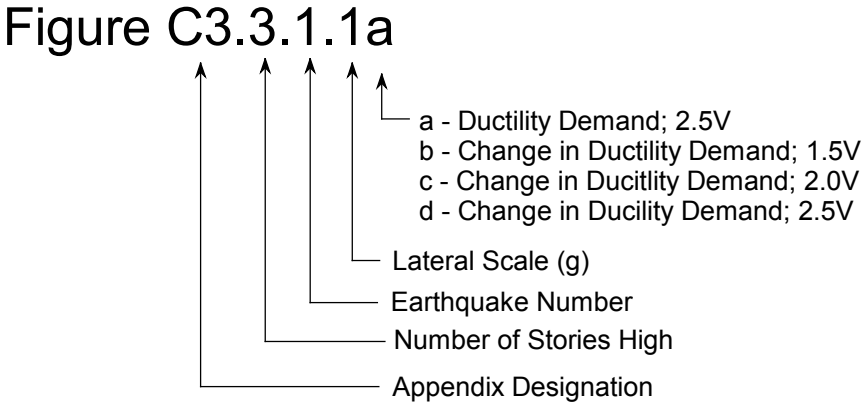
Appendix C3 – Residual Displacements Versus r_p

Figure Number Designation:



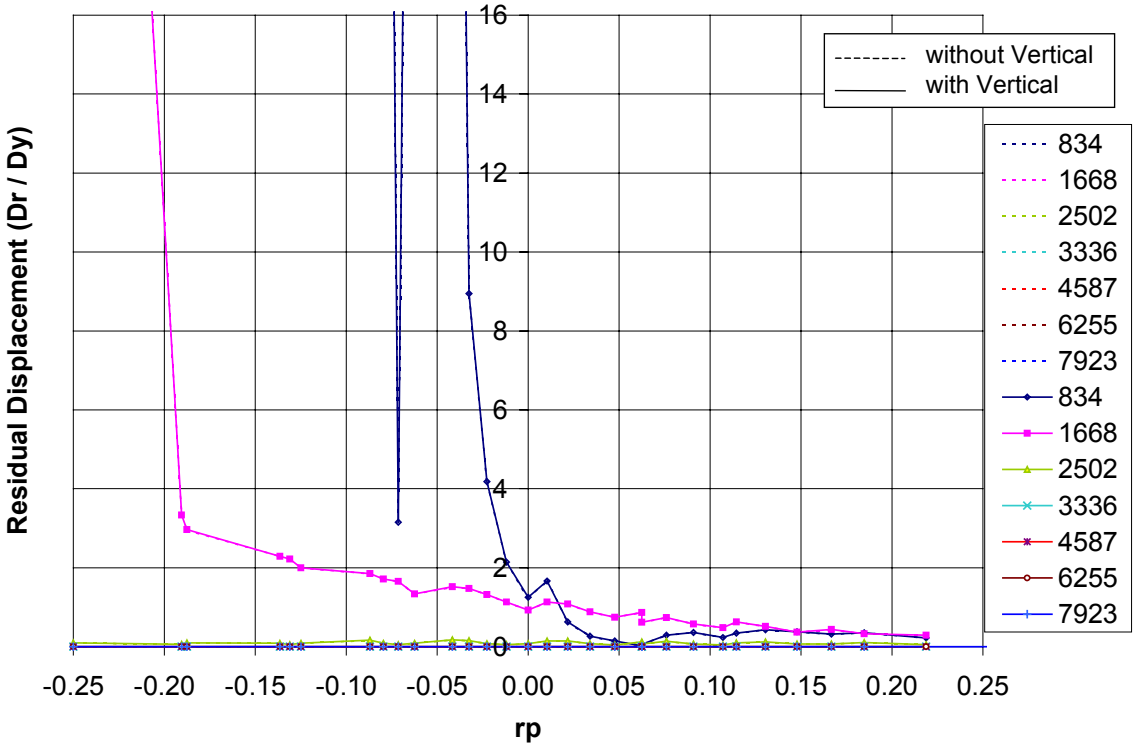


Figure C3.3.1.1a – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

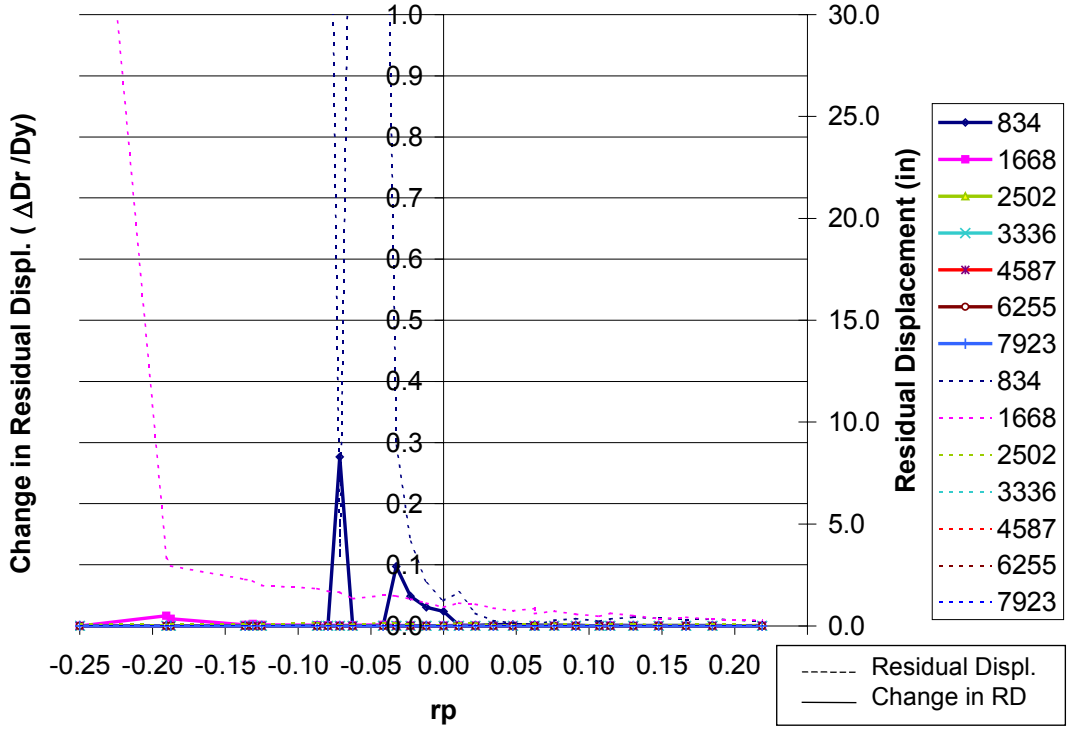


Figure C3.3.1.1b – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

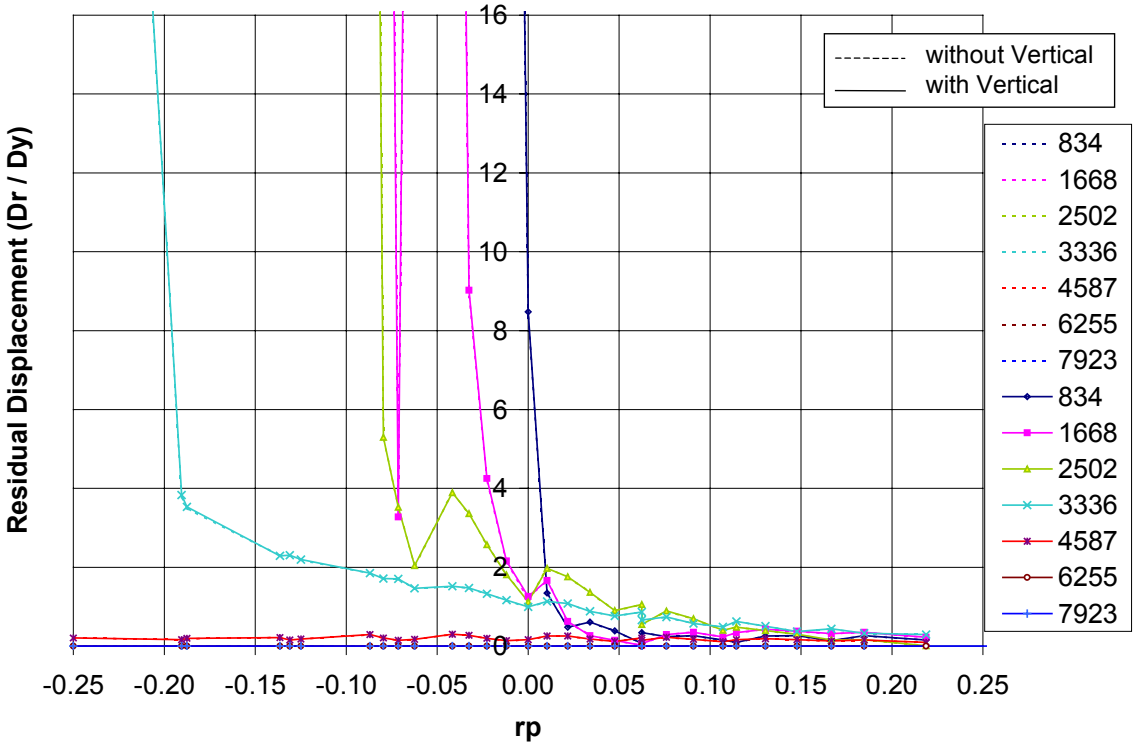


Figure C3.3.1.2a – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

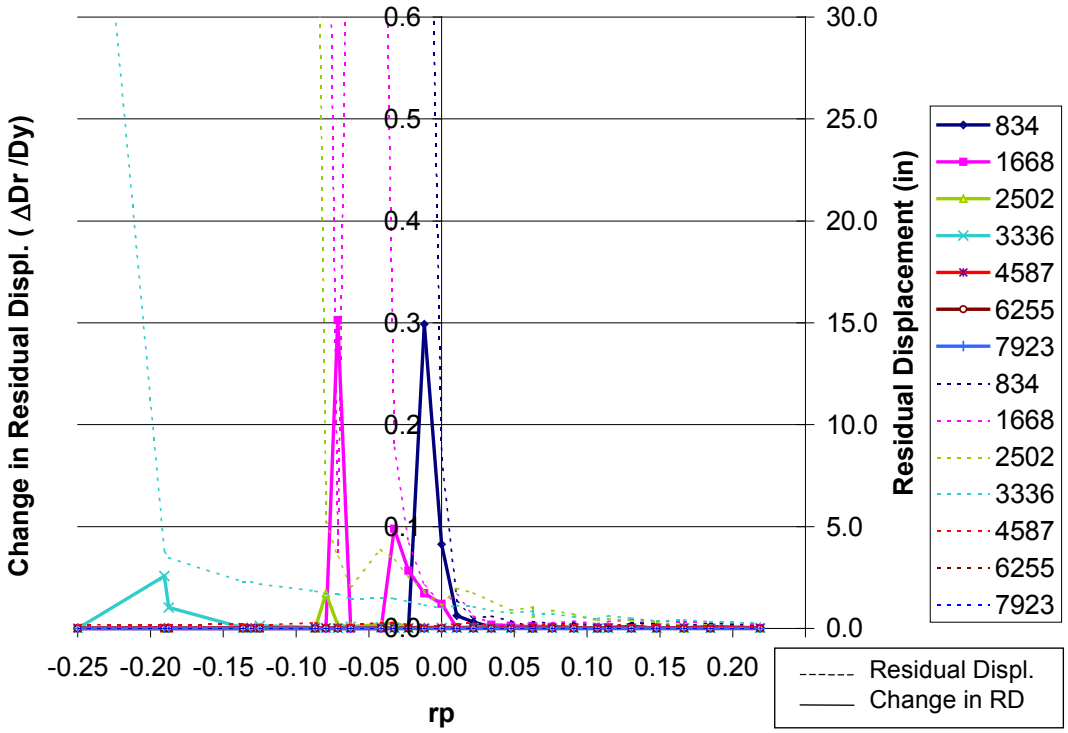


Figure C3.3.1.2b – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

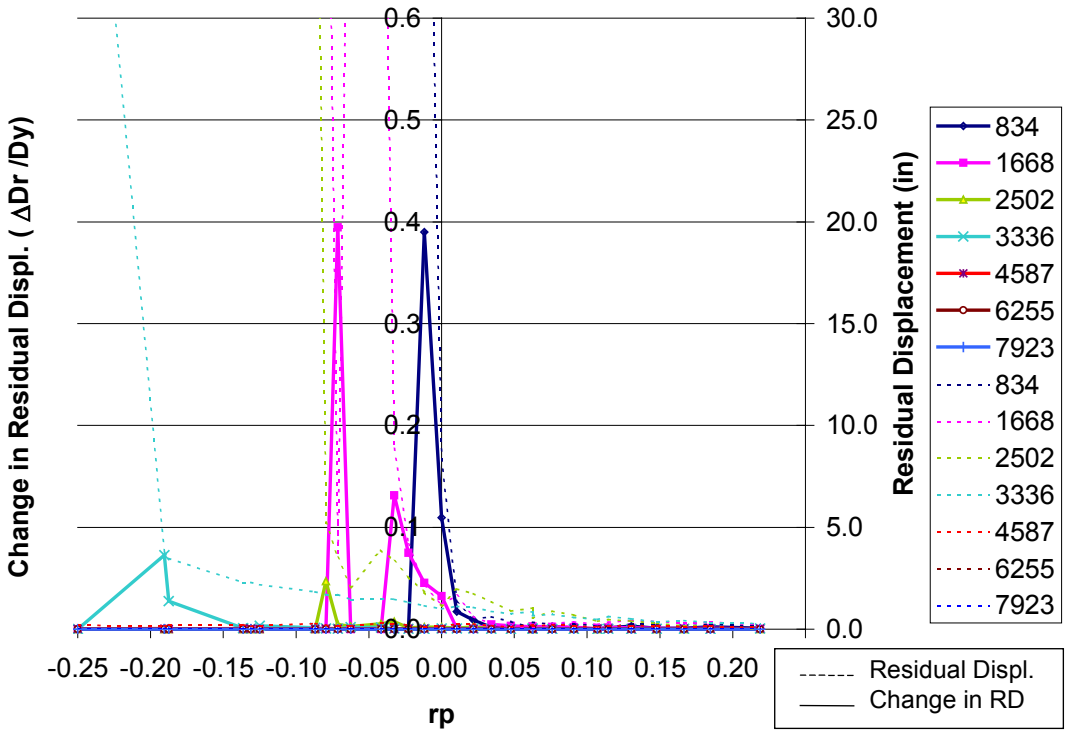


Figure C3.3.1.2c – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

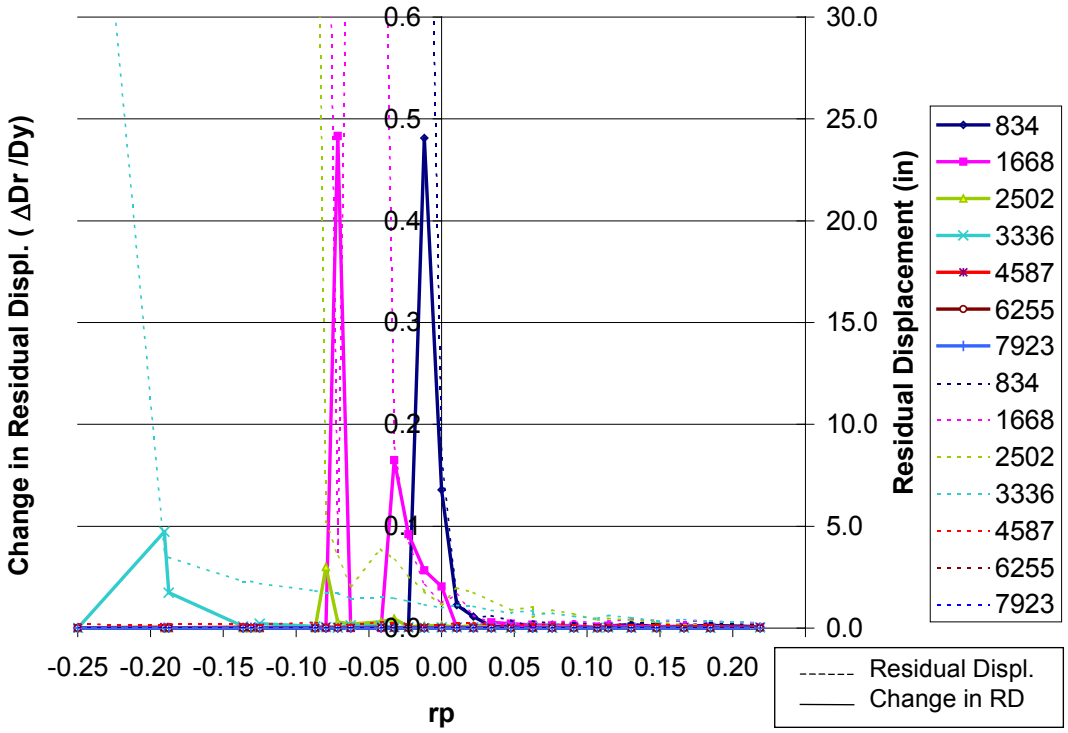


Figure C3.3.1.2d – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

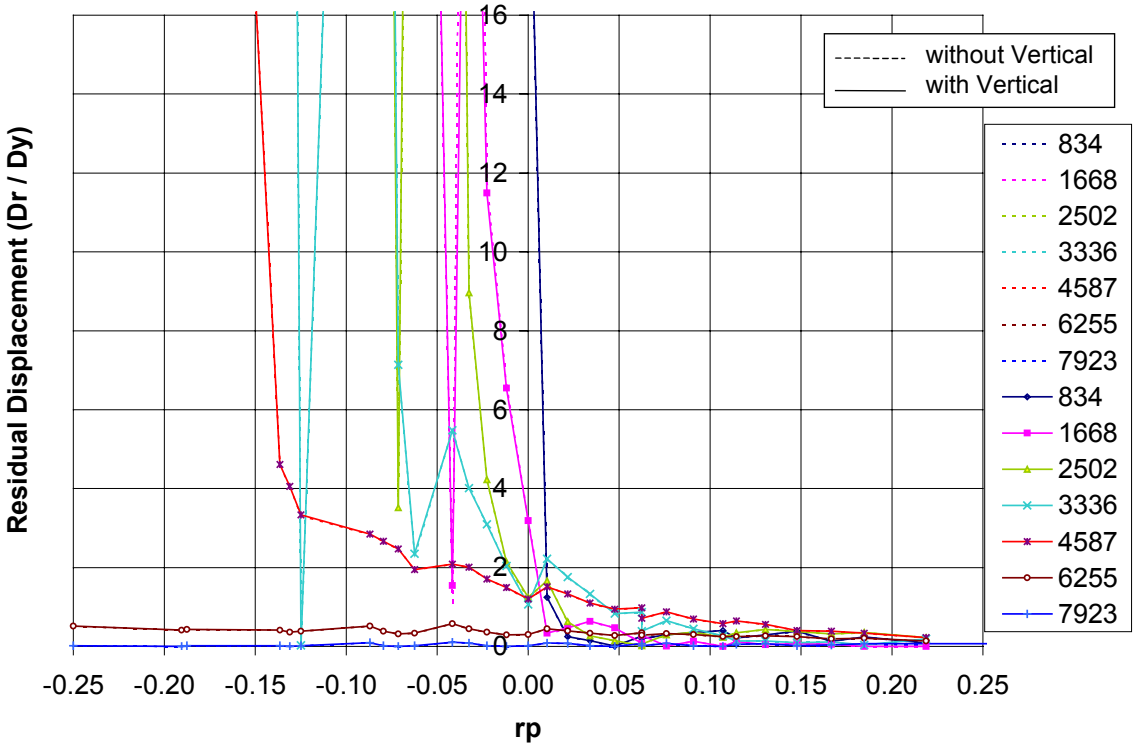


Figure C3.3.1.3a – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

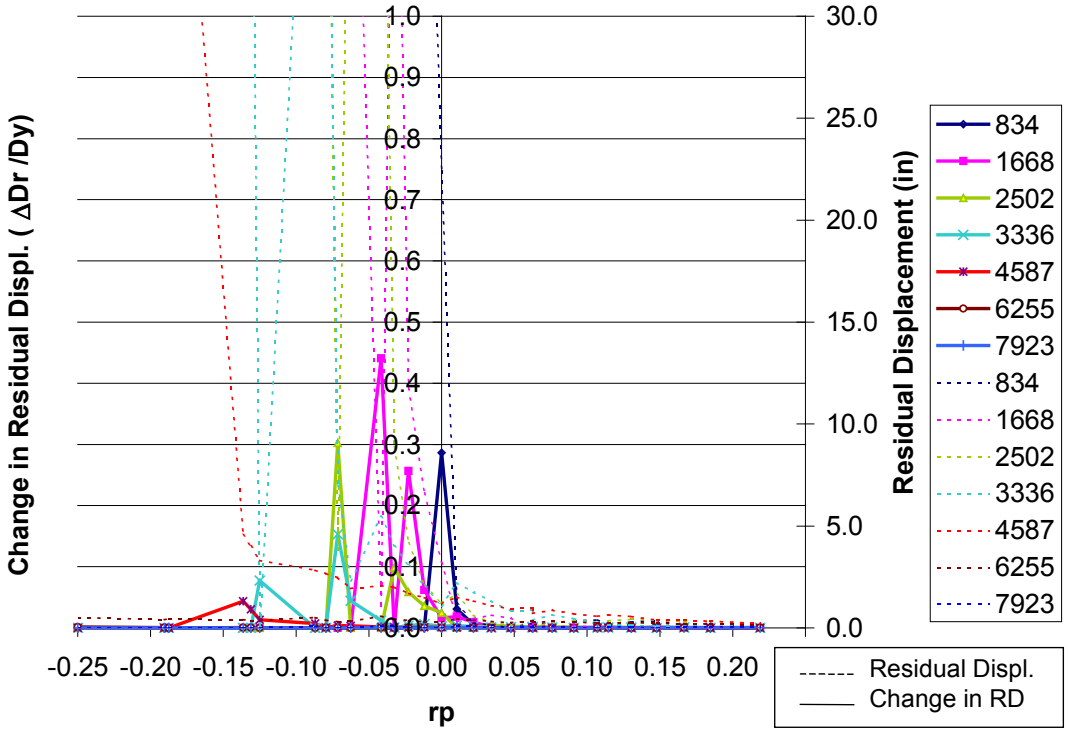


Figure C3.3.1.3b – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

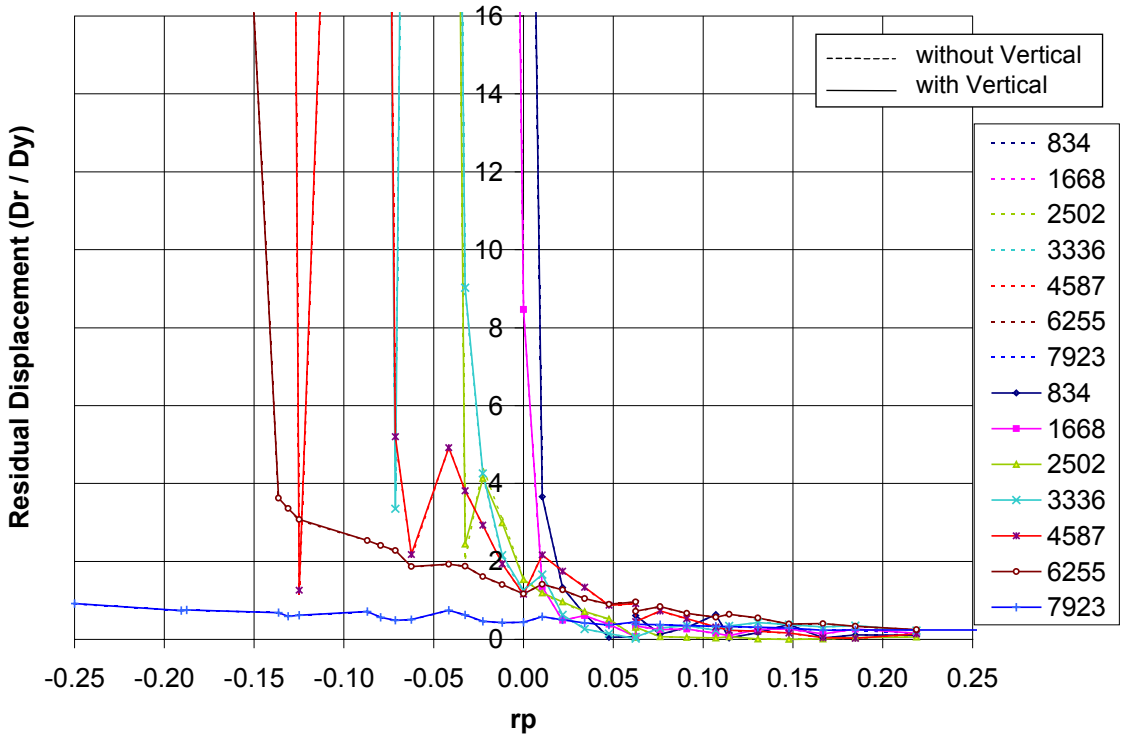


Figure C3.3.1.4a – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

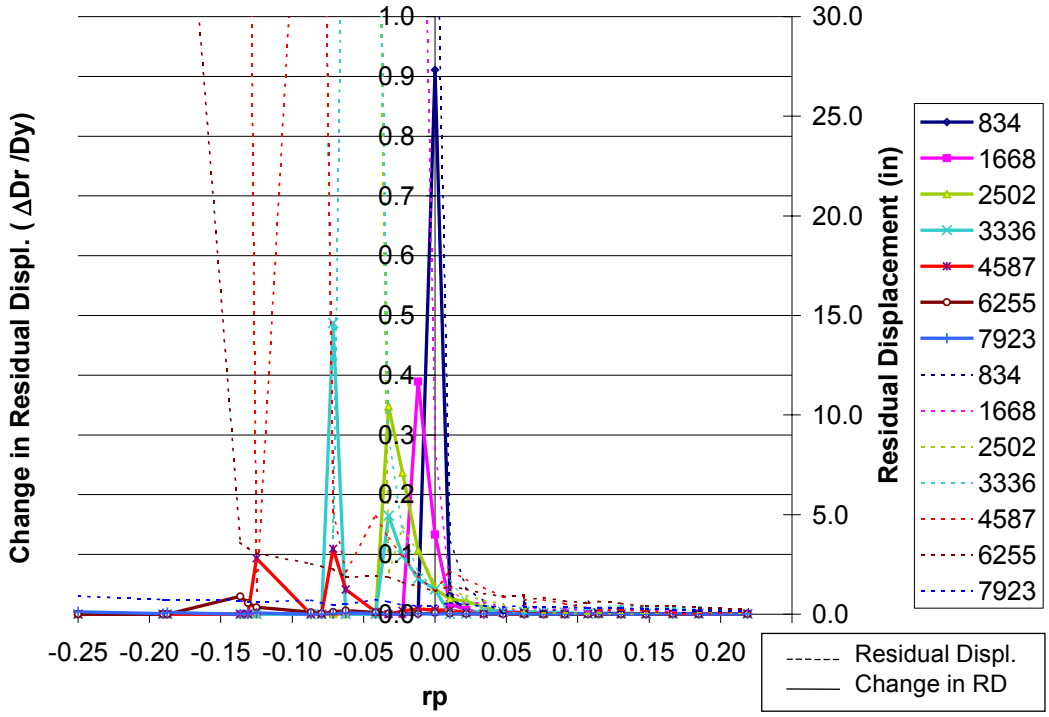


Figure C3.3.1.4b – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

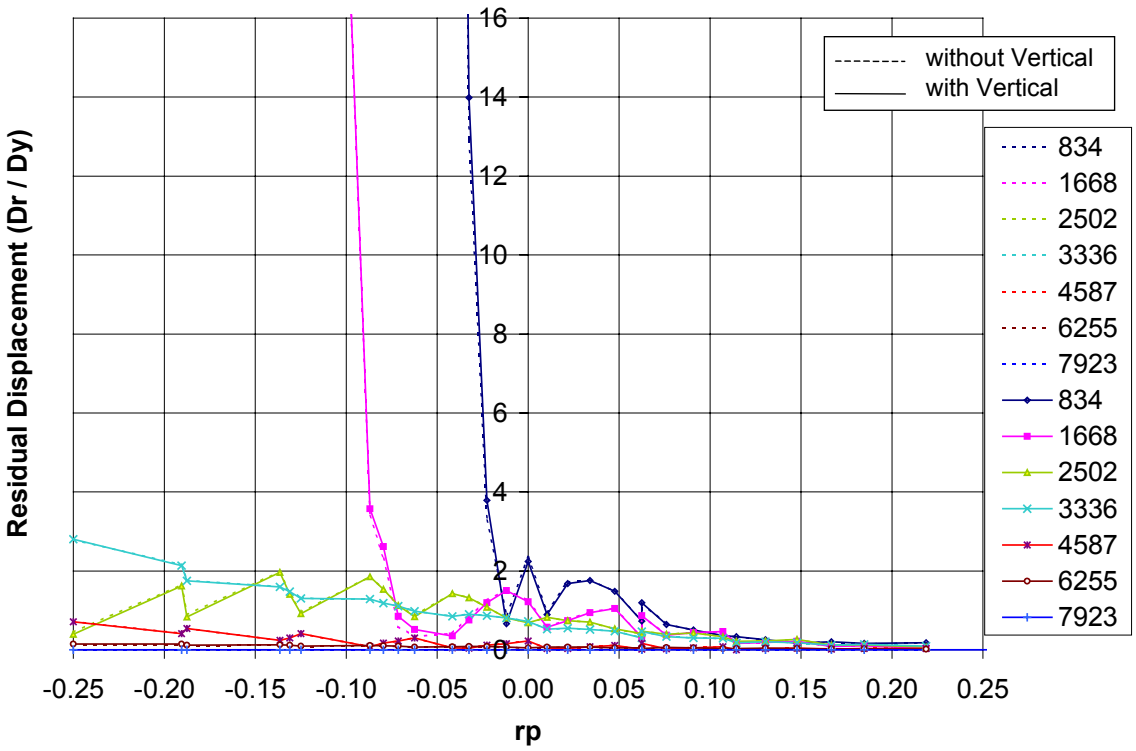


Figure C3.3.2.1a – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

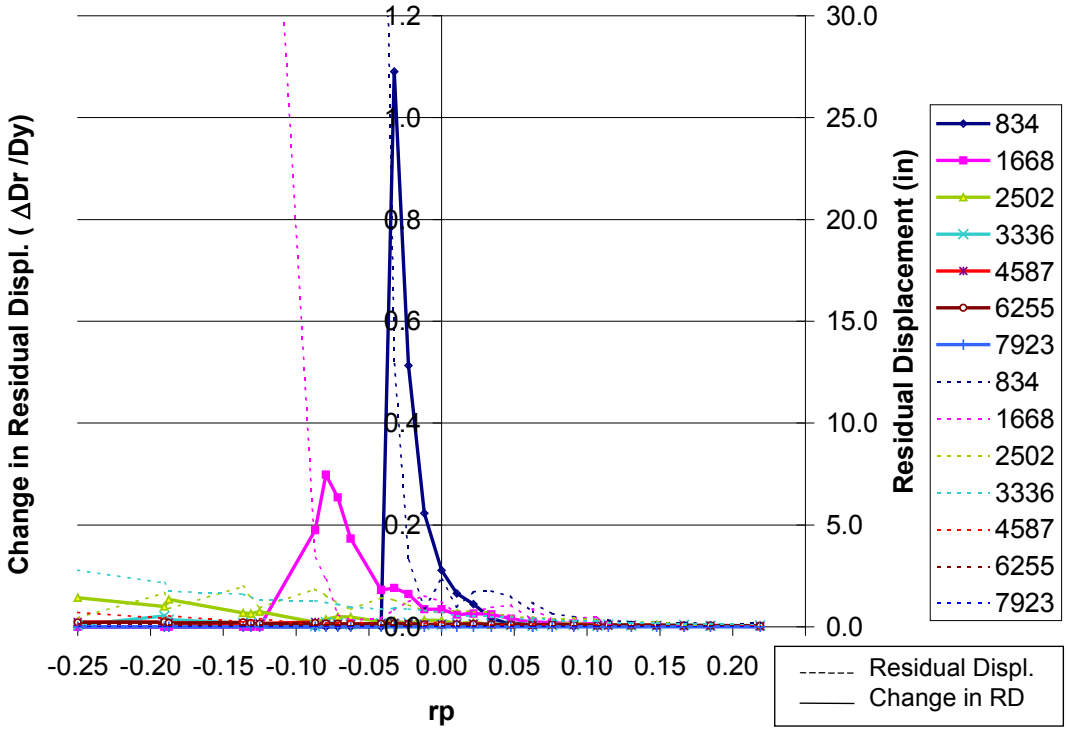


Figure C3.3.2.1b – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

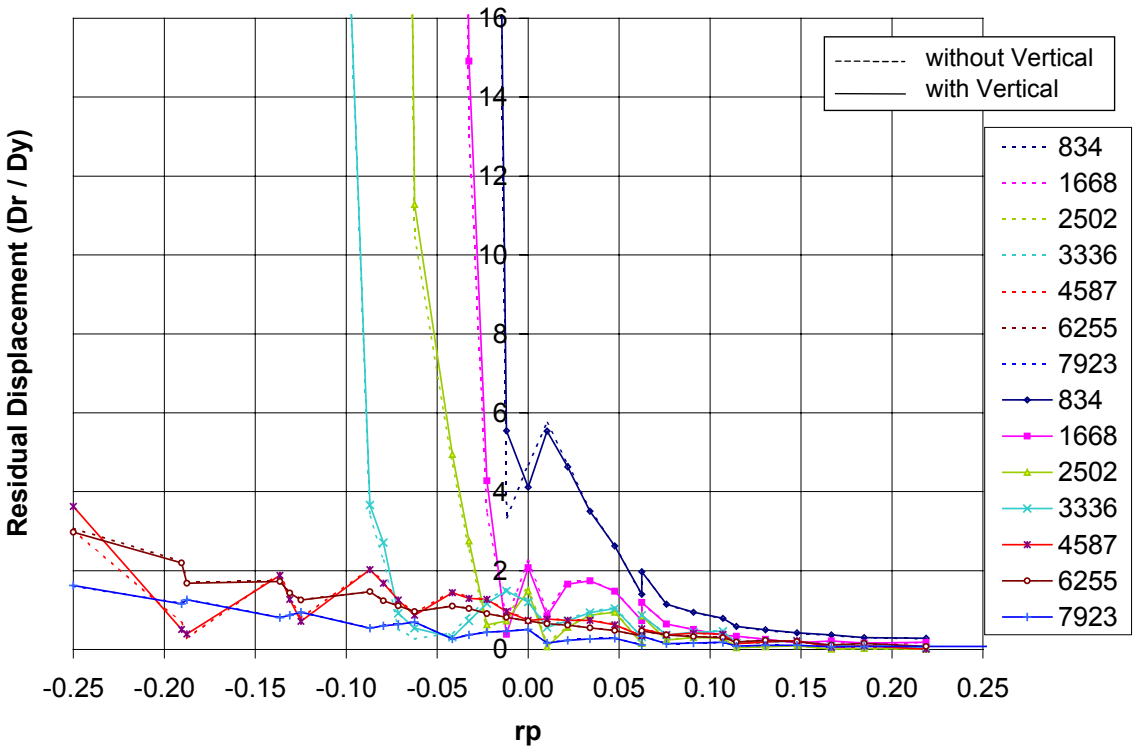


Figure C3.3.2.2a – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

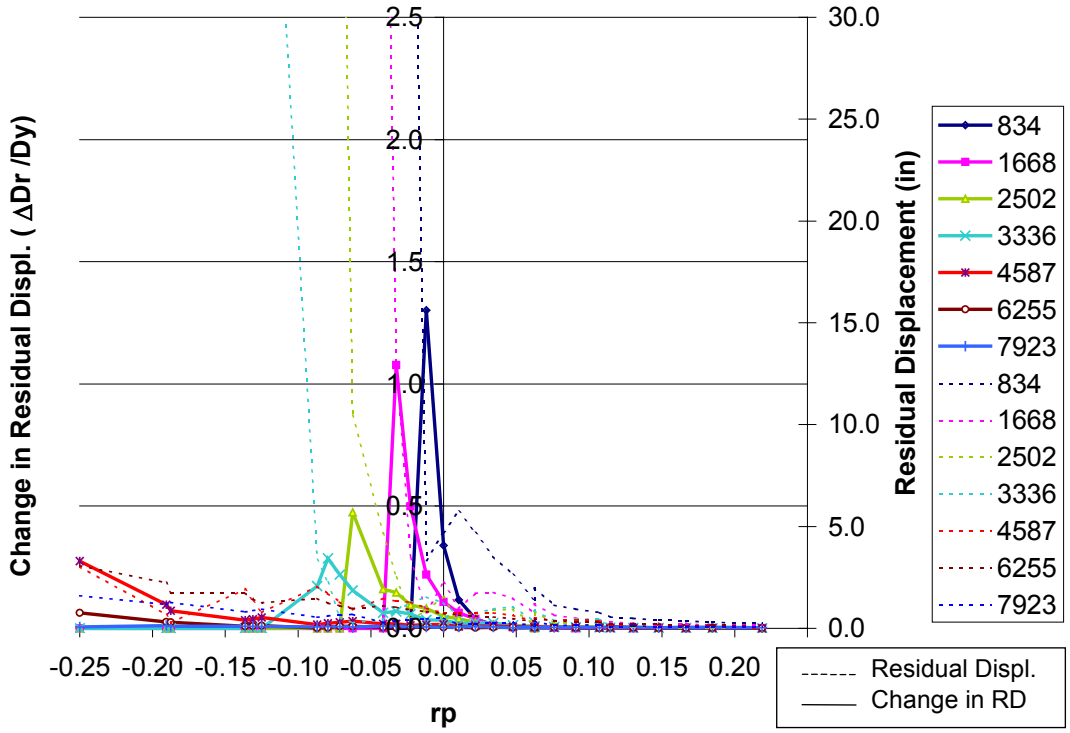


Figure C3.3.2.2b – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

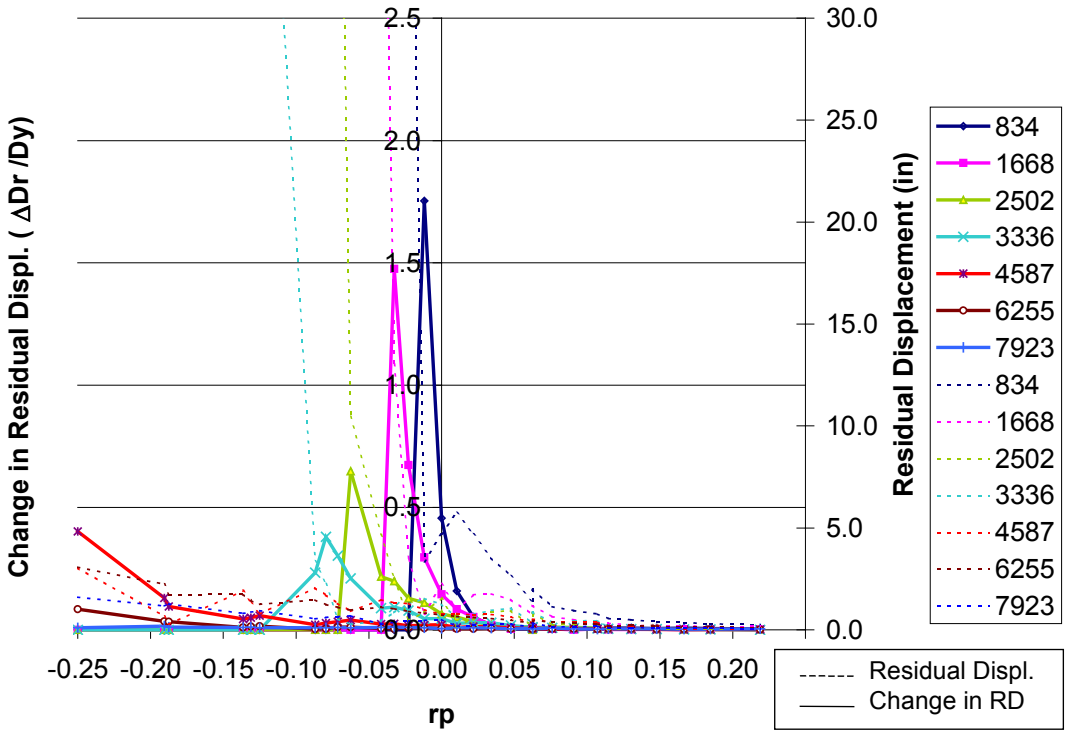


Figure C3.3.2.2c – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

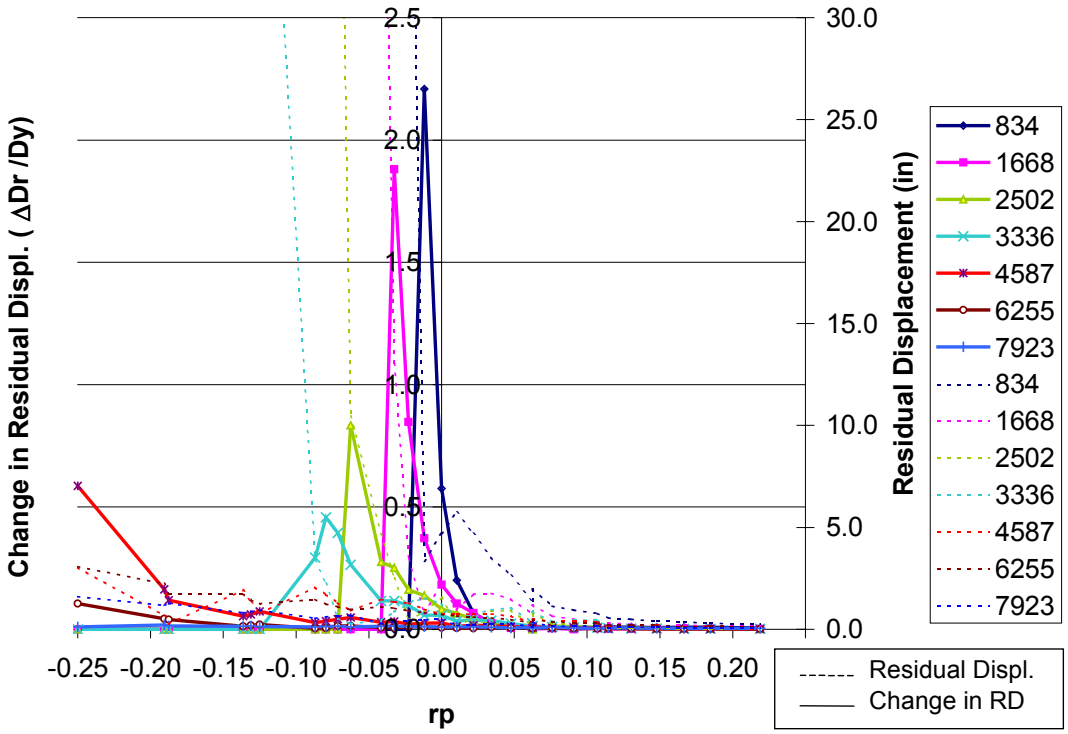


Figure C3.3.2.2d – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

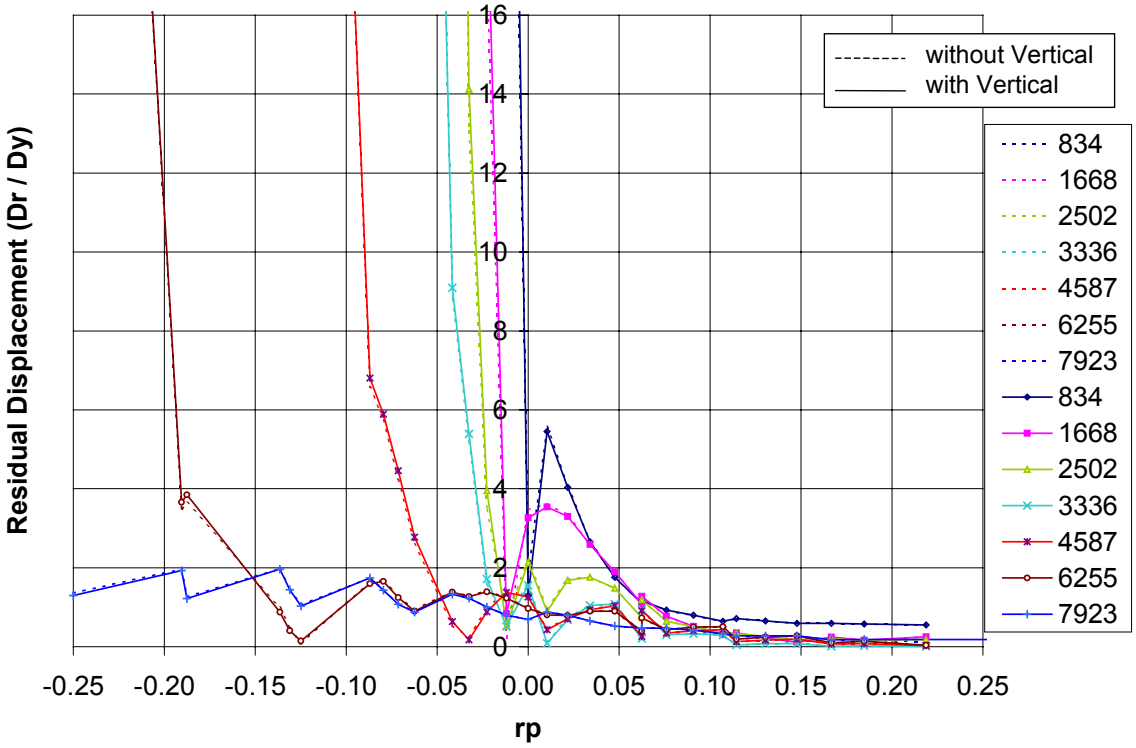


Figure C3.3.2.3a – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

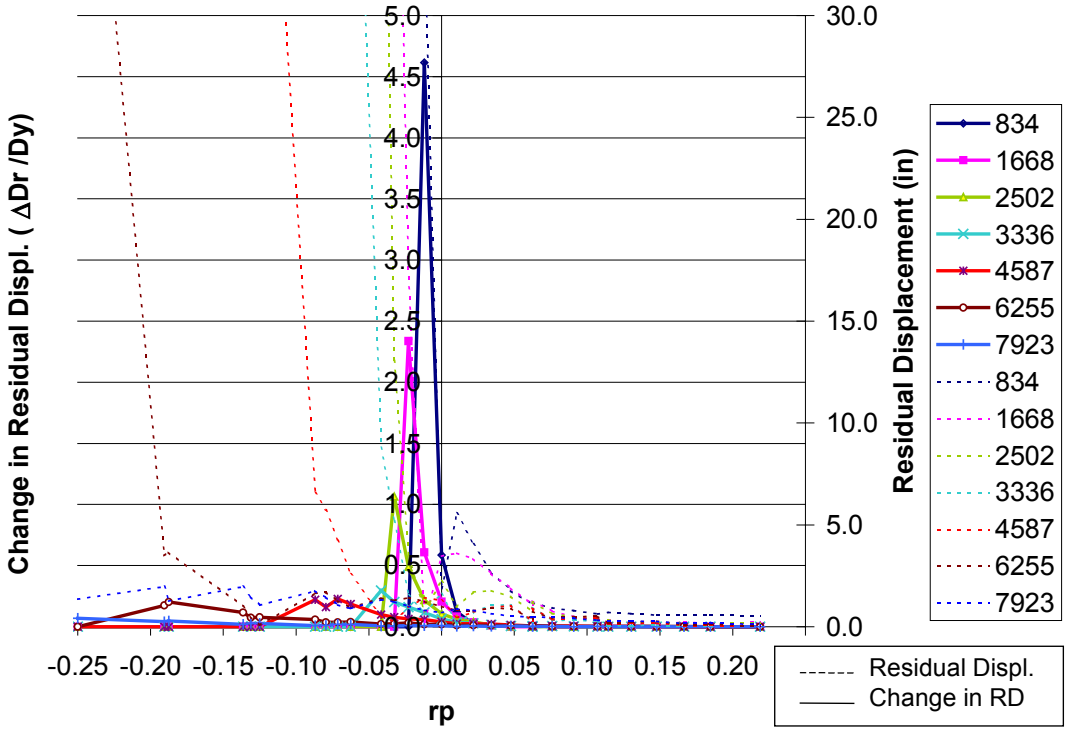


Figure C3.3.2.3b – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

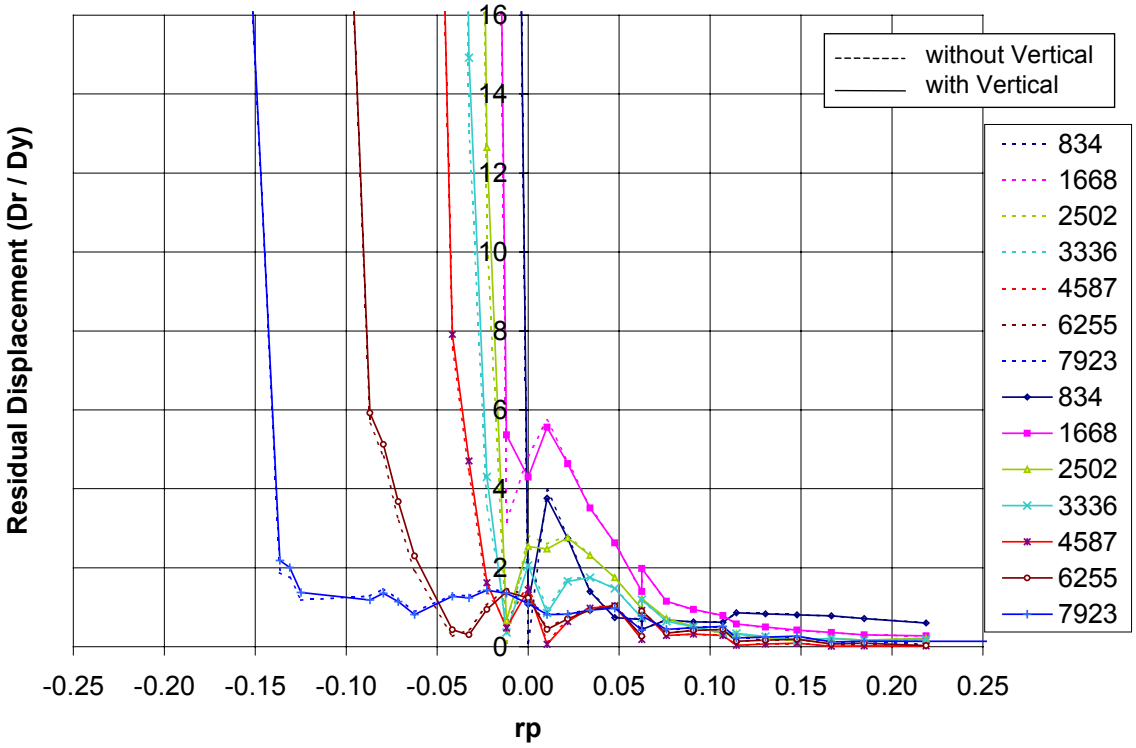


Figure C3.3.2.4a – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

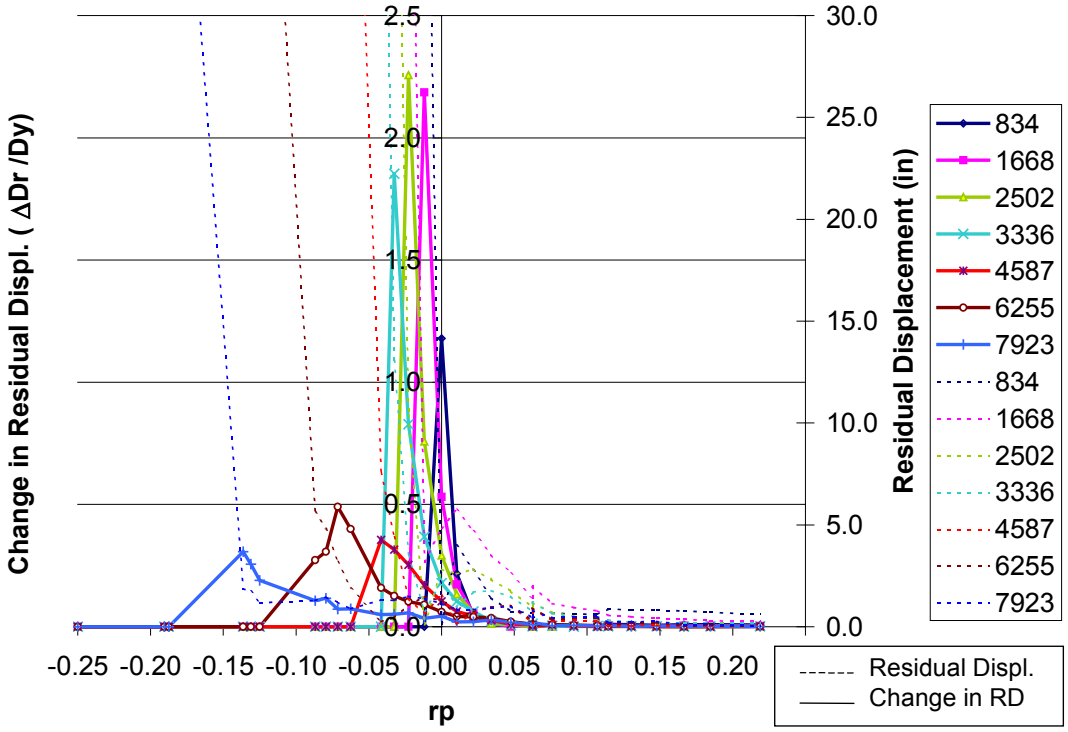


Figure C3.3.2.4b – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

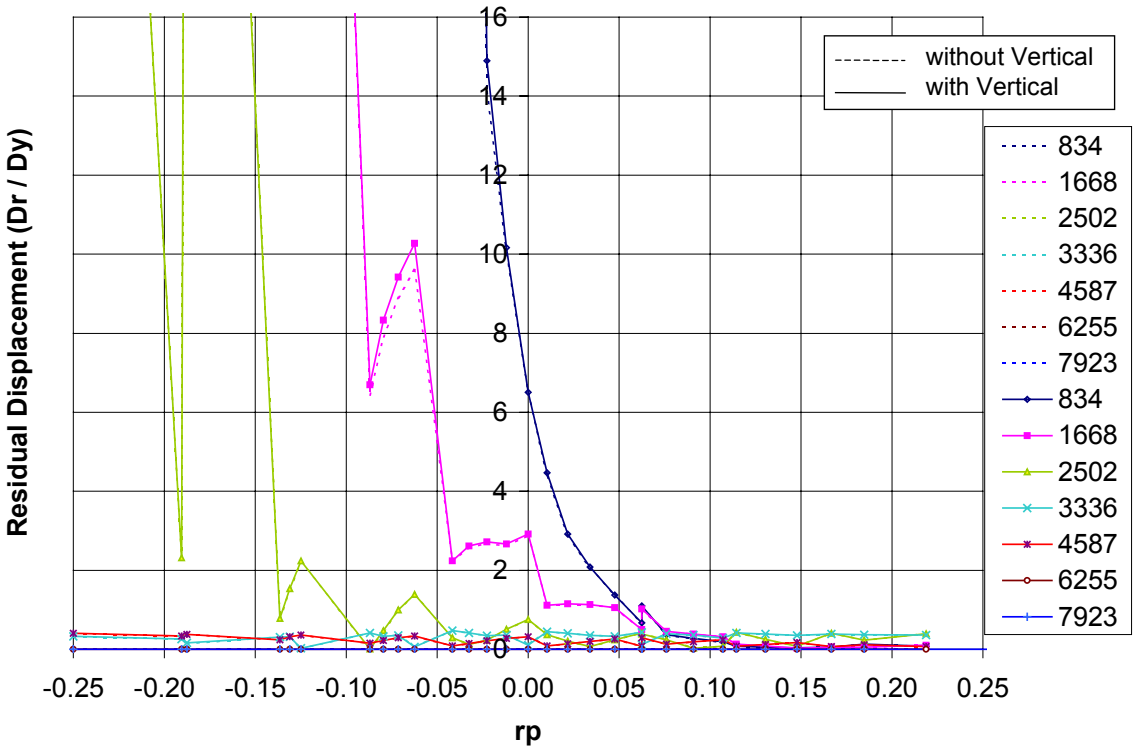


Figure C3.3.3.1a – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

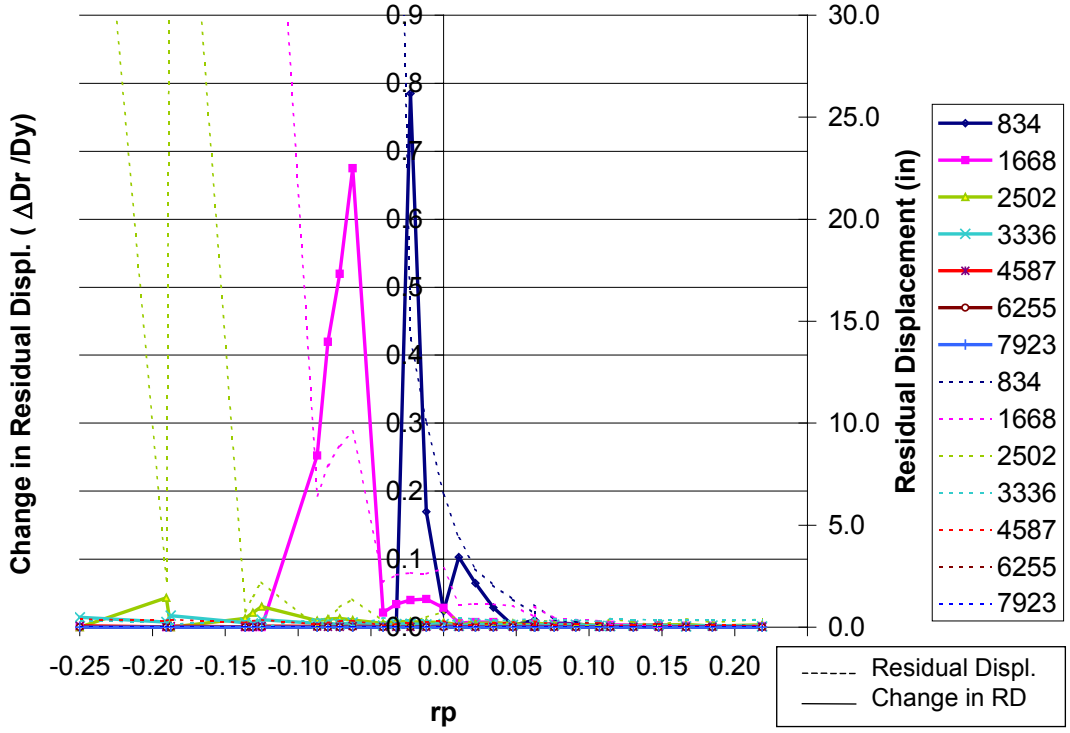


Figure C3.3.3.1b – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

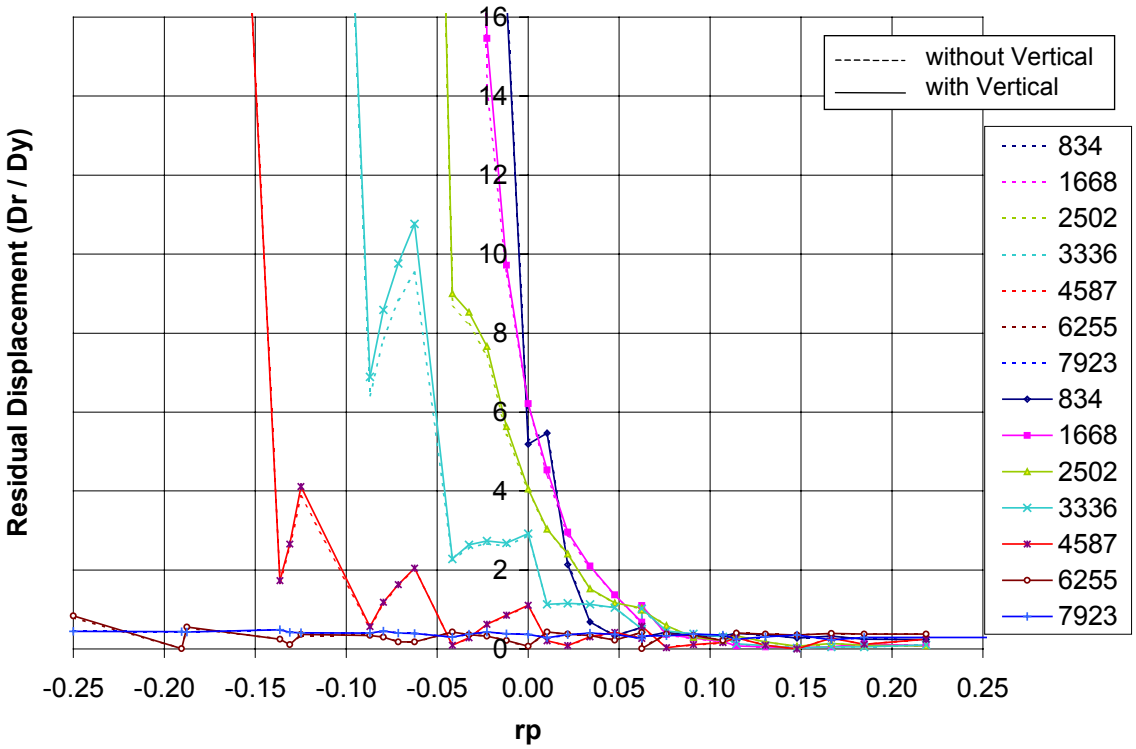


Figure C3.3.3.2a – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

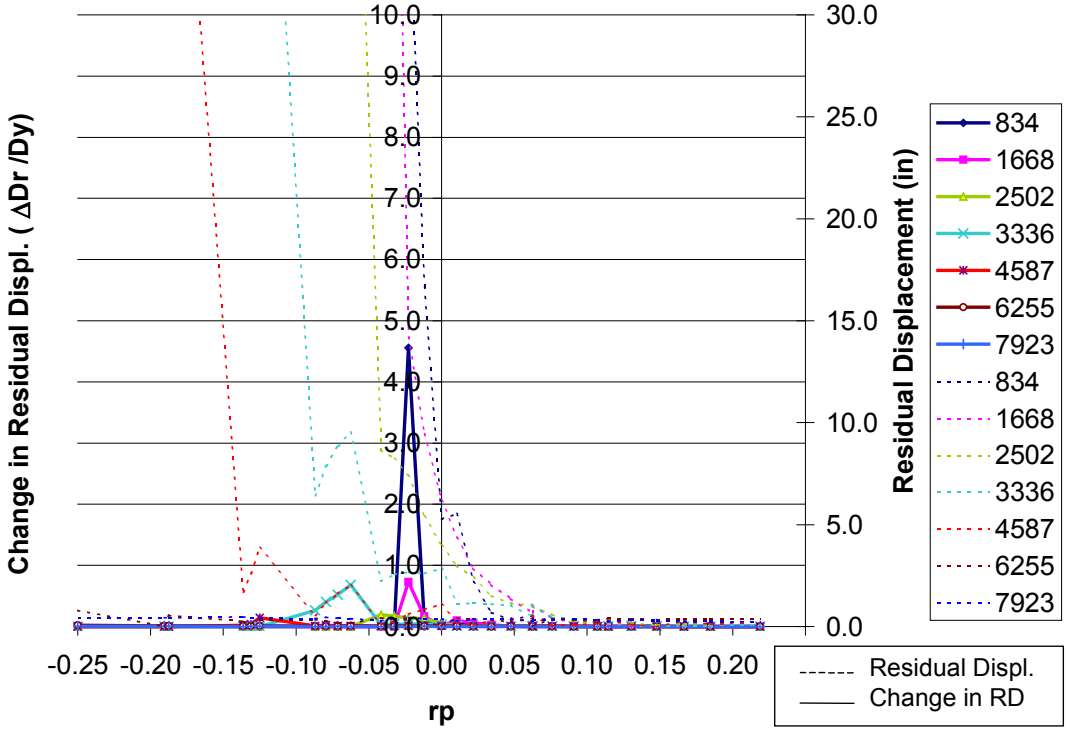


Figure C3.3.3.2b – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

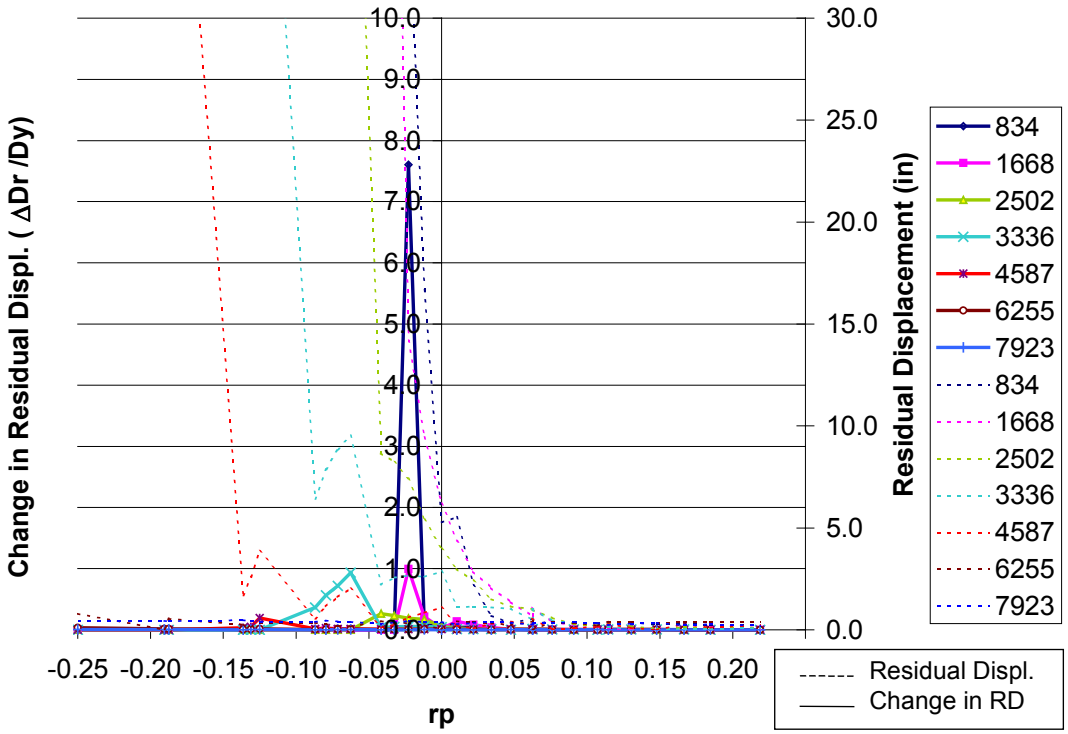


Figure C3.3.3.2c – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

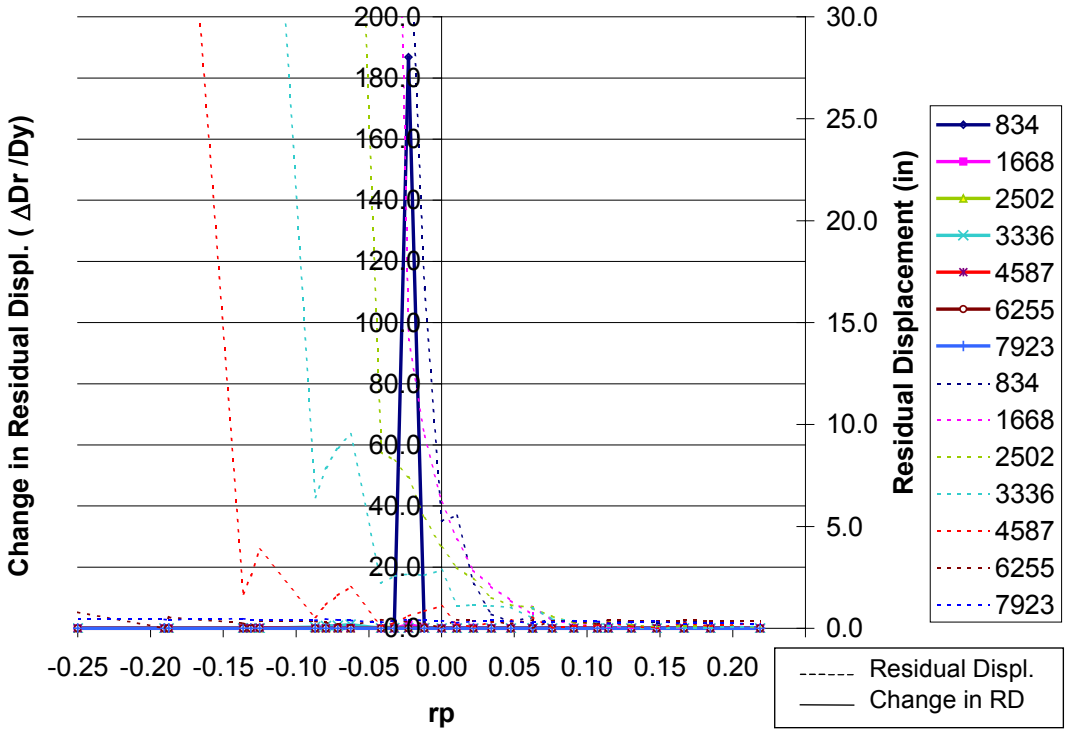


Figure C3.3.3.2d – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

