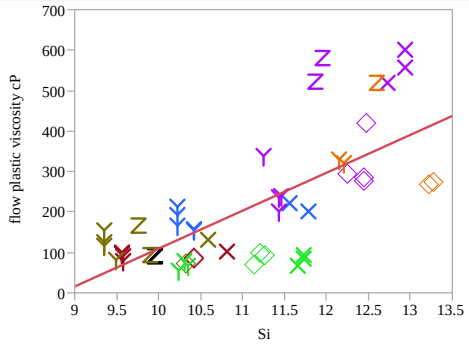
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0444342	0.044434	0.9170
Error	52	2.5196195	0.048454	Prob > F
C. Total	53	2.5640537		0.3427

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3325555	0.072745	114.55	<.0001*
Simulant S	-0.474569	0.495571	-0.96	0.3427

Bivariate Fit of flow plastic viscosity cP By Si



Linear Fit

Linear Fit

flow plastic viscosity cP = -827.7094 + 93.734686* Si

Summary of Fit

RSquare	0.51257
RSquare Adj	0.503013
Root Mean Square Error	106.9244
Mean of Response	204.1321
Observations (or Sum Wgts)	53

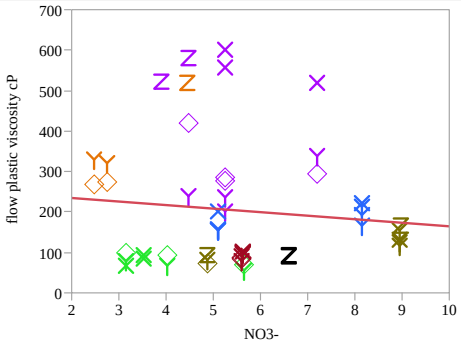
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	613148.0	613148	53.6305
Error	51	583074.1	11433	Prob > F
C. Total	52	1196222.1		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	-827.7094	141.6622	-5.84	<.0001*
Si	93.734686	12.79954	7.32	<.0001*

Bivariate Fit of flow plastic viscosity cP By NO3-



Linear Fit

Linear Fit

flow plastic viscosity cP = 252.46546 - 8.7816401* NO3-

Summary of Fit

RSquare	0.010983
RSquare Adj	-0.00841
Root Mean Square Error	152.308
Mean of Response	204.1321
Observations (or Sum Wgts)	53

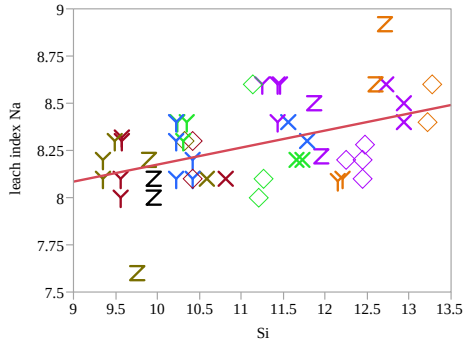
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	13137.8	13137.8	0.5663
Error	51	1183084.3	23197.7	Prob > F
C. Total	52	1196222.1		0.4552

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	252.46546	67.54724	3.74	0.0005*
NO3-	-8.78164	11.66909	-0.75	0.4552

Bivariate Fit of leach index Na By Si



Linear Fit

Linear Fit

leach index Na = 7.2732649 + 0.0902031* Si

Summary of Fit

RSquare	0.230479
RSquare Adj	0.21568
Root Mean Square Error	0.194792
Mean of Response	8.269074
Observations (or Sum Wgts)	54

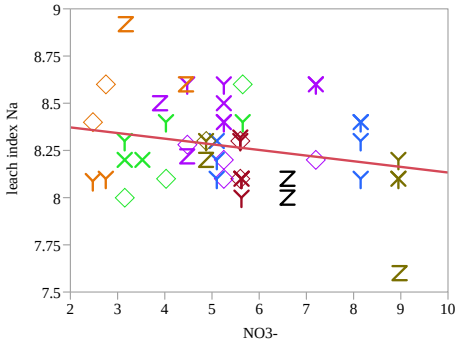
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.5909603	0.590960	15.5745
Error	52	1.9730935	0.037944	Prob > F
C. Total	53	2.5640537		0.0002*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.2732649	0.253719	28.67	<.0001*
Si	0.0902031	0.022857	3.95	0.0002*

Bivariate Fit of leach index Na By NO3-



Linear Fit

Linear Fit

leach index Na = 8.4323638 - 0.0299034* NO3-

Summary of Fit

RSquare	0.061288
RSquare Adj	0.043236
Root Mean Square Error	0.215143
Mean of Response	8.269074
Observations (or Sum Wgts)	54

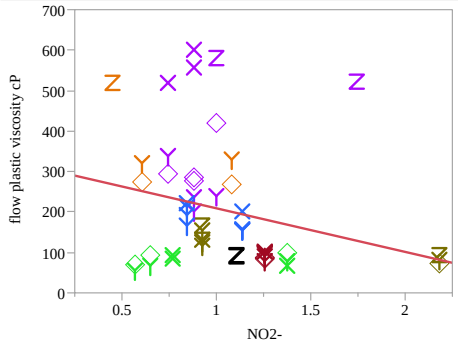
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1571455	0.157145	3.3950
Error	52	2.4069082	0.046287	Prob > F
C. Total	53	2.5640537		0.0711

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4323638	0.093332	90.35	<.0001*
NO3-	-0.029903	0.016229	-1.84	0.0711

Bivariate Fit of flow plastic viscosity cP By NO2-



Linear Fit

flow plastic viscosity cP = 317.19707 - 107.86897* NO2-

Summary of Fit

RSquare	0.072267
RSquare Adj	0.054076
Root Mean Square Error	147.5137
Mean of Response	204.1321
Observations (or Sum Wgts)	53

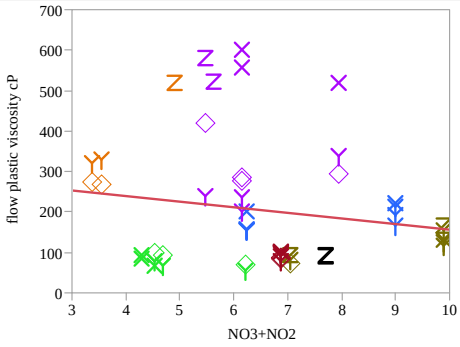
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	86447.0	86447.0	3.9727
Error	51	1109775.1	21760.3	Prob > F
C. Total	52	1196222.1		0.0516

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	317.19707	60.23672	5.27	<.0001*
NO2-	-107.869	54.11953	-1.99	0.0516

Bivariate Fit of flow plastic viscosity cP By NO3+NO2



Linear Fit

flow plastic viscosity cP = 294.86382 - 13.847755* NO3+NO2

Summary of Fit

RSquare	0.026596
RSquare Adj	0.00751
Root Mean Square Error	151.101
Mean of Response	204.1321
Observations (or Sum Wgts)	53

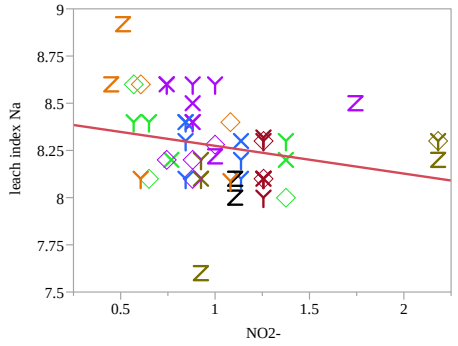
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	31814.7	31814.7	1.3935
Error	51	1164407.4	22831.5	Prob > F
C. Total	52	1196222.1		0.2433

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	294.86382	79.61522	3.70	0.0005*
NO3+NO2	-13.84776	11.73095	-1.18	0.2433

Bivariate Fit of leach index Na By NO2-



Linear Fit

leach index Na = 8.4218176 - 0.1471176* NO2-

Summary of Fit

RSquare	0.065095
RSquare Adj	0.047116
Root Mean Square Error	0.214707
Mean of Response	8.269074
Observations (or Sum Wgts)	54

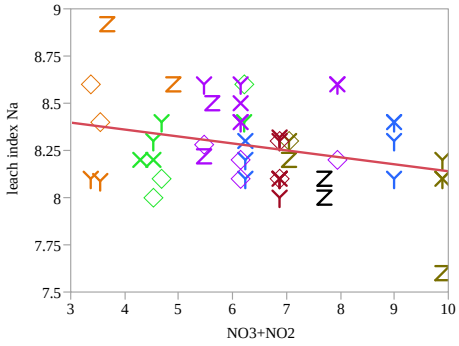
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1669068	0.166907	3.6206
Error	52	2.3971469	0.046099	Prob > F
C. Total	53	2.5640537		0.0626

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4218176	0.085425	98.59	<.0001*
NO2-	-0.147118	0.077317	-1.90	0.0626

Bivariate Fit of leach index Na By NO3+NO2



Linear Fit

leach index Na = 8.5076878 - 0.0367164* NO3+NO2

Summary of Fit

RSquare	0.091499
RSquare Adj	0.074028
Root Mean Square Error	0.211653
Mean of Response	8.269074
Observations (or Sum Wgts)	54

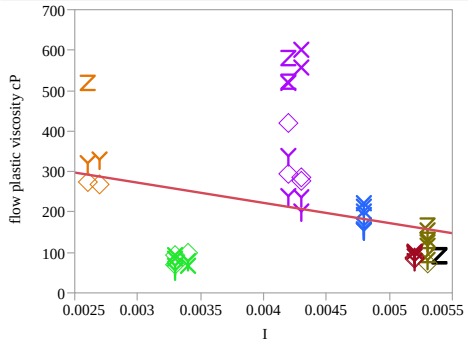
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2346080	0.234608	5.2371
Error	52	2.3294457	0.044797	Prob > F
C. Total	53	2.5640537		0.0262*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.5076878	0.108172	78.65	<.0001*
NO3+NO2	-0.036716	0.016044	-2.29	0.0262*

Bivariate Fit of flow plastic viscosity cP By I



Linear Fit

Linear Fit

flow plastic viscosity cP = 422.90062 - 50063.613* I

Summary of Fit

RSquare	0.085761
RSquare Adj	0.067835
Root Mean Square Error	146.4369
Mean of Response	204.1321
Observations (or Sum Wgts)	53

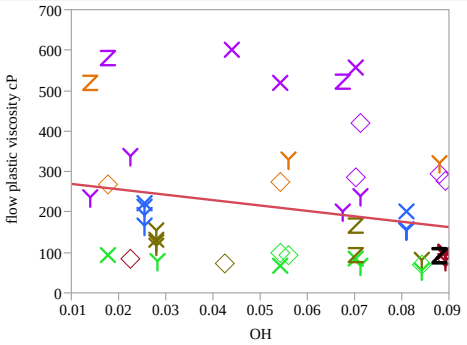
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	102589.8	102590	4.7841
Error	51	1093632.3	21444	Prob > F
C. Total	52	1196222.1		0.0333*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	422.90062	102.0218	4.15	0.0001*
I	-50063.61	22888.68	-2.19	0.0333*

Bivariate Fit of flow plastic viscosity cP By OH



Linear Fit

Linear Fit

flow plastic viscosity cP = 282.74574 - 1332.1794* OH

Summary of Fit

RSquare	0.055481
RSquare Adj	0.036961
Root Mean Square Error	148.8422
Mean of Response	204.1321
Observations (or Sum Wgts)	53

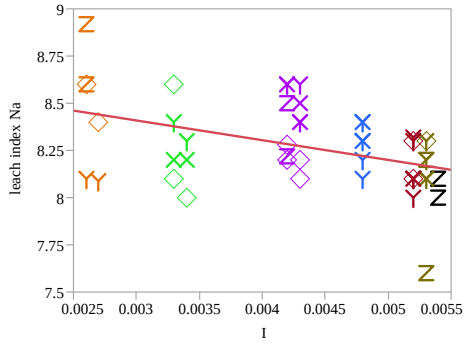
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	66367.4	66367.4	2.9957
Error	51	1129854.7	22154.0	Prob > F
C. Total	52	1196222.1		0.0895

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	282.74574	49.80937	5.68	<.0001*
OH	-1332.179	769.6822	-1.73	0.0895

Bivariate Fit of leach index Na By I



Linear Fit

Linear Fit

leach index Na = 8.722248 - 104.48929* I

Summary of Fit

RSquare	0.187382
RSquare Adj	0.171755
Root Mean Square Error	0.200173
Mean of Response	8.269074
Observations (or Sum Wgts)	54

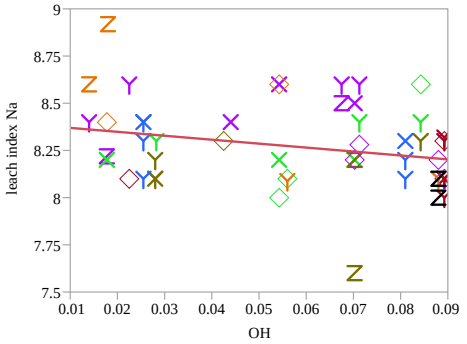
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4804573	0.480457	11.9907
Error	52	2.0835964	0.040069	Prob > F
C. Total	53	2.5640537		0.0011*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.722248	0.133676	65.25	<.0001*
I	-104.4893	30.17516	-3.46	0.0011*

Bivariate Fit of leach index Na By OH



Linear Fit

Linear Fit

leach index Na = 8.3907064 - 2.0881078* OH

Summary of Fit

RSquare	0.066414
RSquare Adj	0.04846
Root Mean Square Error	0.214555
Mean of Response	8.269074
Observations (or Sum Wgts)	54

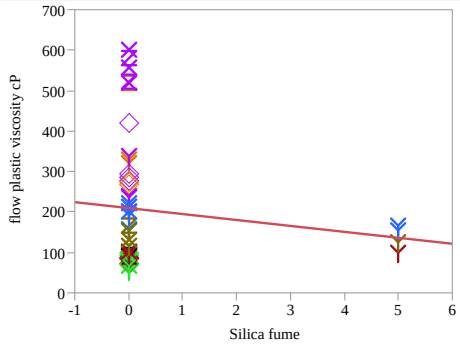
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1702883	0.170288	3.6992
Error	52	2.3937654	0.046034	Prob > F
C. Total	53	2.5640537		0.0599

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3907064	0.069655	120.46	<.0001*
OH	-2.088108	1.085674	-1.92	0.0599

Bivariate Fit of flow plastic viscosity cP By Silica fume



Linear Fit

flow plastic viscosity cP = 209.67347 - 14.684694* Silica fume

Summary of Fit

RSquare	0.016666
RSquare Adj	-0.00261
Root Mean Square Error	151.8698
Mean of Response	204.1321
Observations (or Sum Wgts)	53

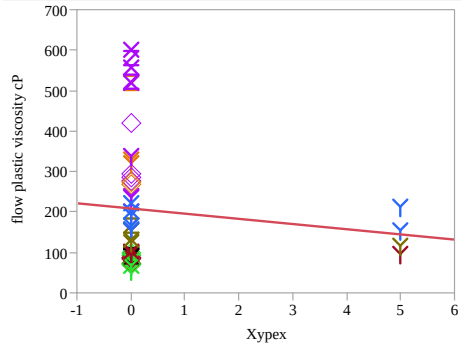
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	19936.5	19936.5	0.8644
Error	51	1176285.5	23064.4	Prob > F
C. Total	52	1196222.1		0.3569

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	209.67347	21.69568	9.66	<.0001*
Silica fume	-14.68469	15.79469	-0.93	0.3569

Bivariate Fit of flow plastic viscosity cP By Xypex



Linear Fit

flow plastic viscosity cP = 208.97959 - 12.845918* Xypex

Summary of Fit

RSquare	0.012754
RSquare Adj	-0.0066
Root Mean Square Error	152.1716
Mean of Response	204.1321
Observations (or Sum Wgts)	53

