

Contract No:

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APPENDIX D: SUPPLEMENTAL TRANSPORT MODEL RESULTS FOR SLIT AND ENGINEERED TRENCHES

This appendix to Chapter 5, Section 5.1 provides supplemental concentration profiles for radionuclide species in STs and ETs that contribute to at least 0.1% of the sum-of-fractions. All concentrations are reported as pCi L⁻¹ per Ci parent buried. The following nomenclature is used for all radionuclides in all DUs: an uppercase letter suffix indicates a SWF (e.g., I-129G, C-14N, H-3F, etc.), while the absence of an uppercase letter denotes a generic waste form (e.g., I-129, C-14, H-3, etc.).

D.1 SLIT TRENCHES

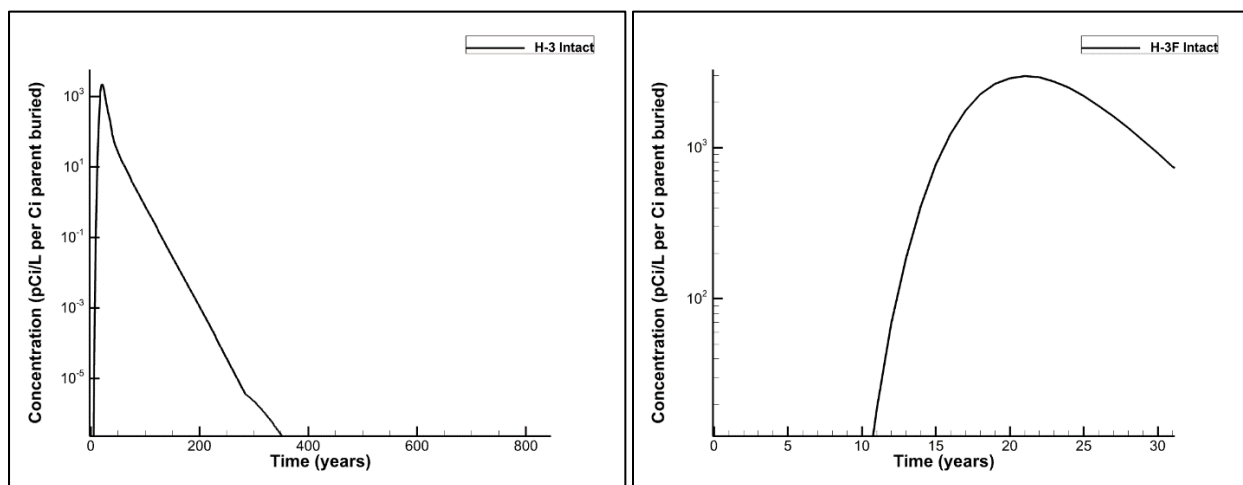


Figure D-1. Concentration Profiles of H-3 and H-3F for Intact Case at ST01

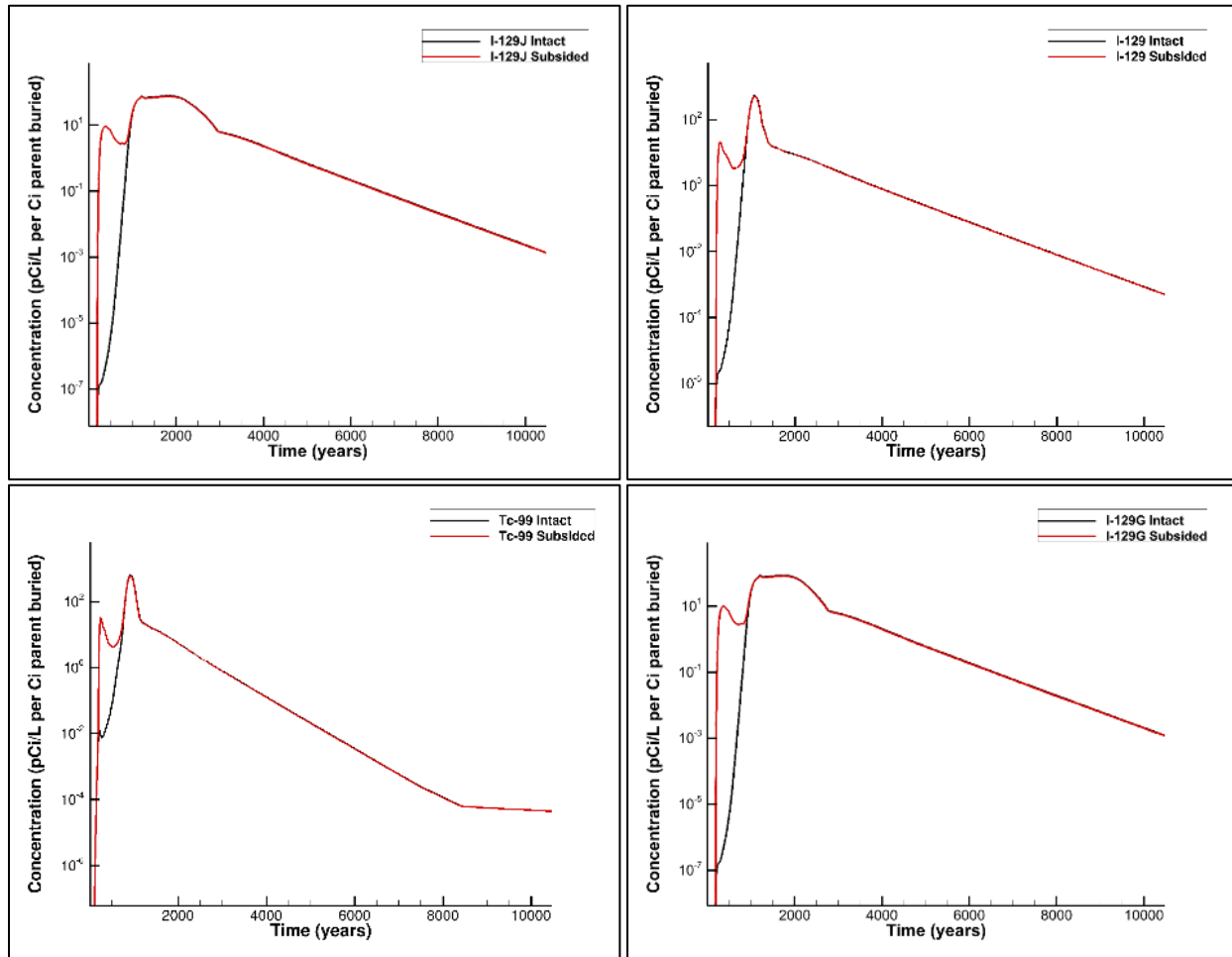


Figure D-2. Concentration Profiles of I-129J, I-129, Tc-99, and I-129G for Intact and Subsidence Cases at ST02

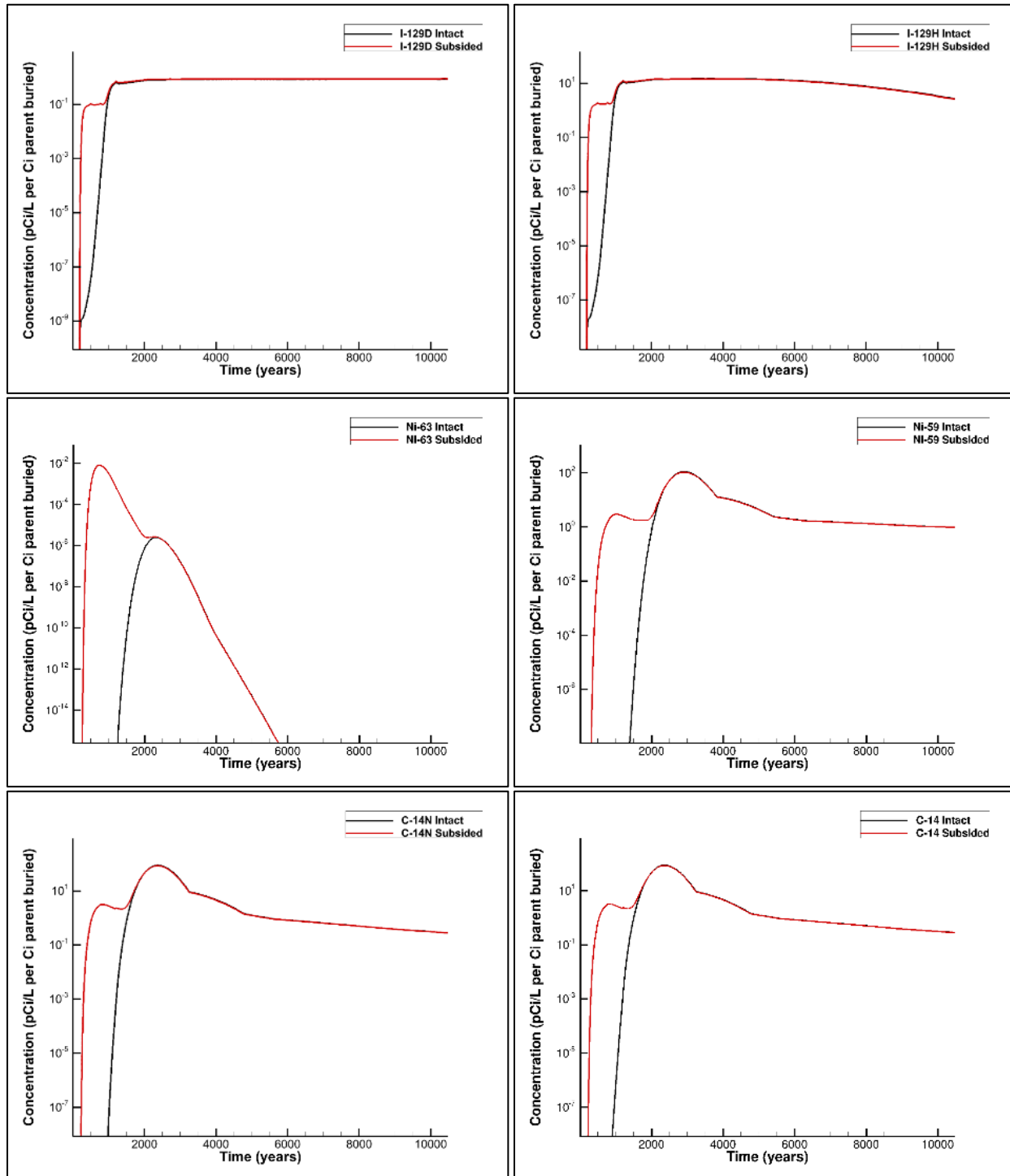


Figure D-3. Concentration Profiles of I-129D, I-129H, Ni-63, Ni-59, C-14N, C-14, and I-129I for Intact and Subsidence Cases at ST02

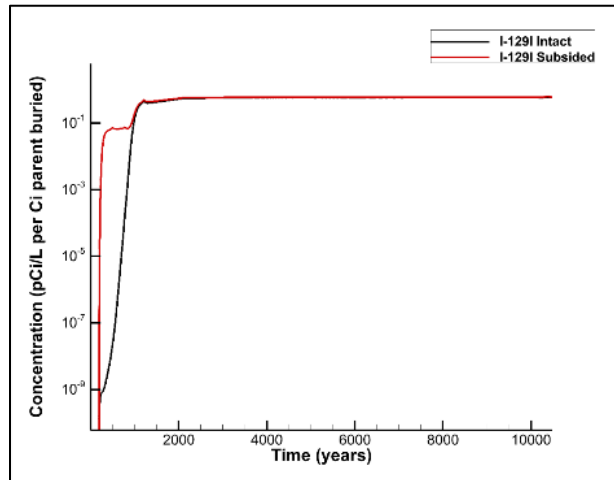


Figure D-3 (cont'd). Concentration Profiles of I-129D, I-129H, Ni-63, Ni-59, C-14N, C-14, and I-129I for Intact and Subsidence Cases at ST02