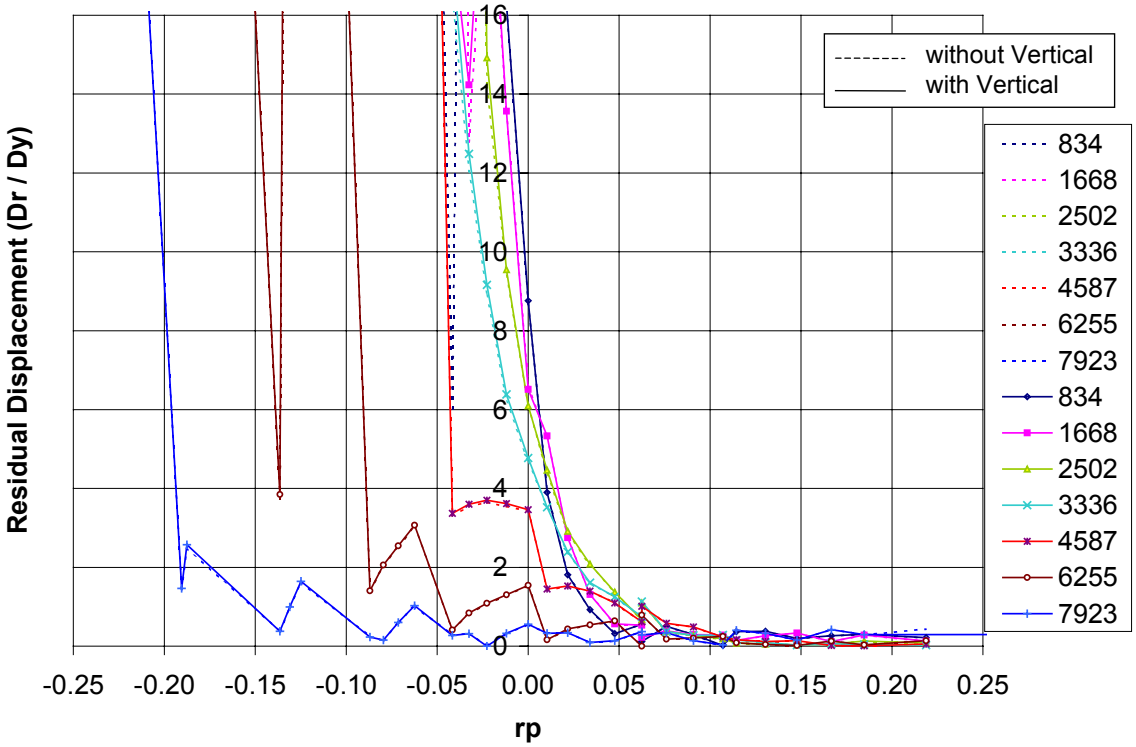


Figure C3.3.3.3a – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

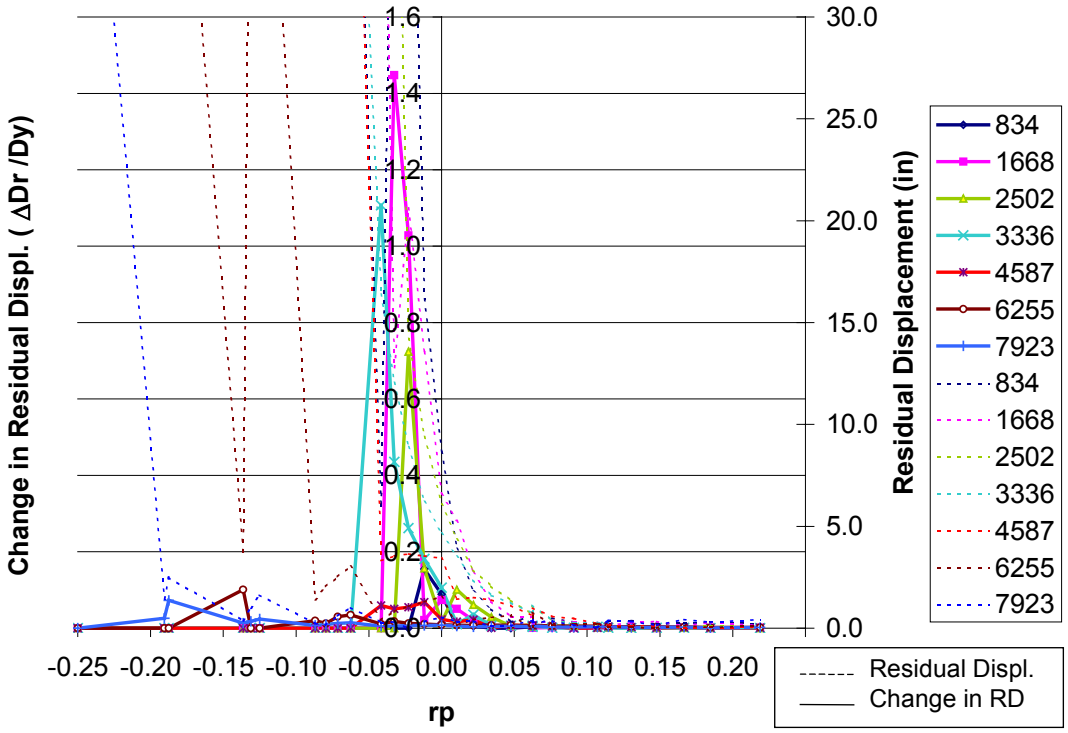


Figure C3.3.3.3b – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

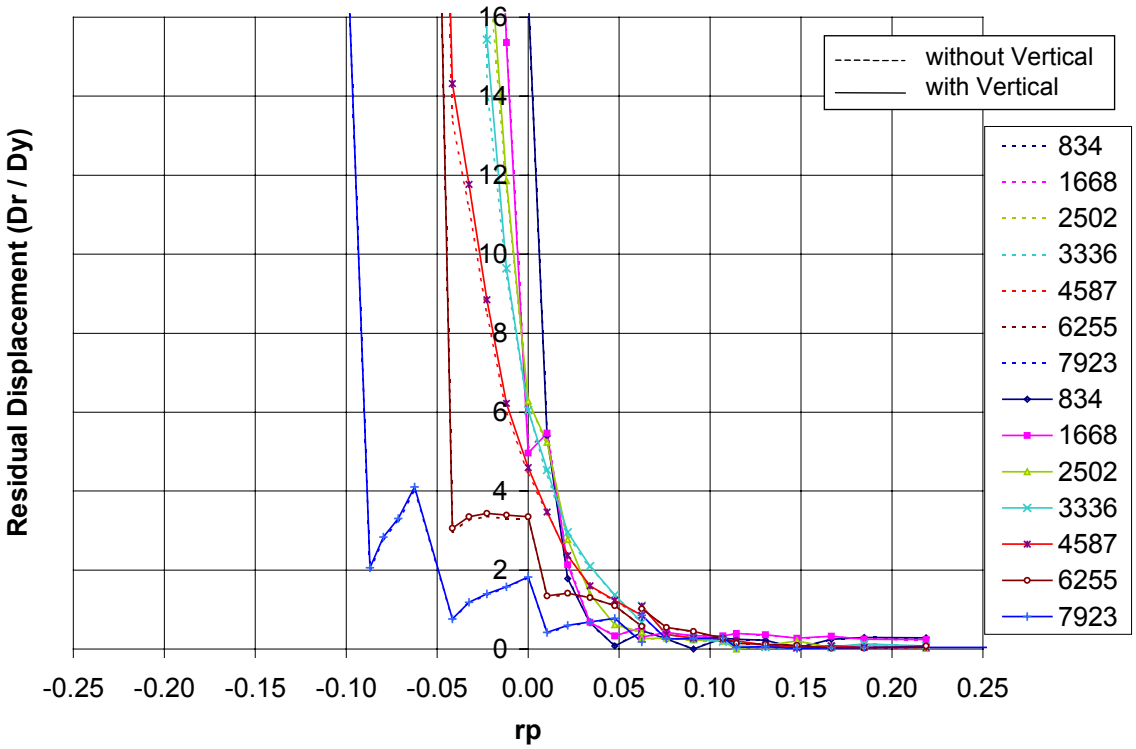


Figure C3.3.3.4a – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

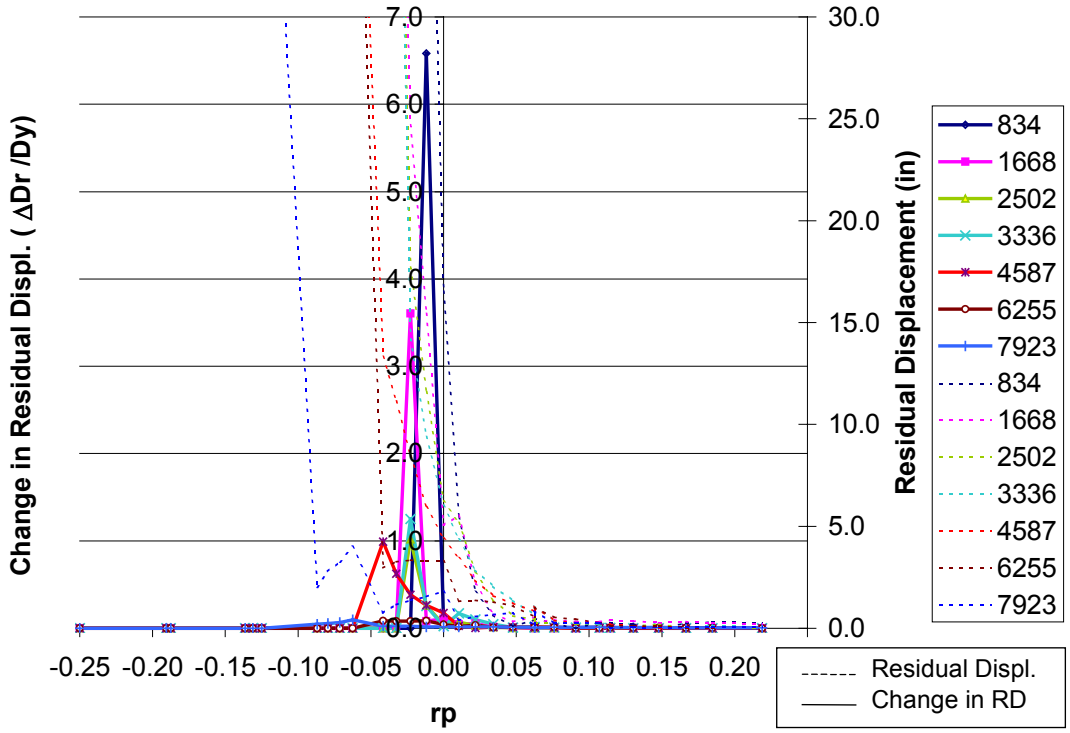


Figure C3.3.3.4b – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Second

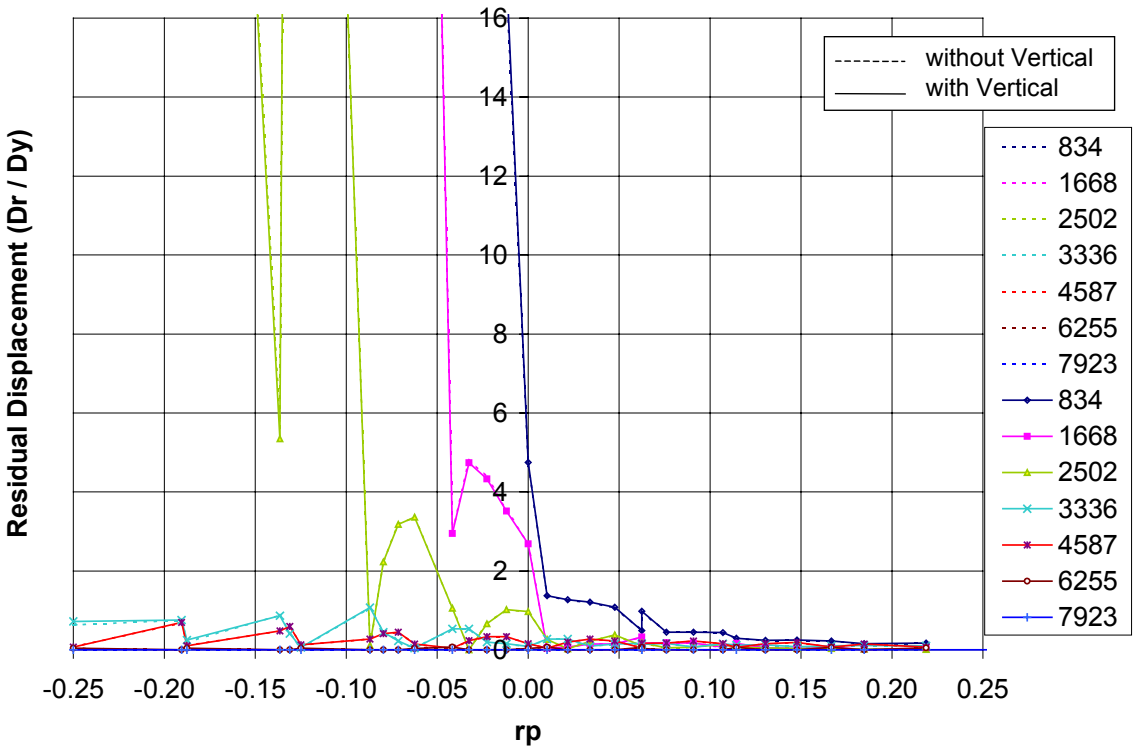


Figure C3.3.4.1a – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

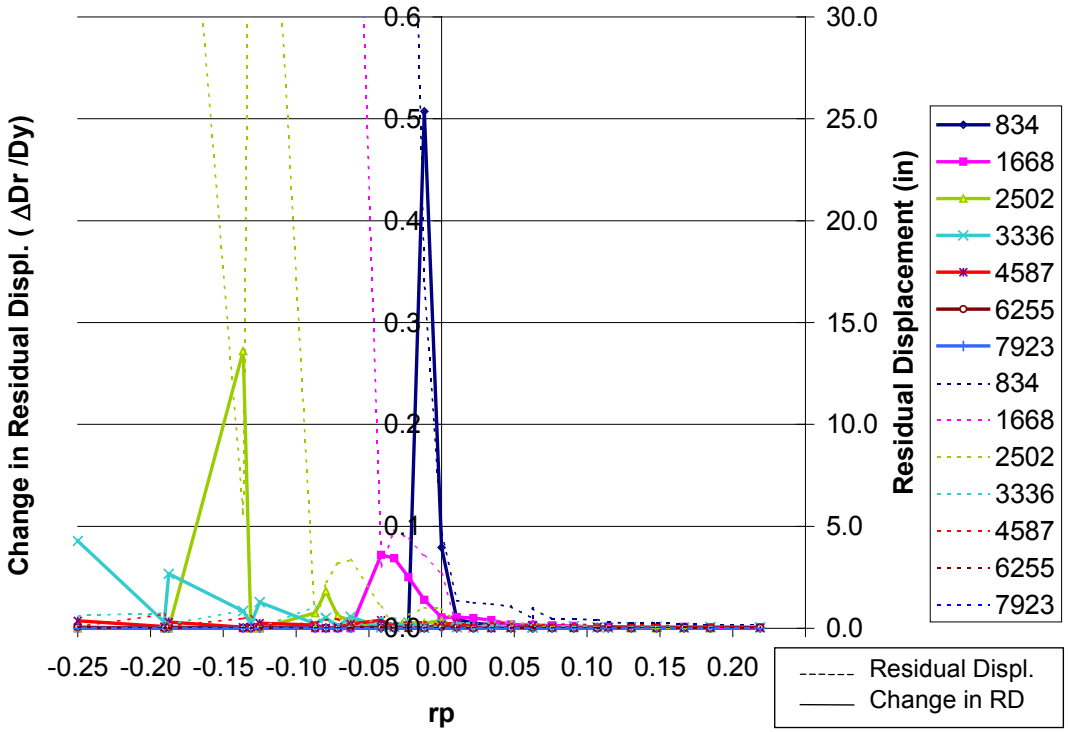


Figure C3.3.4.1b – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

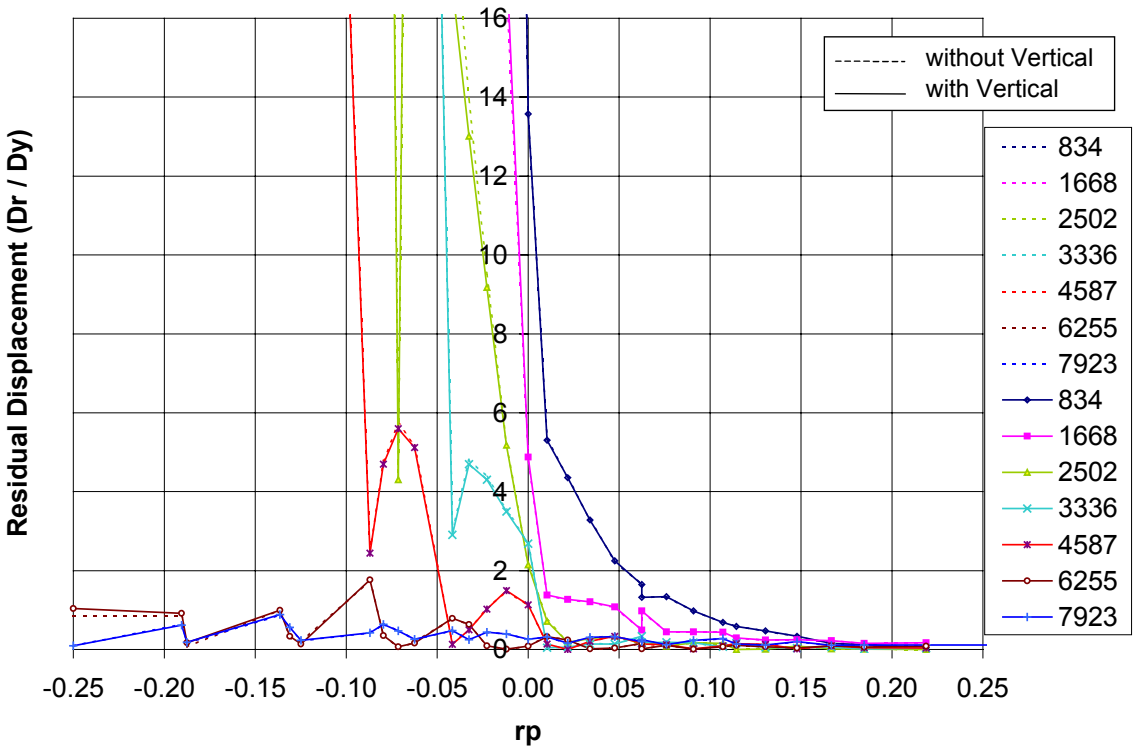


Figure C3.3.4.2a – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

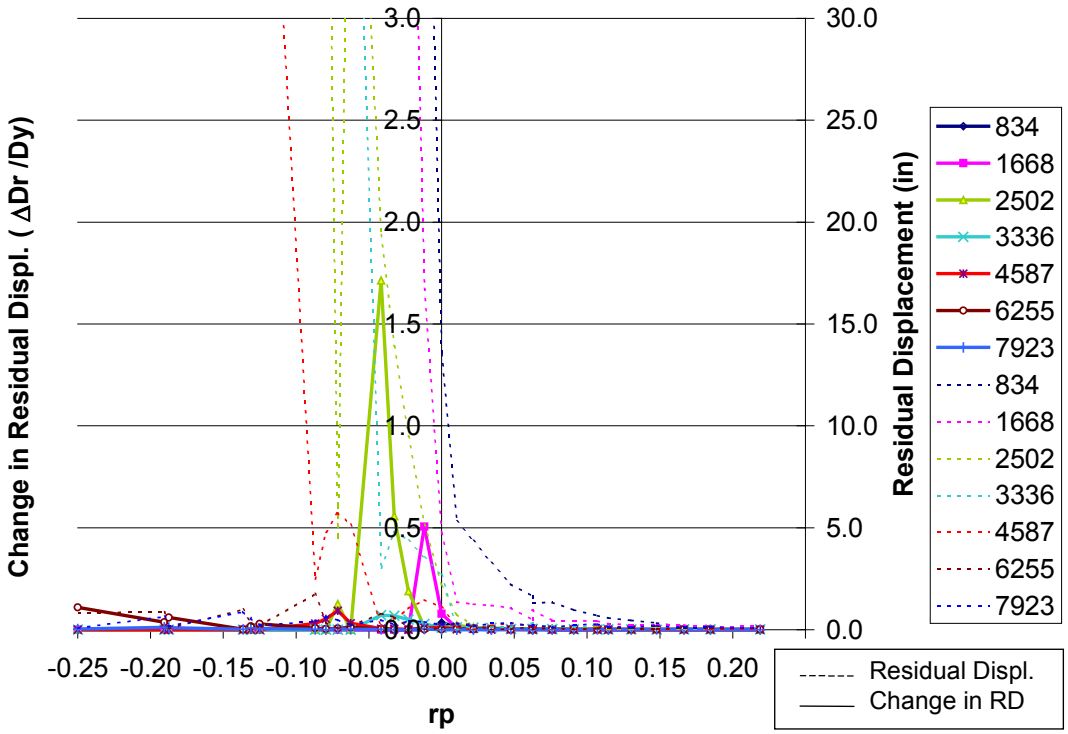


Figure C3.3.4.2b – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

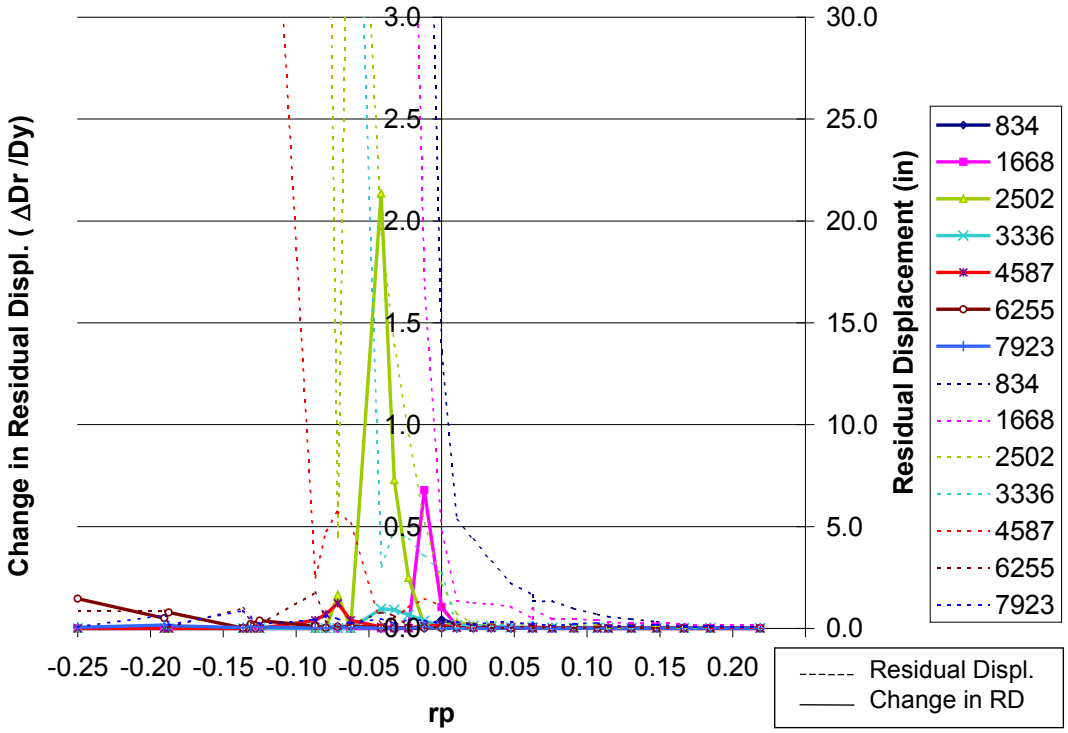


Figure C3.3.4.2c – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

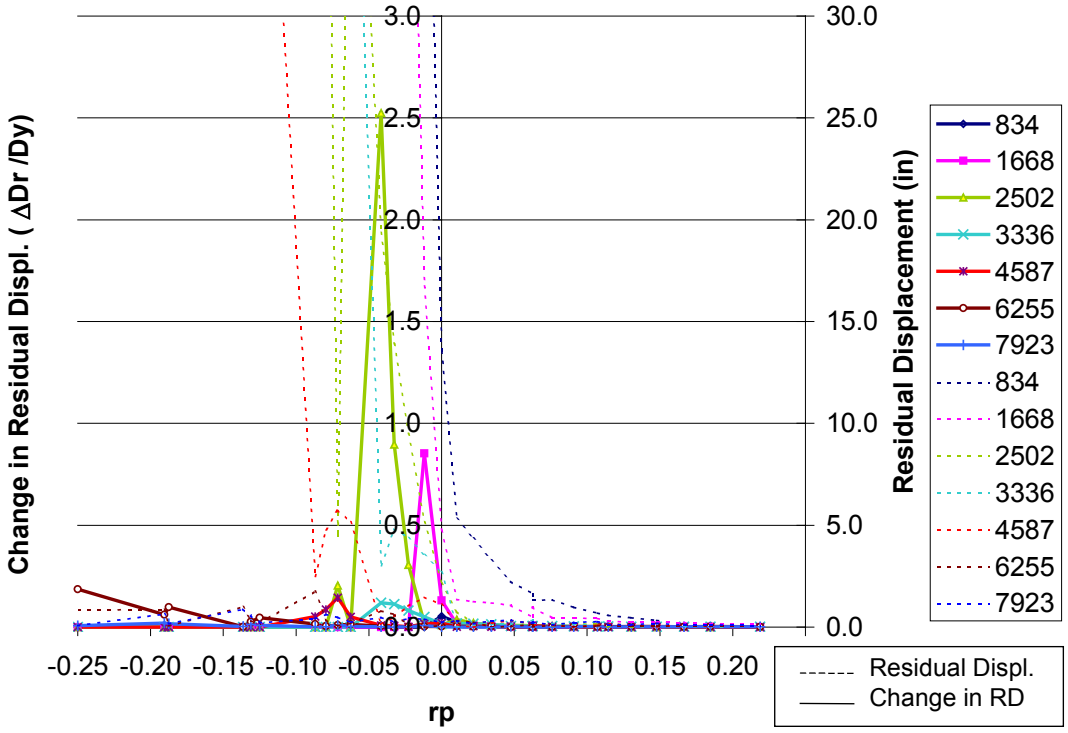


Figure C3.3.4.2d – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

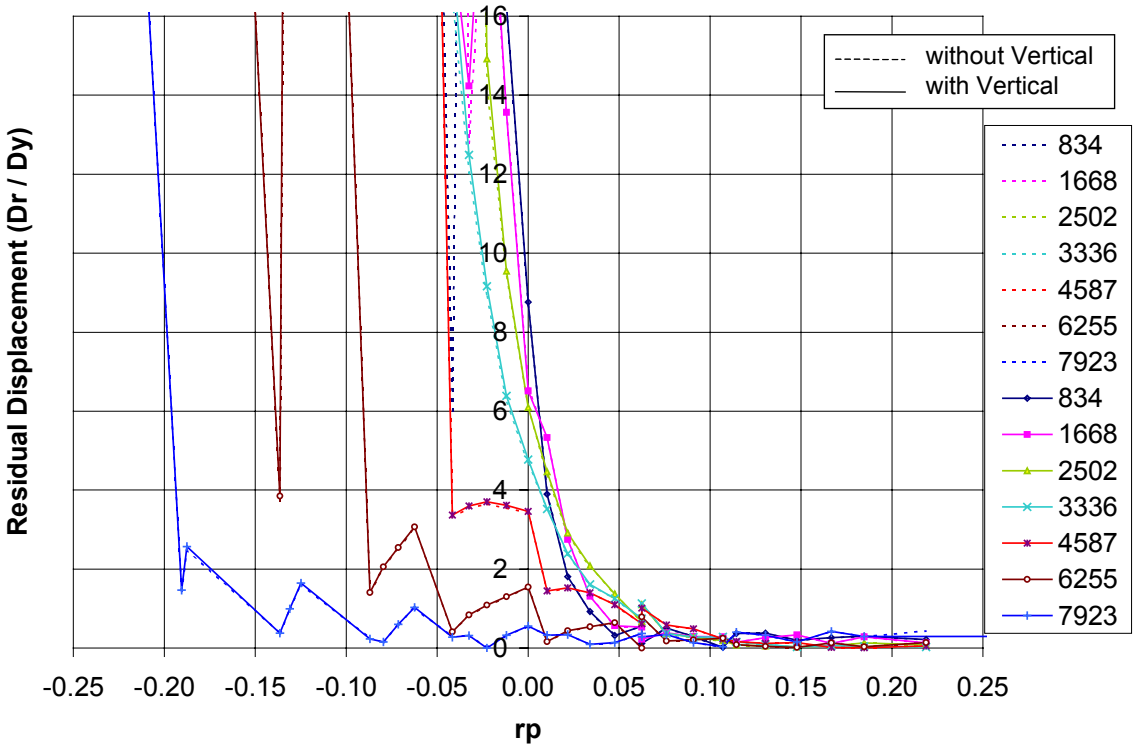


Figure C3.3.4.3a – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

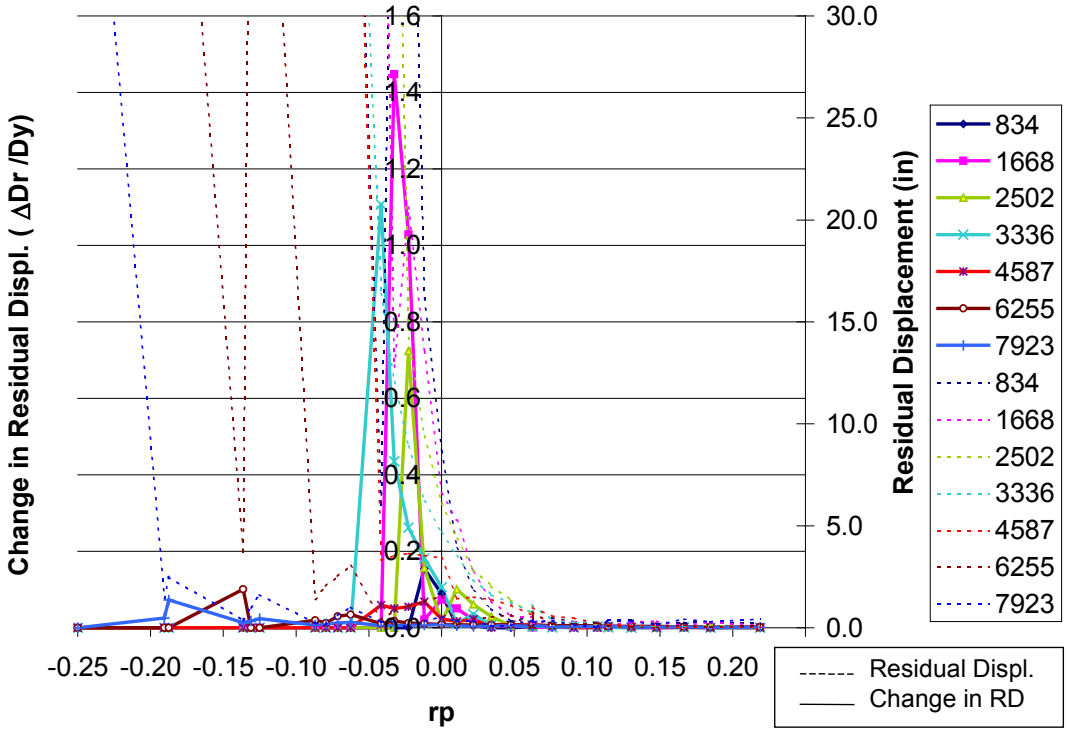


Figure C3.3.4.3b – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

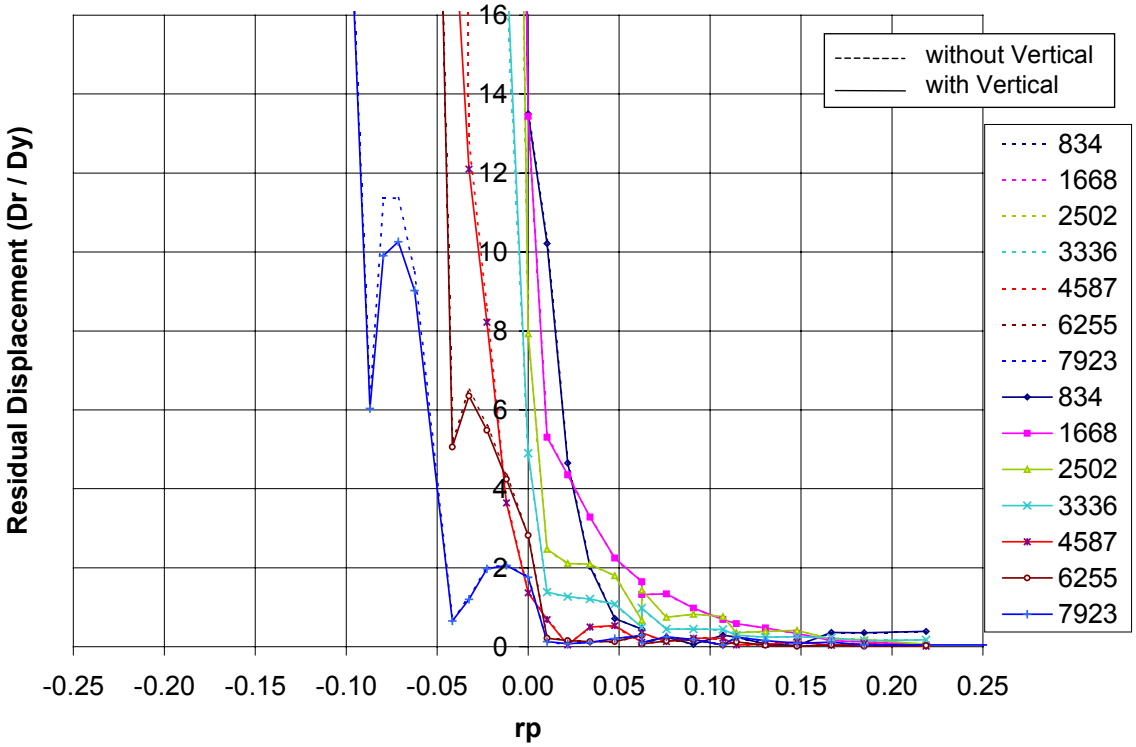


Figure C3.3.4.4a – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

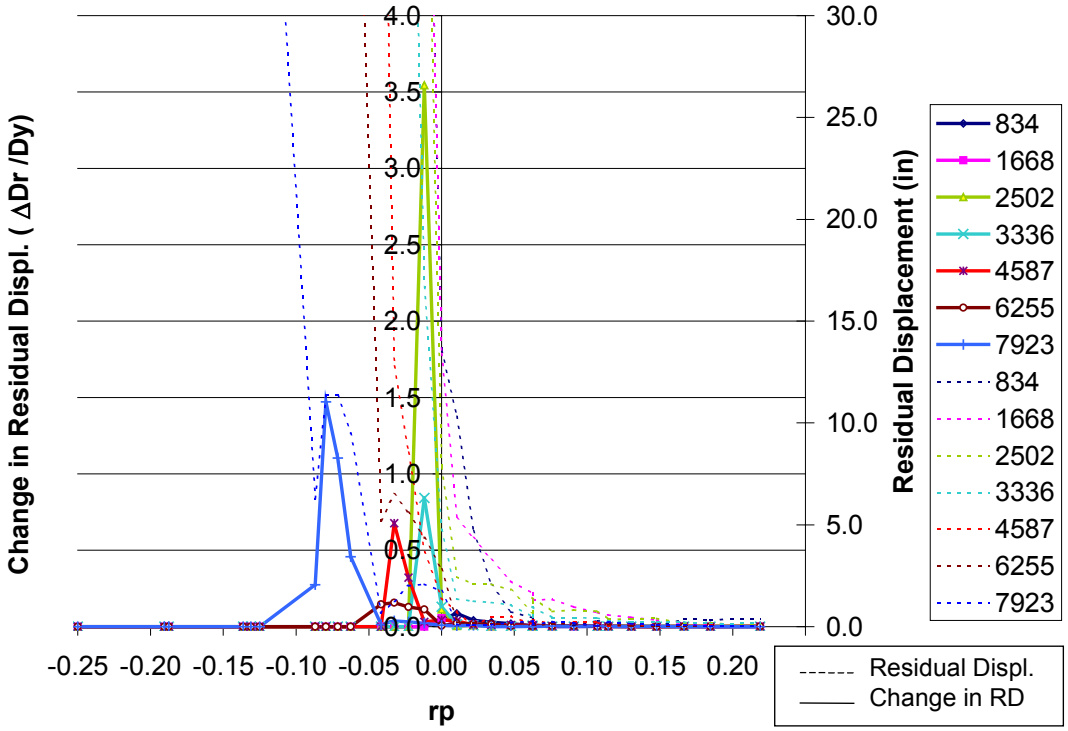


Figure C3.3.4.4b – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

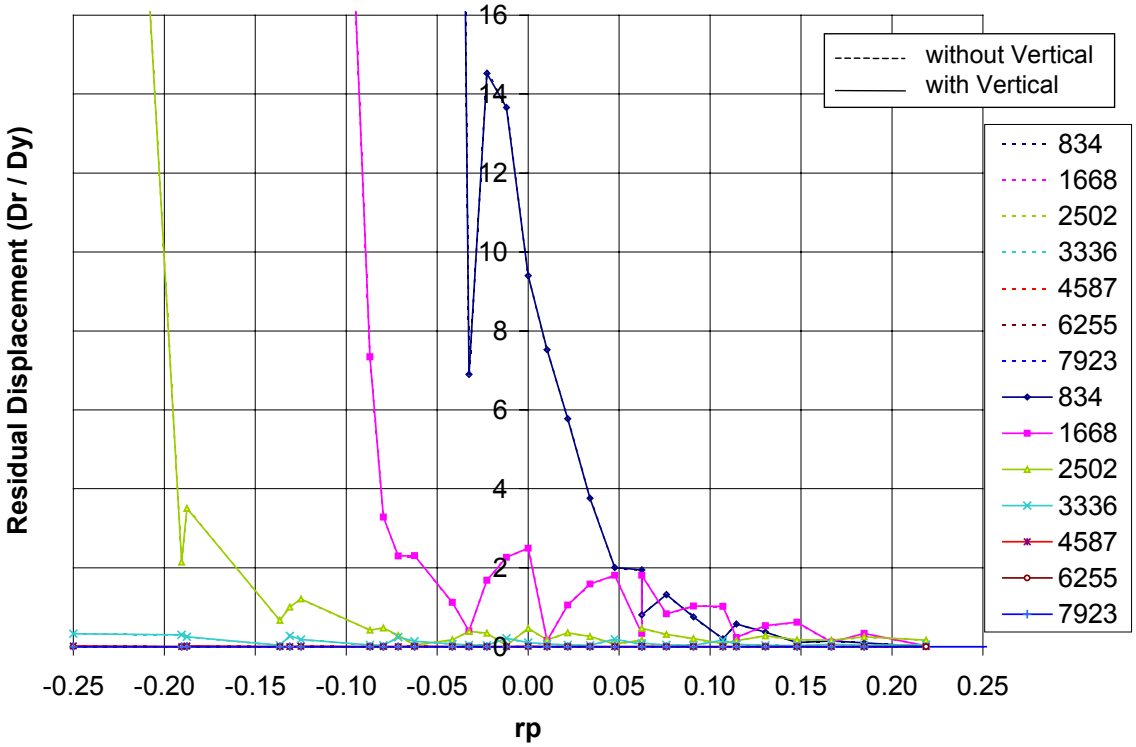


Figure C3.3.5.1a – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

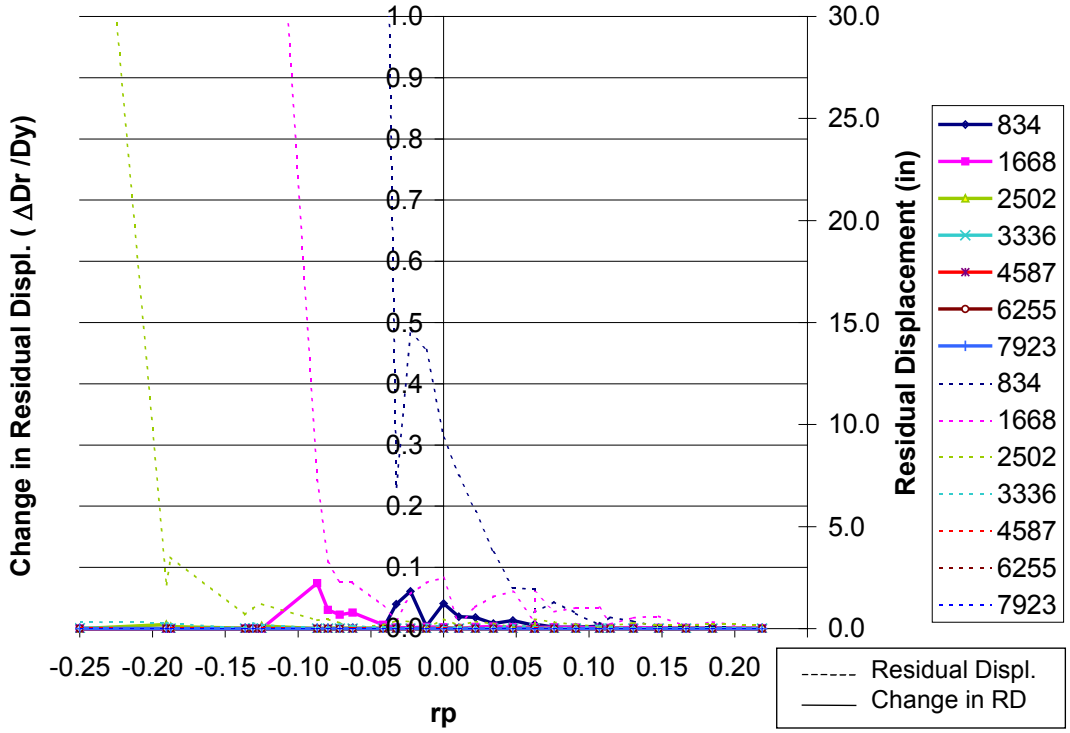


Figure C3.3.5.1b – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

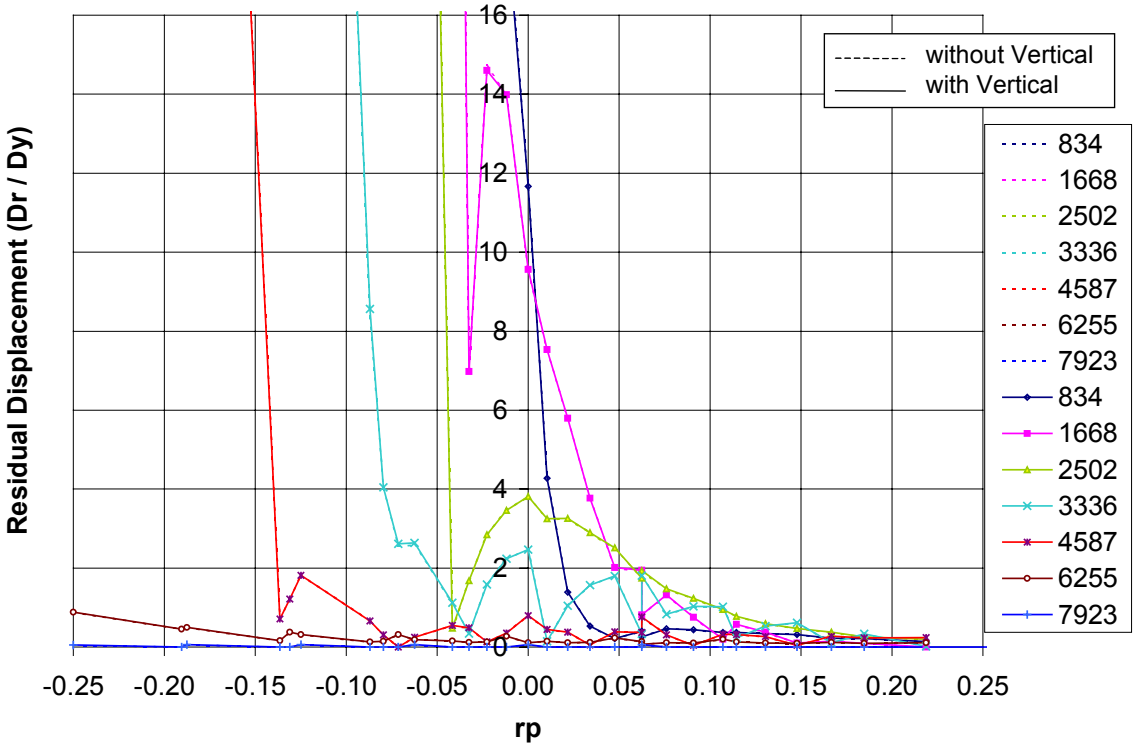


Figure C3.3.5.2a – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

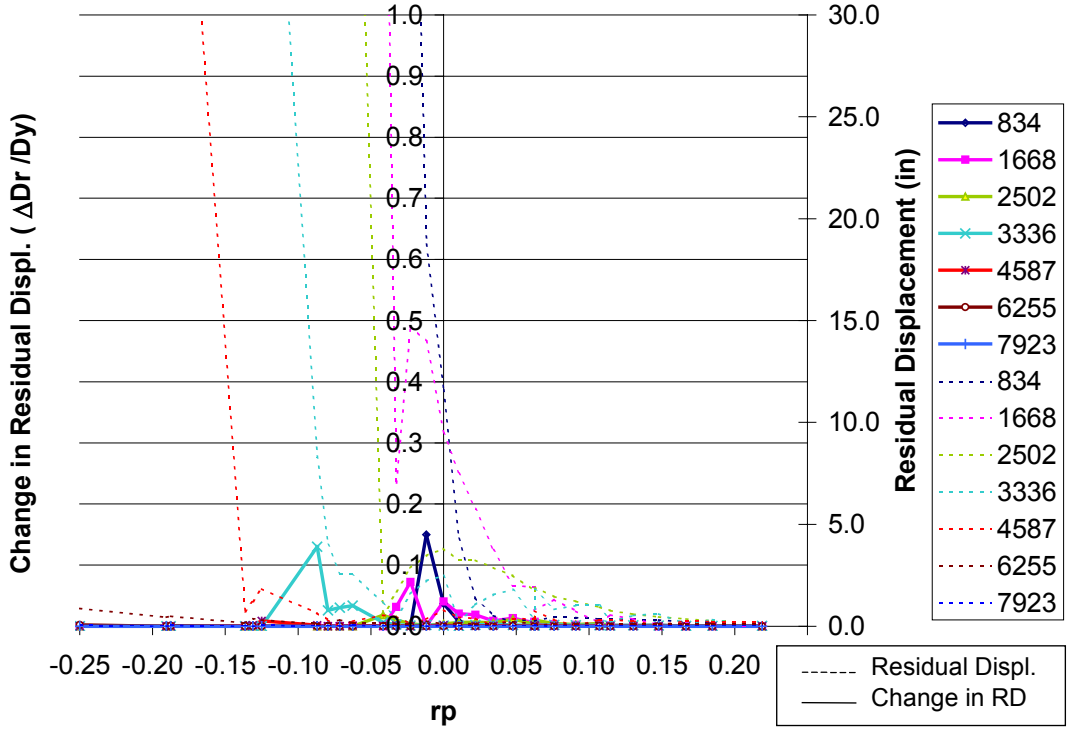


Figure C3.3.5.2b – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

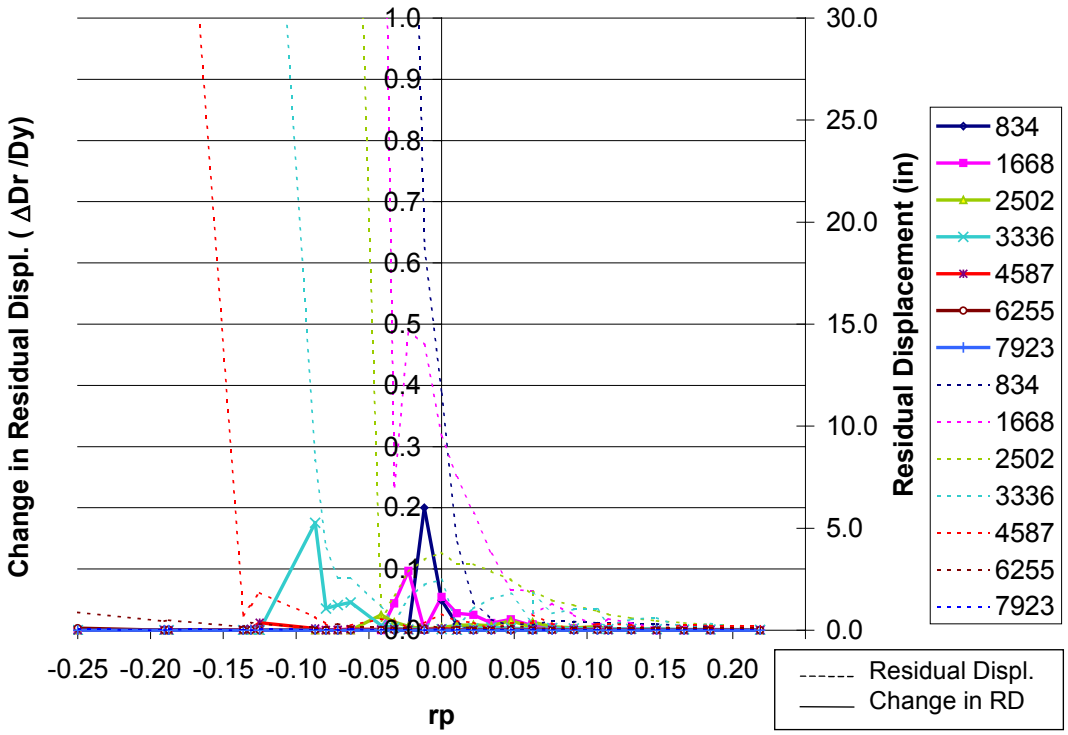


Figure C3.3.5.2c – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

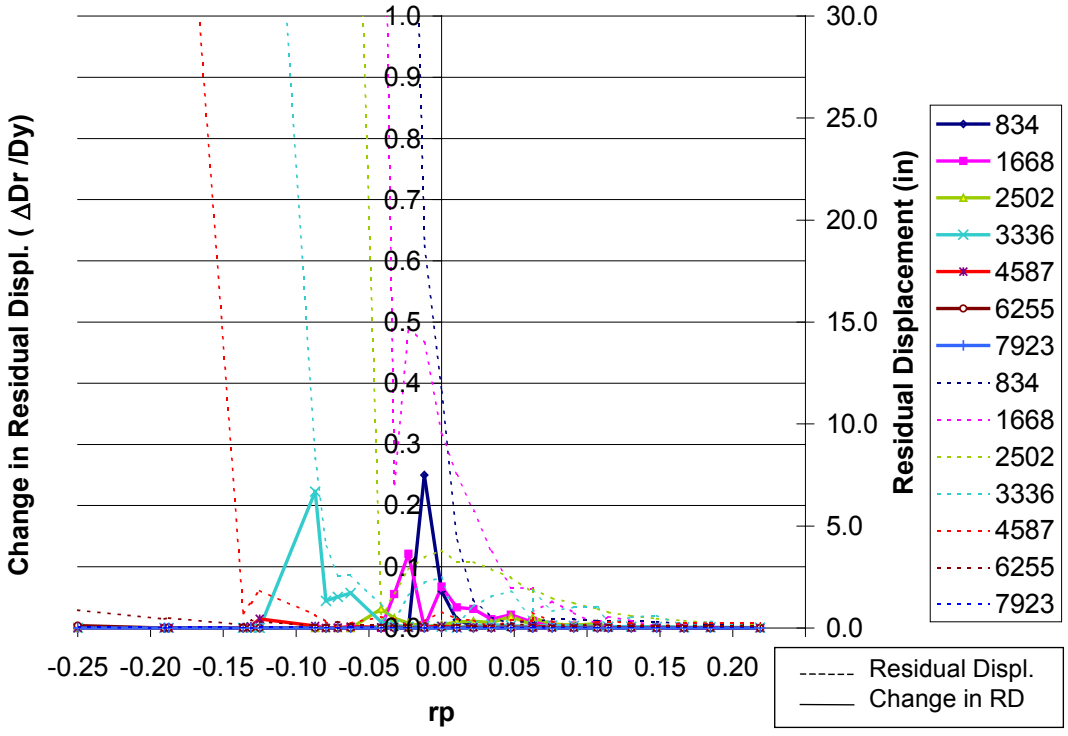


Figure C3.3.5.2d – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

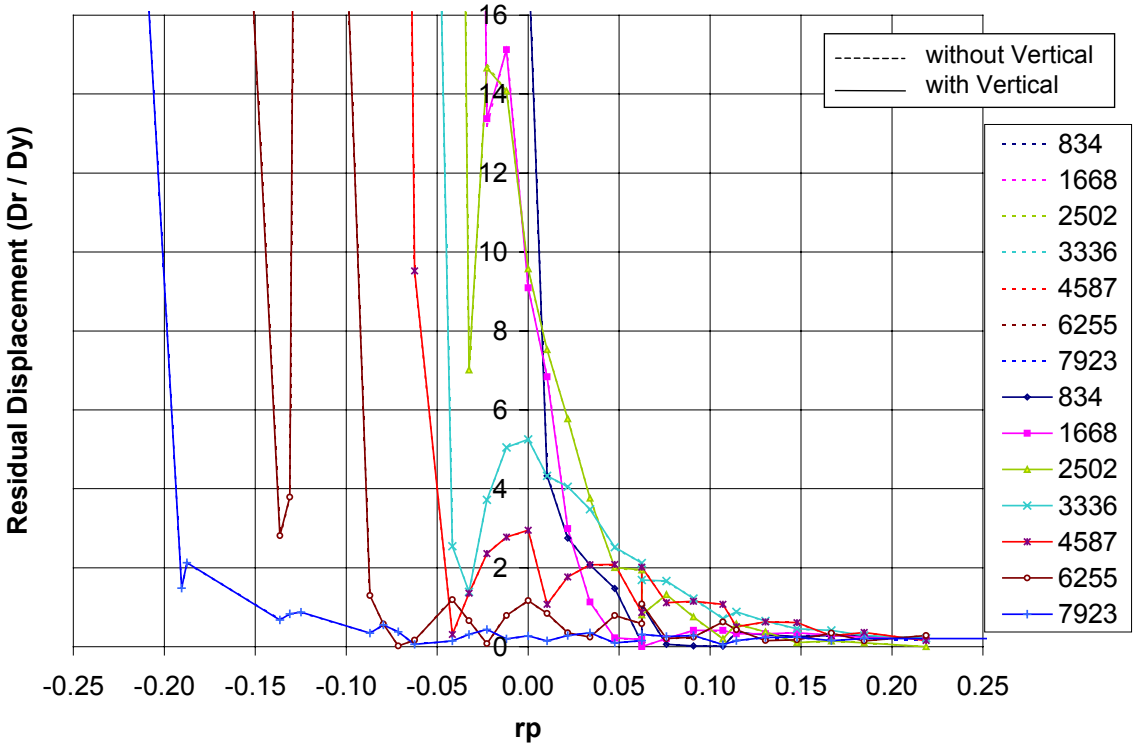


Figure C3.3.5.3a – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

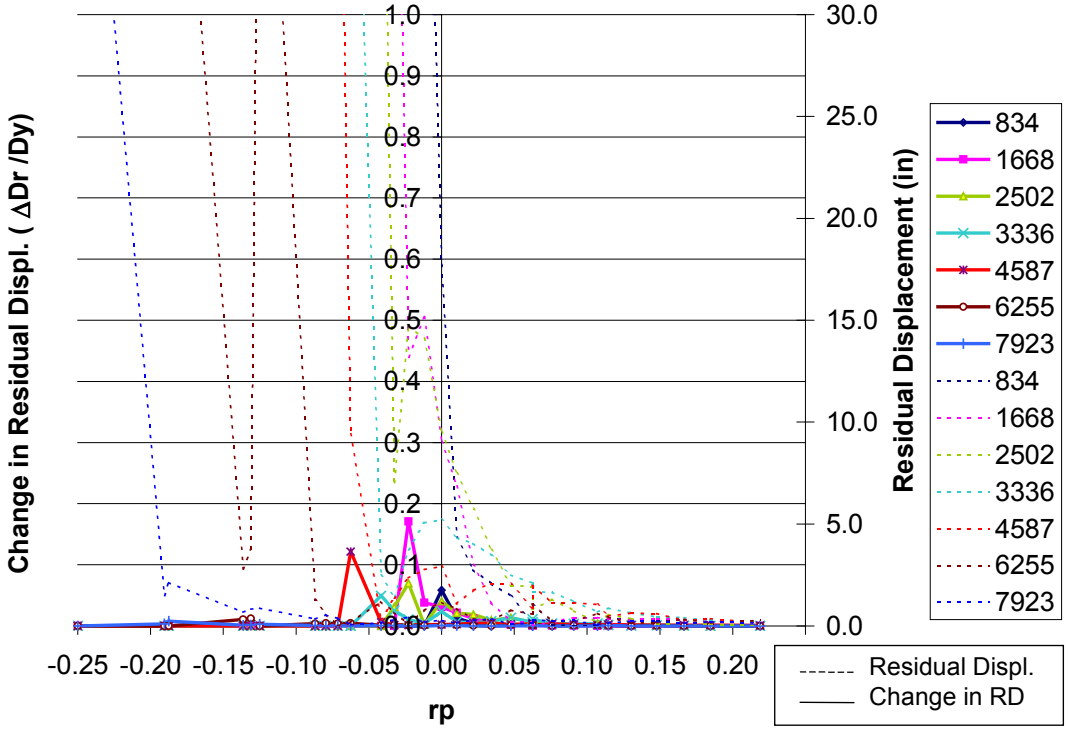


Figure C3.3.5.3b – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

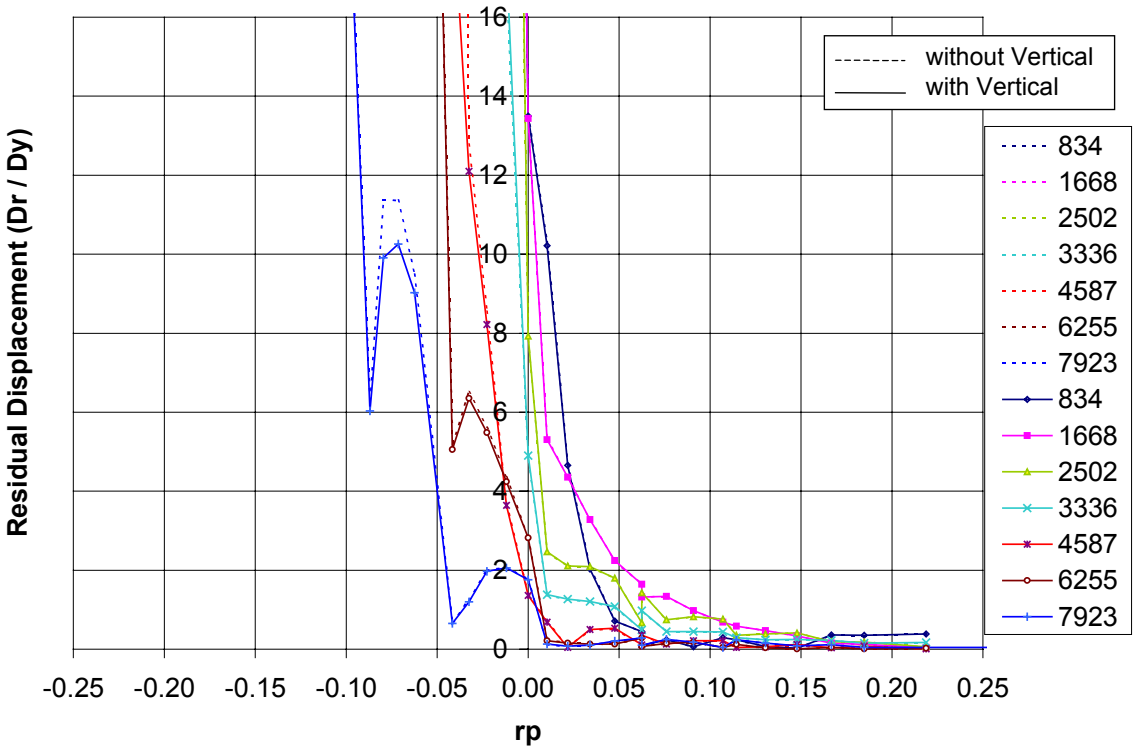


Figure C3.3.5.4a – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

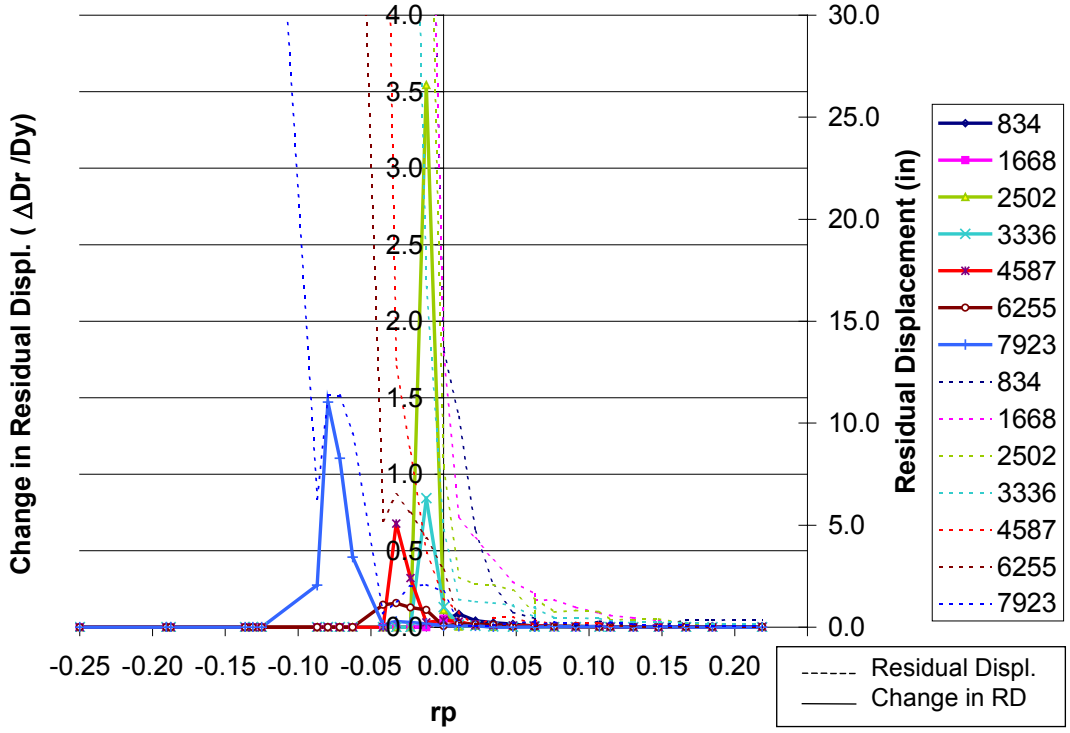


Figure C3.3.5.4b – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

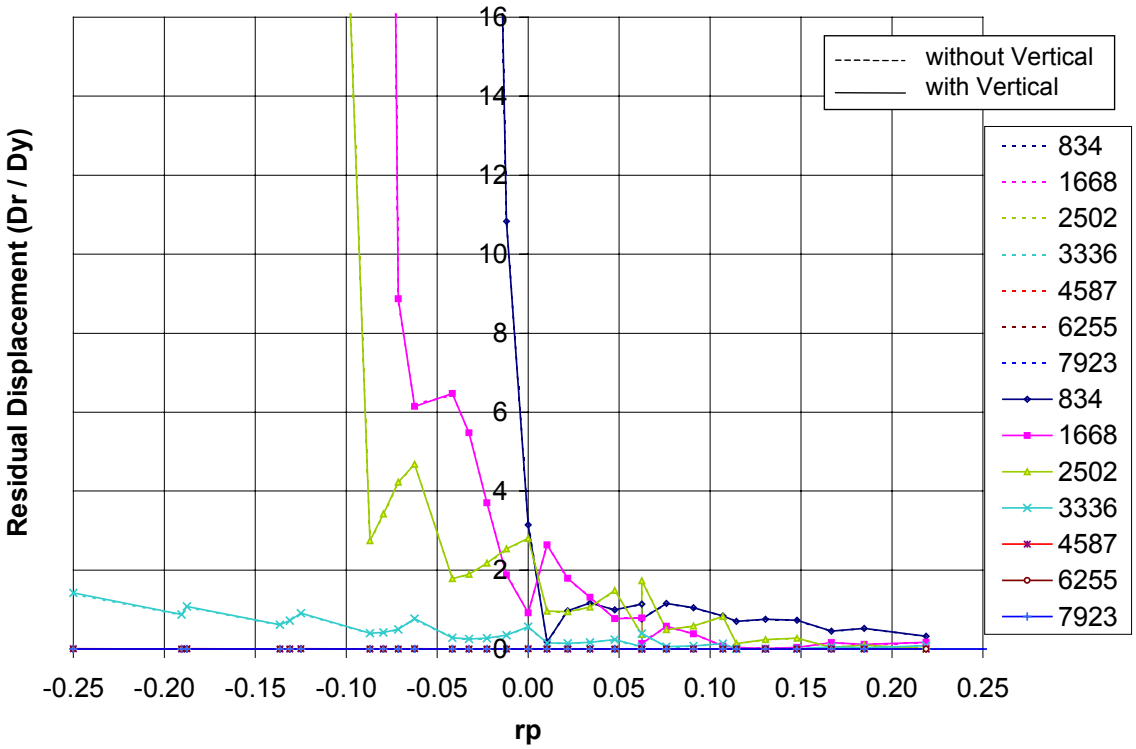


Figure C3.3.6.1a – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

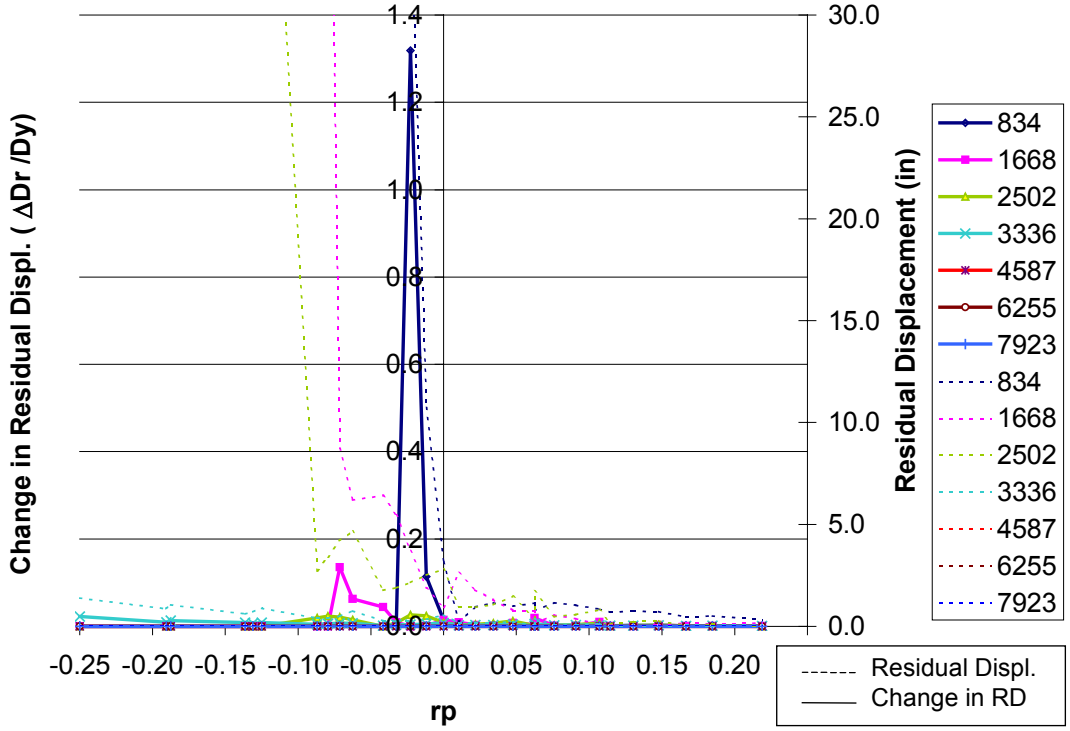


Figure C3.3.6.1b – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

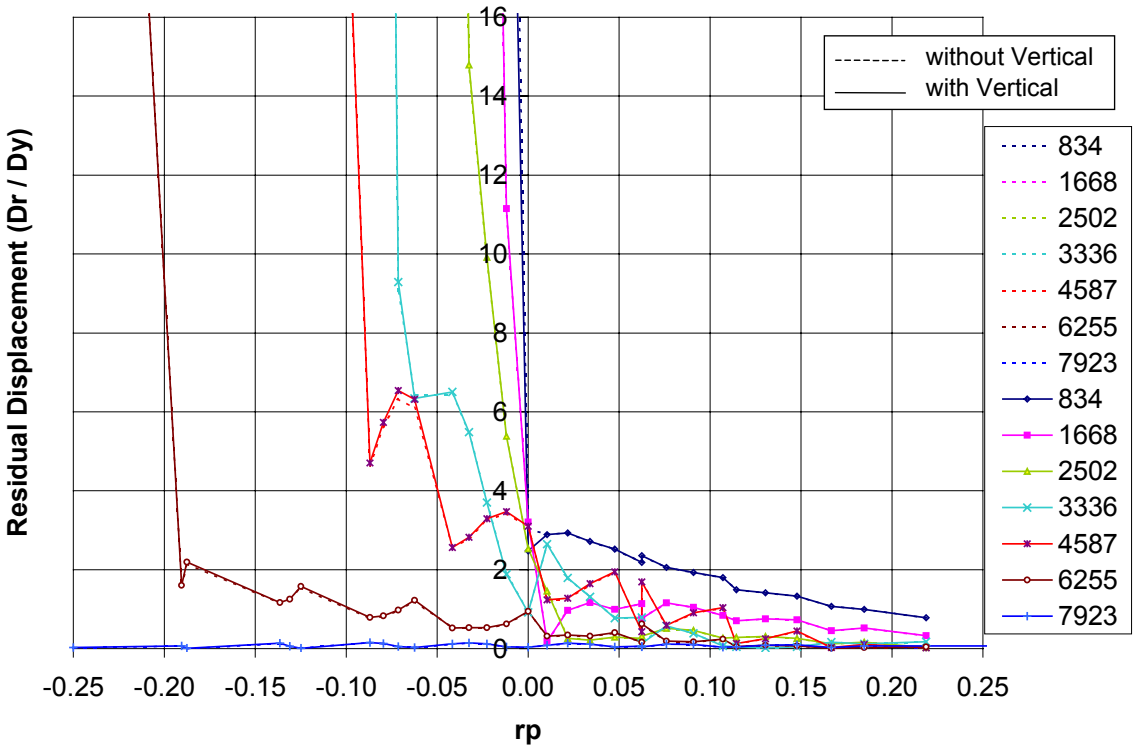


Figure C3.3.6.2a – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