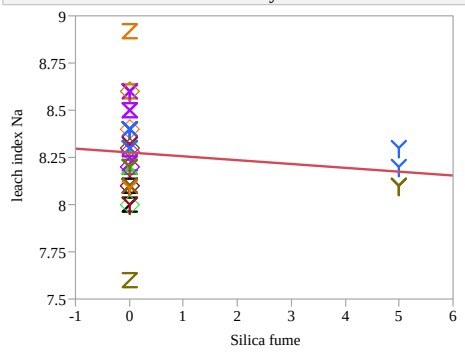
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	15256.3	15256.3	0.6588
Error	51	1180965.7	23156.2	Prob > F
C. Total	52	1196222.1		0.4207

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	208.97959	21.7388	9.61	<.0001*
Xypex	-12.84592	15.82608	-0.81	0.4207

Bivariate Fit of leach index Na By Silica fume



Linear Fit

leach index Na = 8.2766 - 0.02032* Silica fume

Summary of Fit

RSquare	0.014911
RSquare Adj	-0.00403
Root Mean Square Error	0.220394
Mean of Response	8.269074
Observations (or Sum Wgts)	54

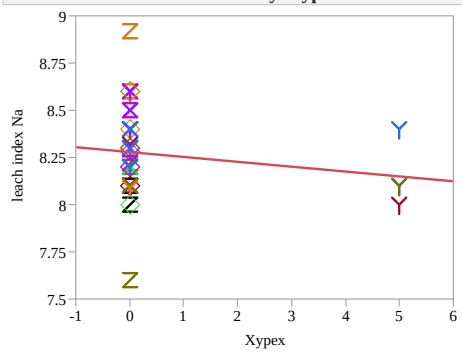
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0382317	0.038232	0.7871
Error	52	2.5258220	0.048573	Prob > F
C. Total	53	2.5640537		0.3791

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2766	0.031168	265.54	<.0001*
Silica fume	-0.02032	0.022904	-0.89	0.3791

Bivariate Fit of leach index Na By Xypex



Linear Fit

leach index Na = 8.2786 - 0.02572* Xypex

Summary of Fit

RSquare	0.023889
RSquare Adj	0.005117
Root Mean Square Error	0.219387
Mean of Response	8.269074
Observations (or Sum Wgts)	54

Analysis of Variance

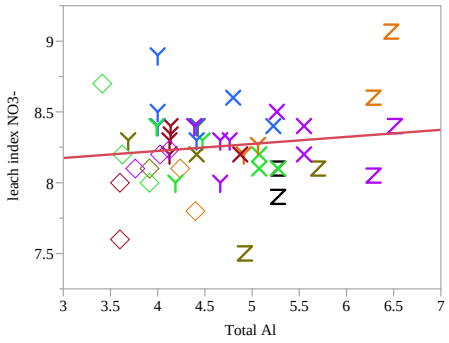
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0612517	0.061252	1.2726
Error	52	2.5028020	0.048131	Prob > F
C. Total	53	2.5640537		0.2645

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2786	0.031026	266.83	<.0001*
Xypex	-0.02572	0.022799	-1.13	0.2645

Fit Group

Bivariate Fit of leach index NO3- By Total Al



Linear Fit

Linear Fit

leach index NO3- = 8.0255183 + 0.04973*Total Al

Summary of Fit

RSquare	0.021193
RSquare Adj	0.00237
Root Mean Square Error	0.26331
Mean of Response	8.252963
Observations (or Sum Wgts)	54

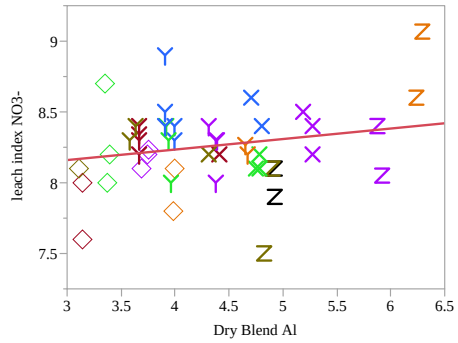
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0780602	0.078060	1.1259
Error	52	3.6052657	0.069332	Prob > F
C. Total	53	3.6833259		0.2936

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.0255183	0.217326	36.93	<.0001*
Total Al	0.04973	0.046867	1.06	0.2936

Bivariate Fit of leach index NO3- By Dry Blend Al



Linear Fit

Linear Fit

leach index NO3- = 7.9372729 + 0.074235*Dry Blend Al

Summary of Fit

RSquare	0.047022
RSquare Adj	0.028695
Root Mean Square Error	0.259812
Mean of Response	8.252963
Observations (or Sum Wgts)	54

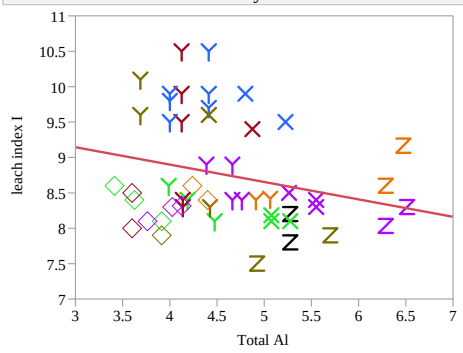
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1731965	0.173197	2.5658
Error	52	3.5101294	0.067502	Prob > F
C. Total	53	3.6833259		0.1153

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.9372729	0.20023	39.64	<.0001*
Dry Blend Al	0.074235	0.046345	1.60	0.1153

Bivariate Fit of leach index I By Total Al



Linear Fit

Linear Fit

leach index I = 9.8832904 - 0.2457249*Total Al

Summary of Fit

RSquare	0.063202
RSquare Adj	0.045186
Root Mean Square Error	0.73706
Mean of Response	8.759444
Observations (or Sum Wgts)	54

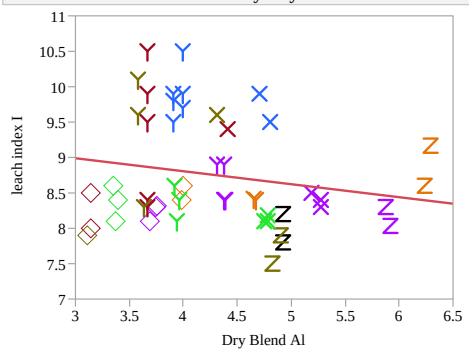
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.905864	1.90586	3.5082
Error	52	28.249419	0.54326	Prob > F
C. Total	53	30.155283		0.0667

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.8832904	0.608343	16.25	<.0001*
Total Al	-0.245725	0.131192	-1.87	0.0667

Bivariate Fit of leach index I By Dry Blend Al



Linear Fit

Linear Fit

leach index I = 9.5382957 - 0.183148*Dry Blend Al

Summary of Fit

RSquare	0.034959
RSquare Adj	0.016401
Root Mean Square Error	0.748088
Mean of Response	8.759444
Observations (or Sum Wgts)	54

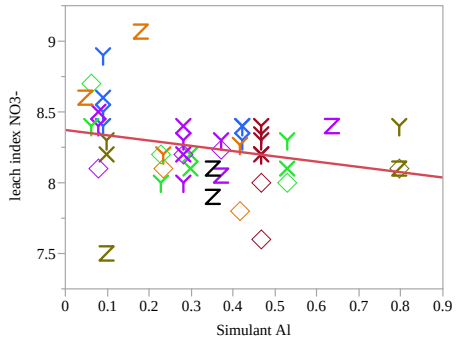
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.054208	1.05421	1.8837
Error	52	29.101076	0.55964	Prob > F
C. Total	53	30.155283		0.1758

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.5382957	0.576531	16.54	<.0001*
Dry Blend Al	-0.183148	0.133442	-1.37	0.1758

Bivariate Fit of leach index NO3- By Simulant Al



Linear Fit

Linear Fit

leach index NO3- = 8.3726756 - 0.3729107*Simulant Al

Summary of Fit

RSquare	0.077311
RSquare Adj	0.059567
Root Mean Square Error	0.25565
Mean of Response	8.252963
Observations (or Sum Wgts)	54

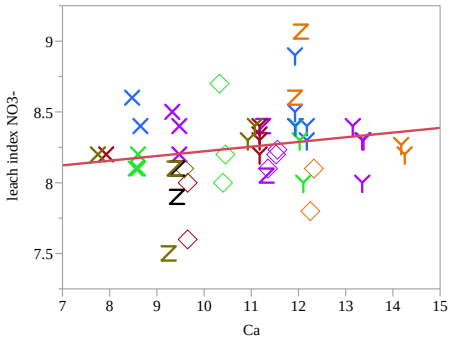
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2847600	0.284760	4.3570
Error	52	3.3985659	0.065357	Prob > F
C. Total	53	3.6833259		0.0418*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3726756	0.067079	124.82	<.0001*
Simulant Al	-0.372911	0.178653	-2.09	0.0418*

Bivariate Fit of leach index NO3- By Ca



Linear Fit

Linear Fit

leach index NO3- = 7.8906789 + 0.0330883* Ca

Summary of Fit

RSquare	0.03954
RSquare Adj	0.021069
Root Mean Square Error	0.26083
Mean of Response	8.252963
Observations (or Sum Wgts)	54

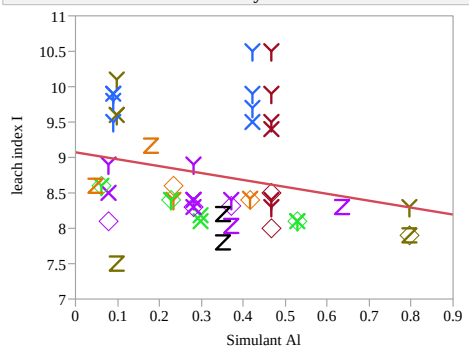
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1456372	0.145637	2.1407
Error	52	3.5376887	0.068032	Prob > F
C. Total	53	3.6833259		0.1495

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.8906789	0.250143	31.54	<.0001*
Ca	0.0330883	0.022615	1.46	0.1495

Bivariate Fit of leach index I By Simulant Al



Linear Fit

Linear Fit

leach index I = 9.0730553 - 0.9769132*Simulant Al

Summary of Fit

RSquare	0.064806
RSquare Adj	0.046822
Root Mean Square Error	0.736429
Mean of Response	8.759444
Observations (or Sum Wgts)	54

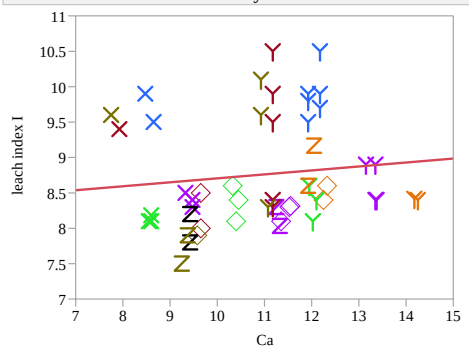
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.954256	1.95426	3.6035
Error	52	28.201028	0.54233	Prob > F
C. Total	53	30.155283		0.0632

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.0730553	0.193227	46.96	<.0001*
Simulant Al	-0.976913	0.514631	-1.90	0.0632

Bivariate Fit of leach index I By Ca



Linear Fit

Linear Fit

leach index I = 8.1476458 + 0.0558771* Ca

Summary of Fit

RSquare	0.013773
RSquare Adj	-0.00519
Root Mean Square Error	0.756255
Mean of Response	8.759444
Observations (or Sum Wgts)	54

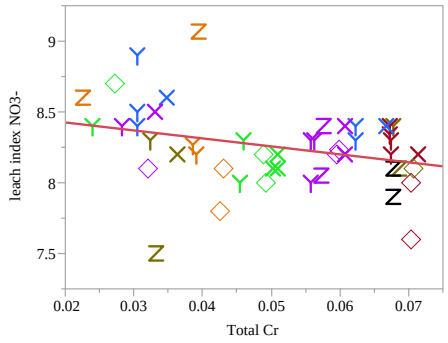
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.415328	0.415328	0.7262
Error	52	29.739956	0.571922	Prob > F
C. Total	53	30.155283		0.3980

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.1476458	0.725268	11.23	<.0001*
Ca	0.0558771	0.06557	0.85	0.3980

Bivariate Fit of leach index NO3- By Total Cr



Linear Fit

Linear Fit

leach index NO3- = 8.5376628 - 5.6262727*Total Cr

Summary of Fit

RSquare	0.105367
RSquare Adj	0.088163
Root Mean Square Error	0.251733
Mean of Response	8.252963
Observations (or Sum Wgts)	54

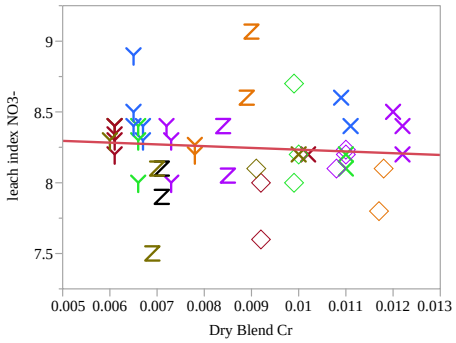
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3881020	0.388102	6.1244
Error	52	3.2952240	0.063370	Prob > F
C. Total	53	3.6833259		0.0166*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.5376628	0.120034	71.13	<.0001*
Total Cr	-5.626273	2.273467	-2.47	0.0166*

Bivariate Fit of leach index NO3- By Dry Blend Cr



Linear Fit

Linear Fit

leach index NO3- = 8.358486 - 12.44702*Dry Blend Cr

Summary of Fit

RSquare	0.009703
RSquare Adj	-0.00934
Root Mean Square Error	0.264851
Mean of Response	8.252963
Observations (or Sum Wgts)	54

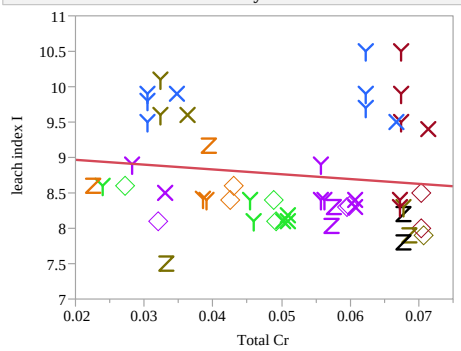
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0357409	0.035741	0.5095
Error	52	3.6475850	0.070146	Prob > F
C. Total	53	3.6833259		0.4785

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.358486	0.152161	54.93	<.0001*
Dry Blend Cr	-12.44702	17.43747	-0.71	0.4785

Bivariate Fit of leach index I By Total Cr



Linear Fit

Linear Fit

leach index I = 9.103303 - 6.7953748*Total Cr

Summary of Fit

RSquare	0.018774
RSquare Adj	-0.0001
Root Mean Square Error	0.754335
Mean of Response	8.759444
Observations (or Sum Wgts)	54

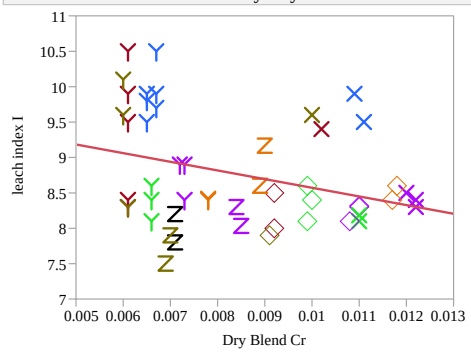
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.566149	0.566149	0.9950
Error	52	29.589134	0.569022	Prob > F
C. Total	53	30.155283		0.3232

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.103303	0.359689	25.31	<.0001*
Total Cr	-6.795375	6.812591	-1.00	0.3232

Bivariate Fit of leach index I By Dry Blend Cr



Linear Fit

Linear Fit

leach index I = 9.7963455 - 122.30811*Dry Blend Cr

Summary of Fit

RSquare	0.114441
RSquare Adj	0.097411
Root Mean Square Error	0.71662
Mean of Response	8.759444
Observations (or Sum Wgts)	54