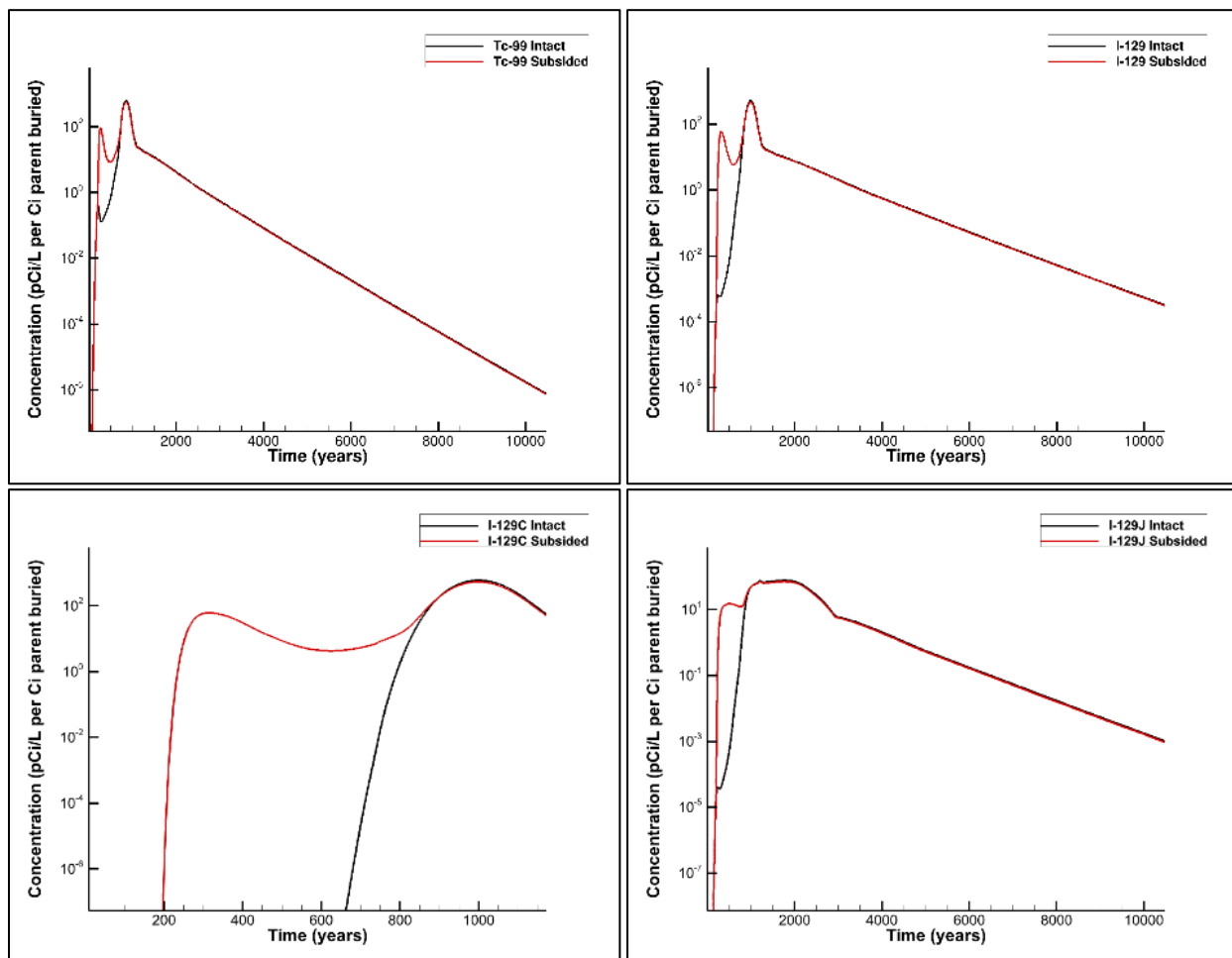


Figure D-4. Concentration Profiles of Tc-99, I-129, I-129C, I-129J, Np-237, U-233, Th-229, Ni-59, Ni-63, and C-14 for Intact and Subsidence Cases at ST03

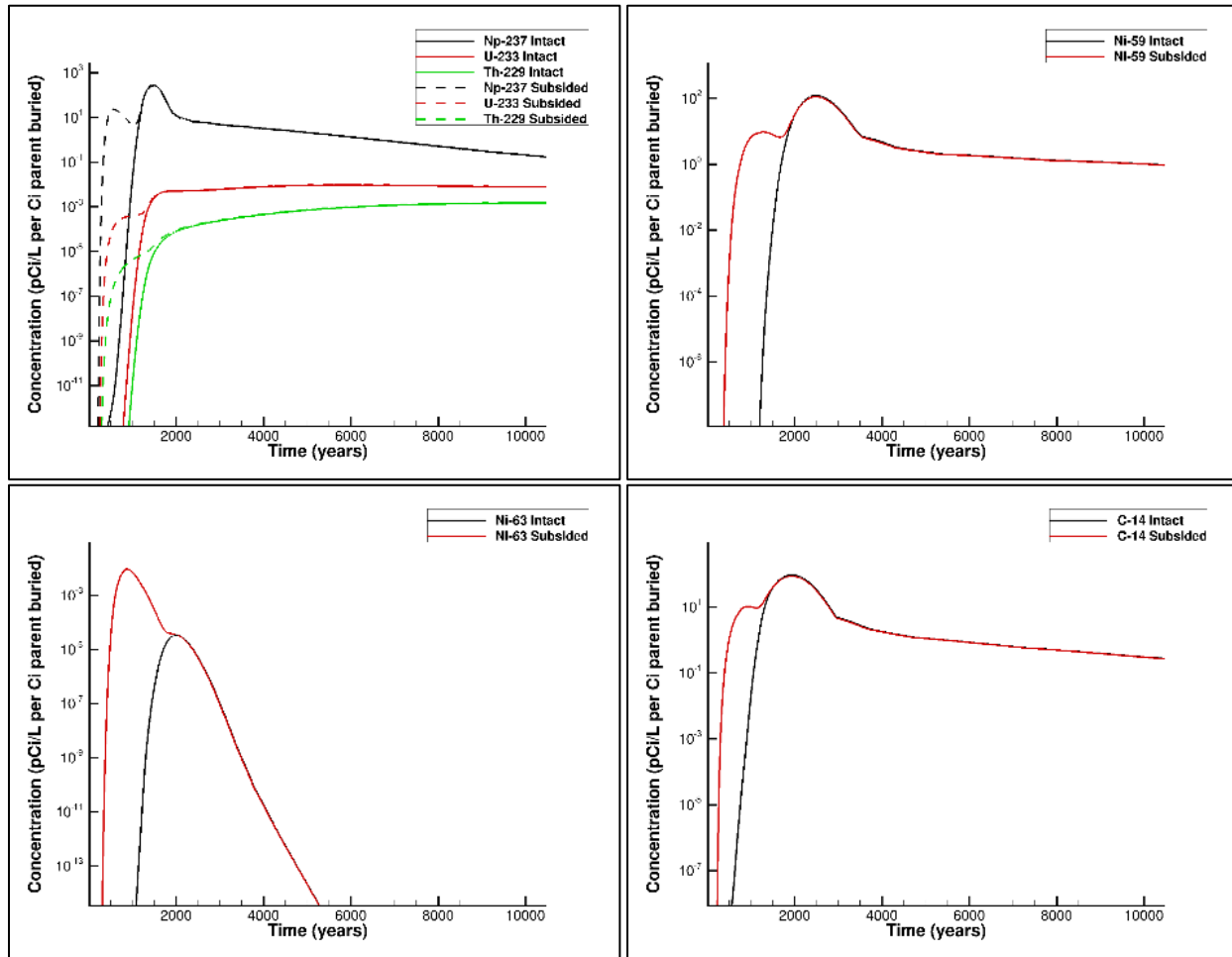


Figure D-4 (cont'd). Concentration Profiles of Tc-99, I-129, I-129C, I-129J, Np-237, U-233, Th-229, Ni-59, Ni-63, and C-14 for Intact and Subsidence Cases at ST03

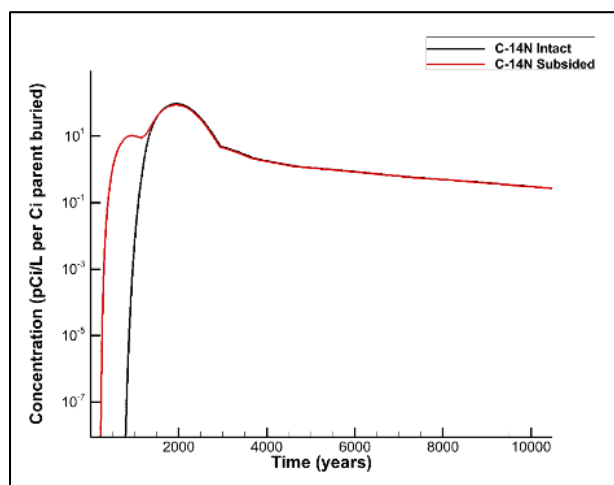


Figure D-5. Concentration Profiles of C-14N for Intact and Subsidence Cases at ST03

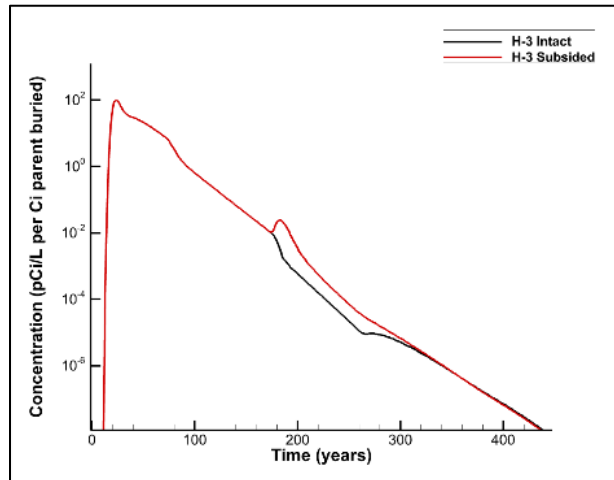


Figure D-6. Concentration Profiles of H-3 Intact and Subsidence Cases at ST04

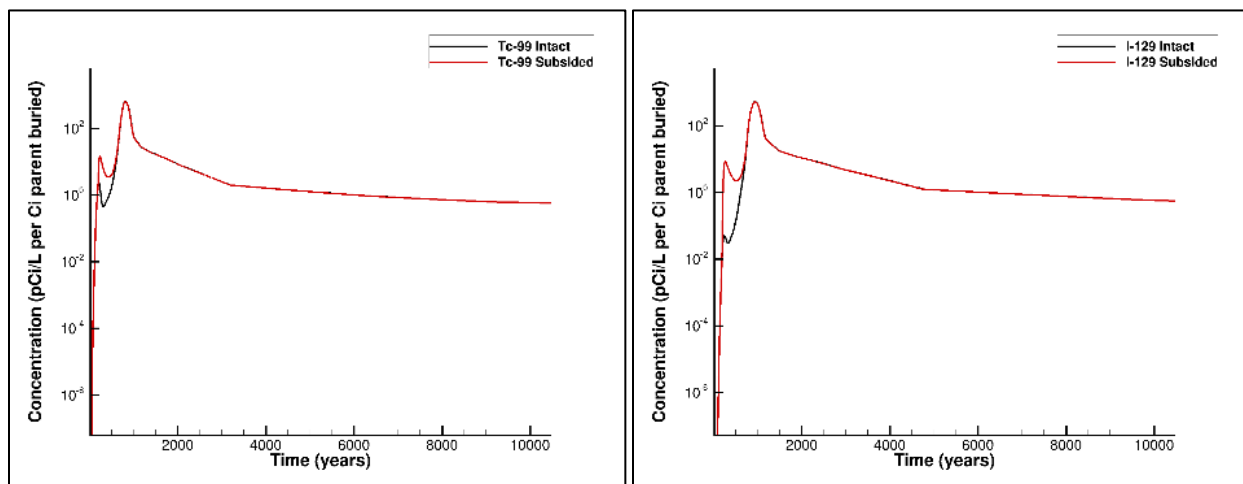


Figure D-7. Concentration Profiles of Tc-99 and I-129 for Intact and Subsidence Cases at ST05

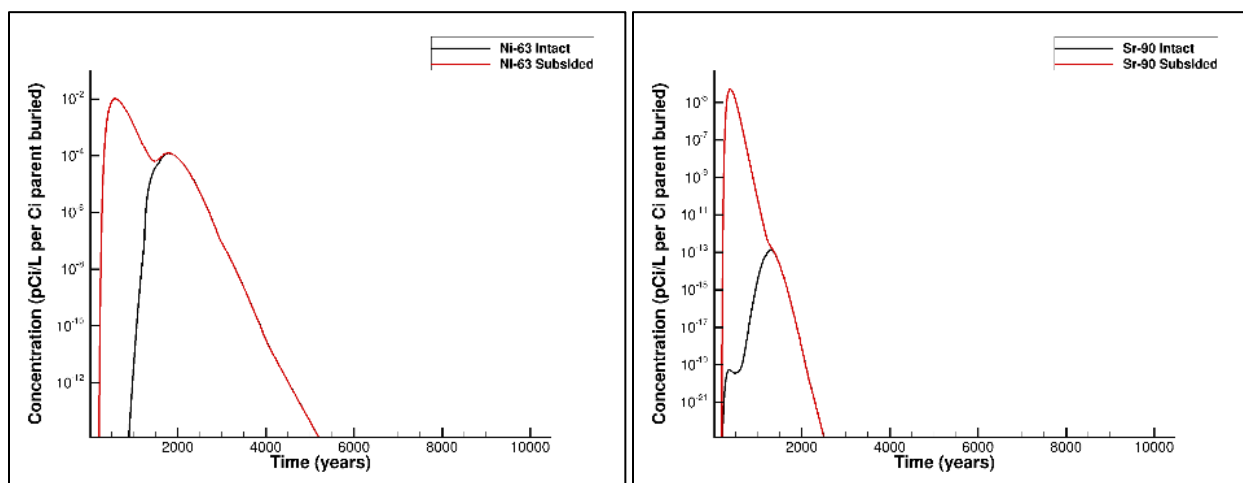


Figure D-8. Concentration Profiles of Ni-63, Sr-90, Np-237, U-233, Th-229, I-129J, Ni-59, C-14, and I-129R for Intact and Subsidence Cases at ST05