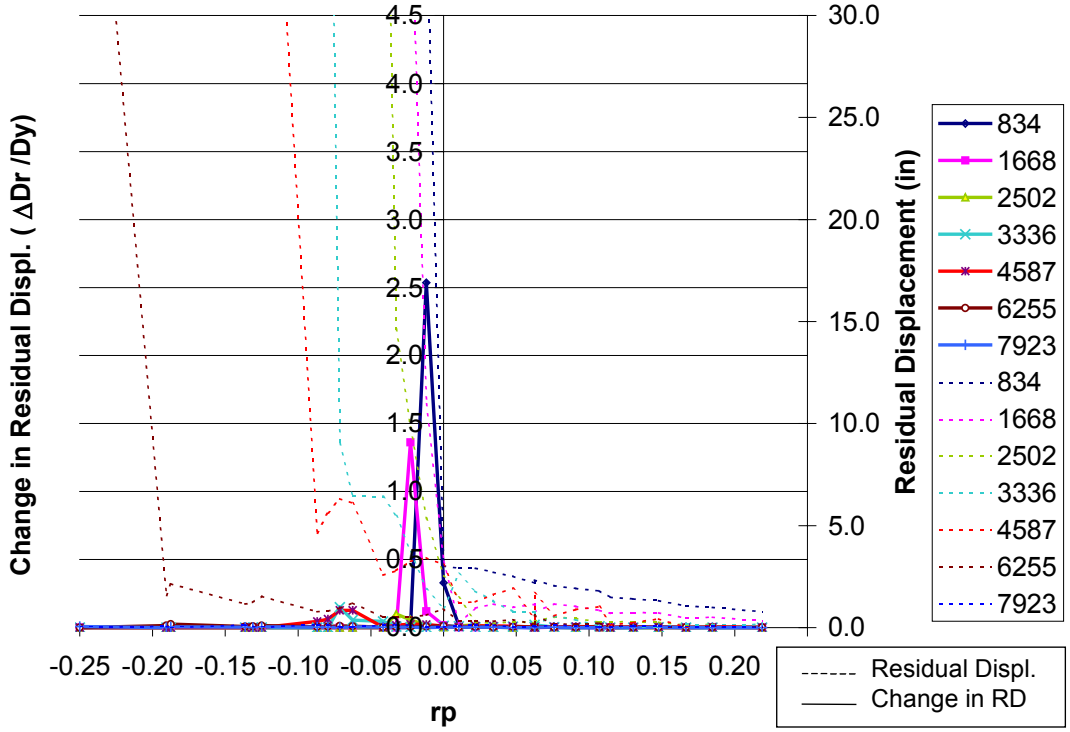


Figure C3.3.6.2b – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

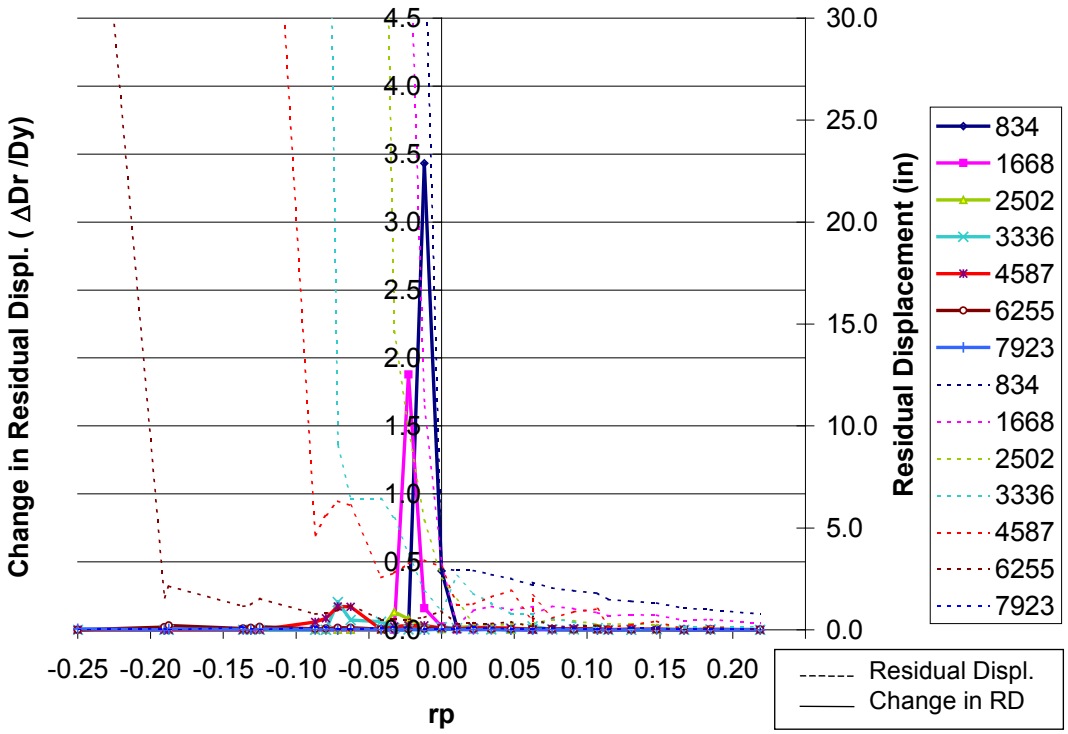


Figure C3.3.6.2c – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

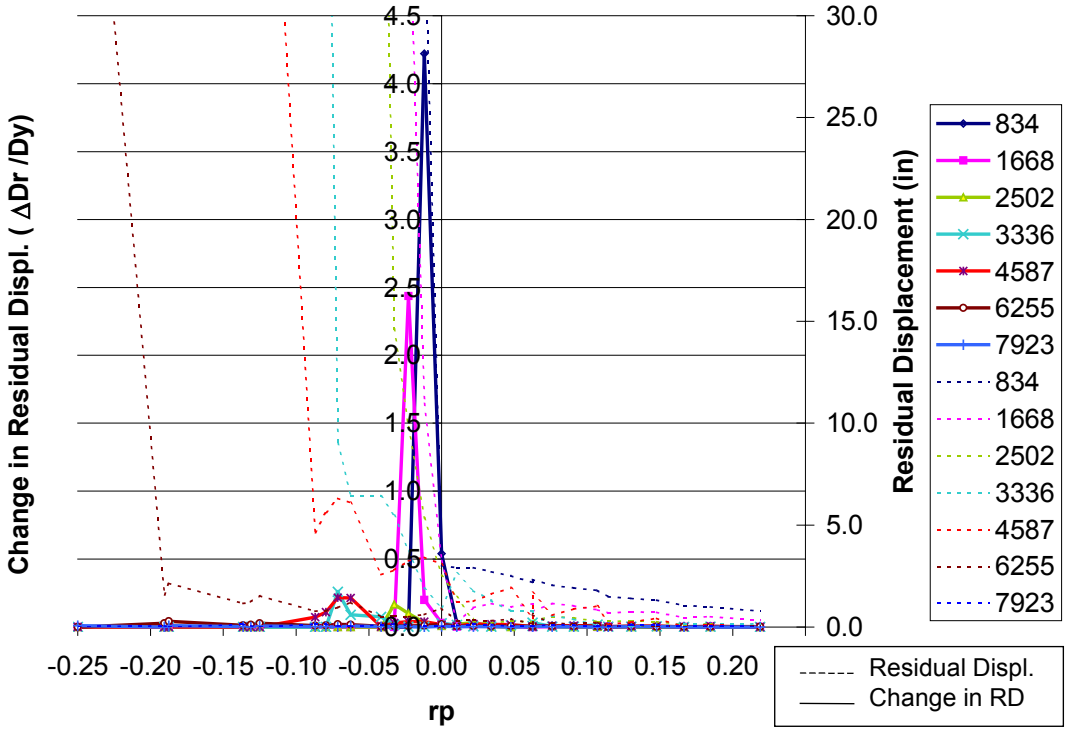


Figure C3.3.6.2d – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

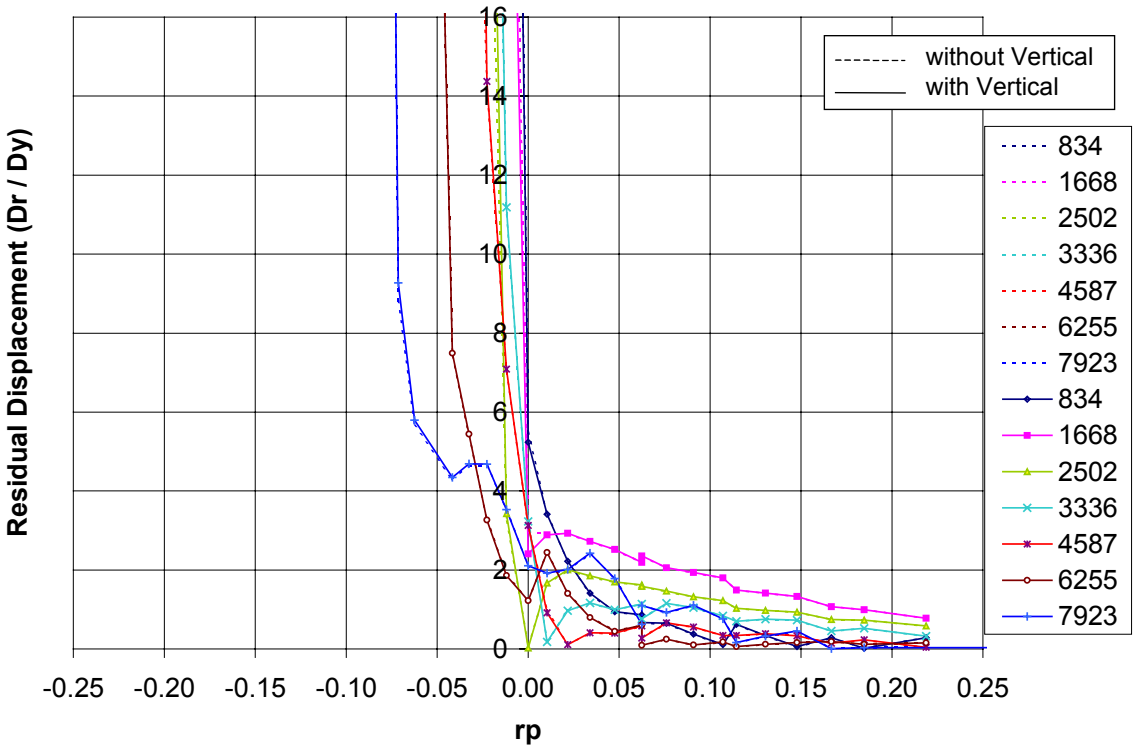


Figure C3.3.6.3a – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

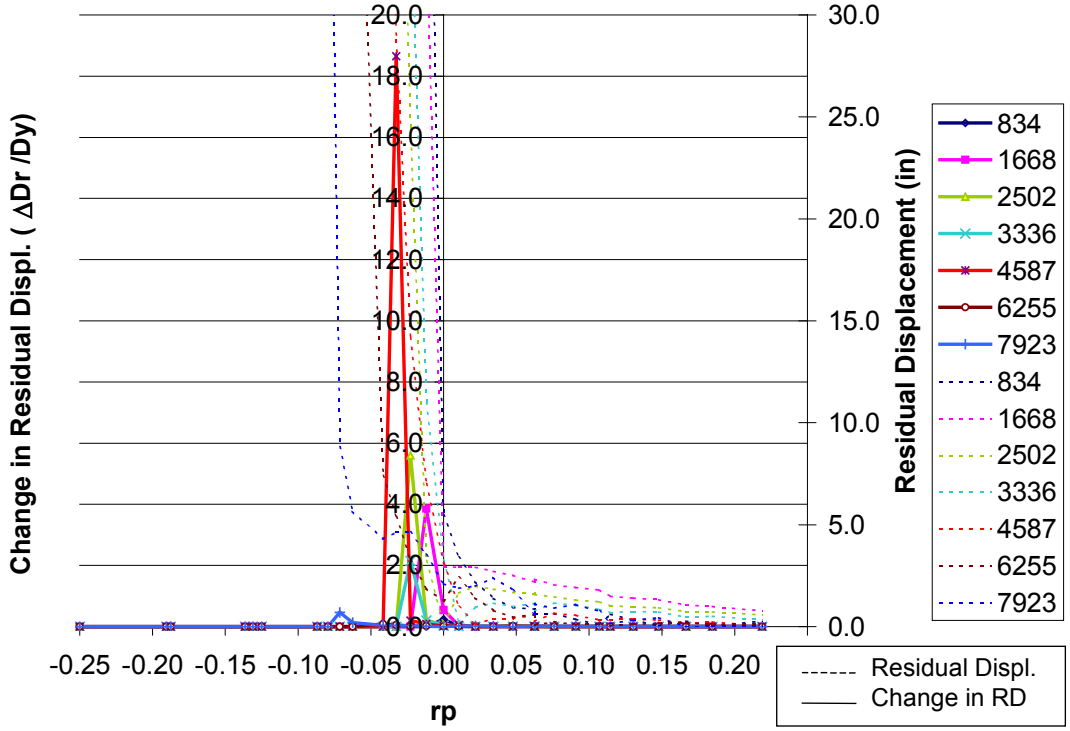


Figure C3.3.6.3b – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

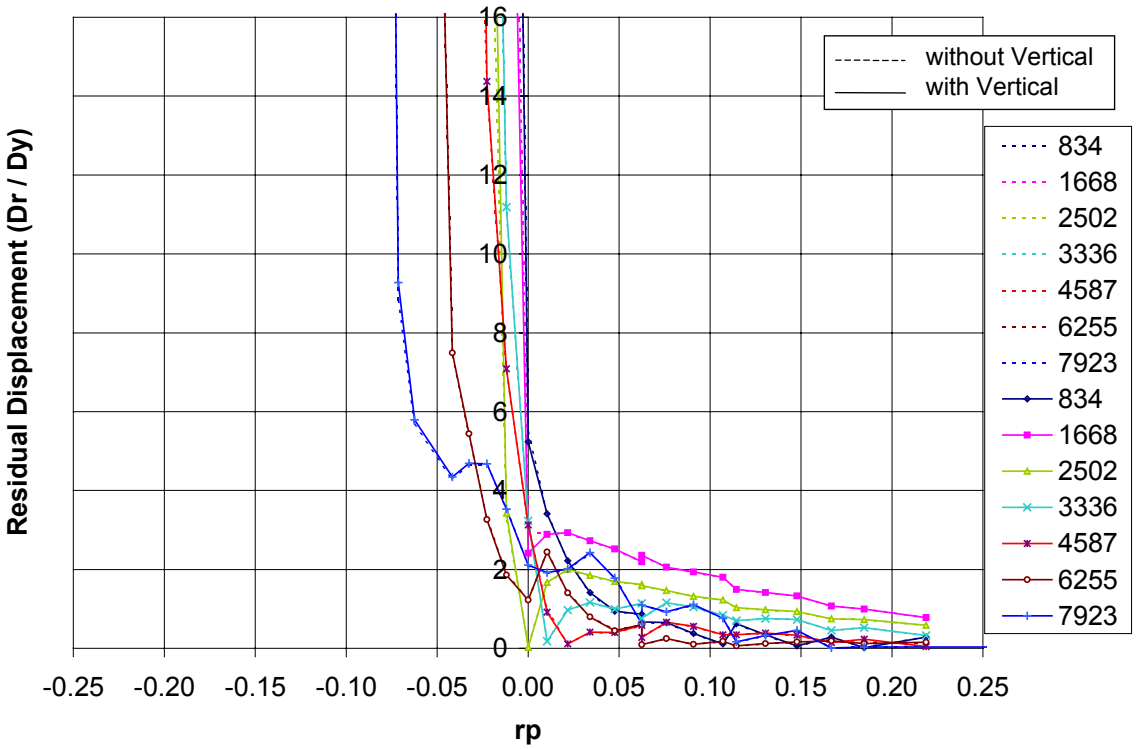


Figure C3.3.6.4a – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

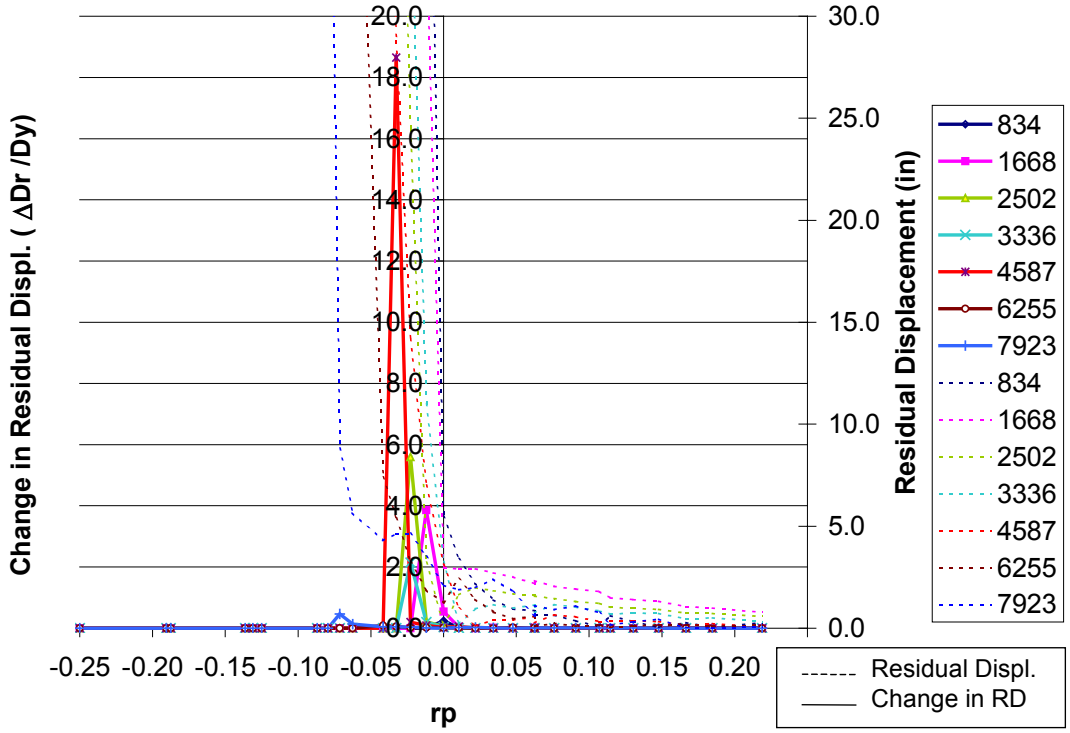


Figure C3.3.6.4b – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

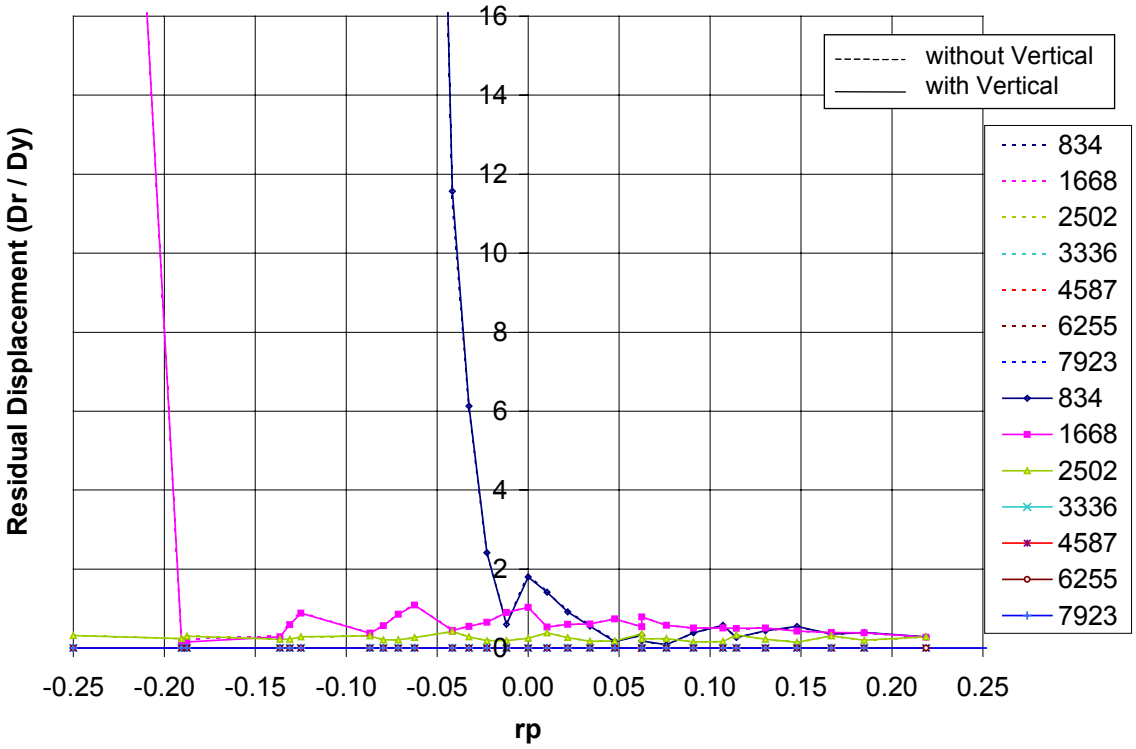


Figure C3.3.7.1a – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

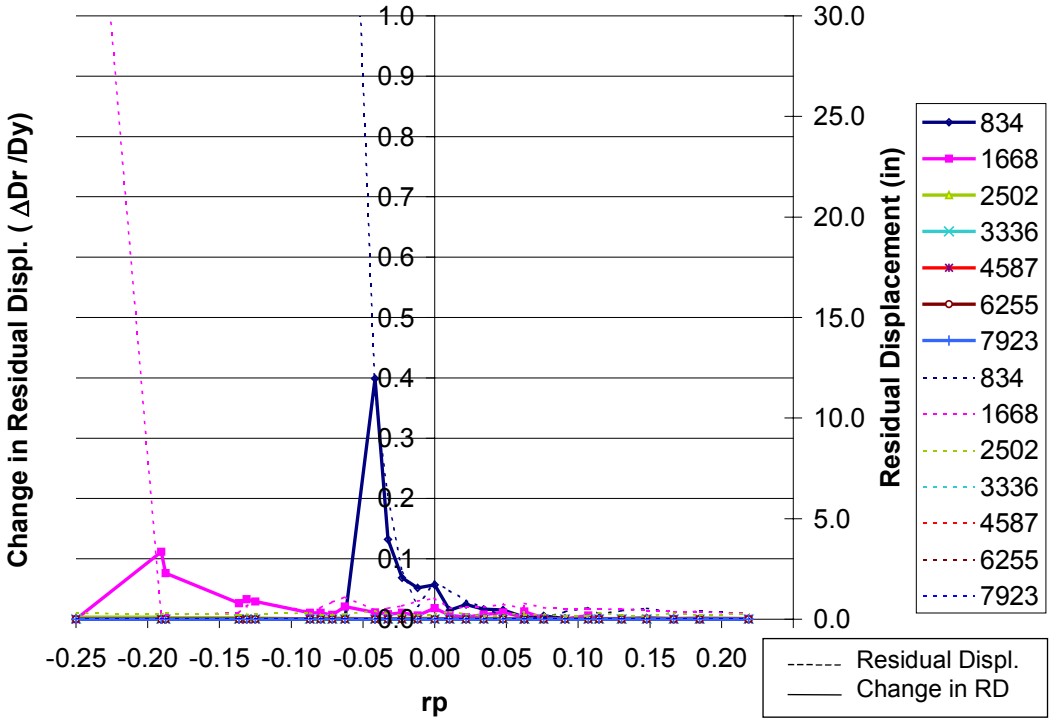


Figure C3.3.7.1b – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

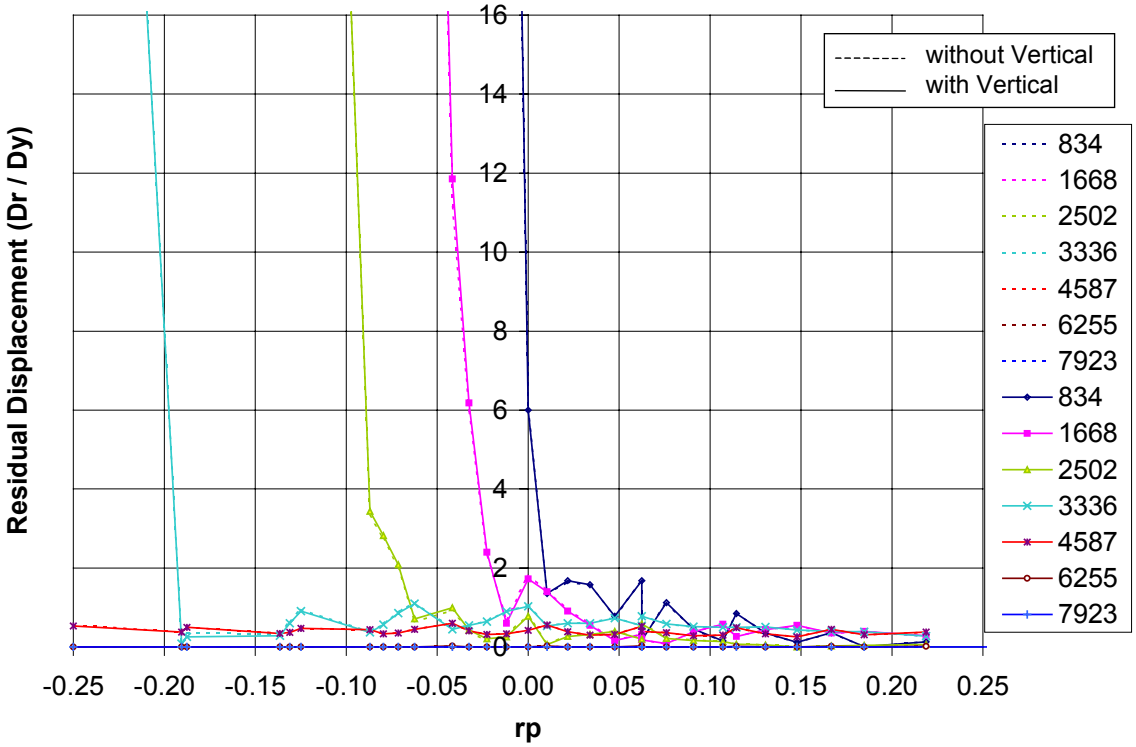


Figure C3.3.7.2a – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

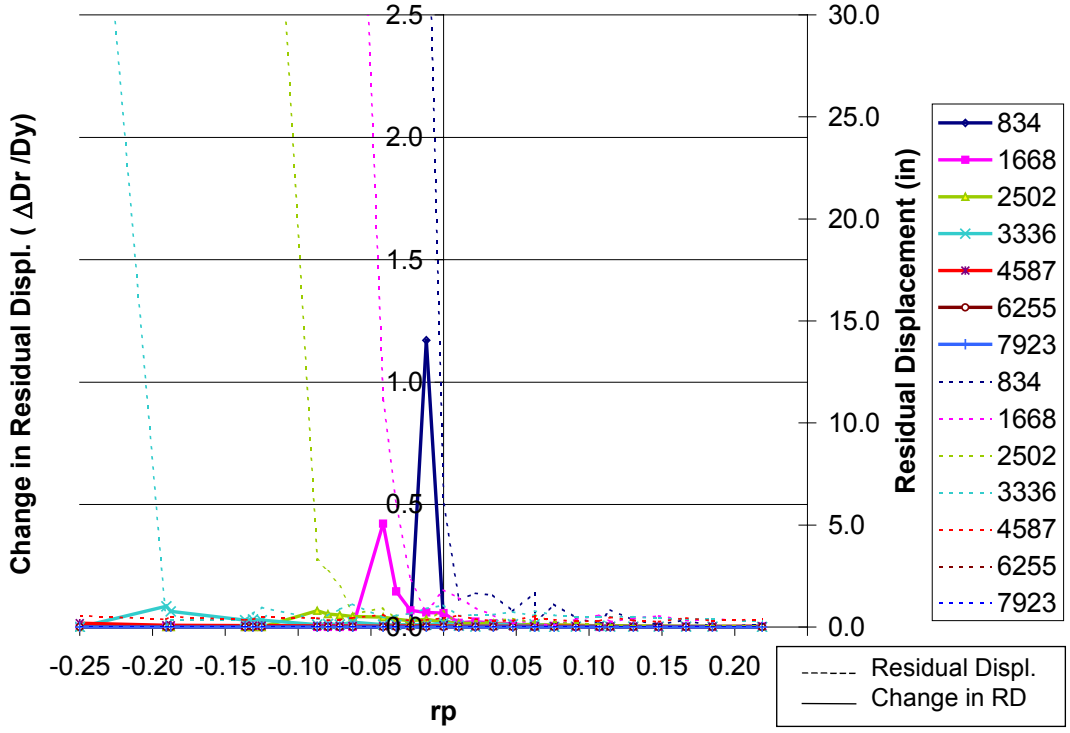


Figure C3.3.7.2b – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

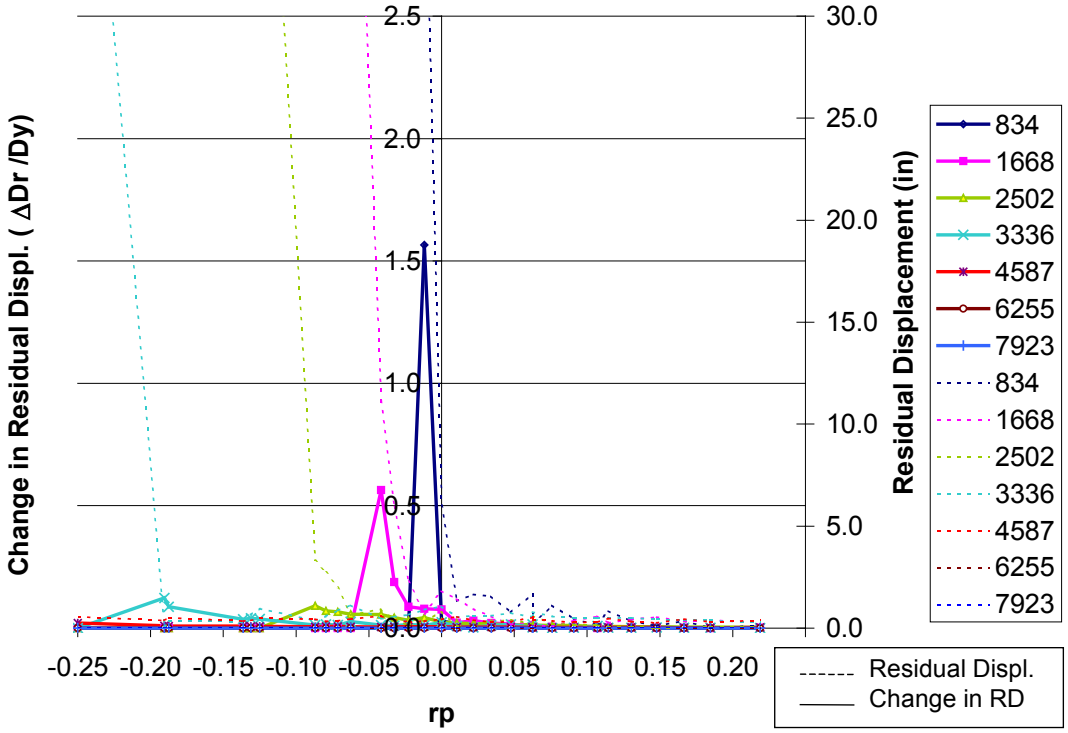


Figure C3.3.7.2c – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

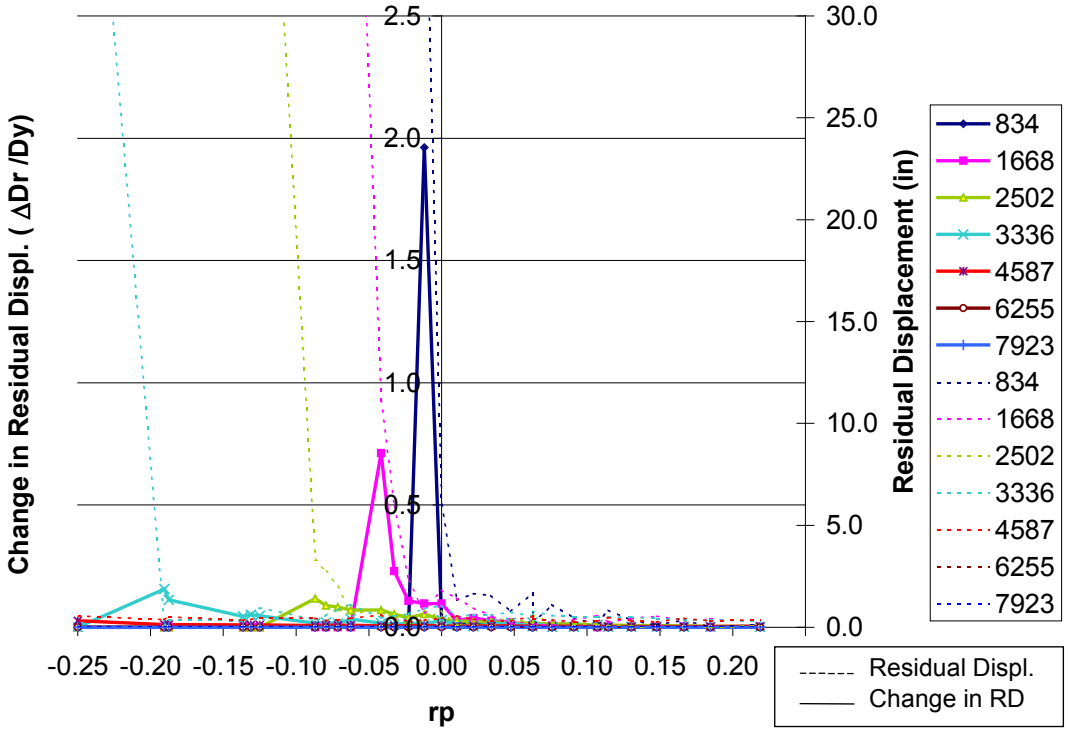


Figure C3.3.7.2d – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

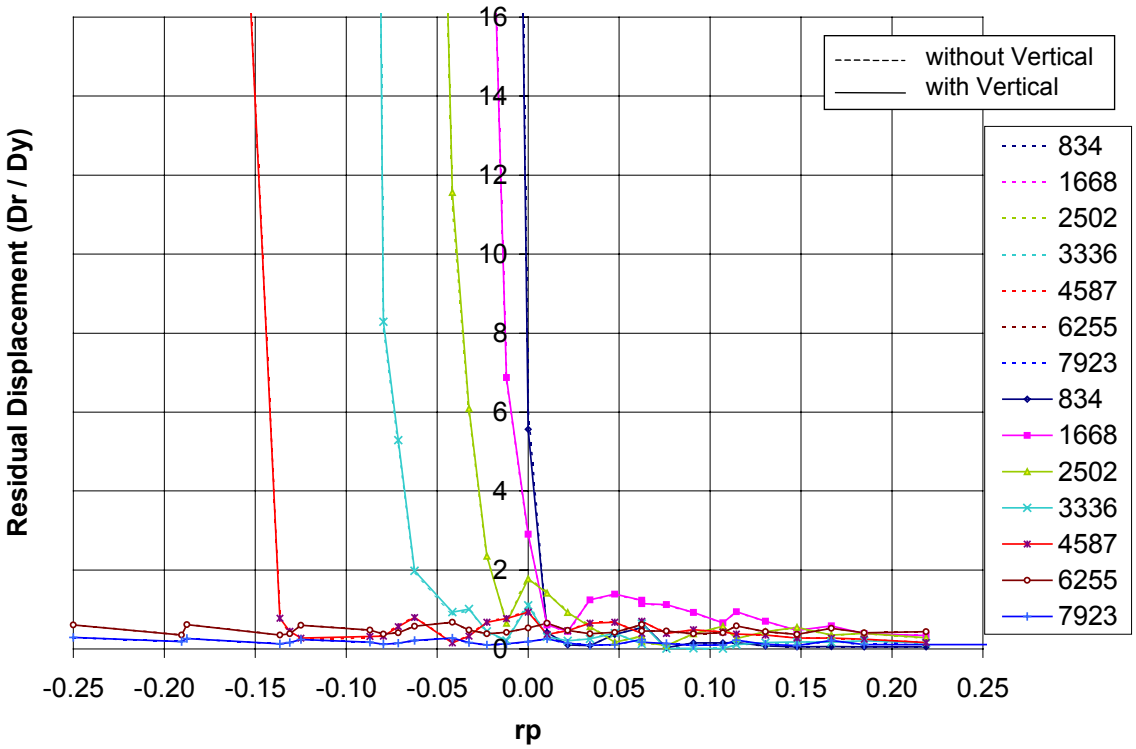


Figure C3.3.7.3a – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

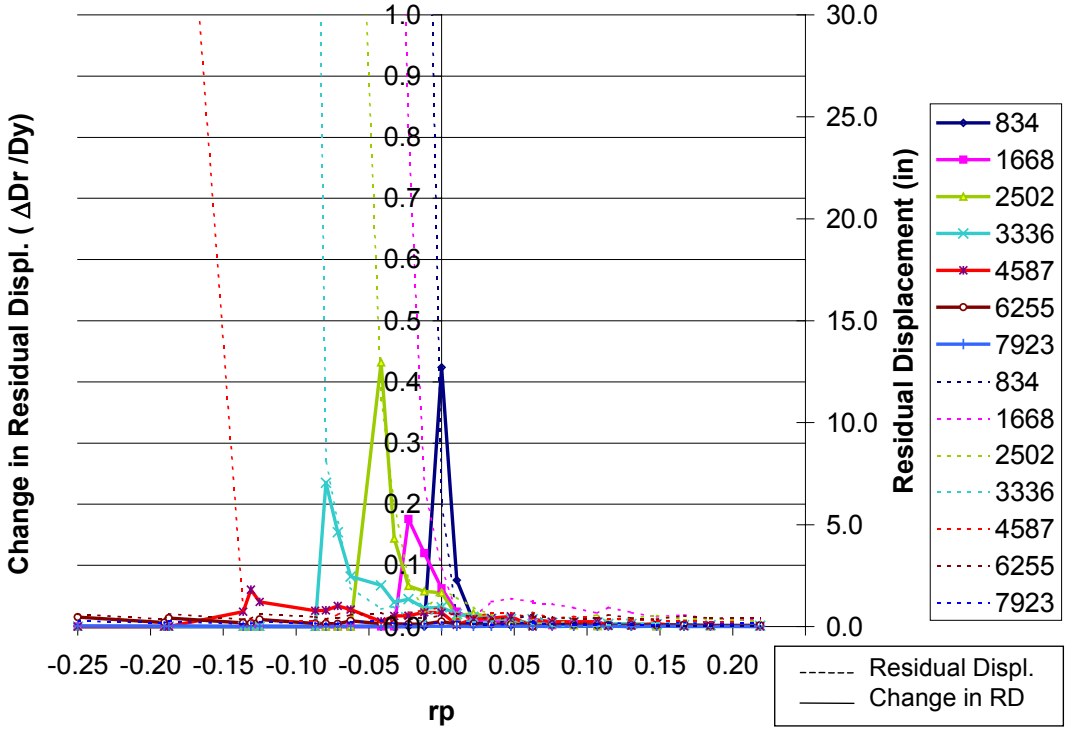


Figure C3.3.7.3b – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

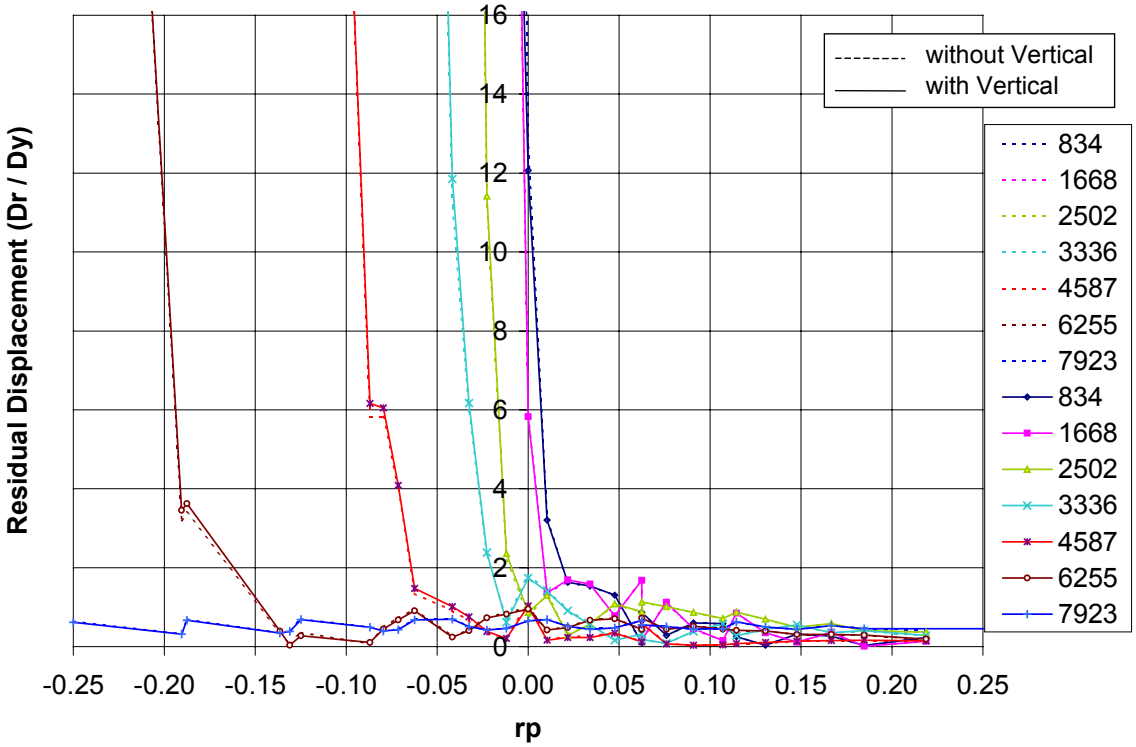


Figure C3.3.7.4a – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

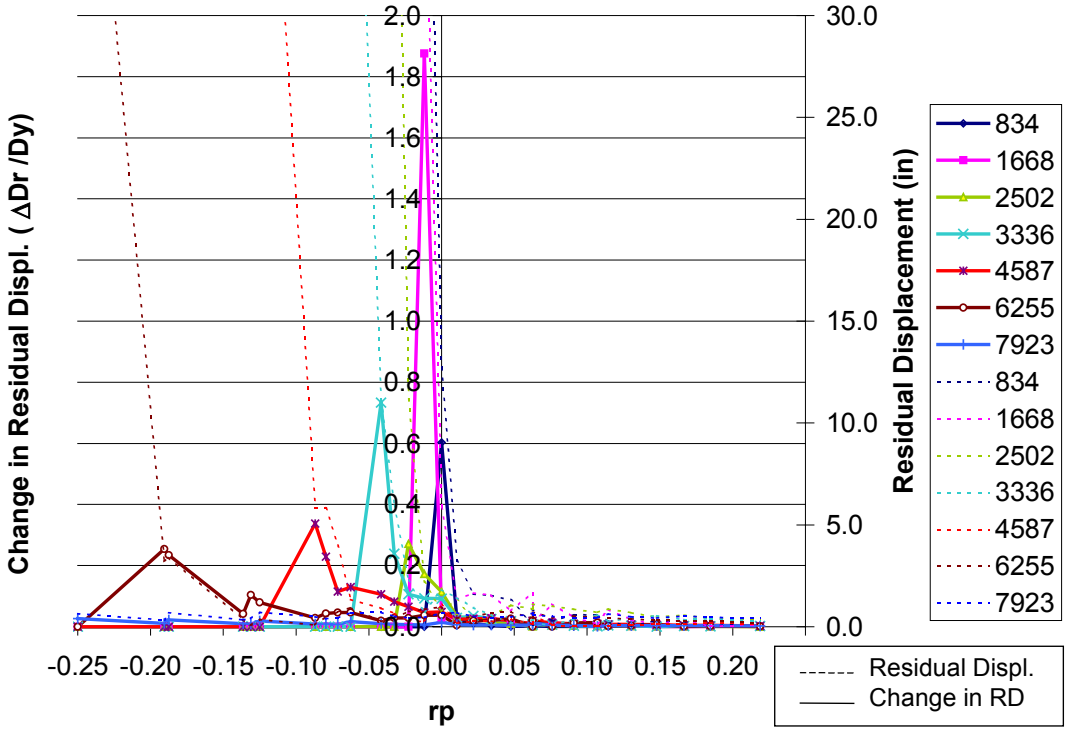


Figure C3.3.7.4b – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

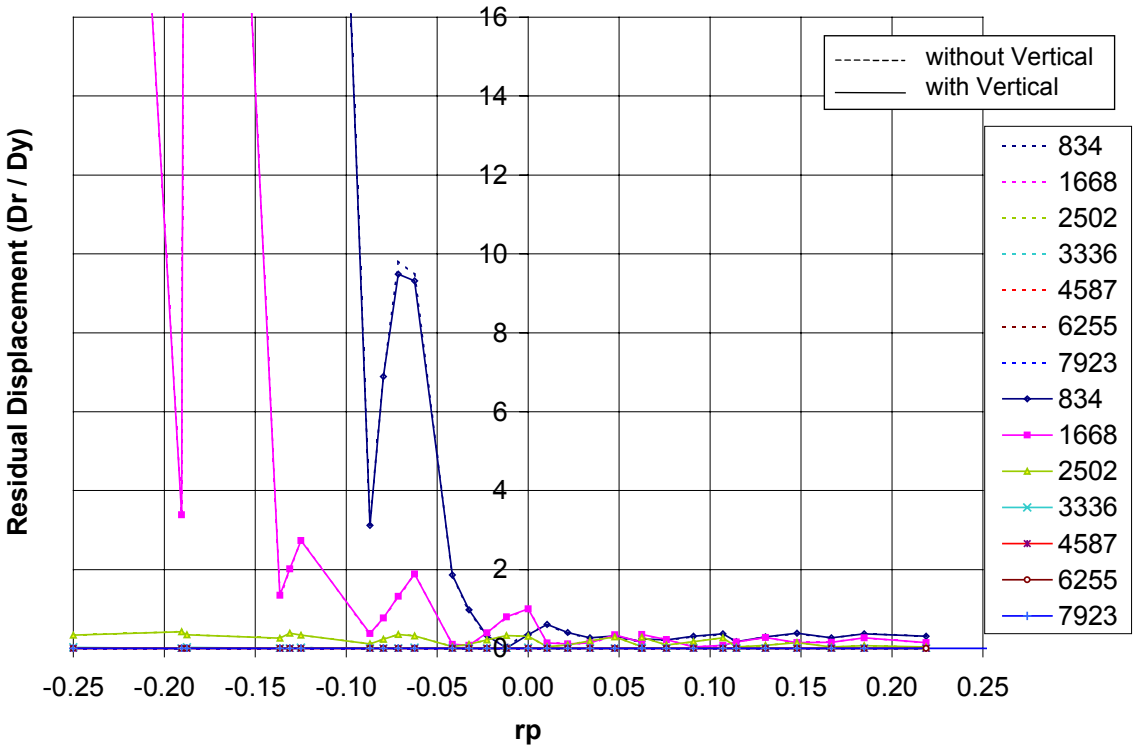


Figure C3.3.8.1a – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

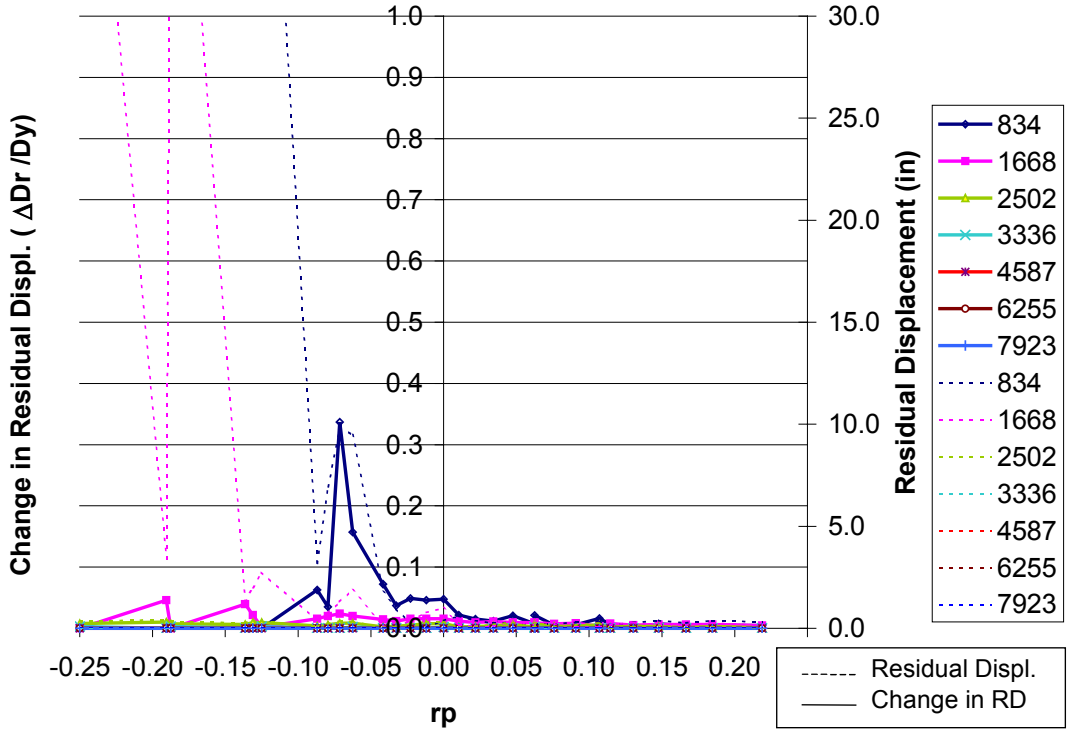


Figure C3.3.8.1b – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

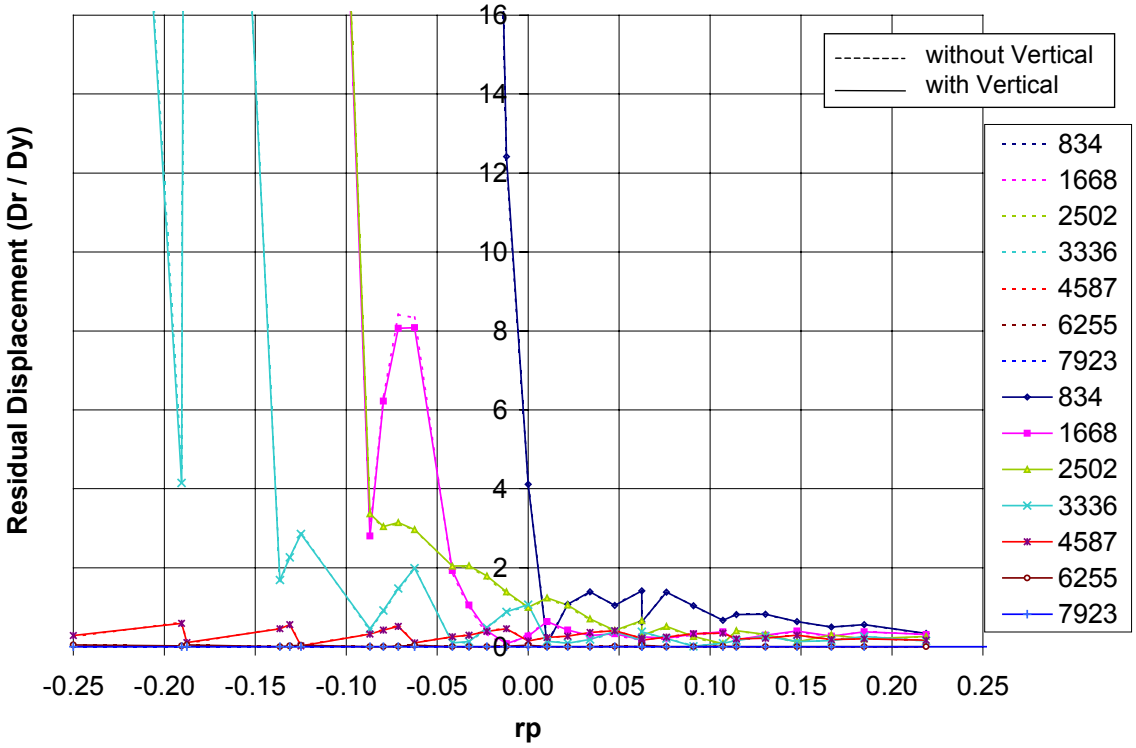


Figure C3.3.8.2a – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

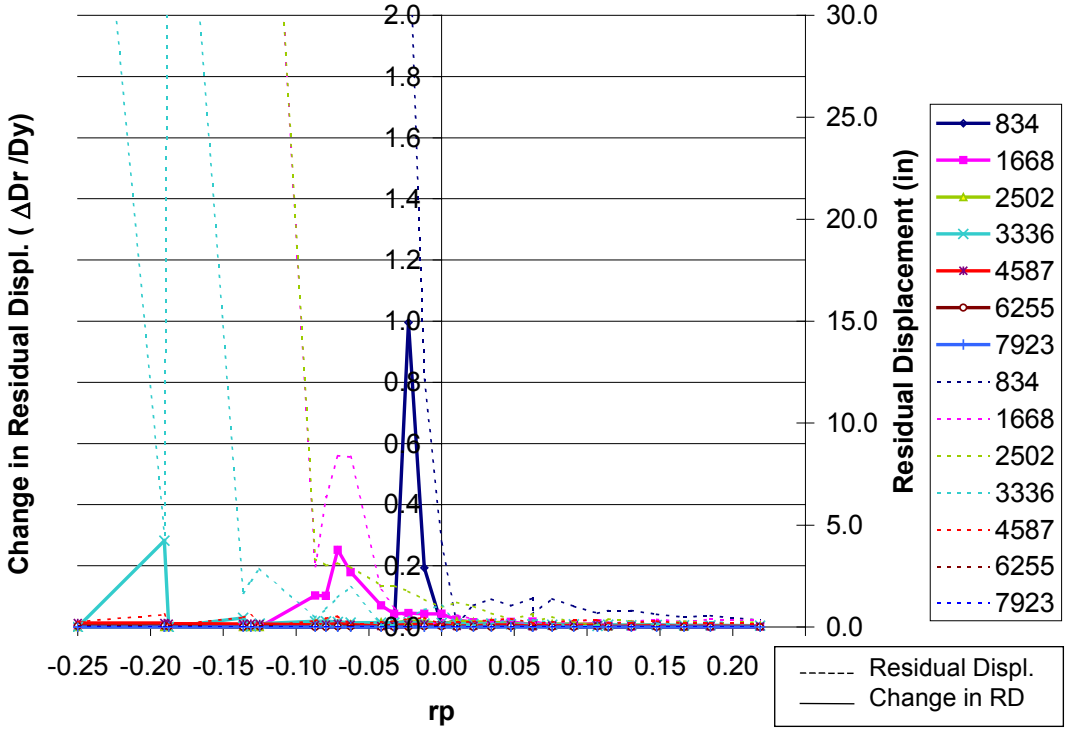


Figure C3.3.8.2b – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

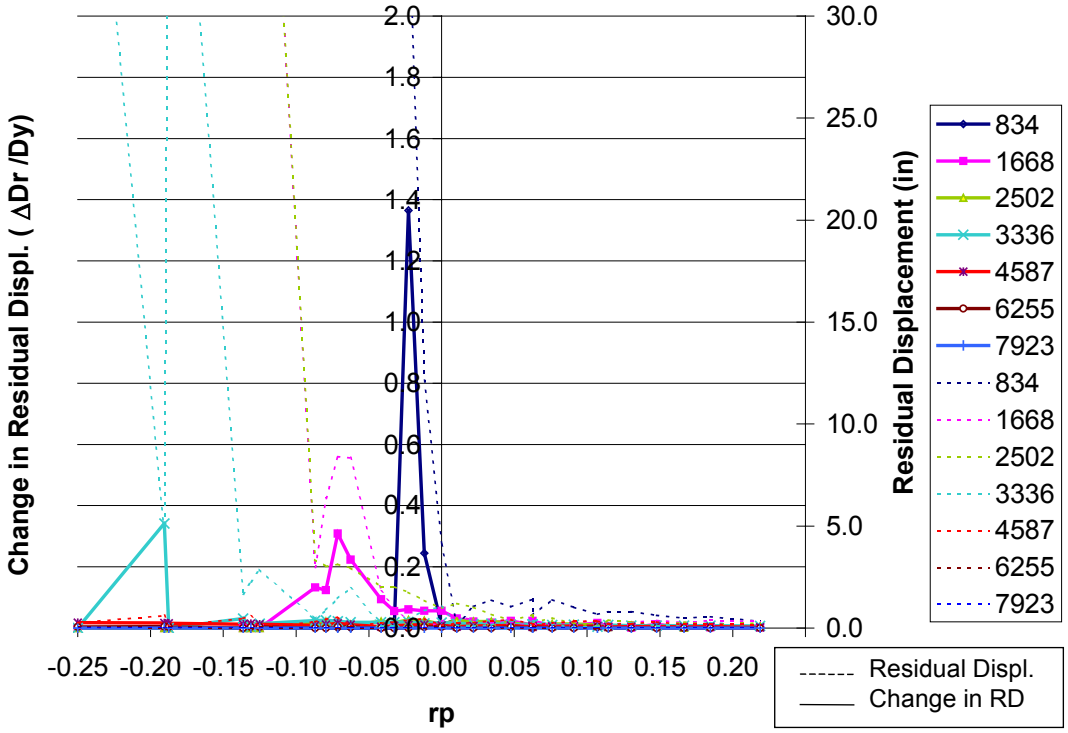


Figure C3.3.8.2c – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

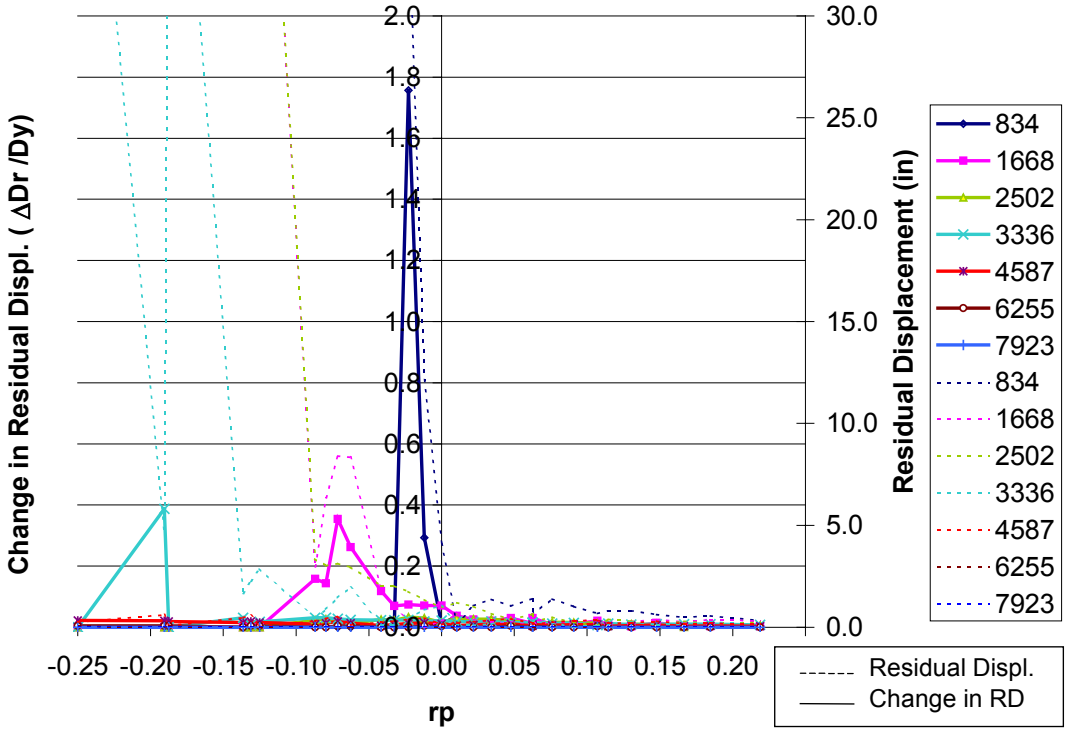


Figure C3.3.8.2d – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

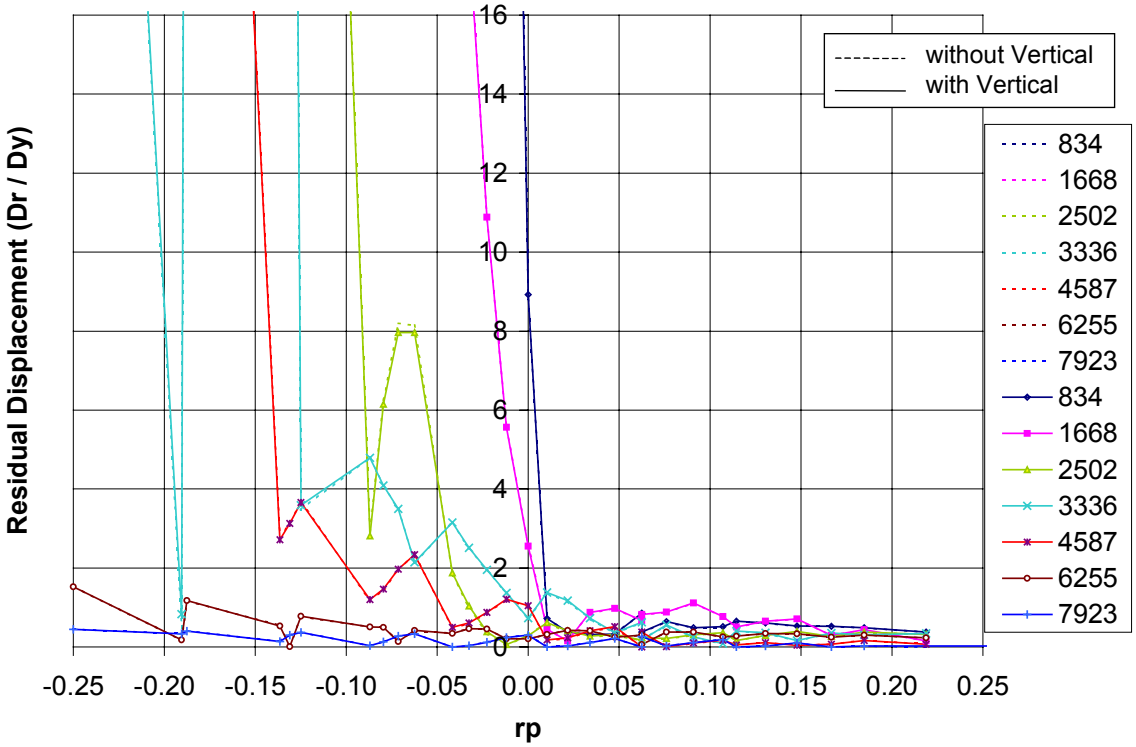


Figure C3.3.8.3a – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

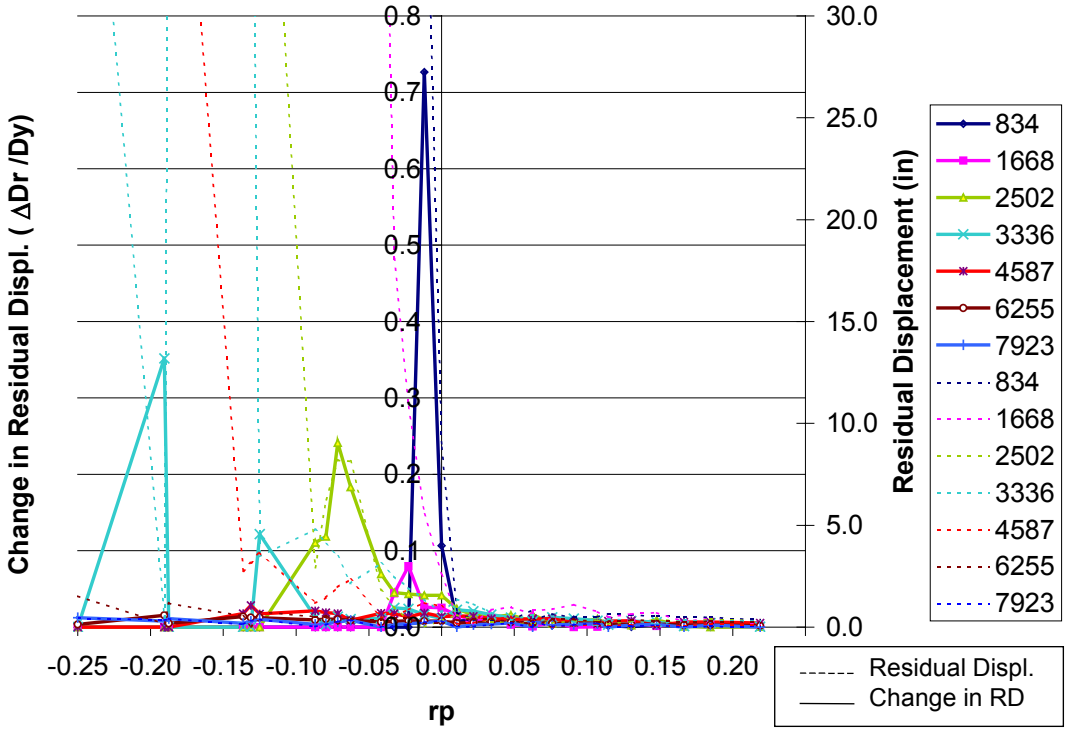


Figure C3.3.8.3b – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

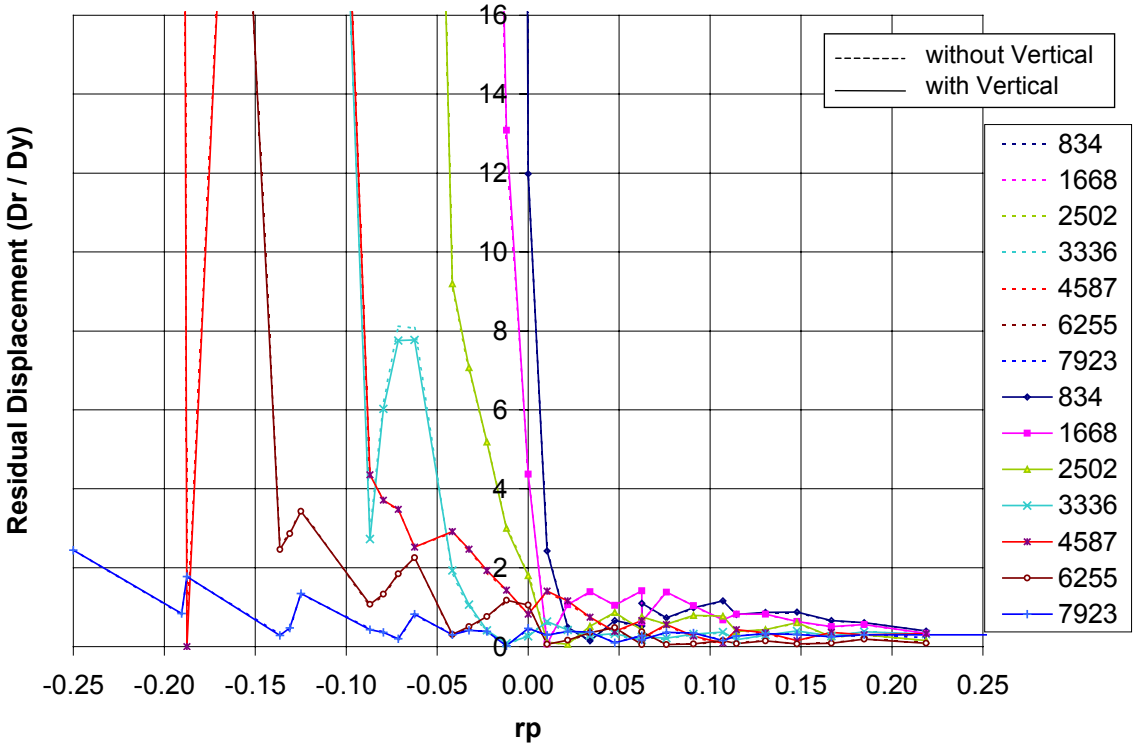


Figure C3.3.8.4a – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.705 Seconds.

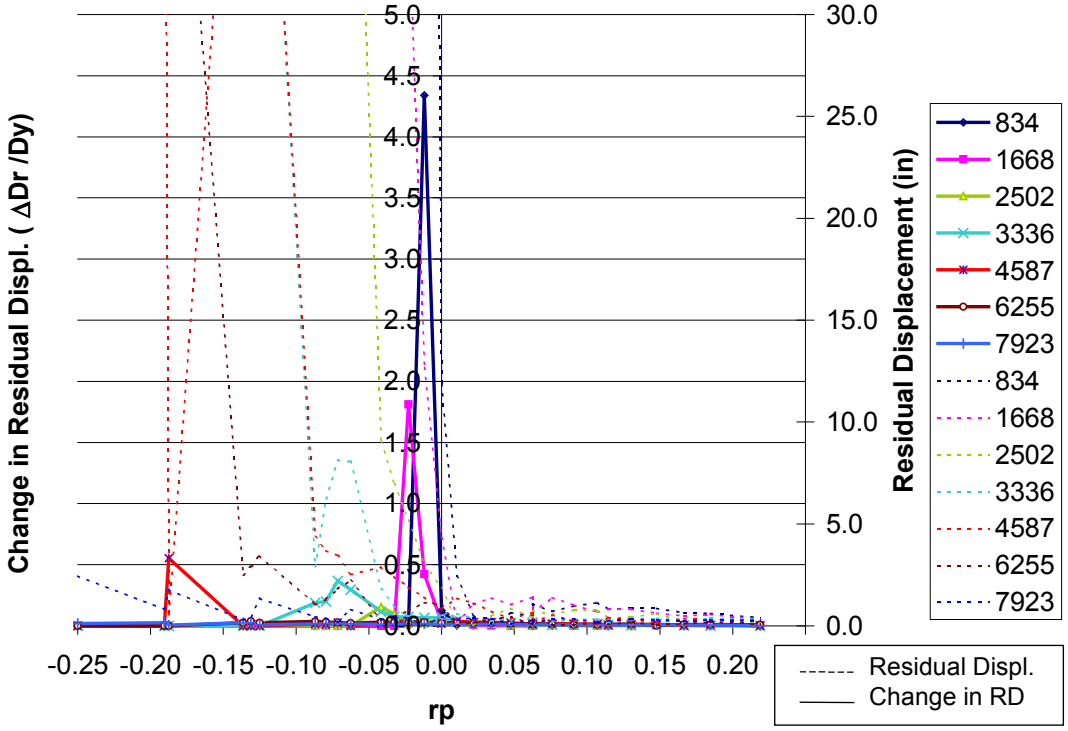


Figure C3.3.8.4b – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.705 Seconds.