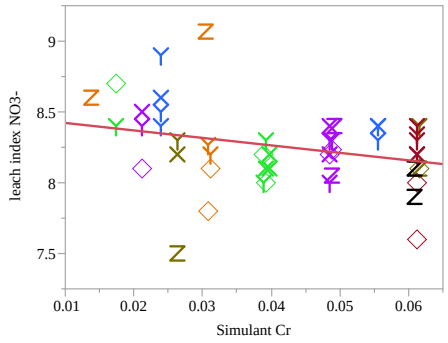
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.451005	3.45100	6.7200
Error	52	26.704278	0.51354	Prob > F
C. Total	53	30.155283		0.0123*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.7963455	0.41171	23.79	<.0001*
Dry Blend Cr	-122.3081	47.18144	-2.59	0.0123*

Bivariate Fit of leach index NO3- By Simulant Cr



Linear Fit

Linear Fit

leach index NO3- = 8.4750715 - 5.273418*Simulant Cr

Summary of Fit

RSquare	0.094544
RSquare Adj	0.077131
Root Mean Square Error	0.253252
Mean of Response	8.252963
Observations (or Sum Wgts)	54

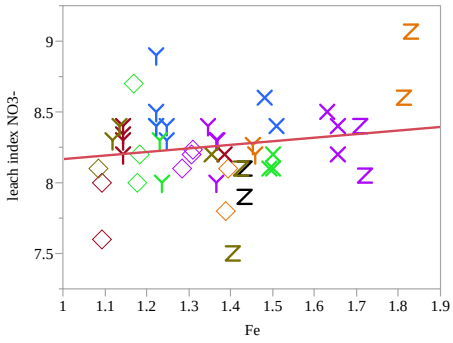
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3482352	0.348235	5.4296
Error	52	3.3350907	0.064136	Prob > F
C. Total	53	3.6833259		0.0237*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4750715	0.101358	83.62	<.0001*
Simulant Cr	-5.273418	2.263122	-2.33	0.0237*

Bivariate Fit of leach index NO3- By Fe



Linear Fit

Linear Fit

leach index NO3- = 7.9135828 + 0.2531582* Fe

Summary of Fit

RSquare	0.034397
RSquare Adj	0.015828
Root Mean Square Error	0.261528
Mean of Response	8.252963
Observations (or Sum Wgts)	54

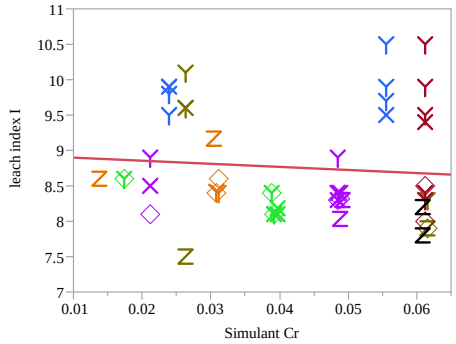
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1266961	0.126696	1.8524
Error	52	3.5566298	0.068397	Prob > F
C. Total	53	3.6833259		0.1794

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.9135828	0.251884	31.42	<.0001*
Fe	0.2531582	0.186006	1.36	0.1794

Bivariate Fit of leach index I By Simulant Cr



Linear Fit

Linear Fit

leach index I = 8.9436284 - 4.3729916*Simulant Cr

Summary of Fit

RSquare	0.007941
RSquare Adj	-0.01114
Root Mean Square Error	0.758488
Mean of Response	8.759444
Observations (or Sum Wgts)	54

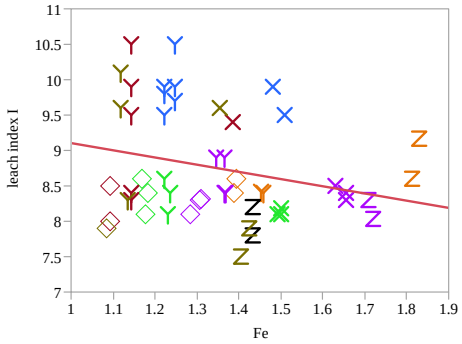
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.239467	0.239467	0.4162
Error	52	29.915816	0.575304	Prob > F
C. Total	53	30.155283		0.5217

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.9436284	0.303568	29.46	<.0001*
Simulant Cr	-4.372992	6.778047	-0.65	0.5217

Bivariate Fit of leach index I By Fe



Linear Fit

Linear Fit

leach index I = 10.122122 - 1.0164797* Fe

Summary of Fit

RSquare	0.067735
RSquare Adj	0.049807
Root Mean Square Error	0.735275
Mean of Response	8.759444
Observations (or Sum Wgts)	54

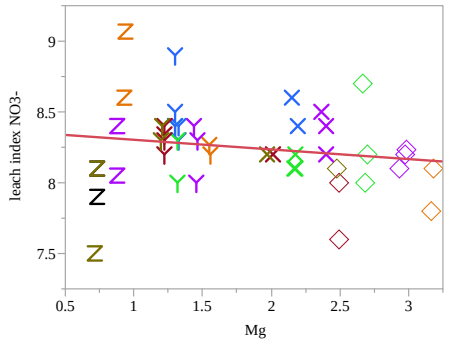
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.042570	2.04257	3.7781
Error	52	28.112714	0.54063	Prob > F
C. Total	53	30.155283		0.0573

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.122122	0.708163	14.29	<.0001*
Fe	-1.01648	0.52295	-1.94	0.0573

Bivariate Fit of leach index NO3- By Mg



Linear Fit

Linear Fit

leach index NO3- = 8.3710867 - 0.0679594* Mg

Summary of Fit

RSquare	0.035442
RSquare Adj	0.016893
Root Mean Square Error	0.261386
Mean of Response	8.252963
Observations (or Sum Wgts)	54

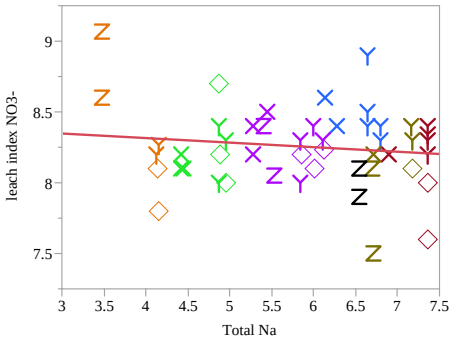
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1305440	0.130544	1.9107
Error	52	3.5527819	0.068323	Prob > F
C. Total	53	3.6833259		0.1728

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3710867	0.092563	90.44	<.0001*
Mg	-0.067959	0.049165	-1.38	0.1728

Bivariate Fit of leach index NO3- By Total Na



Linear Fit

Linear Fit

leach index NO3- = 8.444152 - 0.0321652*Total Na

Summary of Fit

RSquare	0.019346
RSquare Adj	0.000488
Root Mean Square Error	0.263558
Mean of Response	8.252963
Observations (or Sum Wgts)	54

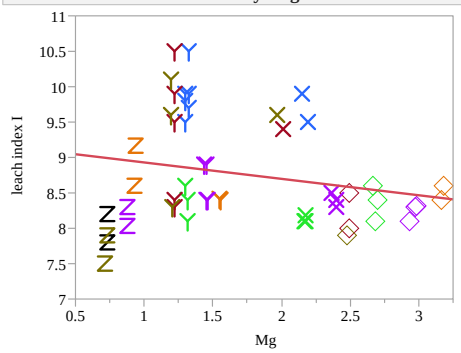
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0712591	0.071259	1.0259
Error	52	3.6120668	0.069463	Prob > F
C. Total	53	3.6833259		0.3158

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.444152	0.192141	43.95	<.0001*
Total Na	-0.032165	0.031757	-1.01	0.3158

Bivariate Fit of leach index I By Mg



Linear Fit

Linear Fit

leach index I = 9.1628147 - 0.2320685* Mg

Summary of Fit

RSquare	0.050481
RSquare Adj	0.032221
Root Mean Square Error	0.742048
Mean of Response	8.759444
Observations (or Sum Wgts)	54

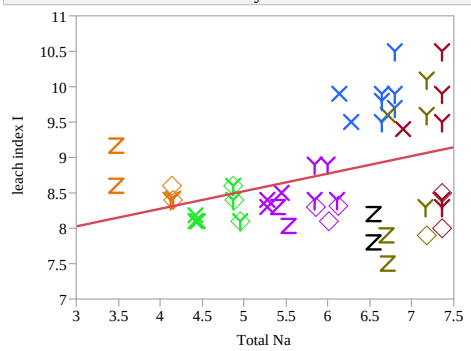
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.522266	1.52227	2.7646
Error	52	28.633017	0.55063	Prob > F
C. Total	53	30.155283		0.1024

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.1628147	0.262777	34.87	<.0001*
Mg	-0.232068	0.139573	-1.66	0.1024

Bivariate Fit of leach index I By Total Na



Linear Fit

Linear Fit

leach index I = 7.2798048 + 0.248931*Total Na

Summary of Fit

RSquare	0.141535
RSquare Adj	0.125026
Root Mean Square Error	0.705572
Mean of Response	8.759444
Observations (or Sum Wgts)	54

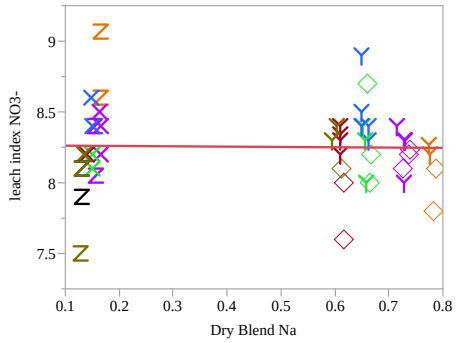
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4.268021	4.26802	8.5732
Error	52	25.887262	0.49783	Prob > F
C. Total	53	30.155283		0.0051*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.2798048	0.514381	14.15	<.0001*
Total Na	0.248931	0.085017	2.93	0.0051*

Bivariate Fit of leach index NO3- By Dry Blend Na



Linear Fit

Linear Fit

leach index NO3- = 8.2646278 - 0.0234901*Dry Blend Na

Summary of Fit

RSquare	0.000508
RSquare Adj	-0.01871
Root Mean Square Error	0.266077
Mean of Response	8.252963
Observations (or Sum Wgts)	54

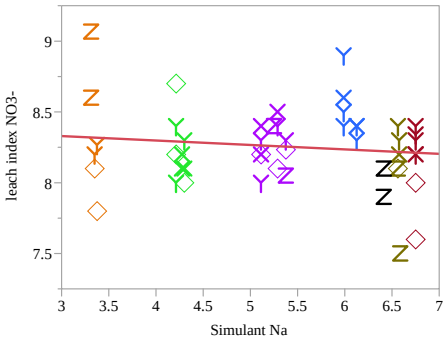
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0018723	0.001872	0.0264
Error	52	3.6814536	0.070797	Prob > F
C. Total	53	3.6833259		0.8714

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2646278	0.08035	102.86	<.0001*
Dry Blend Na	-0.02349	0.144444	-0.16	0.8714

Bivariate Fit of leach index NO3- By Simulant Na



Linear Fit

Linear Fit

leach index NO3- = 8.4224431 - 0.0311121*Simulant Na

Summary of Fit

RSquare	0.018039
RSquare Adj	-0.00084
Root Mean Square Error	0.263734
Mean of Response	8.252963
Observations (or Sum Wgts)	54

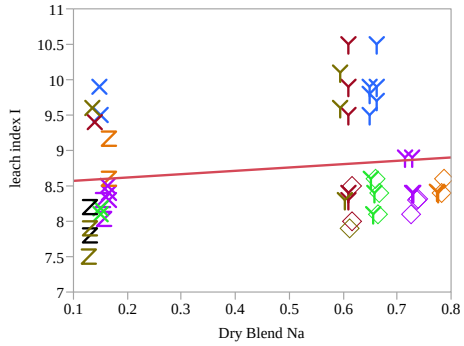
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0664440	0.066444	0.9553
Error	52	3.6168820	0.069555	Prob > F
C. Total	53	3.6833259		0.3329

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4224431	0.177078	47.56	<.0001*
Simulant Na	-0.031112	0.031832	-0.98	0.3329

Bivariate Fit of leach index I By Dry Blend Na



Linear Fit

Linear Fit

leach index I = 8.5252334 + 0.4716432*Dry Blend Na

Summary of Fit

RSquare	0.025031
RSquare Adj	0.006282
Root Mean Square Error	0.751927
Mean of Response	8.759444
Observations (or Sum Wgts)	54

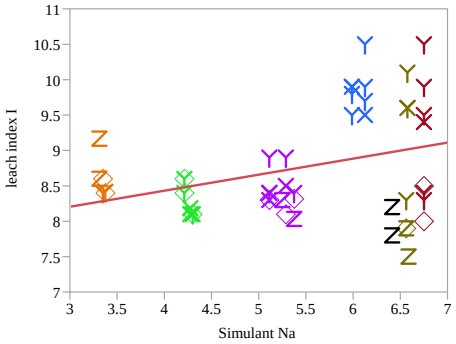
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.754819	0.754819	1.3350
Error	52	29.400464	0.565394	Prob > F
C. Total	53	30.155283		0.2532

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.5252334	0.227066	37.55	<.0001*
Dry Blend Na	0.4716432	0.408195	1.16	0.2532

Bivariate Fit of leach index I By Simulant Na



Linear Fit

Linear Fit

leach index I = 7.525819 + 0.2264614*Simulant Na

Summary of Fit

RSquare	0.11674
RSquare Adj	0.099755
Root Mean Square Error	0.715689
Mean of Response	8.759444
Observations (or Sum Wgts)	54

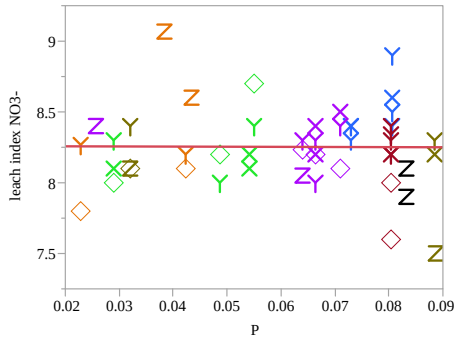
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.520339	3.52034	6.8728
Error	52	26.634945	0.51221	Prob > F
C. Total	53	30.155283		0.0115*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.525819	0.480533	15.66	<.0001*
Simulant Na	0.2264614	0.086383	2.62	0.0115*

Bivariate Fit of leach index NO3- By P



Linear Fit

Linear Fit

leach index NO3- = 8.2587403 - 0.0916061* P

Summary of Fit

RSquare	4.978e-5
RSquare Adj	-0.01918
Root Mean Square Error	0.266138
Mean of Response	8.252963
Observations (or Sum Wgts)	54

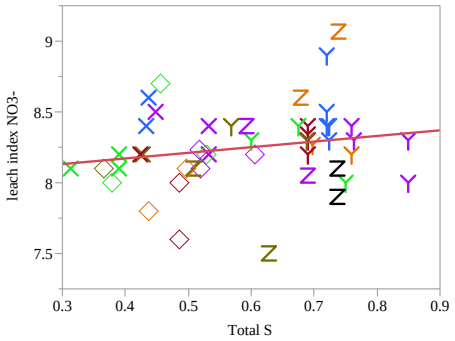
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0001834	0.000183	0.0026
Error	52	3.6831426	0.070830	Prob > F
C. Total	53	3.6833259		0.9596

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2587403	0.119183	69.29	<.0001*
P	-0.091606	1.80042	-0.05	0.9596

Bivariate Fit of leach index NO3- By Total S



Linear Fit

Linear Fit

leach index NO3- = 8.012315 + 0.3982186*Total S

Summary of Fit

RSquare	0.042881
RSquare Adj	0.024474
Root Mean Square Error	0.260376
Mean of Response	8.252963
Observations (or Sum Wgts)	54