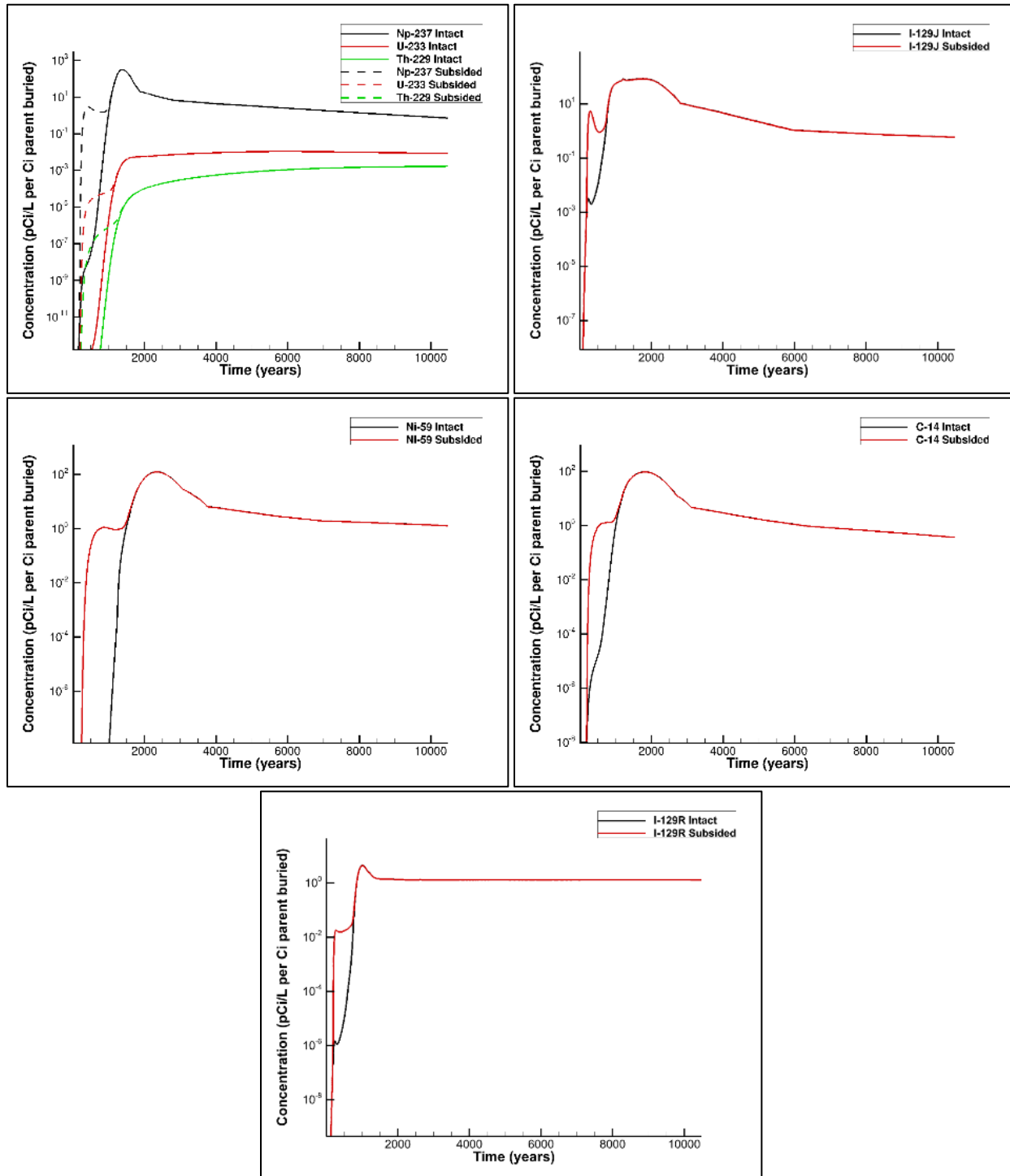


Figure D-8 (cont'd). Concentration Profiles of Ni-63, Sr-90, Np-237, U-233, Th-229, I-129J, Ni-59, C-14, and I-129R for Intact and Subsidence Cases at ST05

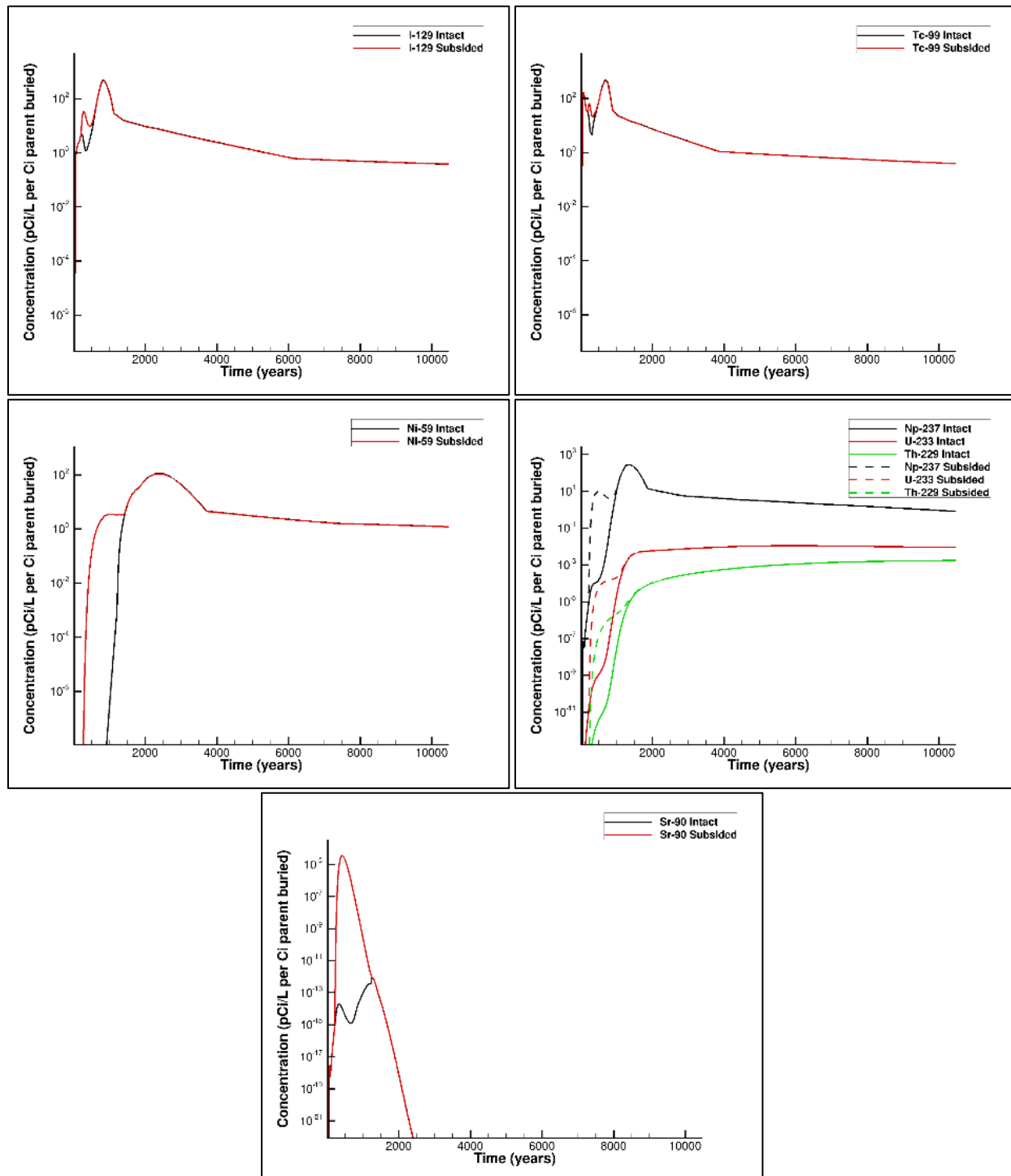


Figure D-9. Concentration Profiles of I-129, Tc-99, Ni-59, Np-237, U-233, Th-229, and Sr-90 for Intact and Subsidence Cases at ST06

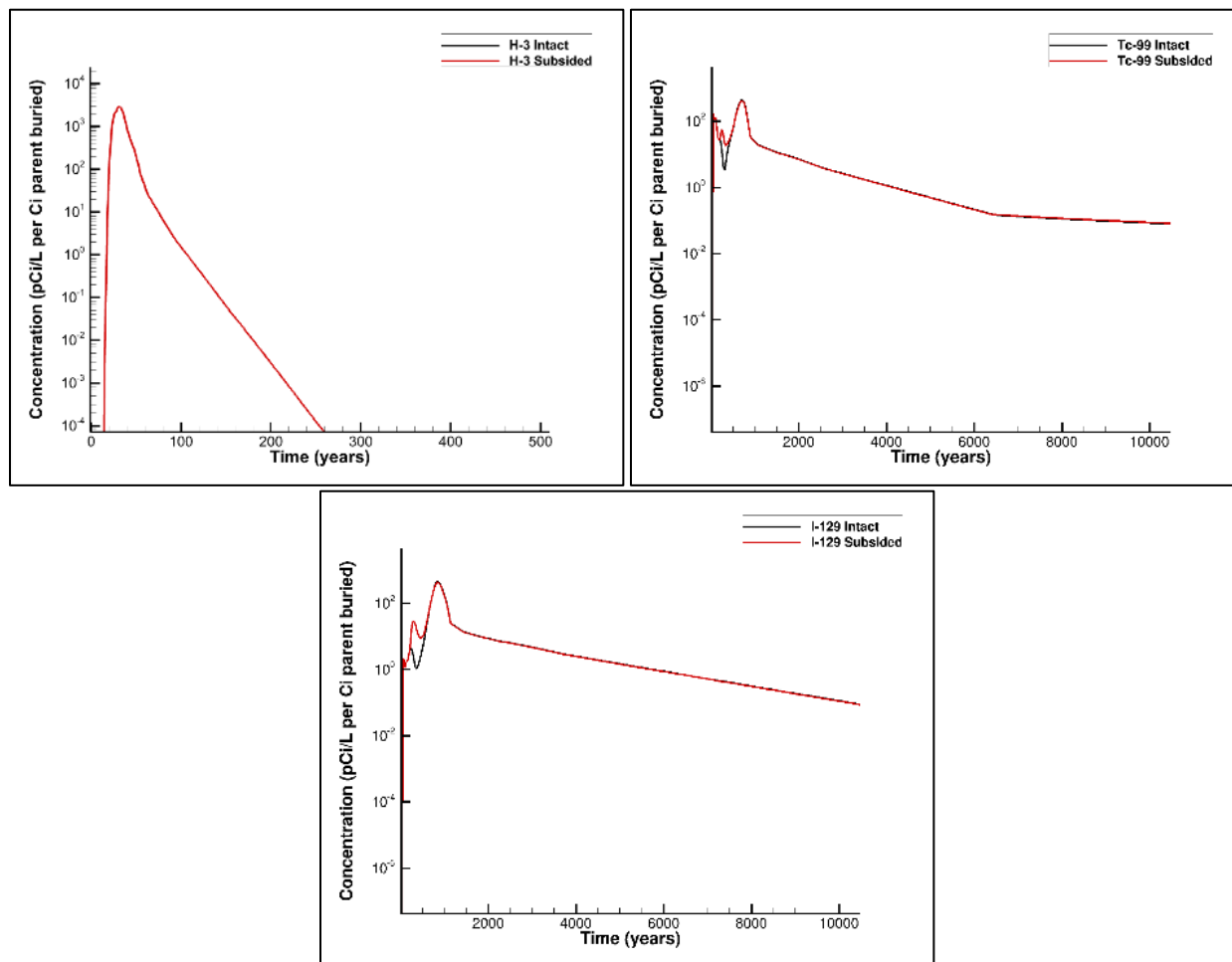


Figure D-10. Concentration Profiles of H-3, Tc-99, and I-129 for Intact and Subsidence Cases at ST07