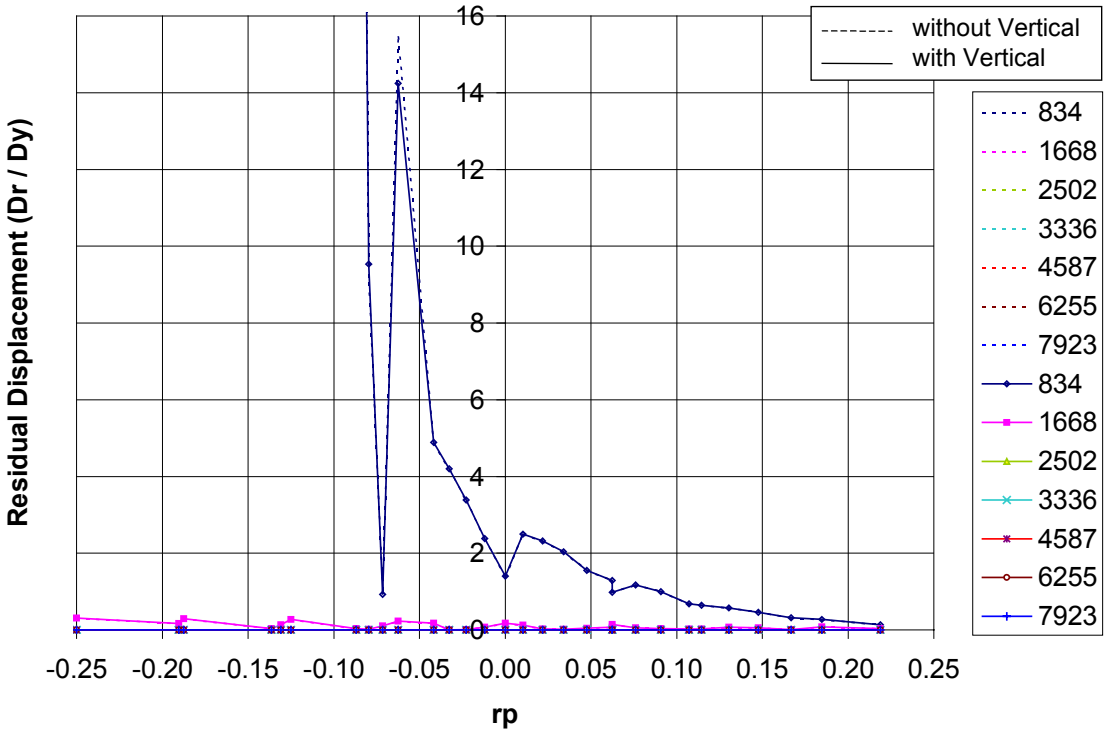


Figure C3.4.1.1a – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

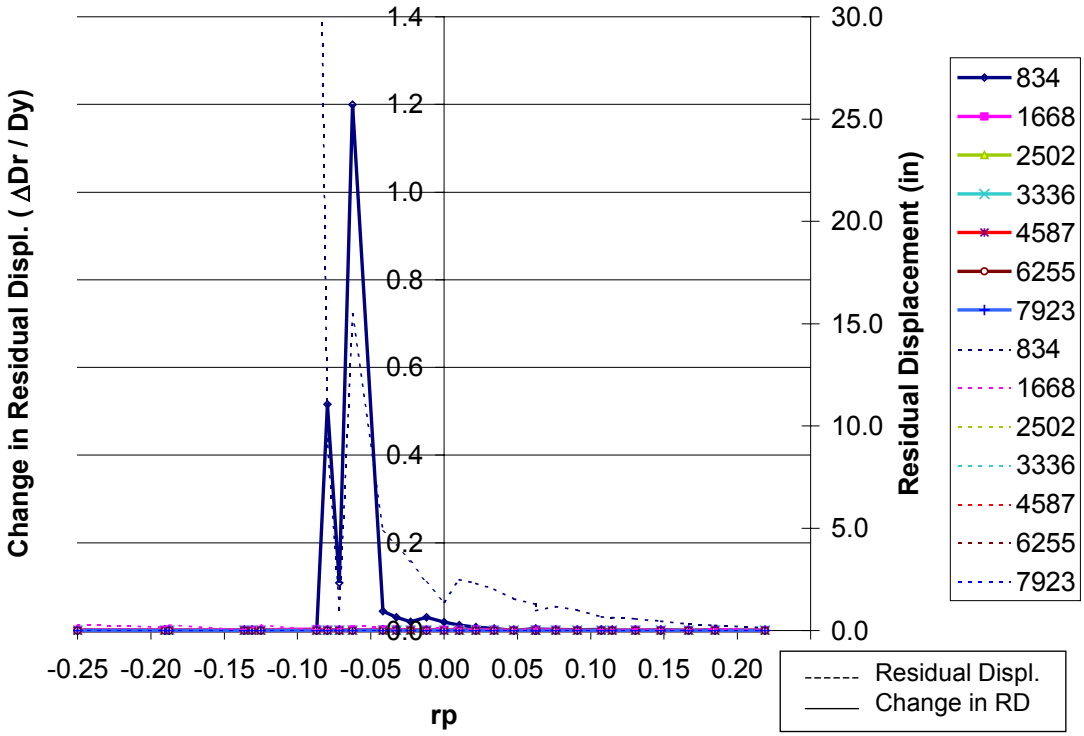


Figure C3.4.1.1b – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

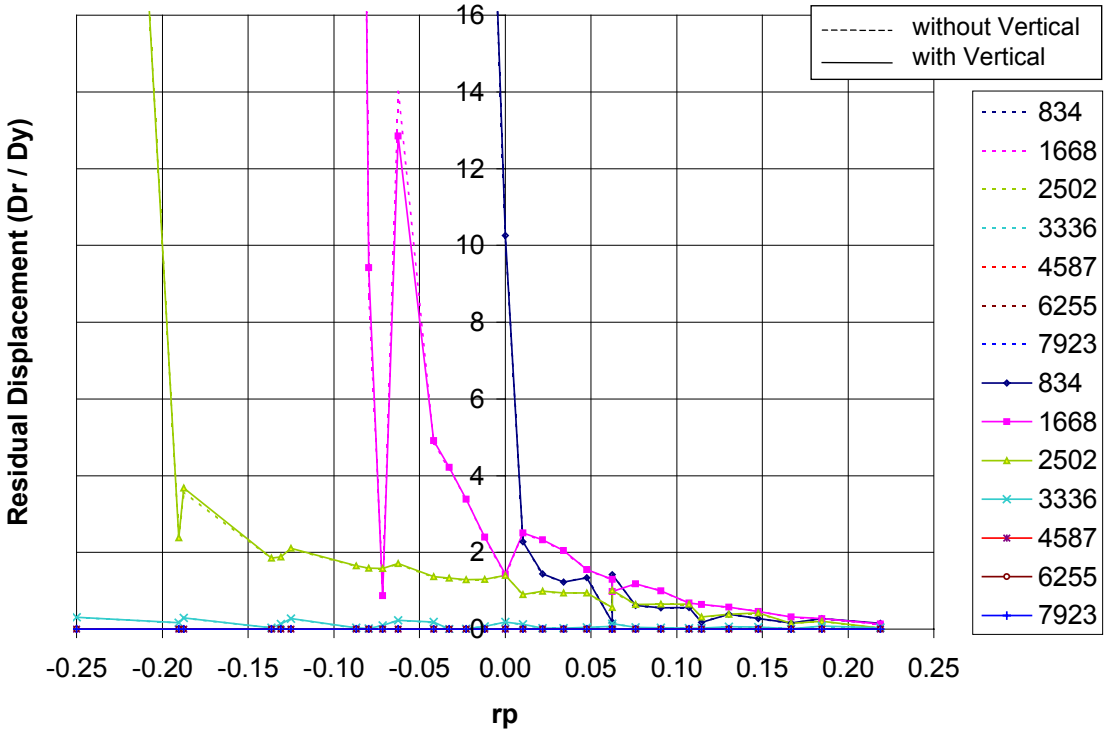


Figure C3.4.1.2a – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

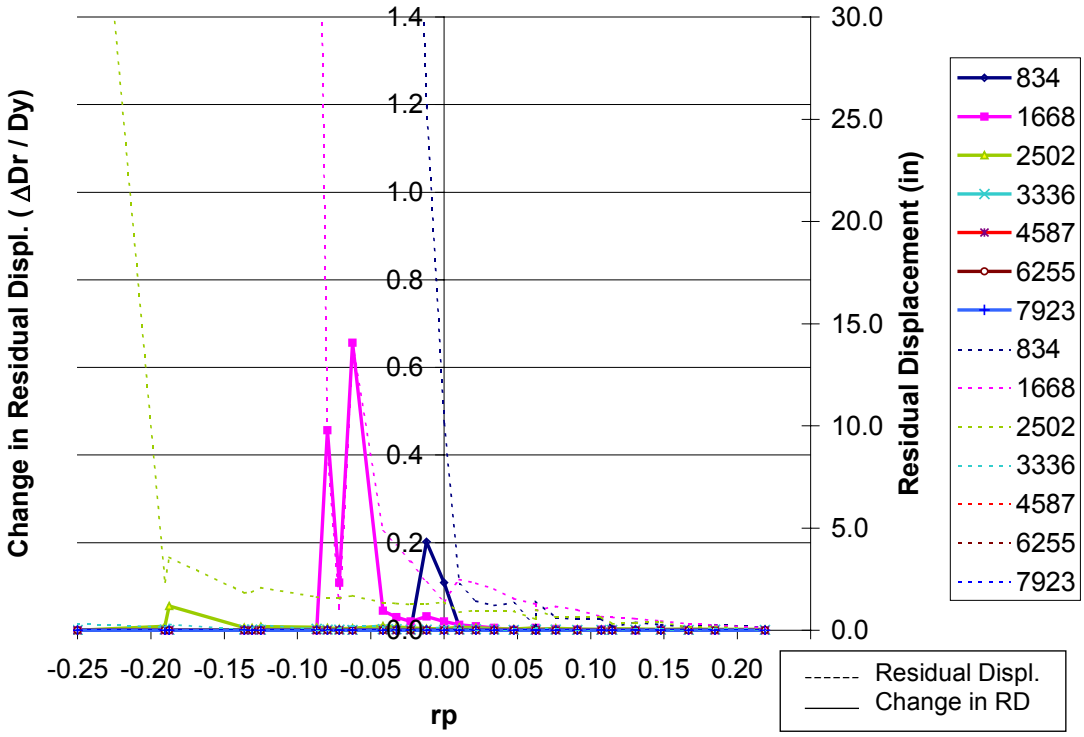


Figure C3.4.1.2b – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

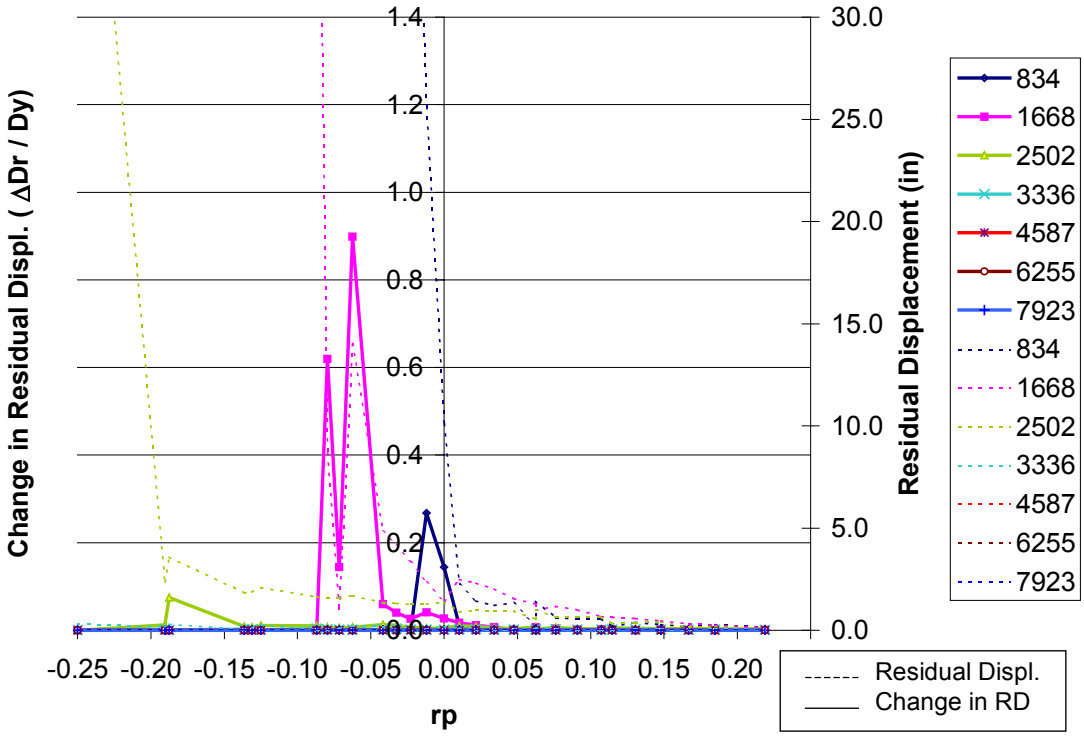


Figure C3.4.1.2c – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

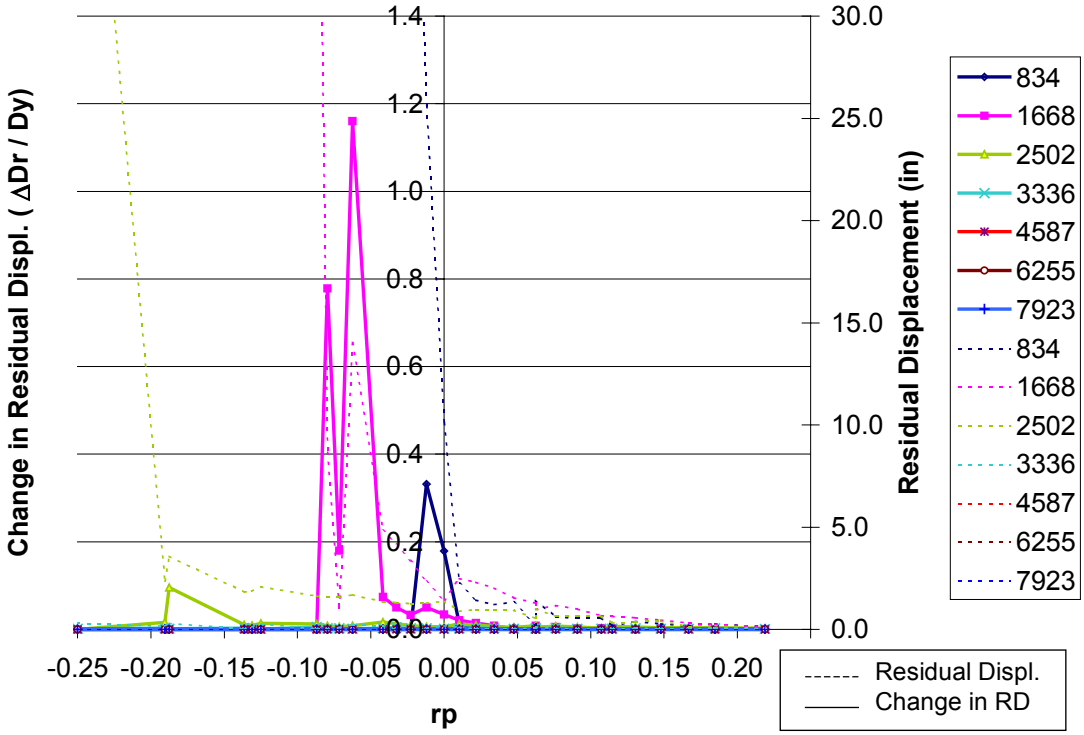


Figure C3.4.1.2d – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

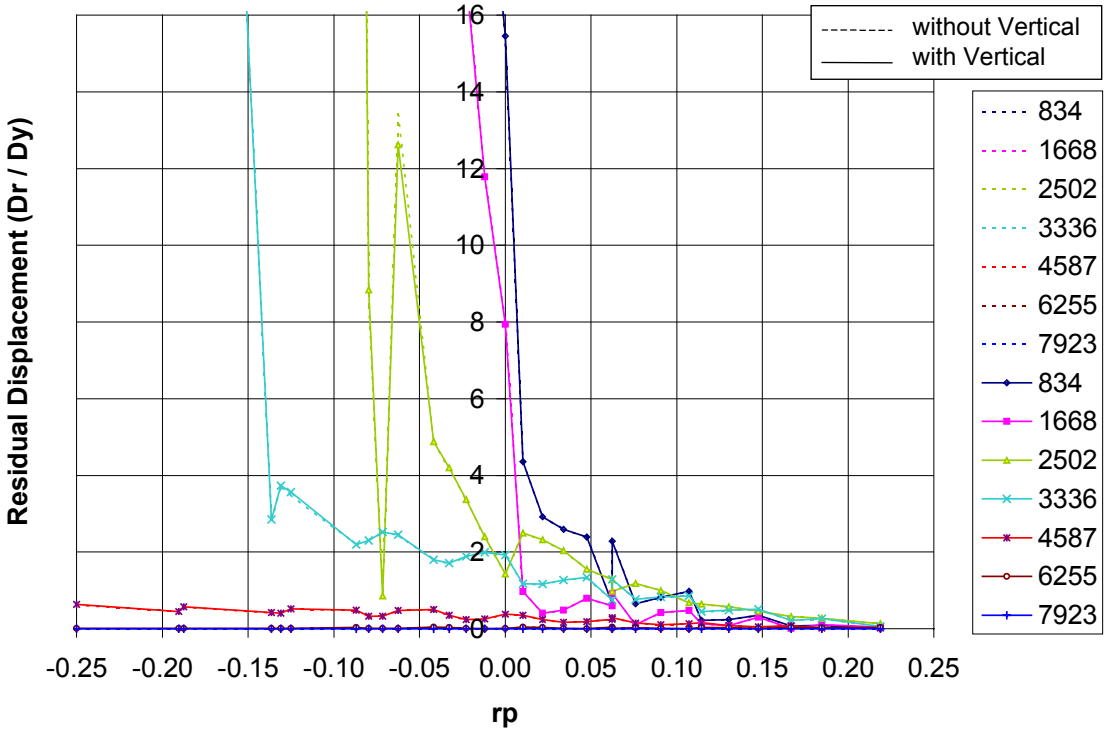


Figure C3.4.1.3a – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

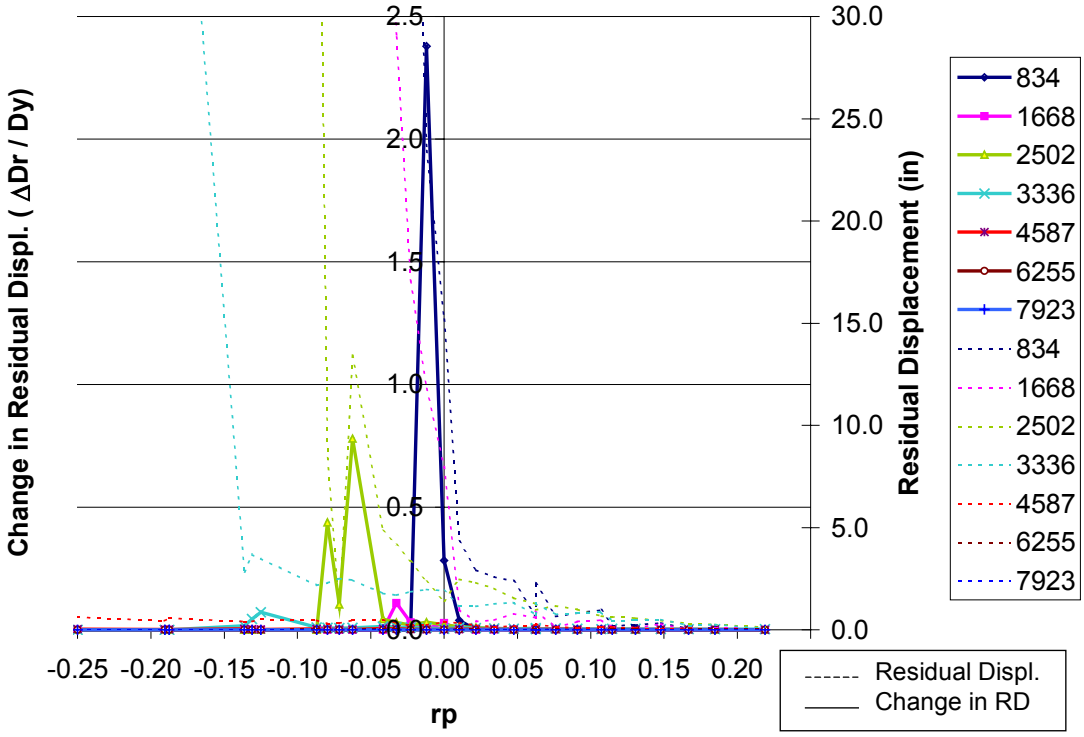


Figure C3.4.1.3b – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

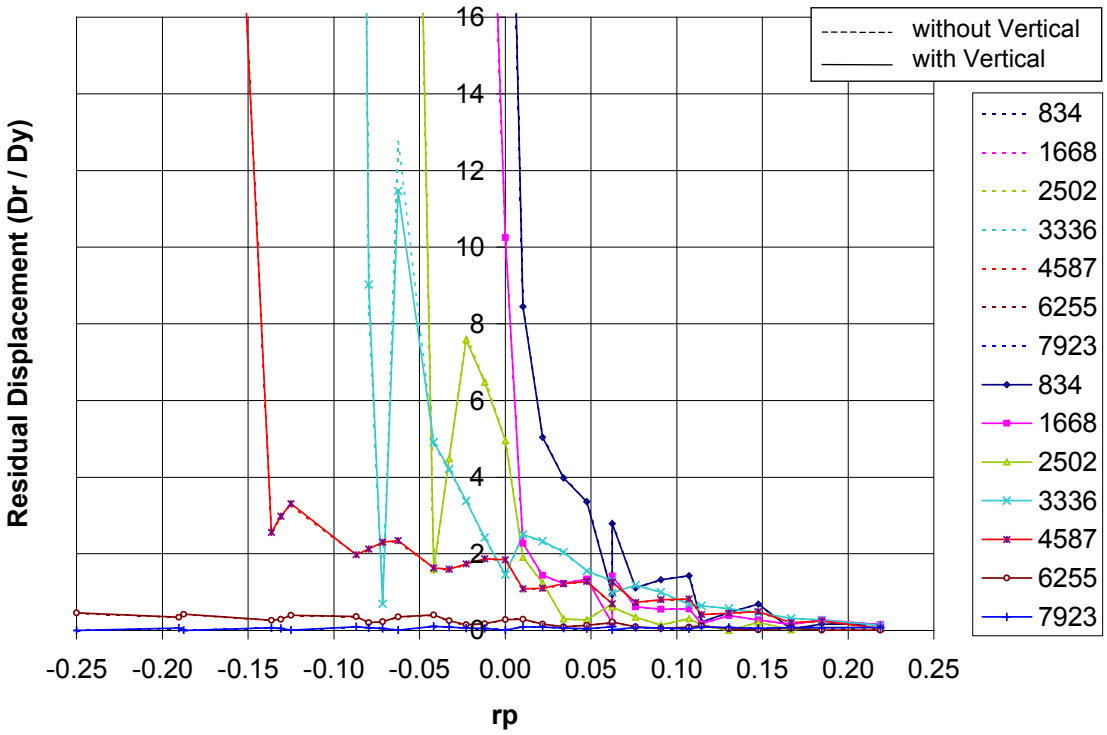


Figure C3.4.1.4a – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

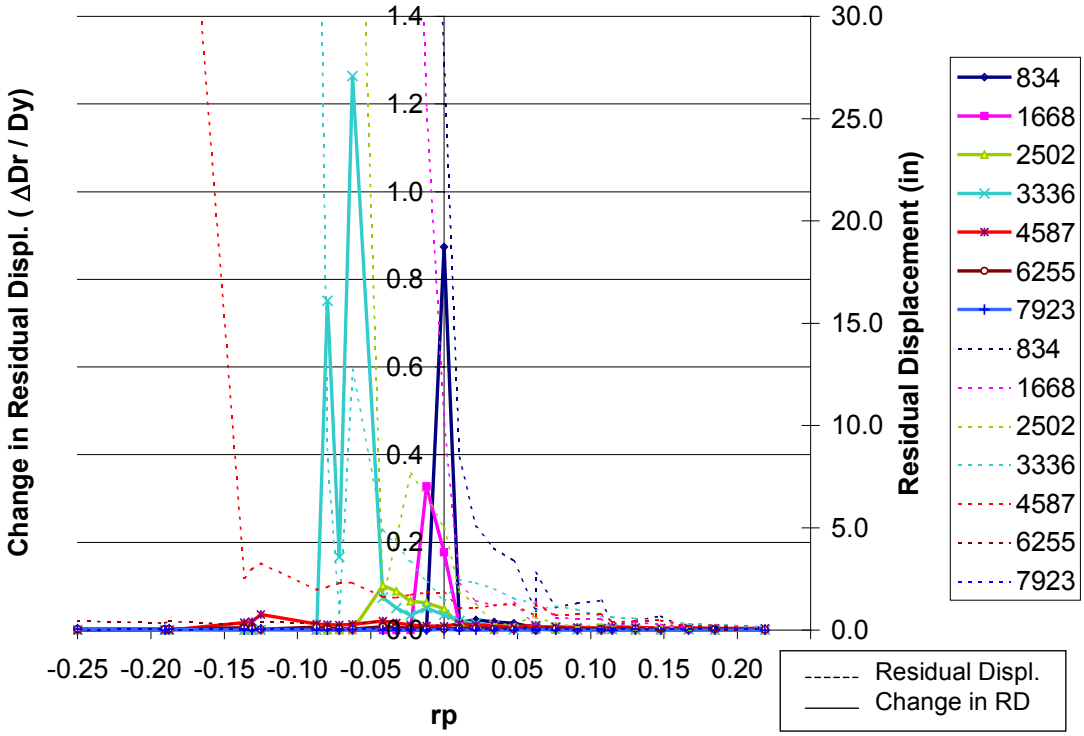


Figure C3.4.1.4b – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

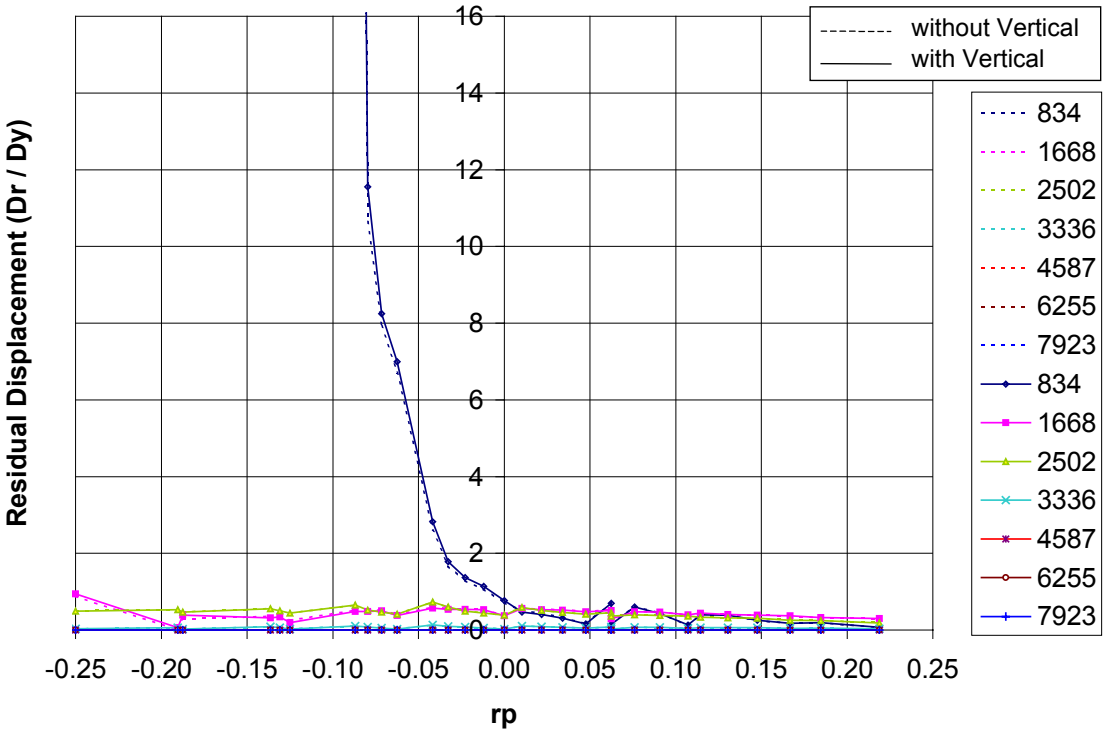


Figure C3.4.2.1a – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

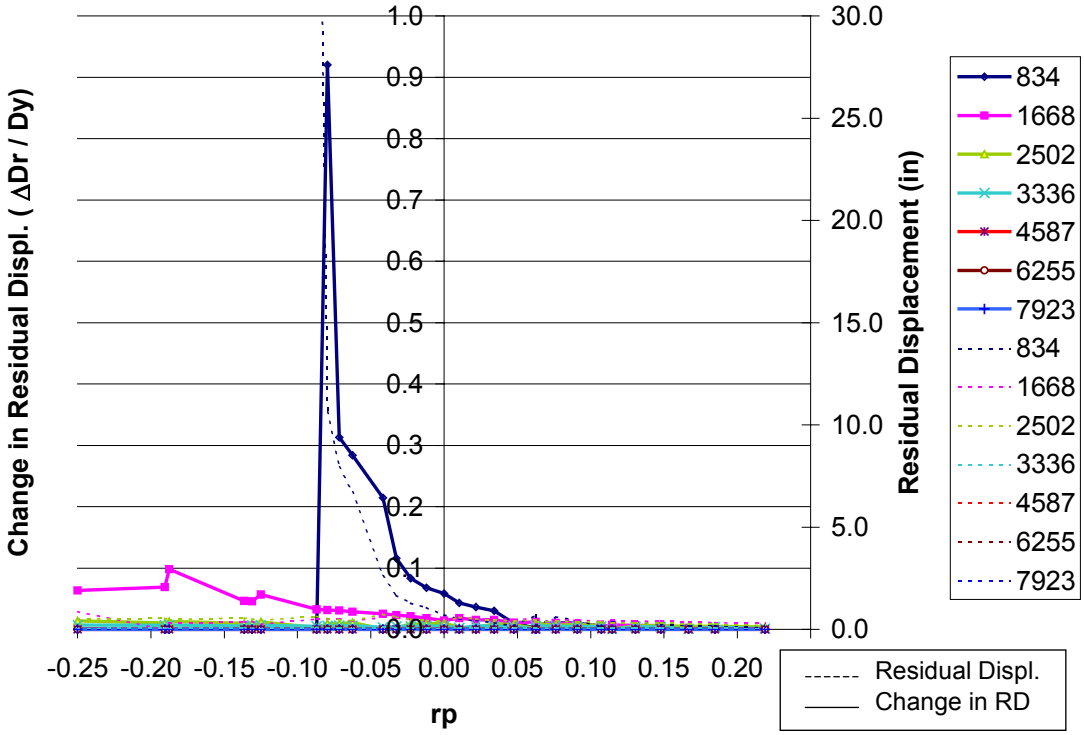


Figure C3.4.2.1b – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

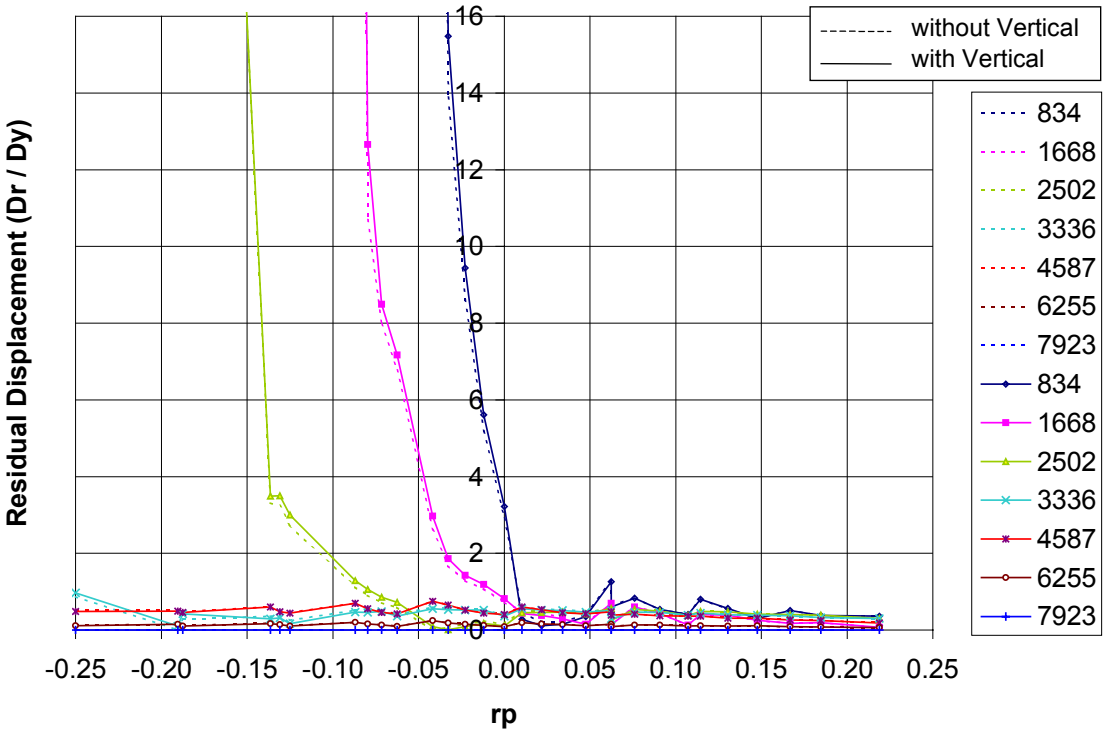


Figure C3.4.2.2a – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

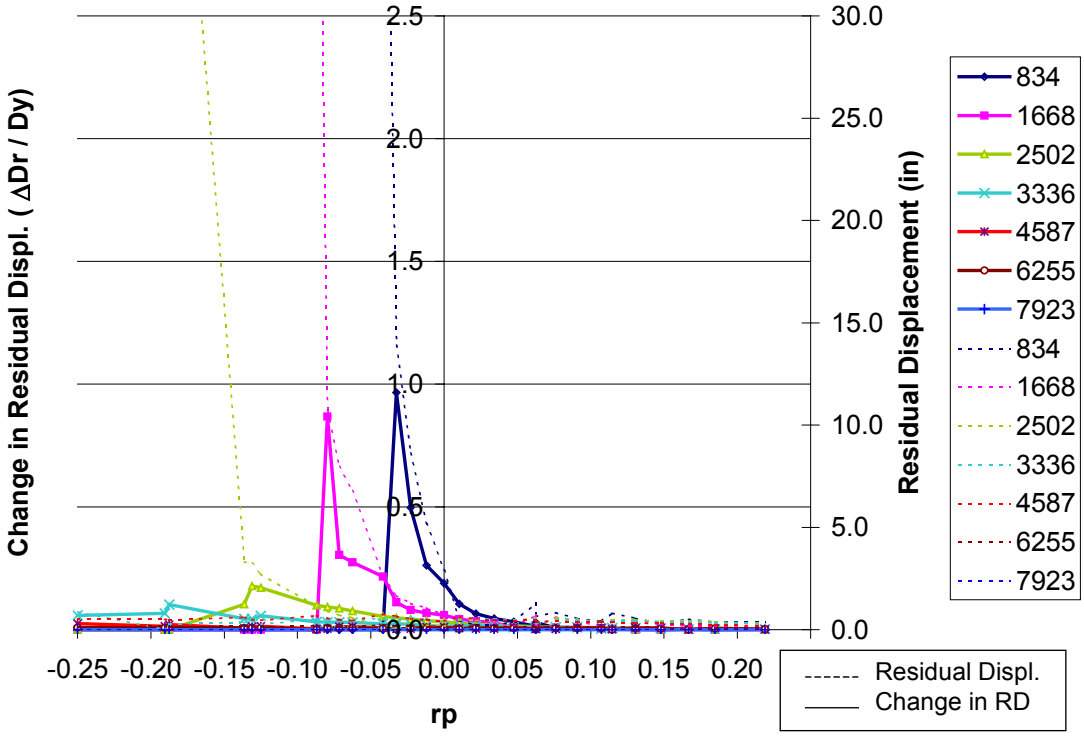


Figure C3.4.2.2b – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

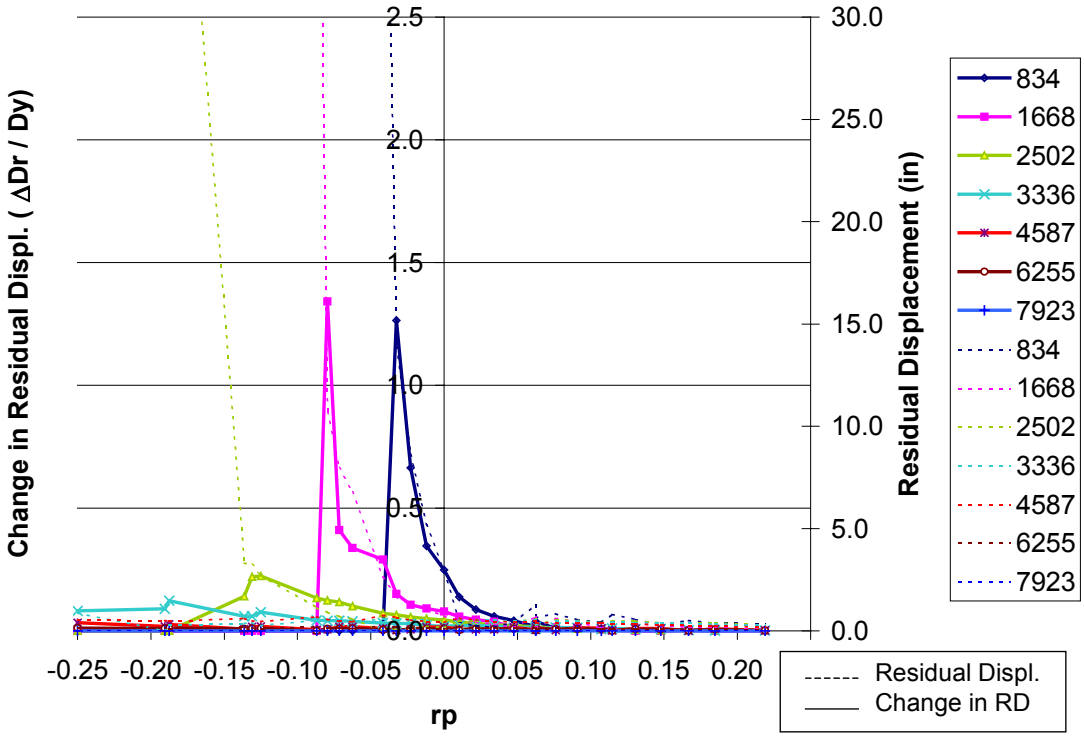


Figure C3.4.2.2c – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

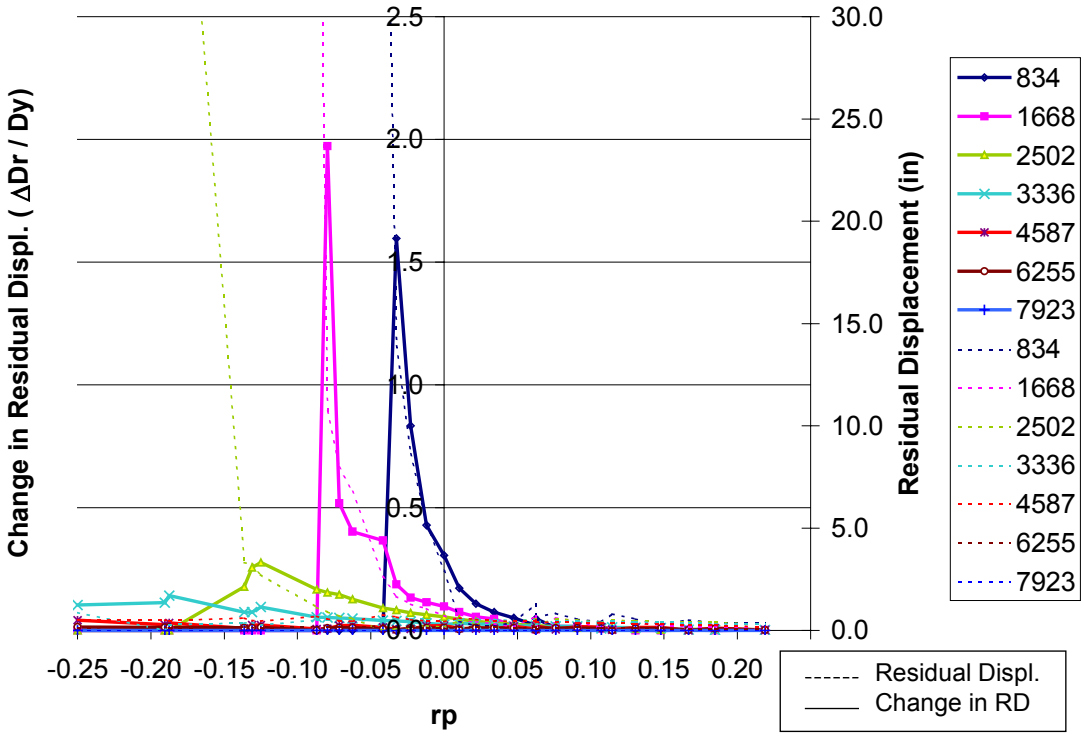


Figure C3.4.2.2d – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

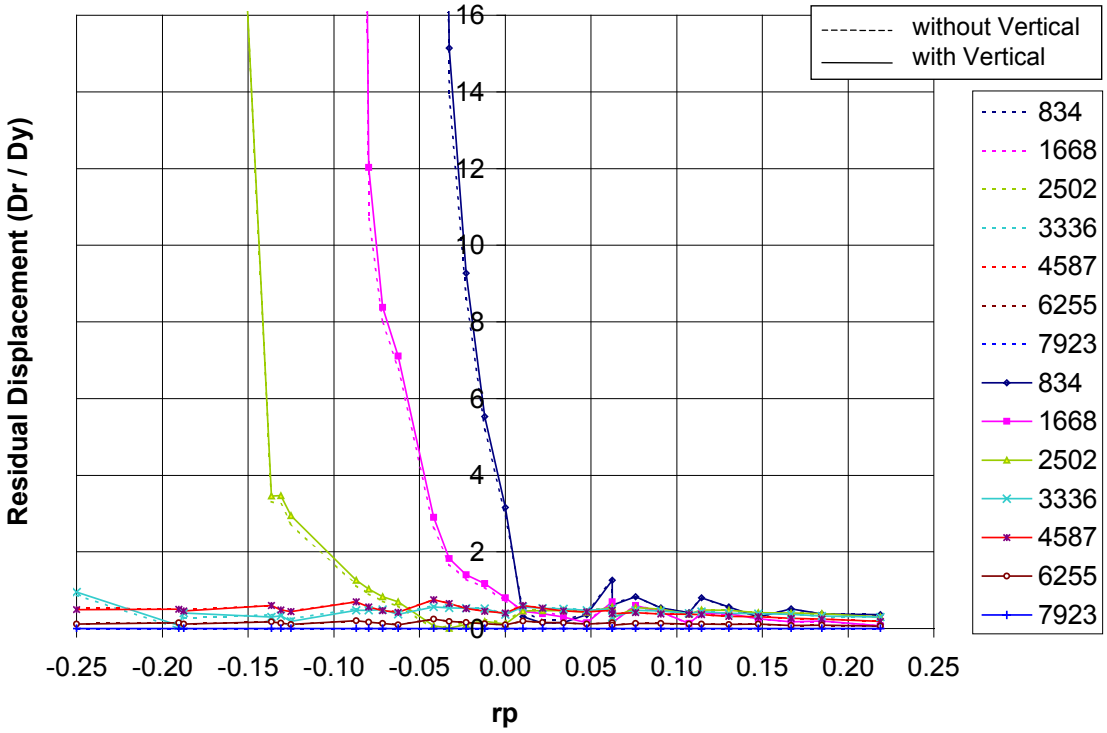


Figure C3.4.2.3a – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

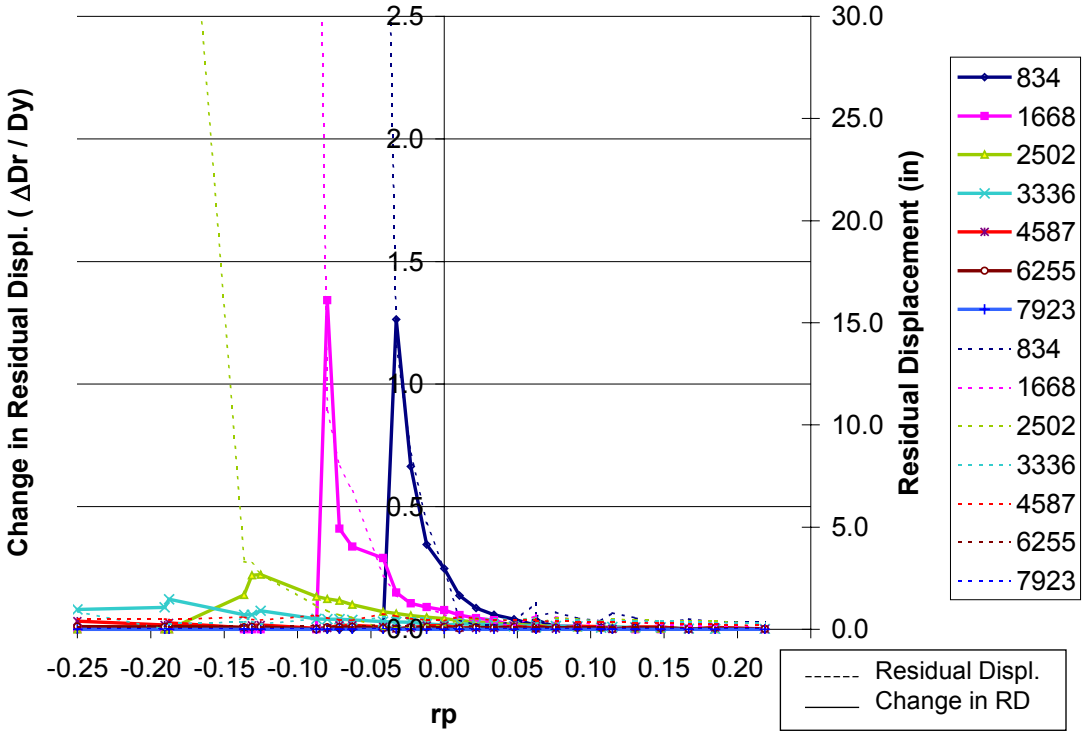


Figure C3.4.2.3b – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

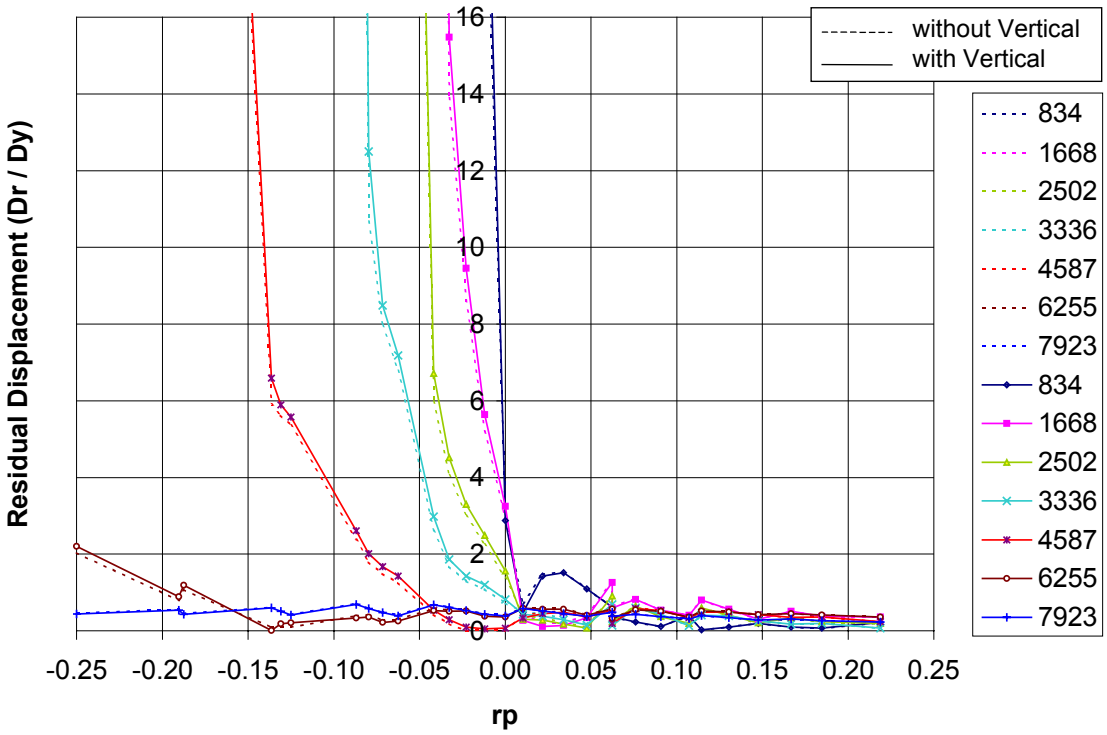


Figure C3.4.2.4a – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

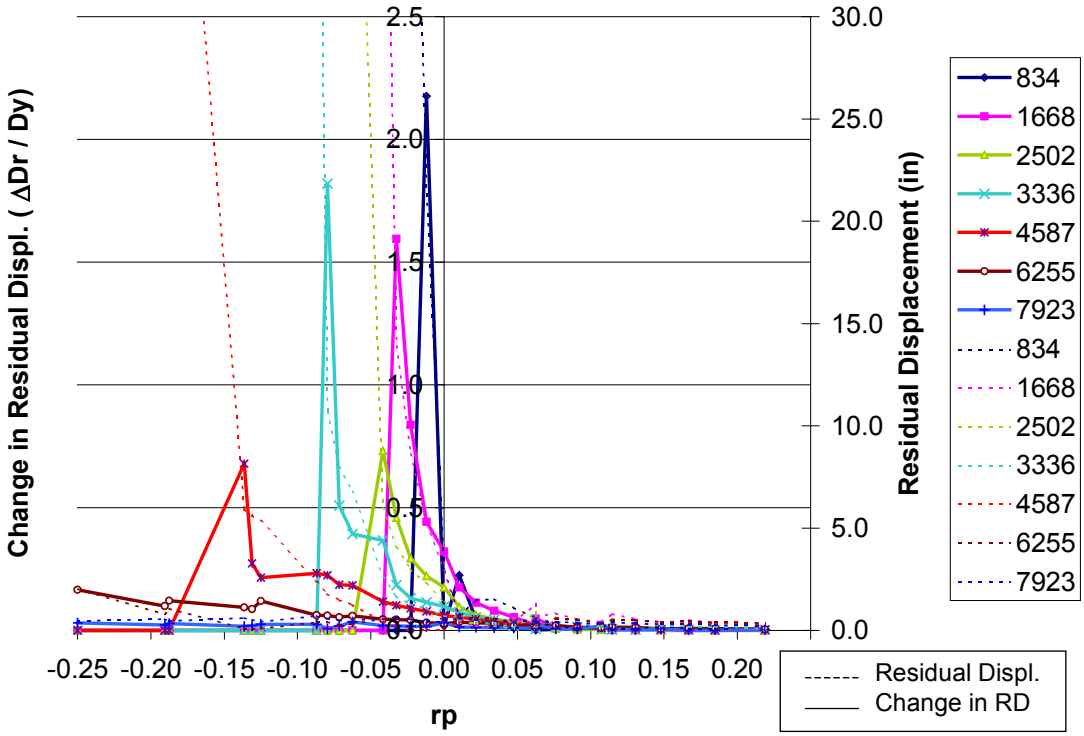


Figure C3.4.2.4b – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

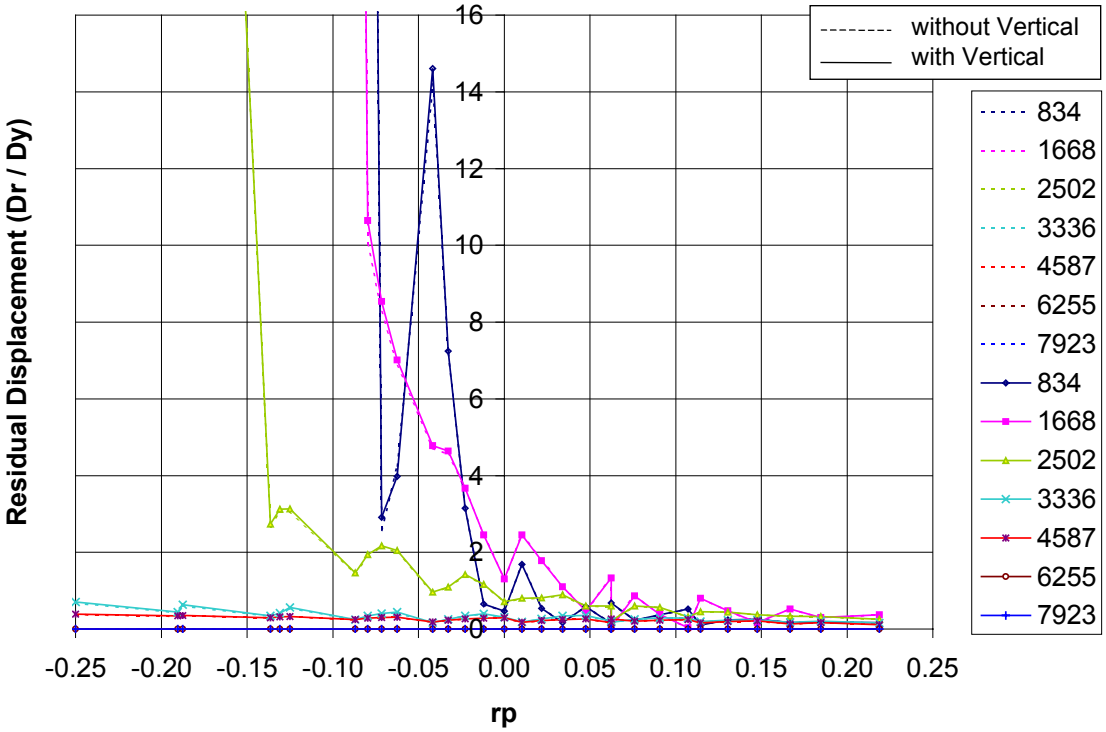


Figure C3.4.3.1a – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

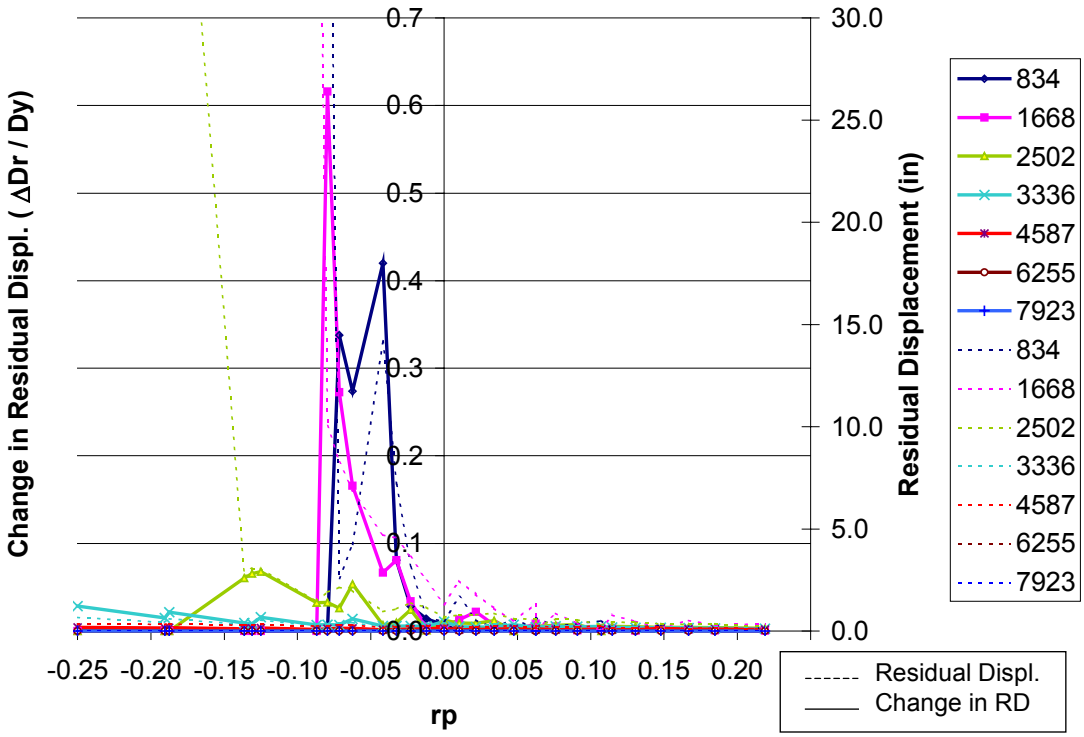


Figure C3.4.3.1b – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

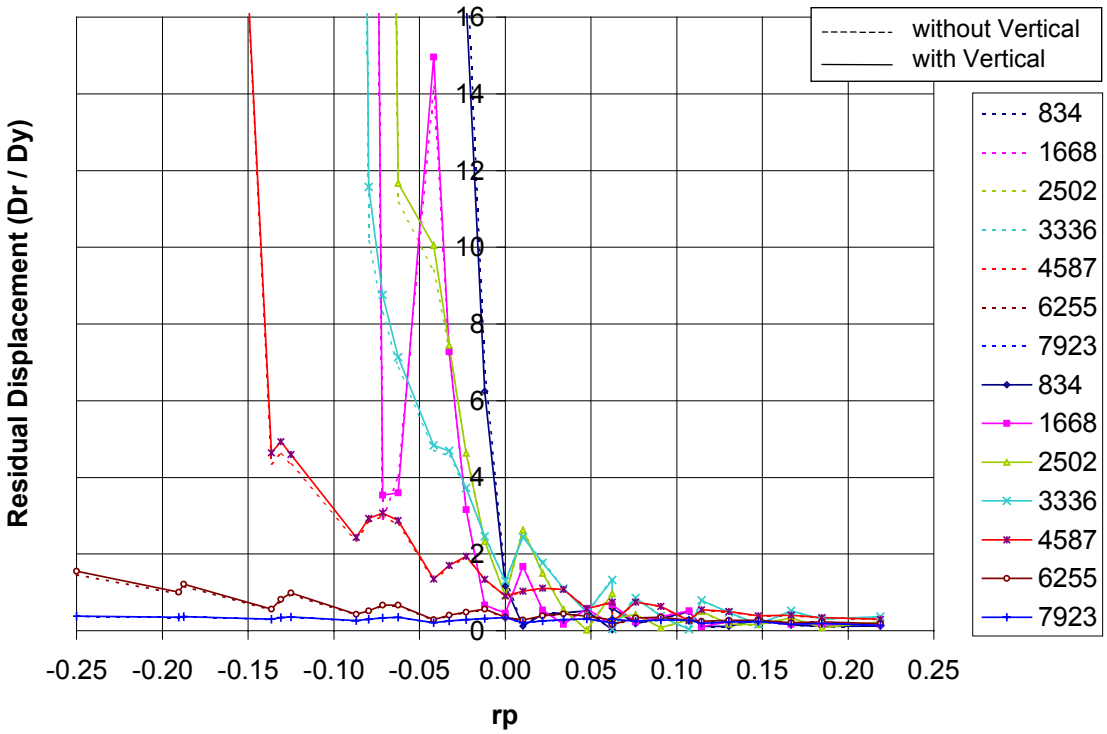


Figure C3.4.3.2a – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

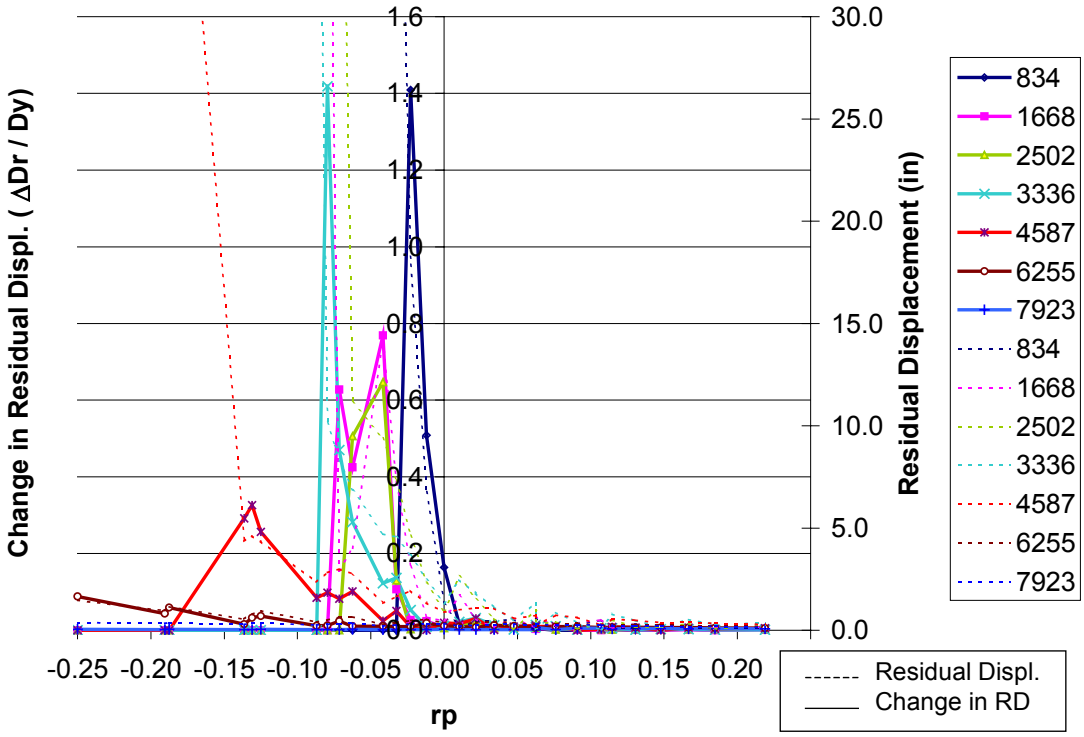


Figure C3.4.3.2b – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

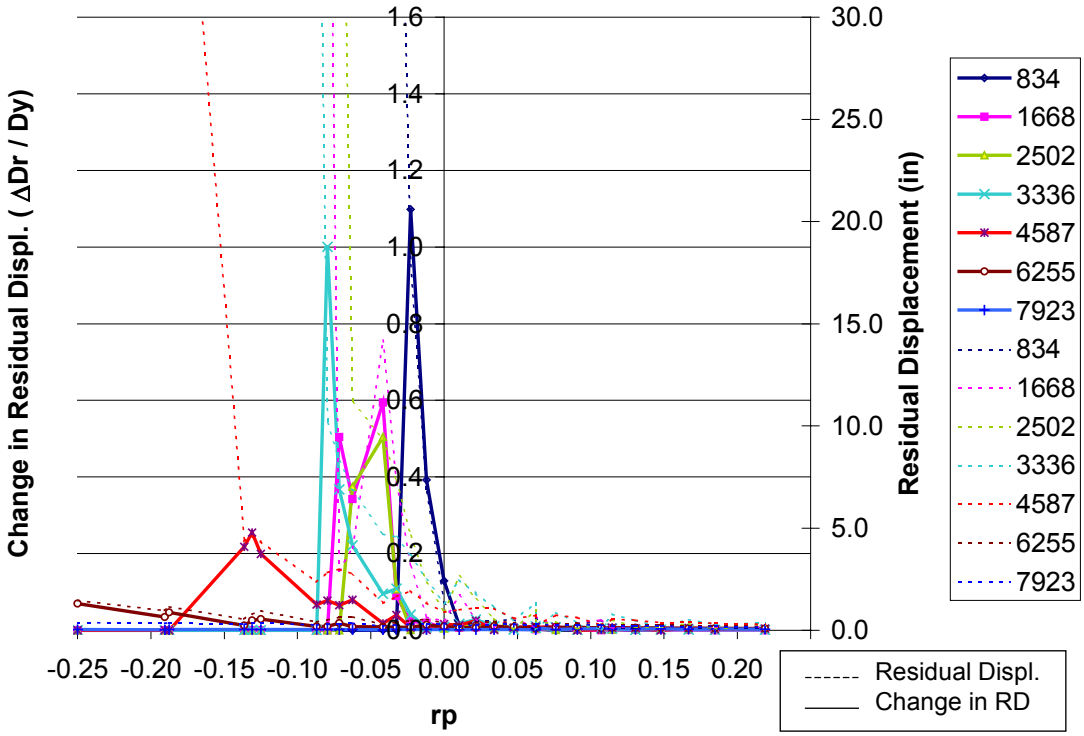


Figure C3.4.3.2c – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

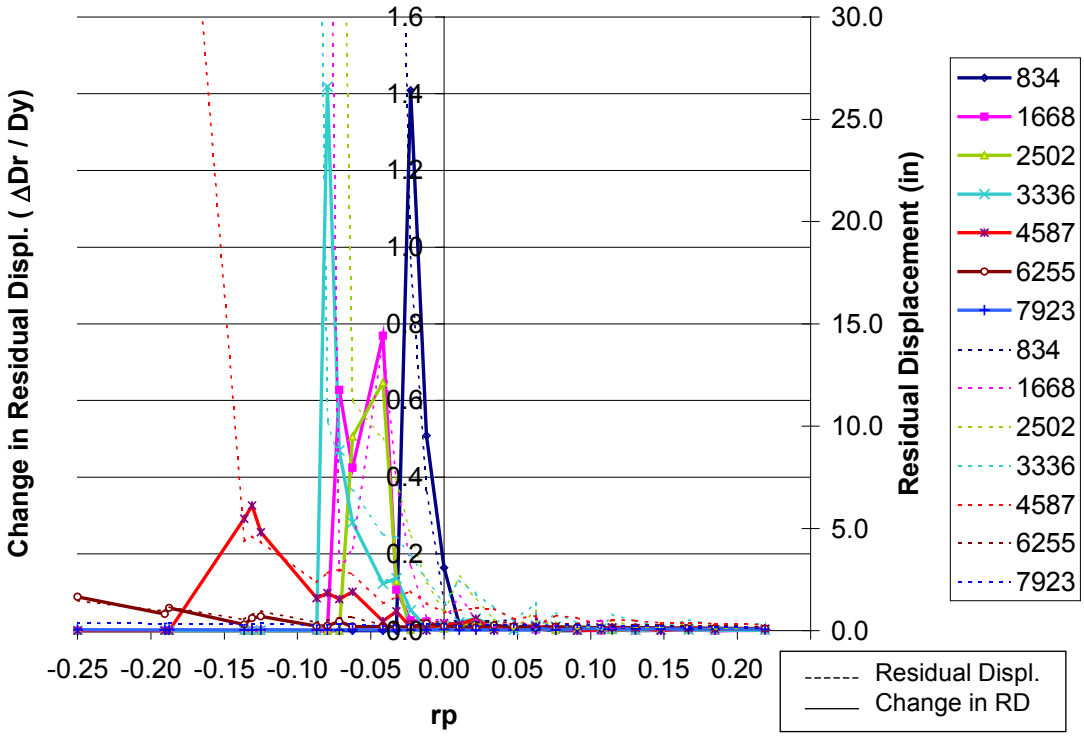


Figure C3.4.3.2d – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

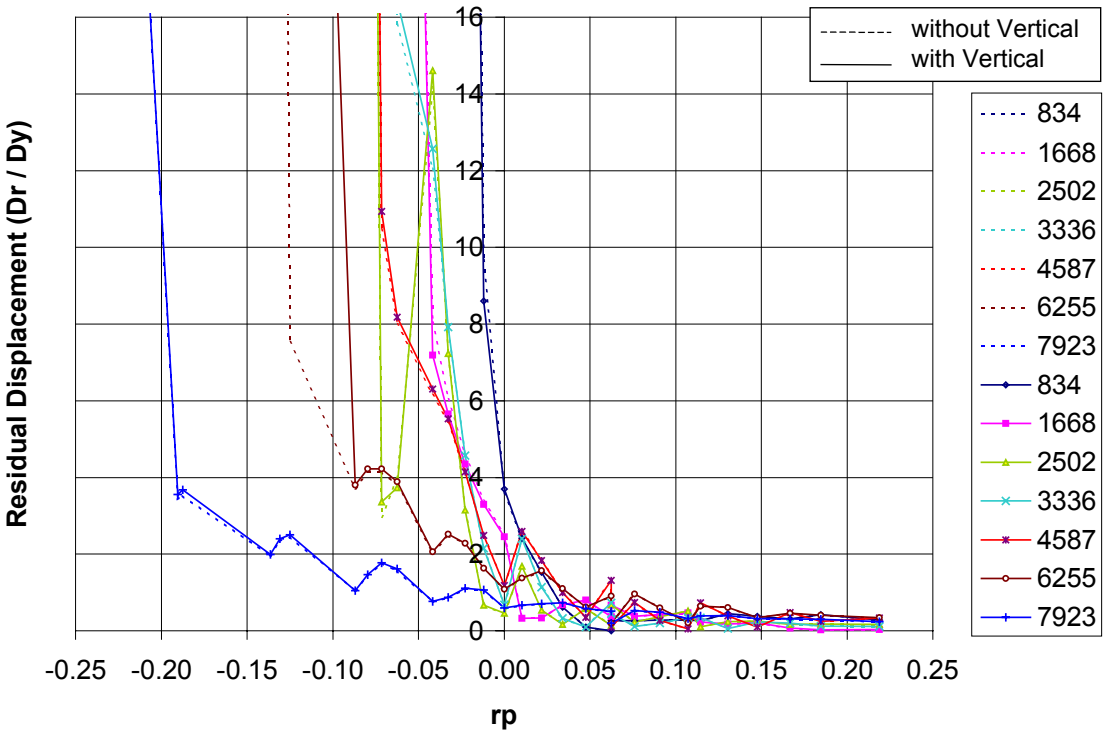


Figure C3.4.3.3a – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

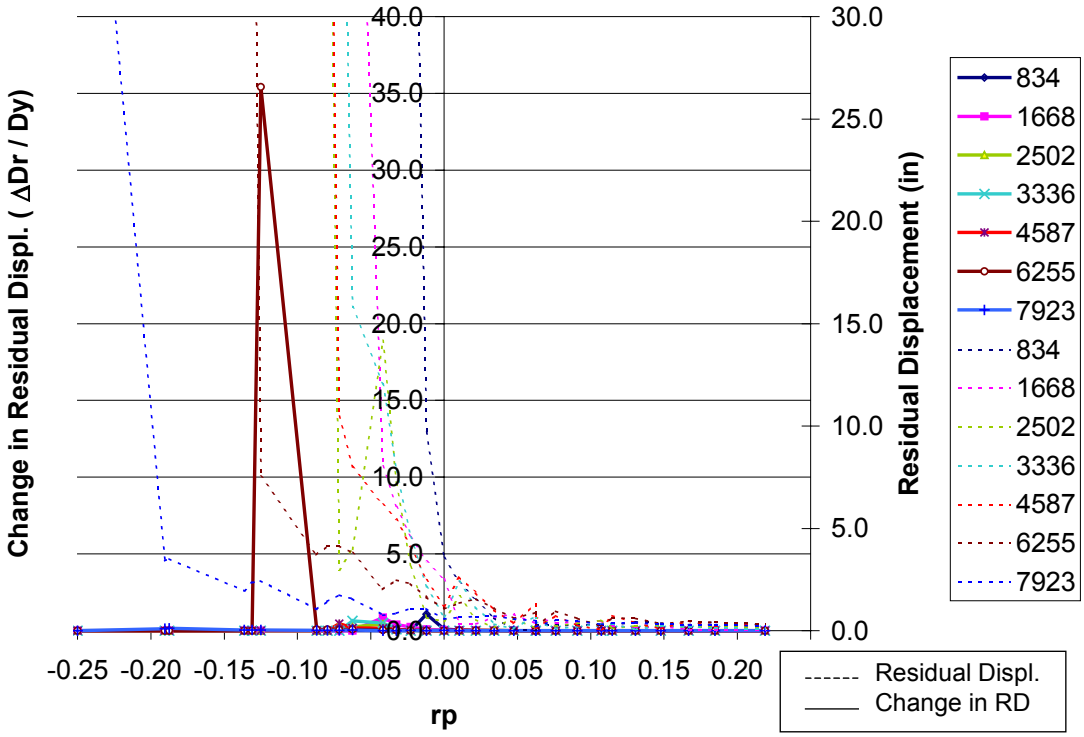


Figure C3.4.3.3b – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

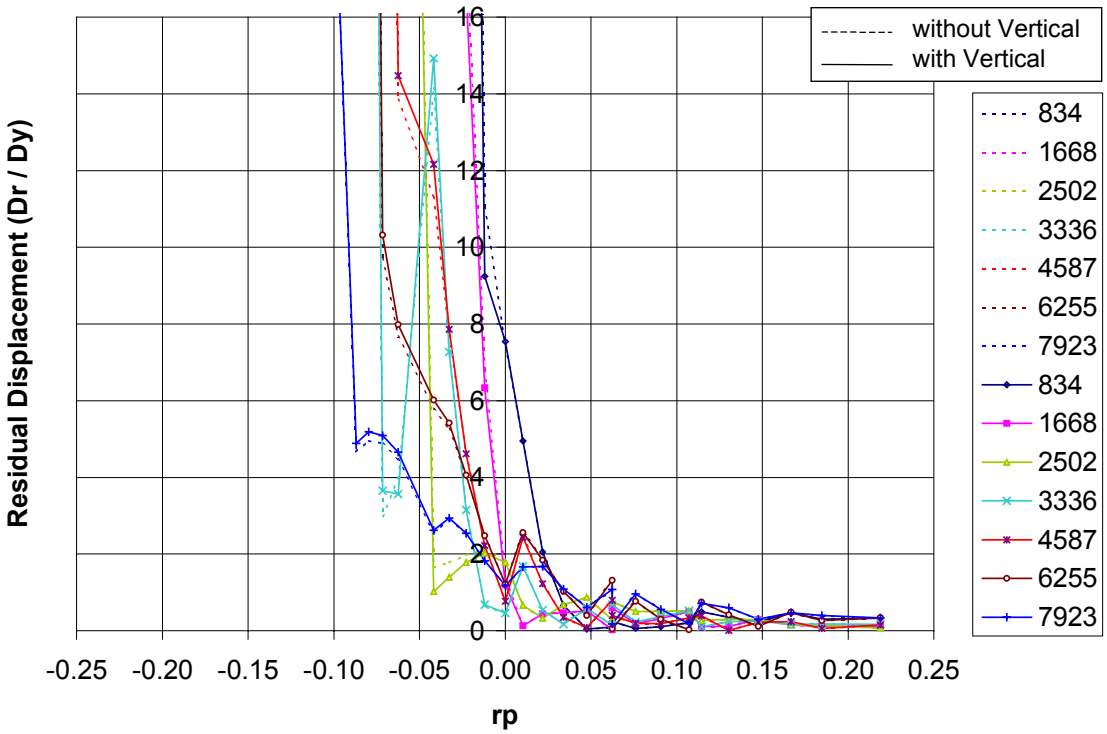


Figure C3.4.3.4a – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

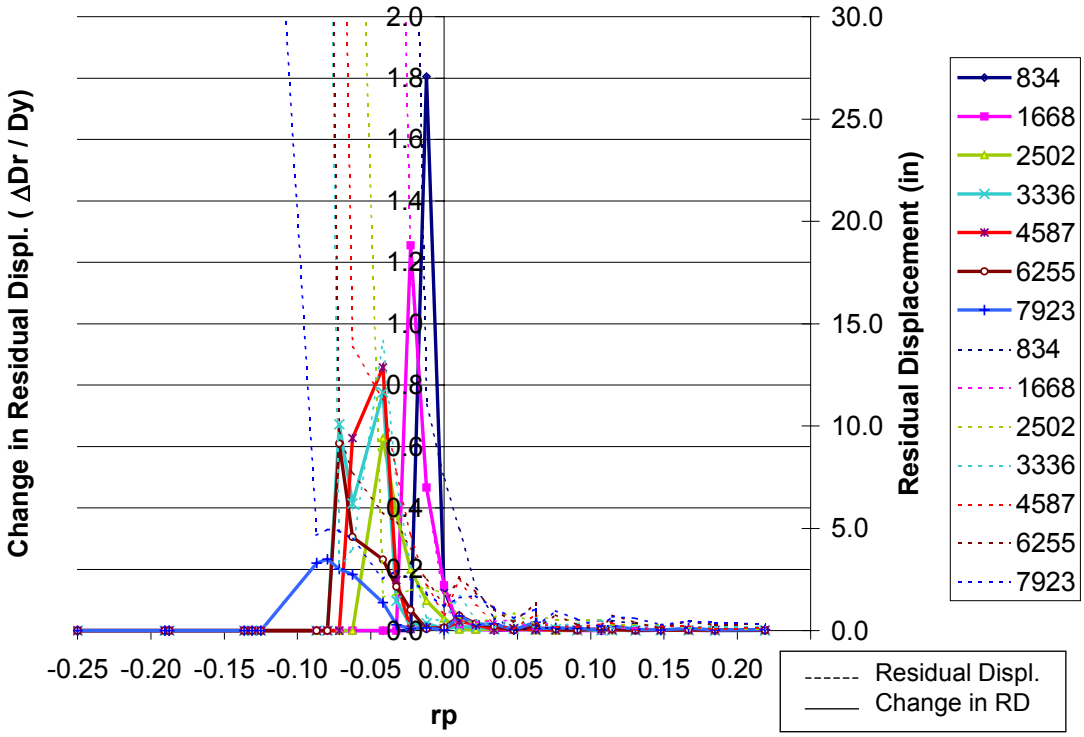


Figure C3.4.3.4b – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

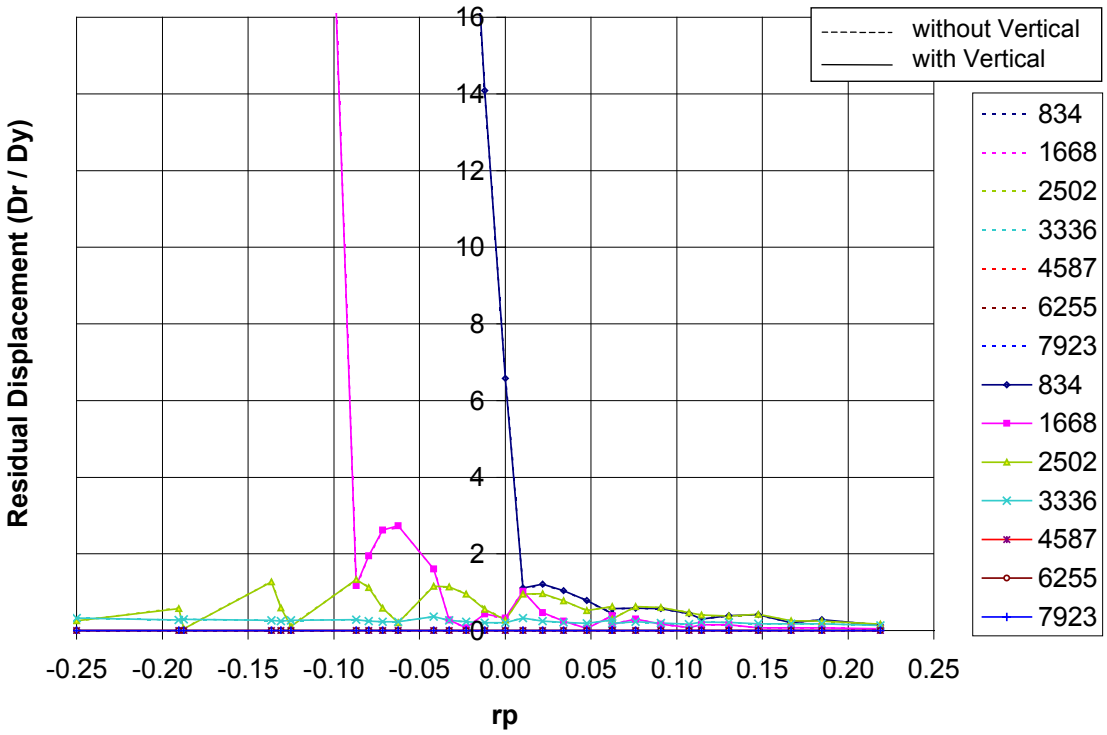


Figure C3.4.4.1a – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

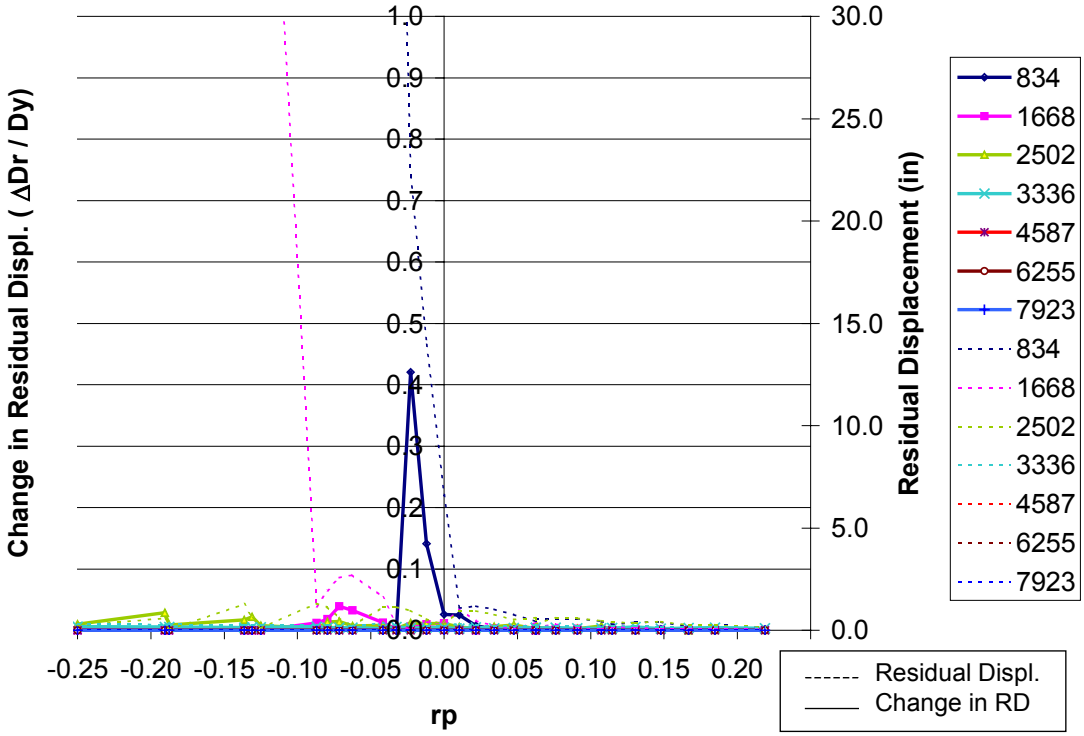


Figure C3.4.4.1b – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

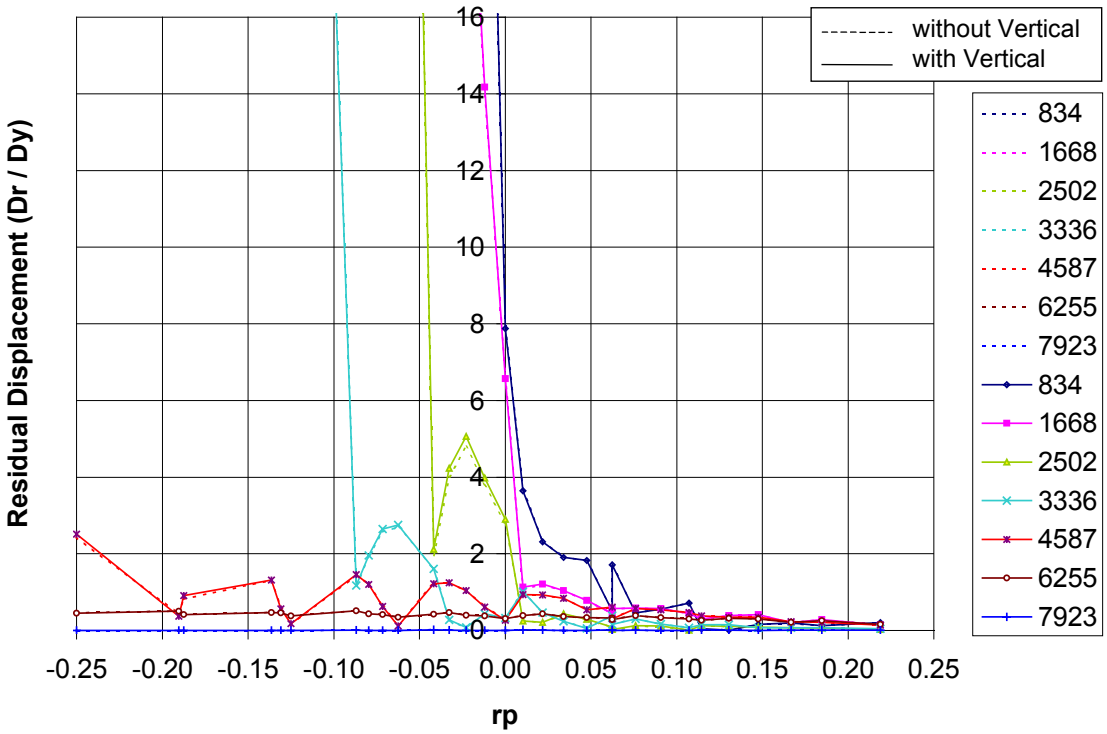


Figure C3.4.4.2a – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

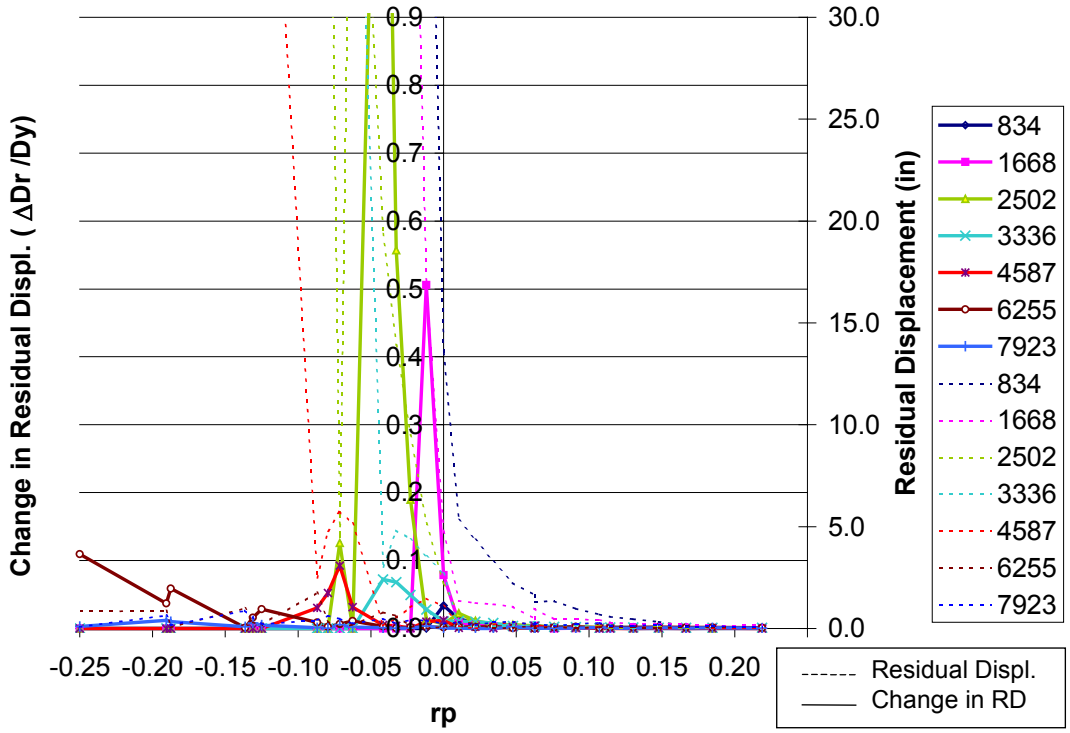


Figure C3.4.4.2b – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

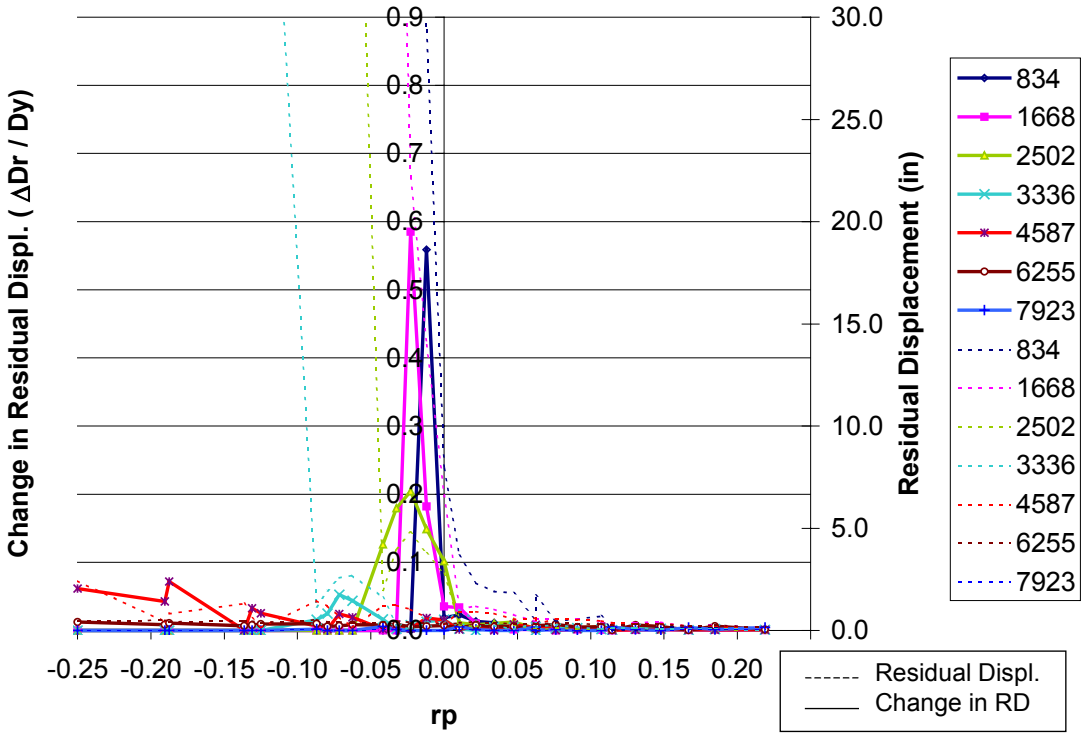


Figure C3.4.4.2c – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

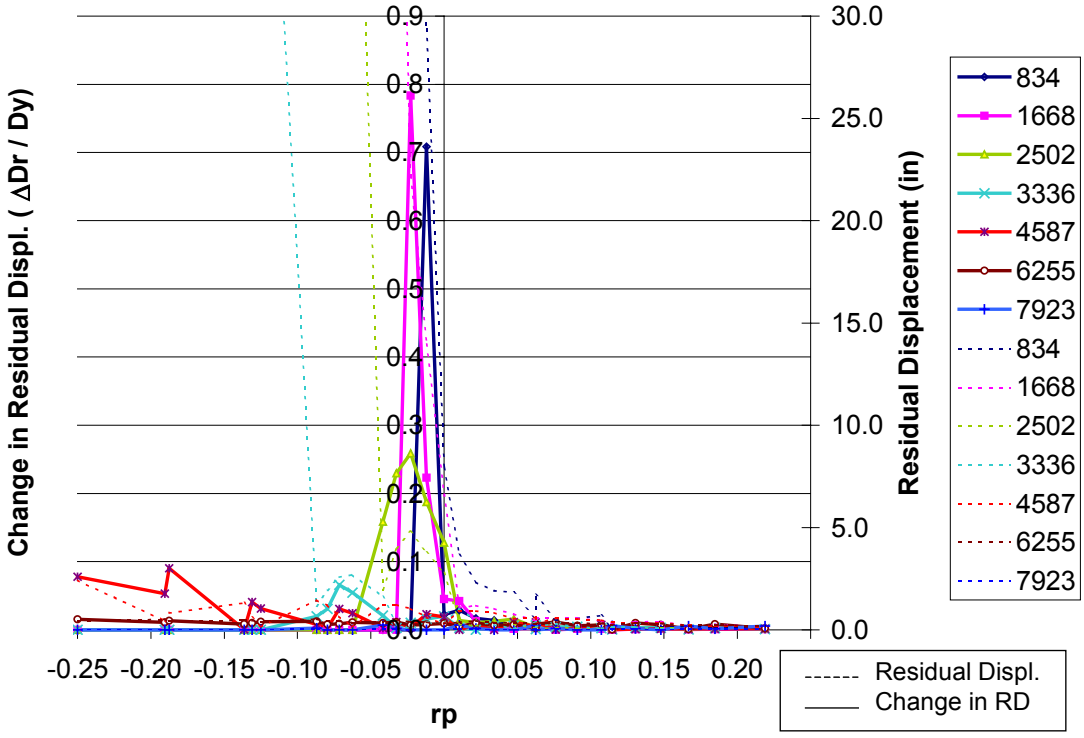


Figure C3.4.4.2d – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

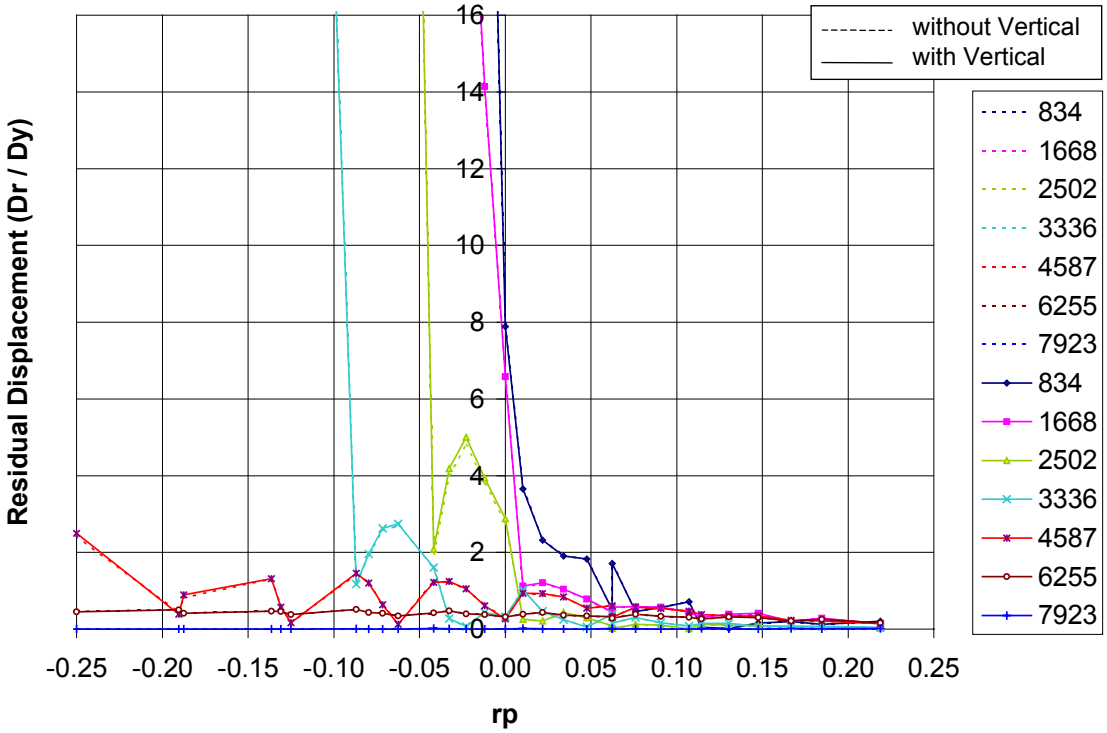


Figure C3.4.4.3a – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

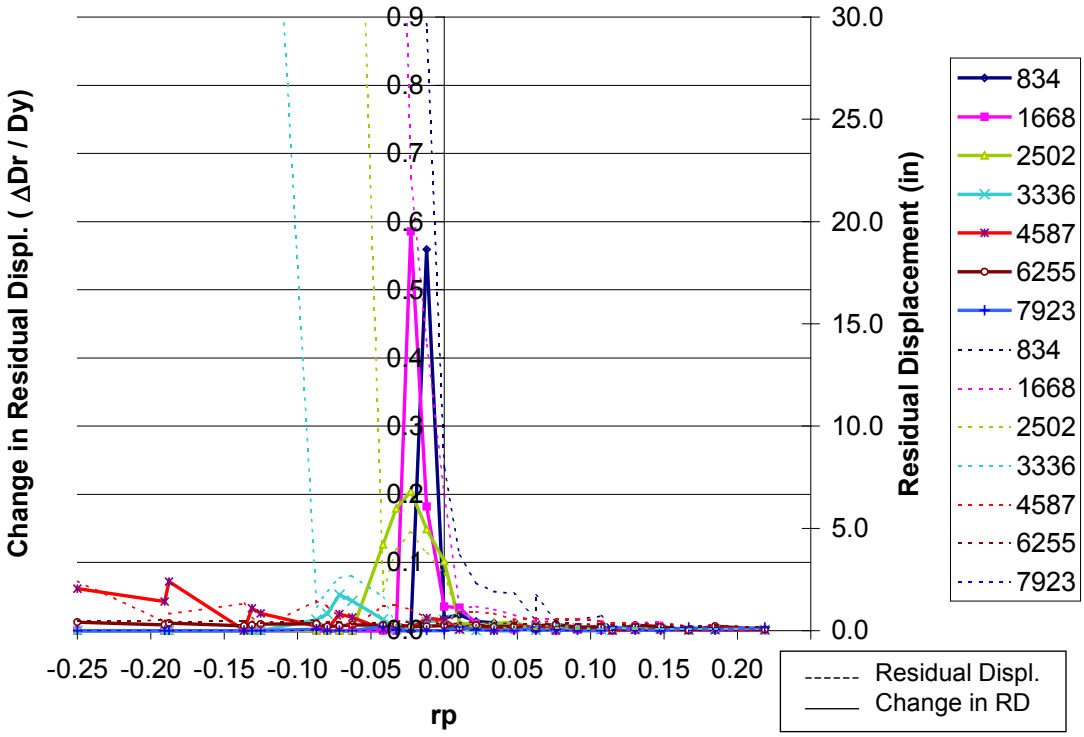


Figure C3.4.4.3b – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

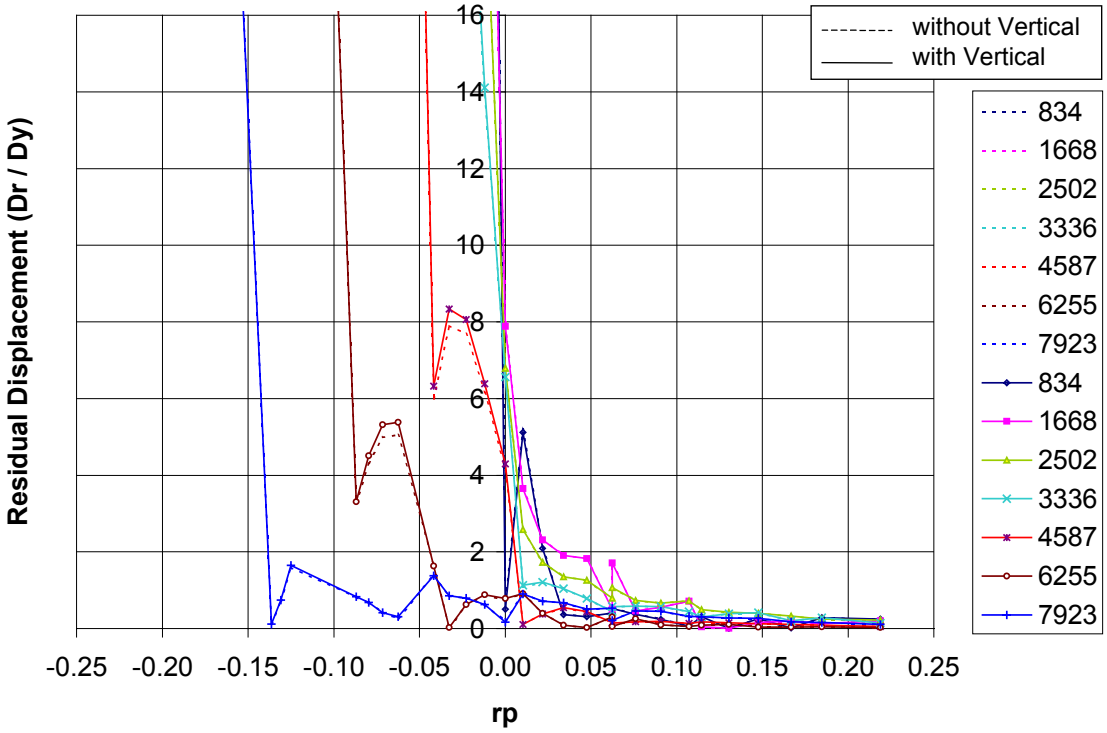


Figure C3.4.4.4a – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

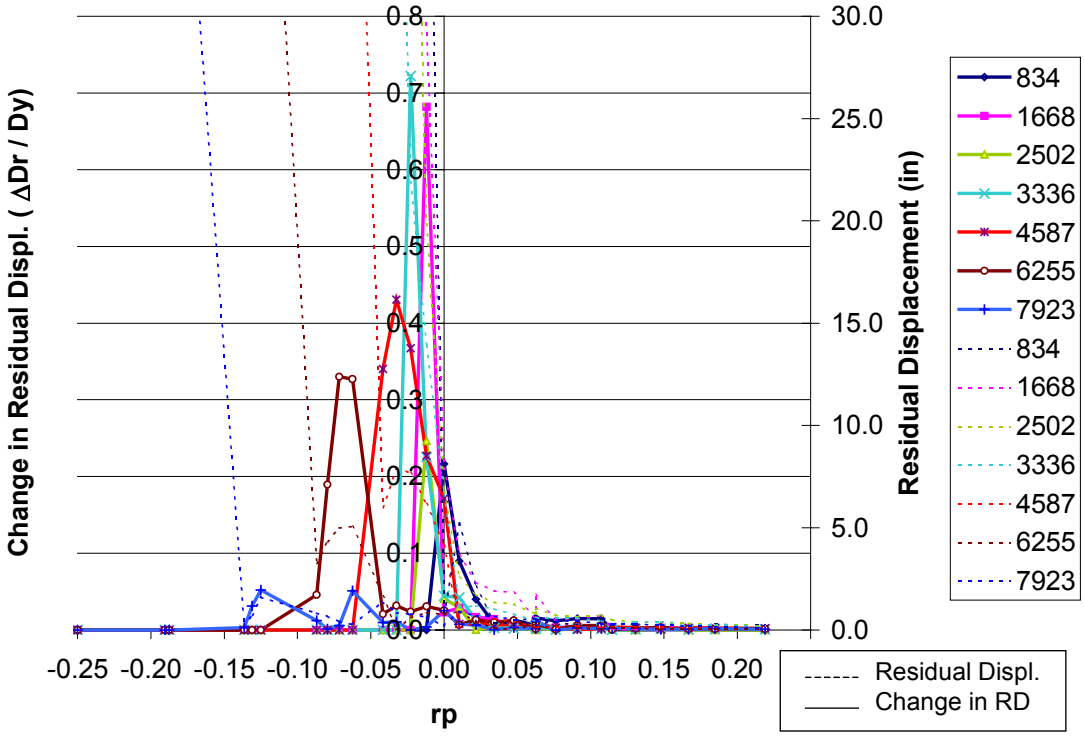


Figure C3.4.4.4b – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

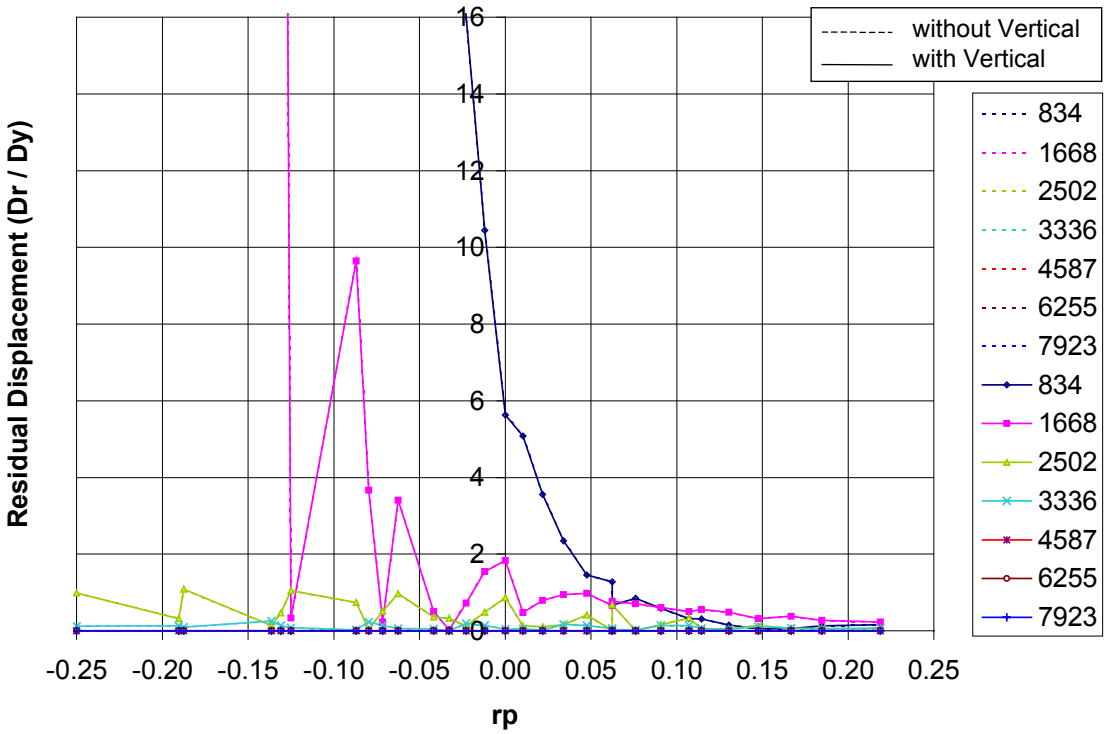