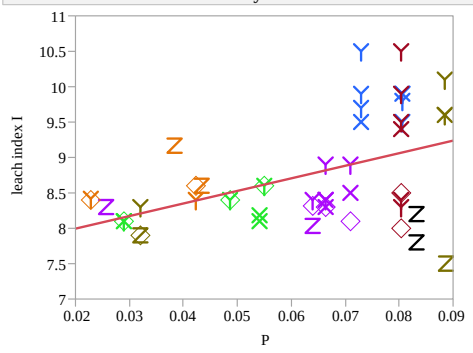
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1579431	0.157943	2.3297
Error	52	3.5253828	0.067796	Prob > F
C. Total	53	3.6833259		0.1330

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.012315	0.161597	49.58	<.0001*
Total S	0.3982186	0.260899	1.53	0.1330

Bivariate Fit of leach index I By P



Linear Fit

Linear Fit

leach index I = 7.6401892 + 17.747176* P

Summary of Fit

RSquare	0.228225
RSquare Adj	0.213383
Root Mean Square Error	0.668999
Mean of Response	8.759444
Observations (or Sum Wgts)	54

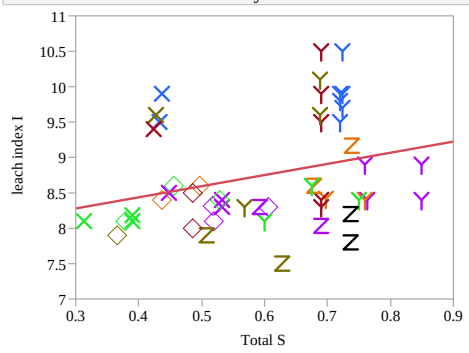
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	6.882177	6.88218	15.3771
Error	52	23.273106	0.44756	Prob > F
C. Total	53	30.155283		0.0003*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.6401892	0.299592	25.50	<.0001*
P	17.747176	4.525763	3.92	0.0003*

Bivariate Fit of leach index I By Total S



Linear Fit

Linear Fit

leach index I = 7.8066143 + 1.5767212*Total S

Summary of Fit

RSquare	0.082112
RSquare Adj	0.06446
Root Mean Square Error	0.729583
Mean of Response	8.759444
Observations (or Sum Wgts)	54

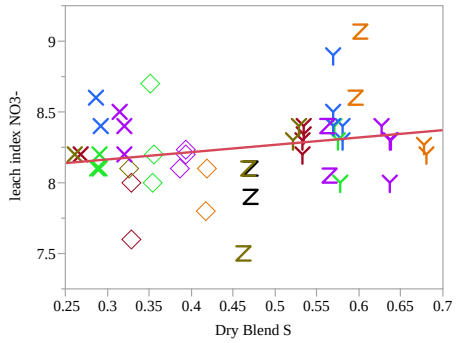
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.476096	2.47610	4.6518
Error	52	27.679187	0.53229	Prob > F
C. Total	53	30.155283		0.0357*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.8066143	0.4528	17.24	<.0001*
Total S	1.5767212	0.731048	2.16	0.0357*

Bivariate Fit of leach index NO3- By Dry Blend S



Linear Fit

Linear Fit

leach index NO3- = 8.0095711 + 0.5172537*Dry Blend S

Summary of Fit

RSquare	0.059985
RSquare Adj	0.041908
Root Mean Square Error	0.258039
Mean of Response	8.252963
Observations (or Sum Wgts)	54

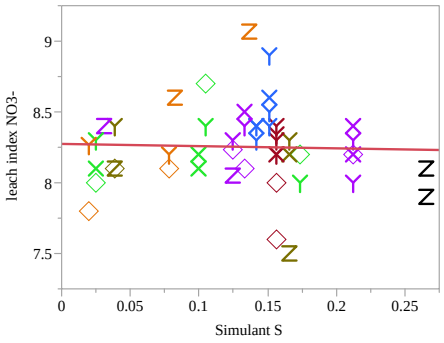
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2209457	0.220946	3.3183
Error	52	3.4623802	0.066584	Prob > F
C. Total	53	3.6833259		0.0743

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.0095711	0.13815	57.98	<.0001*
Dry Blend S	0.5172537	0.283953	1.82	0.0743

Bivariate Fit of leach index NO3- By Simulant S



Linear Fit

Linear Fit

leach index NO3- = 8.2737278 - 0.1552318*Simulant S

Summary of Fit

RSquare	0.001291
RSquare Adj	-0.01792
Root Mean Square Error	0.265973
Mean of Response	8.252963
Observations (or Sum Wgts)	54

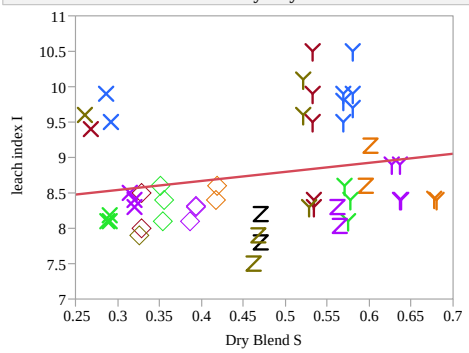
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0047542	0.004754	0.0672
Error	52	3.6785717	0.070742	Prob > F
C. Total	53	3.6833259		0.7965

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2737278	0.087897	94.13	<.0001*
Simulant S	-0.155232	0.598795	-0.26	0.7965

Bivariate Fit of leach index I By Dry Blend S



Linear Fit

Linear Fit

leach index I = 8.157665 + 1.2788954*Dry Blend S

Summary of Fit

RSquare	0.04479
RSquare Adj	0.026421
Root Mean Square Error	0.744268
Mean of Response	8.759444
Observations (or Sum Wgts)	54

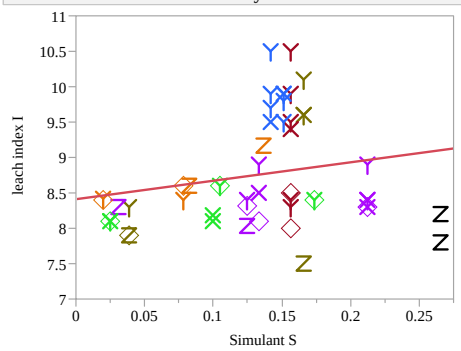
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.350667	1.35067	2.4383
Error	52	28.804616	0.55393	Prob > F
C. Total	53	30.155283		0.1245

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.157665	0.39847	20.47	<.0001*
Dry Blend S	1.2788954	0.819012	1.56	0.1245

Bivariate Fit of leach index I By Simulant S



Linear Fit

Linear Fit

leach index I = 8.410568 + 2.608097*Simulant S

Summary of Fit

RSquare	0.044504
RSquare Adj	0.02613
Root Mean Square Error	0.744379
Mean of Response	8.759444
Observations (or Sum Wgts)	54

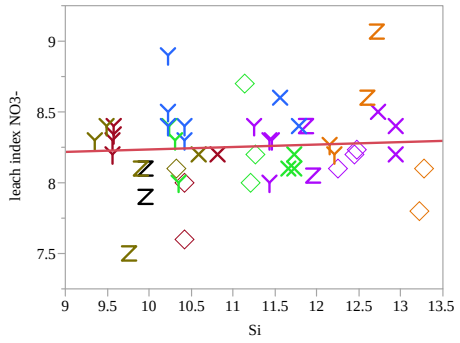
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.342043	1.34204	2.4220
Error	52	28.813240	0.55410	Prob > F
C. Total	53	30.155283		0.1257

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.410568	0.245997	34.19	<.0001*
Simulant S	2.608097	1.675849	1.56	0.1257

Bivariate Fit of leach index NO3- By Si



Linear Fit

Linear Fit

leach index NO3- = 8.0622371 + 0.0172765* Si

Summary of Fit

RSquare	0.005886
RSquare Adj	-0.01323
Root Mean Square Error	0.265361
Mean of Response	8.252963
Observations (or Sum Wgts)	54

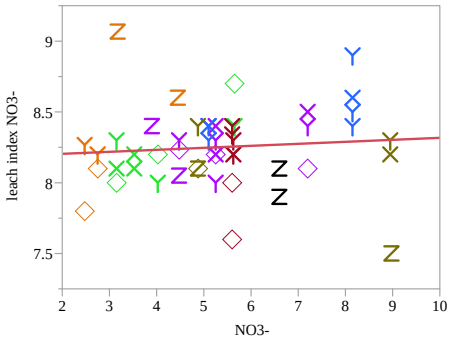
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0216783	0.021678	0.3079
Error	52	3.6616476	0.070416	Prob > F
C. Total	53	3.6833259		0.5814

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.0622371	0.345634	23.33	<.0001*
Si	0.0172765	0.031137	0.55	0.5814

Bivariate Fit of leach index NO3- By NO3-



Linear Fit

Linear Fit

leach index NO3- = 8.1752554 + 0.0142306* NO3-

Summary of Fit

RSquare	0.009662
RSquare Adj	-0.00938
Root Mean Square Error	0.264856
Mean of Response	8.252963
Observations (or Sum Wgts)	54

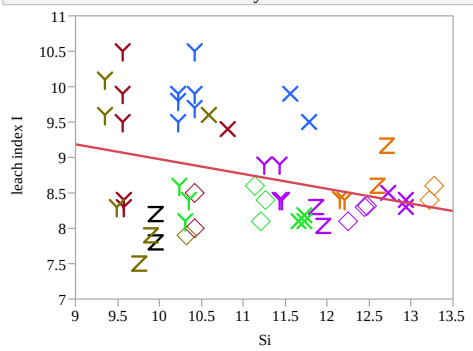
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0355886	0.035589	0.5073
Error	52	3.6477374	0.070149	Prob > F
C. Total	53	3.6833259		0.4795

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.1752554	0.114898	71.15	<.0001*
NO3-	0.0142306	0.019979	0.71	0.4795

Bivariate Fit of leach index I By Si



Linear Fit

Linear Fit

leach index I = 11.071786 - 0.2094582* Si

Summary of Fit

RSquare	0.105669
RSquare Adj	0.08847
Root Mean Square Error	0.72016
Mean of Response	8.759444
Observations (or Sum Wgts)	54

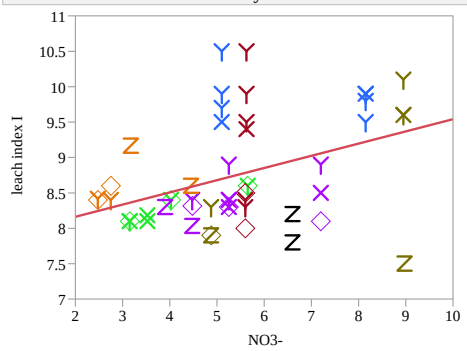
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	3.186472	3.18647	6.1440
Error	52	26.968811	0.51863	Prob > F
C. Total	53	30.155283		0.0165*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	11.071786	0.938014	11.80	<.0001*
Si	-0.209458	0.084503	-2.48	0.0165*

Bivariate Fit of leach index I By NO3-



Linear Fit

Linear Fit

leach index I = 7.818299 + 0.1723527* NO3-

Summary of Fit

RSquare	0.173115
RSquare Adj	0.157213
Root Mean Square Error	0.692473
Mean of Response	8.759444
Observations (or Sum Wgts)	54

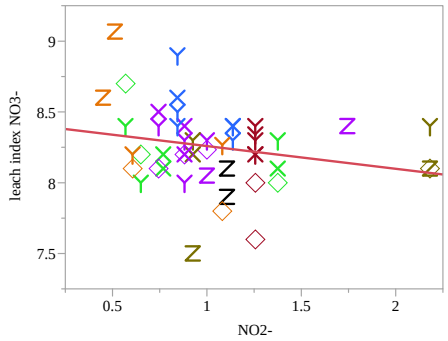
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	5.220324	5.22032	10.8866
Error	52	24.934959	0.47952	Prob > F
C. Total	53	30.155283		0.0018*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.818299	0.300403	26.03	<.0001*
NO3-	0.1723527	0.052236	3.30	0.0018*

Bivariate Fit of leach index NO3- By NO2-



Linear Fit

Linear Fit

leach index NO3- = 8.4199785 - 0.160864* NO2-

Summary of Fit

RSquare	0.054178
RSquare Adj	0.035989
Root Mean Square Error	0.258835
Mean of Response	8.252963
Observations (or Sum Wgts)	54

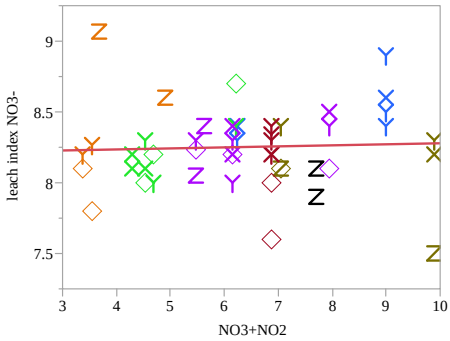
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1995549	0.199555	2.9786
Error	52	3.4837710	0.066996	Prob > F
C. Total	53	3.6833259		0.0903

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4199785	0.102983	81.76	<.0001*
NO2-	-0.160864	0.093207	-1.73	0.0903

Bivariate Fit of leach index NO3- By NO3+NO2



Linear Fit

Linear Fit

leach index NO3- = 8.2058964 + 0.0072423* NO3+NO2

Summary of Fit

RSquare	0.002478
RSquare Adj	-0.0167
Root Mean Square Error	0.265815
Mean of Response	8.252963
Observations (or Sum Wgts)	54

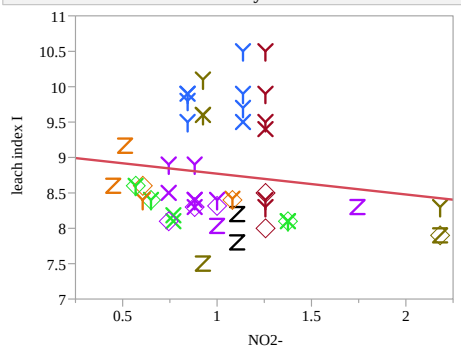
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0091280	0.009128	0.1292
Error	52	3.6741979	0.070658	Prob > F
C. Total	53	3.6833259		0.7207

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2058964	0.135854	60.40	<.0001*
NO3+NO2	0.0072423	0.02015	0.36	0.7207

Bivariate Fit of leach index I By NO2-



Linear Fit

Linear Fit

leach index I = 9.0643692 - 0.2936937* NO2-

Summary of Fit

RSquare	0.022058
RSquare Adj	0.003252
Root Mean Square Error	0.753072
Mean of Response	8.759444
Observations (or Sum Wgts)	54

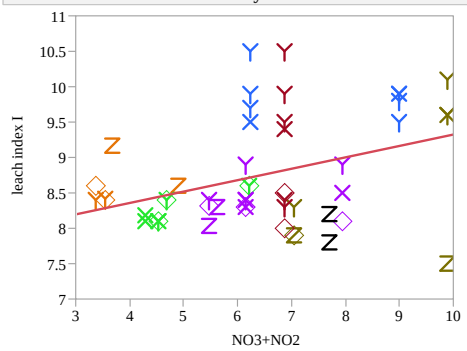
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.665172	0.665172	1.1729
Error	52	29.490111	0.567118	Prob > F
C. Total	53	30.155283		0.2838

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.0643692	0.299625	30.25	<.0001*
NO2-	-0.293694	0.271184	-1.08	0.2838

Bivariate Fit of leach index I By NO3+NO2



Linear Fit

Linear Fit

leach index I = 7.7129332 + 0.1610309* NO3+NO2

Summary of Fit

RSquare	0.14965
RSquare Adj	0.133297
Root Mean Square Error	0.702229
Mean of Response	8.759444
Observations (or Sum Wgts)	54