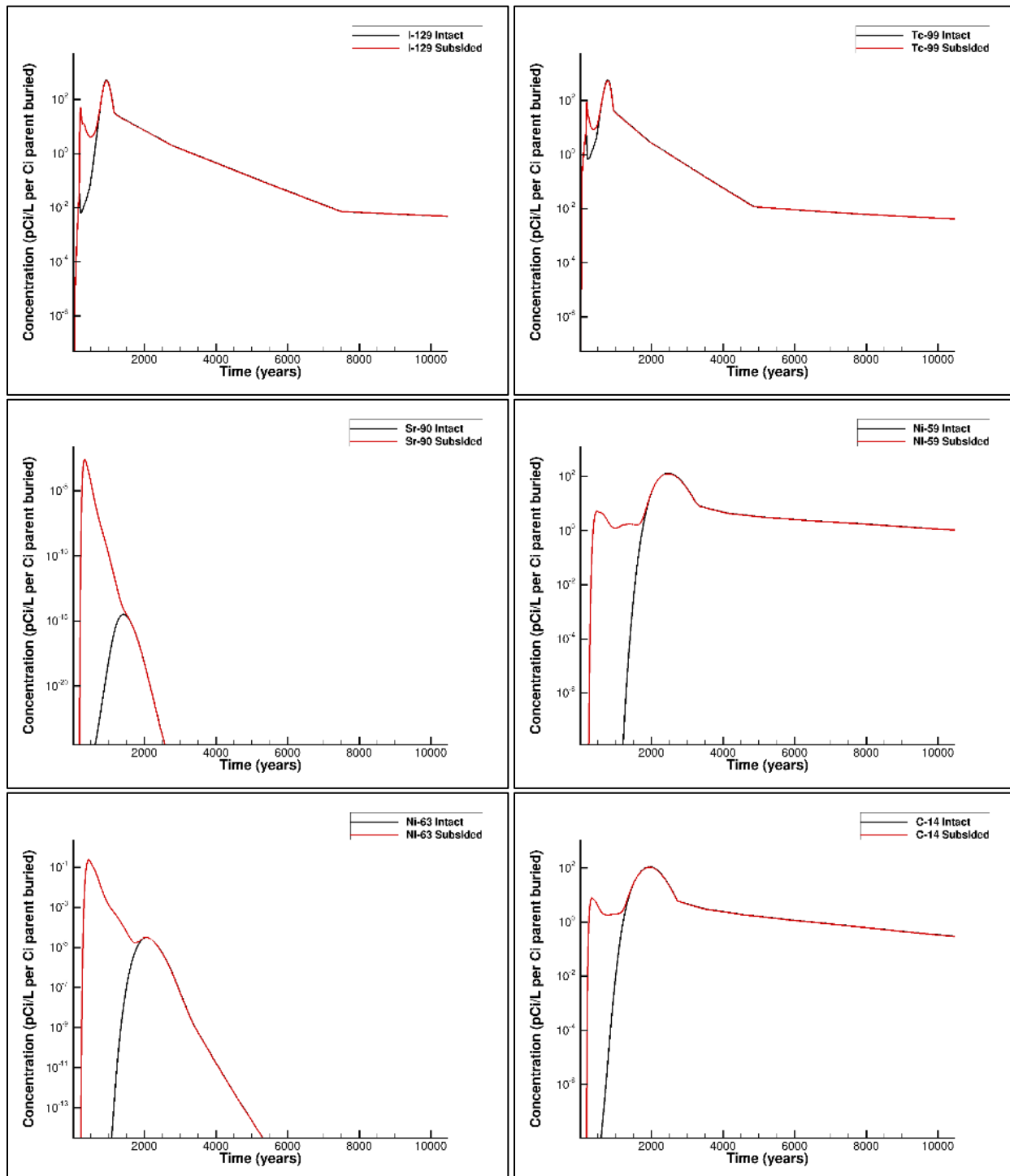


Figure D-11. Concentration Profiles of I-129, Tc-99, Sr-90, Ni-59, Ni-63, and C-14 for Intact and Subsidence Cases at ST08

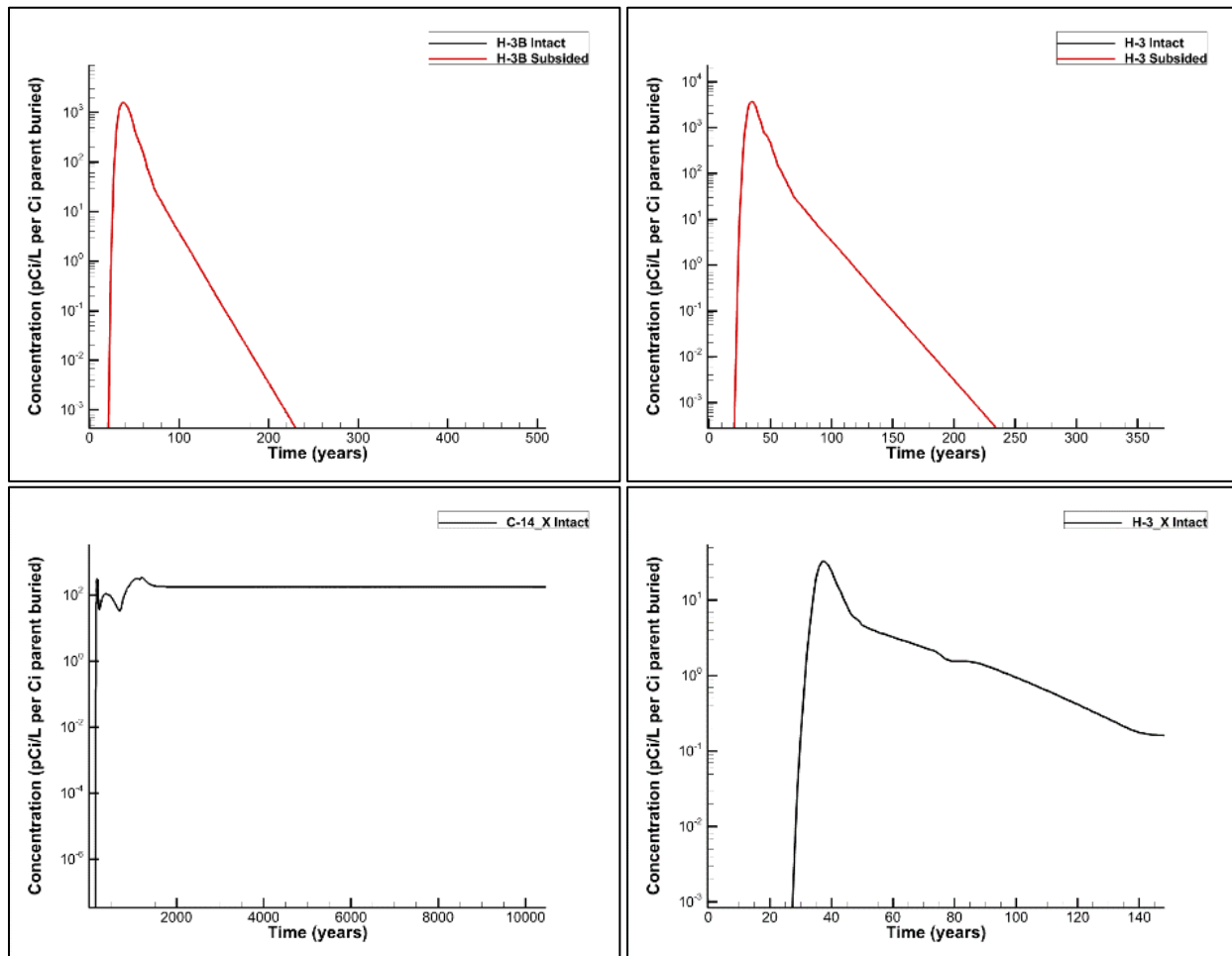


Figure D-12. Concentration Profiles of H-3B, H-3, C-14X, and H-3X for Intact and Subsidence Cases at ST09

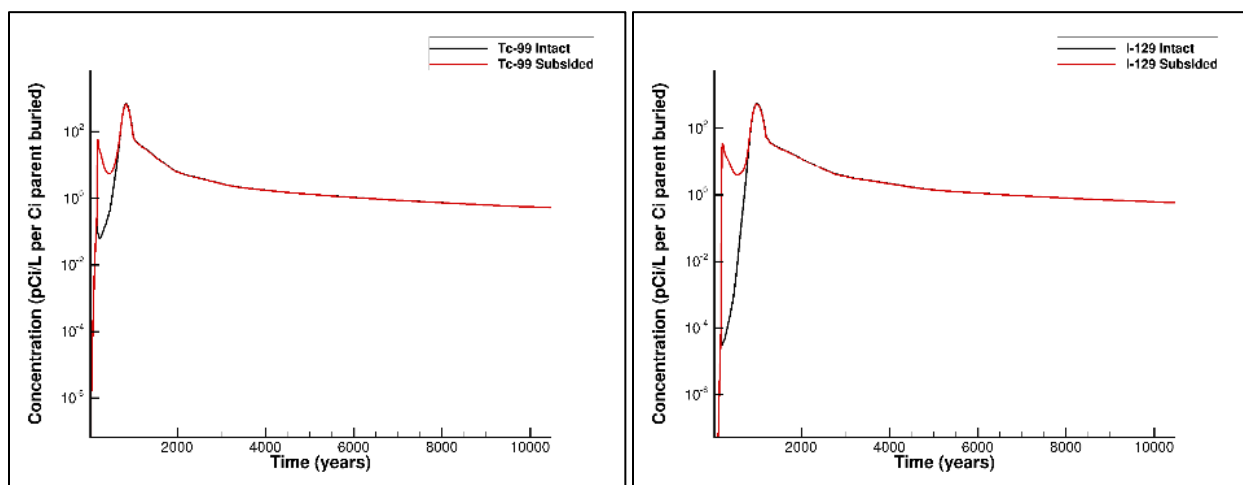


Figure D-13. Concentration Profiles of Tc-99 and I-129 for Intact and Subsidence Cases at ST10

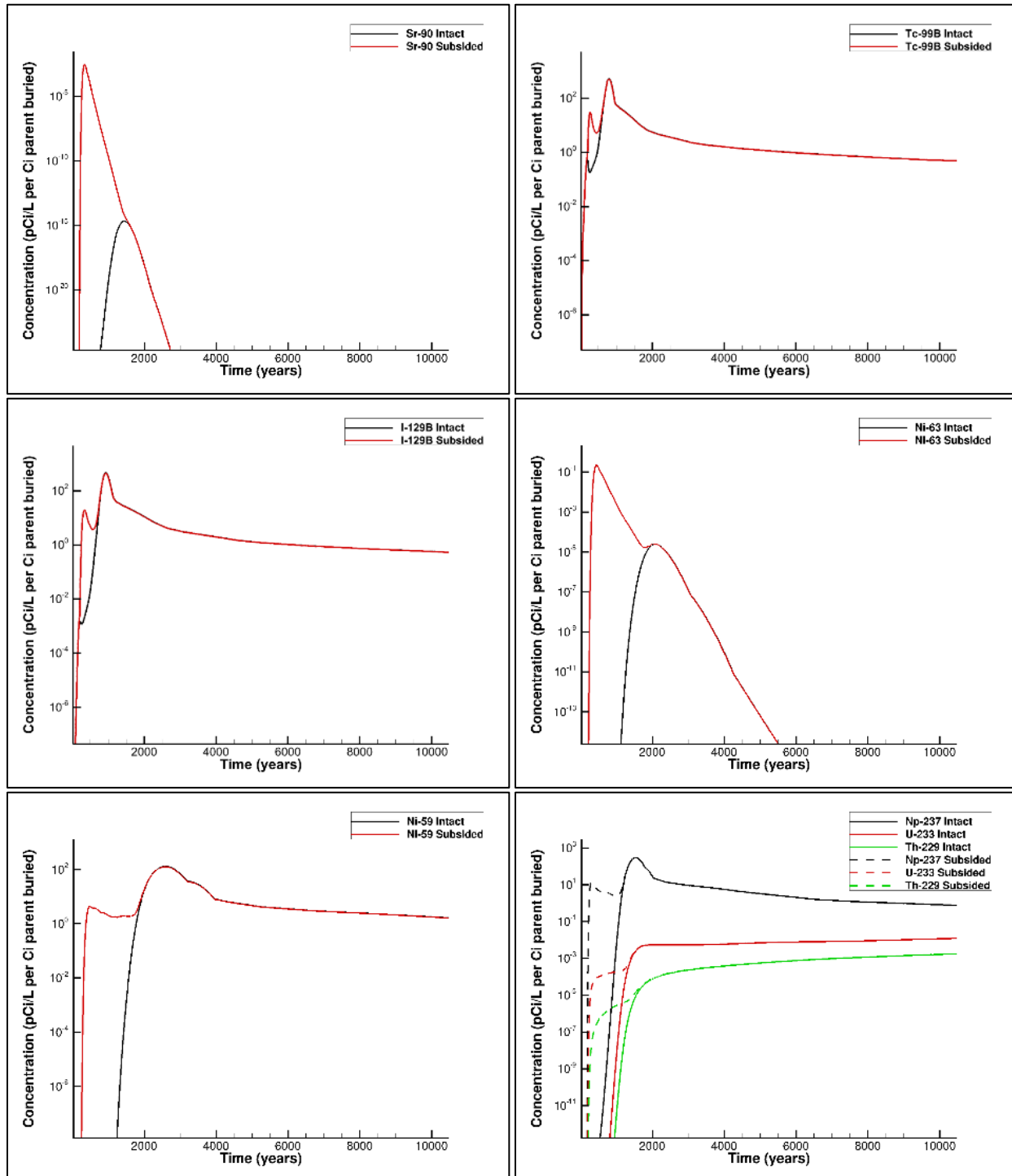


Figure D-14. Concentration Profiles of Sr-90, Tc-99B, I-129B, Ni-63, Ni-59, Np-237, U-233, Th-229, and C-14 for Intact and Subsidence Cases at ST10