Figure C.3.4.5.1a – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

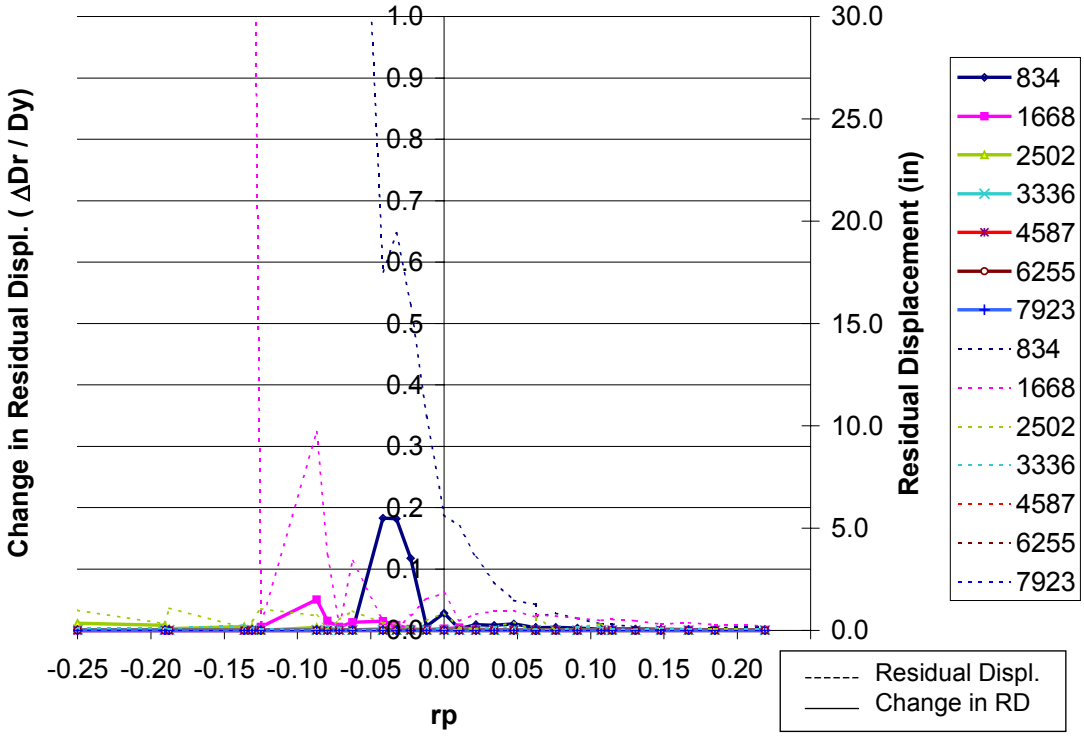


Figure C.3.4.5.1b – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

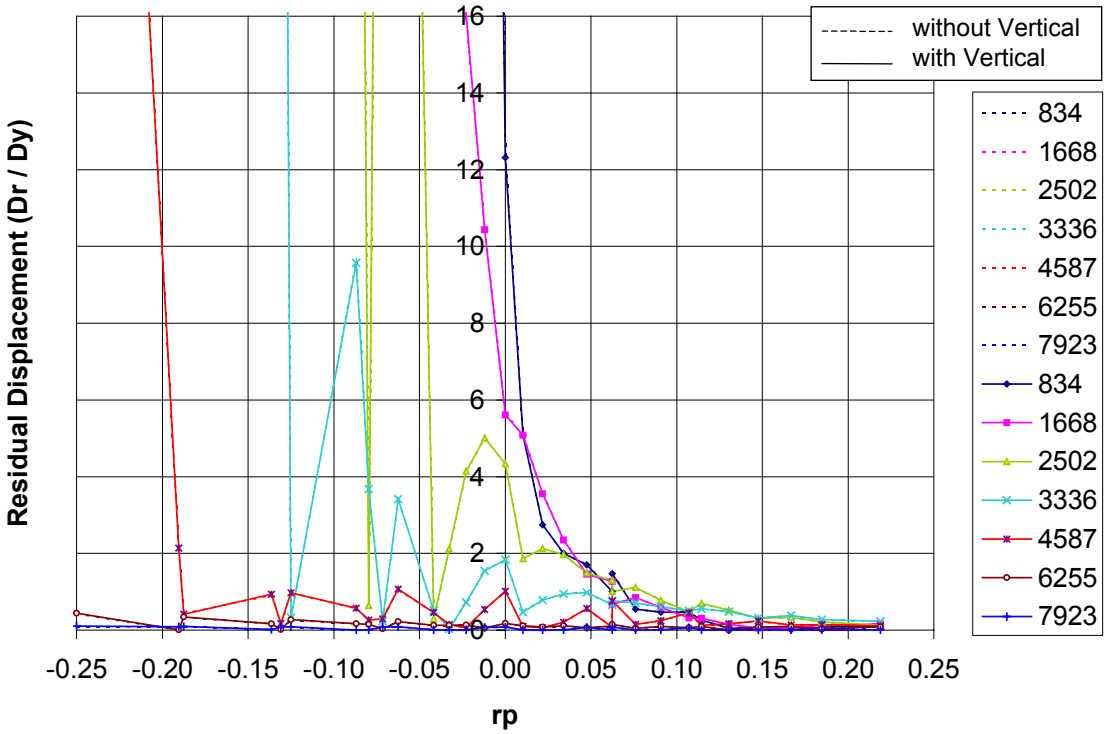


Figure C.3.4.5.2a – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

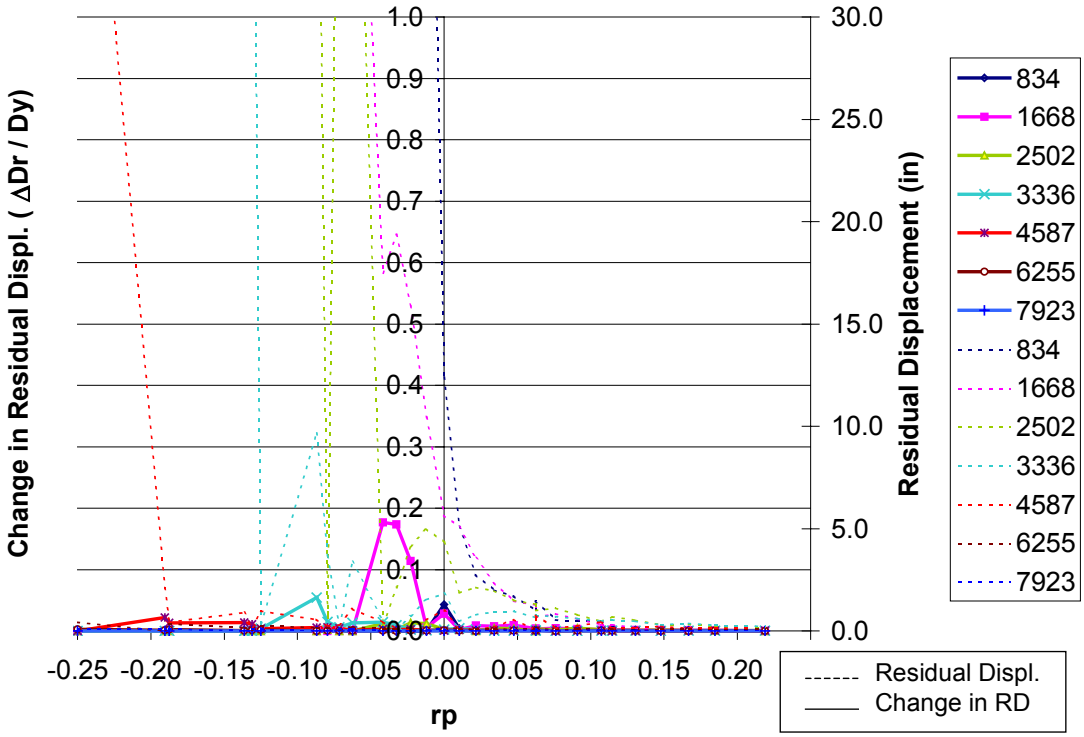


Figure C.3.4.5.2b – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

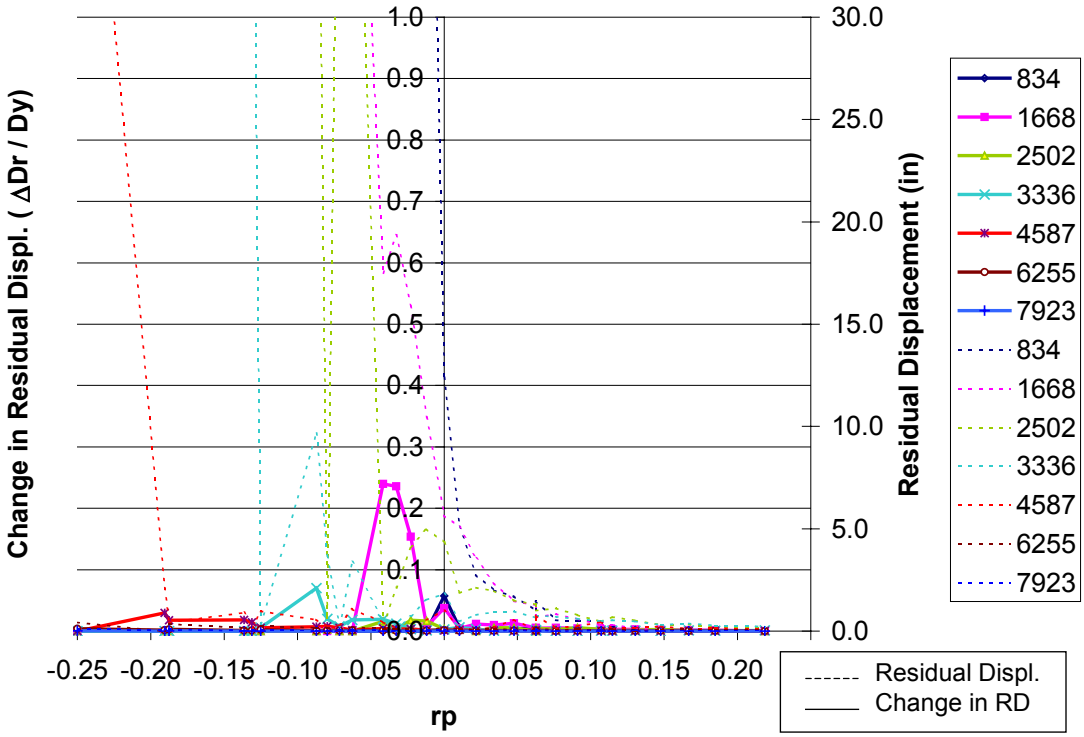


Figure C.3.4.5.2c – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

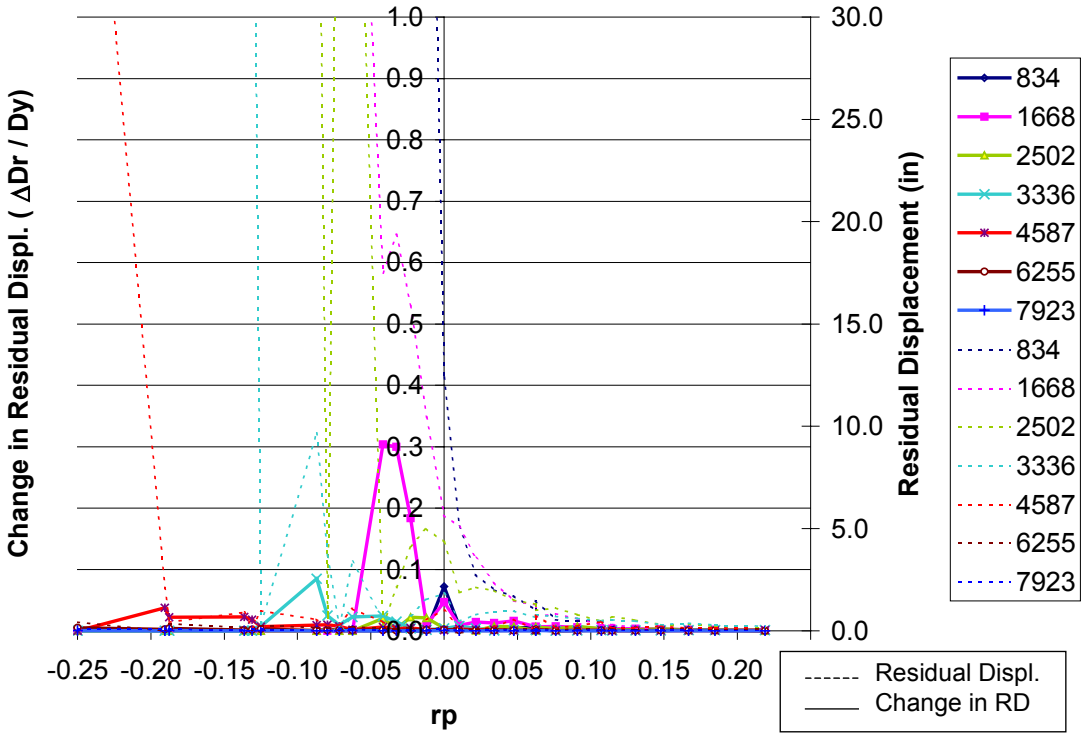


Figure C.3.4.5.2d – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

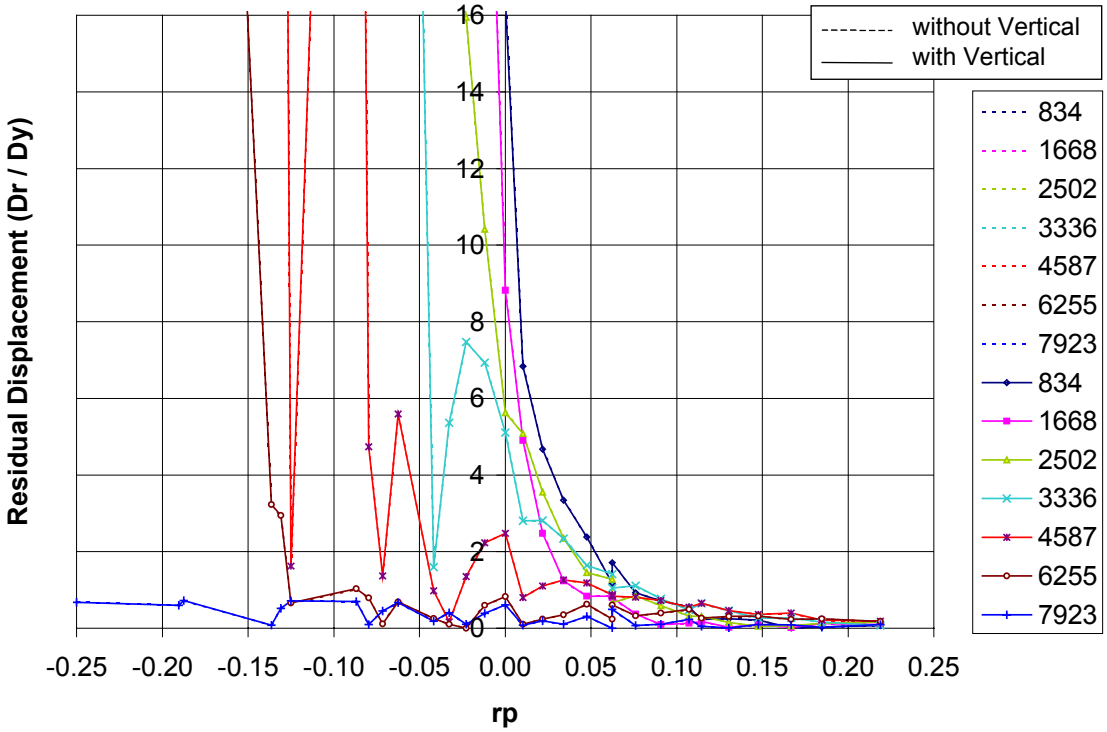


Figure C.3.4.5.3a – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

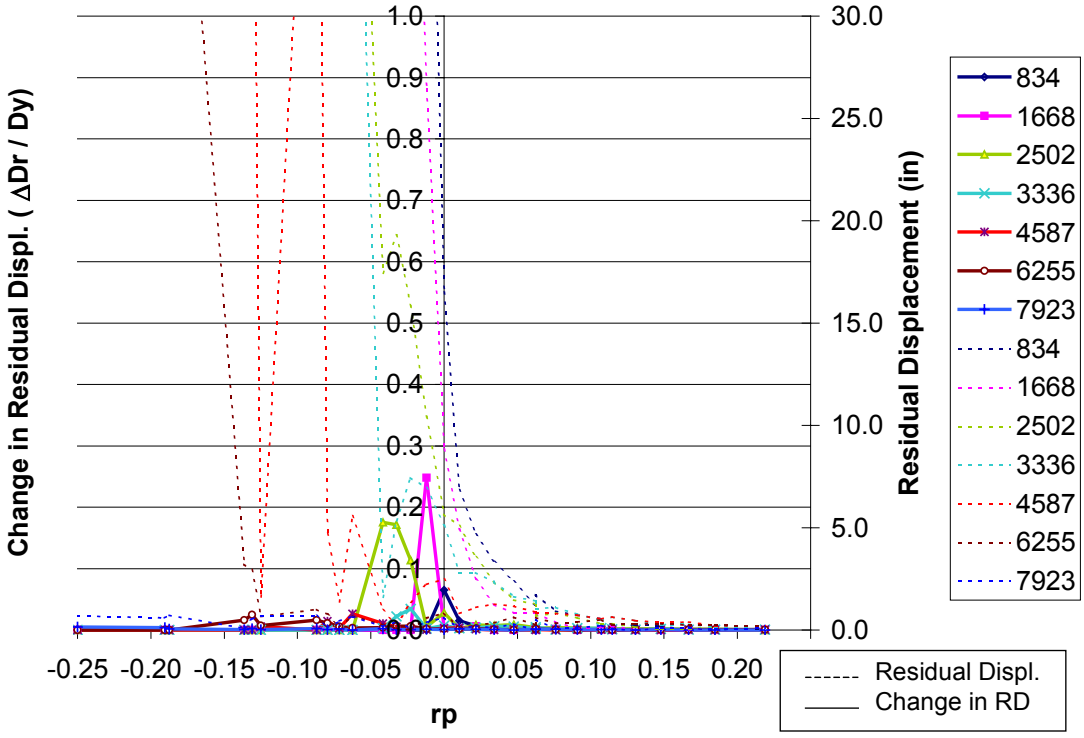


Figure C.3.4.5.3b – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

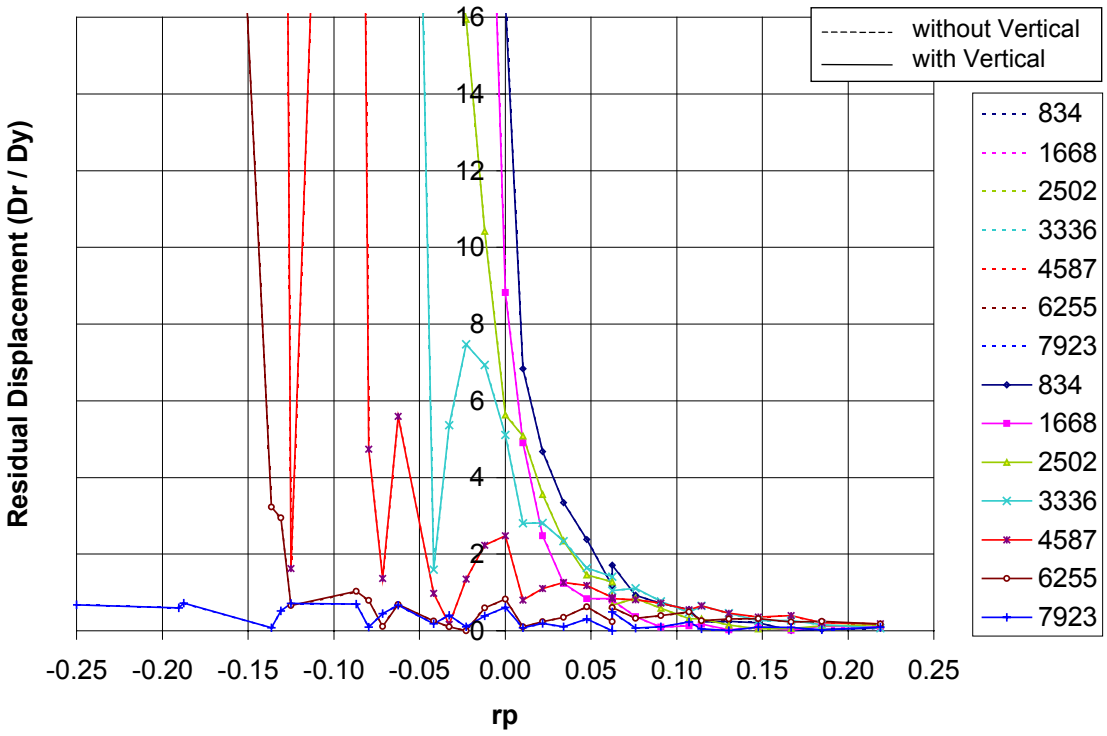


Figure C.3.4.5.4a – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

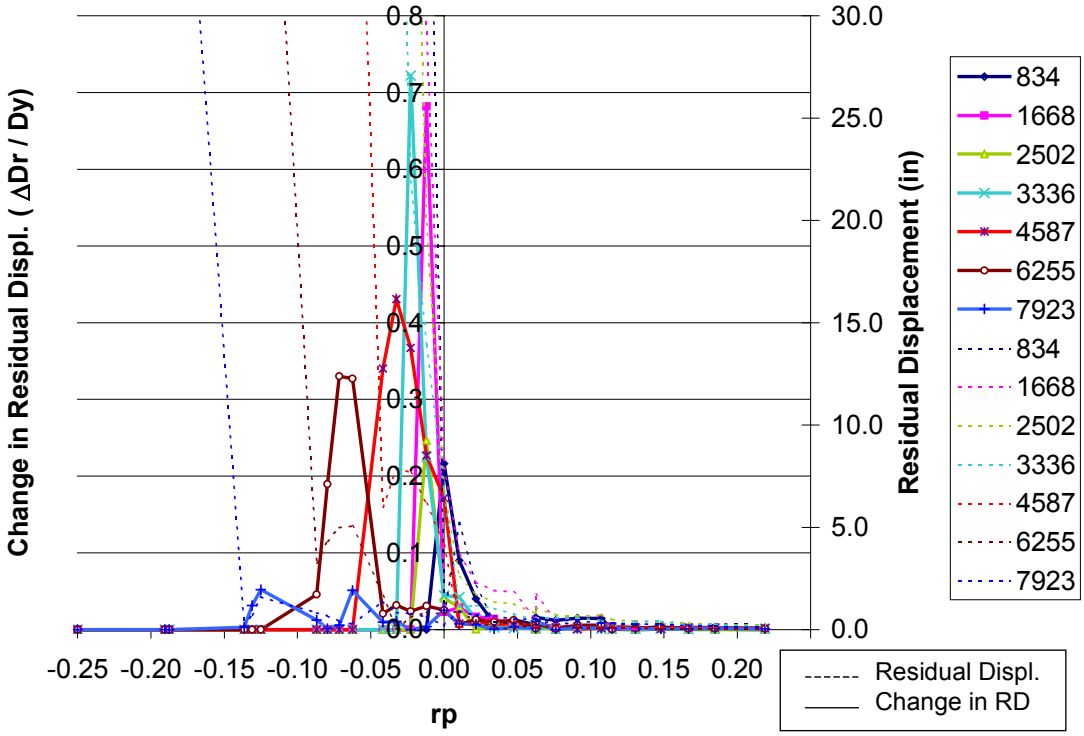


Figure C.3.4.5.4b – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

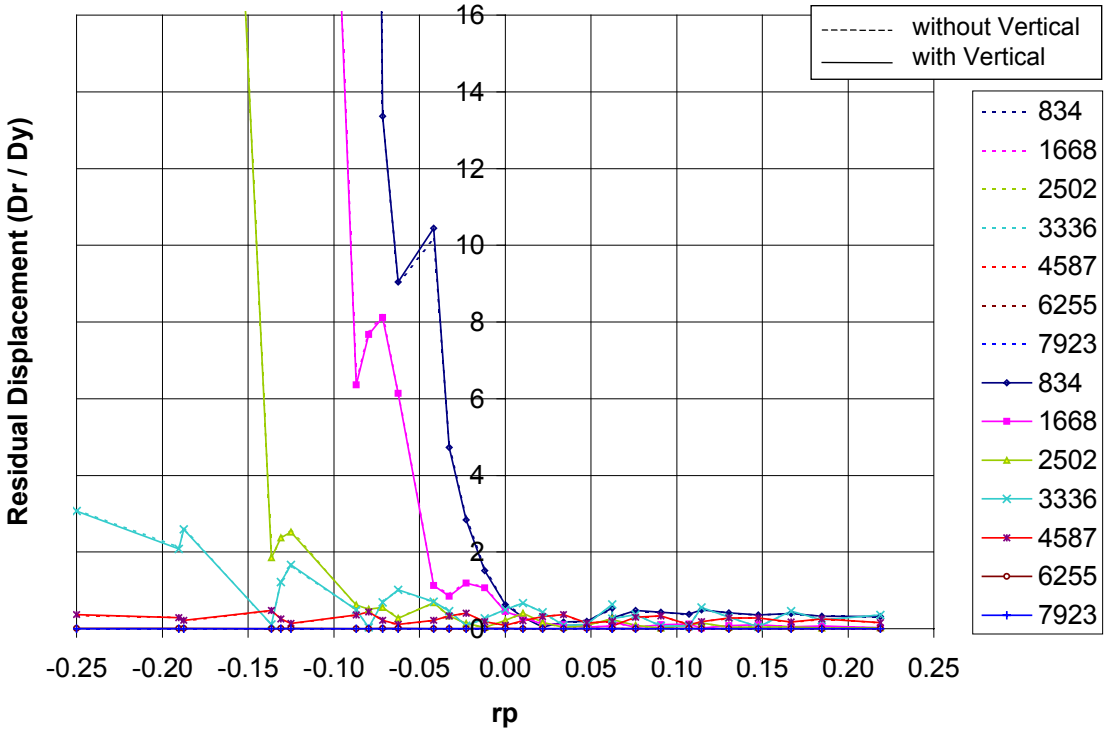


Figure C.3.4.6.1a – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

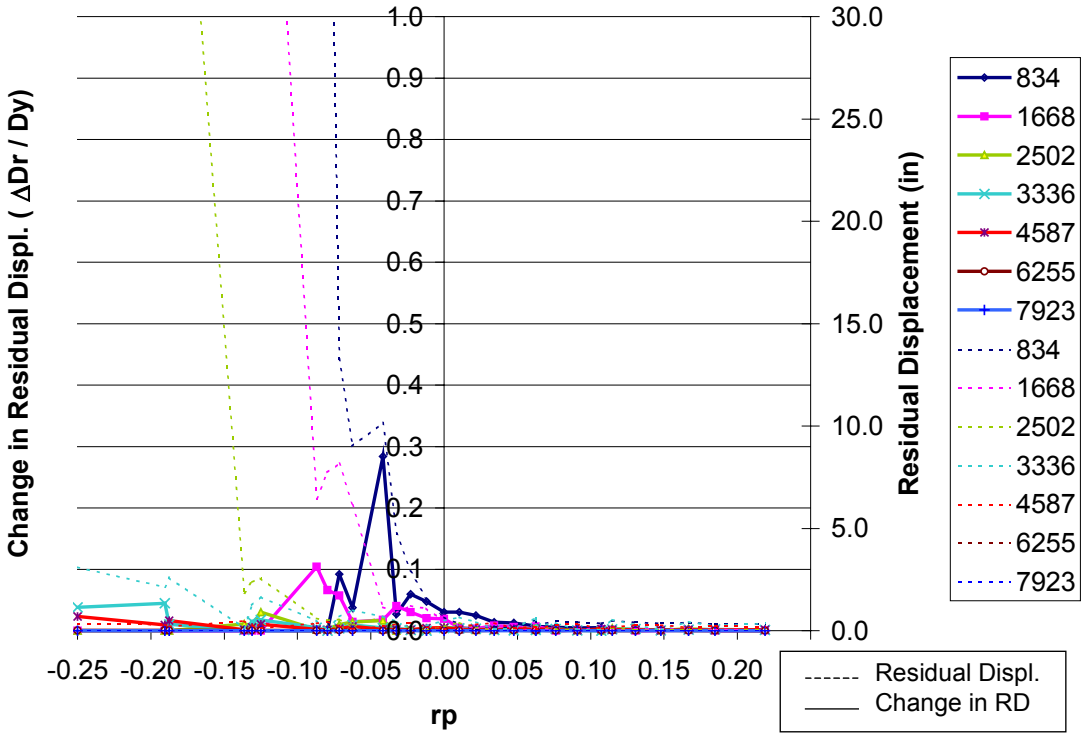


Figure C.3.4.6.1b – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

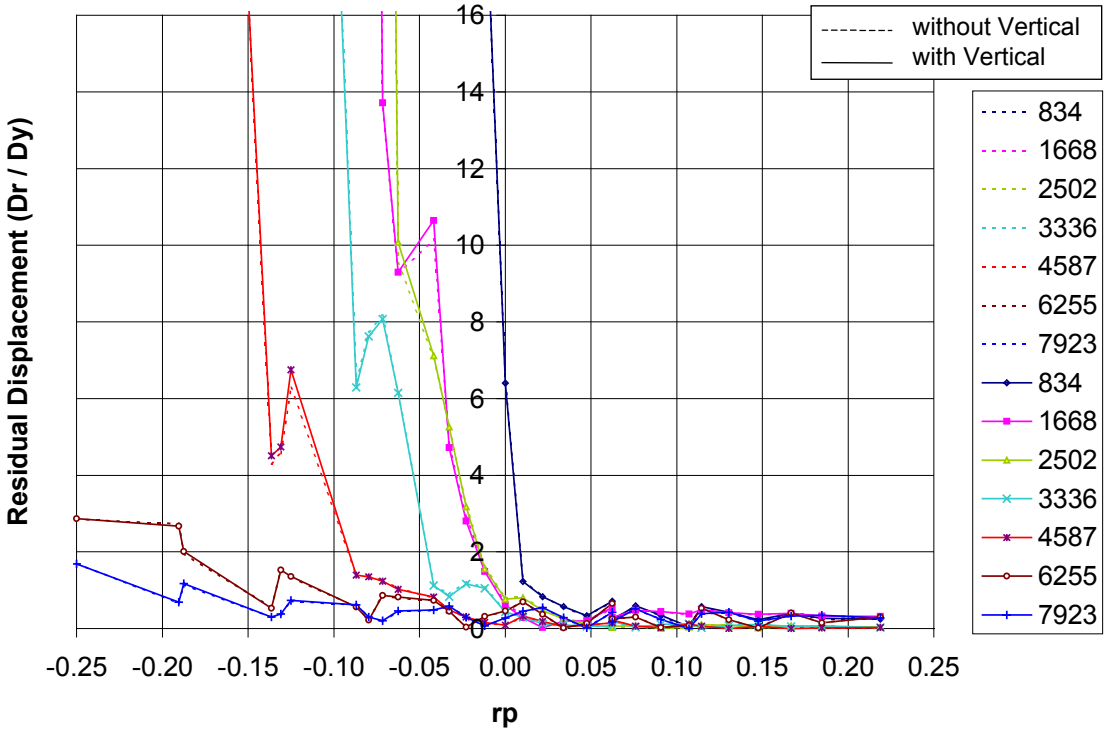


Figure C.3.4.6.2a – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

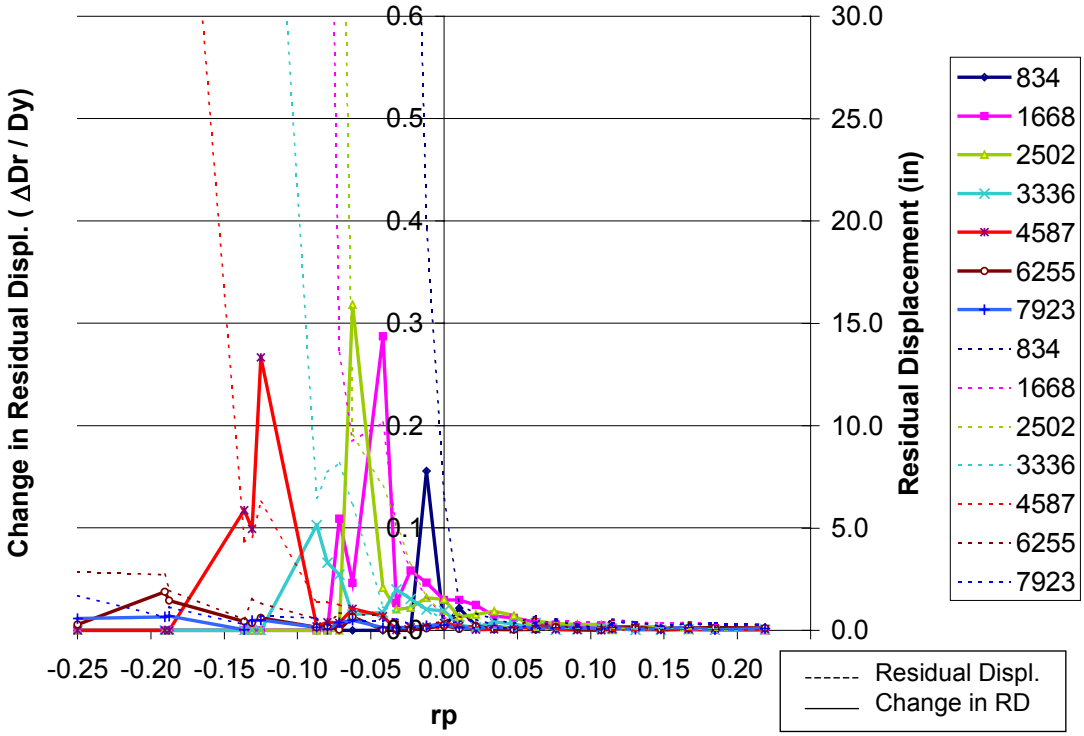


Figure C.3.4.6.2b – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

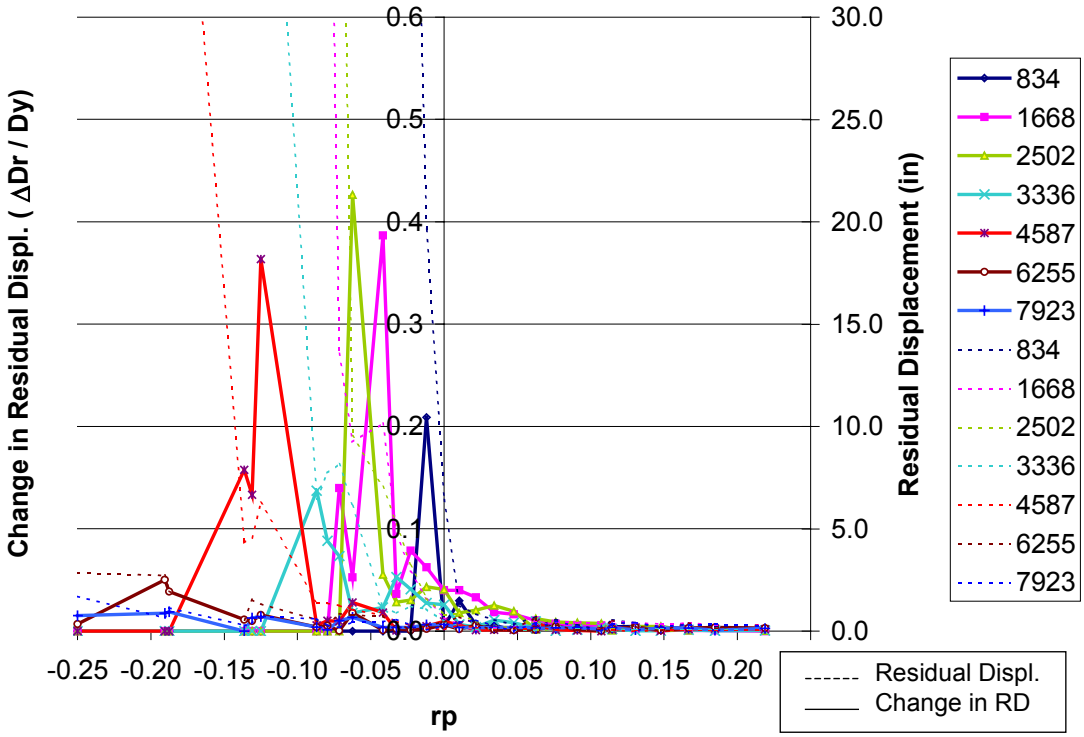


Figure C.3.4.6.2c – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

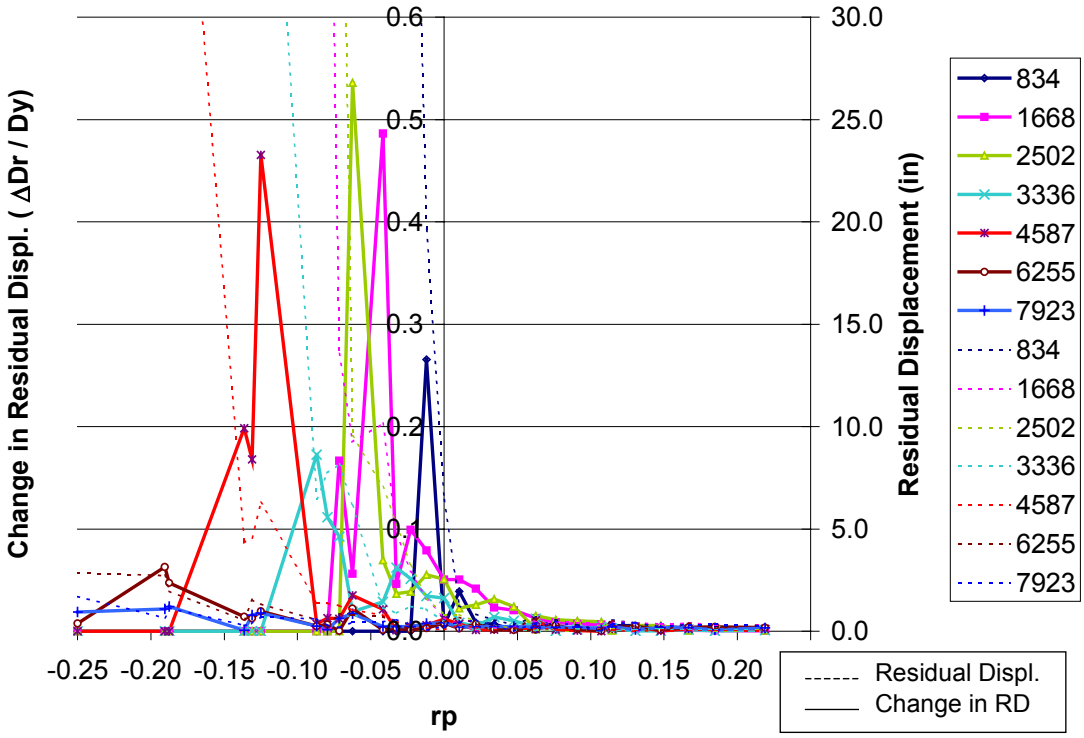


Figure C.3.4.6.2d – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

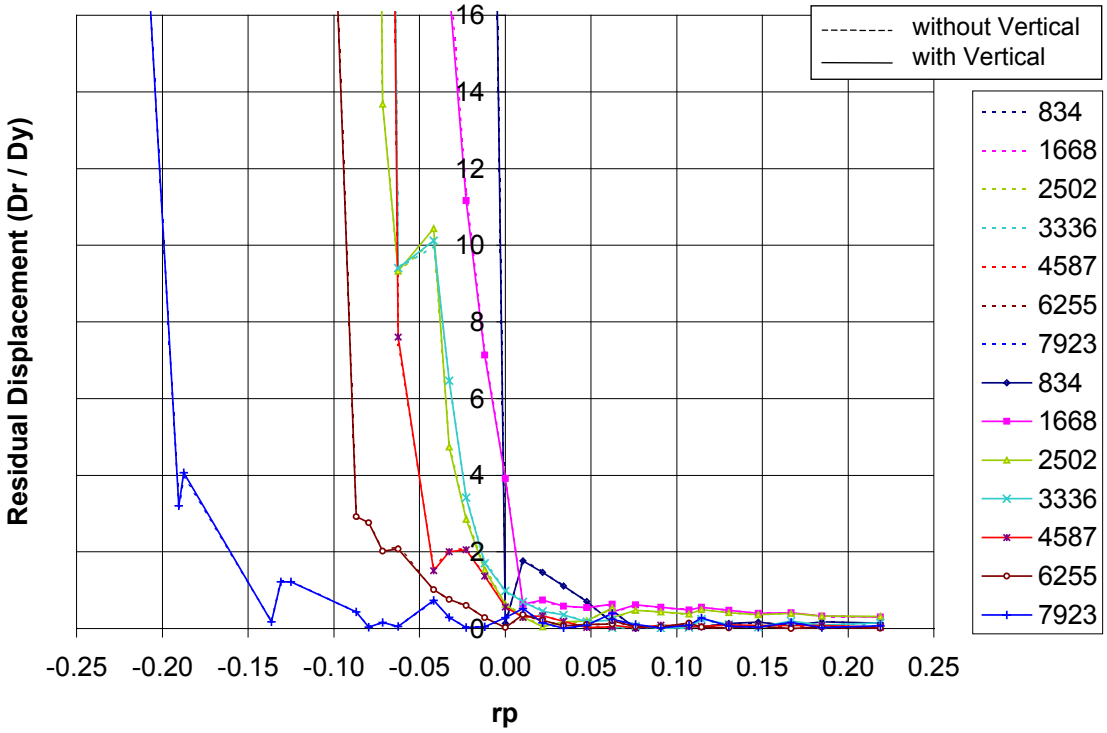


Figure C.3.4.6.3a – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

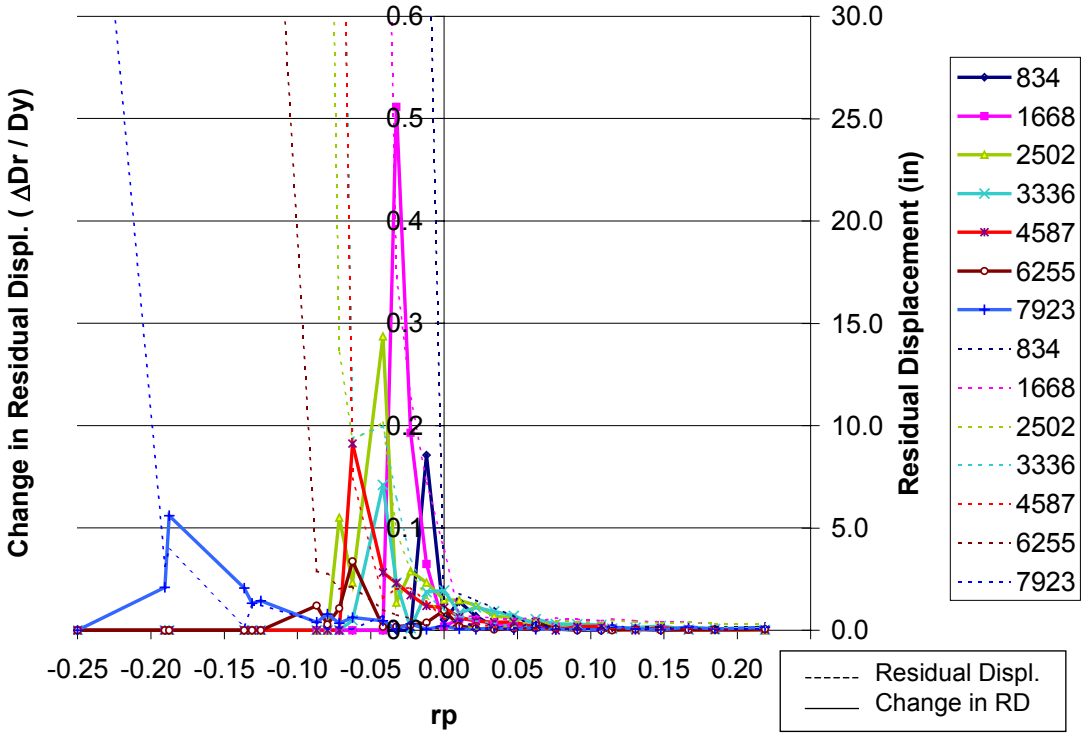


Figure C.3.4.6.3b – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

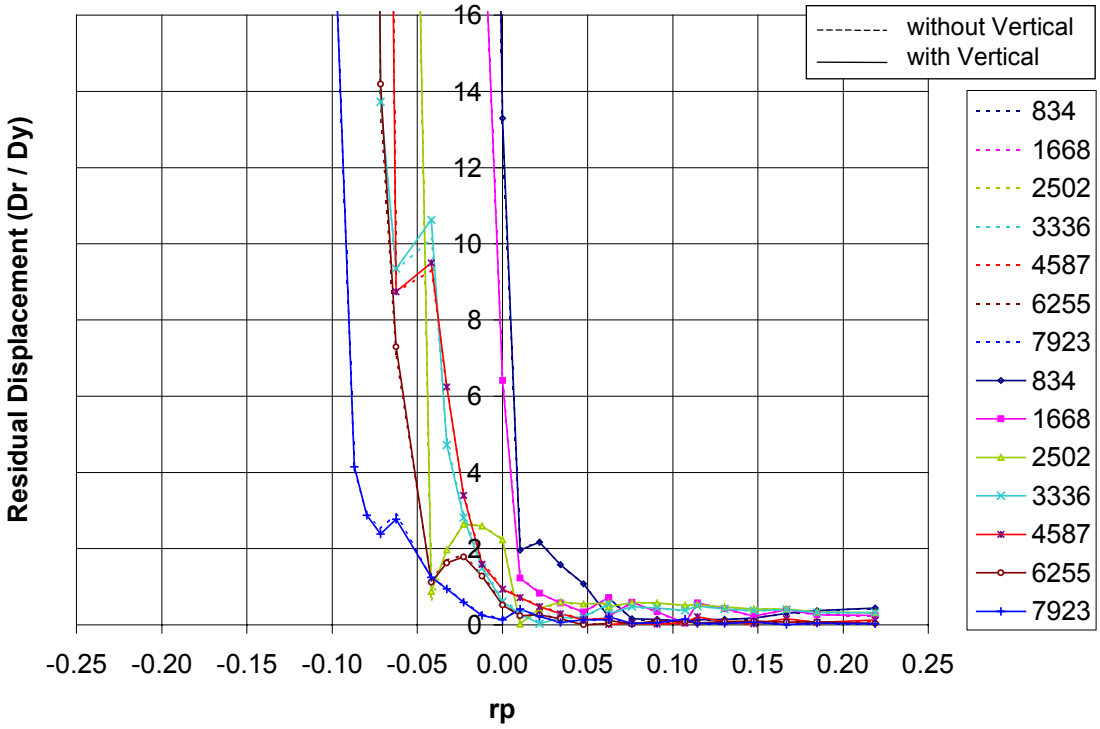


Figure C.3.4.6.4a – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

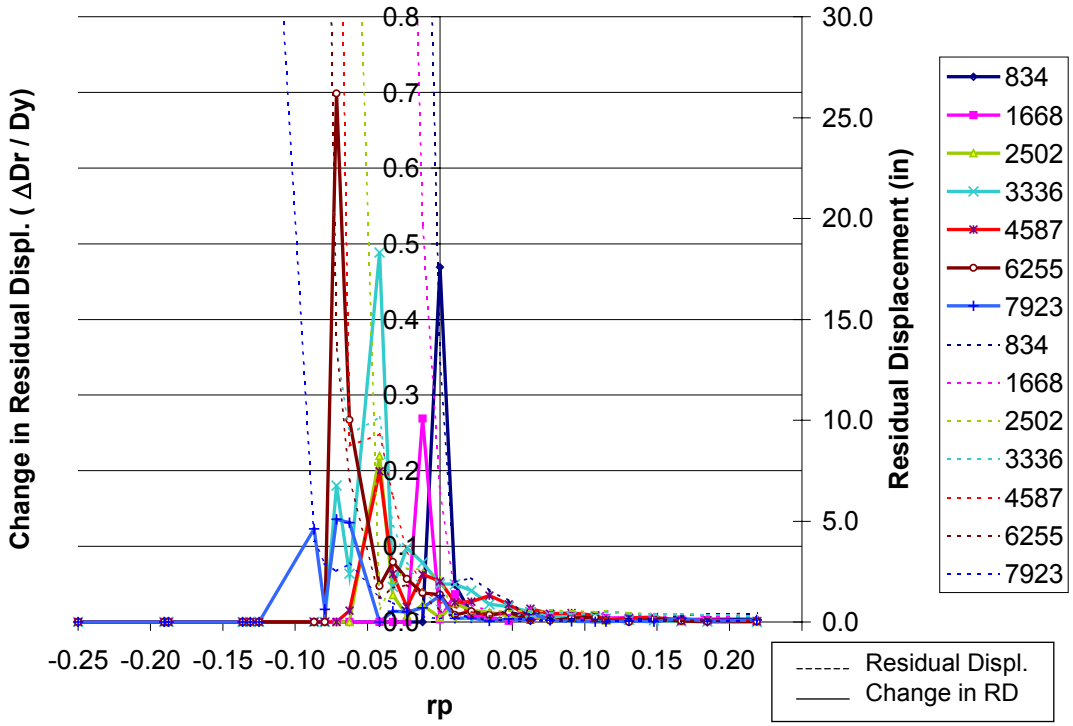


Figure C.3.4.6.4b – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

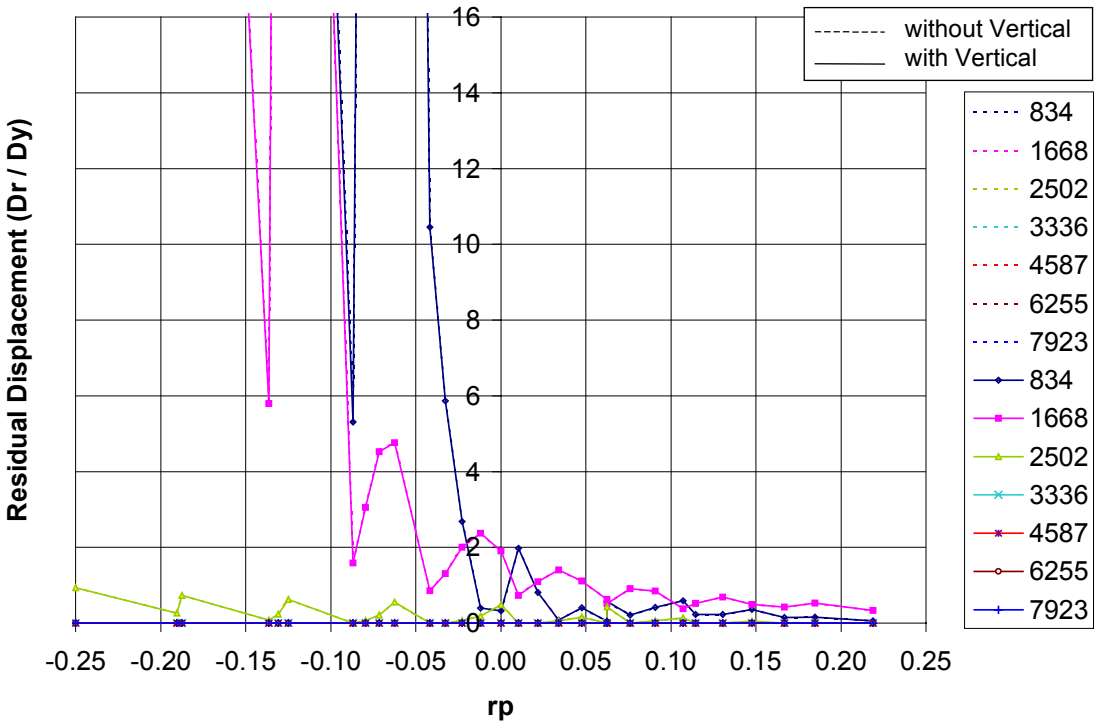


Figure C3.4.7.1a – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

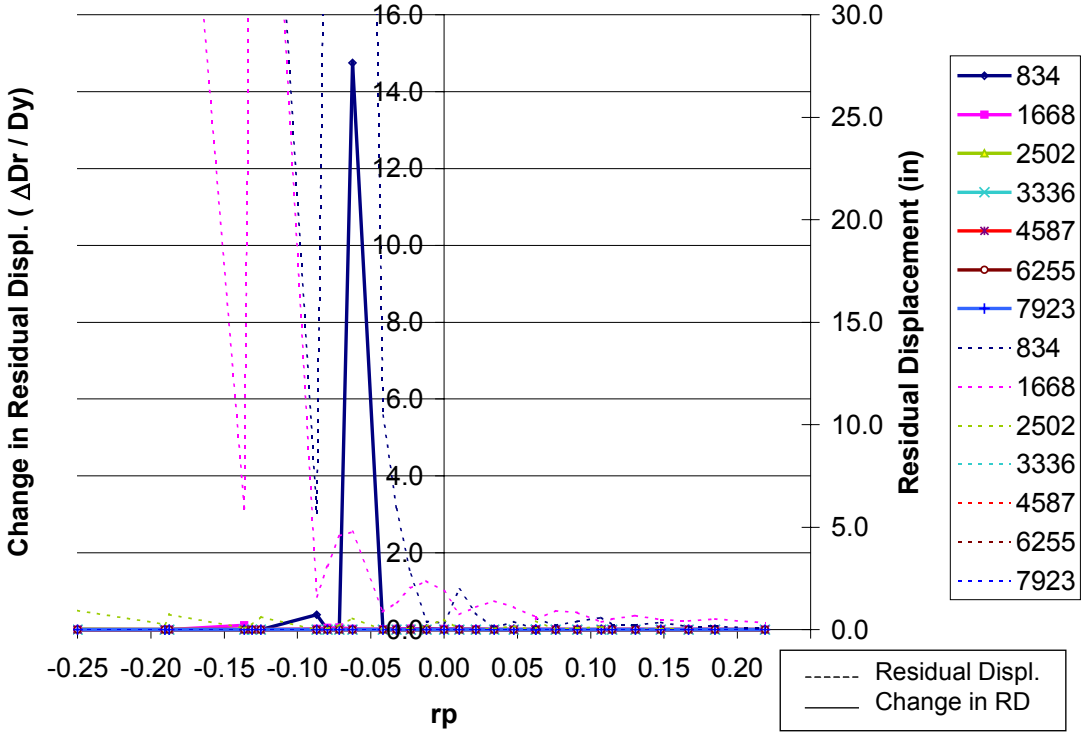


Figure C3.4.7.1b – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

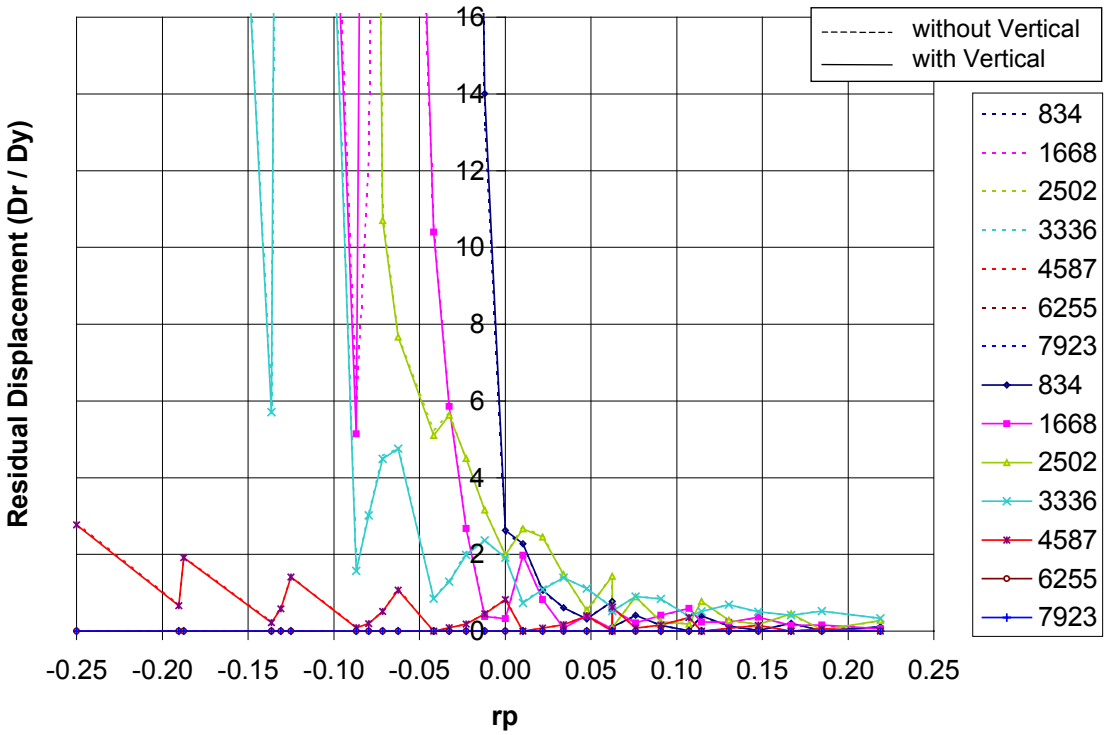


Figure C3.4.7.2a – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

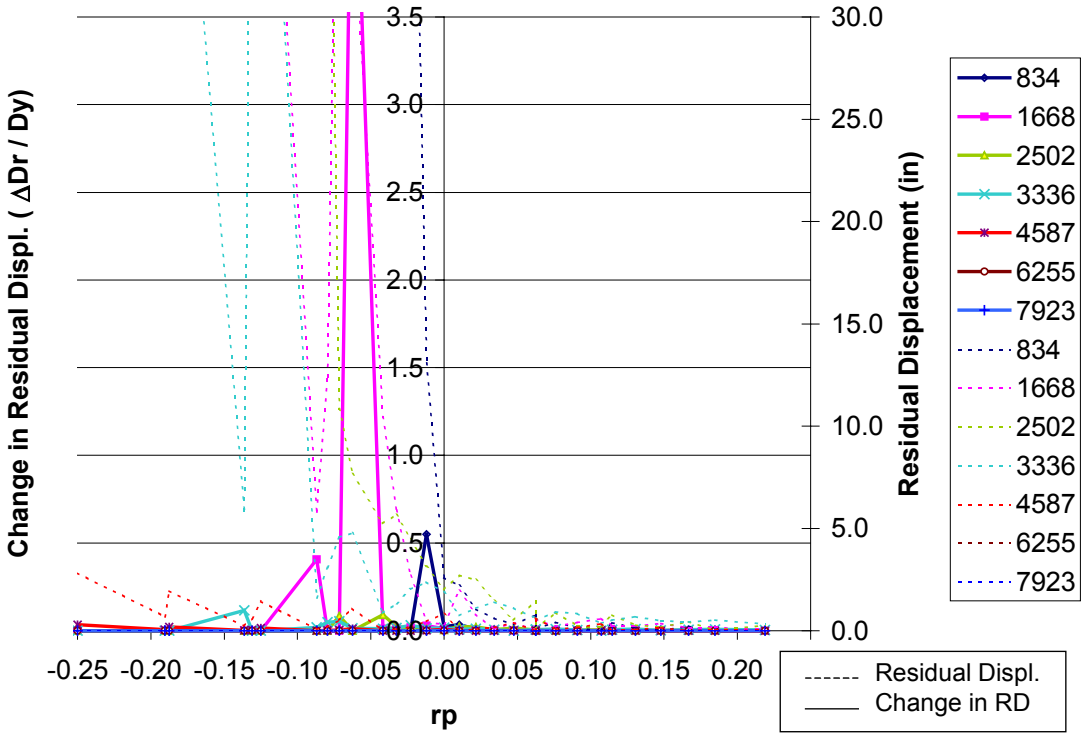


Figure C3.4.7.2b – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

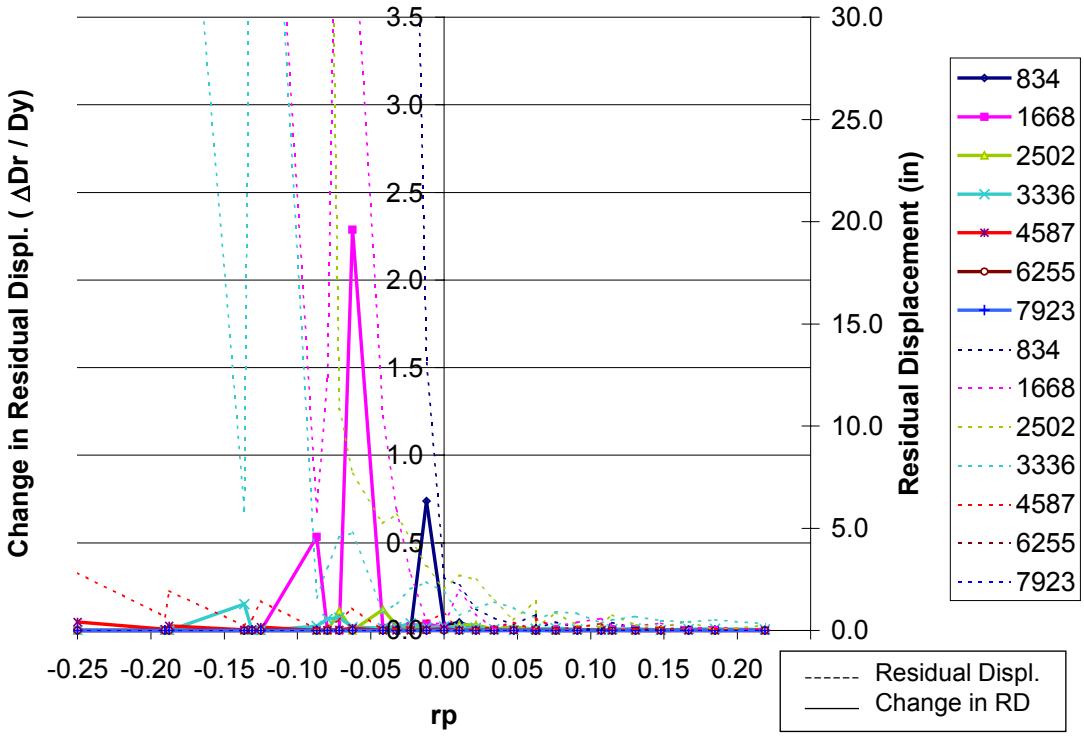


Figure C3.4.7.2c – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

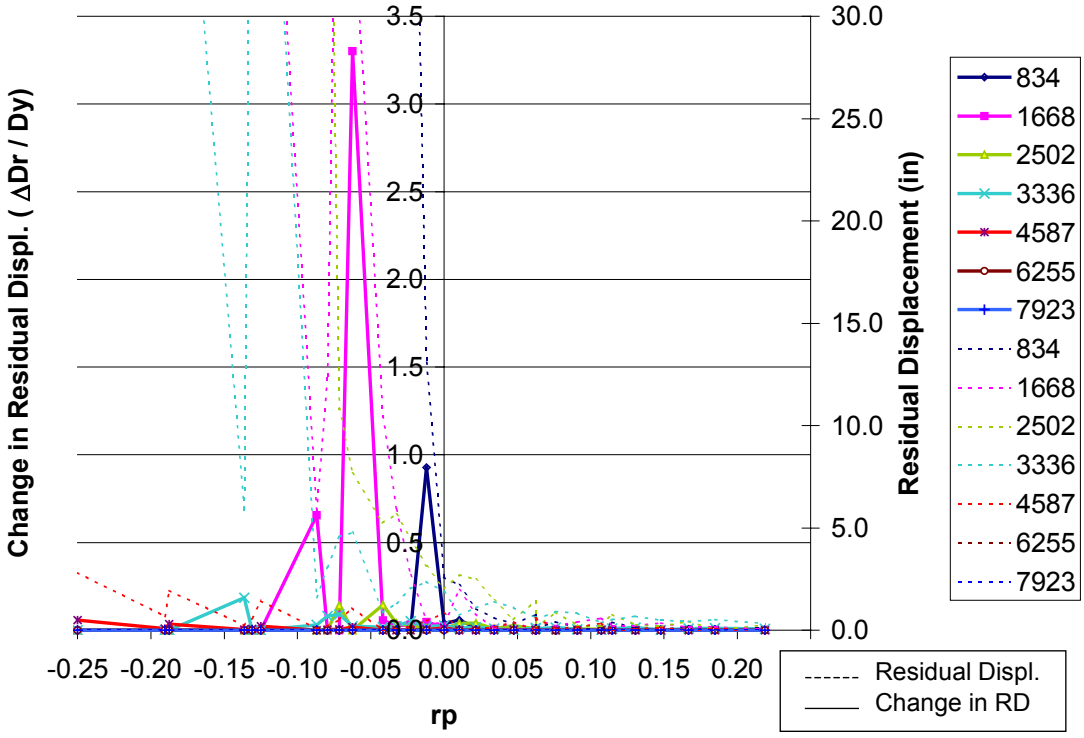


Figure C3.4.7.2d – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

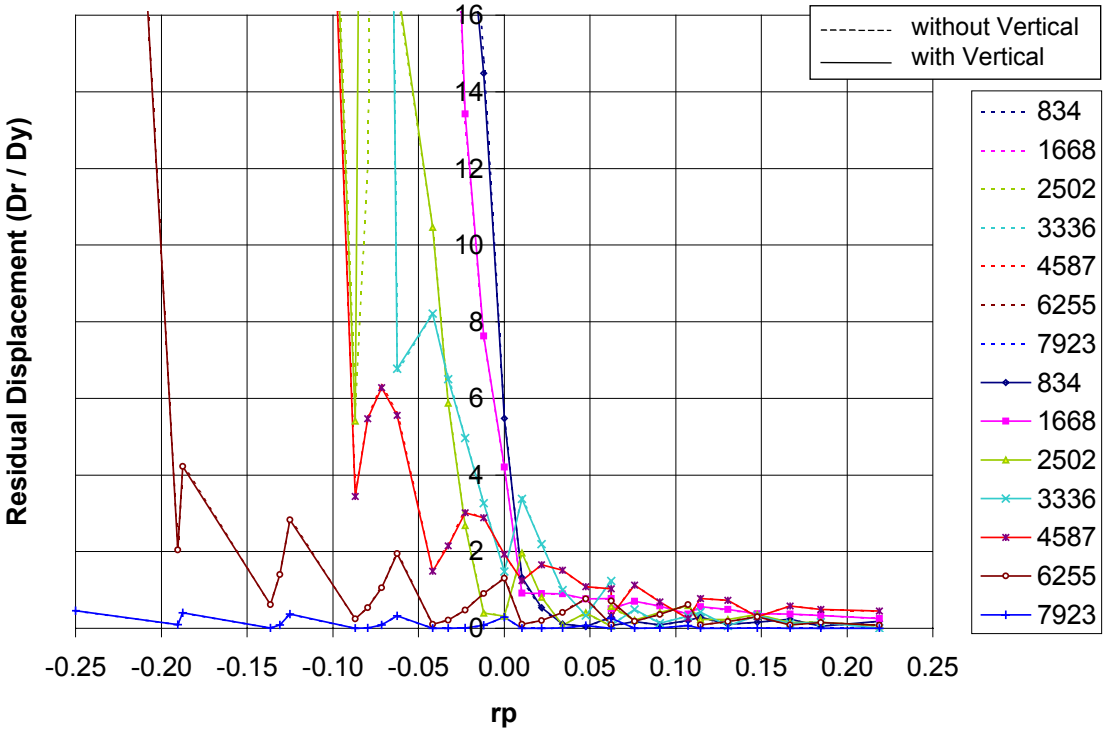


Figure C3.4.7.3a – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

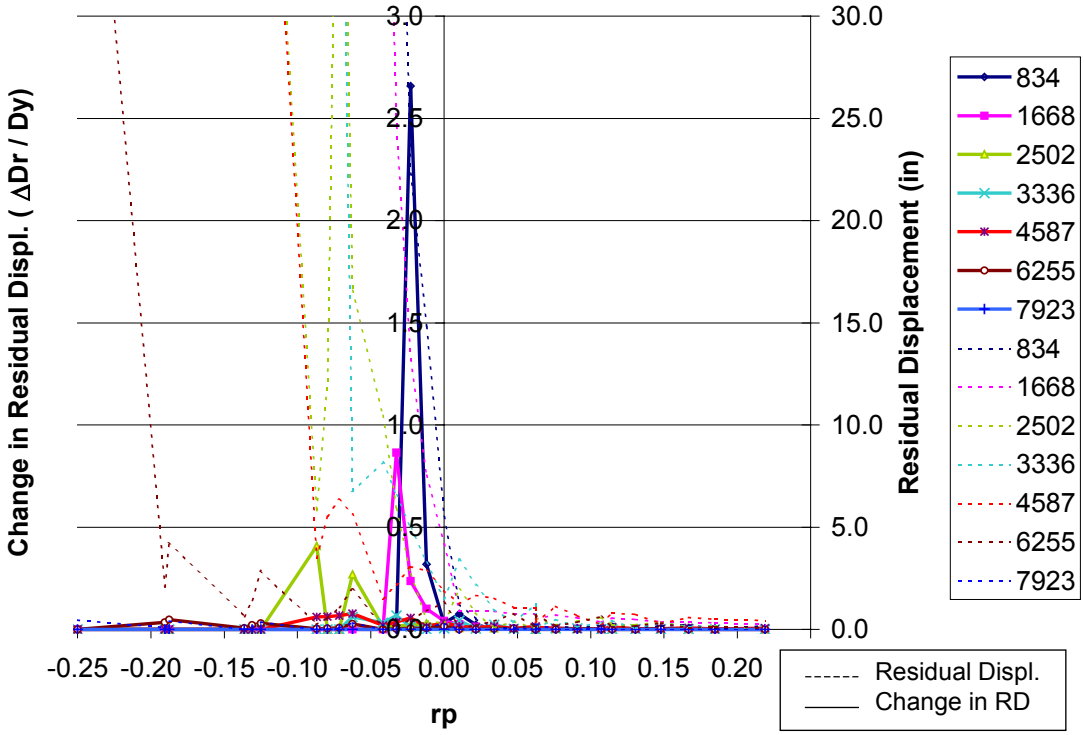


Figure C3.4.7.3b – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

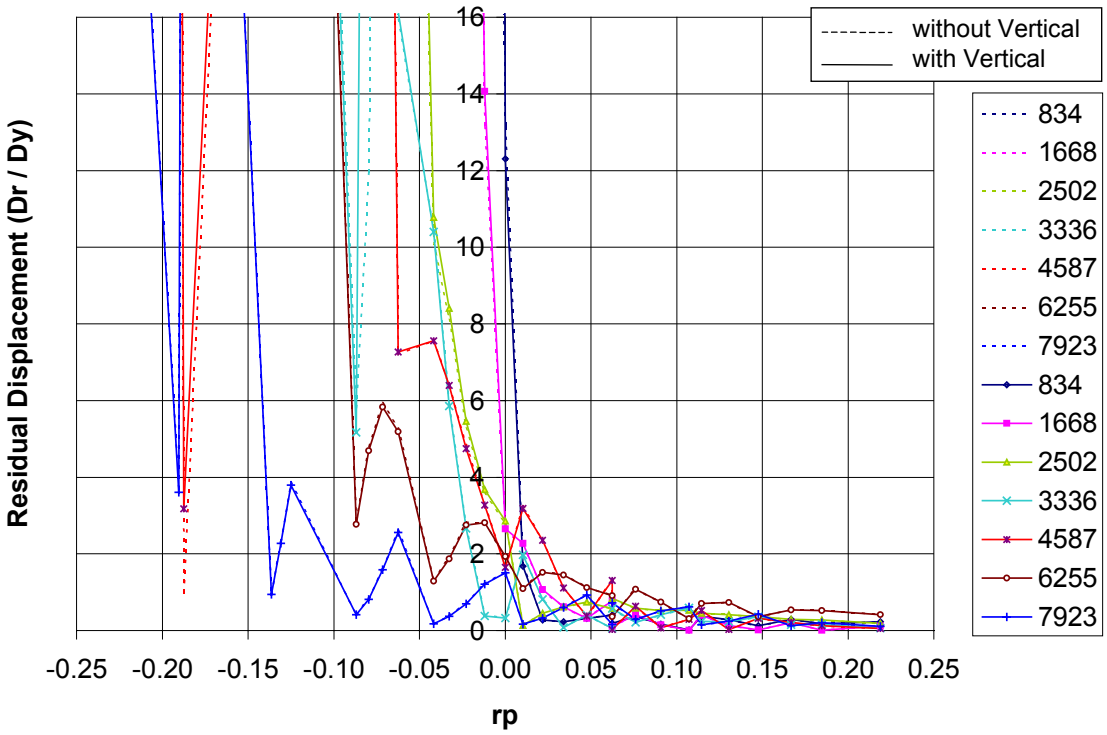


Figure C3.4.7.4a – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

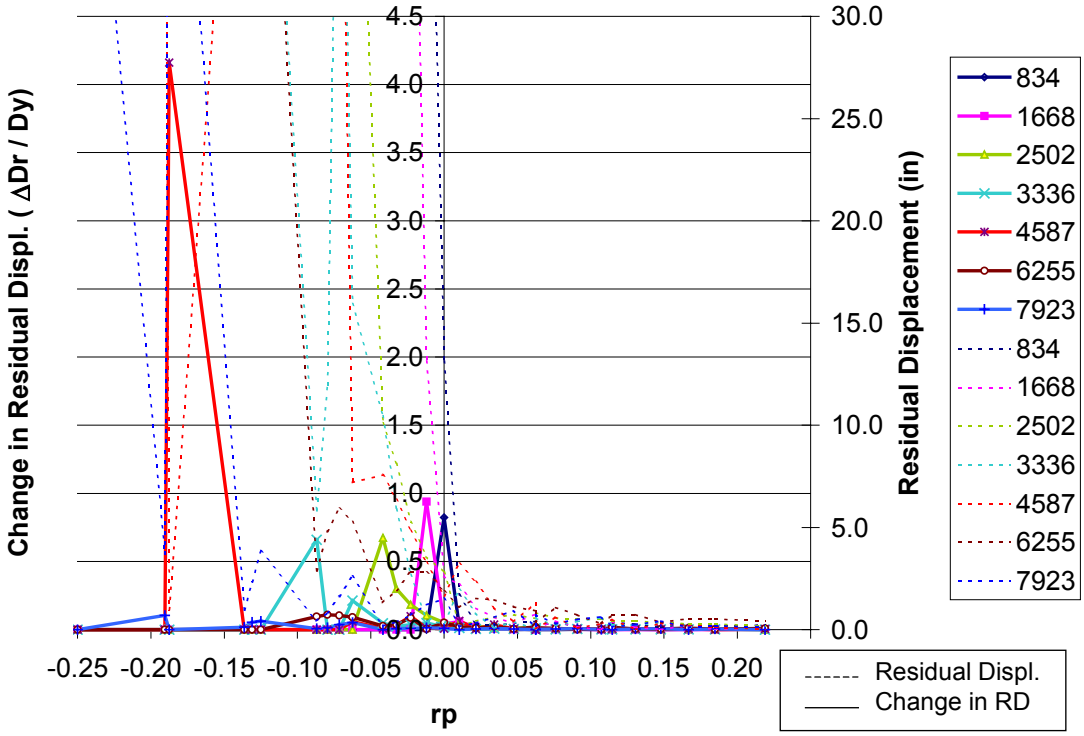


Figure C3.4.7.4b – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

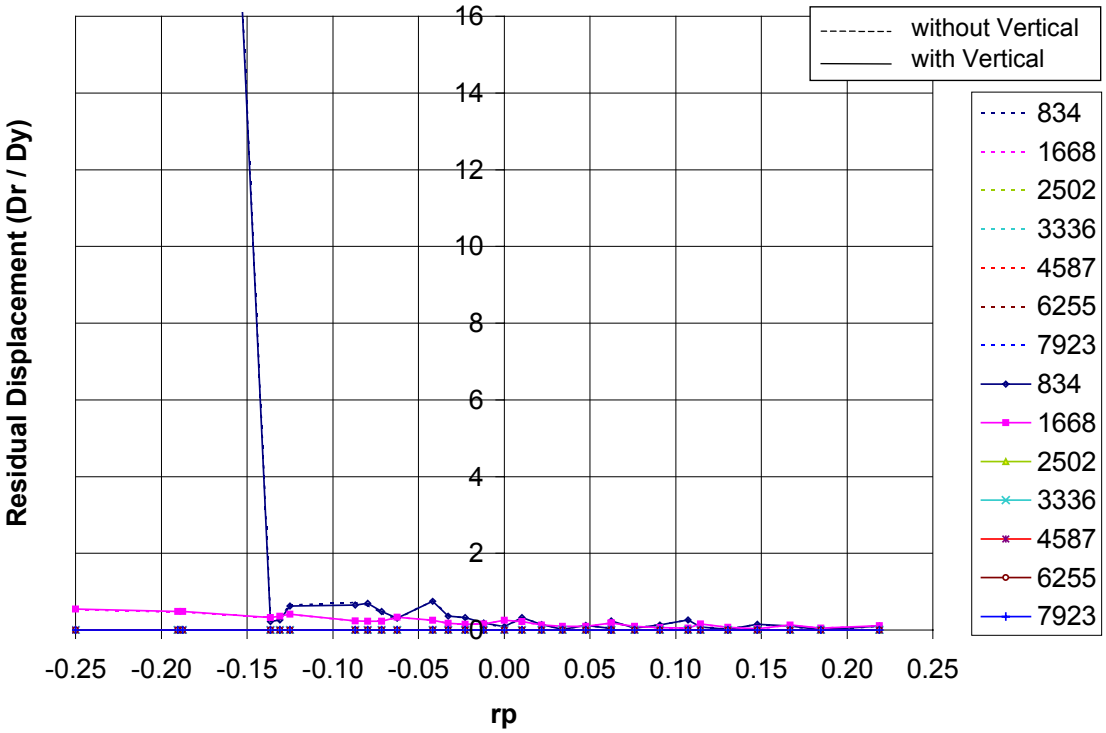


Figure C3.4.8.1a – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

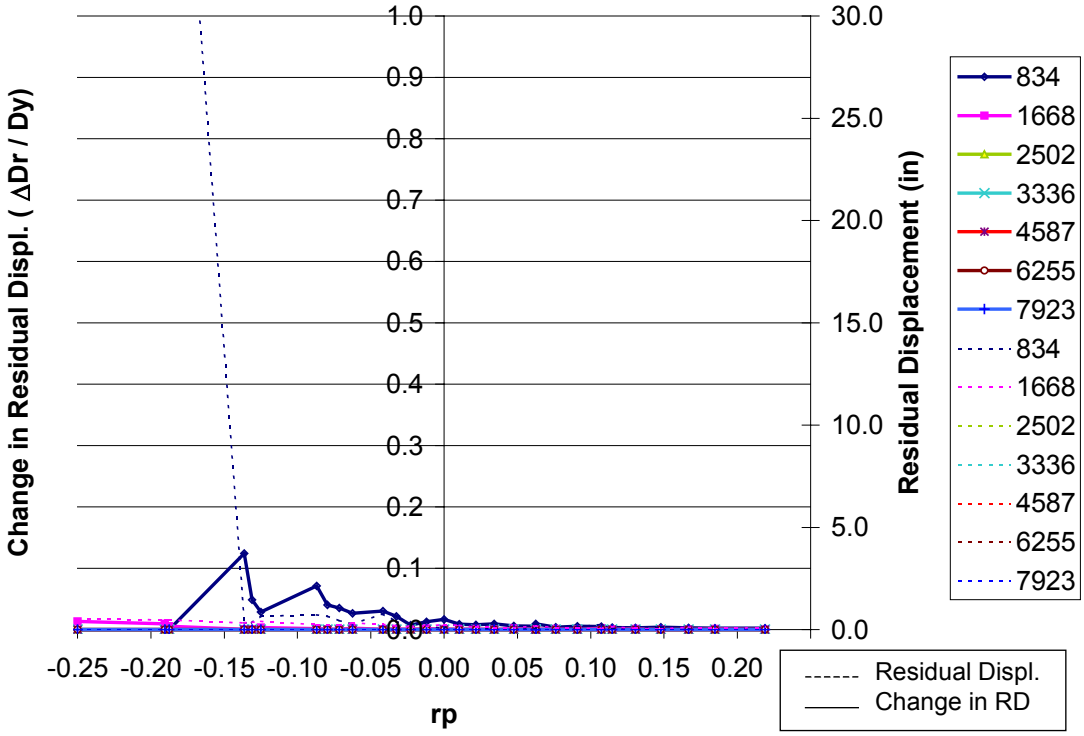


Figure C3.4.8.1b – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

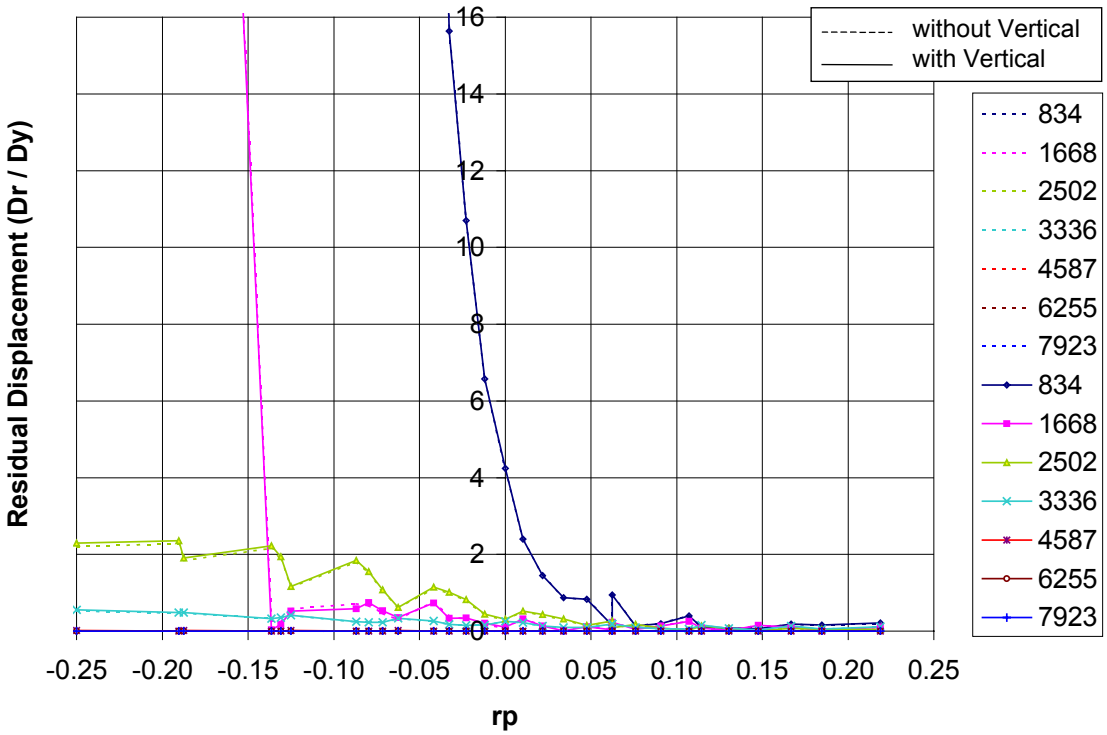


Figure C3.4.8.2a – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

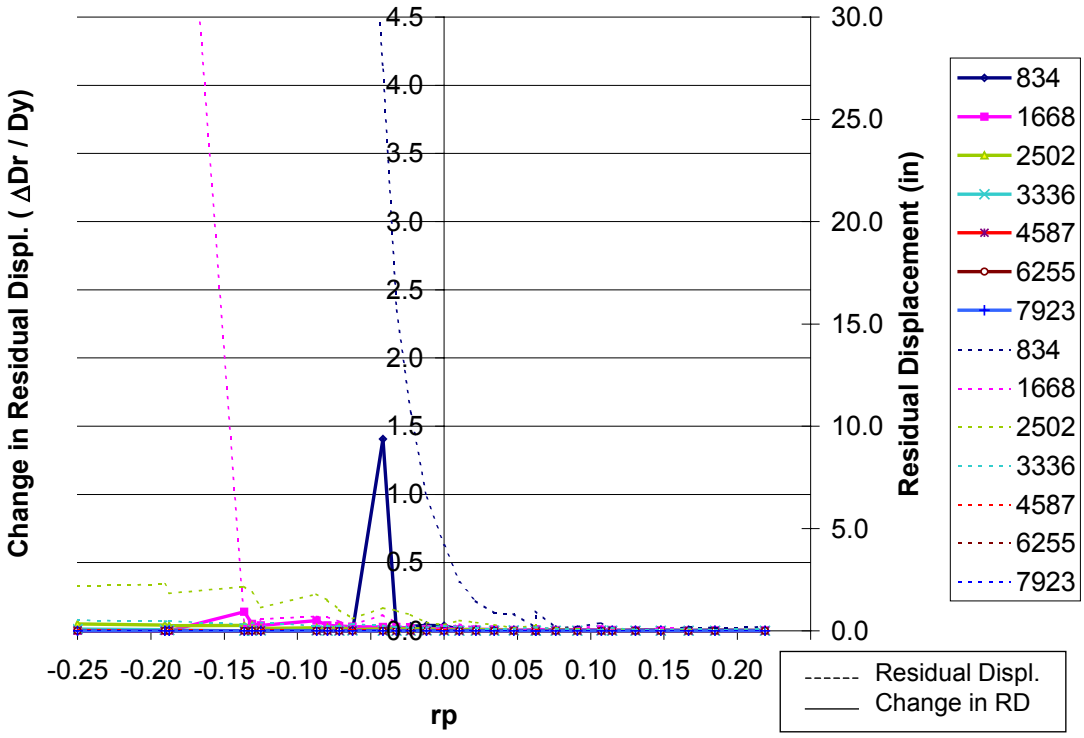


Figure C3.4.8.2b – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

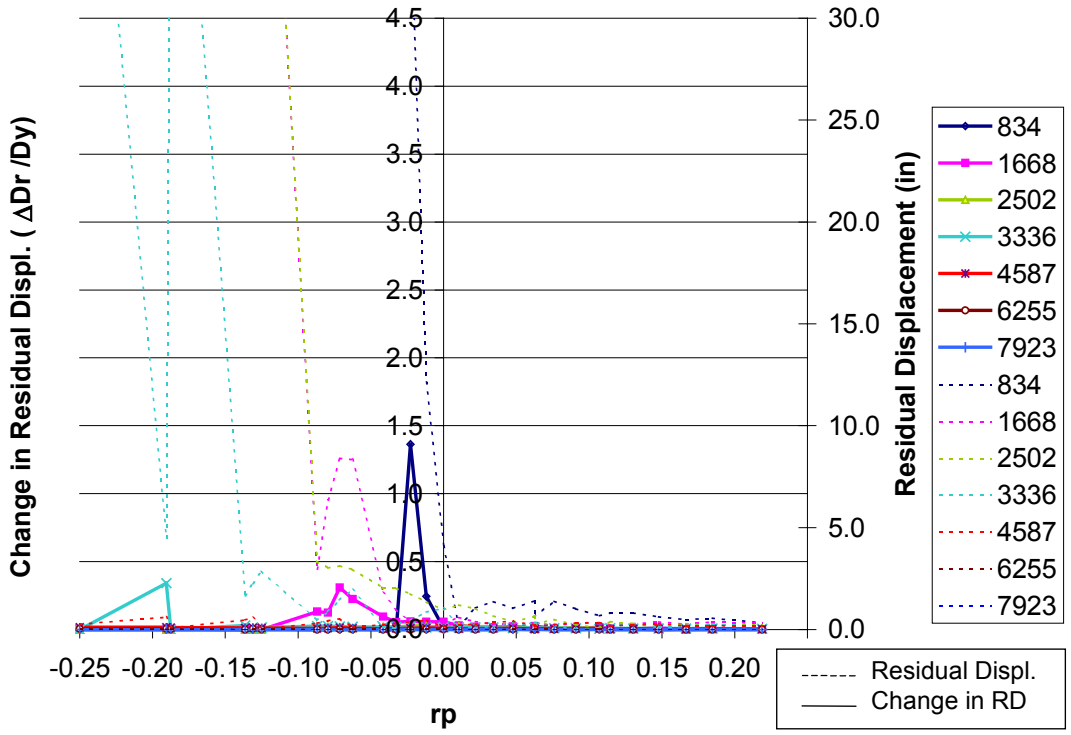


Figure C3.4.8.2c – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

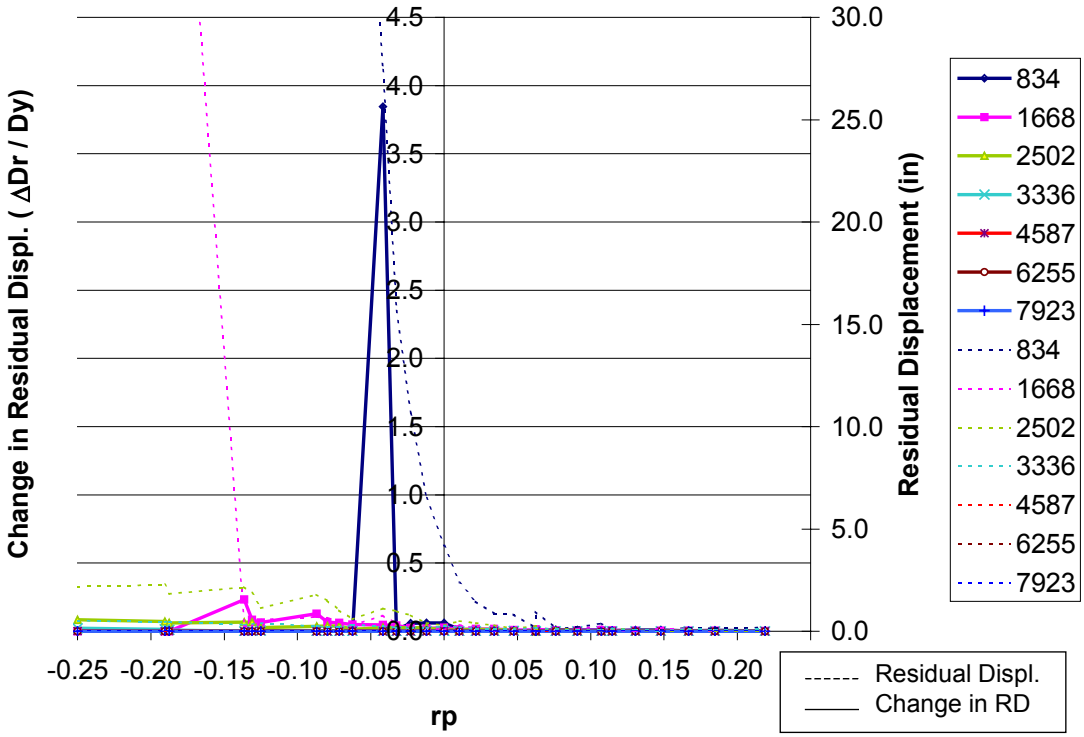


Figure C3.4.8.2d – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

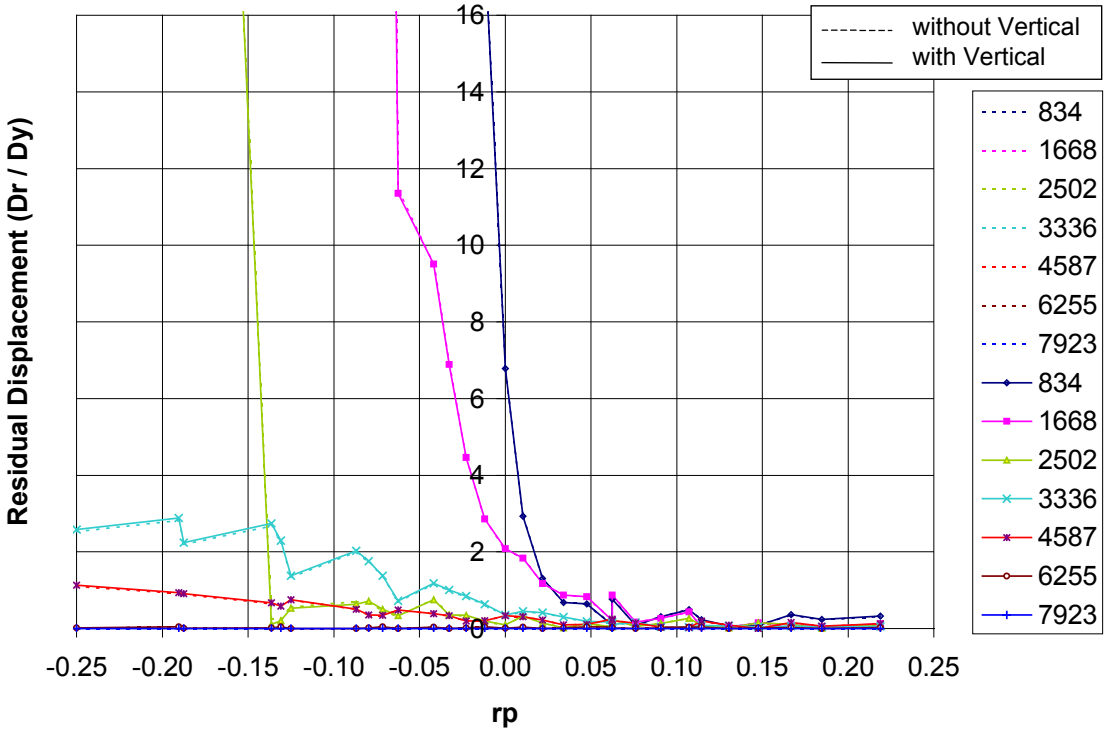


Figure C3.4.8.3a – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

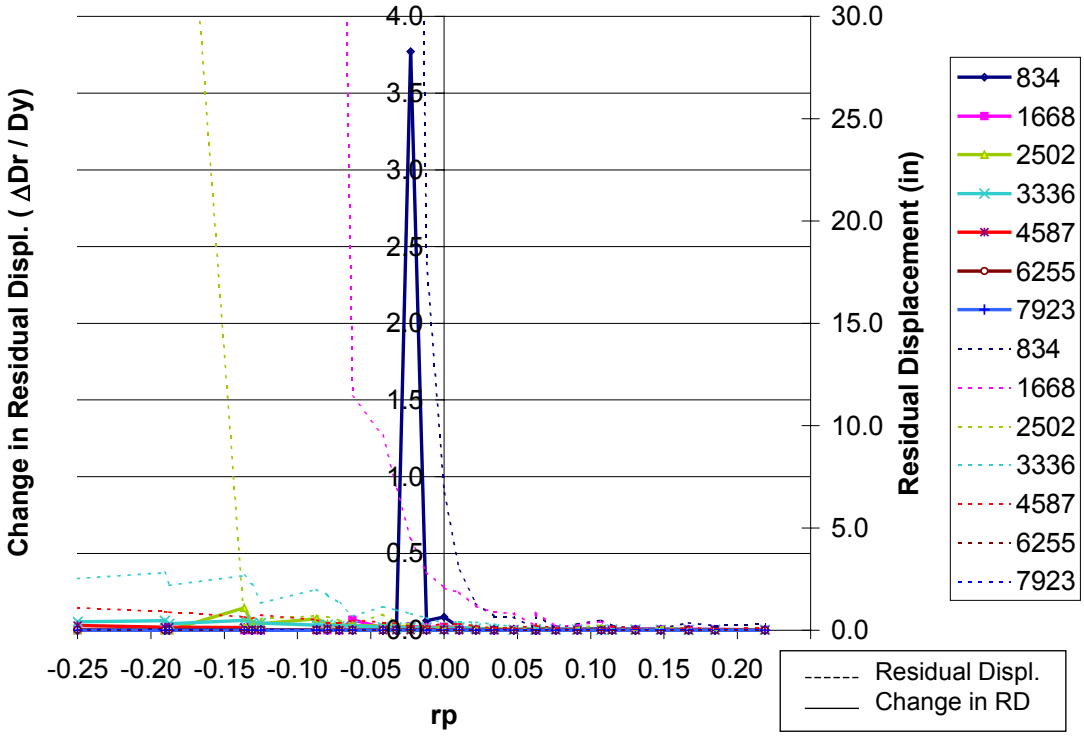


Figure C3.4.8.3b – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

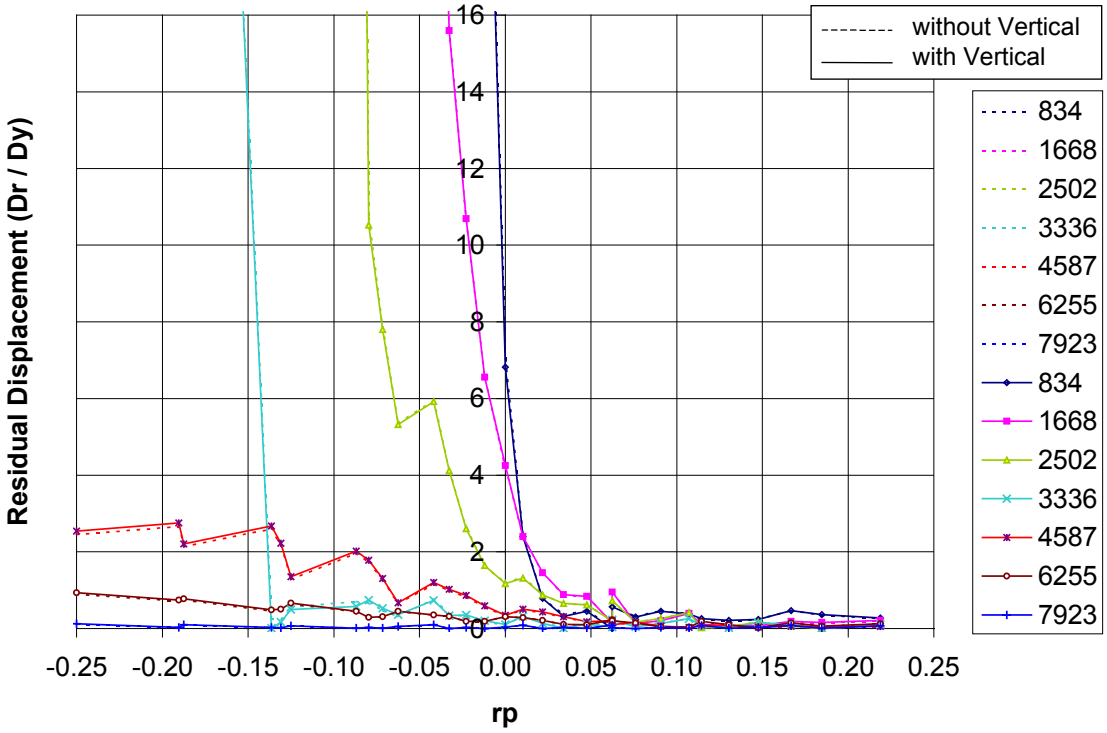


Figure C3.4.8.4a – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 0.903 Seconds.

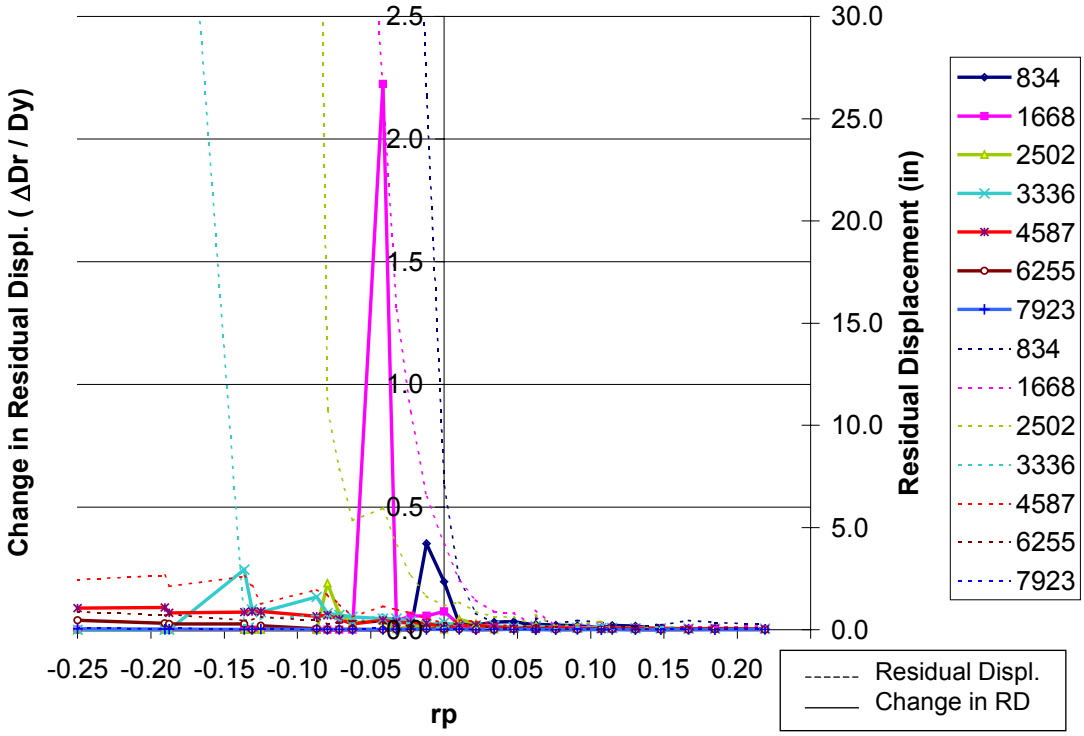


Figure C3.4.8.4b – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 0.903 Seconds.