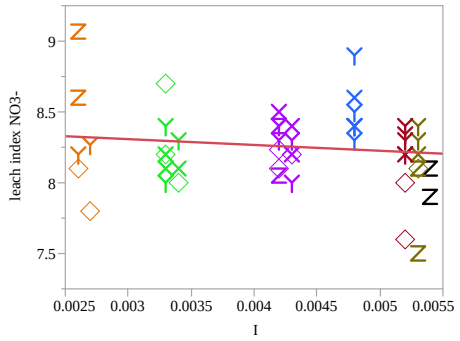
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4.512735	4.51273	9.1513
Error	52	25.642549	0.49313	Prob > F
C. Total	53	30.155283		0.0039*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.7129332	0.358898	21.49	<.0001*
NO3+NO2	0.1610309	0.053231	3.03	0.0039*

Bivariate Fit of leach index NO3- By I



Linear Fit

Linear Fit

leach index NO3- = 8.4322286 - 41.333659* I

Summary of Fit

RSquare	0.020412
RSquare Adj	0.001573
Root Mean Square Error	0.263415
Mean of Response	8.252963
Observations (or Sum Wgts)	54

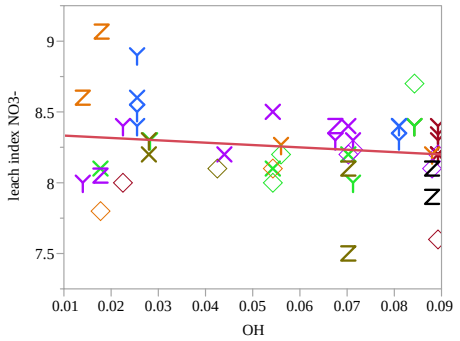
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0751829	0.075183	1.0835
Error	52	3.6081431	0.069387	Prob > F
C. Total	53	3.6833259		0.3027

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.4322286	0.175909	47.94	<.0001*
I	-41.33366	39.7086	-1.04	0.3027

Bivariate Fit of leach index NO3- By OH



Linear Fit

Linear Fit

leach index NO3- = 8.3496943 - 1.6606233* OH

Summary of Fit

RSquare	0.02924
RSquare Adj	0.010572
Root Mean Square Error	0.262225
Mean of Response	8.252963
Observations (or Sum Wgts)	54

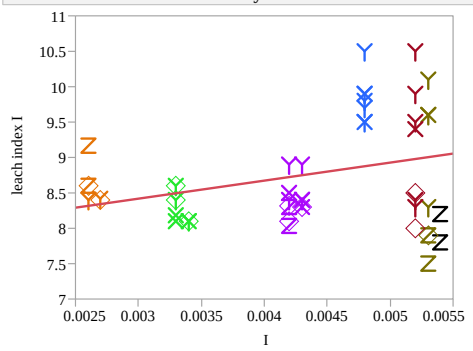
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1077014	0.107701	1.5663
Error	52	3.5756245	0.068762	Prob > F
C. Total	53	3.6833259		0.2163

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.3496943	0.085131	98.08	<.0001*
OH	-1.660623	1.32689	-1.25	0.2163

Bivariate Fit of leach index I By I



Linear Fit

Linear Fit

leach index I = 7.6568903 + 254.21829* I

Summary of Fit

RSquare	0.094311
RSquare Adj	0.076894
Root Mean Square Error	0.724719
Mean of Response	8.759444
Observations (or Sum Wgts)	54

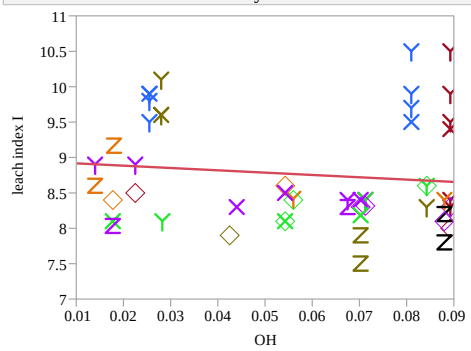
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.843968	2.84397	5.4148
Error	52	27.311315	0.52522	Prob > F
C. Total	53	30.155283		0.0239*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	7.6568903	0.483968	15.82	<.0001*
I	254.21829	109.2481	2.33	0.0239*

Bivariate Fit of leach index I By OH



Linear Fit

Linear Fit

leach index I = 8.9503976 - 3.2781666* OH

Summary of Fit

RSquare	0.013918
RSquare Adj	-0.00505
Root Mean Square Error	0.7562
Mean of Response	8.759444
Observations (or Sum Wgts)	54

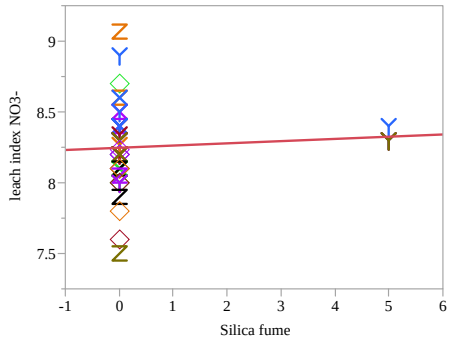
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.419702	0.419702	0.7340
Error	52	29.735581	0.571838	Prob > F
C. Total	53	30.155283		0.3955

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.9503976	0.2455	36.46	<.0001*
OH	-3.278167	3.826459	-0.86	0.3955

Bivariate Fit of leach index NO3- By Silica fume



Linear Fit

leach index NO3- = 8.2472 + 0.01556* Silica fume

Summary of Fit

RSquare	0.006086
RSquare Adj	-0.01303
Root Mean Square Error	0.265334
Mean of Response	8.252963
Observations (or Sum Wgts)	54

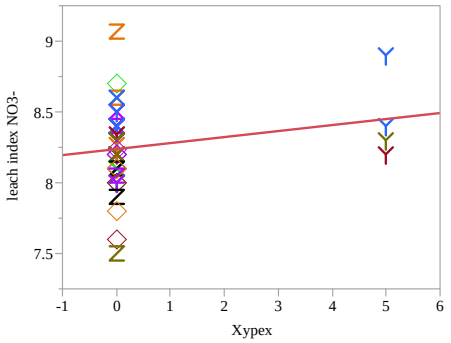
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0224179	0.022418	0.3184
Error	52	3.6609080	0.070402	Prob > F
C. Total	53	3.6833259		0.5750

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2472	0.037524	219.79	<.0001*
Silica fume	0.01556	0.027574	0.56	0.5750

Bivariate Fit of leach index NO3- By Xypex



Linear Fit

leach index NO3- = 8.2372 + 0.04256* Xypex

Summary of Fit

RSquare	0.045534
RSquare Adj	0.027179
Root Mean Square Error	0.260015
Mean of Response	8.252963
Observations (or Sum Wgts)	54

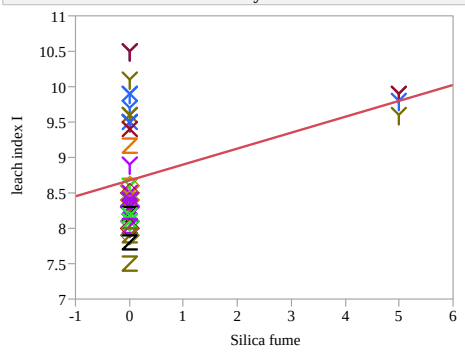
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1677179	0.167718	2.4807
Error	52	3.5156080	0.067608	Prob > F
C. Total	53	3.6833259		0.1213

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.2372	0.036772	224.01	<.0001*
Xypex	0.04256	0.027022	1.58	0.1213

Bivariate Fit of leach index I By Silica fume



Linear Fit

leach index I = 8.6762 + 0.22476* Silica fume

Summary of Fit

RSquare	0.155114
RSquare Adj	0.138866
Root Mean Square Error	0.699969
Mean of Response	8.759444
Observations (or Sum Wgts)	54

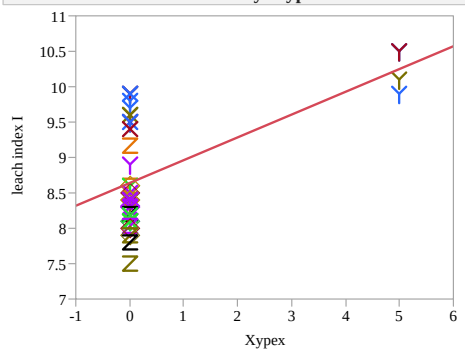
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	4.677505	4.67751	9.5468
Error	52	25.477778	0.48996	Prob > F
C. Total	53	30.155283		0.0032*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.6762	0.098991	87.65	<.0001*
Silica fume	0.22476	0.072743	3.09	0.0032*

Bivariate Fit of leach index I By Xypex



Linear Fit

leach index I = 8.6402 + 0.32196* Xypex

Summary of Fit

RSquare	0.318285
RSquare Adj	0.305175
Root Mean Square Error	0.628755
Mean of Response	8.759444
Observations (or Sum Wgts)	54

Analysis of Variance

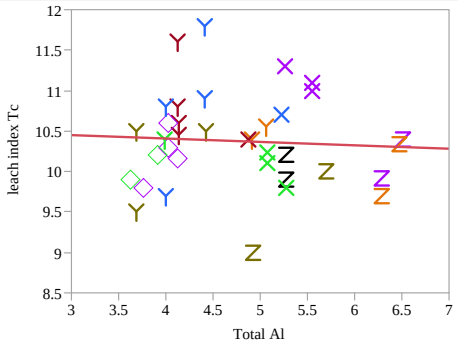
Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	9.597985	9.59799	24.2783
Error	52	20.557298	0.39533	Prob > F
C. Total	53	30.155283		<.0001*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	8.6402	0.088919	97.17	<.0001*
Xypex	0.32196	0.065342	4.93	<.0001*

Fit Group

Bivariate Fit of leach index Tc By Total Al



Linear Fit

Linear Fit

leach index Tc = 10.575453 - 0.0417927*Total Al

Summary of Fit

RSquare	0.003791
RSquare Adj	-0.02551
Root Mean Square Error	0.579714
Mean of Response	10.37667
Observations (or Sum Wgts)	36

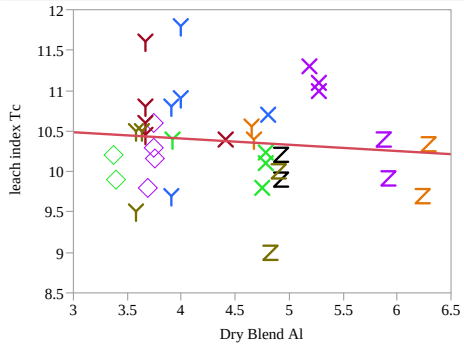
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.043478	0.043478	0.1294
Error	34	11.426322	0.336068	Prob > F
C. Total	35	11.469800		0.7213

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.575453	0.561049	18.85	<.0001*
Total Al	-0.041793	0.116193	-0.36	0.7213

Bivariate Fit of leach index Tc By Dry Blend Al



Linear Fit

Linear Fit

leach index Tc = 10.719523 - 0.0774443*Dry Blend Al

Summary of Fit

RSquare	0.012642
RSquare Adj	-0.0164
Root Mean Square Error	0.577133
Mean of Response	10.37667
Observations (or Sum Wgts)	36

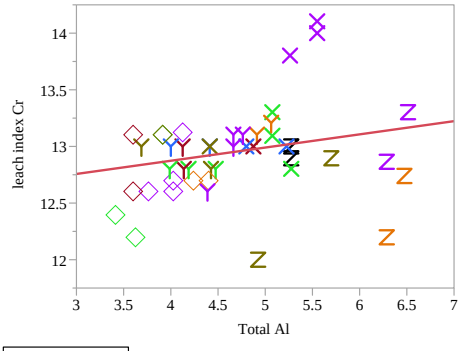
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.145003	0.145003	0.4353
Error	34	11.324797	0.333082	Prob > F
C. Total	35	11.469800		0.5138

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.719523	0.528464	20.28	<.0001*
Dry Blend Al	-0.077444	0.117375	-0.66	0.5138

Bivariate Fit of leach index Cr By Total Al



Linear Fit

Linear Fit

leach index Cr = 12.407878 + 0.1165894*Total Al

Summary of Fit

RSquare	0.062123
RSquare Adj	0.044087
Root Mean Square Error	0.35294
Mean of Response	12.94111
Observations (or Sum Wgts)	54

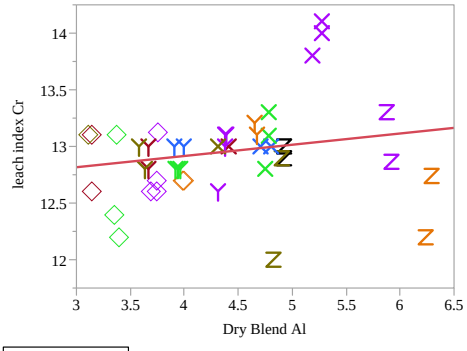
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4290541	0.429054	3.4444
Error	52	6.4774793	0.124567	Prob > F
C. Total	53	6.9065333		0.0691

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.407878	0.291304	42.59	<.0001*
Total Al	0.1165894	0.062821	1.86	0.0691

Bivariate Fit of leach index Cr By Dry Blend Al



Linear Fit

Linear Fit

leach index Cr = 12.51775 + 0.0995539*Dry Blend Al

Summary of Fit

RSquare	0.0451
RSquare Adj	0.026737
Root Mean Square Error	0.356129
Mean of Response	12.94111
Observations (or Sum Wgts)	54

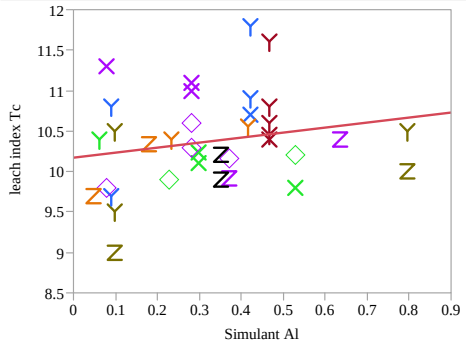
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3114860	0.311486	2.4560
Error	52	6.5950473	0.126828	Prob > F
C. Total	53	6.9065333		0.1231

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.51775	0.274459	45.61	<.0001*
Dry Blend Al	0.0995539	0.063525	1.57	0.1231

Bivariate Fit of leach index Tc By Simulant Al



Linear Fit

leach index Tc = 10.172571 + 0.6196963*Simulant Al

Summary of Fit

RSquare	0.044941
RSquare Adj	0.016851
Root Mean Square Error	0.567615
Mean of Response	10.37667
Observations (or Sum Wgts)	36

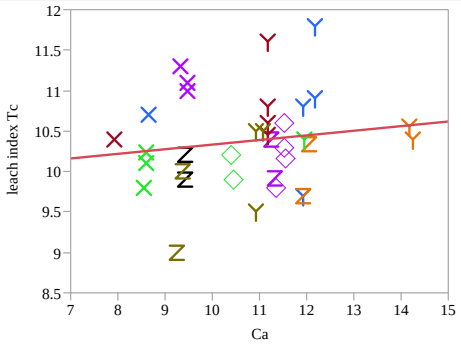
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.515463	0.515463	1.5999
Error	34	10.954337	0.322186	Prob > F
C. Total	35	11.469800		0.2145

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.172571	0.187045	54.39	<.0001*
Simulant Al	0.6196963	0.48993	1.26	0.2145

Bivariate Fit of leach index Tc By Ca



Linear Fit

leach index Tc = 9.7615231 + 0.0571246* Ca

Summary of Fit

RSquare	0.022476
RSquare Adj	-0.00628
Root Mean Square Error	0.574252
Mean of Response	10.37667
Observations (or Sum Wgts)	36