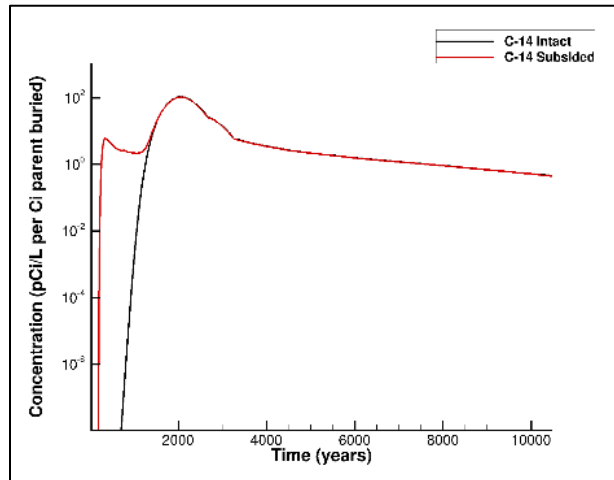


Figure D-14 (cont'd). Concentration Profiles of Sr-90, Tc-99B, I-129B, Ni-63, Ni-59, Np-237, U-233, Th-229, and C-14 for Intact and Subsidence Cases at ST10

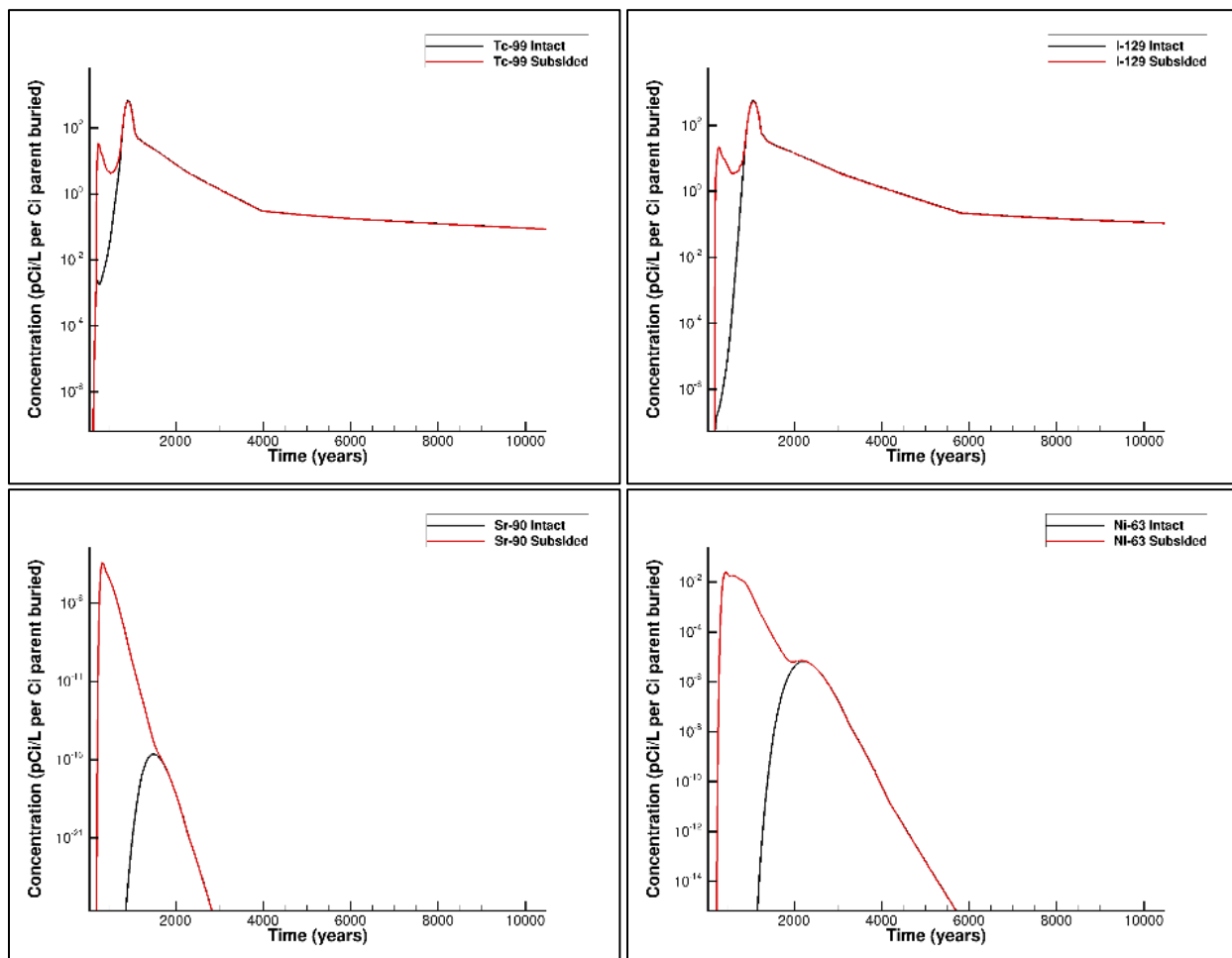


Figure D-15. Concentration Profiles of Tc-99, I-129, Sr-90, Ni-63, Ni-59, Np-237, U-233, Th-229, C-14, and C-14N for Intact and Subsidence Cases at ST11

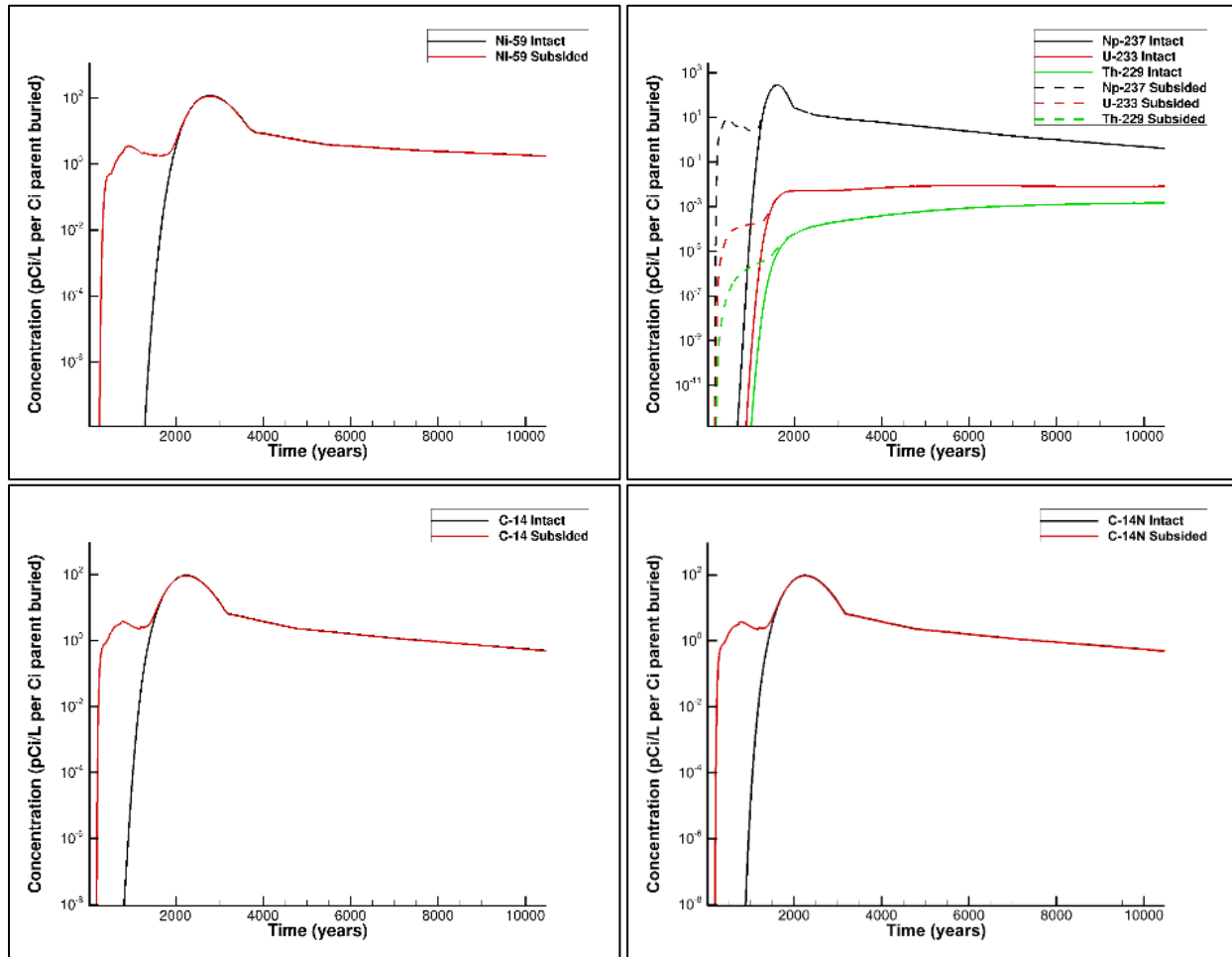


Figure D-15 (cont'd). Concentration Profiles of Tc-99, I-129, Sr-90, Ni-63, Ni-59, Np-237, U-233, Th-229, C-14, and C-14N for Intact and Subsidence Cases at ST11

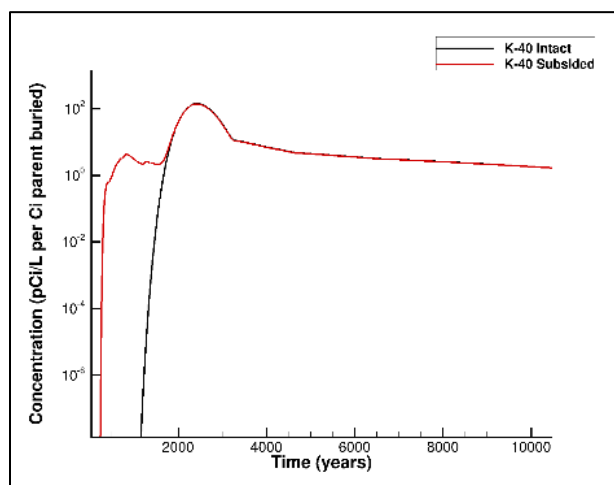


Figure D-16. Concentration Profiles of K-40 for Intact and Subsidence Cases at ST11

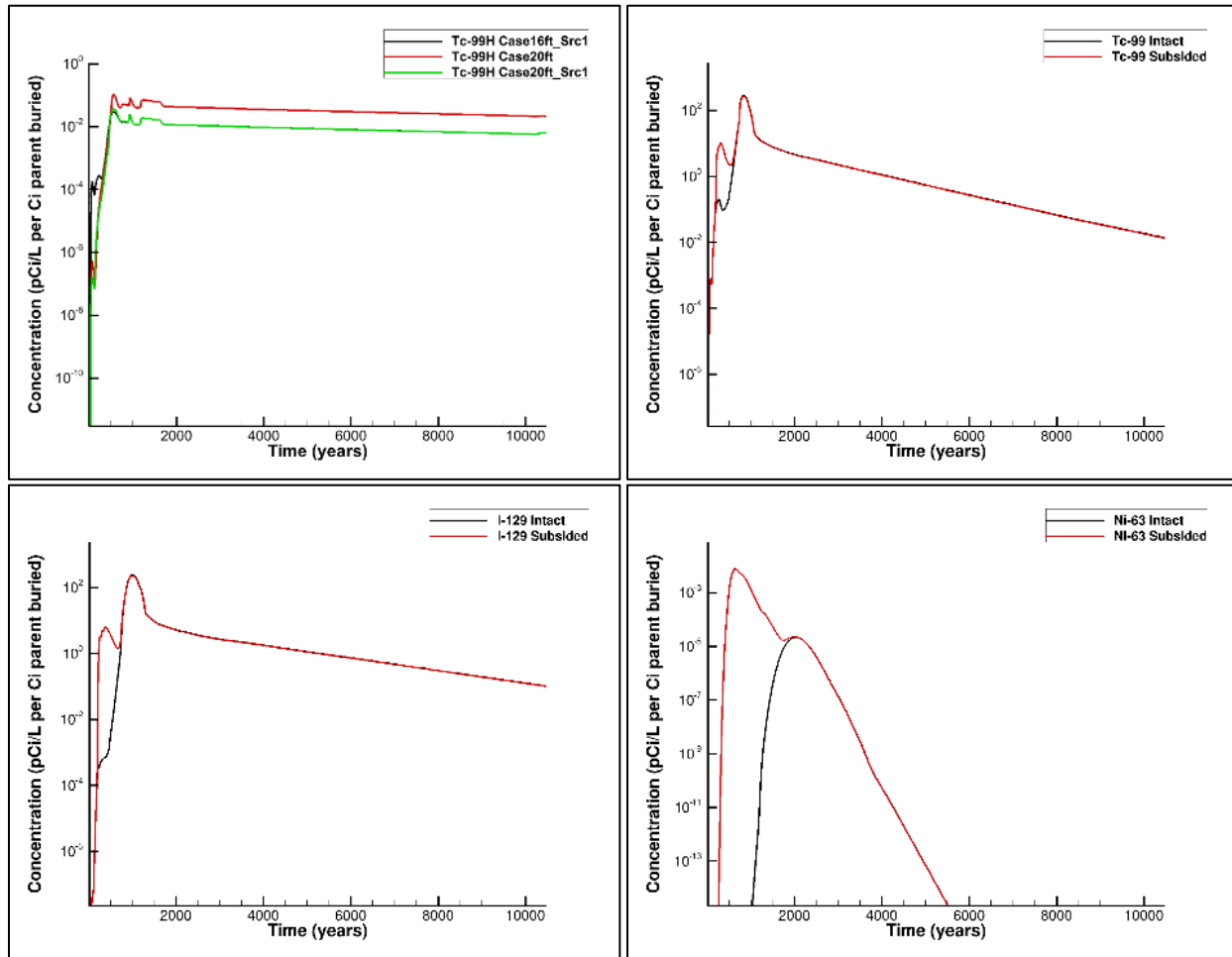


Figure D-17. Concentration Profiles of Tc-99H, Tc-99, I-129, and Ni-63 for Intact and Subsidence Cases at ST14