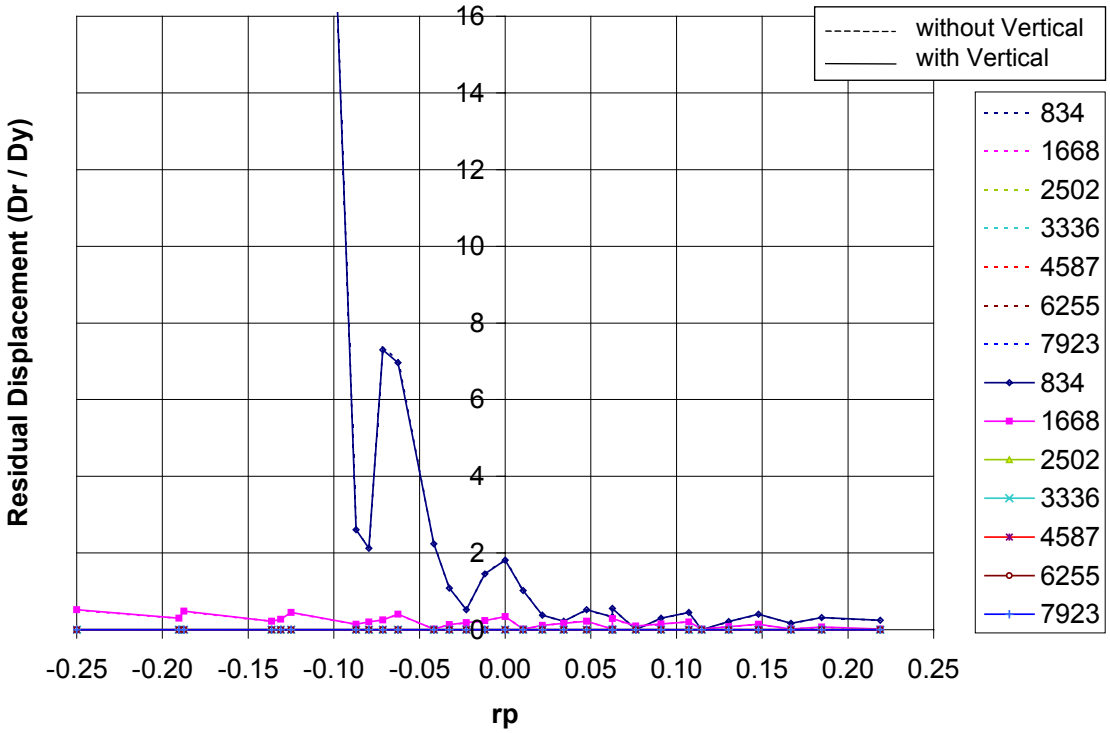


Figure C3.5.1.1a – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

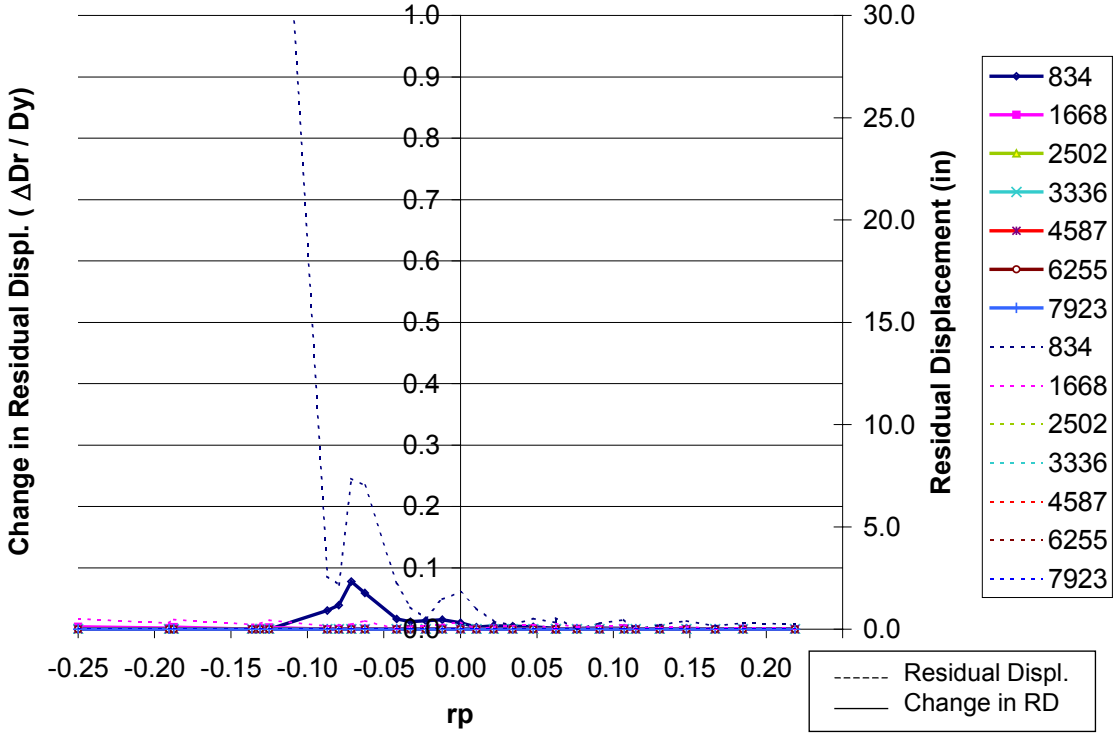


Figure C3.5.1.1b – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

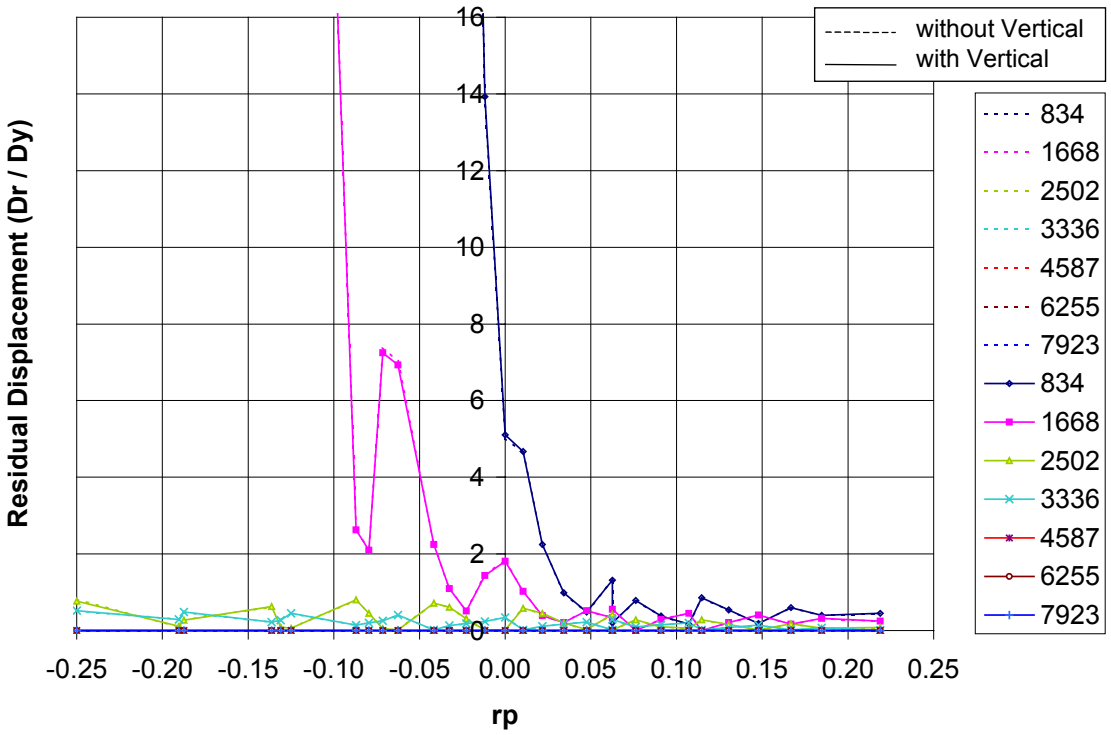


Figure C3.5.1.2a – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

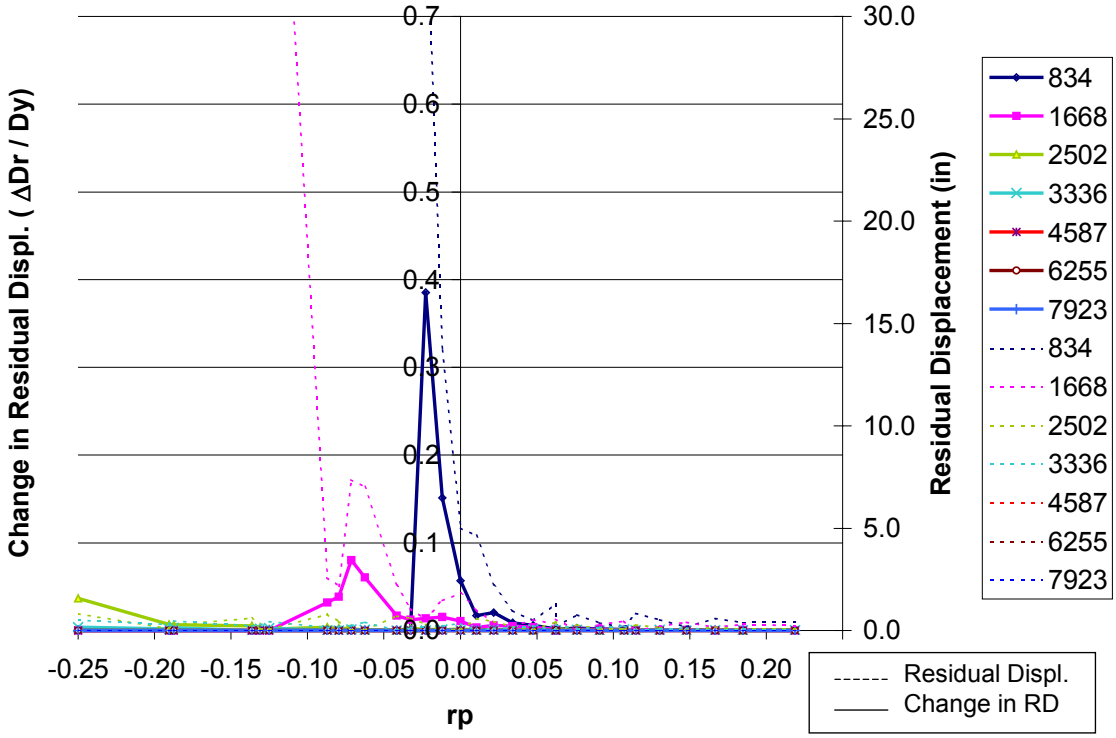


Figure C3.5.1.2b – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

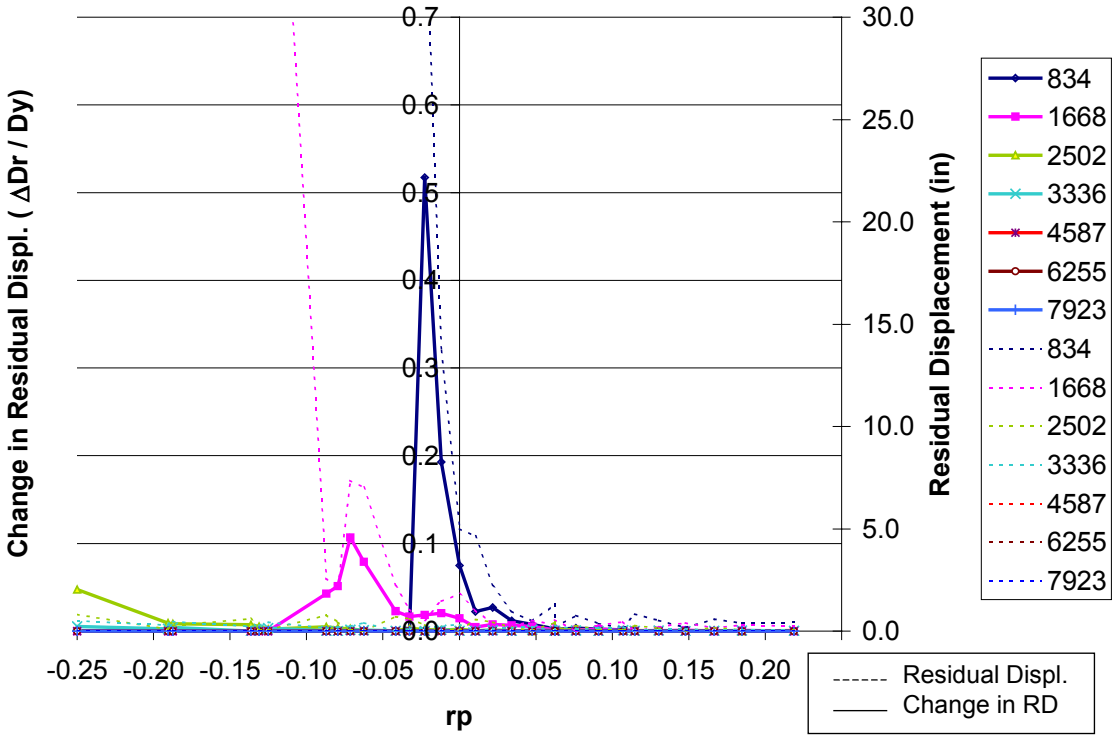


Figure C3.5.1.2c – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

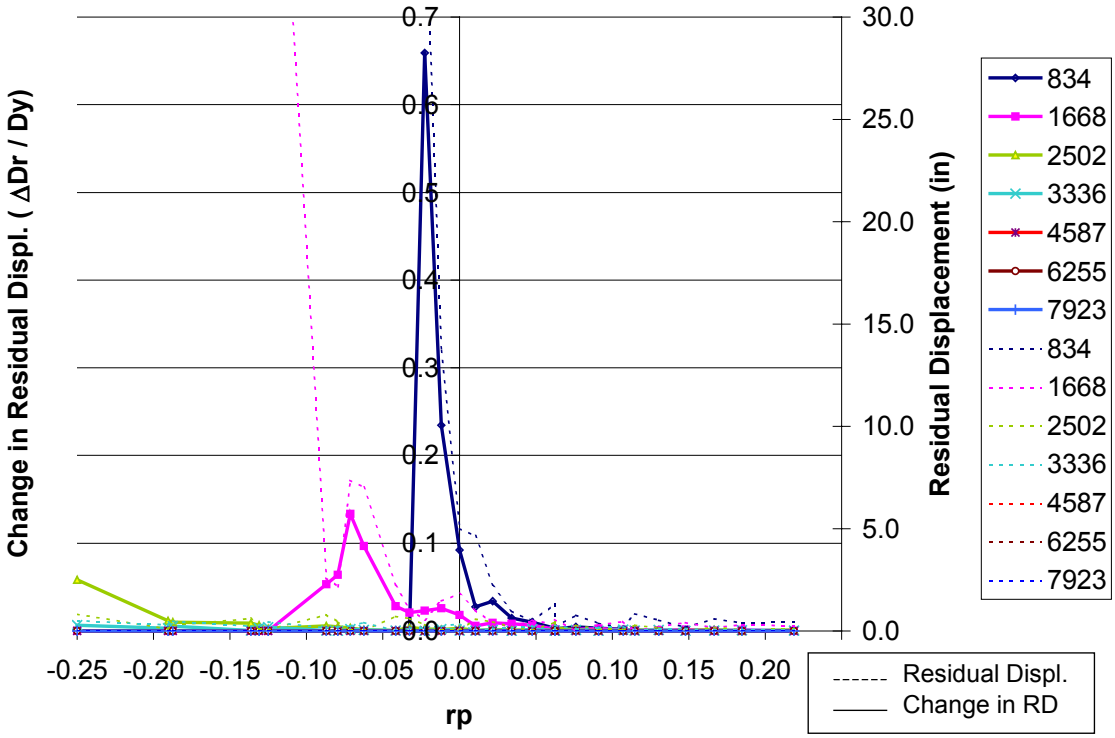


Figure C3.5.1.2d – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

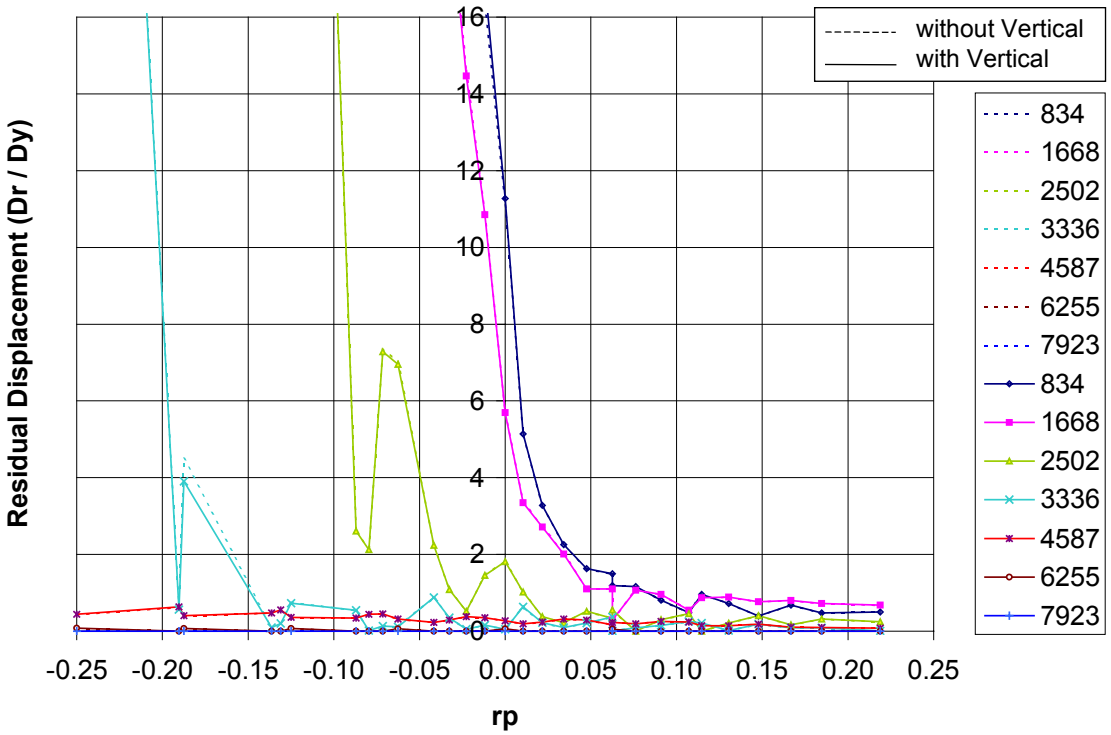


Figure C3.5.1.3a – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

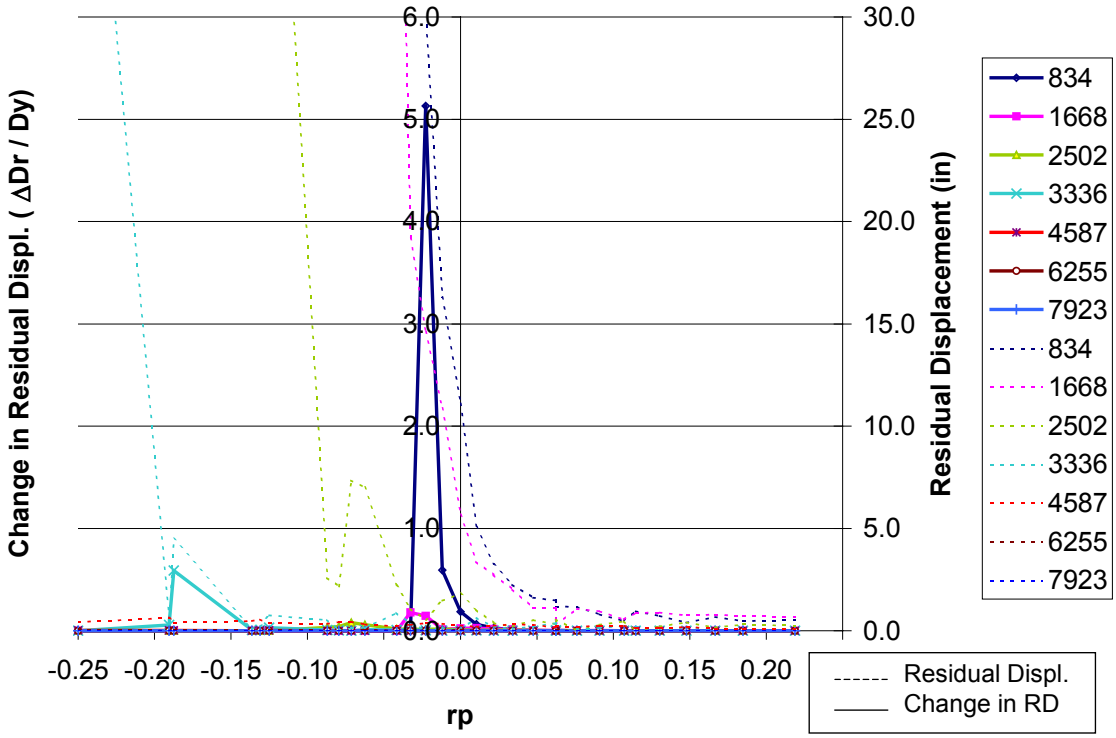


Figure C3.5.1.3b – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

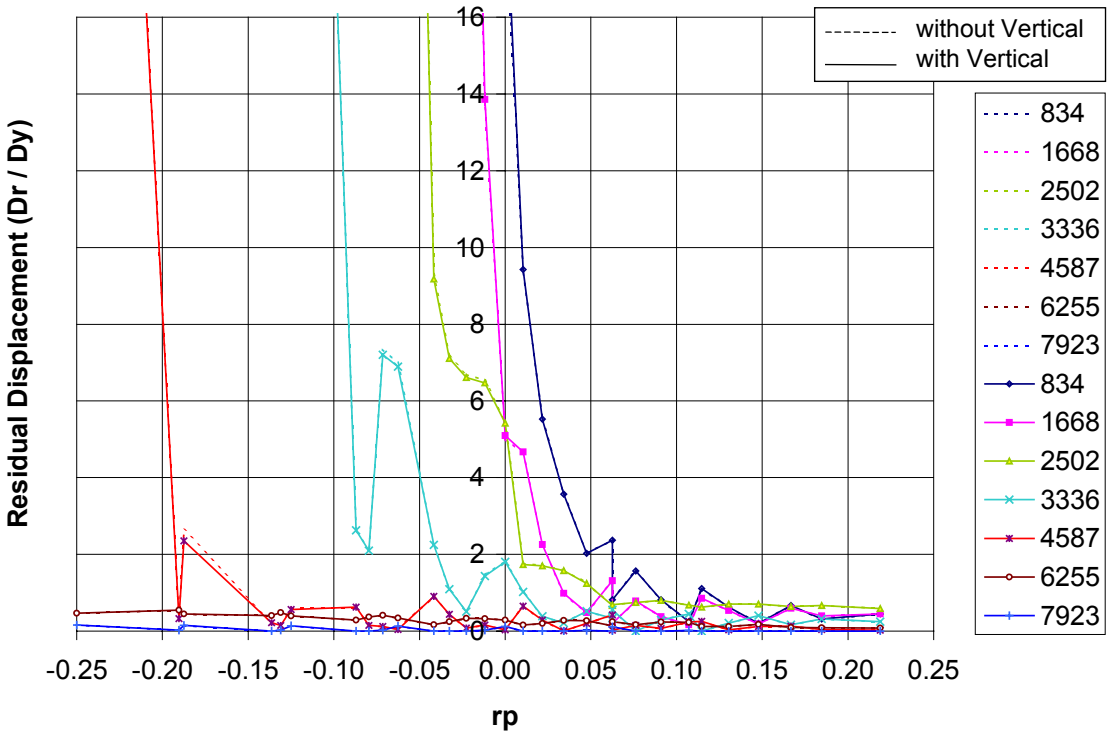


Figure C3.5.1.4a – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

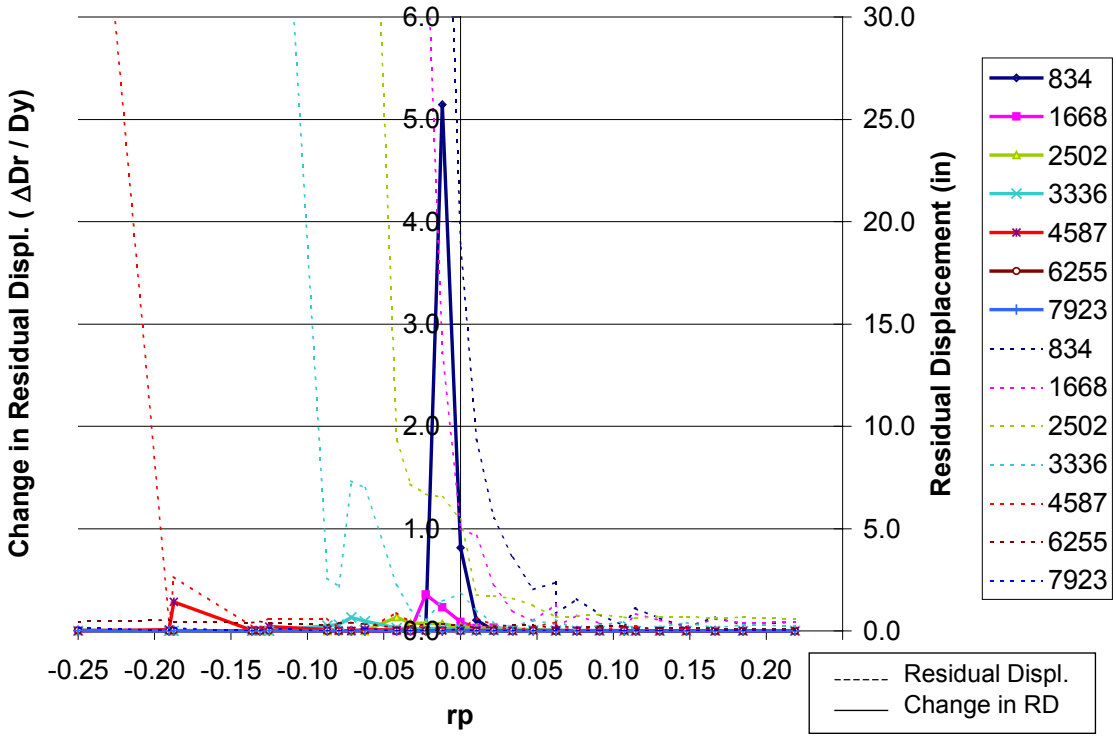


Figure C3.5.1.4b – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

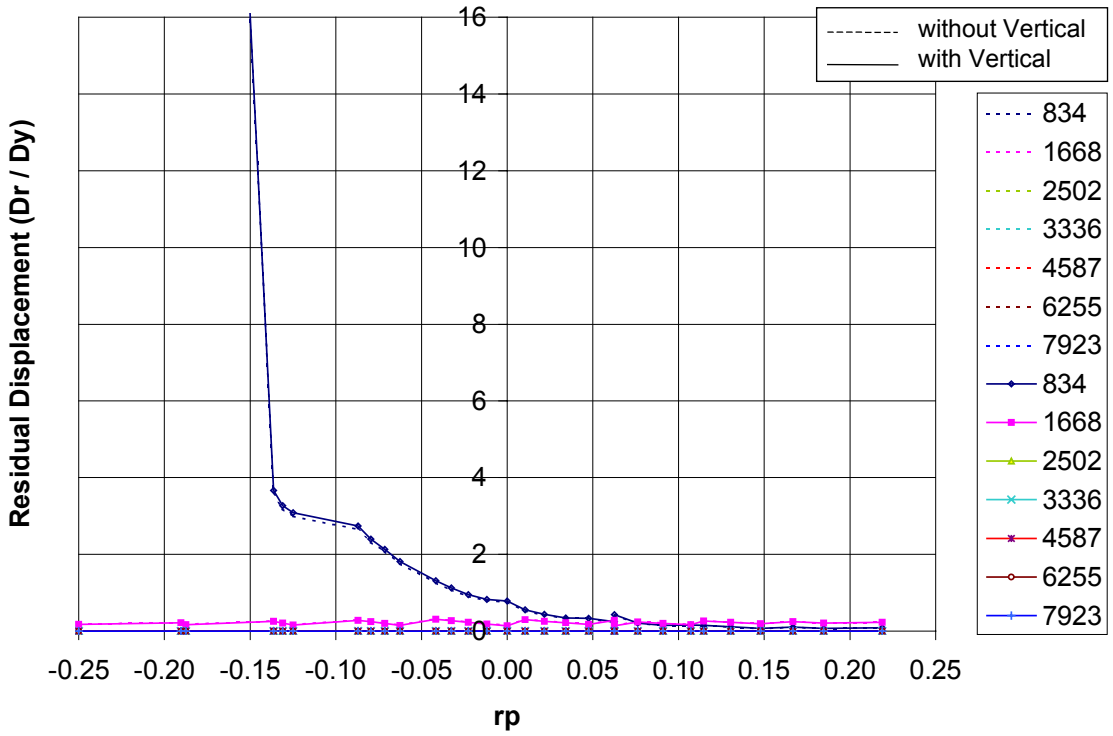


Figure C3.5.2.1a – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

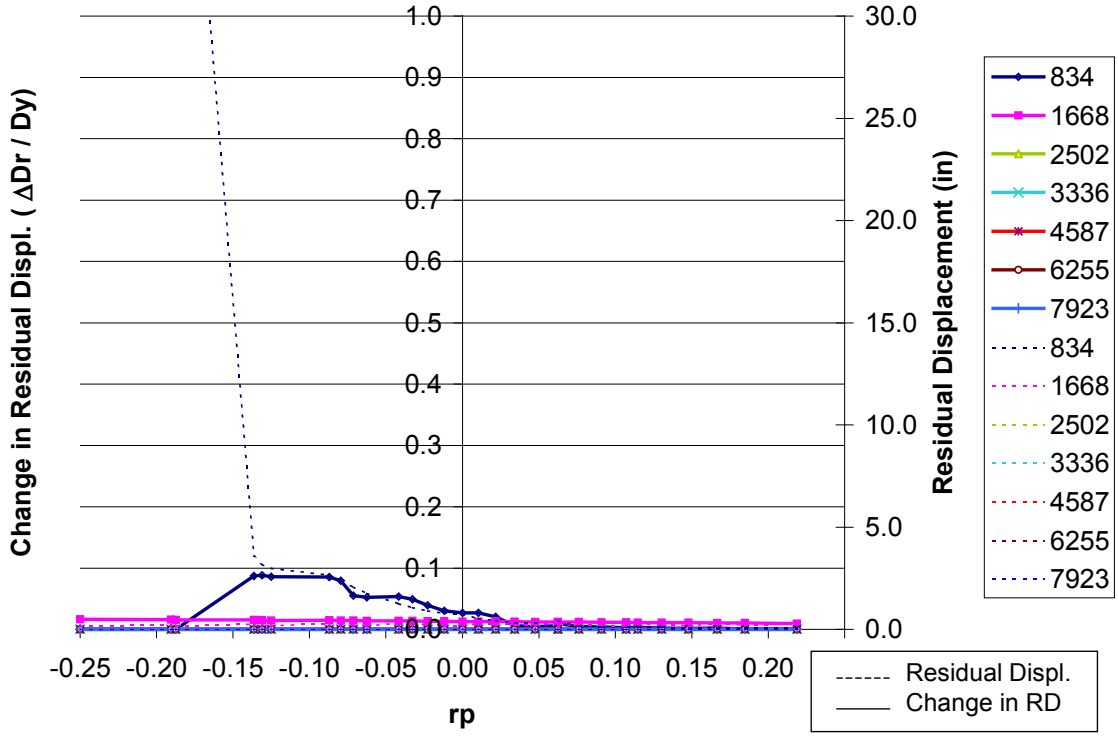


Figure C3.5.2.1b – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

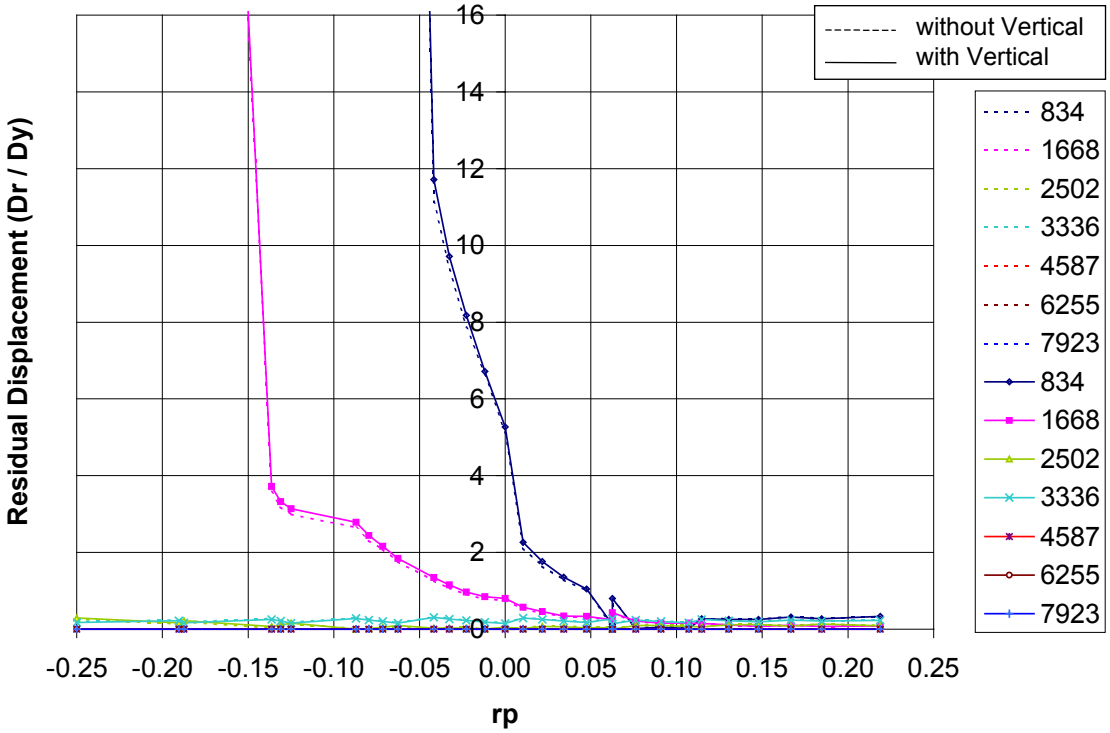


Figure C3.5.2.2a – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

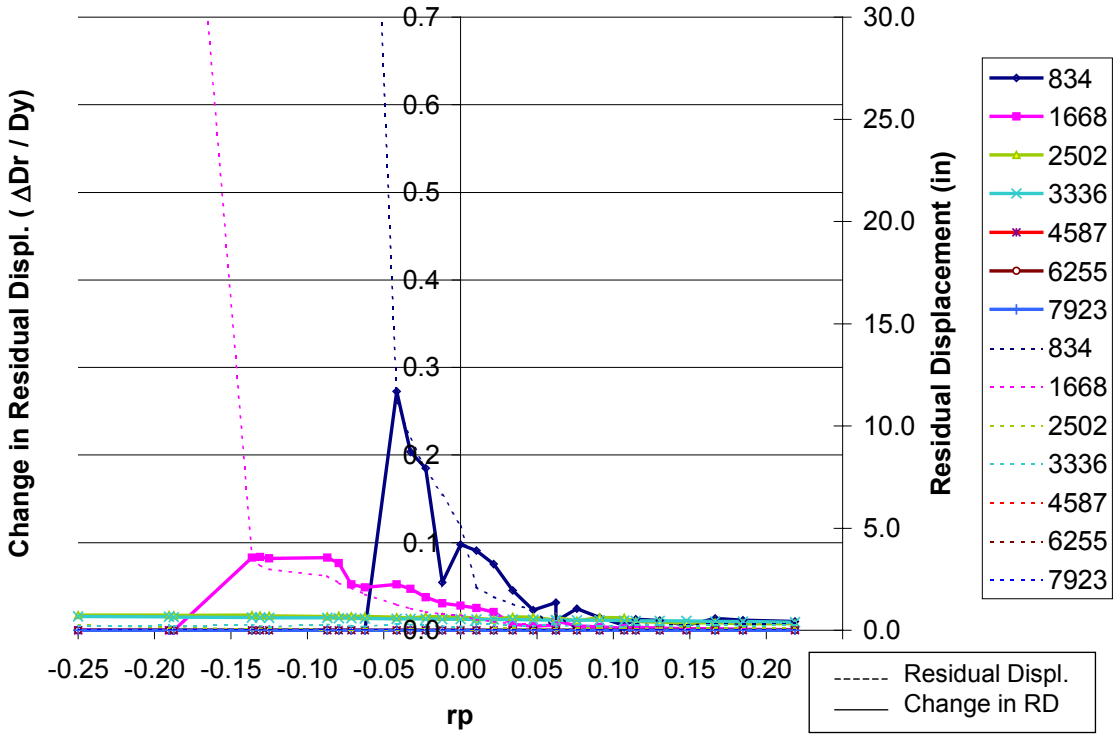


Figure C3.5.2.2b – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

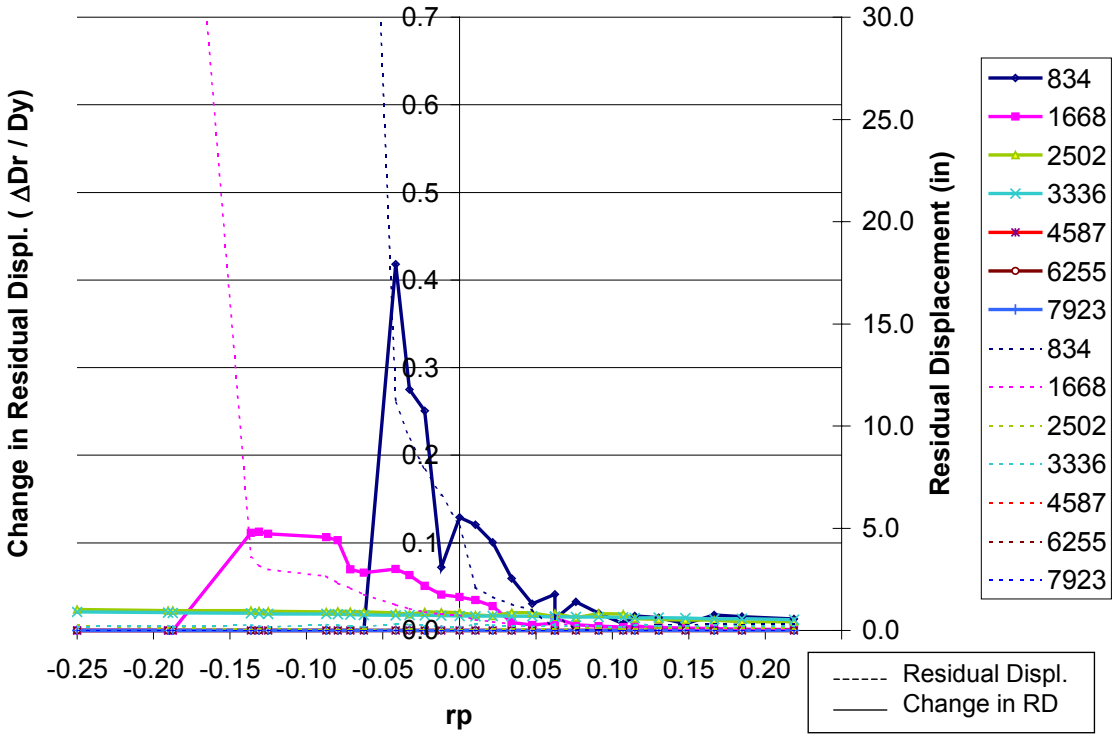


Figure C3.5.2.2c – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

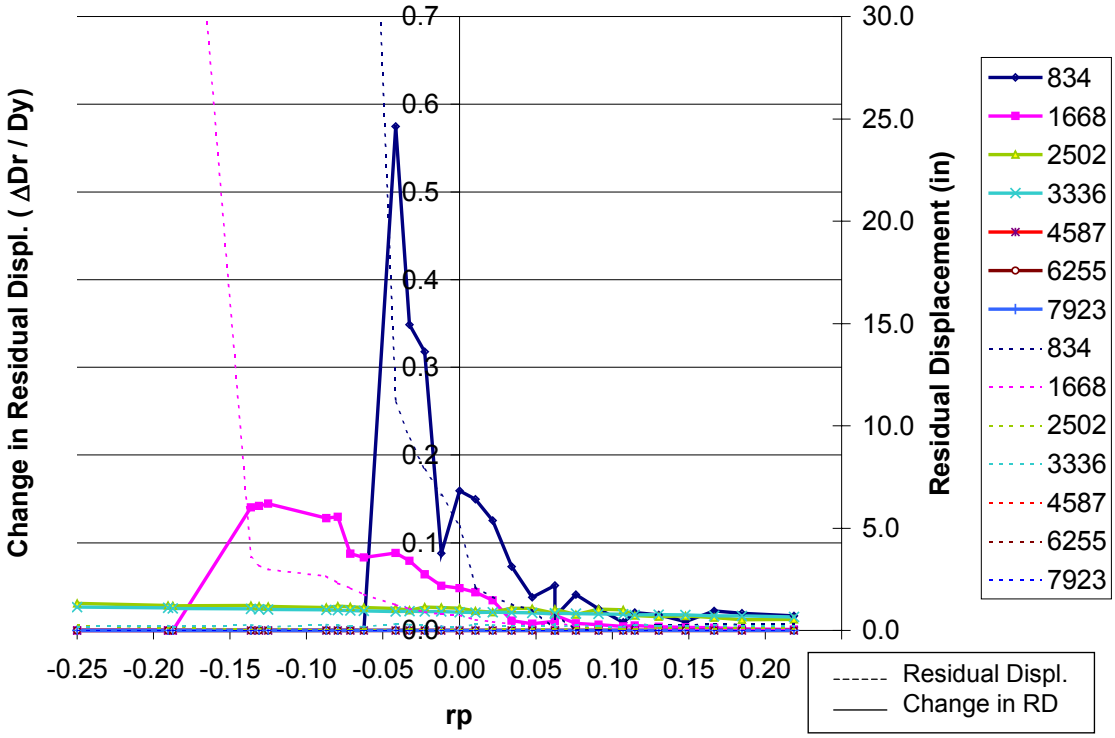


Figure C3.5.2.2d – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

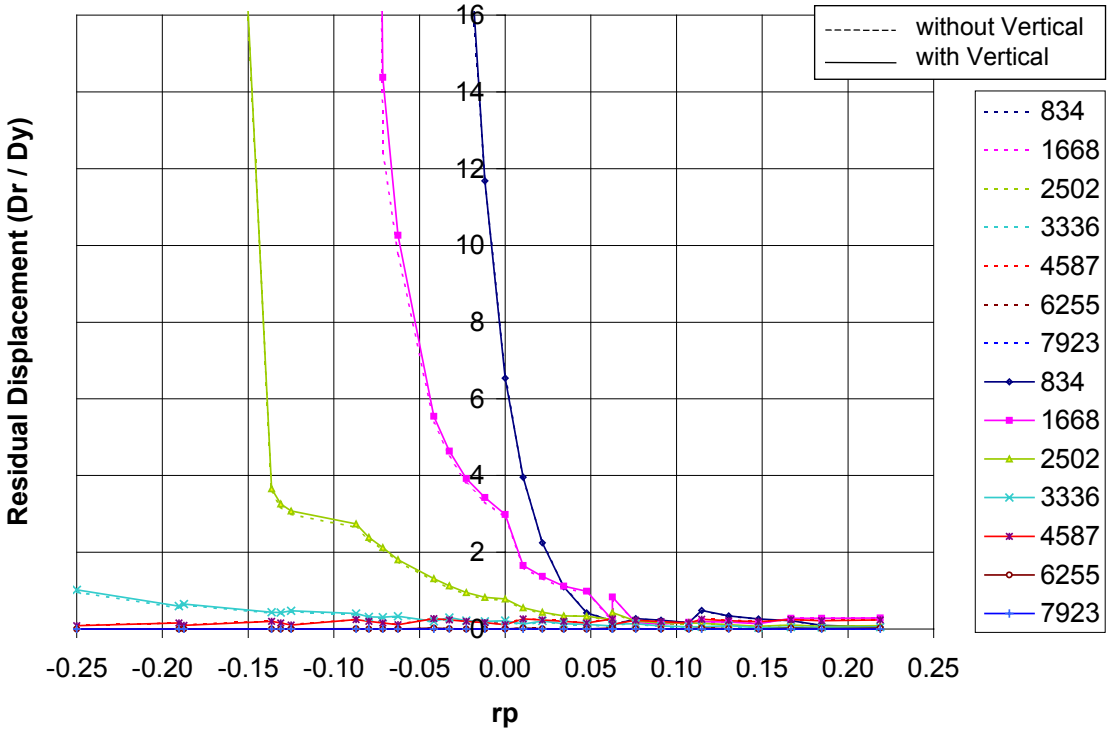


Figure C3.5.2.3a – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

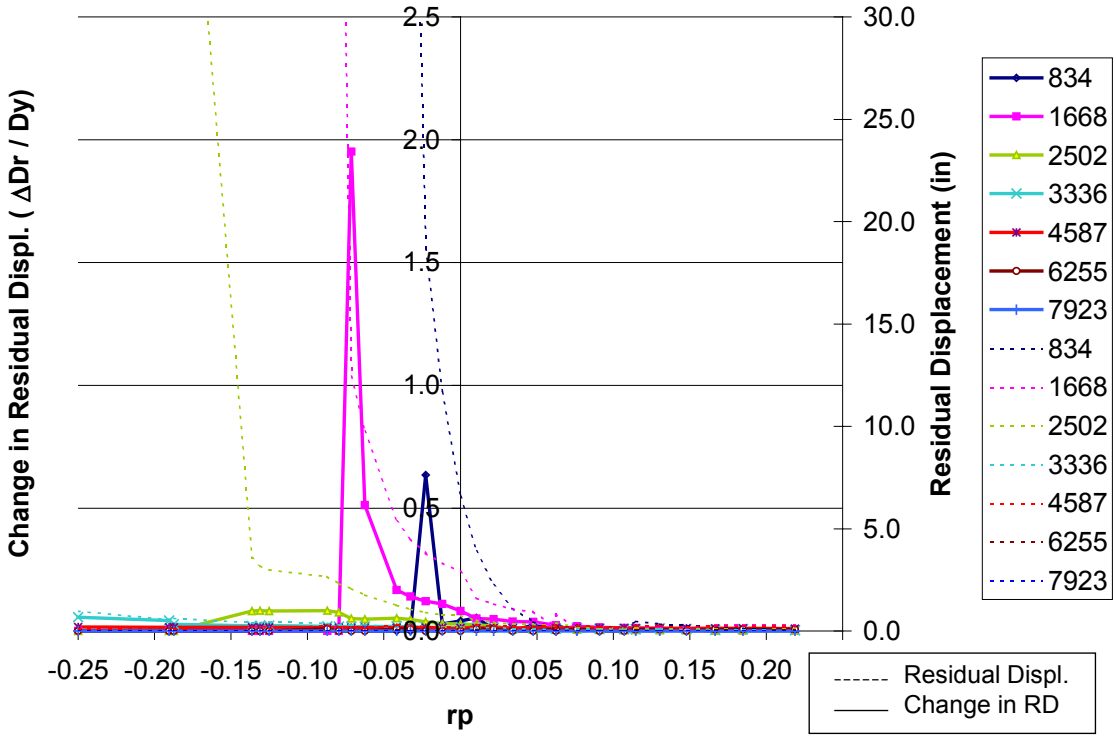


Figure C3.5.2.3b – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

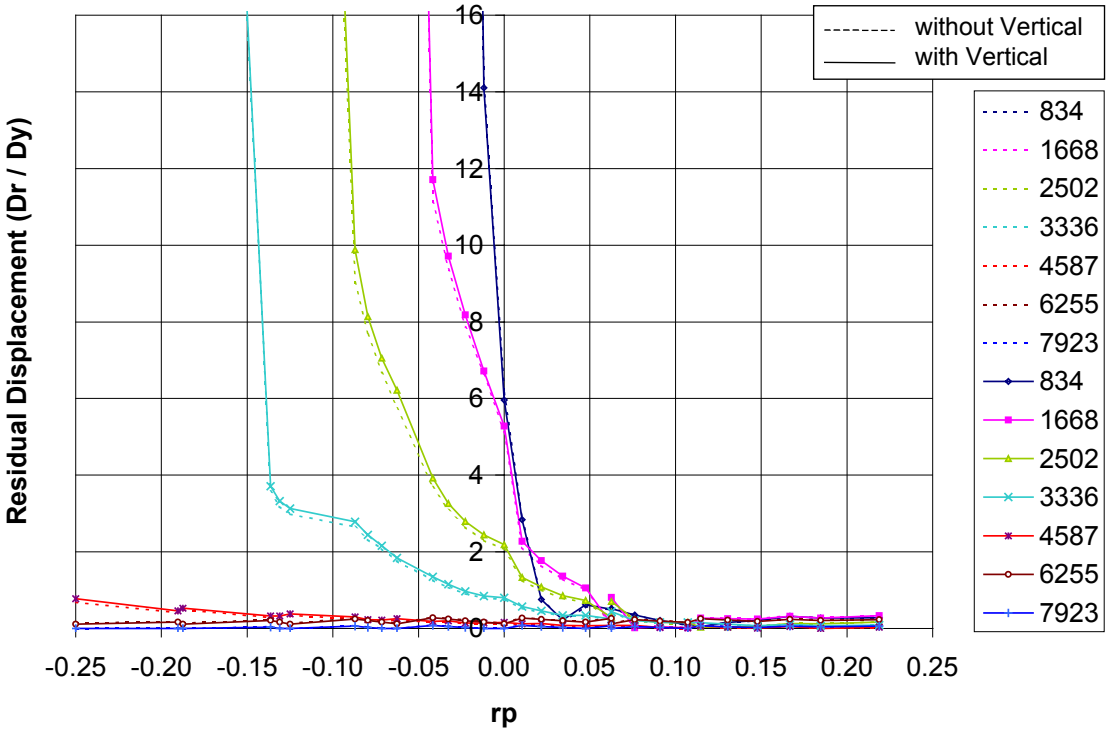


Figure C3.5.2.4a – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

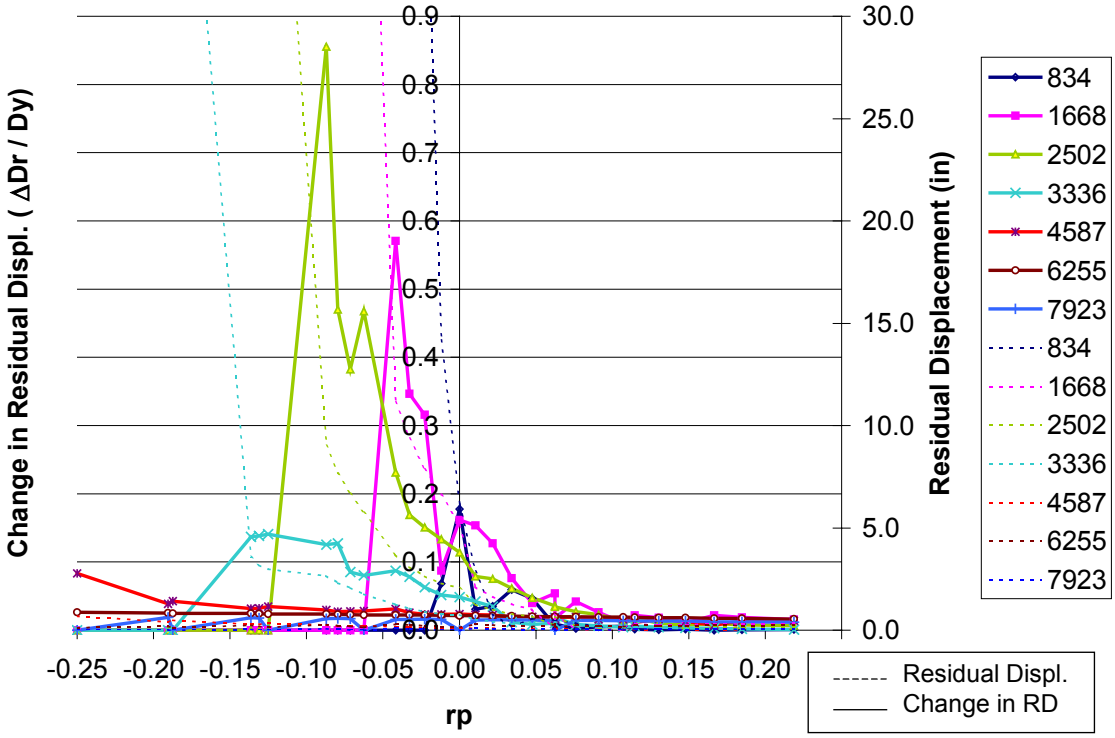


Figure C3.5.2.4b – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

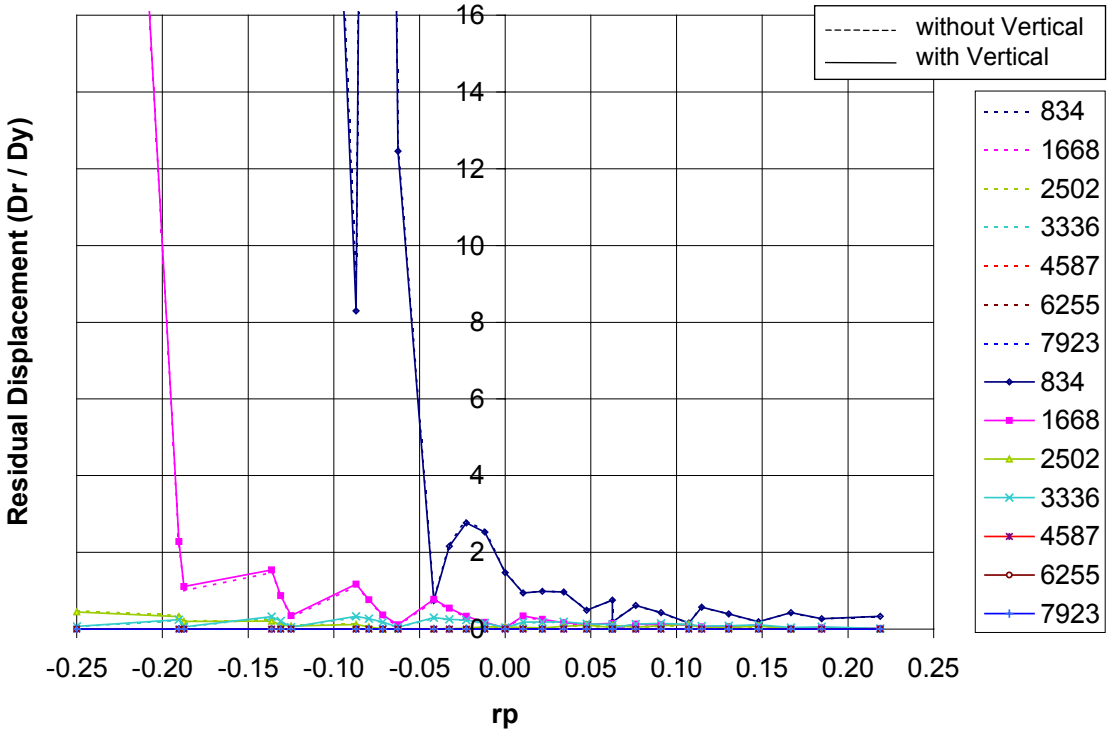


Figure C3.5.3.1a – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

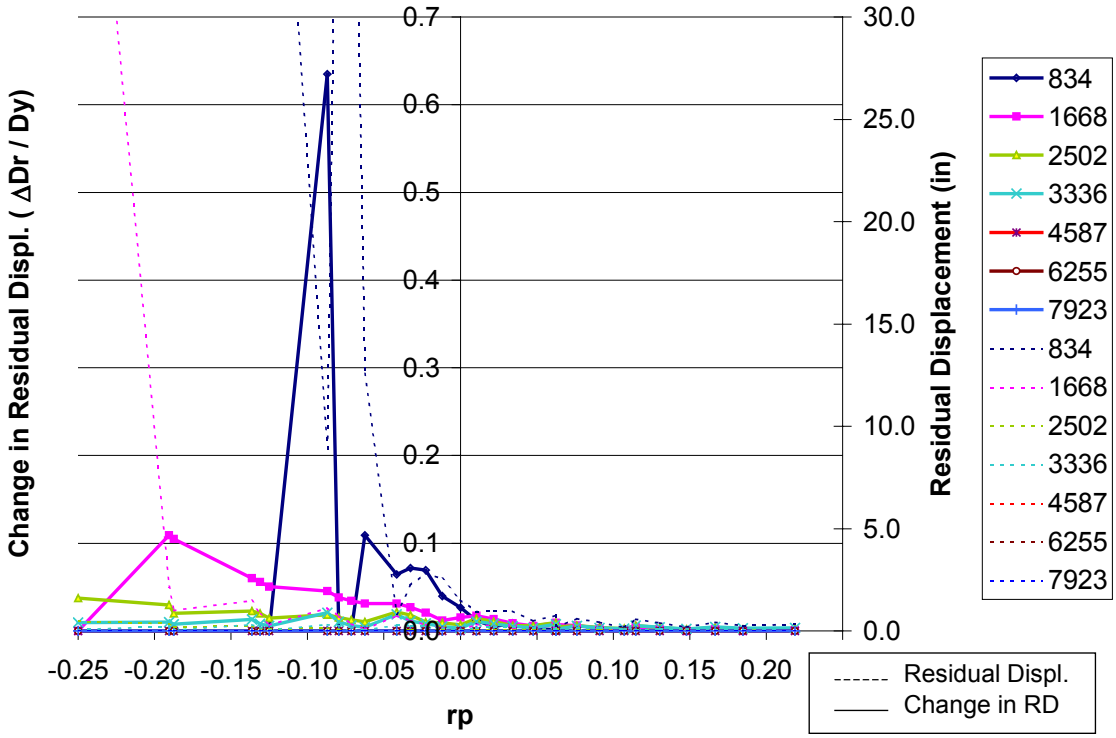


Figure C3.5.3.1b – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

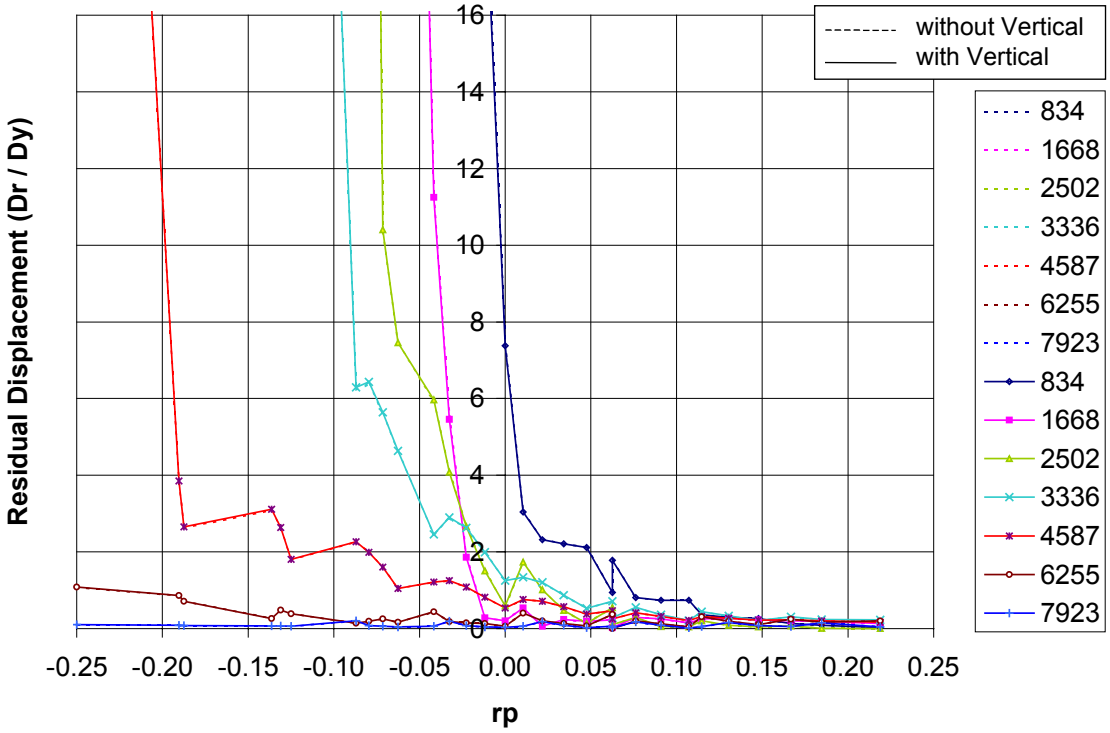


Figure C3.5.3.2a – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

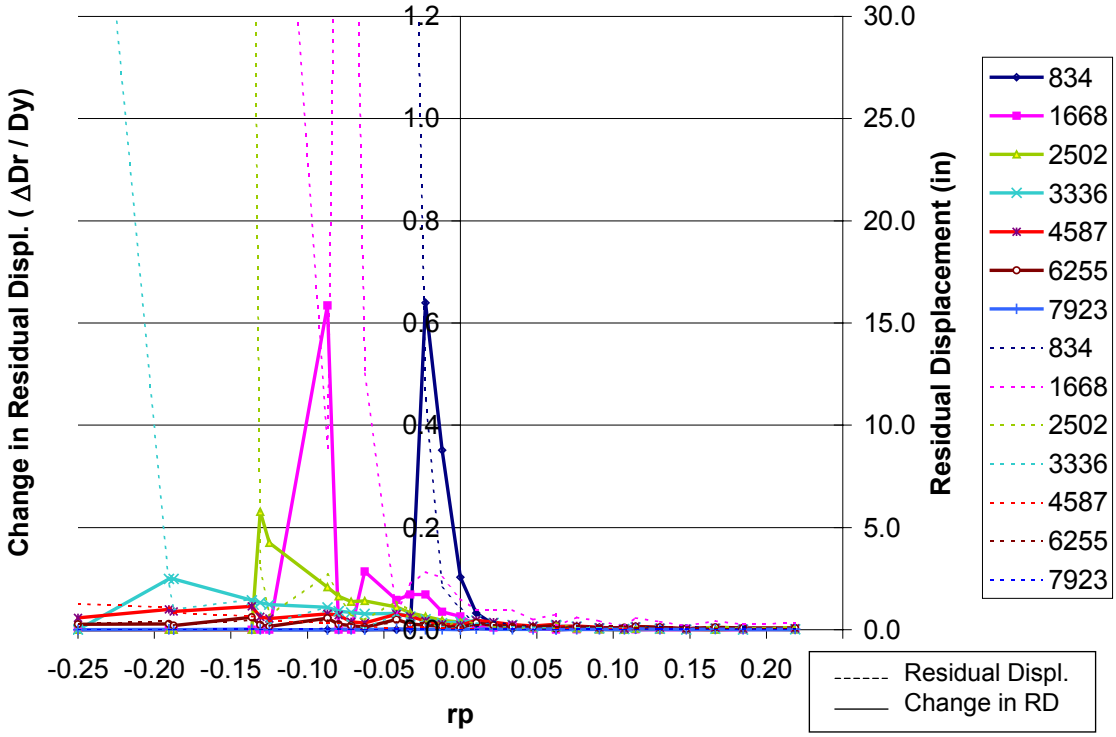


Figure C3.5.3.2b – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

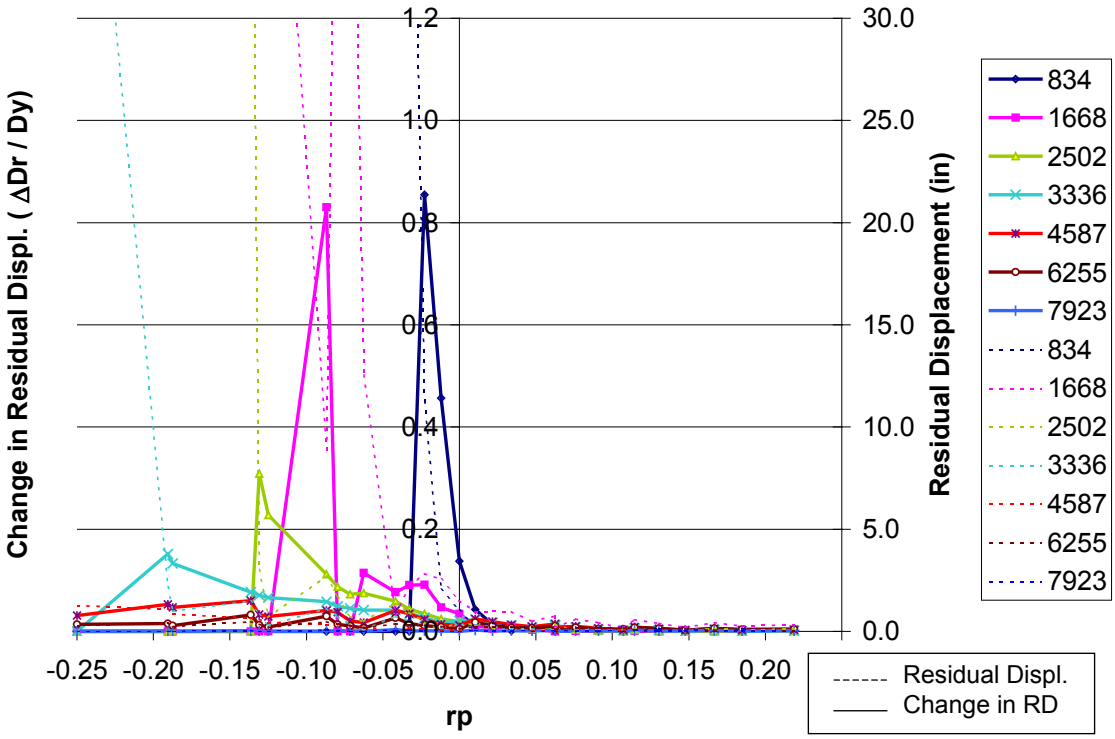


Figure C3.5.3.2c – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

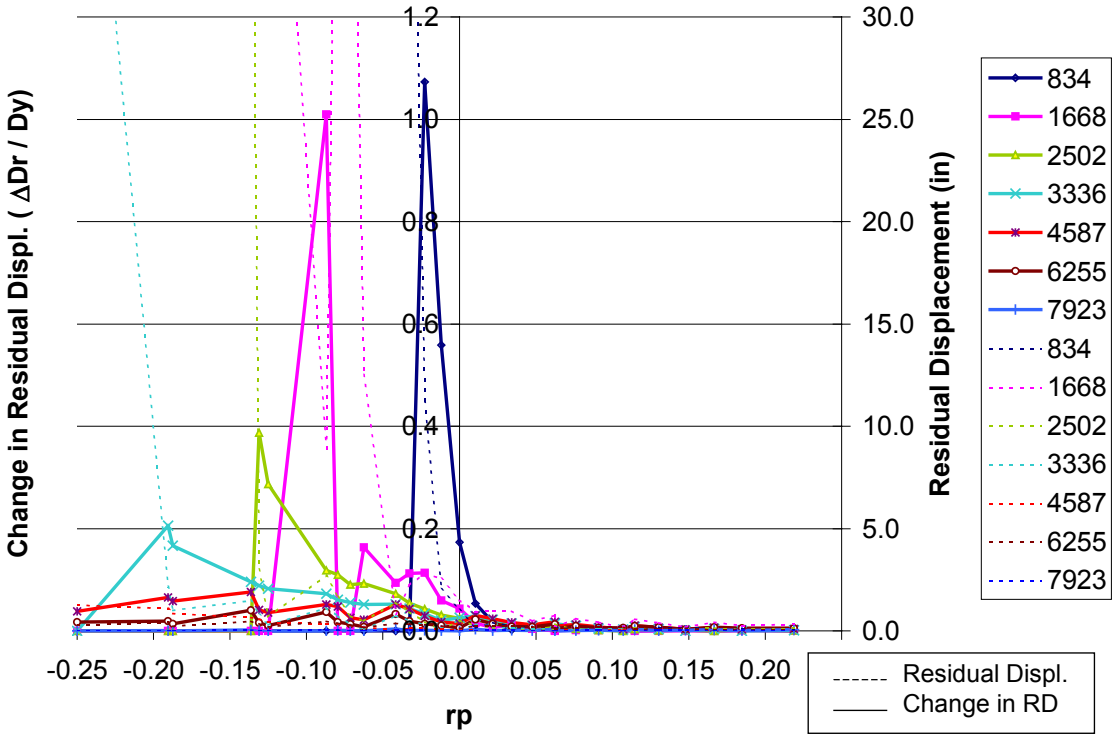


Figure C3.5.3.2d – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

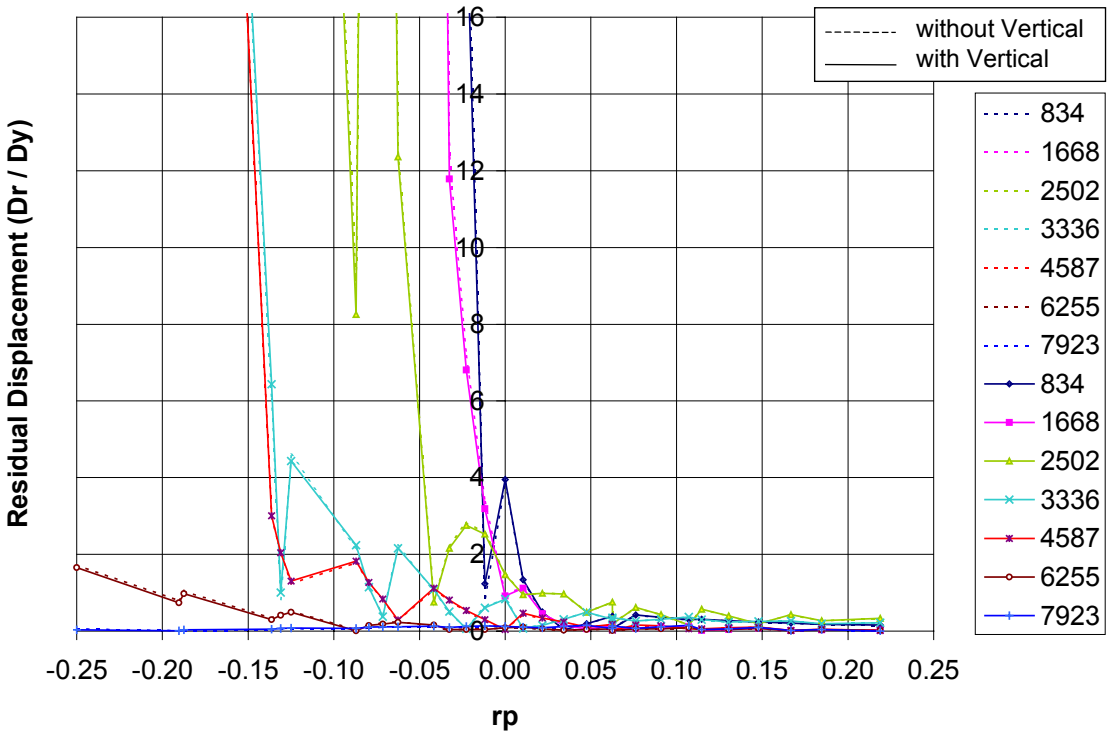


Figure C3.5.3.3a – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

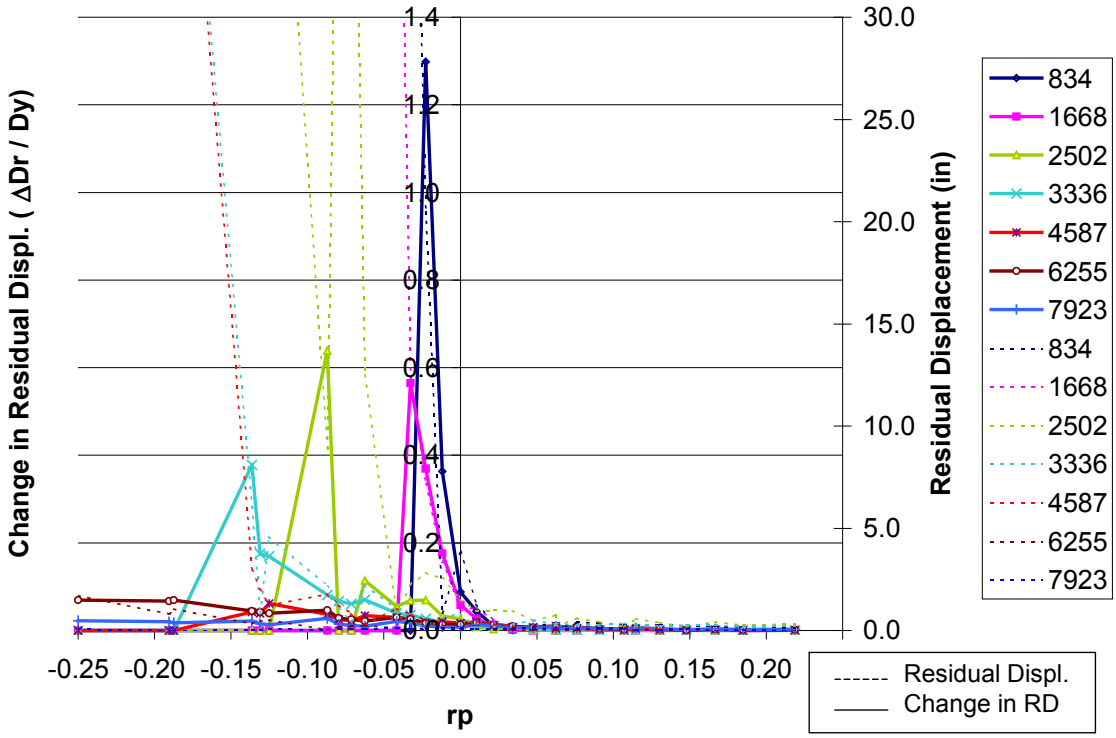


Figure C3.5.3.3b – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

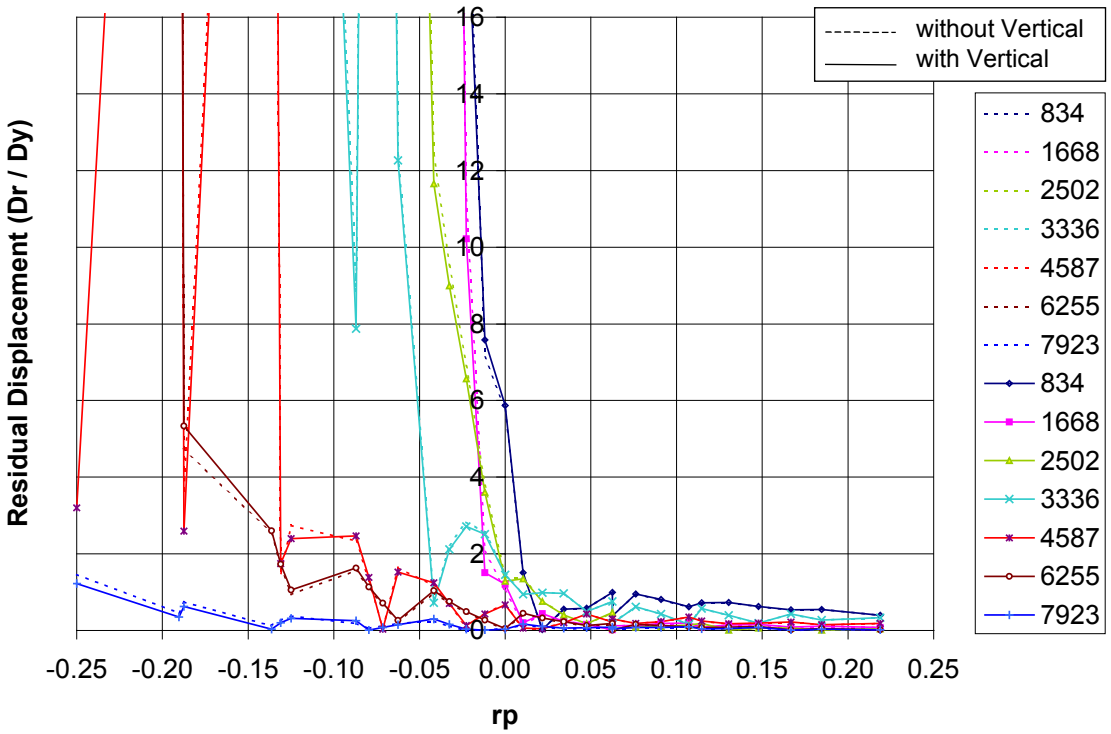


Figure C3.5.3.4a – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

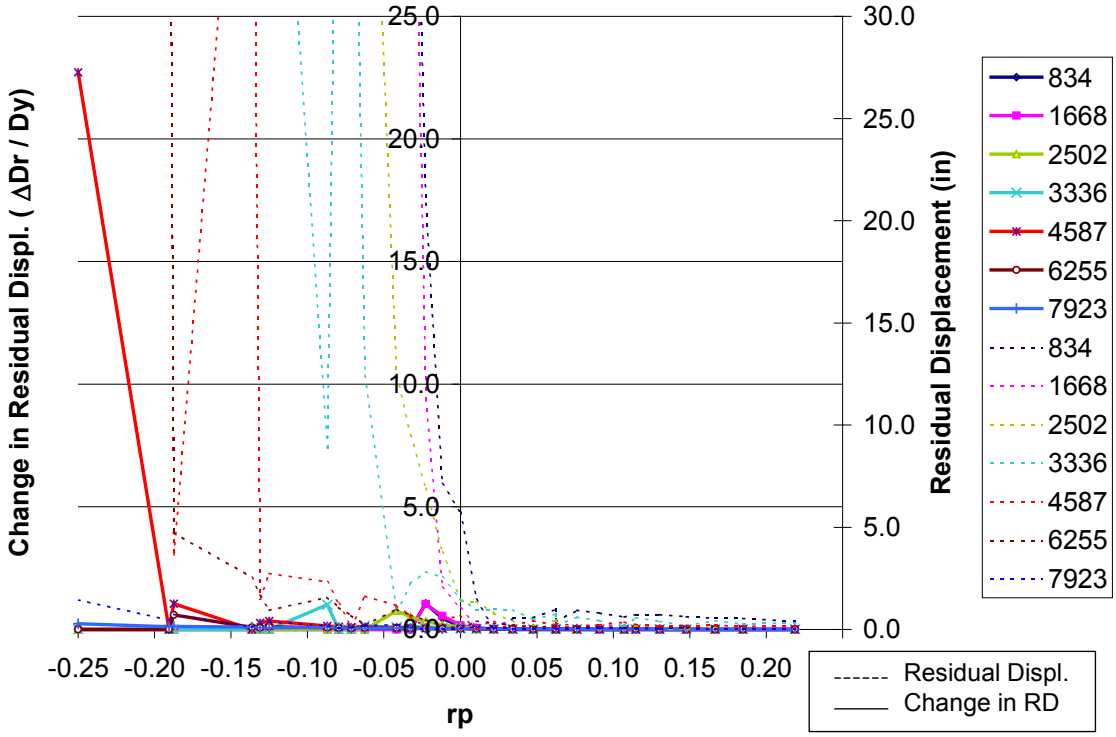


Figure C3.5.3.4b – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

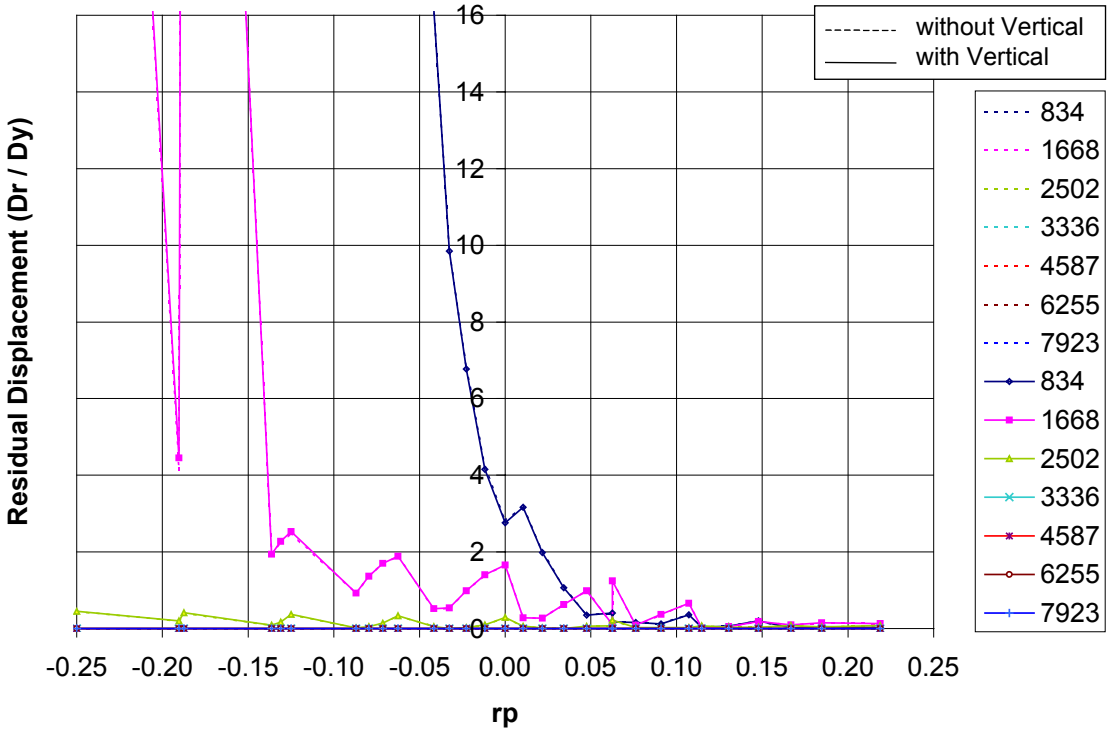


Figure C3.5.4.1a – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

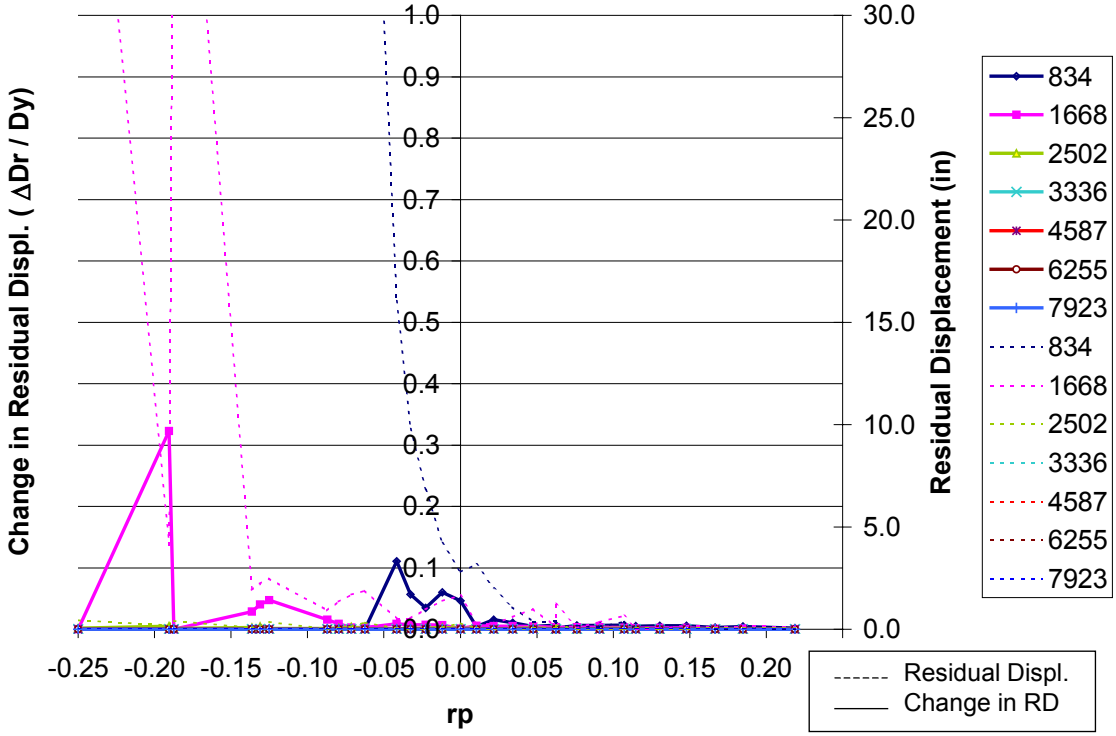


Figure C3.5.4.1b – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

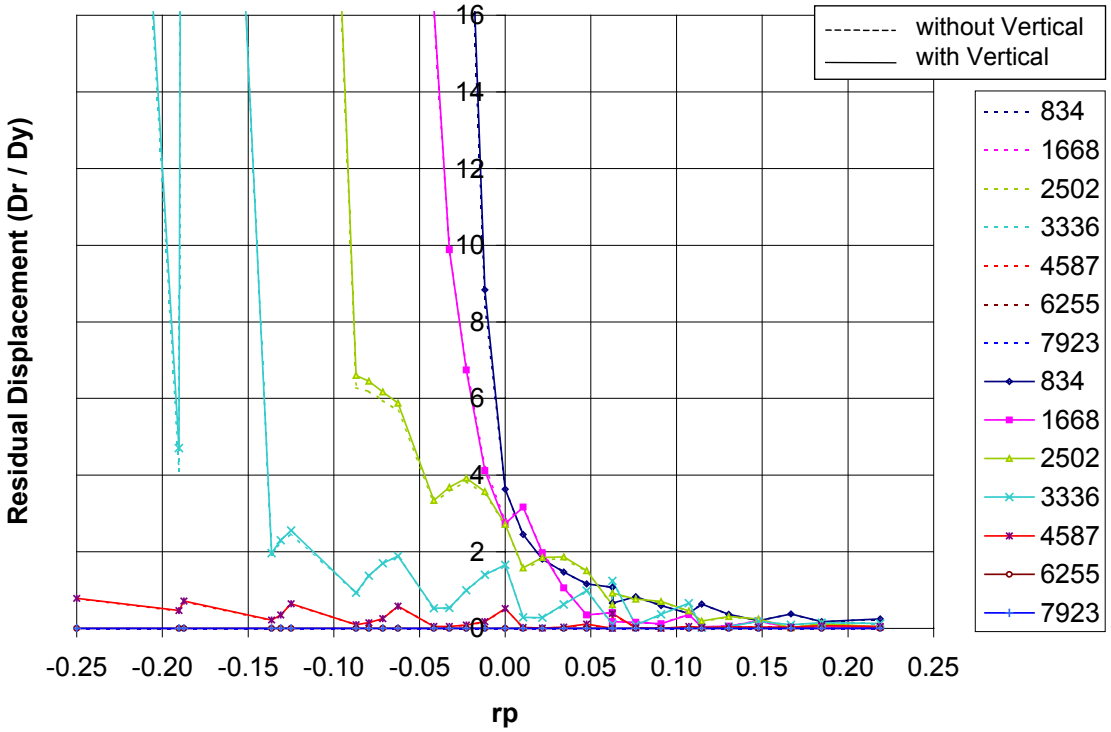


Figure C3.5.4.2a – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

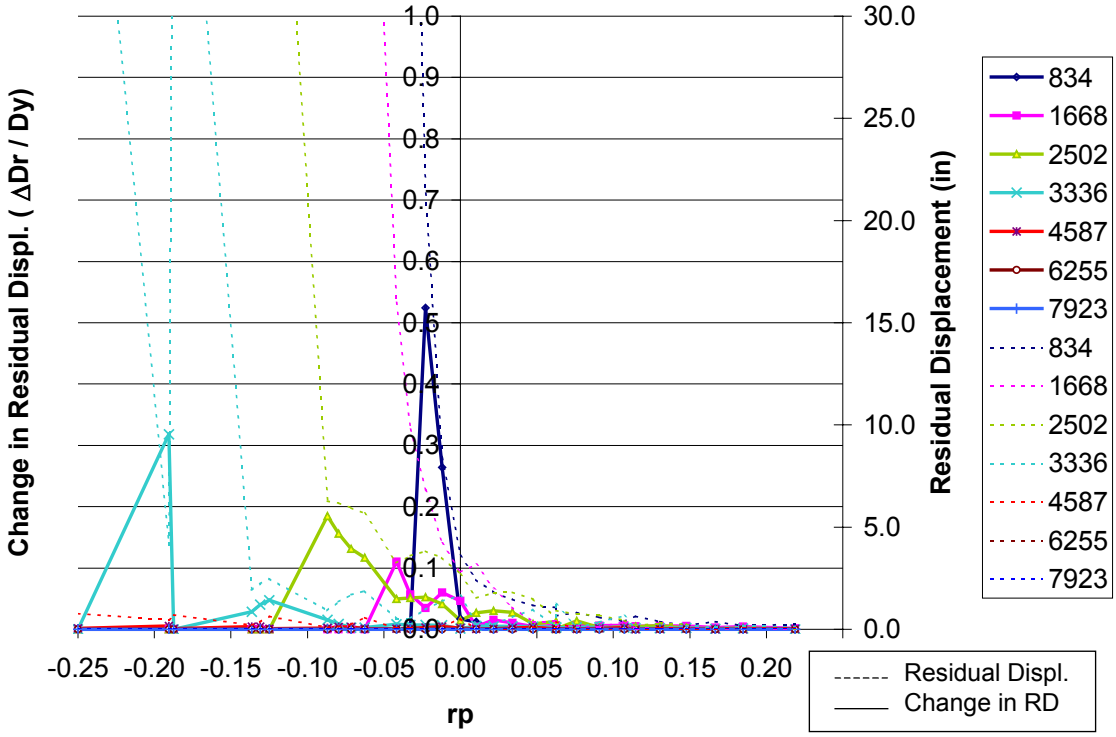


Figure C3.5.4.2b – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

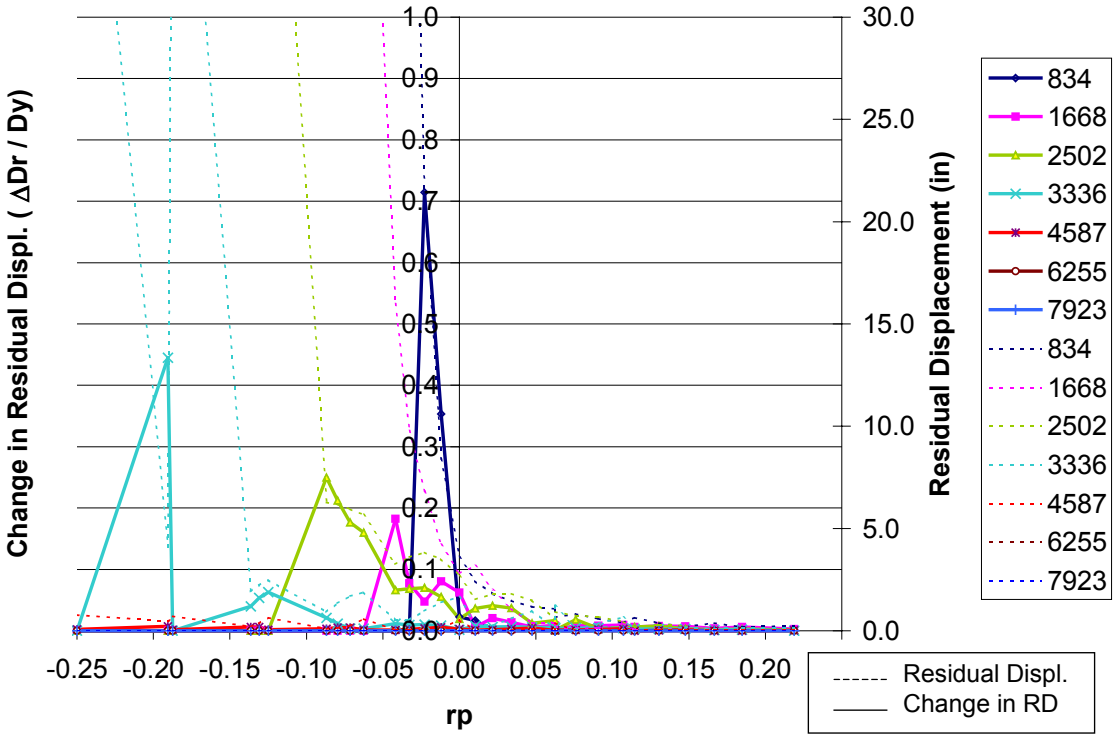