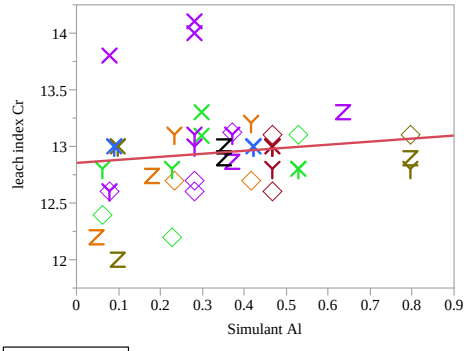
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.257790	0.257790	0.7817
Error	34	11.212010	0.329765	Prob > F
C. Total	35	11.469800		0.3828

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.7615231	0.70229	13.90	<.0001*
Ca	0.0571246	0.064609	0.88	0.3828

Bivariate Fit of leach index Cr By Simulant Al



Linear Fit

leach index Cr = 12.854674 + 0.2692547*Simulant Al

Summary of Fit

RSquare	0.021495
RSquare Adj	0.002678
Root Mean Square Error	0.360504
Mean of Response	12.94111
Observations (or Sum Wgts)	54

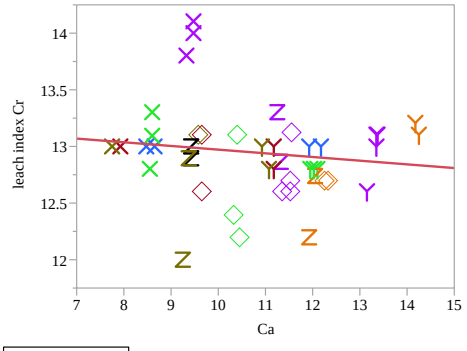
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1484554	0.148455	1.1423
Error	52	6.7580780	0.129963	Prob > F
C. Total	53	6.9065333		0.2901

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.854674	0.094591	135.90	<.0001*
Simulant Al	0.2692547	0.251927	1.07	0.2901

Bivariate Fit of leach index Cr By Ca



Linear Fit

leach index Cr = 13.297386 - 0.0325395* Ca

Summary of Fit

RSquare	0.020393
RSquare Adj	0.001555
Root Mean Square Error	0.360707
Mean of Response	12.94111
Observations (or Sum Wgts)	54

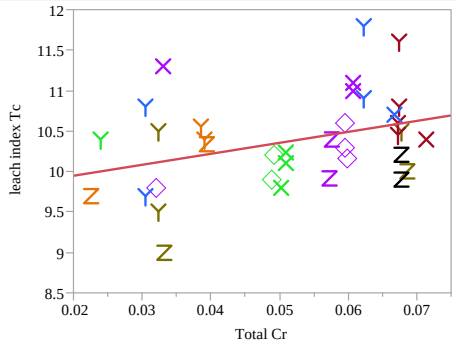
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1408458	0.140846	1.0825
Error	52	6.7656875	0.130109	Prob > F
C. Total	53	6.9065333		0.3029

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.297386	0.345927	38.44	<.0001*
Ca	-0.032539	0.031275	-1.04	0.3029

Bivariate Fit of leach index Tc By Total Cr



Linear Fit

Linear Fit

leach index Tc = 9.6786736 + 13.531369*Total Cr

Summary of Fit

RSquare	0.129781
RSquare Adj	0.104186
Root Mean Square Error	0.541817
Mean of Response	10.37667
Observations (or Sum Wgts)	36

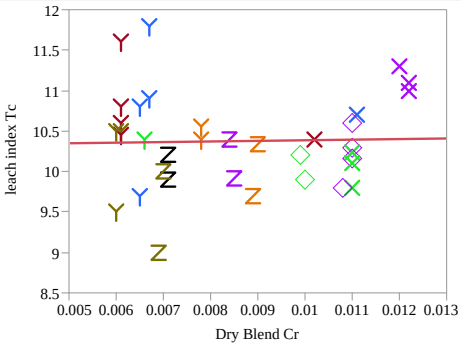
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.488559	1.48856	5.0706
Error	34	9.981241	0.29357	Prob > F
C. Total	35	11.469800		0.0309*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.6786736	0.322857	29.98	<.0001*
Total Cr	13.531369	6.009129	2.25	0.0309*

Bivariate Fit of leach index Tc By Dry Blend Cr



Linear Fit

Linear Fit

leach index Tc = 10.312794 + 7.4559285*Dry Blend Cr

Summary of Fit

RSquare	0.000803
RSquare Adj	-0.02859
Root Mean Square Error	0.580583
Mean of Response	10.37667
Observations (or Sum Wgts)	36

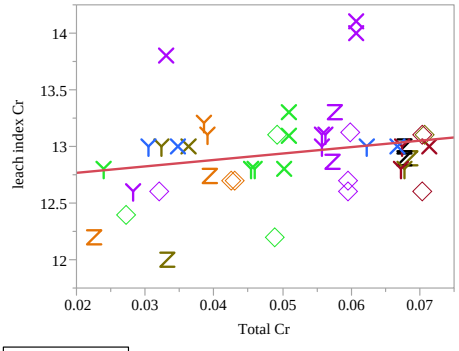
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.009208	0.009208	0.0273
Error	34	11.460592	0.337076	Prob > F
C. Total	35	11.469800		0.8697

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.312794	0.39838	25.89	<.0001*
Dry Blend Cr	7.4559285	45.1109	0.17	0.8697

Bivariate Fit of leach index Cr By Total Cr



Linear Fit

Linear Fit

leach index Cr = 12.654238 + 5.6692234*Total Cr

Summary of Fit

RSquare	0.057055
RSquare Adj	0.038921
Root Mean Square Error	0.353893
Mean of Response	12.94111
Observations (or Sum Wgts)	54

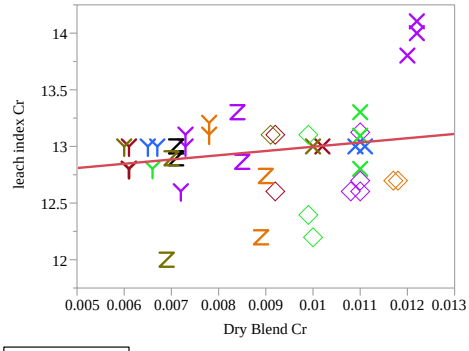
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3940501	0.394050	3.1464
Error	52	6.5124833	0.125240	Prob > F
C. Total	53	6.9065333		0.0820

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.654238	0.168746	74.99	<.0001*
Total Cr	5.6692234	3.196094	1.77	0.0820

Bivariate Fit of leach index Cr By Dry Blend Cr



Linear Fit

Linear Fit

leach index Cr = 12.622962 + 37.527453*Dry Blend Cr

Summary of Fit

RSquare	0.047041
RSquare Adj	0.028714
Root Mean Square Error	0.355767
Mean of Response	12.94111
Observations (or Sum Wgts)	54

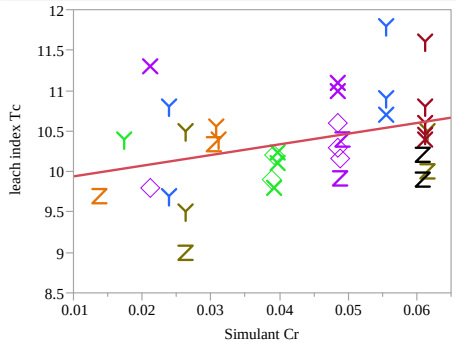
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3248877	0.324888	2.5669
Error	52	6.5816457	0.126570	Prob > F
C. Total	53	6.9065333		0.1152

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.622962	0.204394	61.76	<.0001*
Dry Blend Cr	37.527453	23.4233	1.60	0.1152

Bivariate Fit of leach index Tc By Simulant Cr



Linear Fit

Linear Fit

leach index Tc = 9.8084493 + 13.210091*Simulant Cr

Summary of Fit

RSquare	0.125275
RSquare Adj	0.099548
Root Mean Square Error	0.543218
Mean of Response	10.37667
Observations (or Sum Wgts)	36

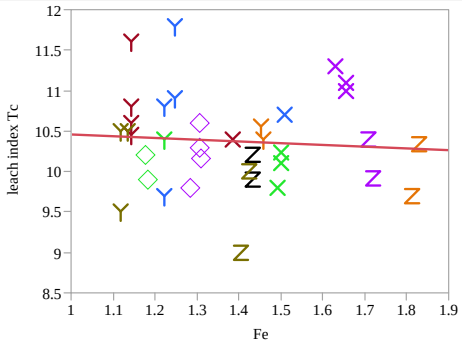
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	1.436884	1.43688	4.8694
Error	34	10.032916	0.29509	Prob > F
C. Total	35	11.469800		0.0342*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.8084493	0.272953	35.93	<.0001*
Simulant Cr	13.210091	5.986447	2.21	0.0342*

Bivariate Fit of leach index Tc By Fe



Linear Fit

Linear Fit

leach index Tc = 10.675395 - 0.2164436* Fe

Summary of Fit

RSquare	0.006302
RSquare Adj	-0.02292
Root Mean Square Error	0.578983
Mean of Response	10.37667
Observations (or Sum Wgts)	36

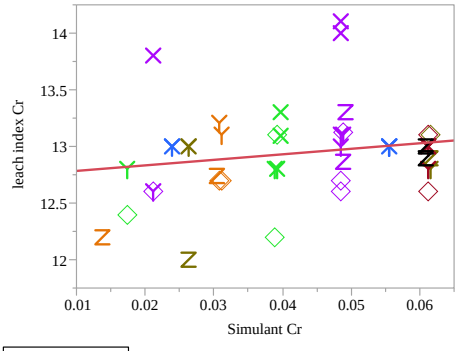
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.072282	0.072282	0.2156
Error	34	11.397518	0.335221	Prob > F
C. Total	35	11.469800		0.6454

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.675395	0.650519	16.41	<.0001*
Fe	-0.216444	0.466119	-0.46	0.6454

Bivariate Fit of leach index Cr By Simulant Cr



Linear Fit

Linear Fit

leach index Cr = 12.736543 + 4.8569591*Simulant Cr

Summary of Fit

RSquare	0.042772
RSquare Adj	0.024364
Root Mean Square Error	0.356563
Mean of Response	12.94111
Observations (or Sum Wgts)	54

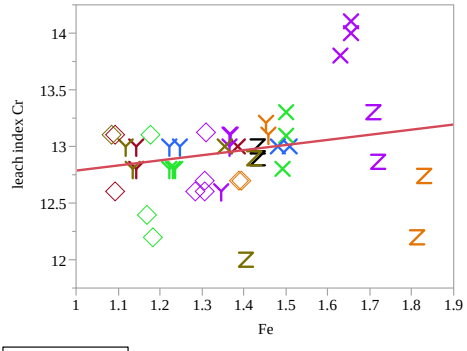
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2954046	0.295405	2.3235
Error	52	6.6111288	0.127137	Prob > F
C. Total	53	6.9065333		0.1335

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.736543	0.142706	89.25	<.0001*
Simulant Cr	4.8569591	3.186339	1.52	0.1335

Bivariate Fit of leach index Cr By Fe



Linear Fit

Linear Fit

leach index Cr = 12.33505 + 0.452087* Fe

Summary of Fit

RSquare	0.058501
RSquare Adj	0.040395
Root Mean Square Error	0.353621
Mean of Response	12.94111
Observations (or Sum Wgts)	54

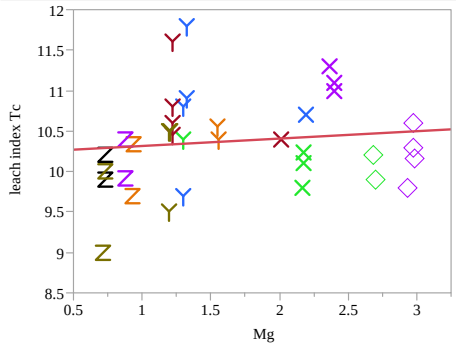
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.4040391	0.404039	3.2311
Error	52	6.5024942	0.125048	Prob > F
C. Total	53	6.9065333		0.0781

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.33505	0.340582	36.22	<.0001*
Fe	0.452087	0.251506	1.80	0.0781

Bivariate Fit of leach index Tc By Mg



Linear Fit

Linear Fit

leach index Tc = 10.225486 + 0.0910077* Mg

Summary of Fit

RSquare	0.014126
RSquare Adj	-0.01487
Root Mean Square Error	0.576699
Mean of Response	10.37667
Observations (or Sum Wgts)	36

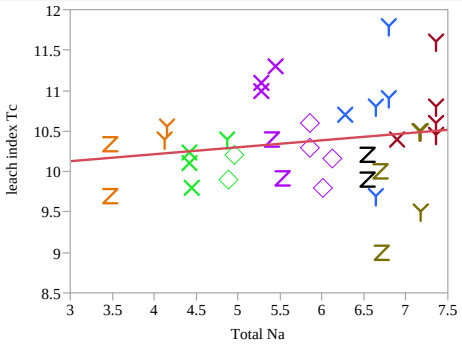
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.162022	0.162022	0.4872
Error	34	11.307778	0.332582	Prob > F
C. Total	35	11.469800		0.4899

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.225486	0.236968	43.15	<.0001*
Mg	0.0910077	0.130389	0.70	0.4899

Bivariate Fit of leach index Tc By Total Na



Linear Fit

Linear Fit

leach index Tc = 9.8706058 + 0.0861503*Total Na

Summary of Fit

RSquare	0.031089
RSquare Adj	0.002591
Root Mean Square Error	0.571716
Mean of Response	10.37667
Observations (or Sum Wgts)	36

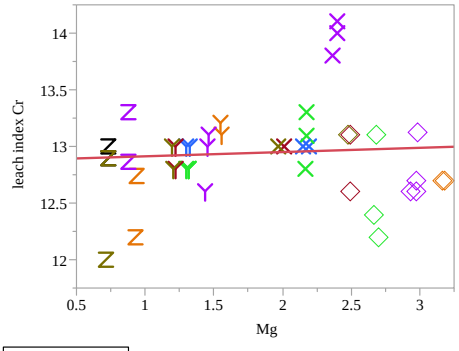
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.356581	0.356581	1.0909
Error	34	11.113219	0.326859	Prob > F
C. Total	35	11.469800		0.3036

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.8706058	0.493792	19.99	<.0001*
Total Na	0.0861503	0.082482	1.04	0.3036

Bivariate Fit of leach index Cr By Mg



Linear Fit

Linear Fit

leach index Cr = 12.876295 + 0.0372905* Mg

Summary of Fit

RSquare	0.005691
RSquare Adj	-0.01343
Root Mean Square Error	0.363403
Mean of Response	12.94111
Observations (or Sum Wgts)	54

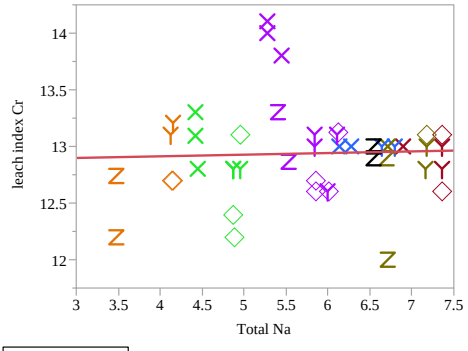
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0393057	0.039306	0.2976
Error	52	6.8672277	0.132062	Prob > F
C. Total	53	6.9065333		0.5877

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.876295	0.12869	100.06	<.0001*
Mg	0.0372905	0.068353	0.55	0.5877

Bivariate Fit of leach index Cr By Total Na



Linear Fit

Linear Fit

leach index Cr = 12.85562 + 0.0143828*Total Na

Summary of Fit

RSquare	0.002063
RSquare Adj	-0.01713
Root Mean Square Error	0.364066
Mean of Response	12.94111
Observations (or Sum Wgts)	54