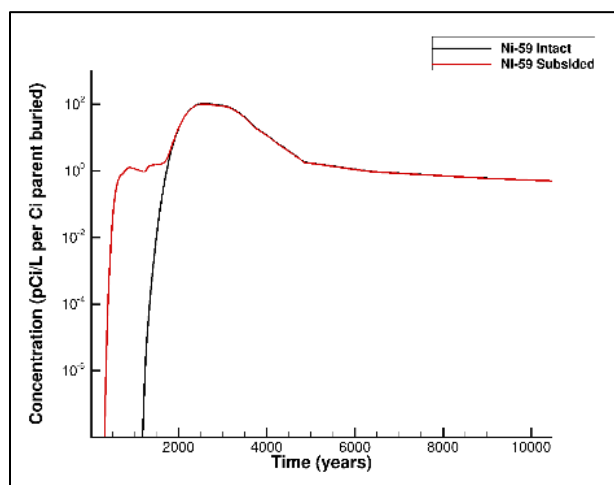


Figure D-18. Concentration Profiles of Ni-59 for Intact and Subsidence Cases at ST14

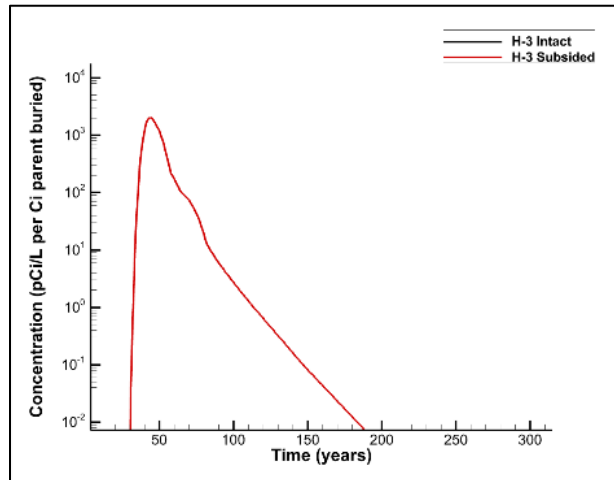


Figure D-19. Concentration Profile of H-3 for Intact and Subsidence Cases at ST18

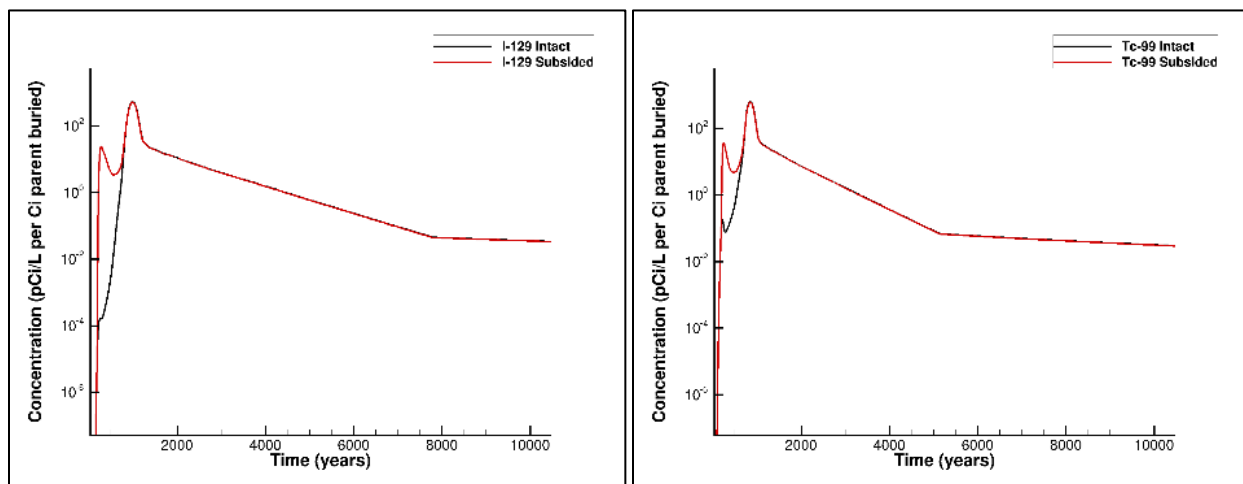


Figure D-20. Concentration Profiles of I-129 and Tc-99 for Intact and Subsidence Cases at ST23

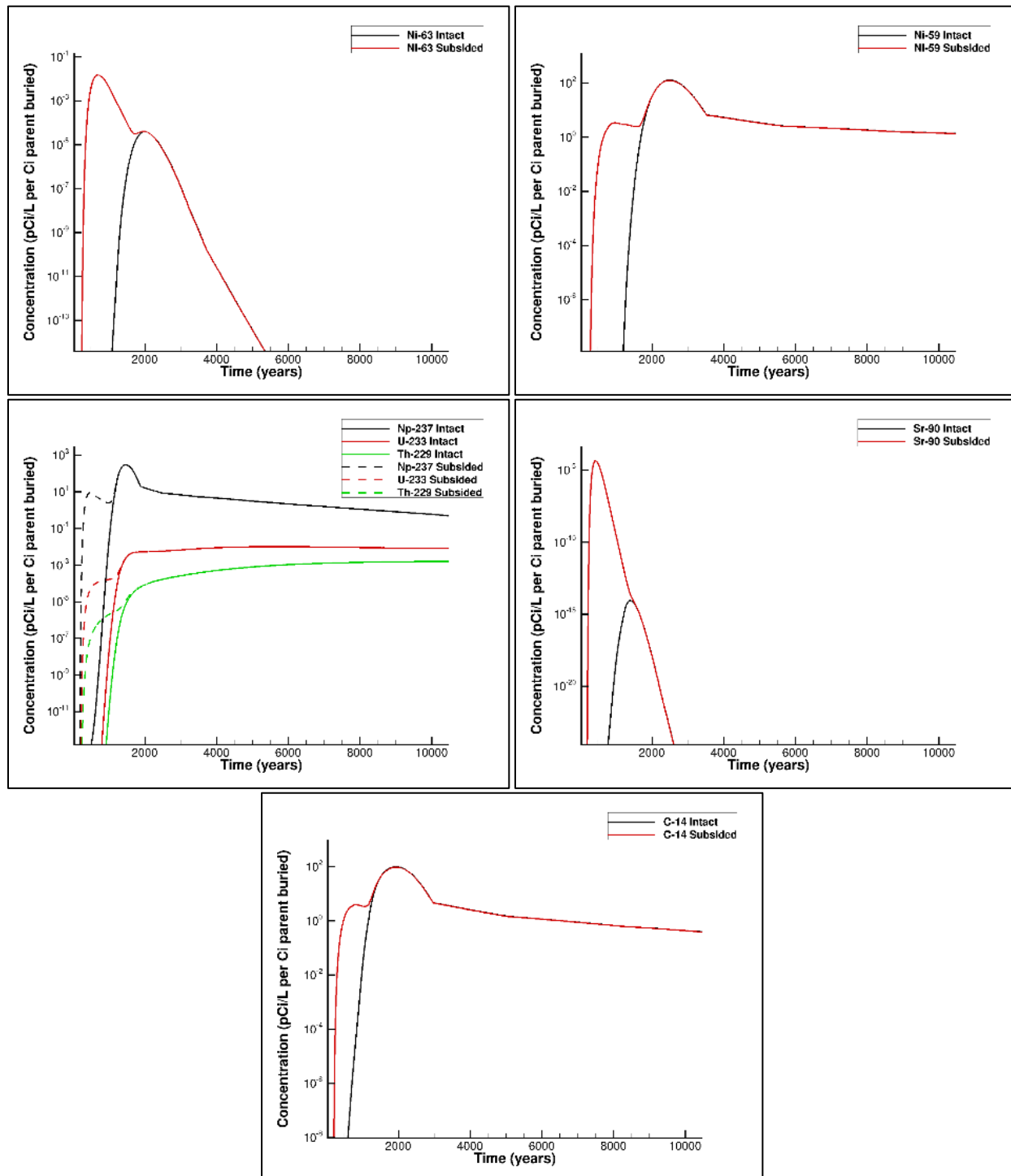


Figure D-21. Concentration Profiles of Ni-63, Ni-59, Np-237, U-233, Th-229, Sr-90, and C-14 for Intact and Subsidence Cases at ST23

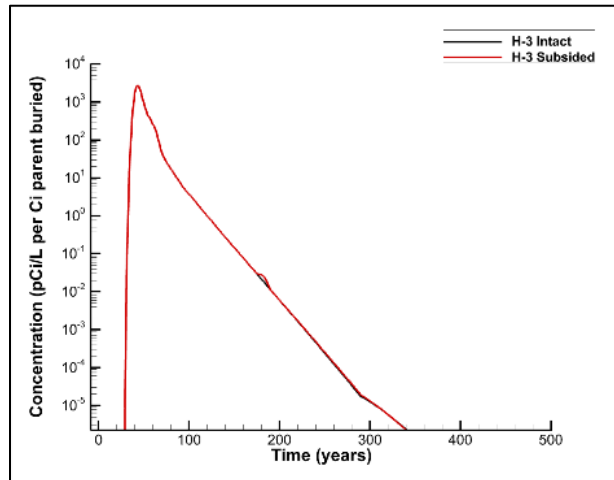


Figure D-22. Concentration Profile of H-3 for Intact and Subsidence Cases at ST24

D.2 ENGINEERED TRENCHES

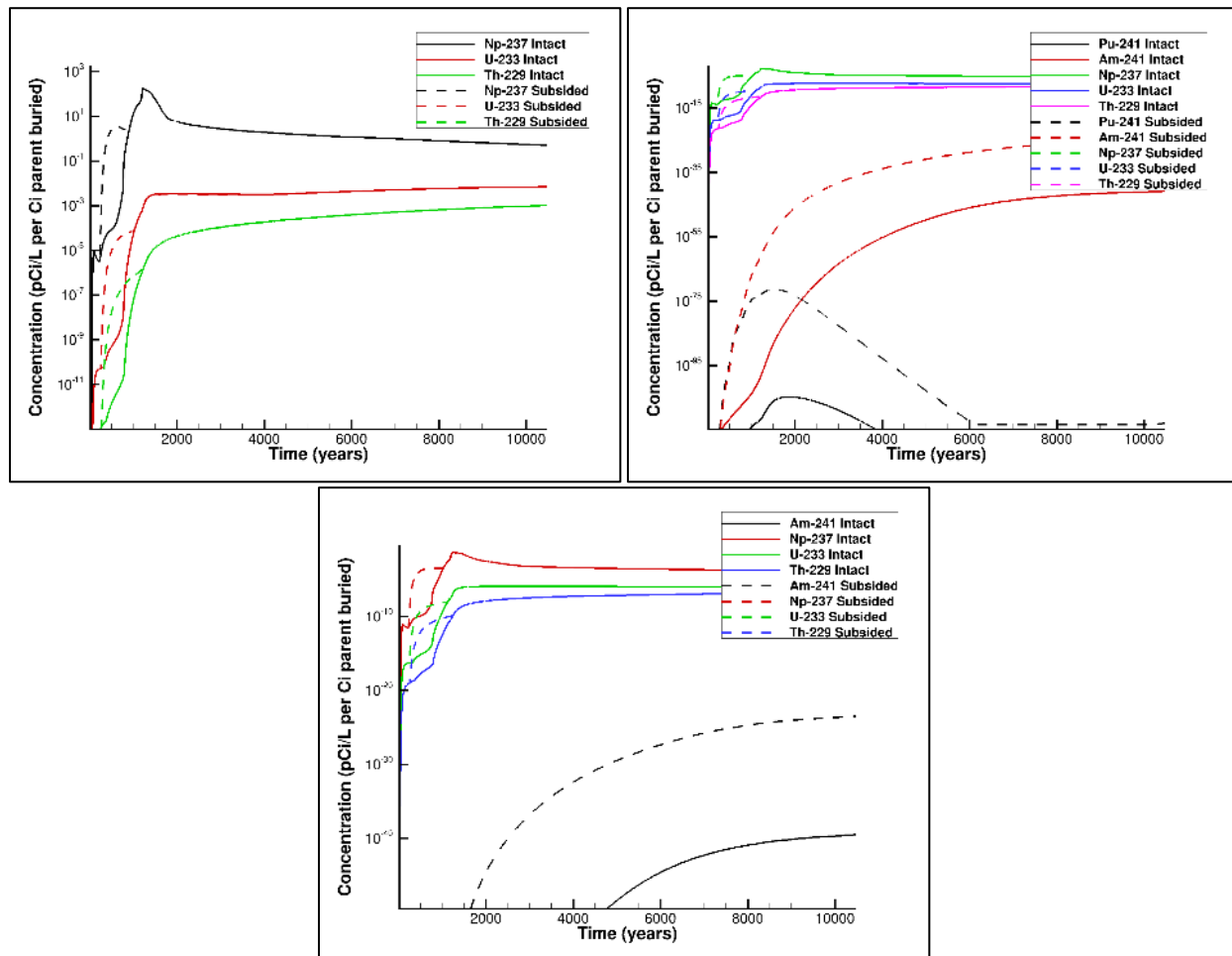


Figure D-23. Concentration Profiles of Np-237, U-233, Th-229, Pu-241, and Am-241, for Intact and Subsidence Cases at ET02