Figure C3.5.4.2c – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

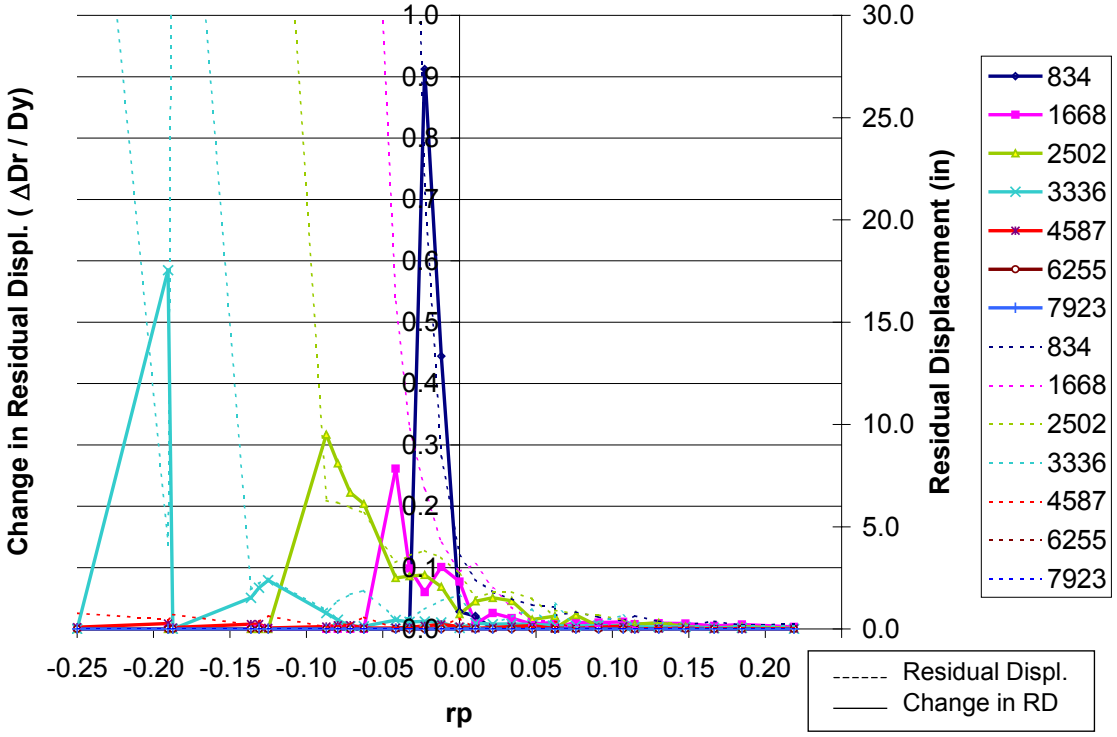


Figure C3.5.4.2d – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

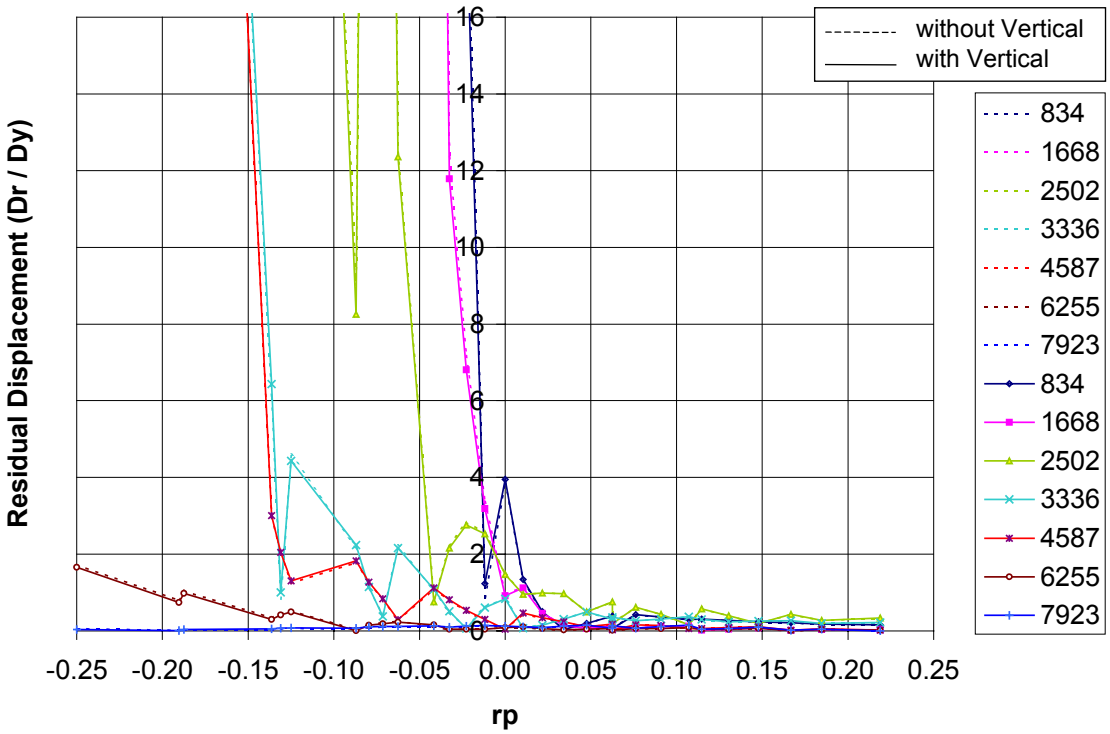


Figure C3.5.4.3a – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

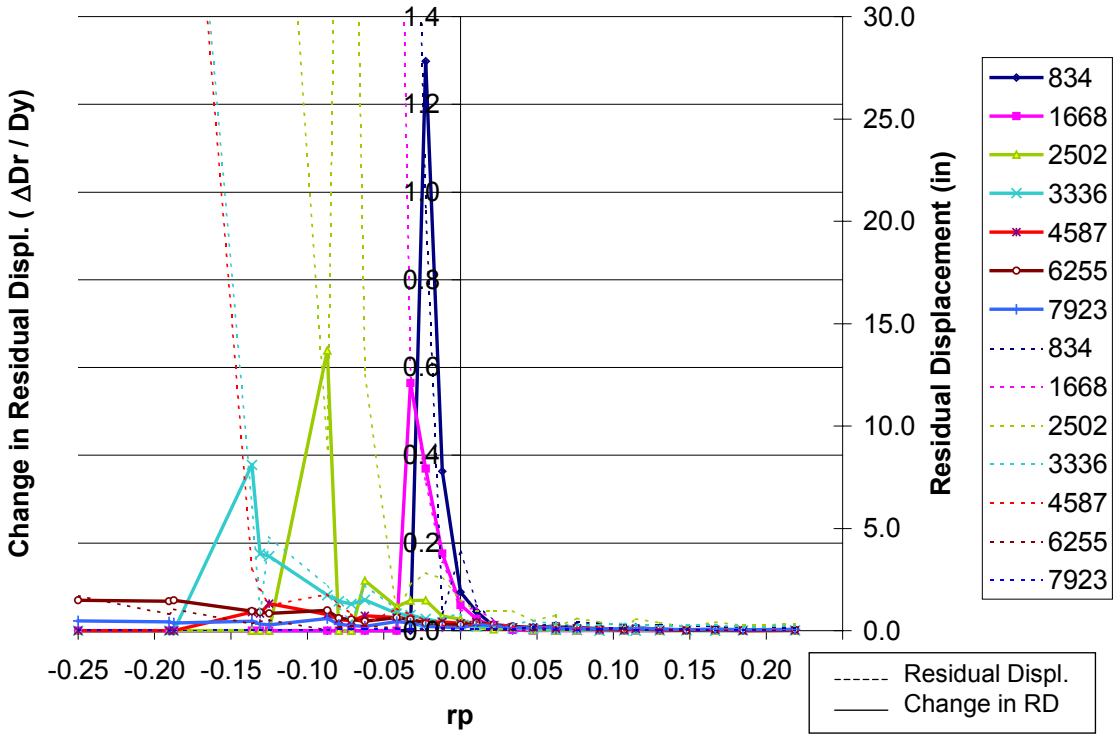


Figure C3.5.4.3b – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

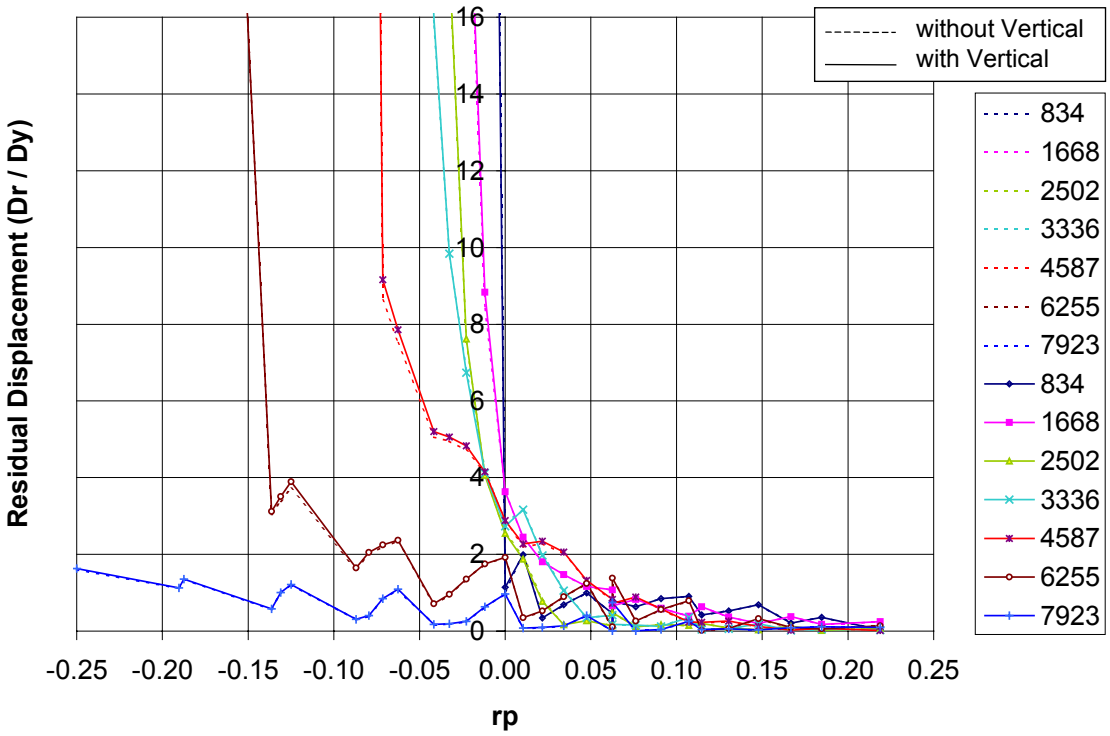


Figure C3.5.4.4a – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

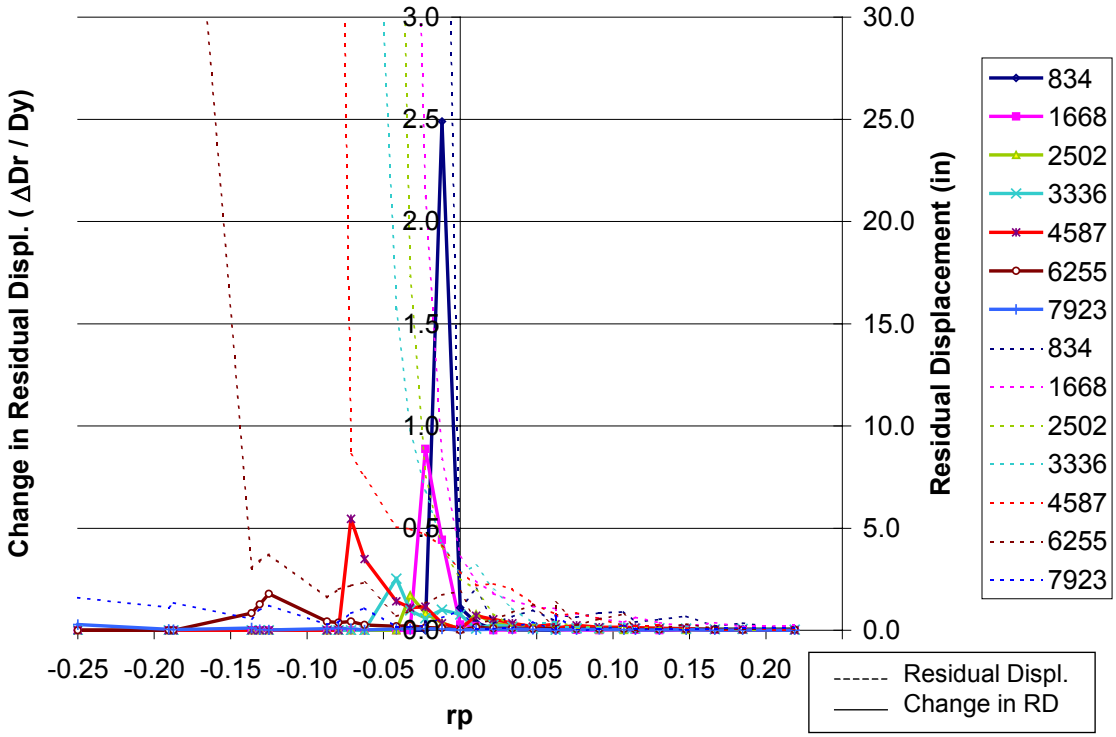


Figure C3.5.4.4b – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

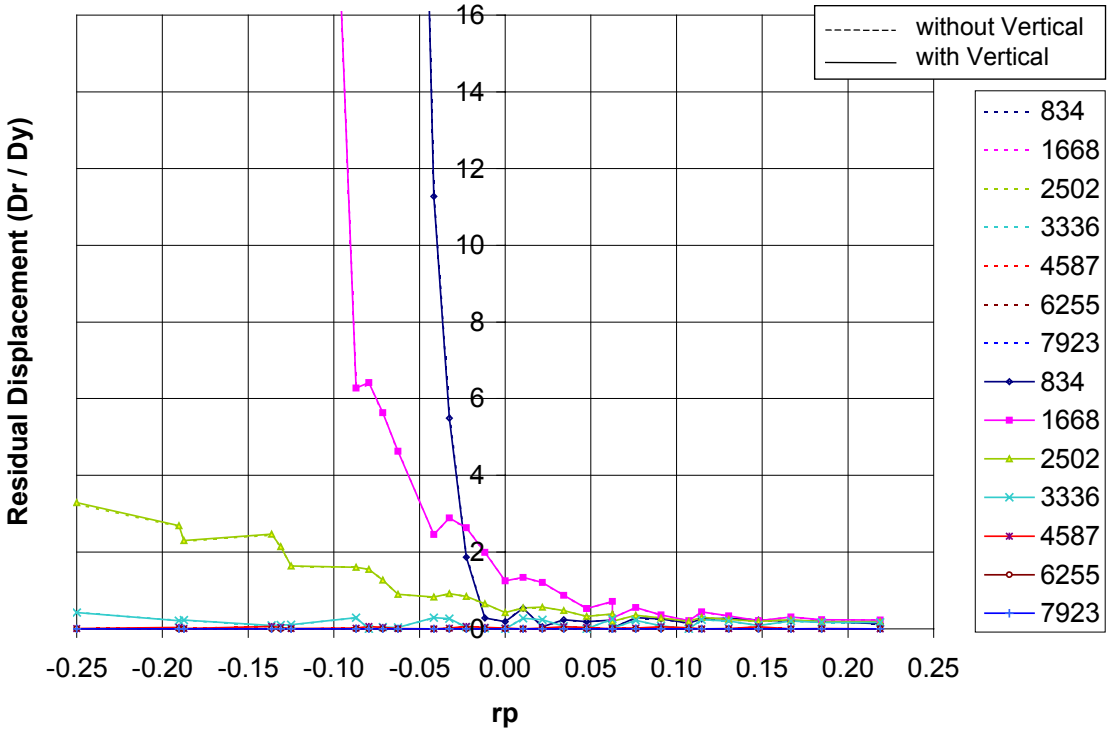


Figure C3.5.5.1a – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

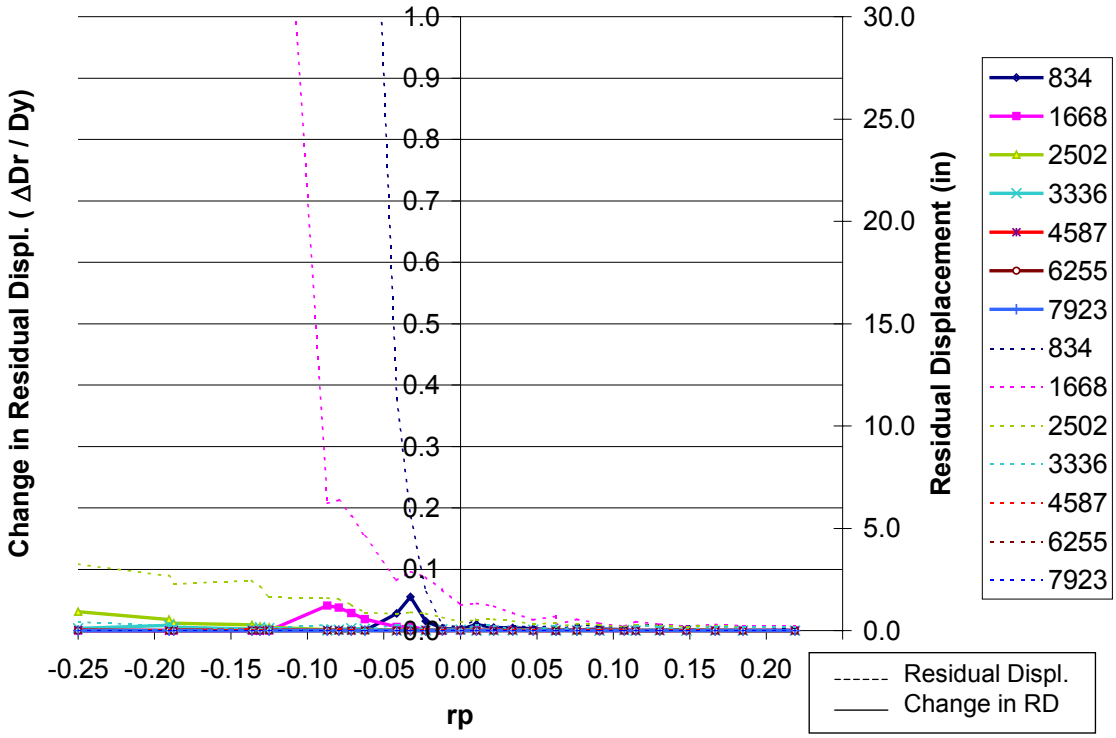


Figure C3.5.5.1b – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

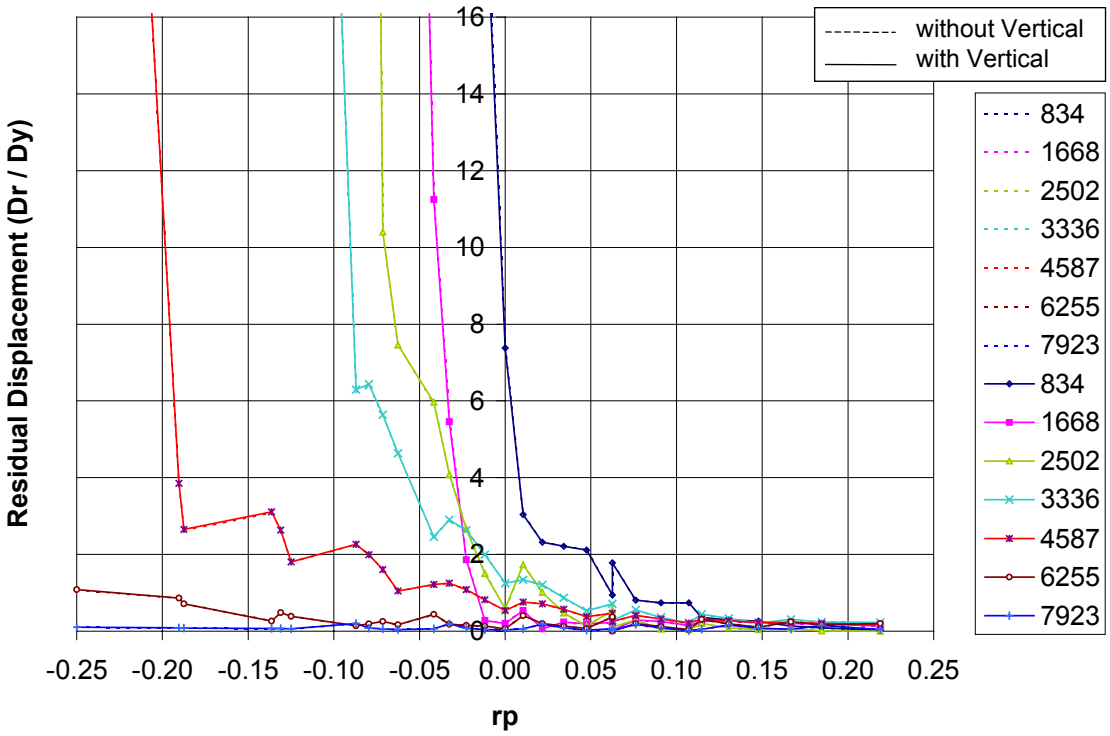


Figure C3.5.5.2a – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

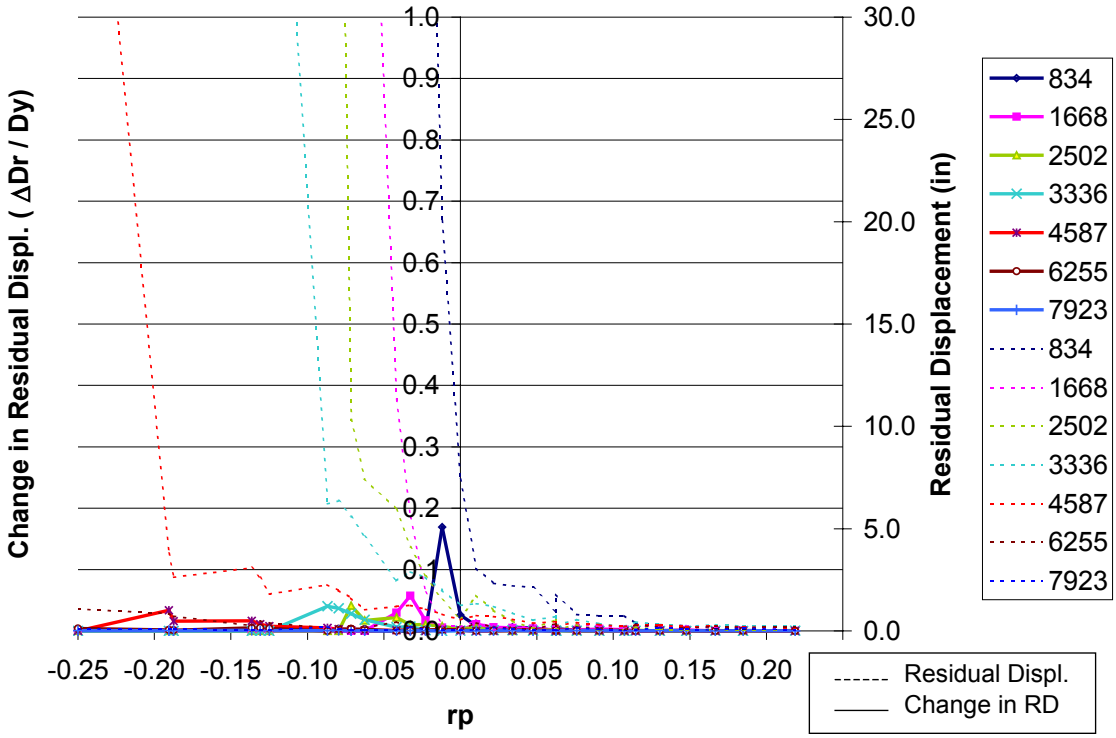


Figure C3.5.5.2b – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

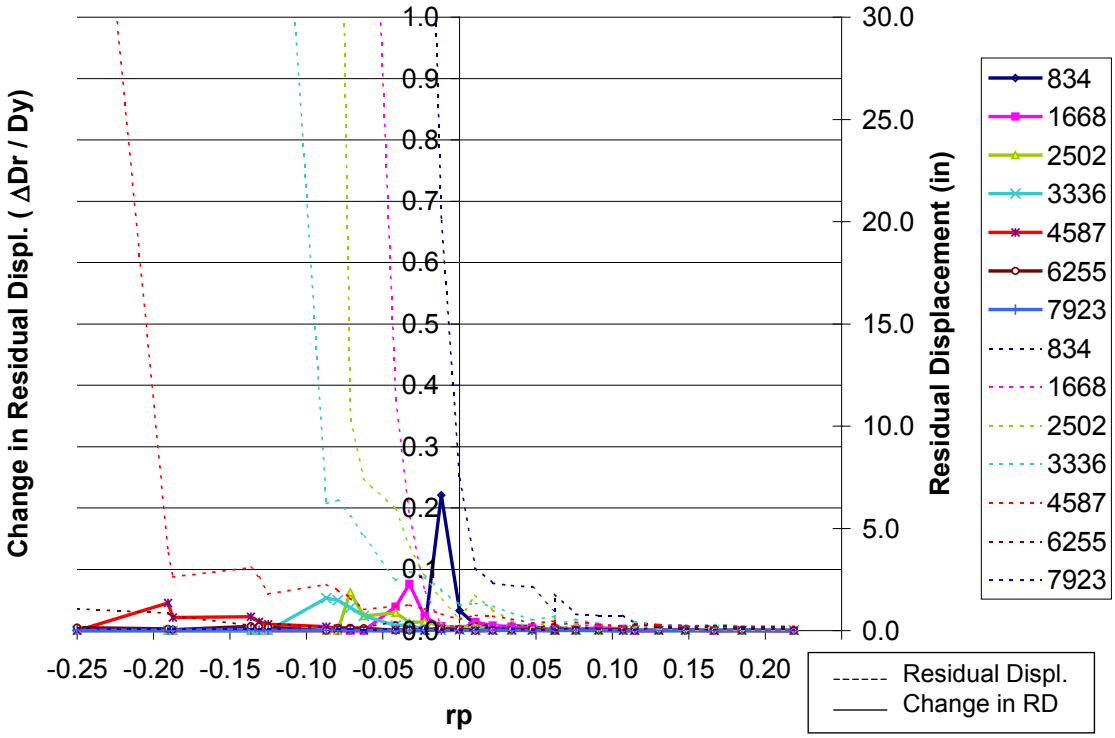


Figure C3.5.5.2c – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

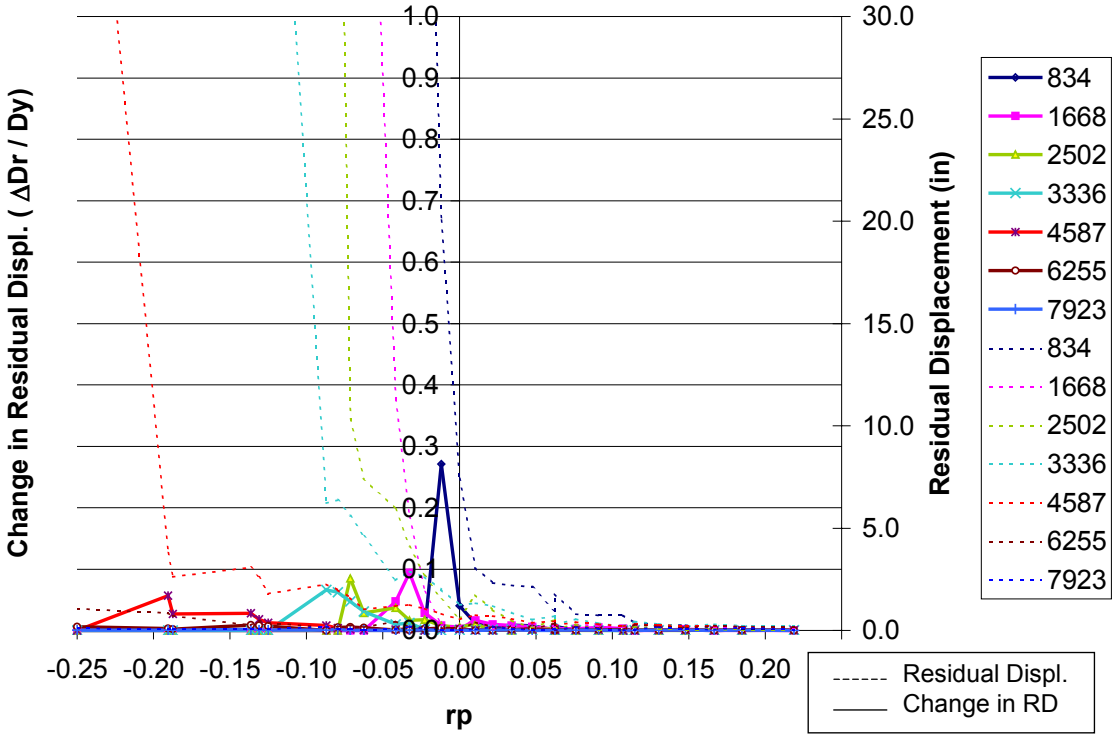


Figure C3.5.5.2d – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

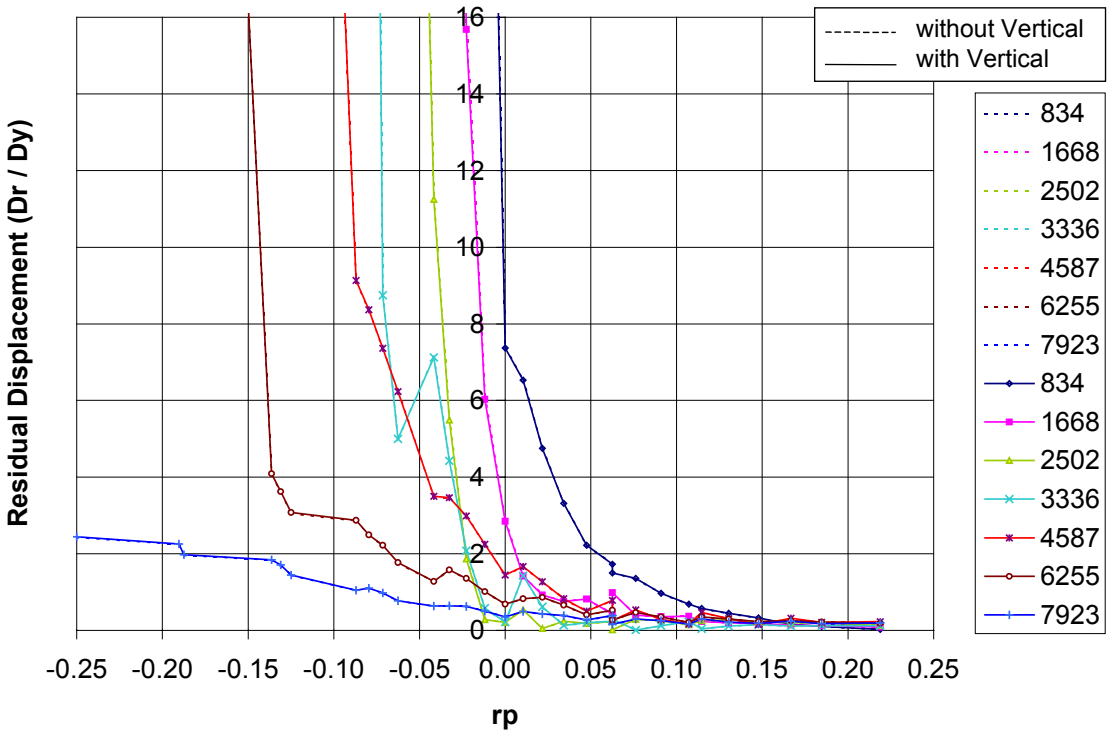


Figure C3.5.5.3a – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

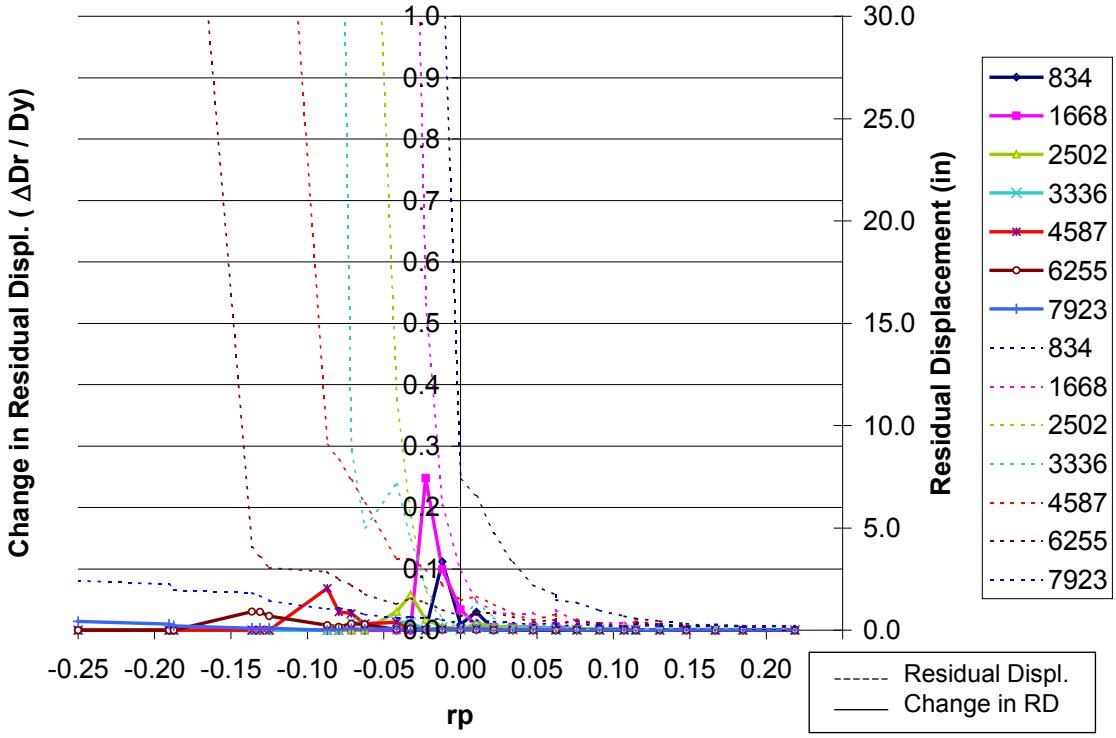


Figure C3.5.5.3b – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

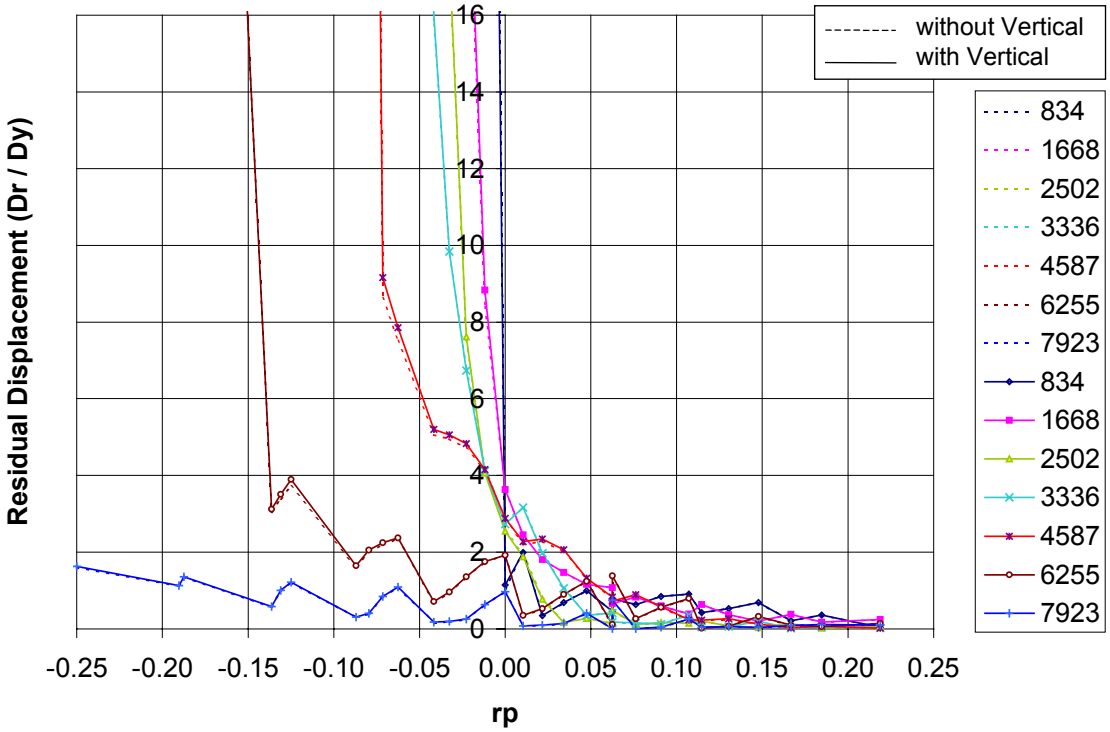


Figure C3.5.5.4a – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

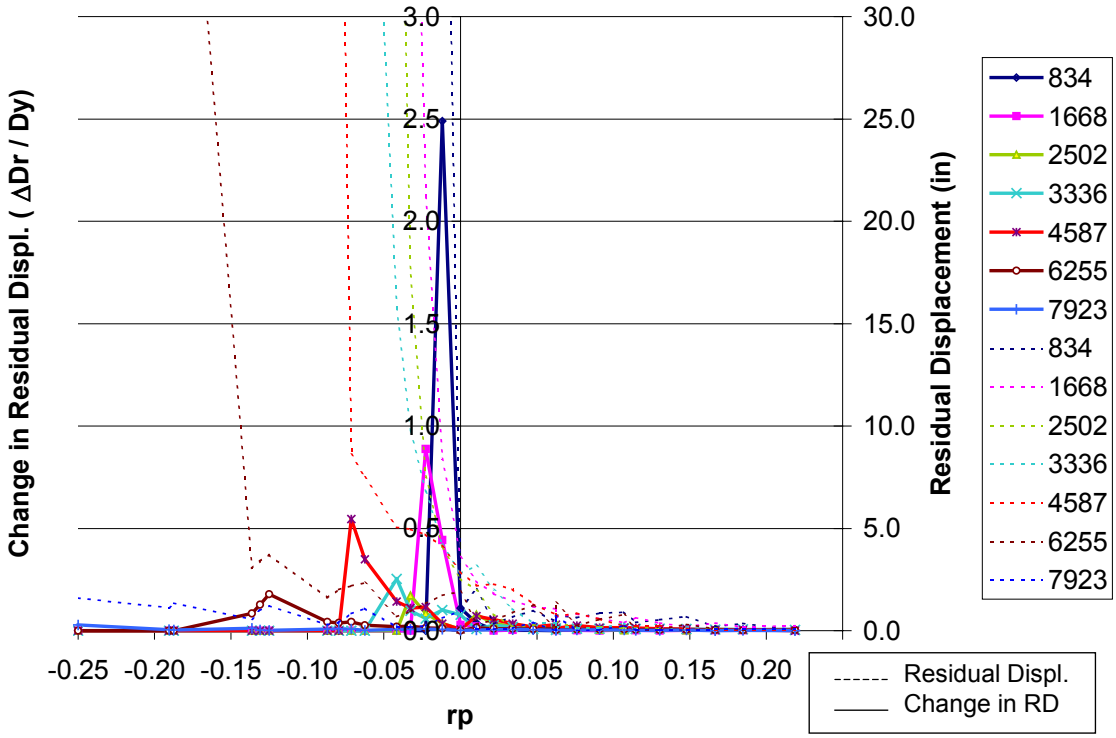


Figure C3.5.5.4b – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

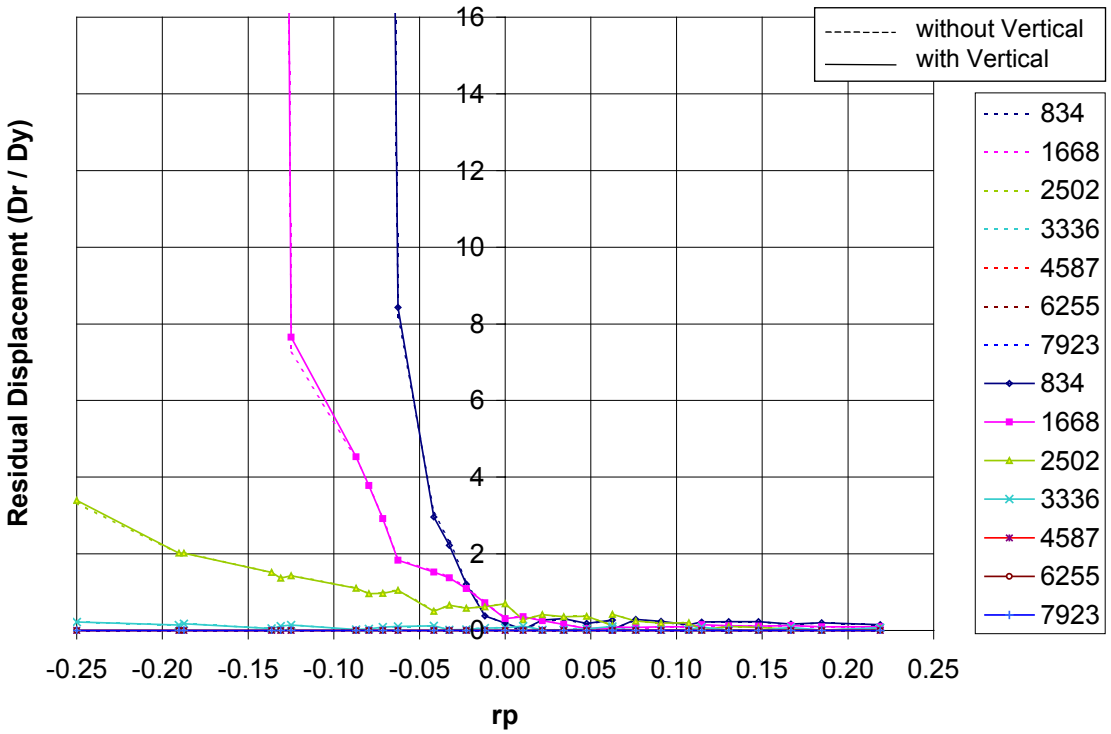


Figure C3.5.6.1a – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

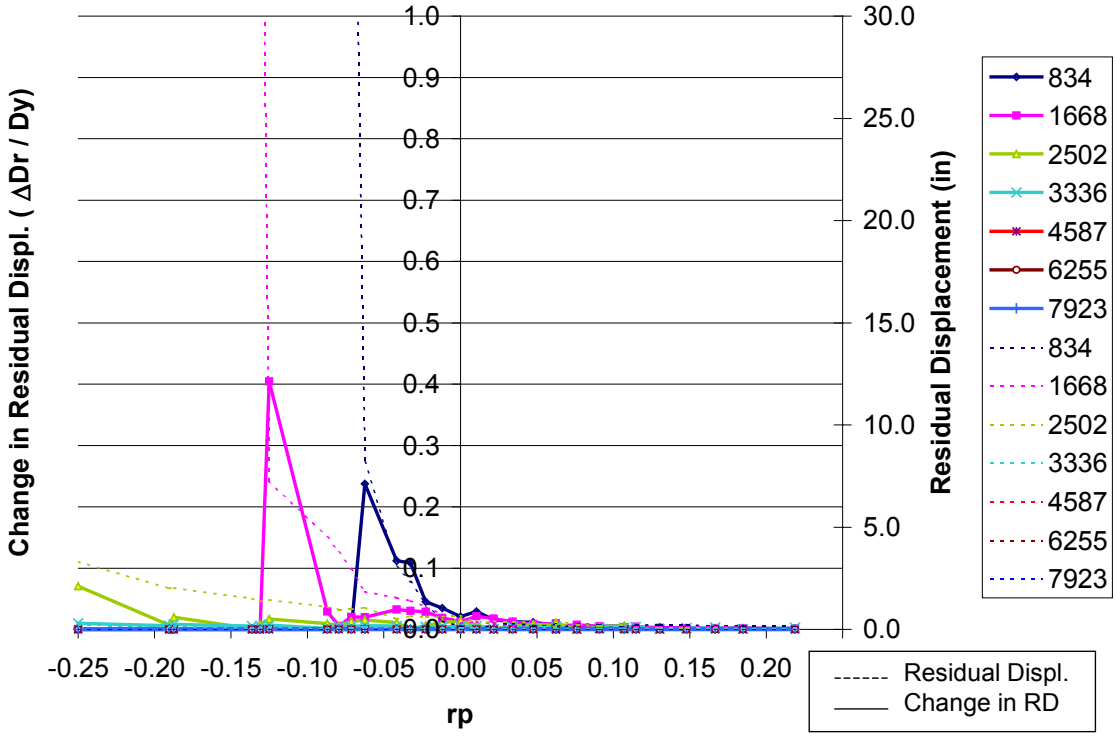


Figure C3.5.6.1b – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

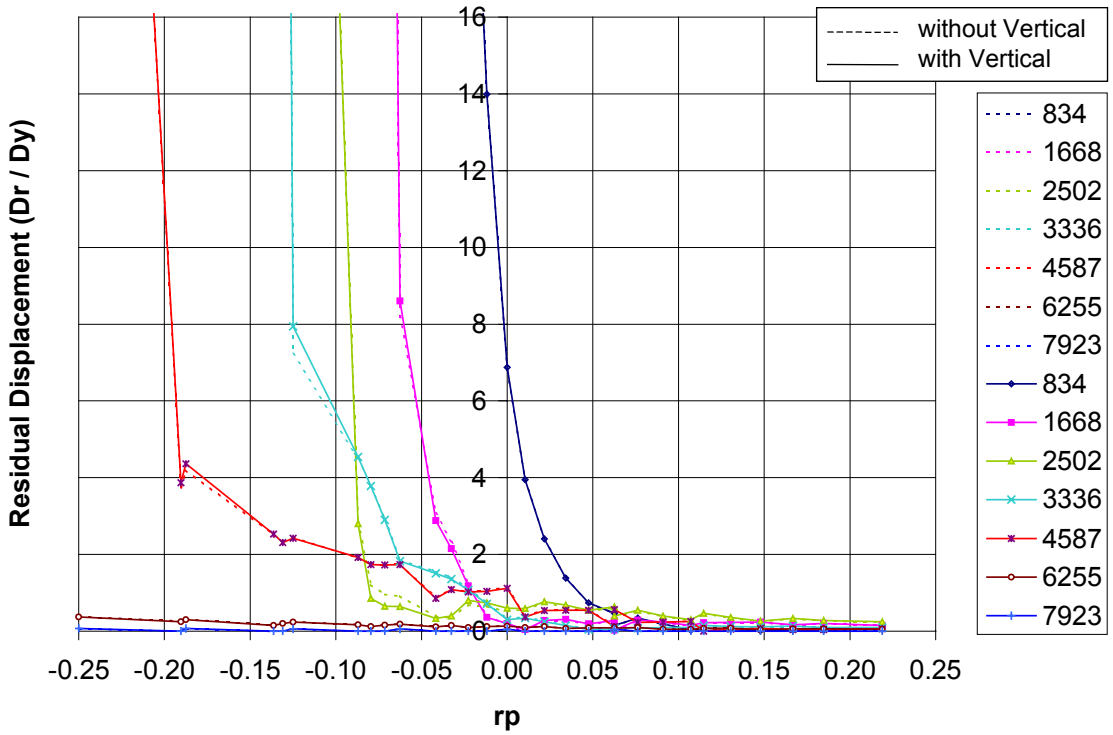


Figure C3.5.6.2a – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

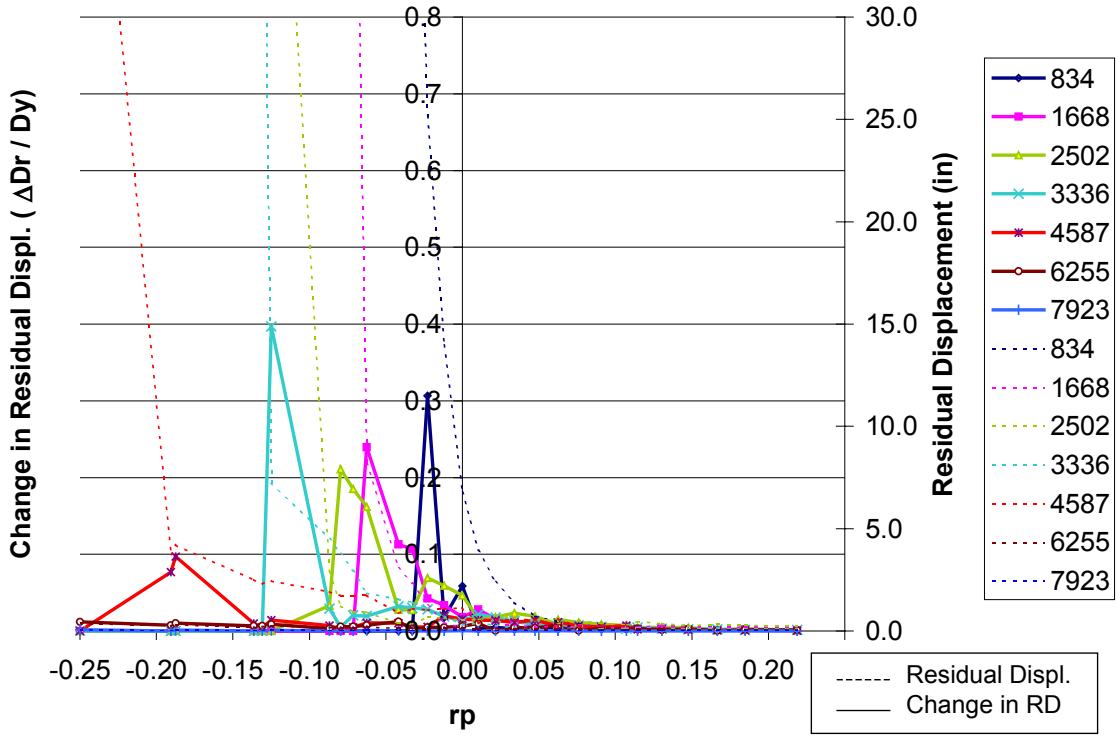


Figure C3.5.6.2b – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

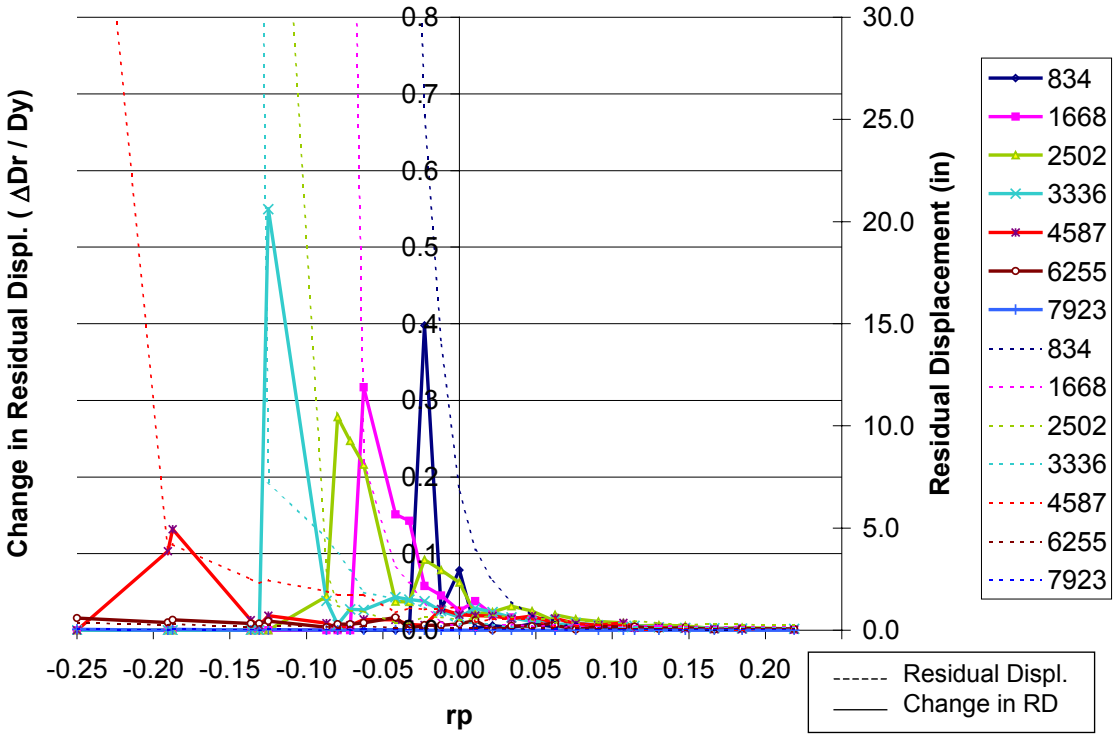


Figure C3.5.6.2c – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

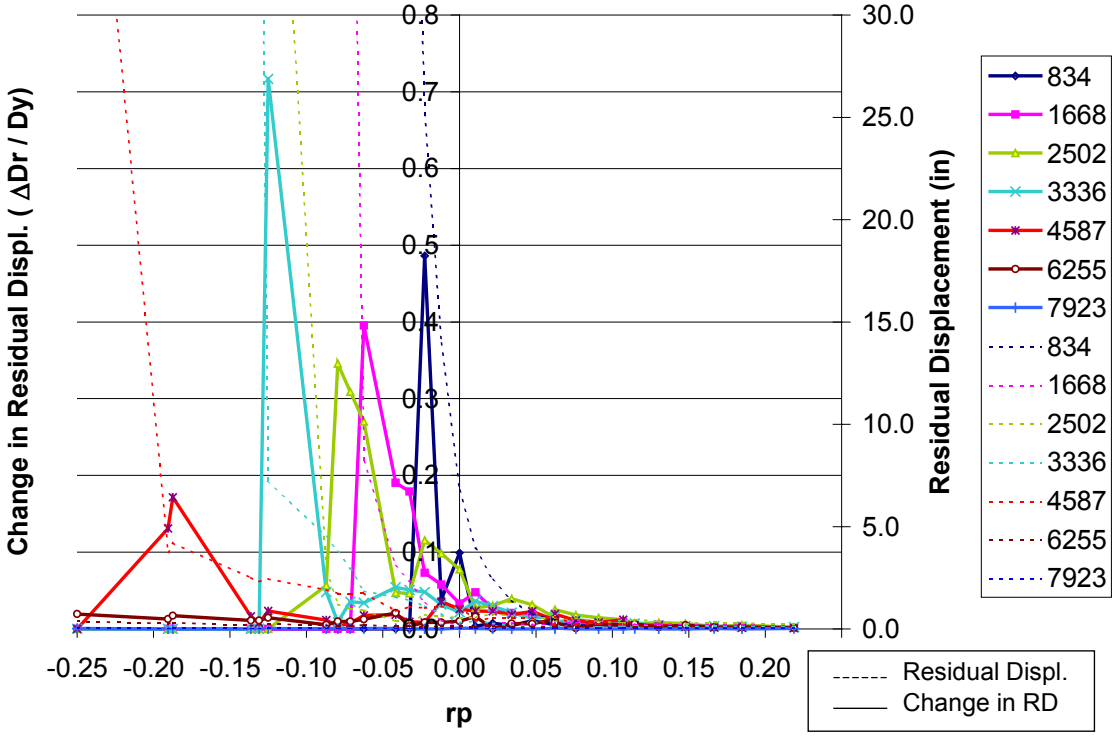


Figure C3.5.6.2d – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

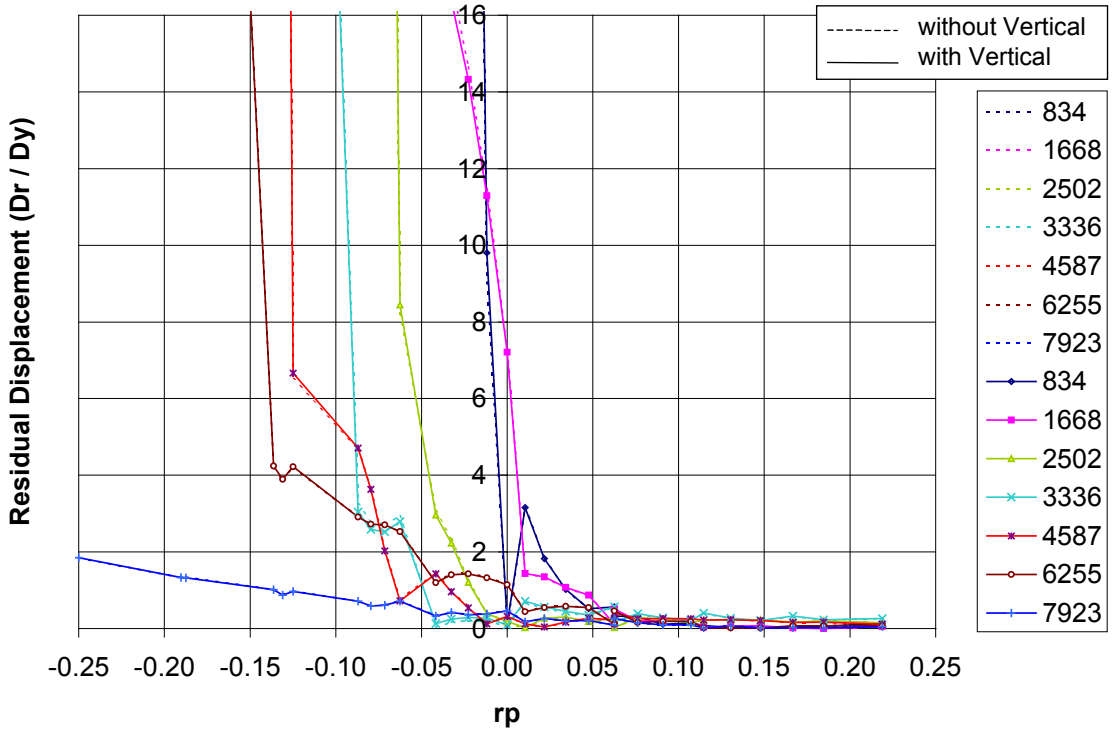


Figure C3.5.6.3a – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

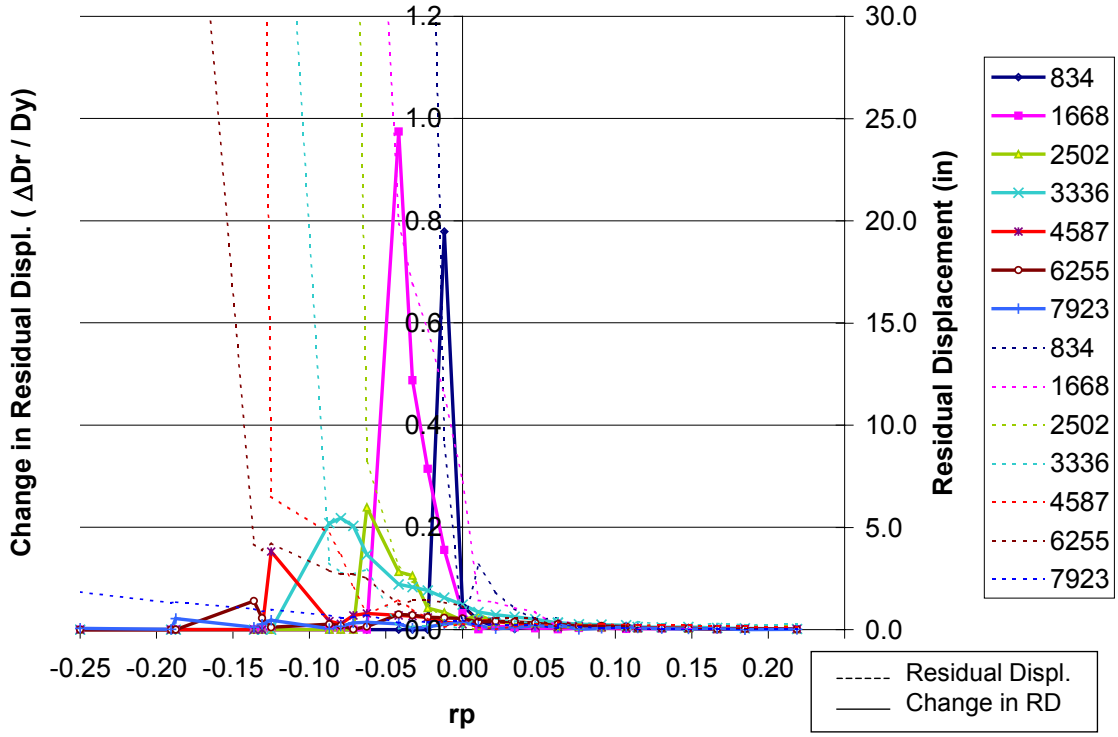


Figure C3.5.6.3b – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

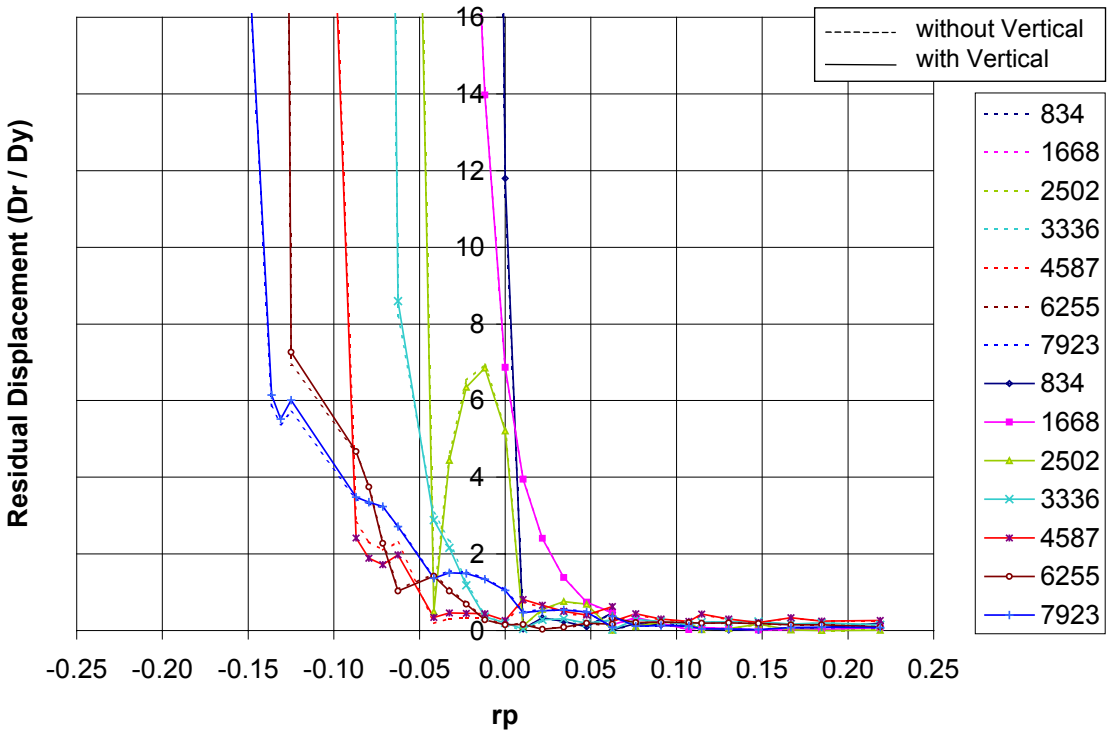


Figure C3.5.6.4a – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

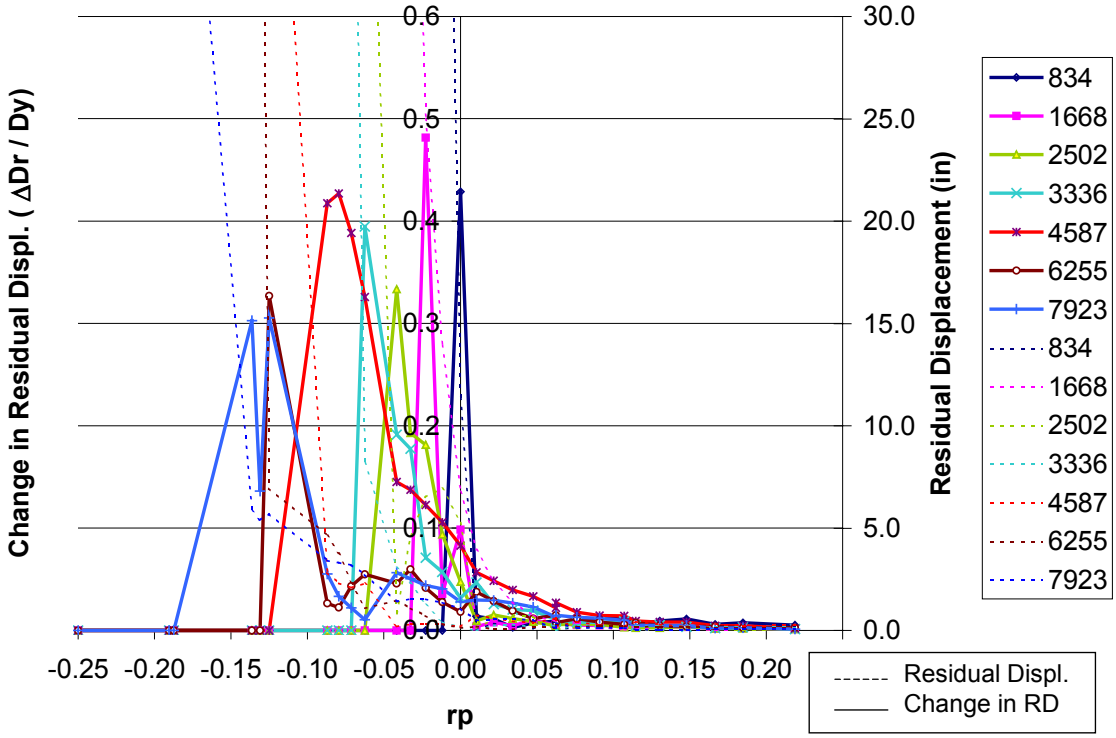


Figure C3.5.6.4b – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

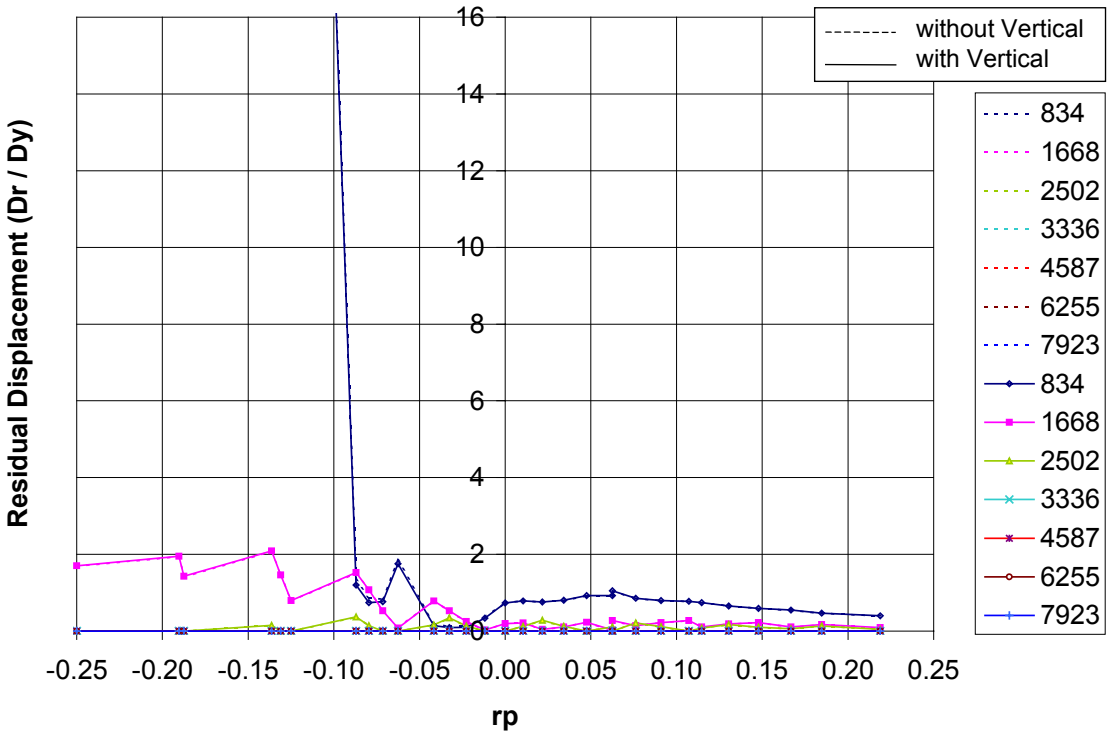


Figure C3.5.7.1a – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

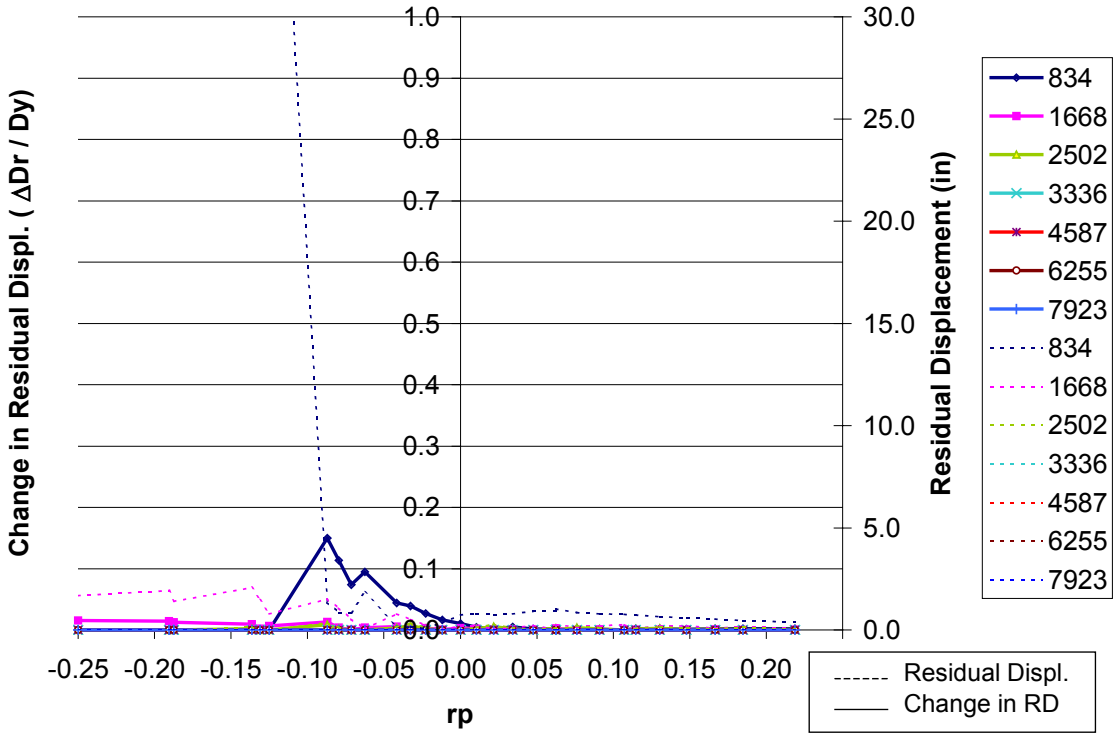


Figure C3.5.7.1b – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

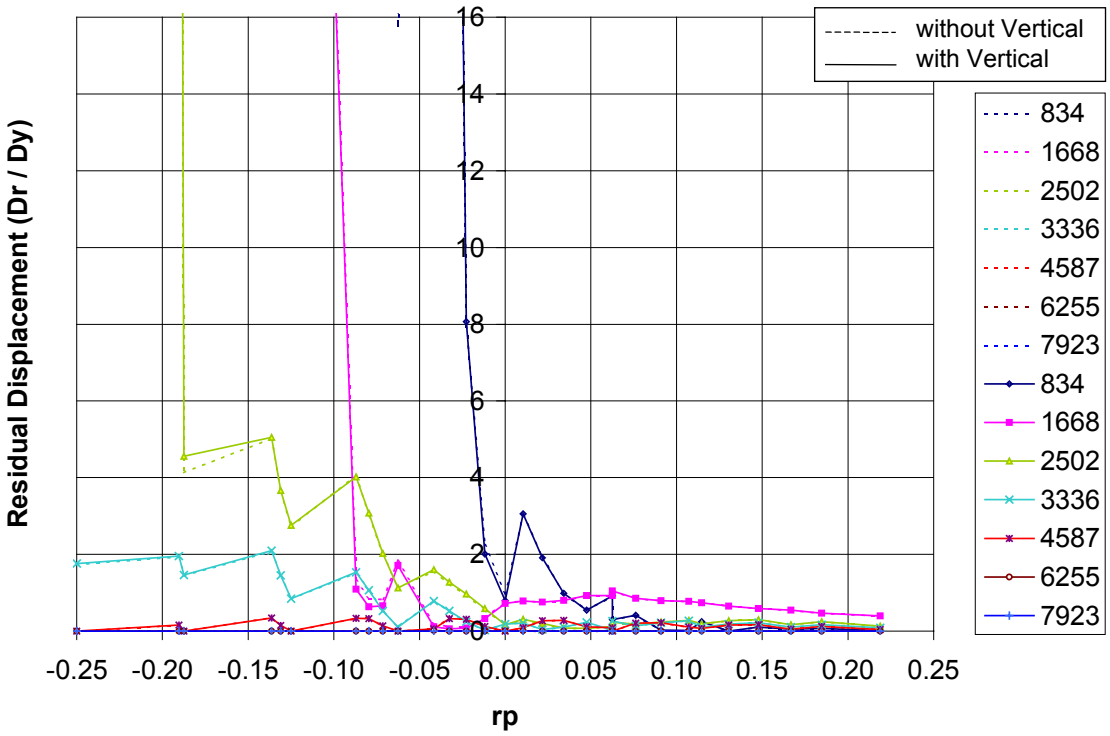


Figure C3.5.7.2a – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

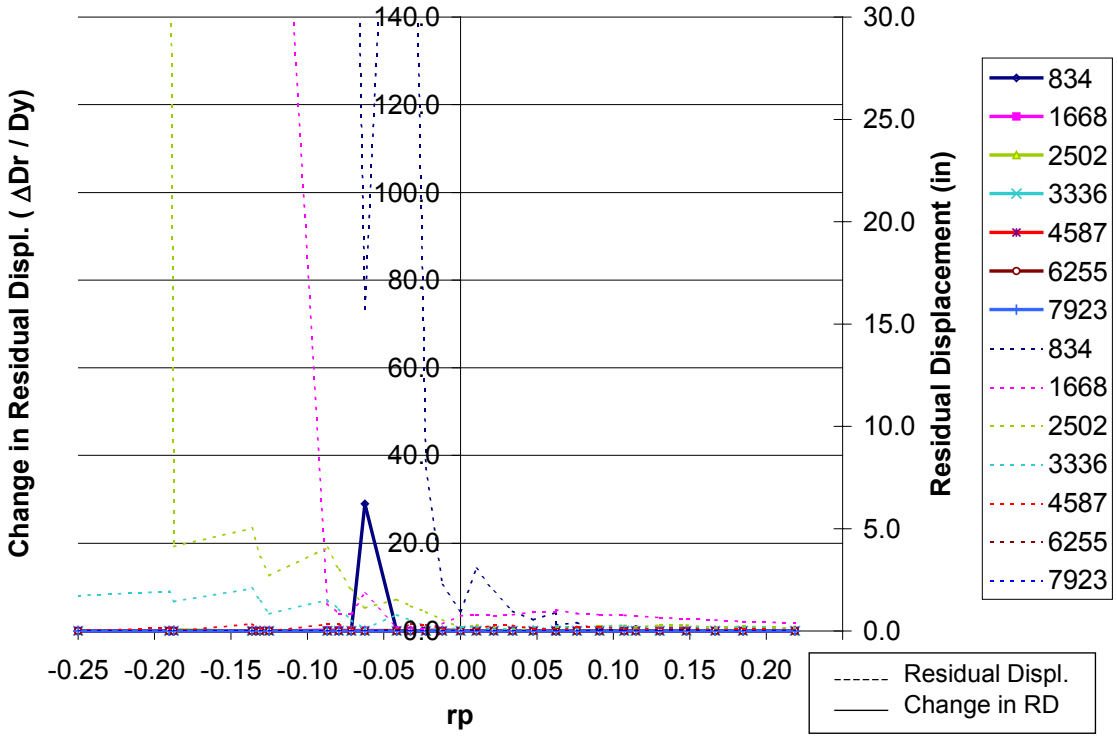


Figure C3.5.7.2b – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

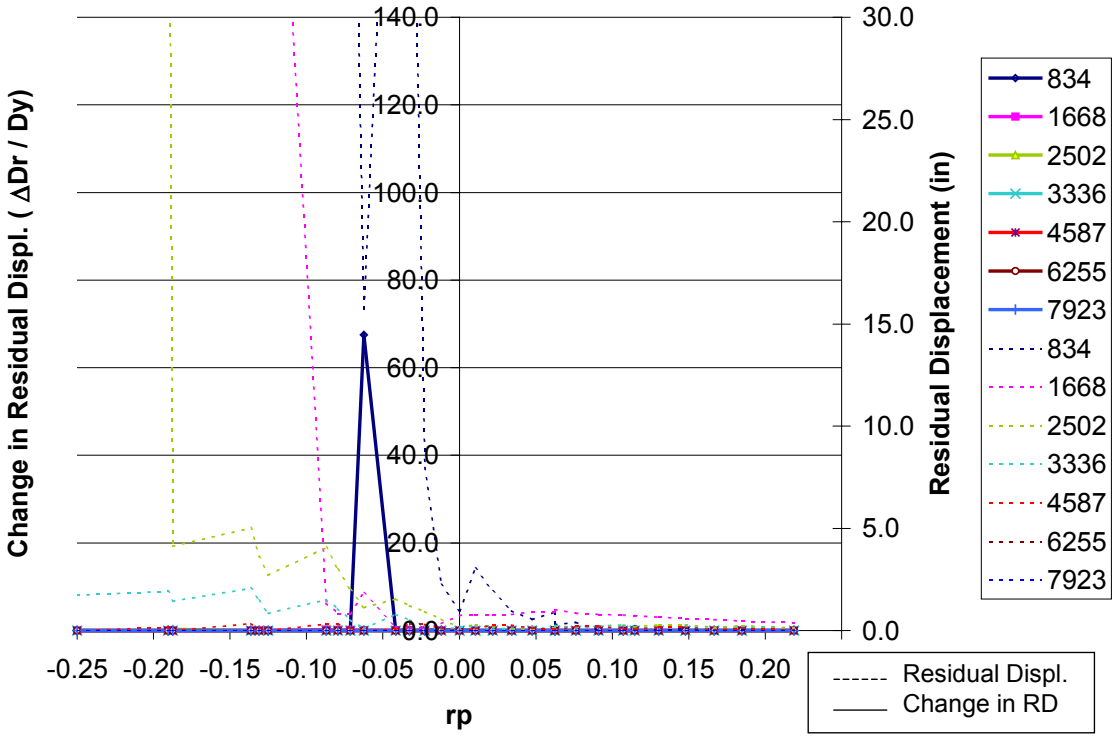


Figure C3.5.7.2c – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

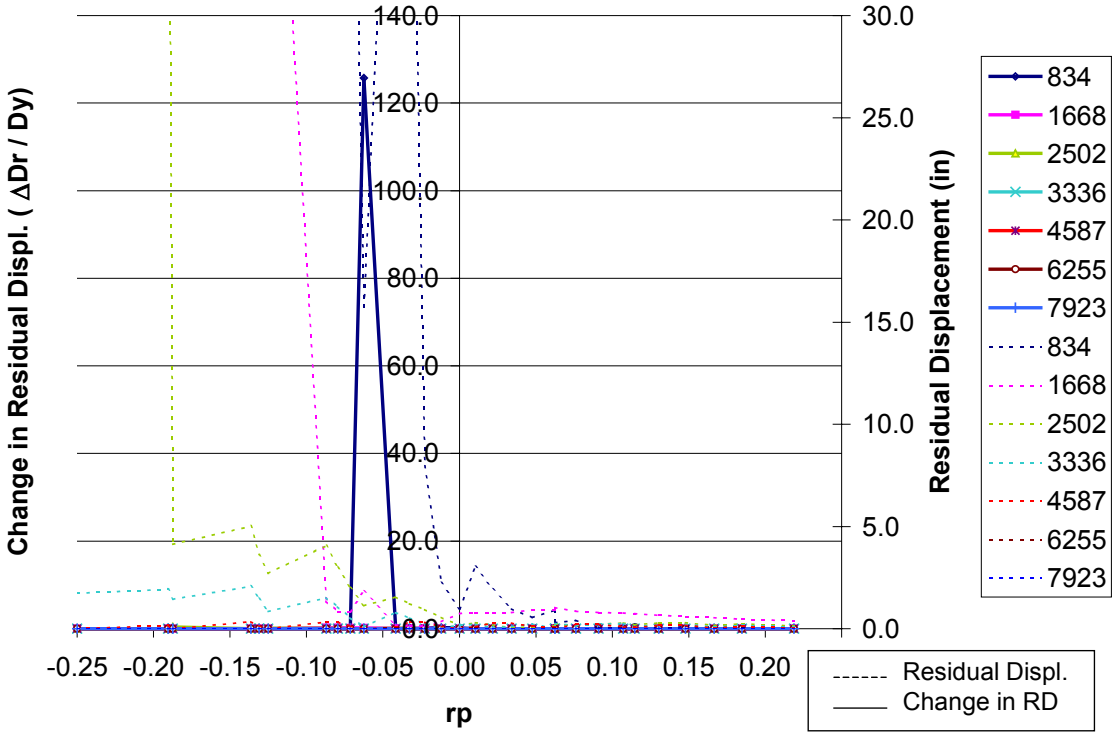


Figure C3.5.7.2d – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

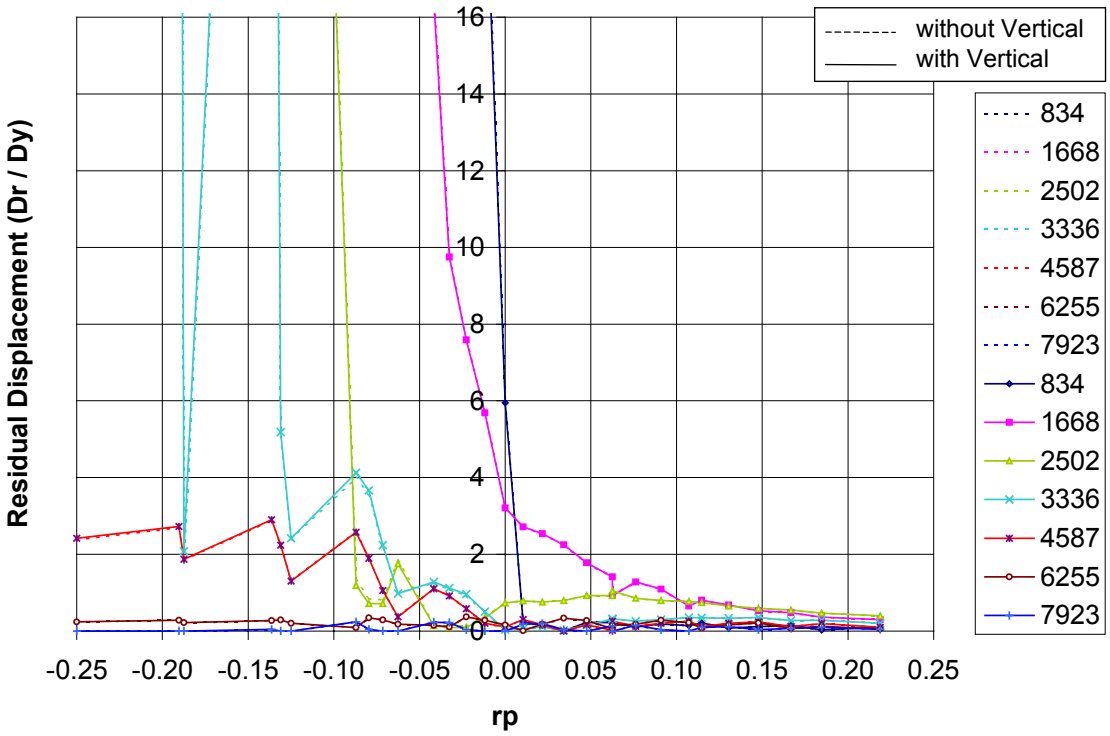


Figure C3.5.7.3a – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

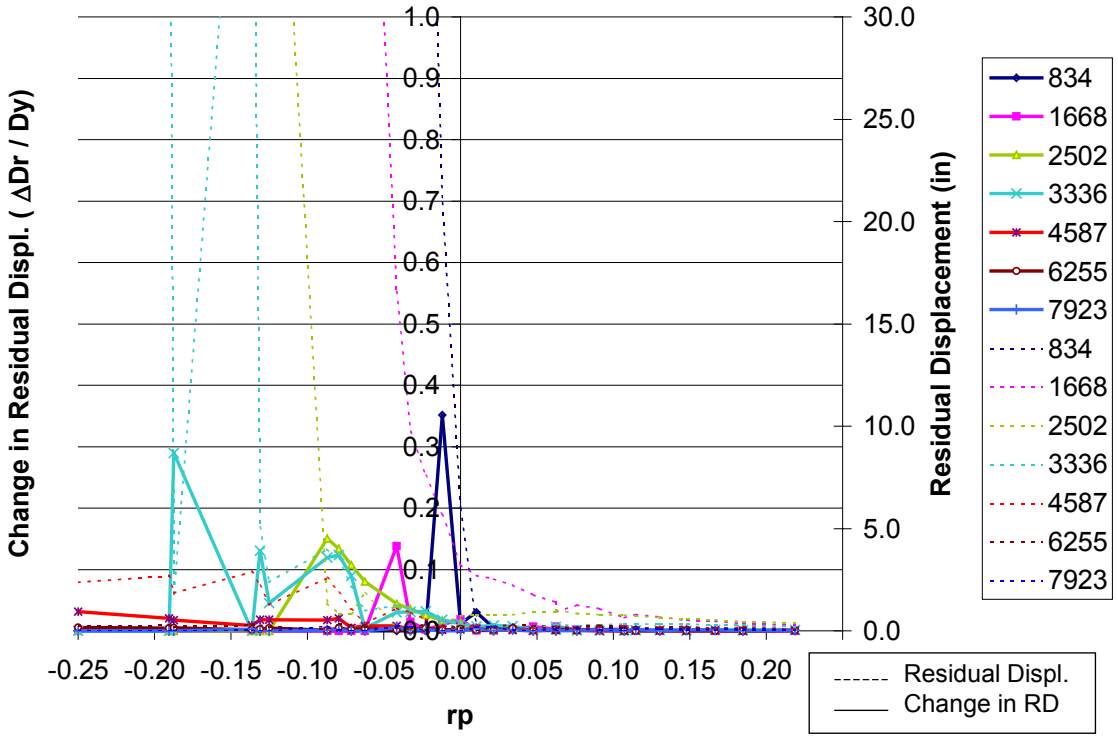


Figure C3.5.7.3b – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

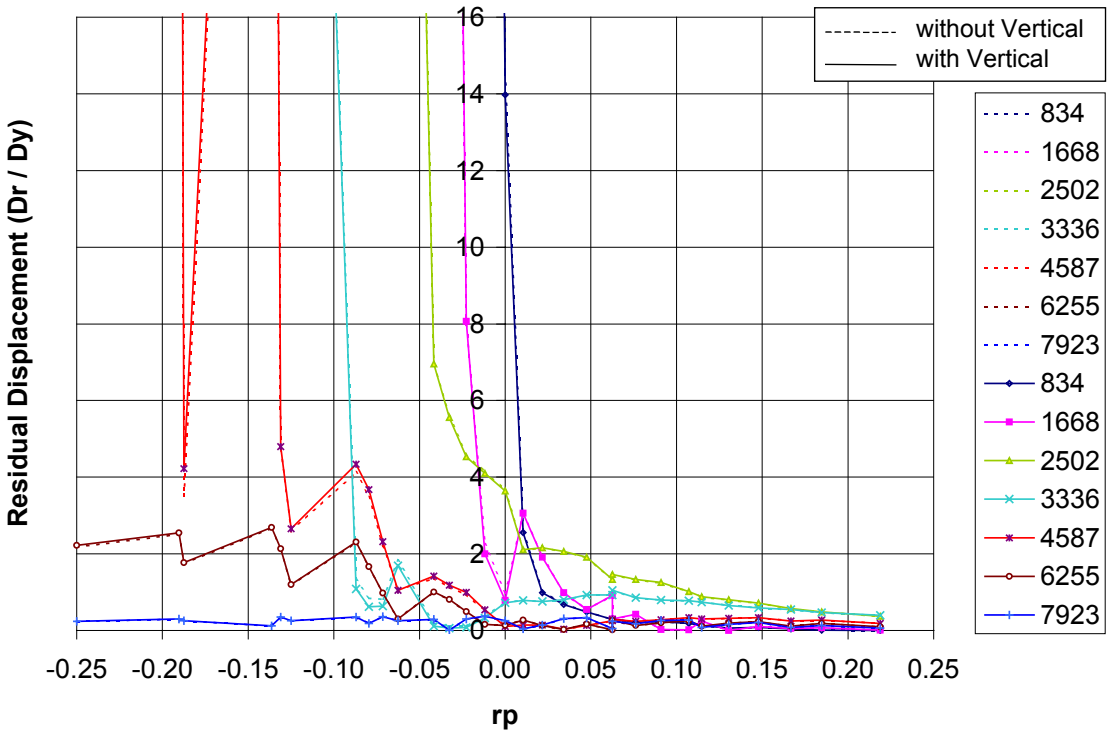


Figure C3.5.7.4a – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