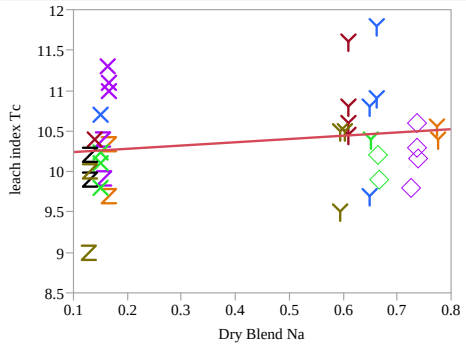
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0142480	0.014248	0.1075
Error	52	6.8922853	0.132544	Prob > F
C. Total	53	6.9065333		0.7443

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.85562	0.265414	48.44	<.0001*
Total Na	0.0143828	0.043868	0.33	0.7443

Bivariate Fit of leach index Tc By Dry Blend Na



Linear Fit

Linear Fit

leach index Tc = 10.199805 + 0.4049037*Dry Blend Na

Summary of Fit

RSquare	0.034936
RSquare Adj	0.006552
Root Mean Square Error	0.57058
Mean of Response	10.37667
Observations (or Sum Wgts)	36

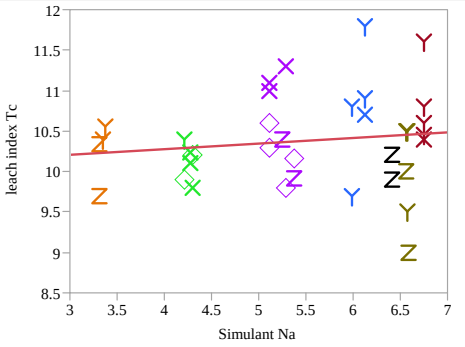
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.400712	0.400712	1.2308
Error	34	11.069088	0.325561	Prob > F
C. Total	35	11.469800		0.2750

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.199805	0.185626	54.95	<.0001*
Dry Blend Na	0.4049037	0.364966	1.11	0.2750

Bivariate Fit of leach index Tc By Simulant Na



Linear Fit

Linear Fit

leach index Tc = 9.9996541 + 0.0693372*Simulant Na

Summary of Fit

RSquare	0.019039
RSquare Adj	-0.00981
Root Mean Square Error	0.57526
Mean of Response	10.37667
Observations (or Sum Wgts)	36

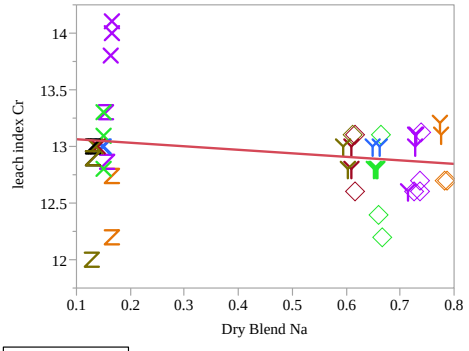
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.218370	0.218370	0.6599
Error	34	11.251430	0.330924	Prob > F
C. Total	35	11.469800		0.4223

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.9996541	0.473913	21.10	<.0001*
Simulant Na	0.0693372	0.085356	0.81	0.4223

Bivariate Fit of leach index Cr By Dry Blend Na



Linear Fit

Linear Fit

leach index Cr = 13.09498 - 0.3098544*Dry Blend Na

Summary of Fit

RSquare	0.047171
RSquare Adj	0.028847
Root Mean Square Error	0.355743
Mean of Response	12.94111
Observations (or Sum Wgts)	54

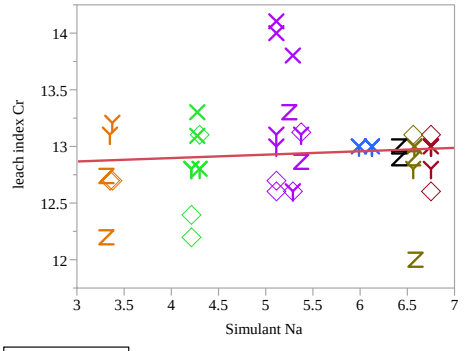
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.3257850	0.325785	2.5743
Error	52	6.5807483	0.126553	Prob > F
C. Total	53	6.9065333		0.1147

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.09498	0.107427	121.90	<.0001*
Dry Blend Na	-0.309854	0.19312	-1.60	0.1147

Bivariate Fit of leach index Cr By Simulant Na



Linear Fit

Linear Fit

leach index Cr = 12.779043 + 0.0297515*Simulant Na

Summary of Fit

RSquare	0.008797
RSquare Adj	-0.01026
Root Mean Square Error	0.362835
Mean of Response	12.94111
Observations (or Sum Wgts)	54

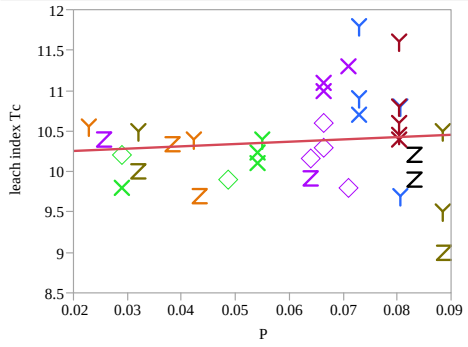
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0607595	0.060759	0.4615
Error	52	6.8457738	0.131649	Prob > F
C. Total	53	6.9065333		0.4999

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.779043	0.243618	52.46	<.0001*
Simulant Na	0.0297515	0.043794	0.68	0.4999

Bivariate Fit of leach index Tc By P



Linear Fit

Linear Fit

leach index Tc = 10.197165 + 2.8646494* P

Summary of Fit

RSquare	0.010324
RSquare Adj	-0.01878
Root Mean Square Error	0.57781
Mean of Response	10.37667
Observations (or Sum Wgts)	36

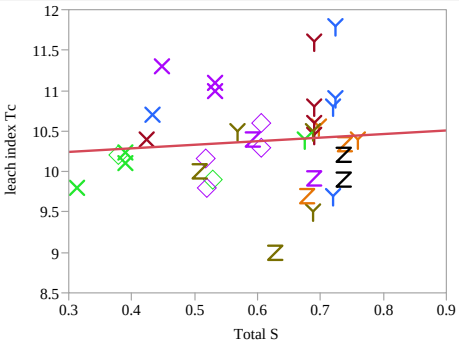
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.118414	0.118414	0.3547
Error	34	11.351386	0.333864	Prob > F
C. Total	35	11.469800		0.5554

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.197165	0.316417	32.23	<.0001*
P	2.8646494	4.810107	0.60	0.5554

Bivariate Fit of leach index Tc By Total S



Linear Fit

Linear Fit

leach index Tc = 10.111535 + 0.4409026*Total S

Summary of Fit

RSquare	0.009431
RSquare Adj	-0.0197
Root Mean Square Error	0.57807
Mean of Response	10.37667
Observations (or Sum Wgts)	36

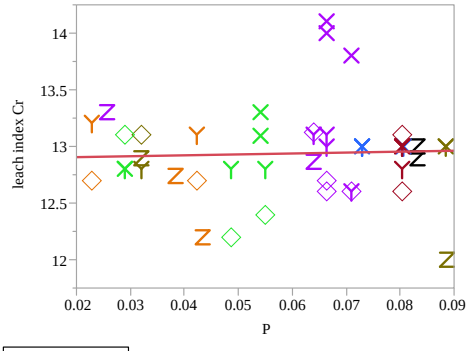
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.108176	0.108176	0.3237
Error	34	11.361624	0.334165	Prob > F
C. Total	35	11.469800		0.5731

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.111535	0.475847	21.25	<.0001*
Total S	0.4409026	0.774923	0.57	0.5731

Bivariate Fit of leach index Cr By P



Linear Fit

Linear Fit

leach index Cr = 12.889387 + 0.820153* P

Summary of Fit

RSquare	0.002128
RSquare Adj	-0.01706
Root Mean Square Error	0.364054
Mean of Response	12.94111
Observations (or Sum Wgts)	54

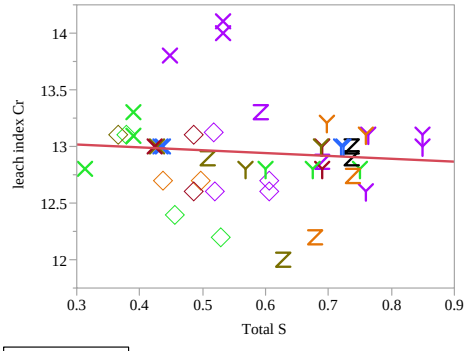
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0146980	0.014698	0.1109
Error	52	6.8918354	0.132535	Prob > F
C. Total	53	6.9065333		0.7405

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.889387	0.163031	79.06	<.0001*
P	0.820153	2.462817	0.33	0.7405

Bivariate Fit of leach index Cr By Total S



Linear Fit

Linear Fit

leach index Cr = 13.094187 - 0.2533058*Total S

Summary of Fit

RSquare	0.009253
RSquare Adj	-0.0098
Root Mean Square Error	0.362752
Mean of Response	12.94111
Observations (or Sum Wgts)	54

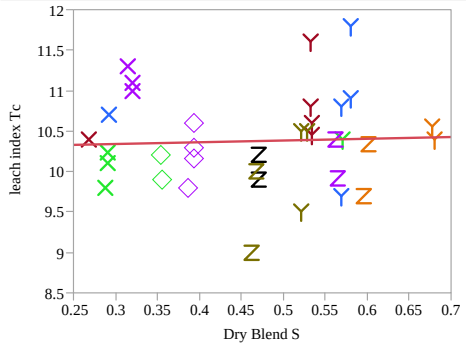
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0639070	0.063907	0.4857
Error	52	6.8426264	0.131589	Prob > F
C. Total	53	6.9065333		0.4890

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.094187	0.225134	58.16	<.0001*
Total S	-0.253306	0.36348	-0.70	0.4890

Bivariate Fit of leach index Tc By Dry Blend S



Linear Fit

Linear Fit

leach index Tc = 10.277491 + 0.2126222*Dry Blend S

Summary of Fit

RSquare	0.002002
RSquare Adj	-0.02735
Root Mean Square Error	0.580234
Mean of Response	10.37667
Observations (or Sum Wgts)	36

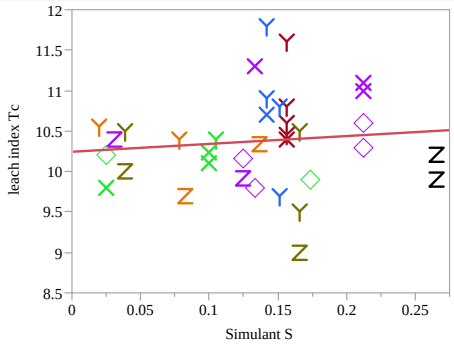
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.022959	0.022959	0.0682
Error	34	11.446841	0.336672	Prob > F
C. Total	35	11.469800		0.7956

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.277491	0.391895	26.23	<.0001*
Dry Blend S	0.2126222	0.814203	0.26	0.7956

Bivariate Fit of leach index Tc By Simulant S



Linear Fit

Linear Fit

leach index Tc = 10.245587 + 0.9716426*Simulant S

Summary of Fit

RSquare	0.011642
RSquare Adj	-0.01743
Root Mean Square Error	0.577425
Mean of Response	10.37667
Observations (or Sum Wgts)	36

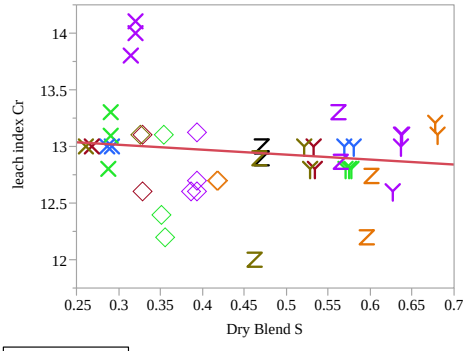
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.133529	0.133529	0.4005
Error	34	11.336271	0.333420	Prob > F
C. Total	35	11.469800		0.5311

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.245587	0.228396	44.86	<.0001*
Simulant S	0.9716426	1.535377	0.63	0.5311

Bivariate Fit of leach index Cr By Dry Blend S



Linear Fit

Linear Fit

leach index Cr = 13.146677 - 0.4368671*Dry Blend S

Summary of Fit

RSquare	0.02282
RSquare Adj	0.004028
Root Mean Square Error	0.36026
Mean of Response	12.94111
Observations (or Sum Wgts)	54

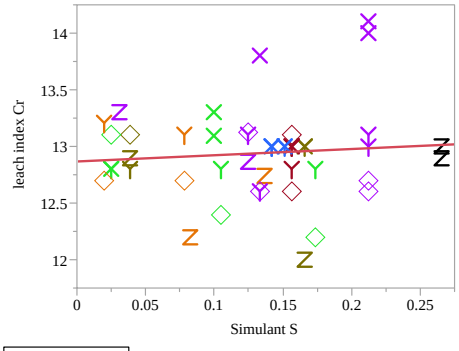
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1576076	0.157608	1.2144
Error	52	6.7489258	0.129787	Prob > F
C. Total	53	6.9065333		0.2755

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	13.146677	0.192878	68.16	<.0001*
Dry Blend S	-0.436867	0.396439	-1.10	0.2755

Bivariate Fit of leach index Cr By Simulant S



Linear Fit

Linear Fit

leach index Cr = 12.867602 + 0.5495287*Simulant S

Summary of Fit

RSquare	0.008627
RSquare Adj	-0.01044
Root Mean Square Error	0.362867
Mean of Response	12.94111
Observations (or Sum Wgts)	54

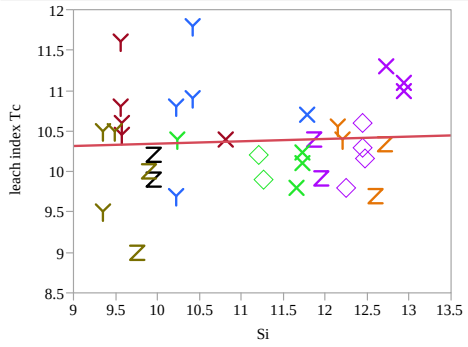
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0595799	0.059580	0.4525
Error	52	6.8469534	0.131672	Prob > F
C. Total	53	6.9065333		0.5041

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.867602	0.119917	107.30	<.0001*
Simulant S	0.5495287	0.816935	0.67	0.5041

Bivariate Fit of leach index Tc By Si



Linear Fit

Linear Fit

leach index Tc = 10.051494 + 0.0293087* Si

Summary of Fit

RSquare	0.003999
RSquare Adj	-0.0253
Root Mean Square Error	0.579653
Mean of Response	10.37667
Observations (or Sum Wgts)	36

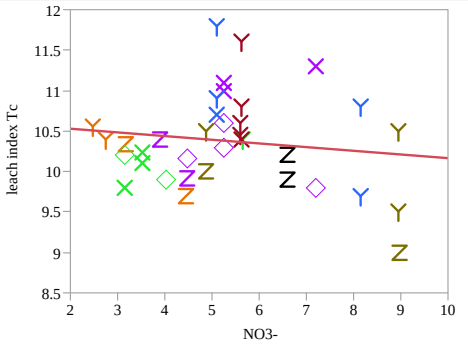
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.045866	0.045866	0.1365
Error	34	11.423934	0.335998	Prob > F
C. Total	35	11.469800		0.7141

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.051494	0.885401	11.35	<.0001*
Si	0.0293087	0.079327	0.37	0.7141

Bivariate Fit of leach index Tc By NO3-



Linear Fit

Linear Fit

leach index Tc = 10.621076 - 0.0454493* NO3-

Summary of Fit

RSquare	0.019496
RSquare Adj	-0.00934
Root Mean Square Error	0.575126
Mean of Response	10.37667
Observations (or Sum Wgts)	36