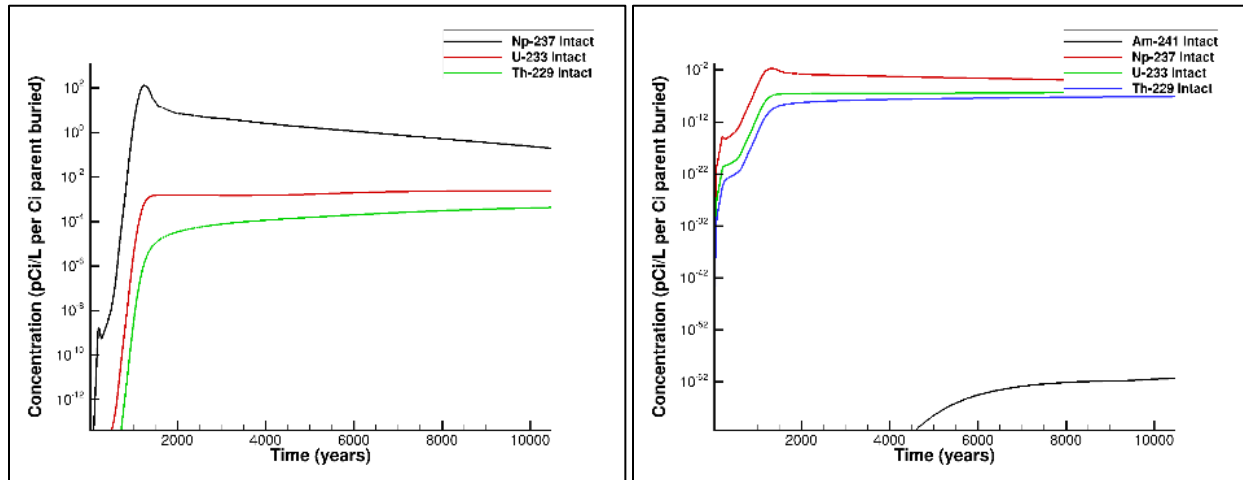


Figure D-24. Concentration Profiles of Am-241, Np-237, U233, and Th-229 for Intact Case at ET03

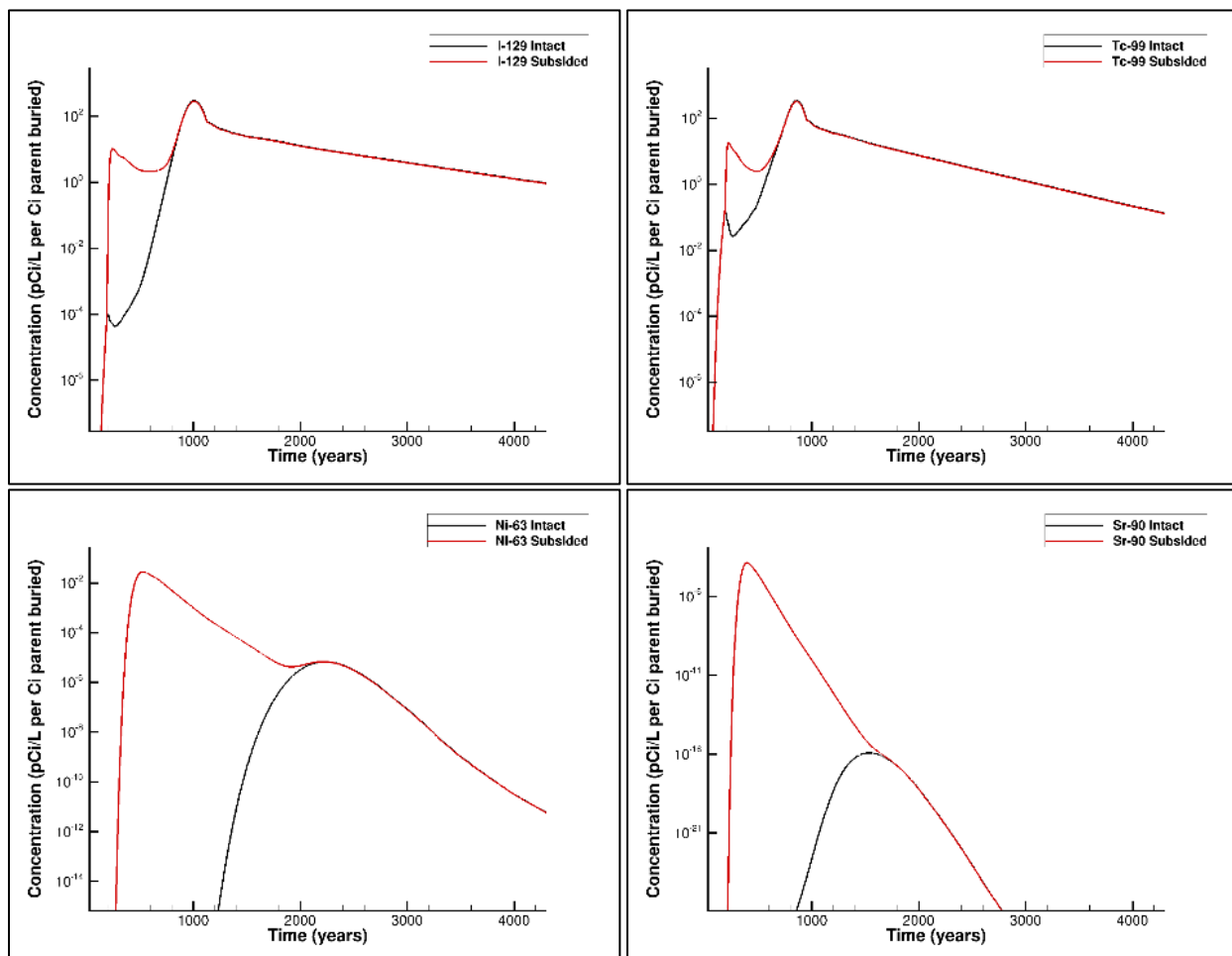


Figure D-25. Concentration Profiles of I-129, Tc-99, Ni-63, and Sr-90 for Intact and Subsidence Cases at ET04

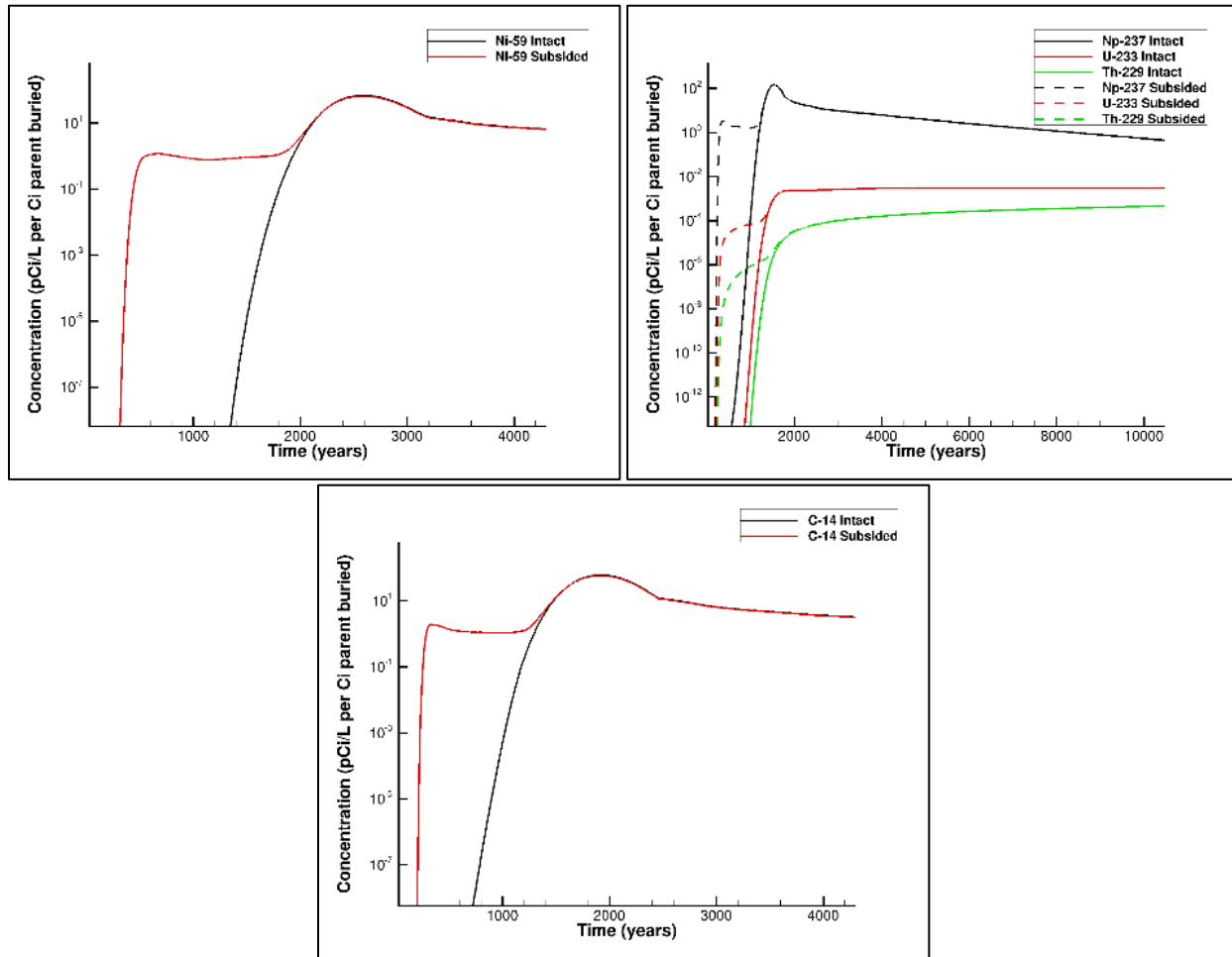


Figure D-26. Concentration Profiles of Ni-59, Np-237, U-233, Th-229, and C-14 for Intact and Subsidence Cases at ET04

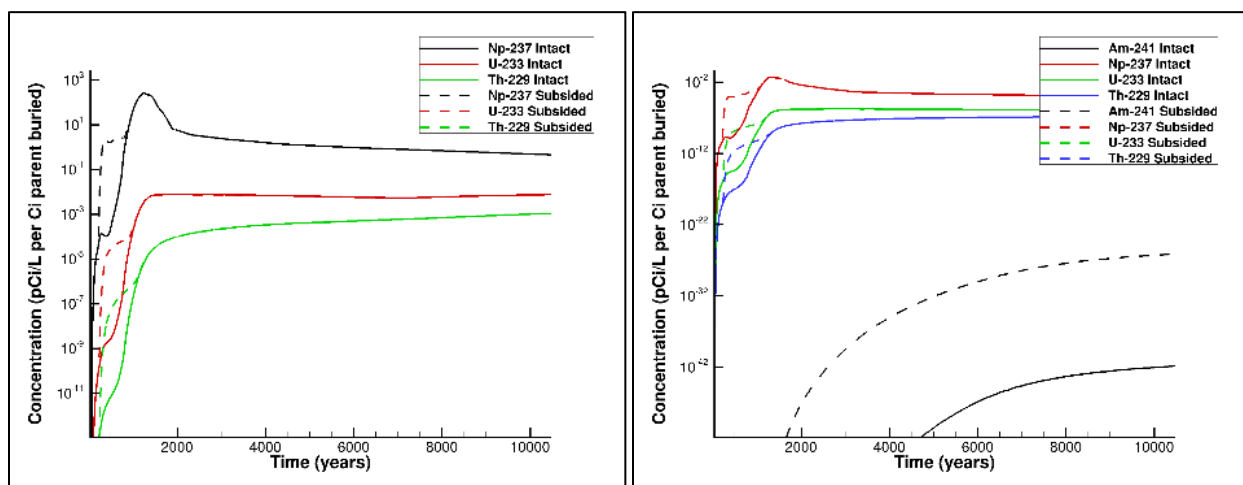


Figure D-27. Concentration Profiles of Am-241, Np-237, U-233, and Th-229 for Intact and Subsidence Cases at ET05

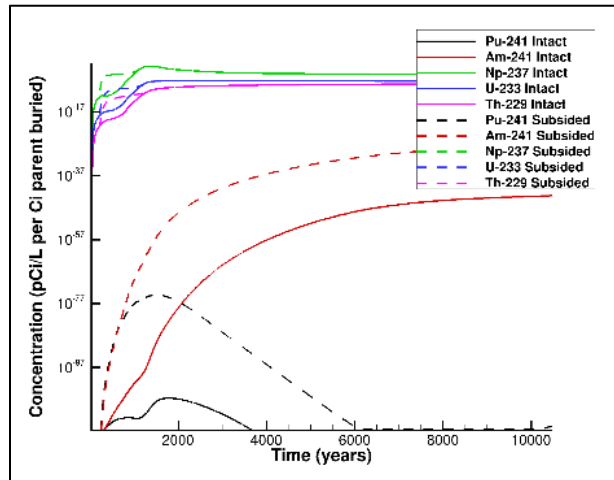


Figure D-28. Concentration Profiles of Pu-241, Am-241, Np-237, U-233, and Th-229 for Intact and Subsidence Cases at ET05

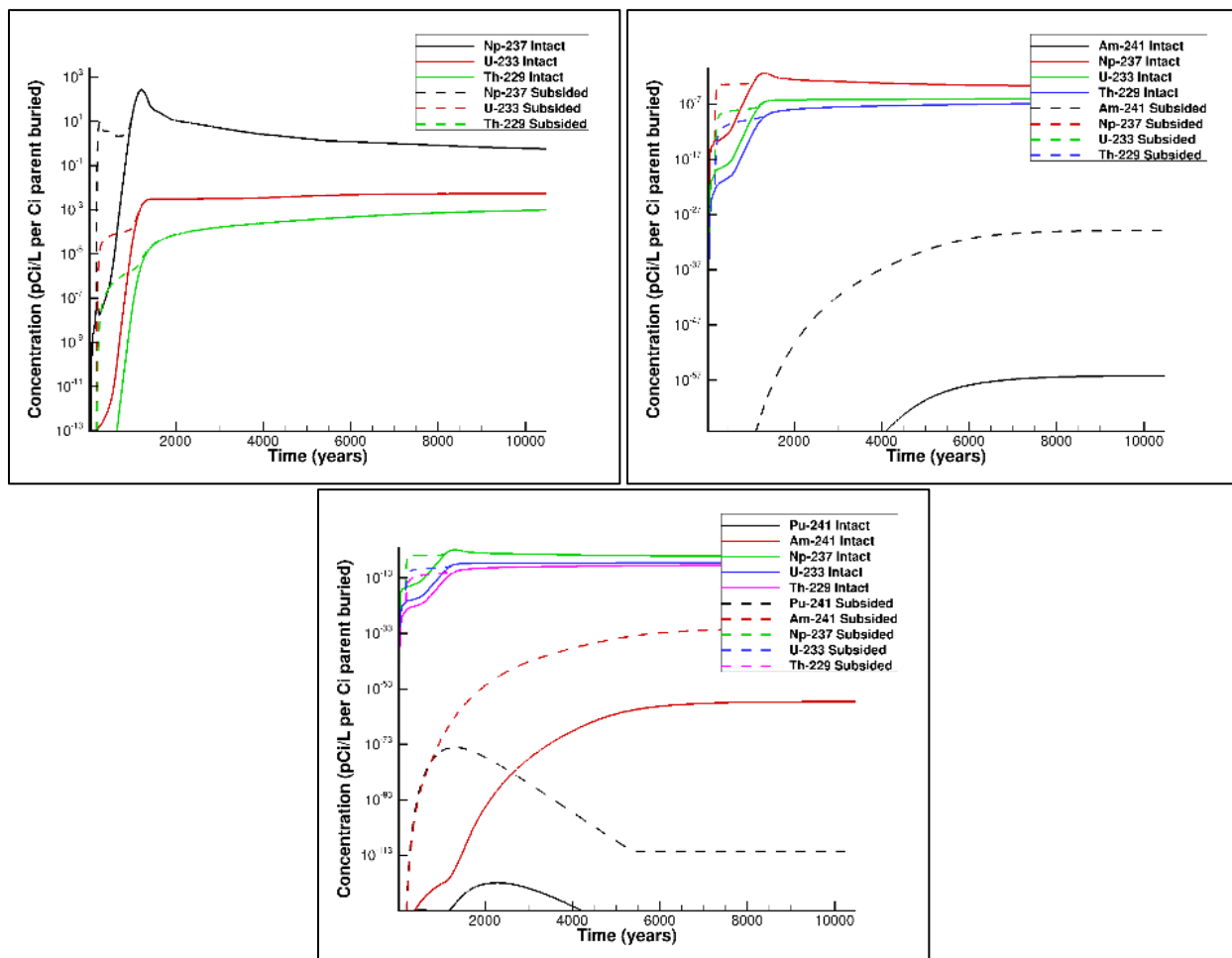


Figure D-29. Concentration Profiles of Pu-241, Am-241, Np-237, U-233, and Th-229 for Intact and Subsidence Cases at ET07

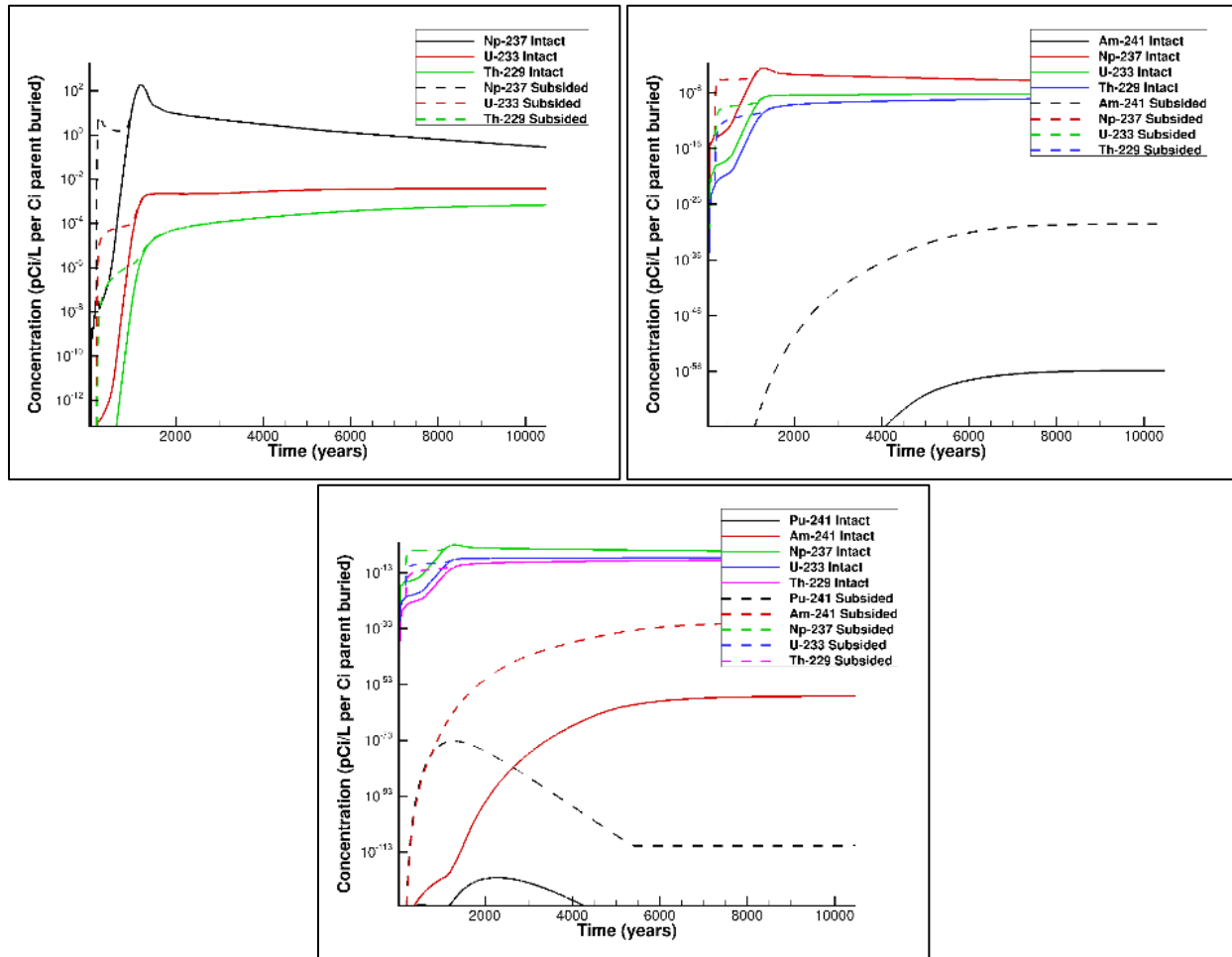


Figure D-30. Concentration Profiles of Pu-241, Am-241, Np-237, U-233, and Th-229 for Intact and Subsidence Cases at ET08

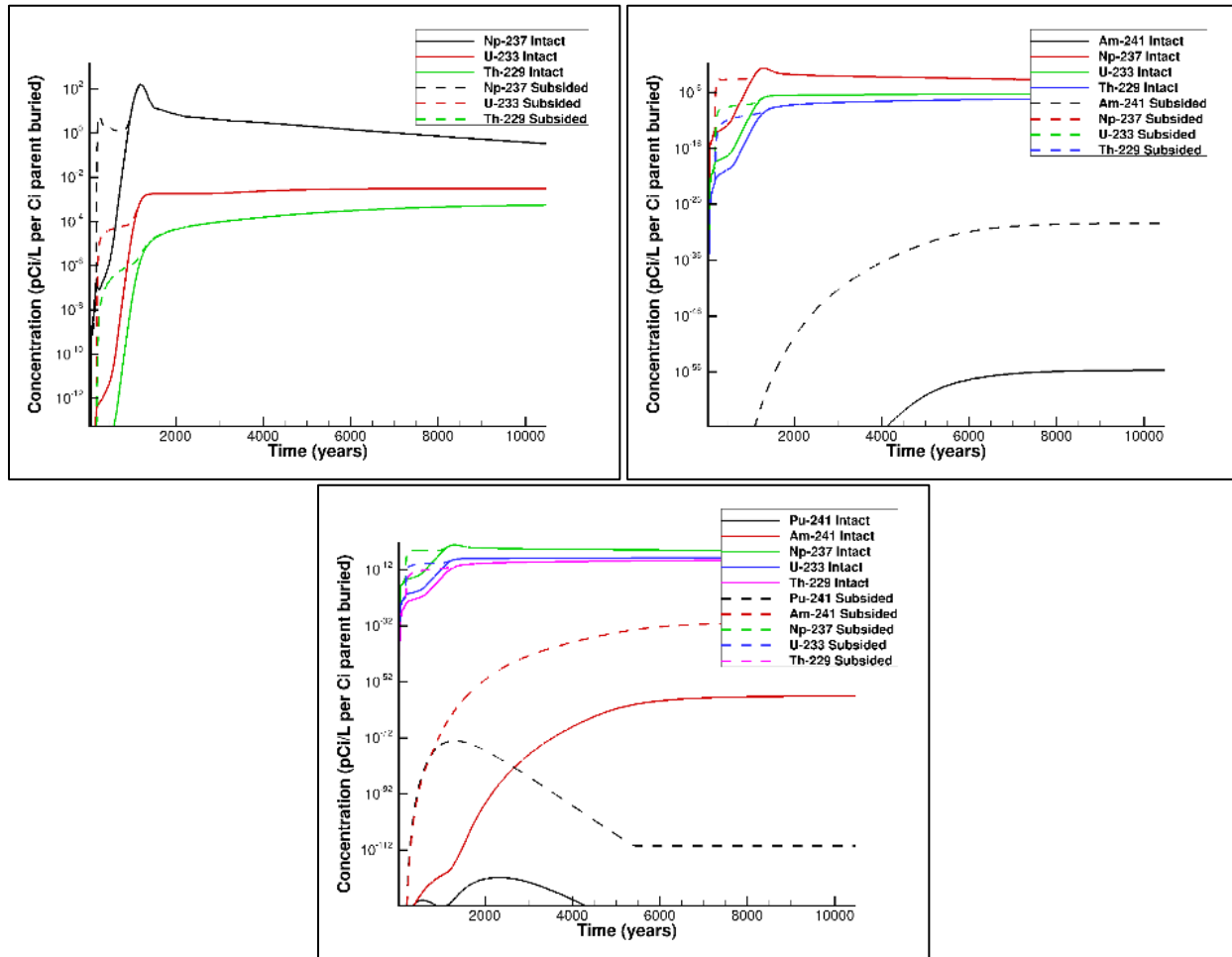


Figure D-31. Concentration Profiles of Pu-241, Am-241, Np-237, U-233, and Th-229 for Intact and Subsidence Cases at ET09