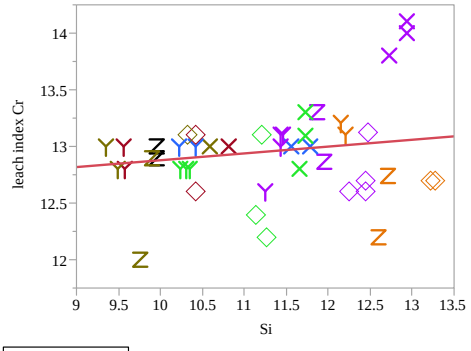
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.223612	0.223612	0.6760
Error	34	11.246188	0.330770	Prob > F
C. Total	35	11.469800		0.4167

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.621076	0.312331	34.01	<.0001*
NO3-	-0.045449	0.055277	-0.82	0.4167

Bivariate Fit of leach index Cr By Si



Linear Fit

Linear Fit

leach index Cr = 12.275365 + 0.0603051* Si

Summary of Fit

RSquare	0.038244
RSquare Adj	0.019749
Root Mean Square Error	0.357405
Mean of Response	12.94111
Observations (or Sum Wgts)	54

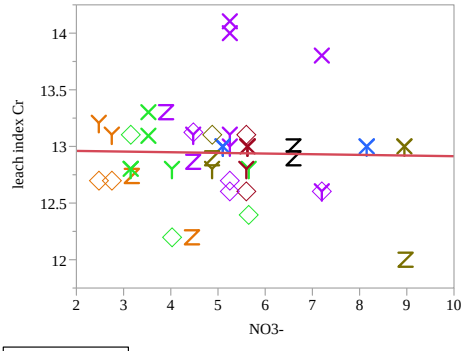
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.2641333	0.264133	2.0678
Error	52	6.6424000	0.127738	Prob > F
C. Total	53	6.9065333		0.1564

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.275365	0.465523	26.37	<.0001*
Si	0.0603051	0.041938	1.44	0.1564

Bivariate Fit of leach index Cr By NO3-



Linear Fit

Linear Fit

leach index Cr = 12.973171 - 0.0058712* NO3-

Summary of Fit

RSquare	0.000877
RSquare Adj	-0.01834
Root Mean Square Error	0.364282
Mean of Response	12.94111
Observations (or Sum Wgts)	54

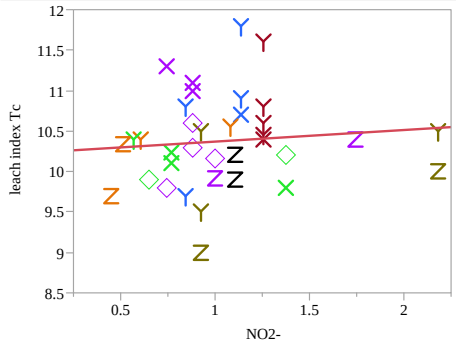
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0060578	0.006058	0.0456
Error	52	6.9004755	0.132701	Prob > F
C. Total	53	6.9065333		0.8316

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.973171	0.15803	82.09	<.0001*
NO3-	-0.005871	0.027479	-0.21	0.8316

Bivariate Fit of leach index Tc By NO2-



Linear Fit

leach index Tc = 10.226815 + 0.1432792* NO2-

Summary of Fit

RSquare	0.009551
RSquare Adj	-0.01958
Root Mean Square Error	0.578036
Mean of Response	10.37667
Observations (or Sum Wgts)	36

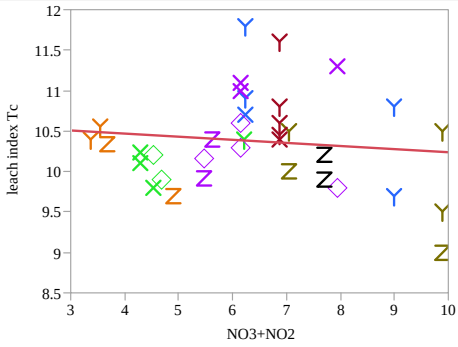
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.109548	0.109548	0.3279
Error	34	11.360252	0.334125	Prob > F
C. Total	35	11.469800		0.5707

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.226815	0.278875	36.67	<.0001*
NO2-	0.1432792	0.250228	0.57	0.5707

Bivariate Fit of leach index Tc By NO3+NO2



Linear Fit

leach index Tc = 10.622609 - 0.0382878* NO3+NO2

Summary of Fit

RSquare	0.013872
RSquare Adj	-0.01513
Root Mean Square Error	0.576773
Mean of Response	10.37667
Observations (or Sum Wgts)	36

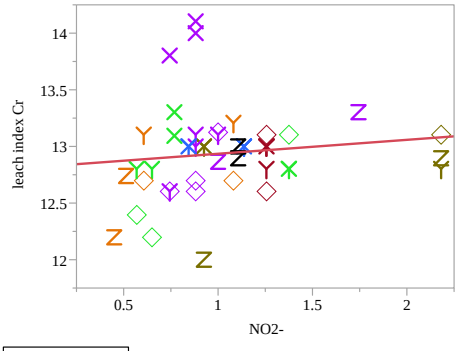
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.159109	0.159109	0.4783
Error	34	11.310691	0.332667	Prob > F
C. Total	35	11.469800		0.4939

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.622609	0.368387	28.84	<.0001*
NO3+NO2	-0.038288	0.055363	-0.69	0.4939

Bivariate Fit of leach index Cr By NO2-



Linear Fit

leach index Cr = 12.813726 + 0.1226931* NO2-

Summary of Fit

RSquare	0.016808
RSquare Adj	-0.0021
Root Mean Square Error	0.361366
Mean of Response	12.94111
Observations (or Sum Wgts)	54

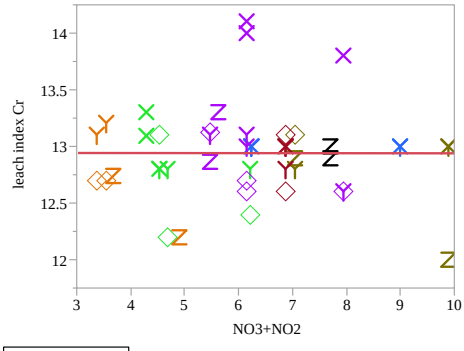
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1160873	0.116087	0.8890
Error	52	6.7904460	0.130585	Prob > F
C. Total	53	6.9065333		0.3501

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.813726	0.143777	89.12	<.0001*
NO2-	0.1226931	0.130129	0.94	0.3501

Bivariate Fit of leach index Cr By NO3+NO2



Linear Fit

leach index Cr = 12.944303 - 0.0004912* NO3+NO2

Summary of Fit

RSquare	6.079e-6
RSquare Adj	-0.01922
Root Mean Square Error	0.364441
Mean of Response	12.94111
Observations (or Sum Wgts)	54

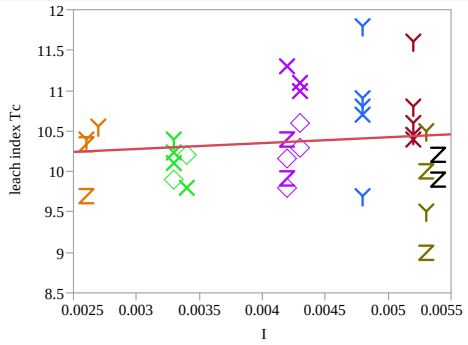
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0000420	0.000042	0.0003
Error	52	6.9064913	0.132817	Prob > F
C. Total	53	6.9065333		0.9859

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.944303	0.18626	69.50	<.0001*
NO3+NO2	-0.000491	0.027626	-0.02	0.9859

Bivariate Fit of leach index Tc By I



Linear Fit

Linear Fit

leach index Tc = 10.061555 + 72.718053* I

Summary of Fit

RSquare	0.013637
RSquare Adj	-0.01537
Root Mean Square Error	0.576842
Mean of Response	10.37667
Observations (or Sum Wgts)	36

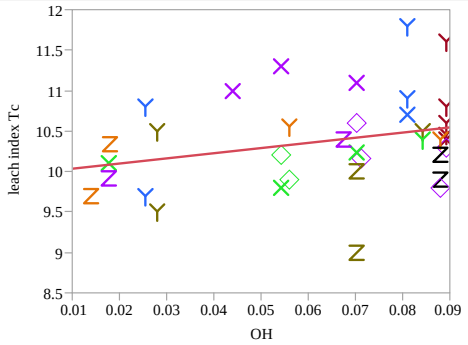
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.156417	0.156417	0.4701
Error	34	11.313383	0.332747	Prob > F
C. Total	35	11.469800		0.4976

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.061555	0.469548	21.43	<.0001*
I	72.718053	106.0615	0.69	0.4976

Bivariate Fit of leach index Tc By OH



Linear Fit

Linear Fit

leach index Tc = 9.972533 + 6.374068* OH

Summary of Fit

RSquare	0.082502
RSquare Adj	0.055516
Root Mean Square Error	0.556341
Mean of Response	10.37667
Observations (or Sum Wgts)	36

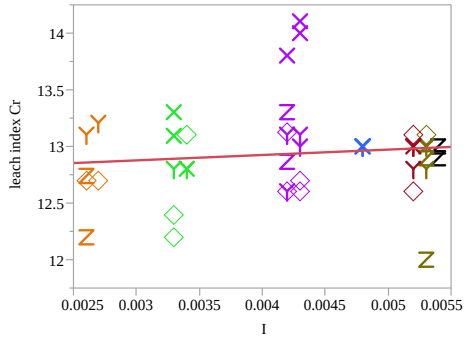
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.946277	0.946277	3.0573
Error	34	10.523523	0.309515	Prob > F
C. Total	35	11.469800		0.0894

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	9.972533	0.249036	40.04	<.0001*
OH	6.374068	3.645429	1.75	0.0894

Bivariate Fit of leach index Cr By I



Linear Fit

Linear Fit

leach index Cr = 12.733575 + 47.852141* I

Summary of Fit

RSquare	0.01459
RSquare Adj	-0.00436
Root Mean Square Error	0.361774
Mean of Response	12.94111
Observations (or Sum Wgts)	54

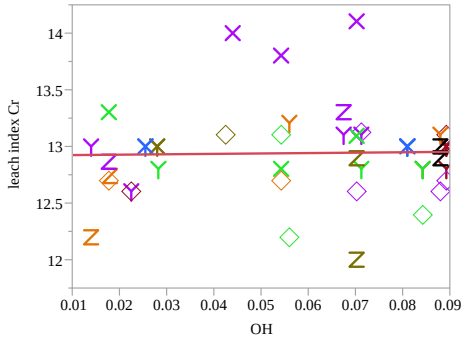
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.1007660	0.100766	0.7699
Error	52	6.8057674	0.130880	Prob > F
C. Total	53	6.9065333		0.3843

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.733575	0.241593	52.71	<.0001*
I	47.852141	54.53575	0.88	0.3843

Bivariate Fit of leach index Cr By OH



Linear Fit

Linear Fit

leach index Cr = 12.920788 + 0.3488907* OH

Summary of Fit

RSquare	0.000688
RSquare Adj	-0.01853
Root Mean Square Error	0.364317
Mean of Response	12.94111
Observations (or Sum Wgts)	54

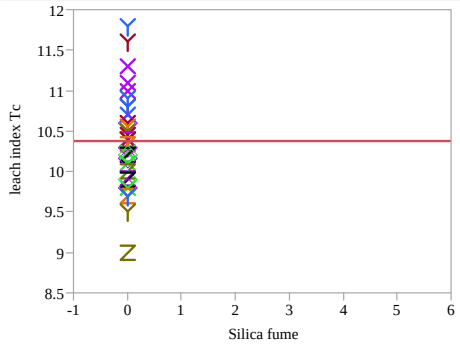
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0047540	0.004754	0.0358
Error	52	6.9017793	0.132727	Prob > F
C. Total	53	6.9065333		0.8506

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.920788	0.118275	109.24	<.0001*
OH	0.3488907	1.843484	0.19	0.8506

Bivariate Fit of leach index Tc By Silica fume



Linear Fit

Linear Fit

leach index Tc = 10.376667 + 0* Silica fume

Summary of Fit

RSquare	0
RSquare Adj	0
Root Mean Square Error	0.572458
Mean of Response	10.37667
Observations (or Sum Wgts)	36

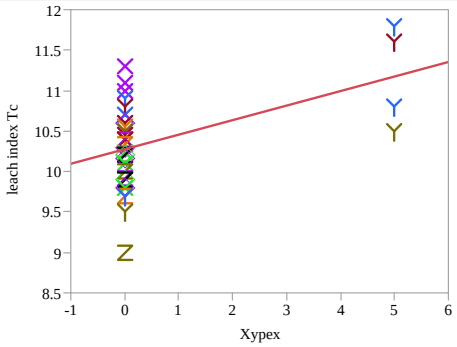
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	0	0.000000	0.000000	.
Error	35	11.469800	0.327709	Prob > F
C. Total	35	11.469800		.

Parameter Estimates

Term		Estimate	Std Error	t Ratio	Prob>|t|
Intercept		10.376667	0.09541	108.76	<.0001*
Silica fume	Zeroed	0	0	.	.

Bivariate Fit of leach index Tc By Xypex



Linear Fit

Linear Fit

leach index Tc = 10.276875 + 0.179625* Xypex

Summary of Fit

RSquare	0.250049
RSquare Adj	0.227992
Root Mean Square Error	0.502985
Mean of Response	10.37667
Observations (or Sum Wgts)	36

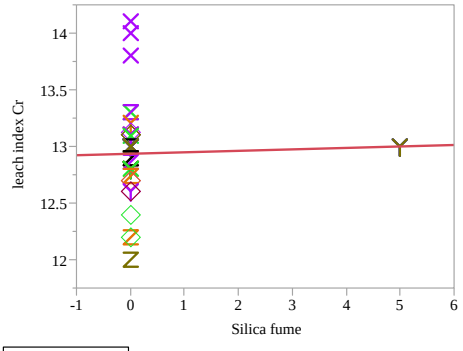
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	2.868013	2.86801	11.3363
Error	34	8.601788	0.25299	Prob > F
C. Total	35	11.469800		0.0019*

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	10.276875	0.088916	115.58	<.0001*
Xypex	0.179625	0.05335	3.37	0.0019*

Bivariate Fit of leach index Cr By Silica fume



Linear Fit

Linear Fit

leach index Cr = 12.9364 + 0.01272* Silica fume

Summary of Fit

RSquare	0.002169
RSquare Adj	-0.01702
Root Mean Square Error	0.364046
Mean of Response	12.94111
Observations (or Sum Wgts)	54

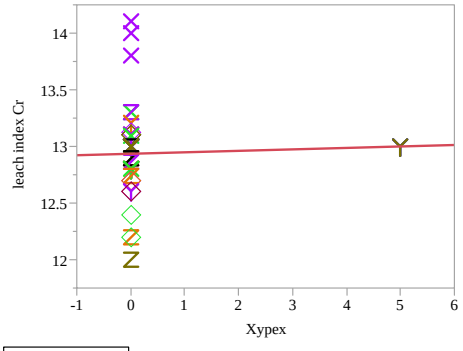
Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0149813	0.014981	0.1130
Error	52	6.8915520	0.132530	Prob > F
C. Total	53	6.9065333		0.7381

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.9364	0.051484	251.27	<.0001*
Silica fume	0.01272	0.037833	0.34	0.7381

Bivariate Fit of leach index Cr By Xypex



Linear Fit

Linear Fit

leach index Cr = 12.9364 + 0.01272* Xypex

Summary of Fit

RSquare	0.002169
RSquare Adj	-0.01702
Root Mean Square Error	0.364046
Mean of Response	12.94111
Observations (or Sum Wgts)	54

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	1	0.0149813	0.014981	0.1130
Error	52	6.8915520	0.132530	Prob > F
C. Total	53	6.9065333		0.7381

Parameter Estimates

Term	Estimate	Std Error	t Ratio	Prob>|t|
Intercept	12.9364	0.051484	251.27	<.0001*
Xypex	0.01272	0.037833	0.34	0.7381