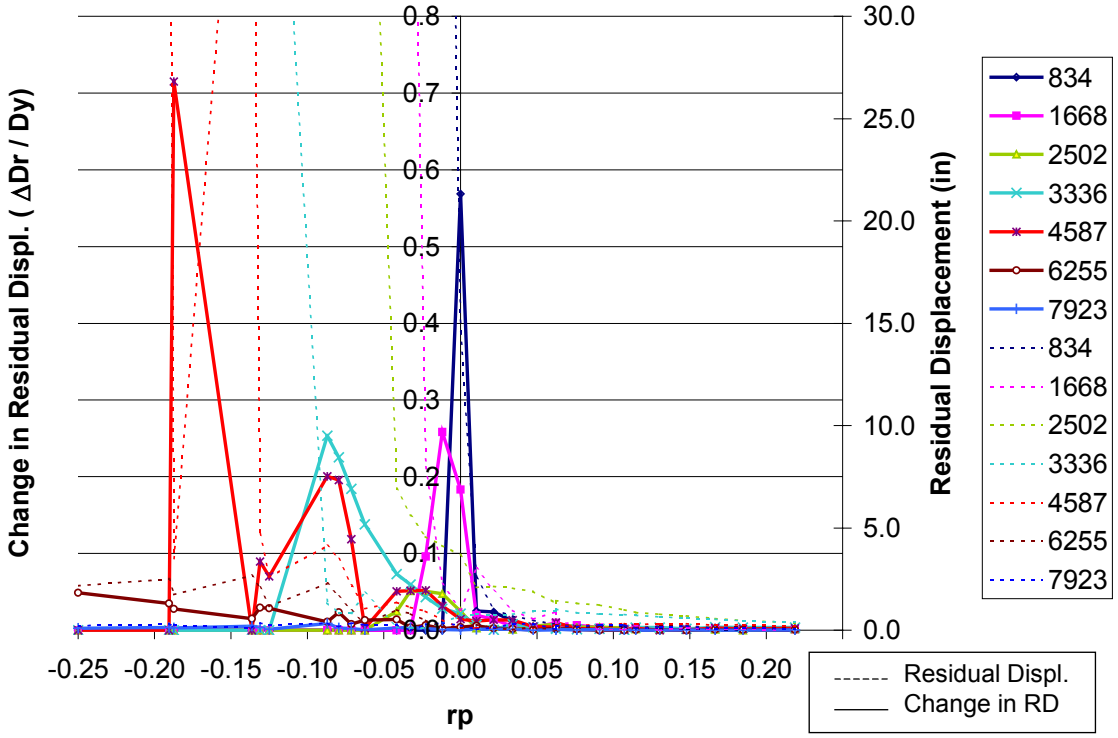


Figure C3.5.7.4b – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

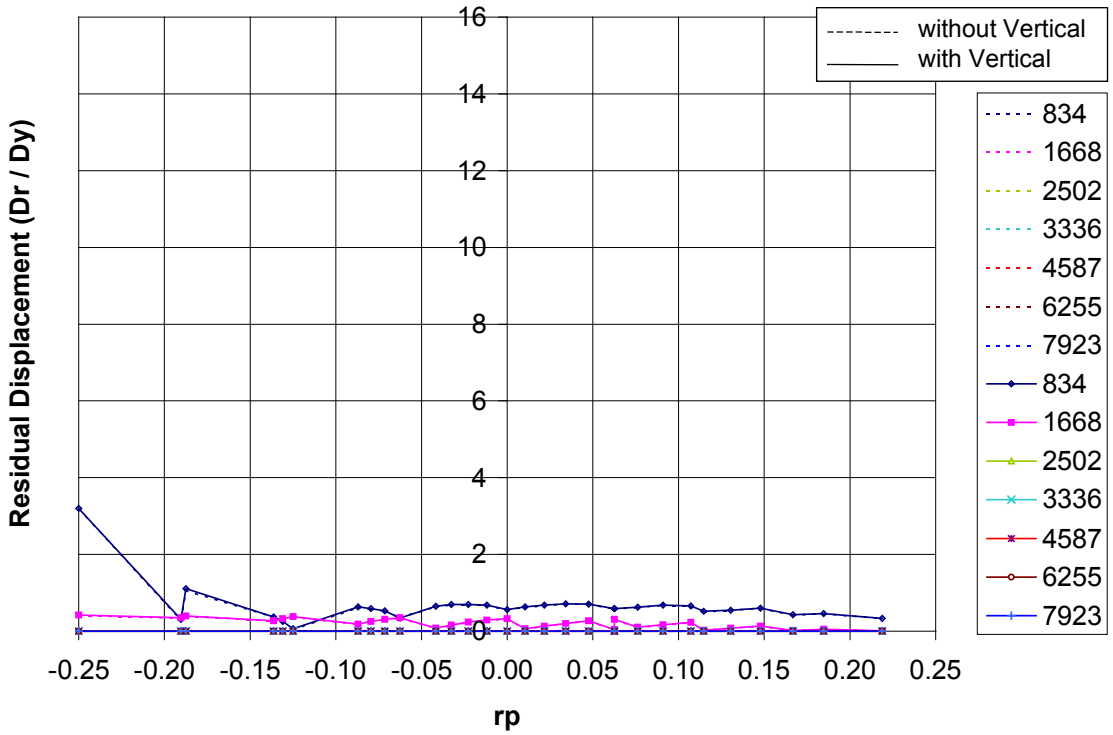


Figure C3.5.8.1a – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

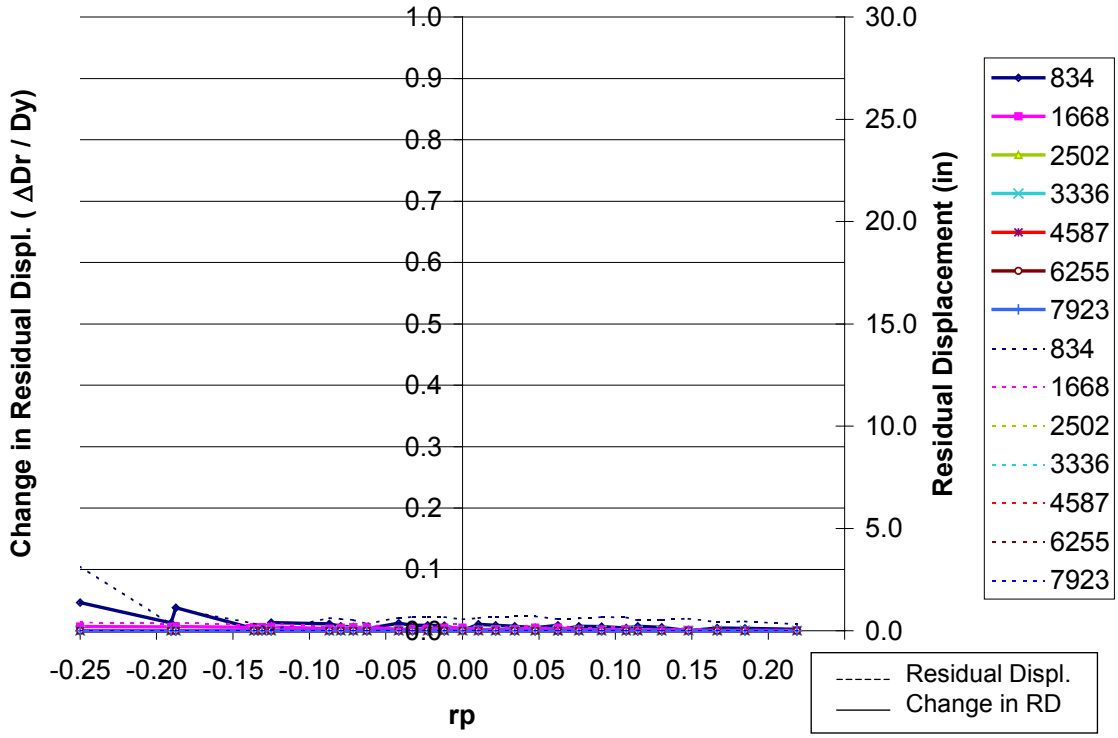


Figure C3.5.8.1b – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

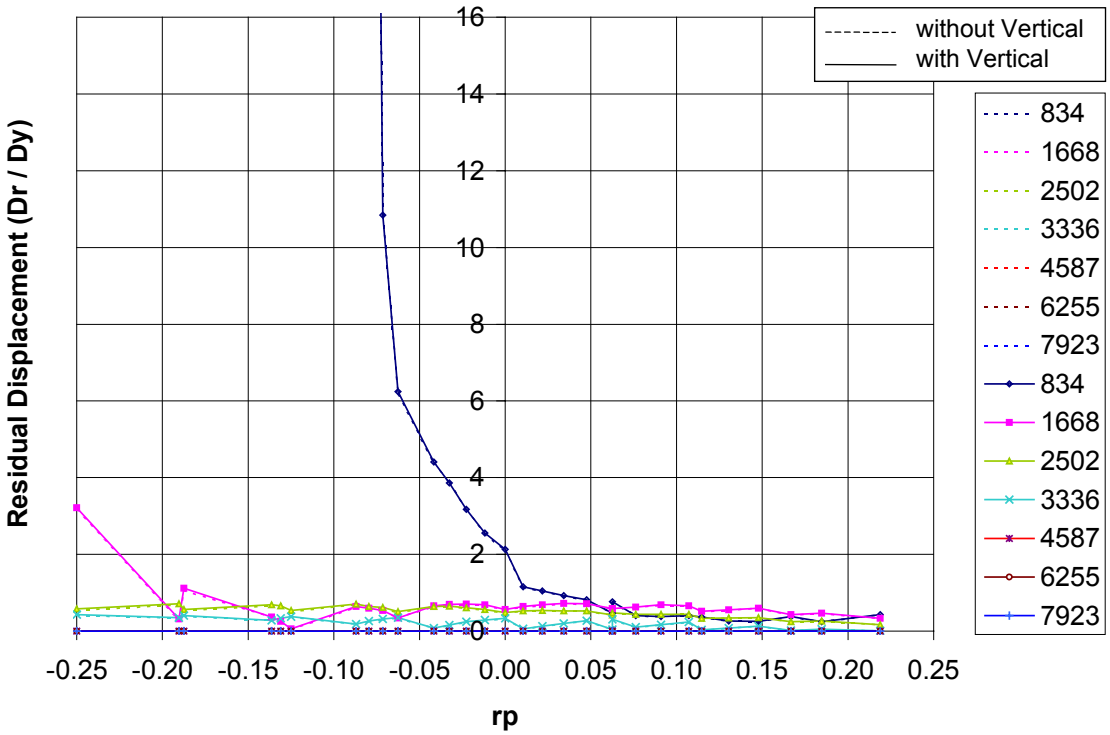


Figure C3.5.8.2a – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

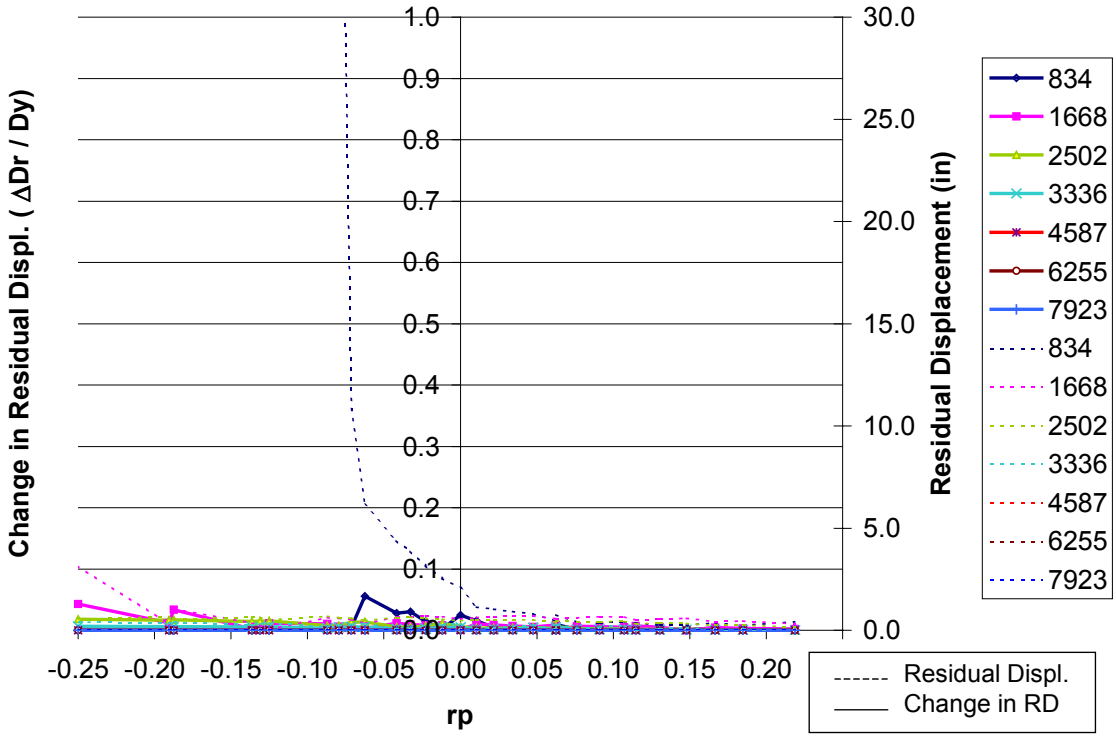


Figure C3.5.8.2b – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

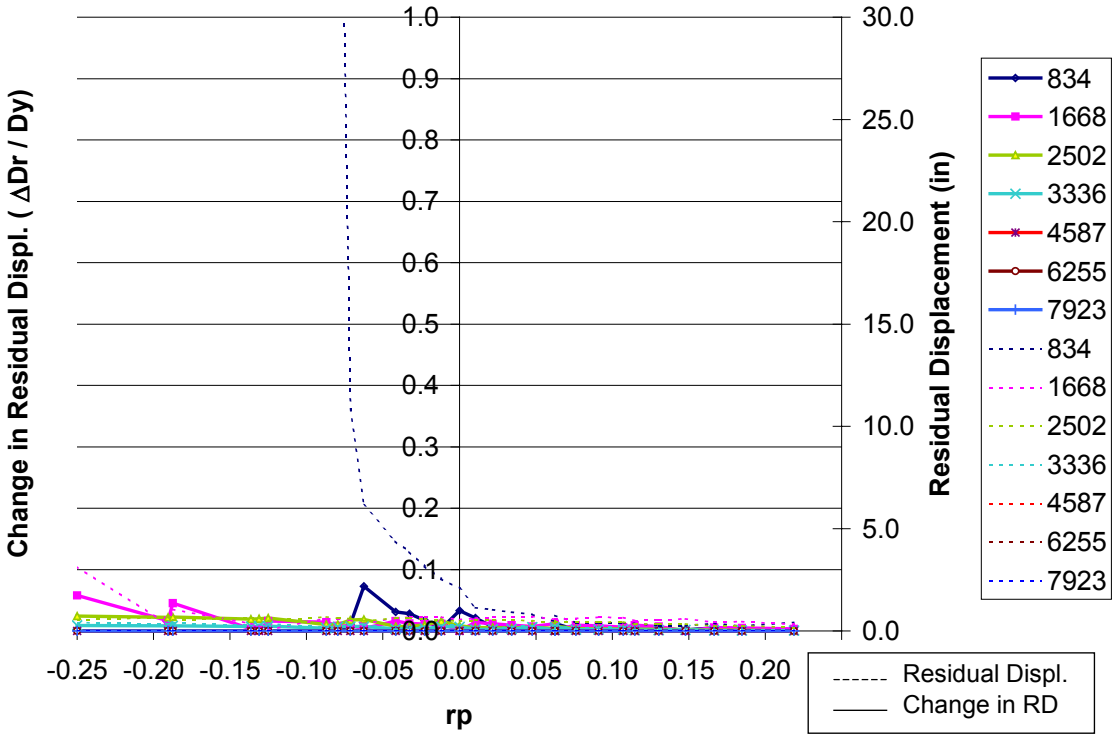


Figure C3.5.8.2c – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

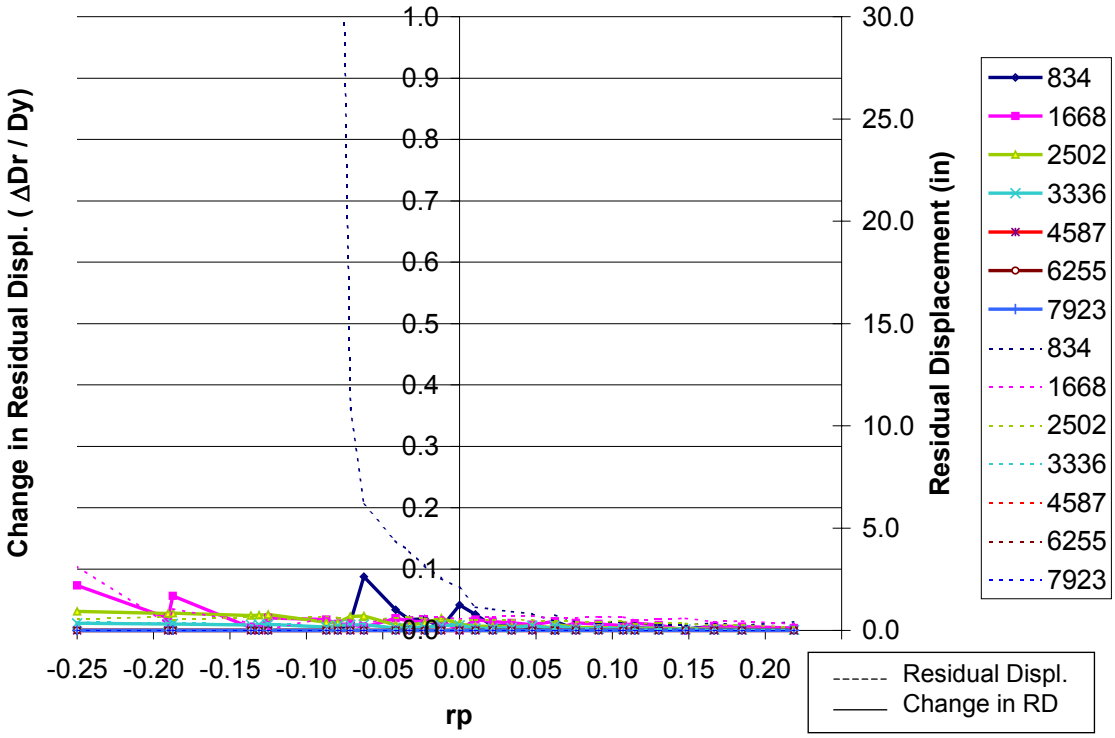


Figure C3.5.8.2d – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

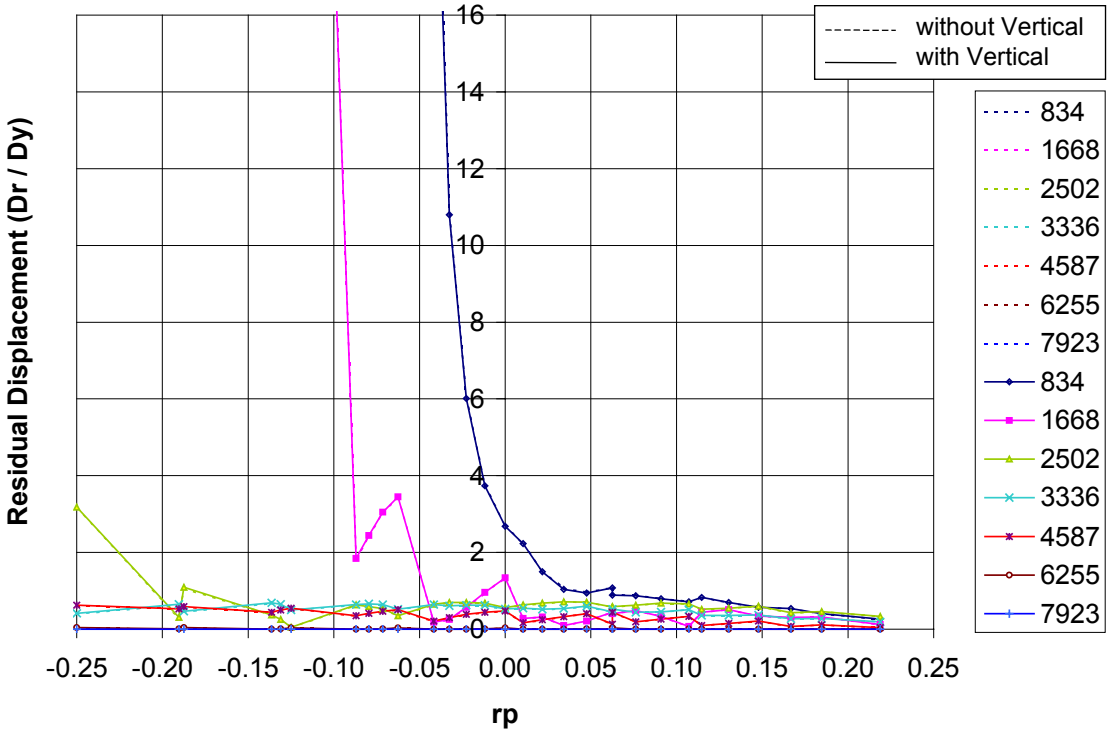


Figure C3.5.8.3a – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

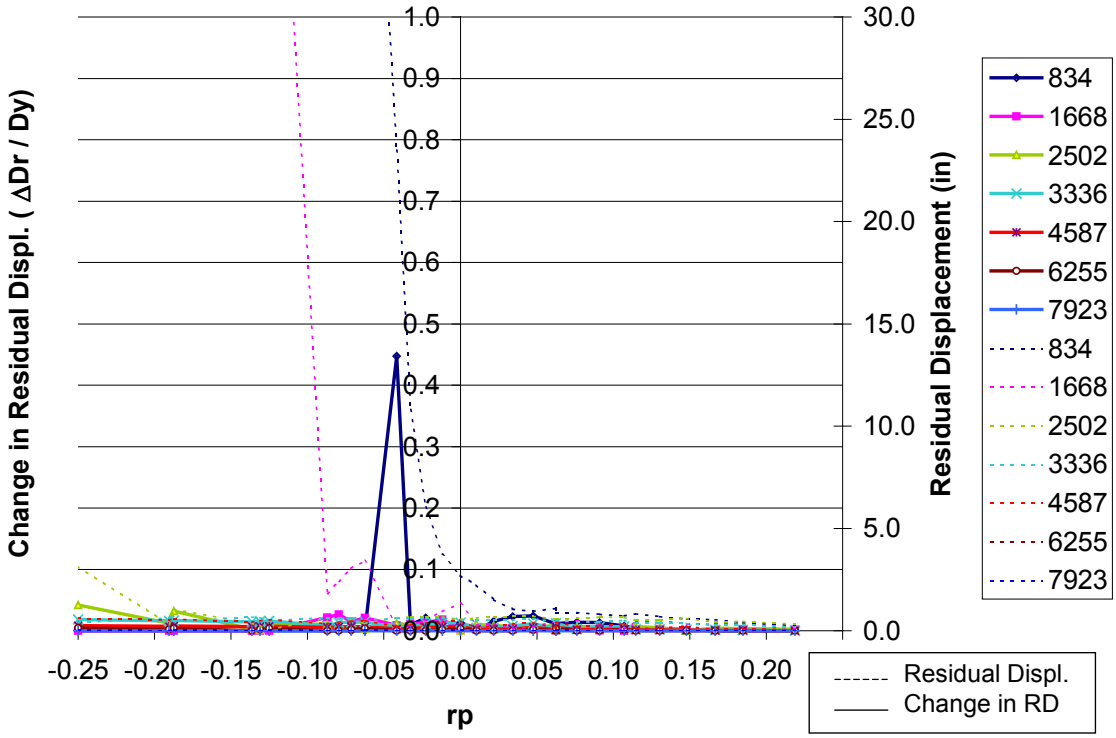


Figure C3.5.8.3b – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

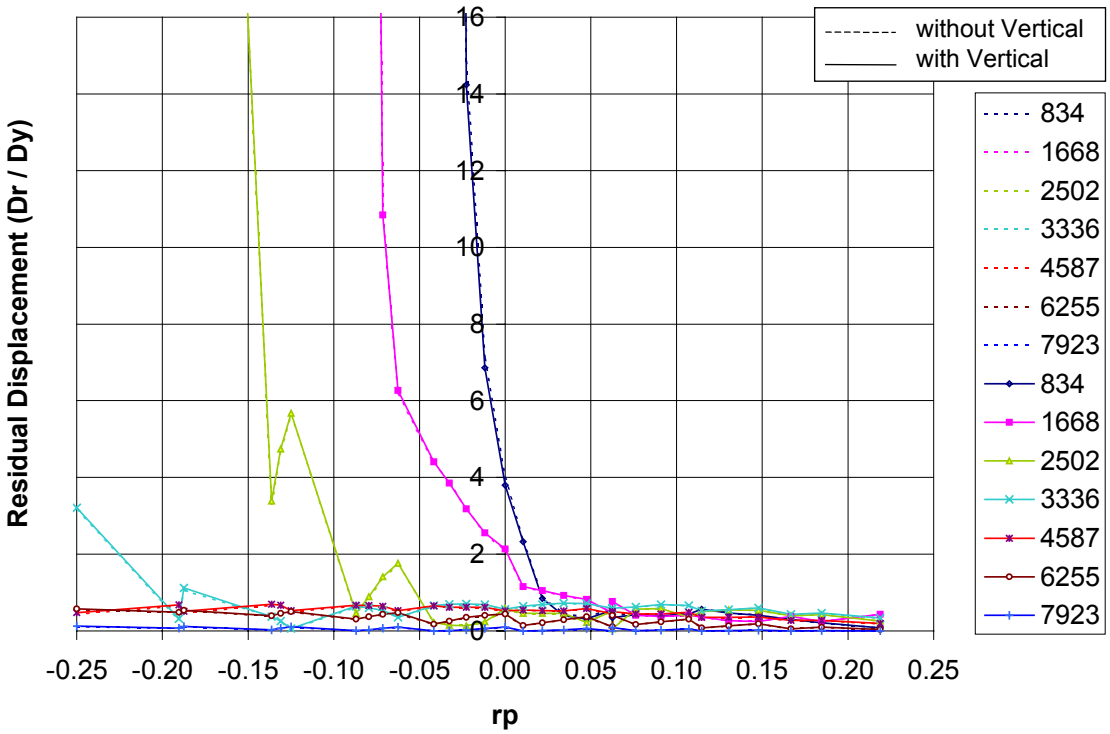


Figure C3.5.8.4a – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.093 Seconds.

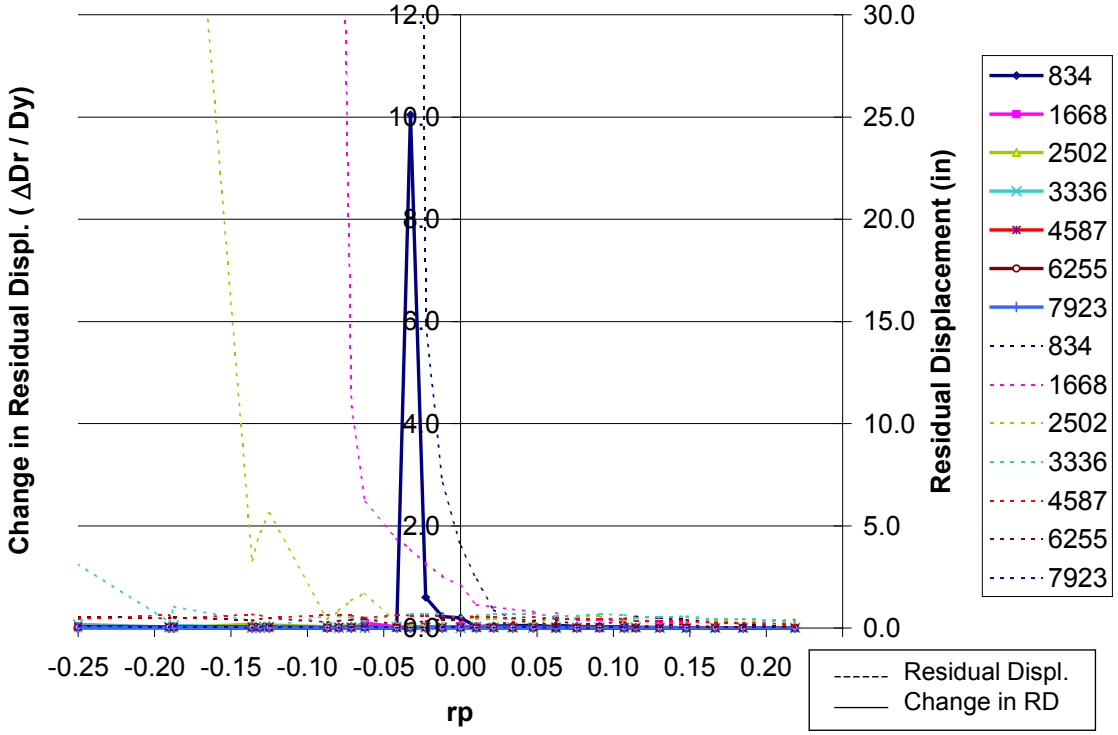


Figure C3.5.8.4b – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.093 Seconds.

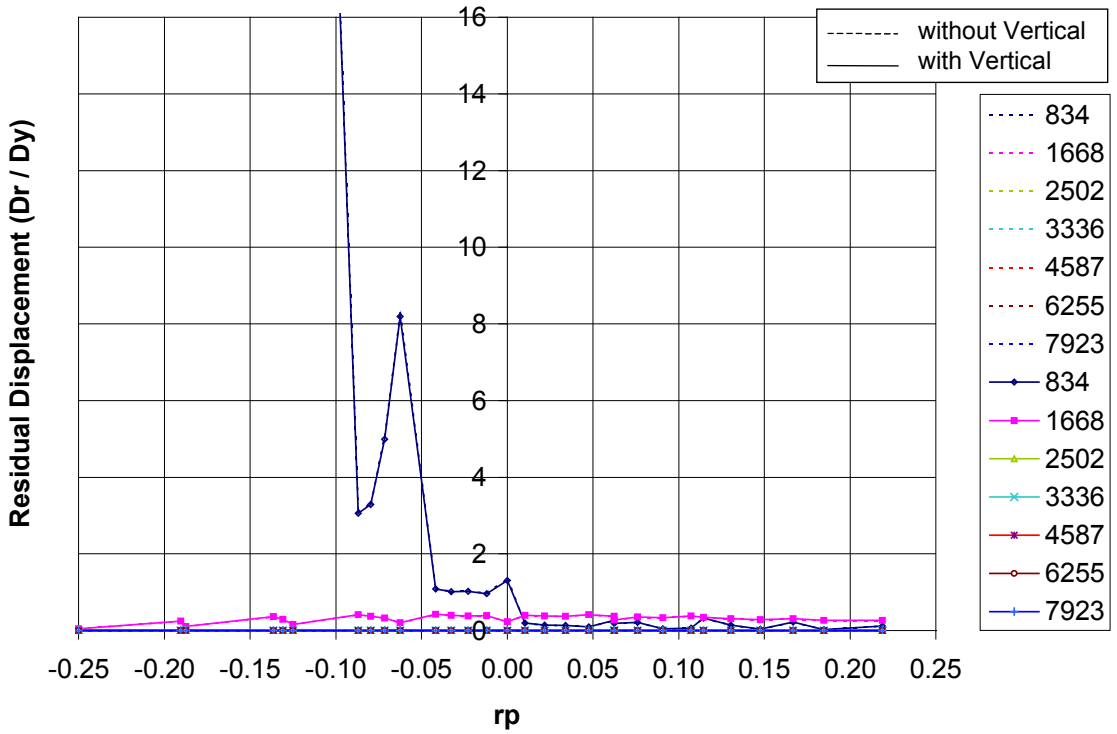


Figure C3.6.1.1a – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

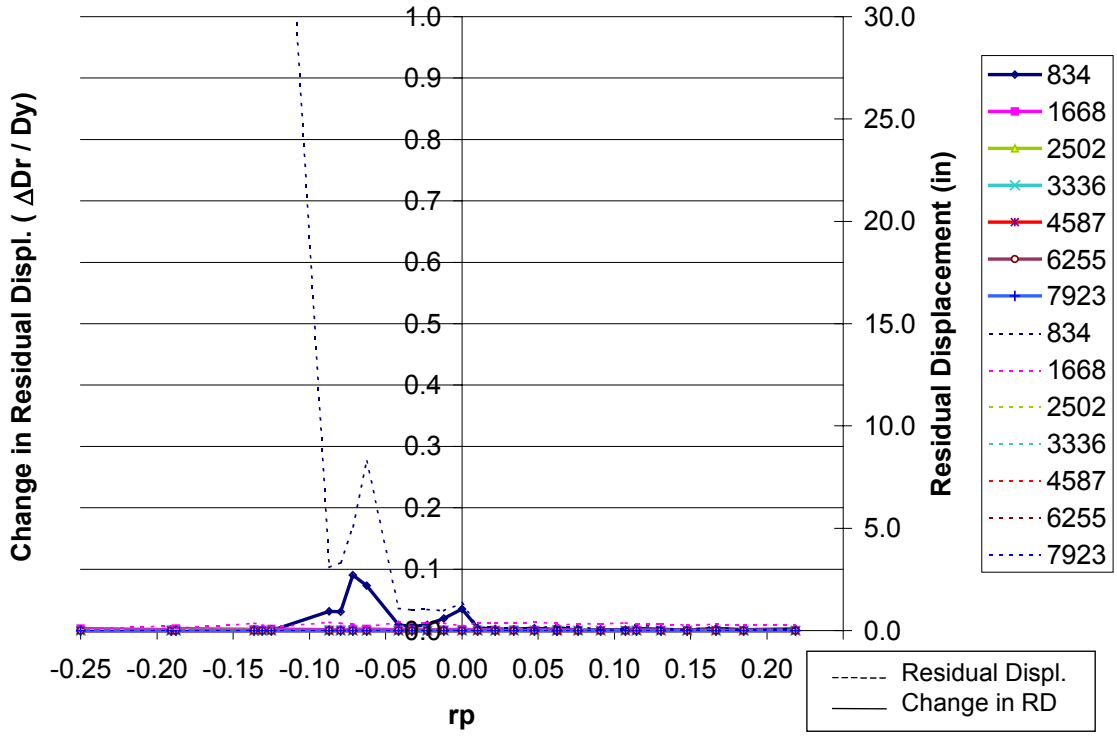


Figure C3.6.1.1b – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

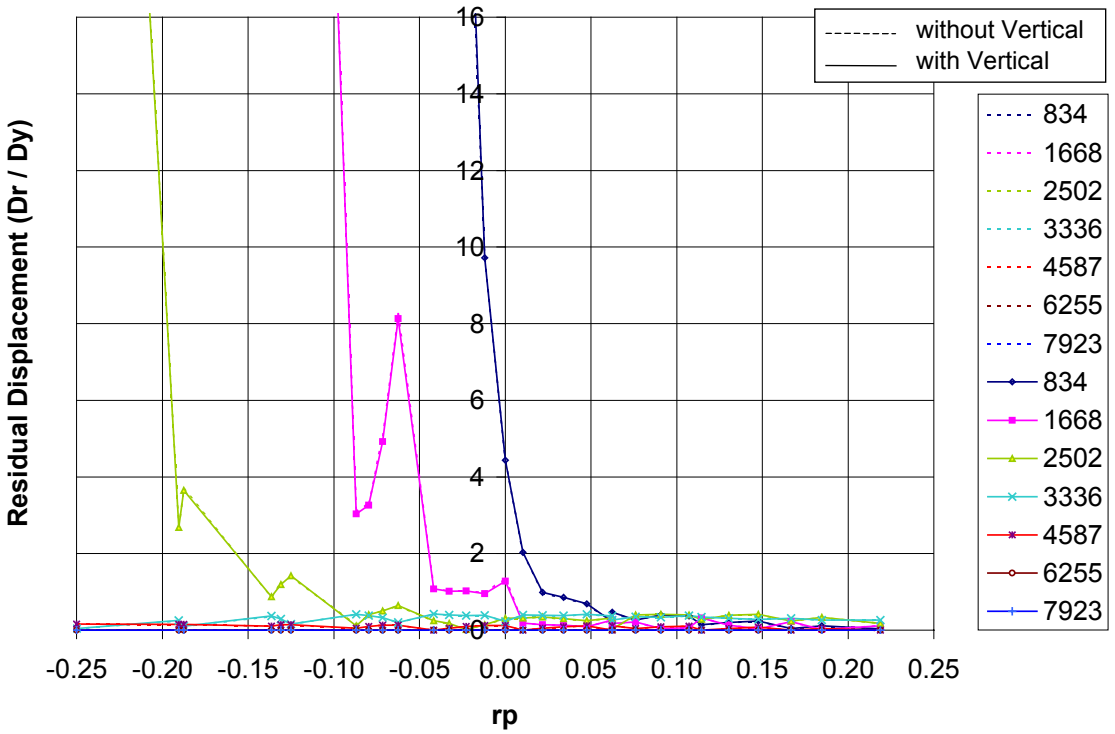


Figure C3.6.1.2a – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

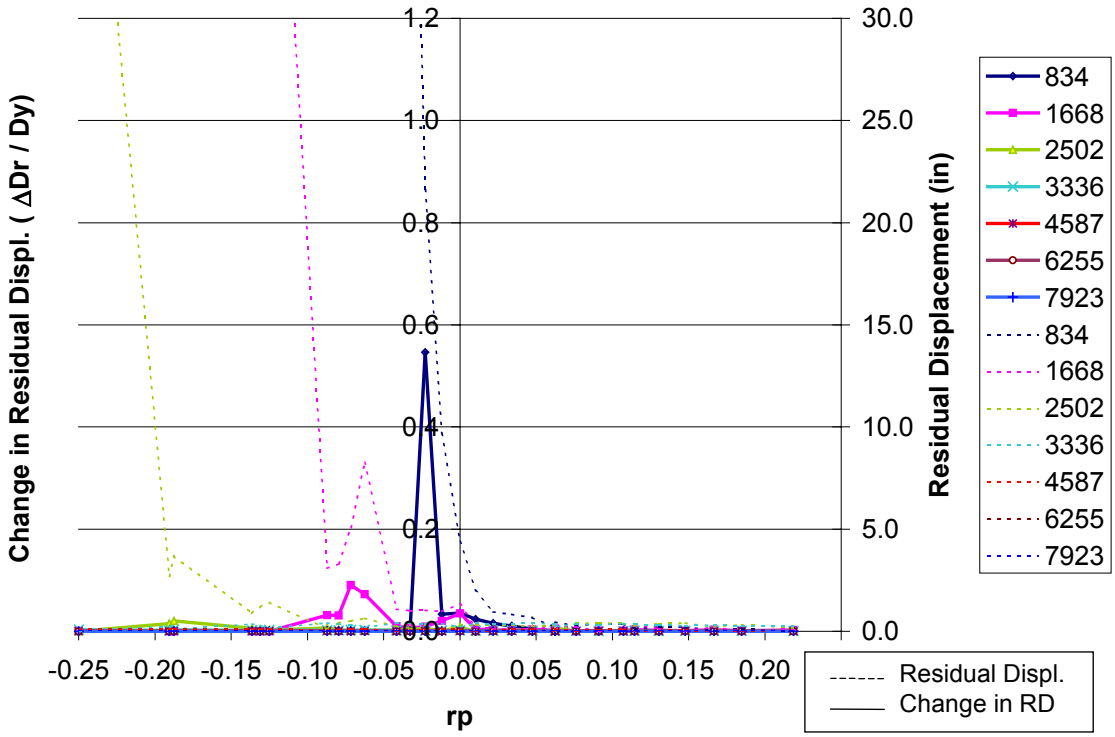


Figure C3.6.1.2b – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

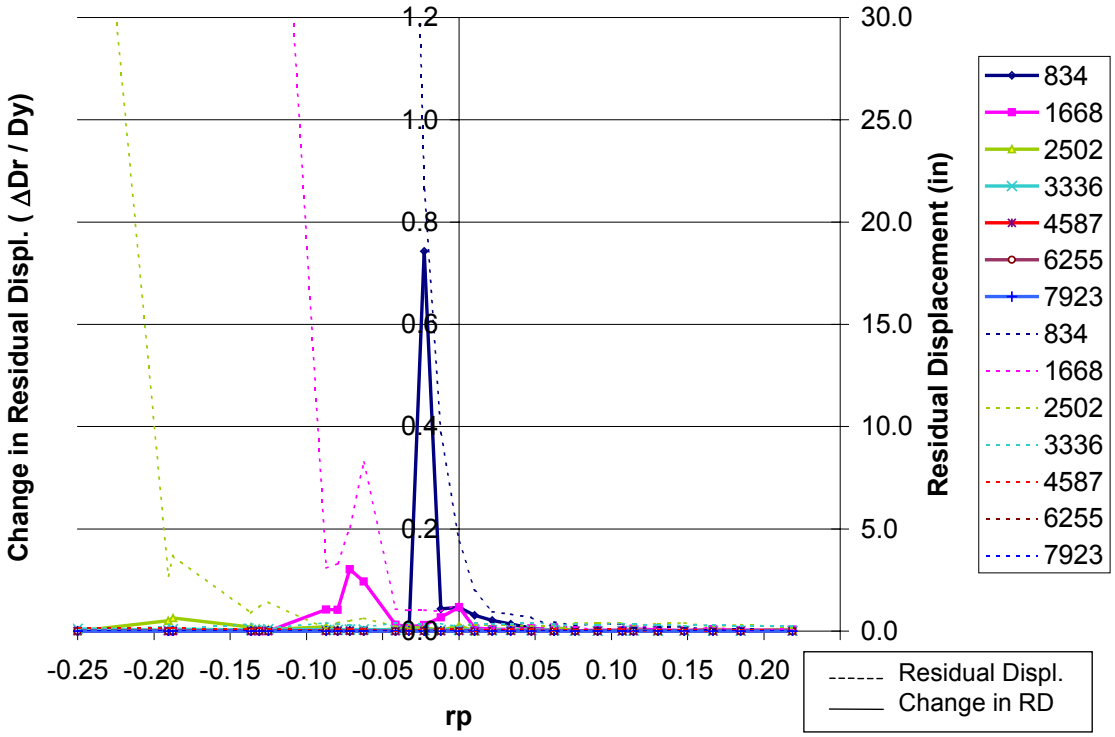


Figure C3.6.1.2c – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

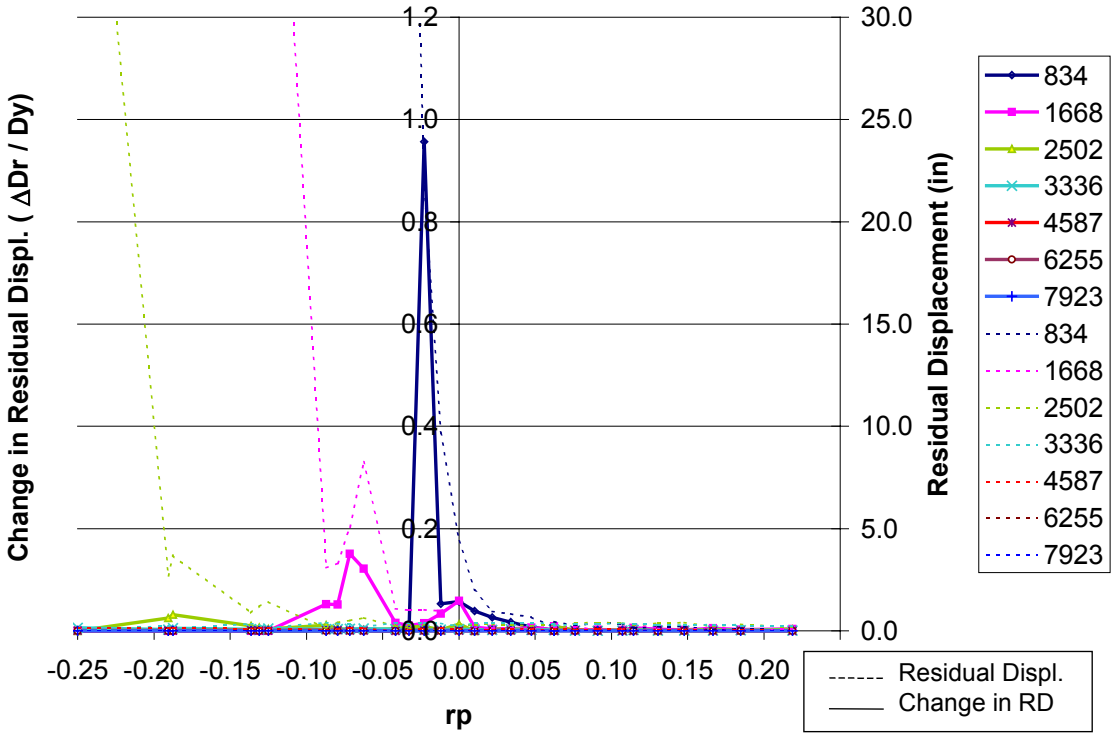


Figure C3.6.1.2d – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

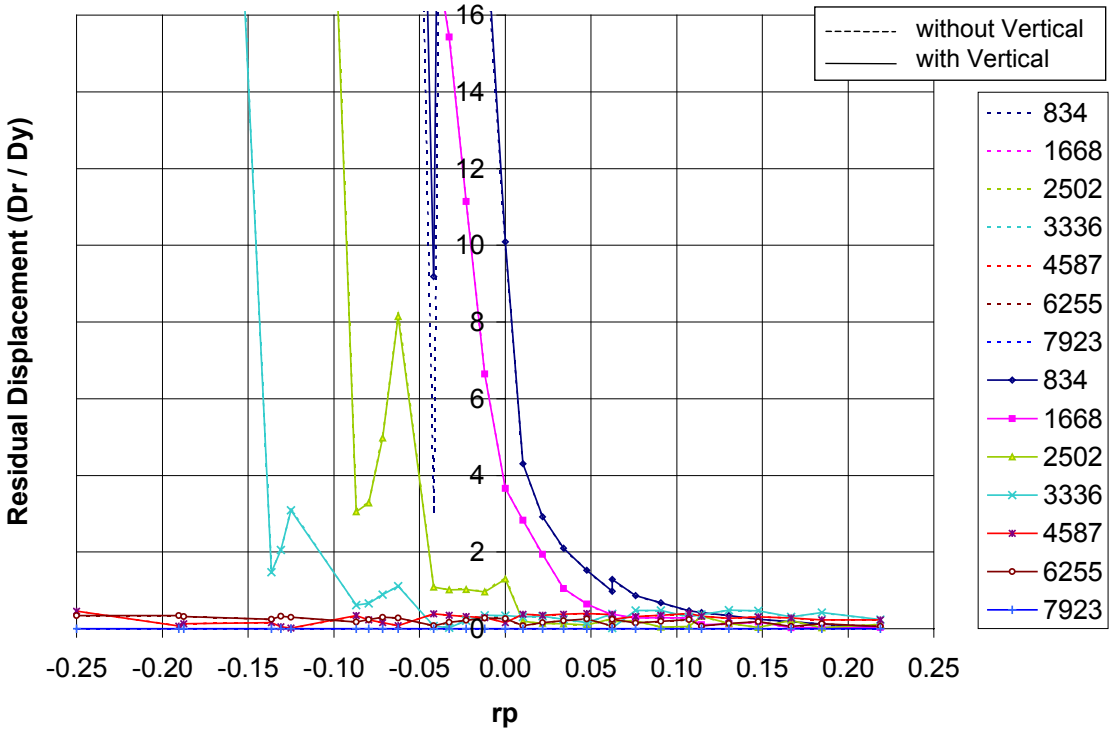


Figure C3.6.1.3a – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

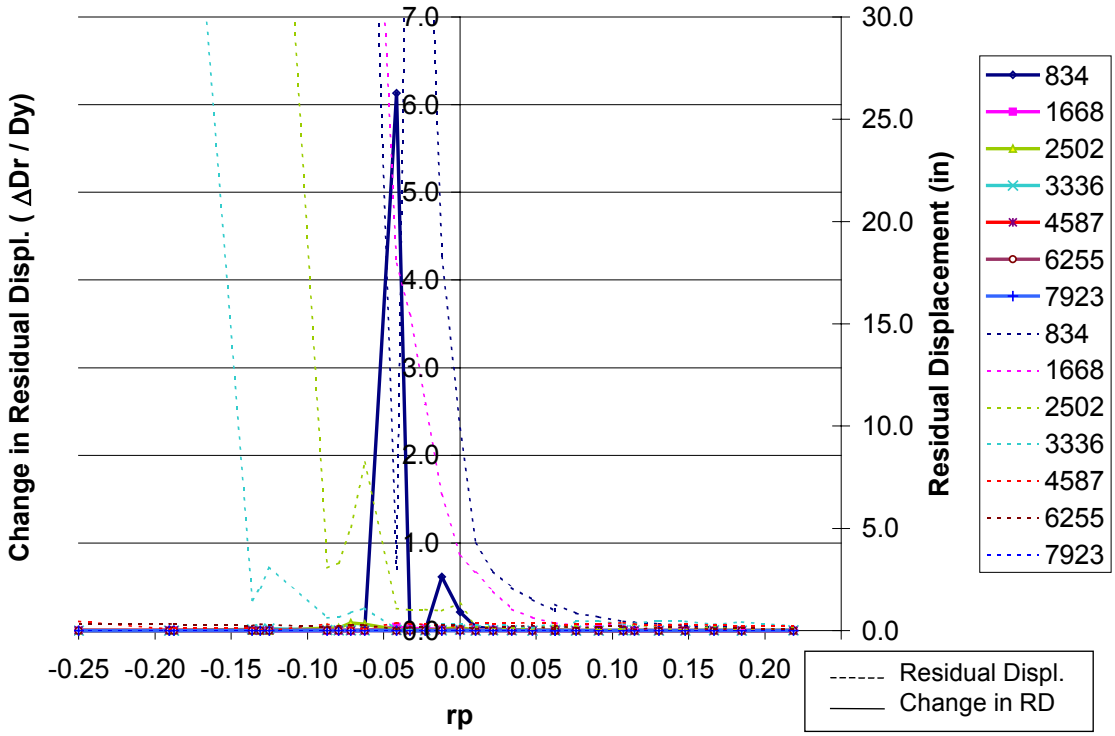


Figure C3.6.1.3b – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

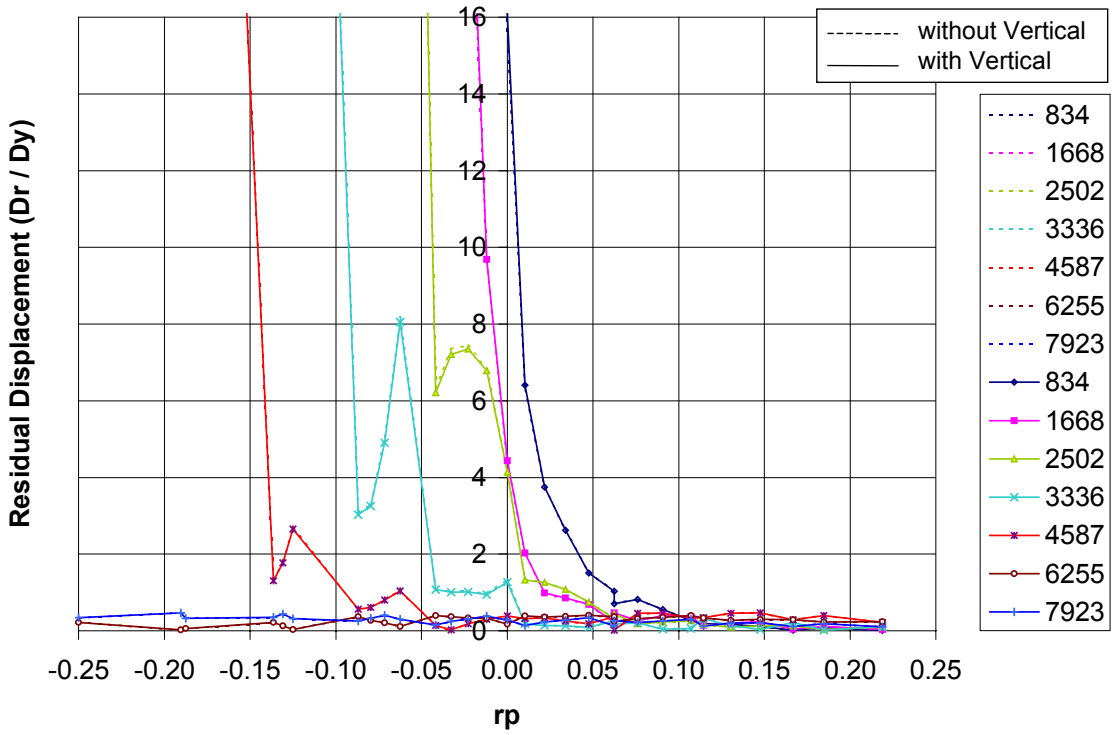


Figure C3.6.1.4a – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

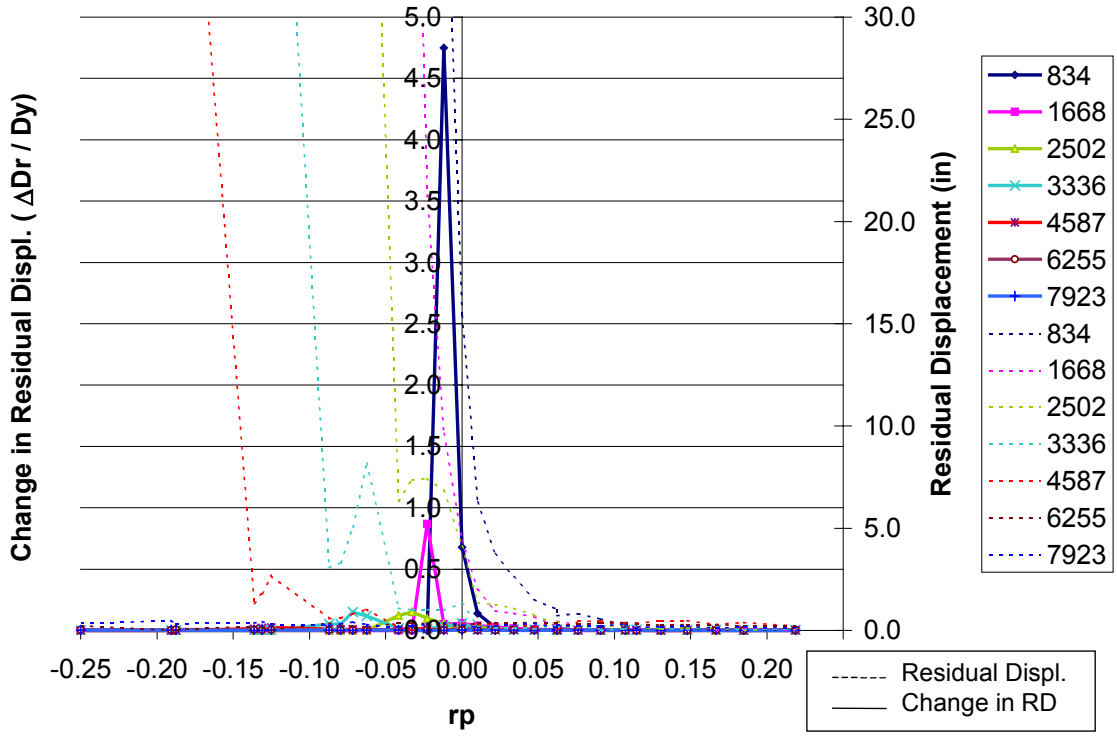


Figure C3.6.1.4b – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

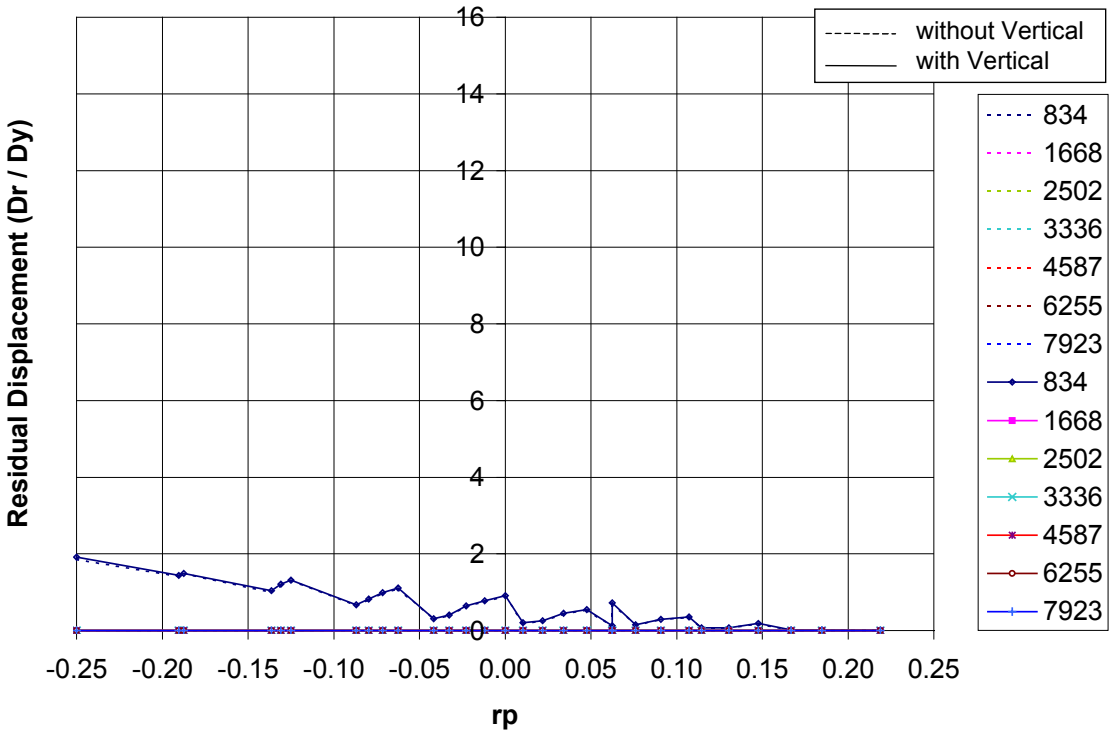


Figure C3.6.2.1a – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

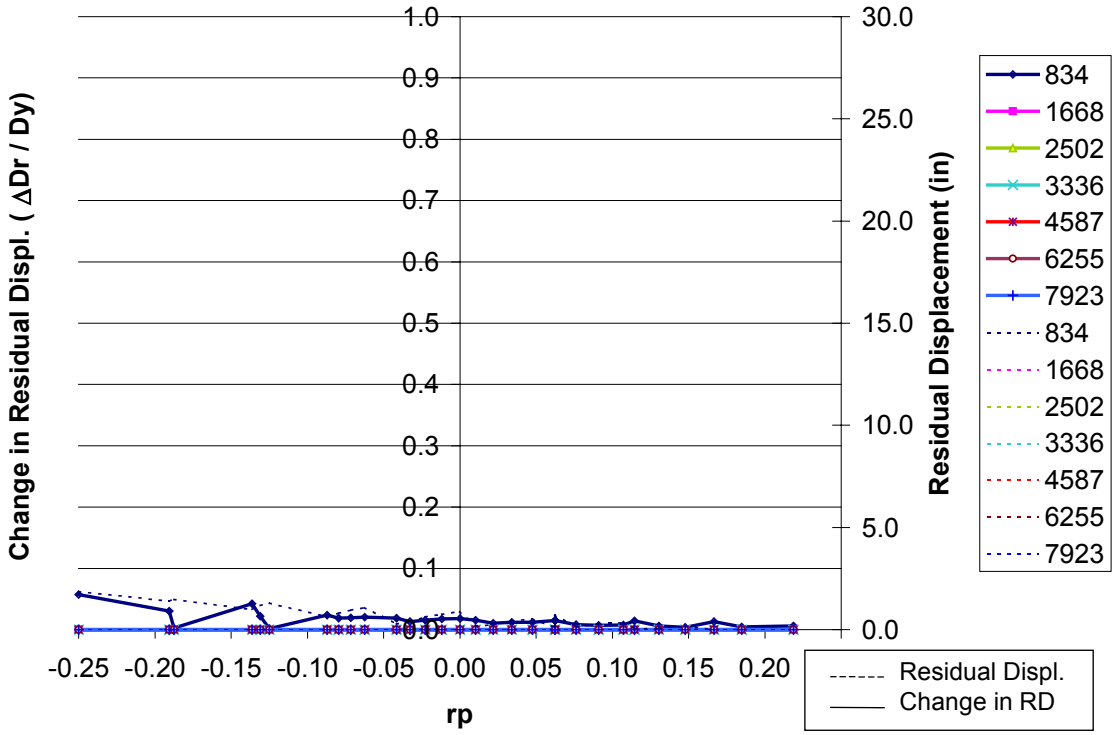


Figure C3.6.2.1b – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

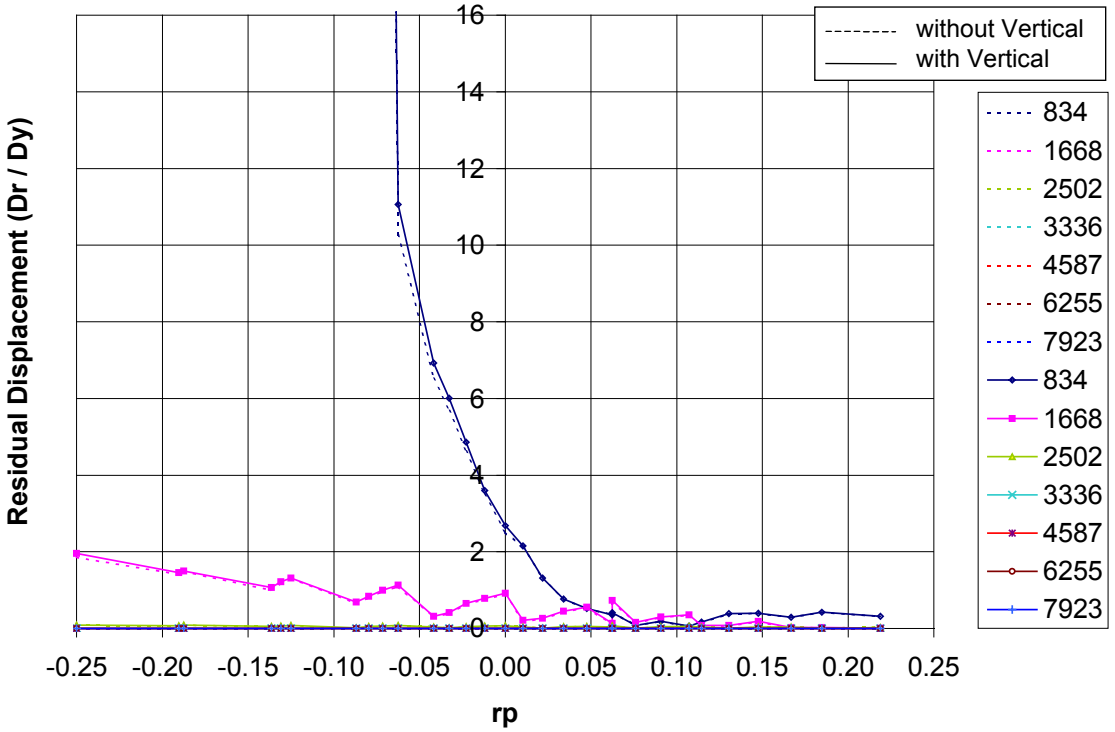


Figure C3.6.2.2a – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

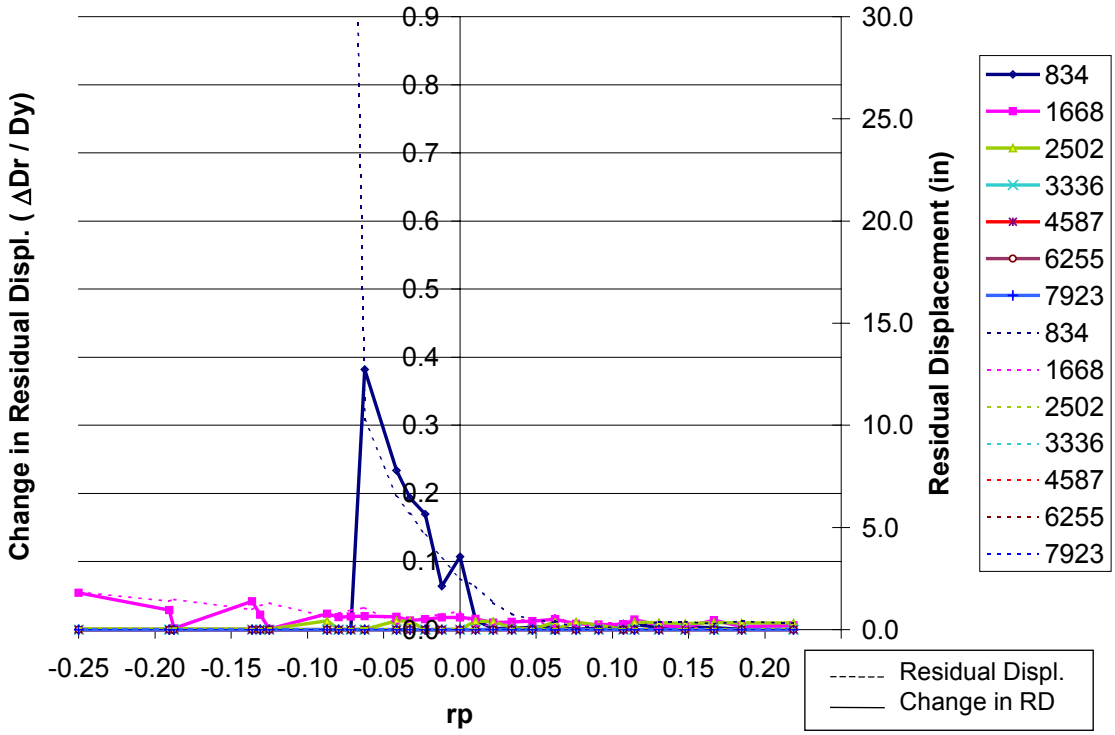


Figure C3.6.2.2b – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

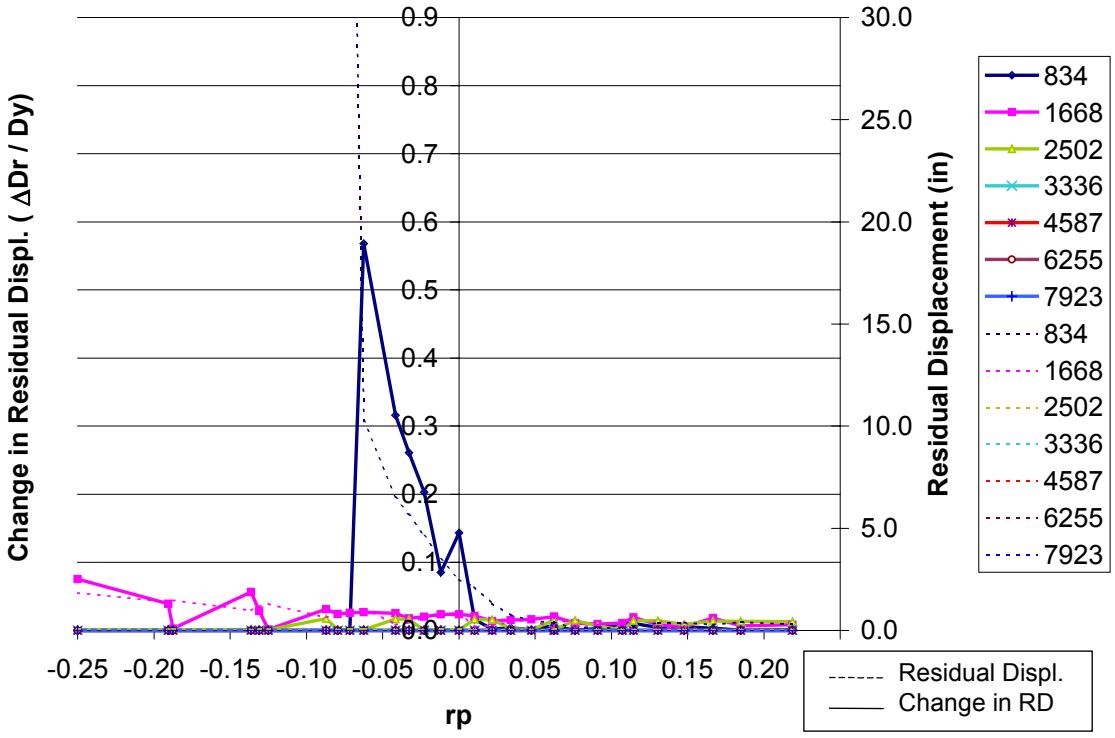


Figure C3.6.2.2c – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

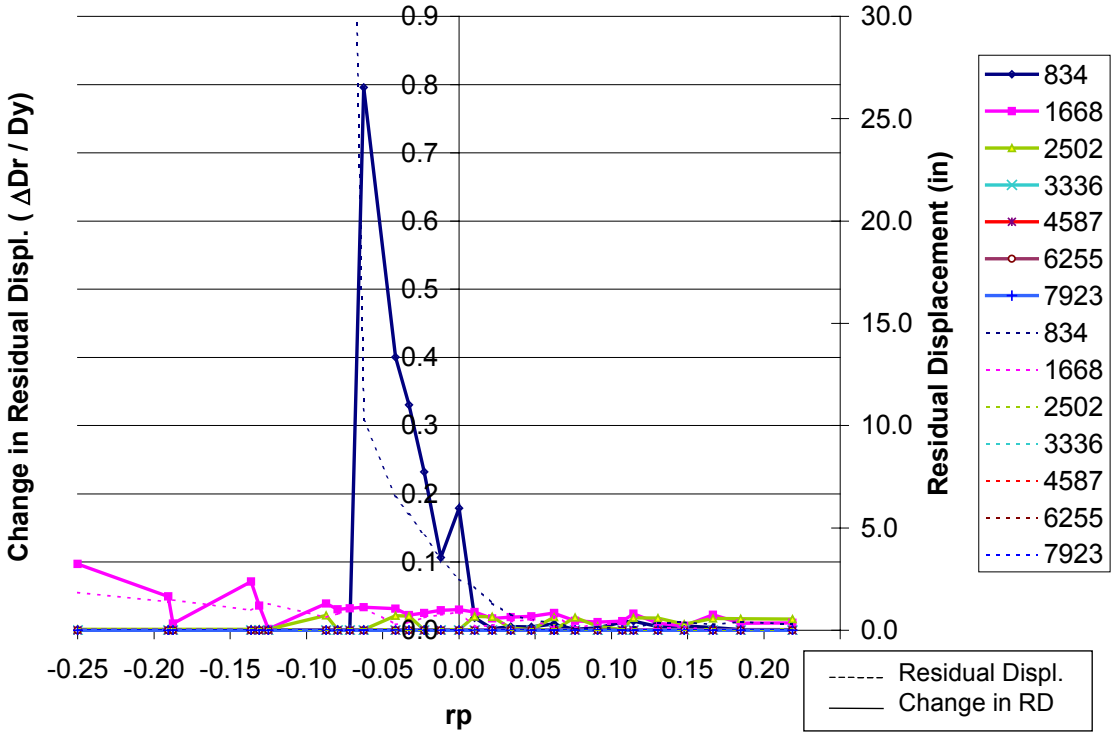


Figure C3.6.2.2d – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

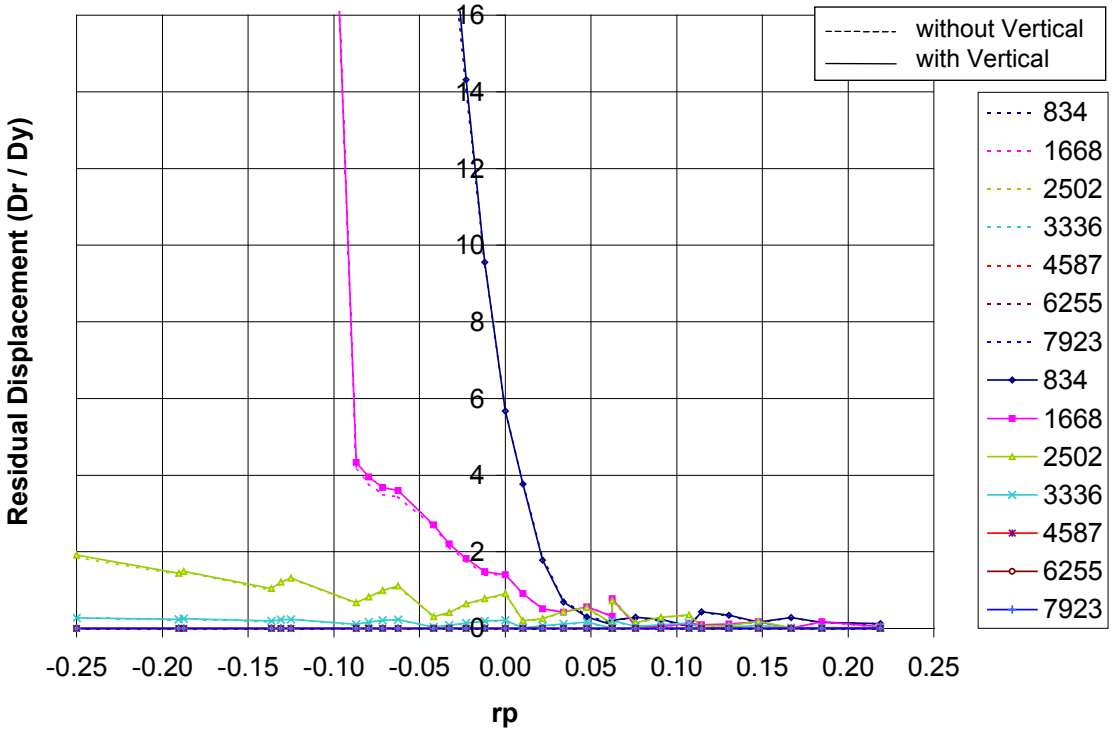


Figure C3.6.2.3a – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

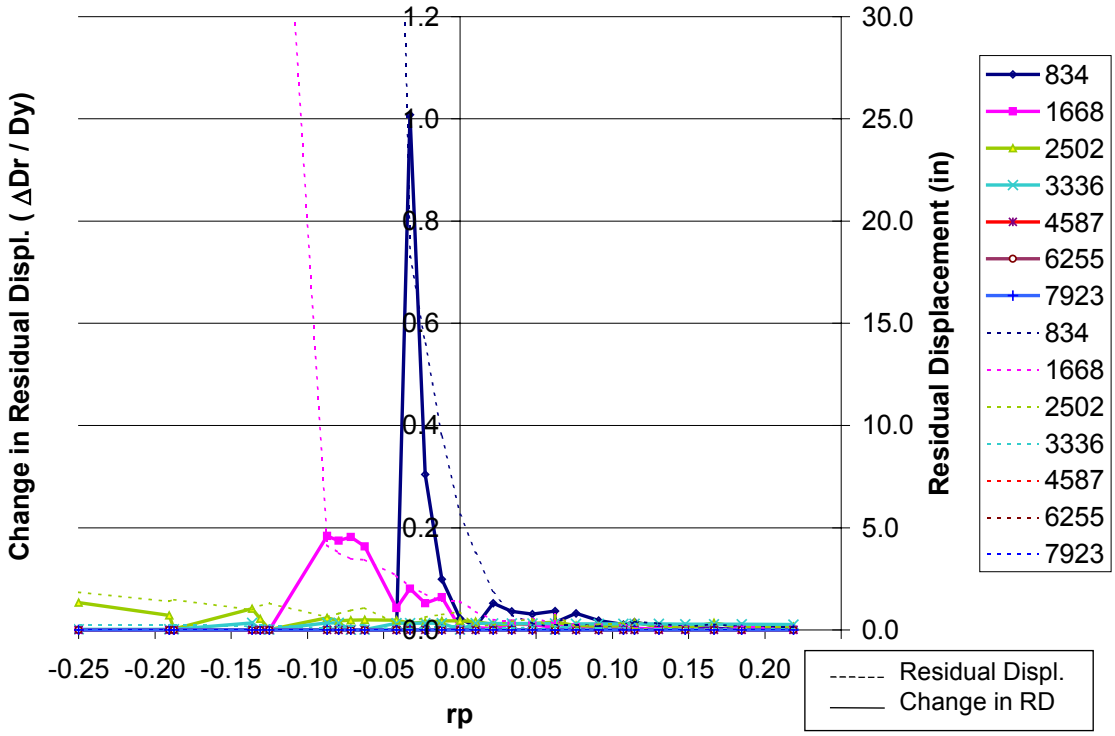


Figure C3.6.2.3b – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

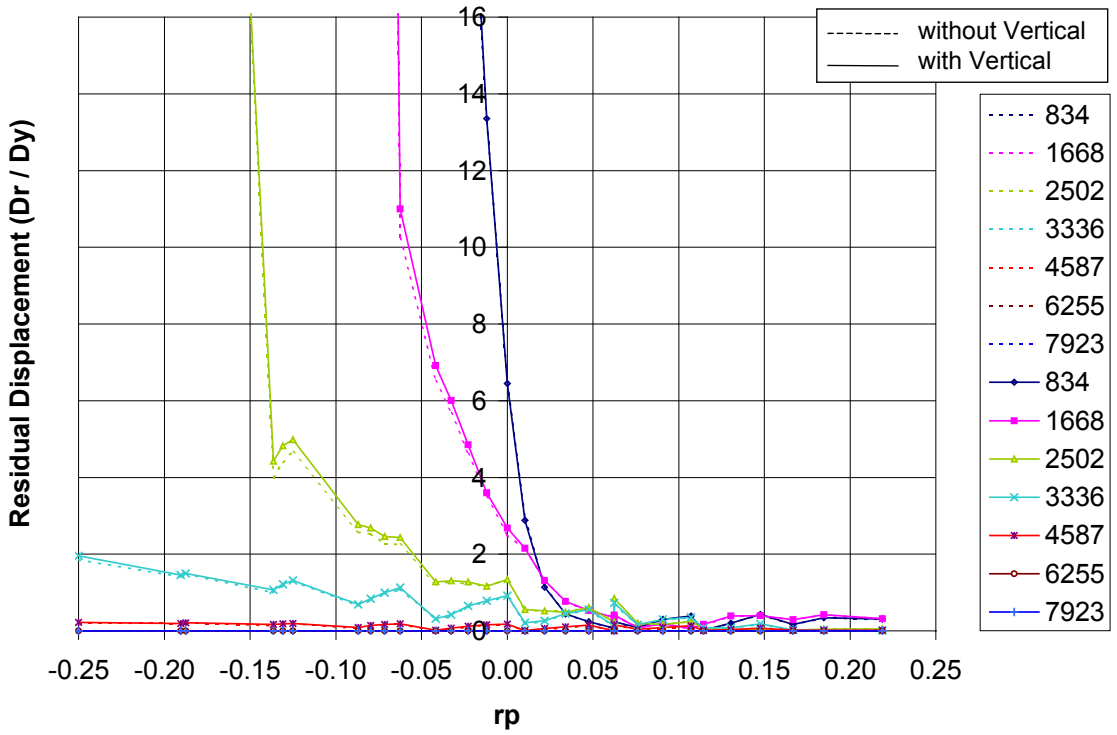


Figure C3.6.2.4a – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

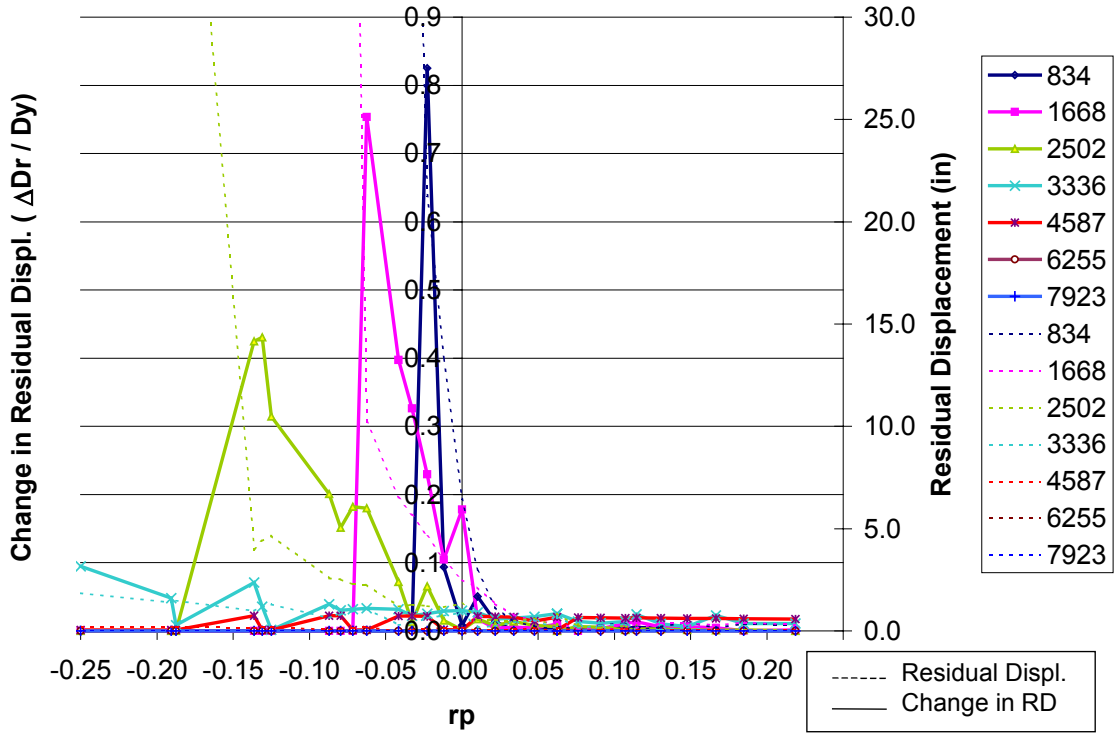


Figure C3.6.2.4b – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

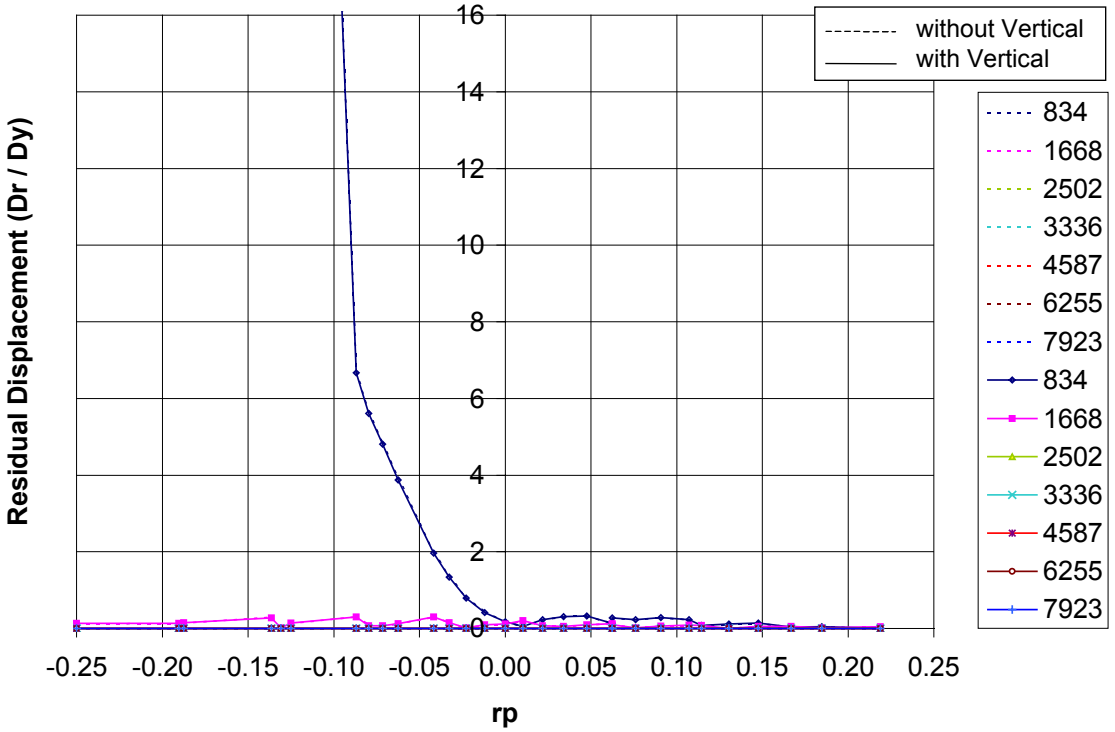


Figure C3.6.3.1a – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

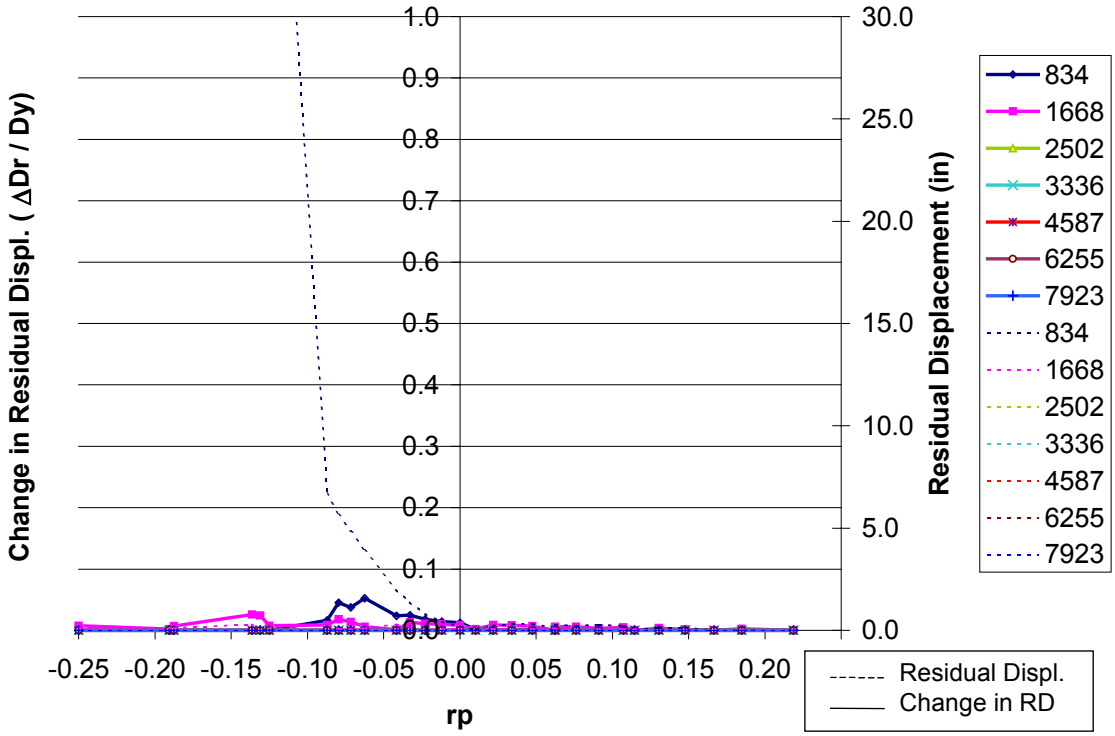


Figure C3.6.3.1b – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

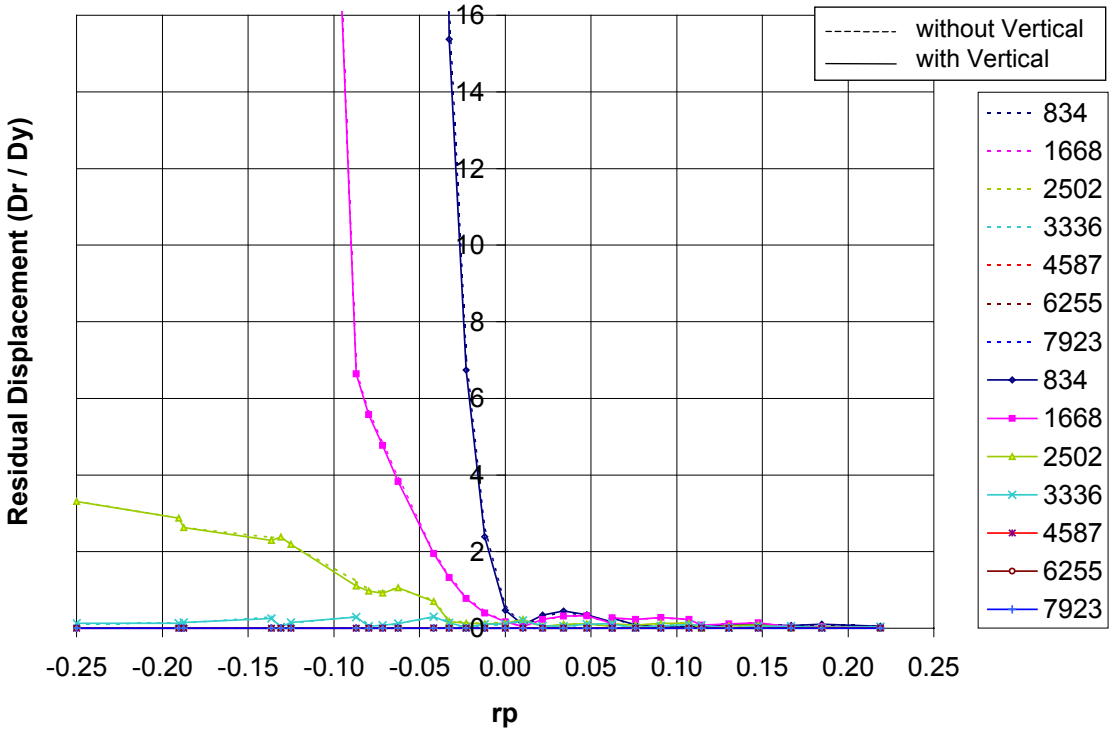


Figure C3.6.3.2a – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

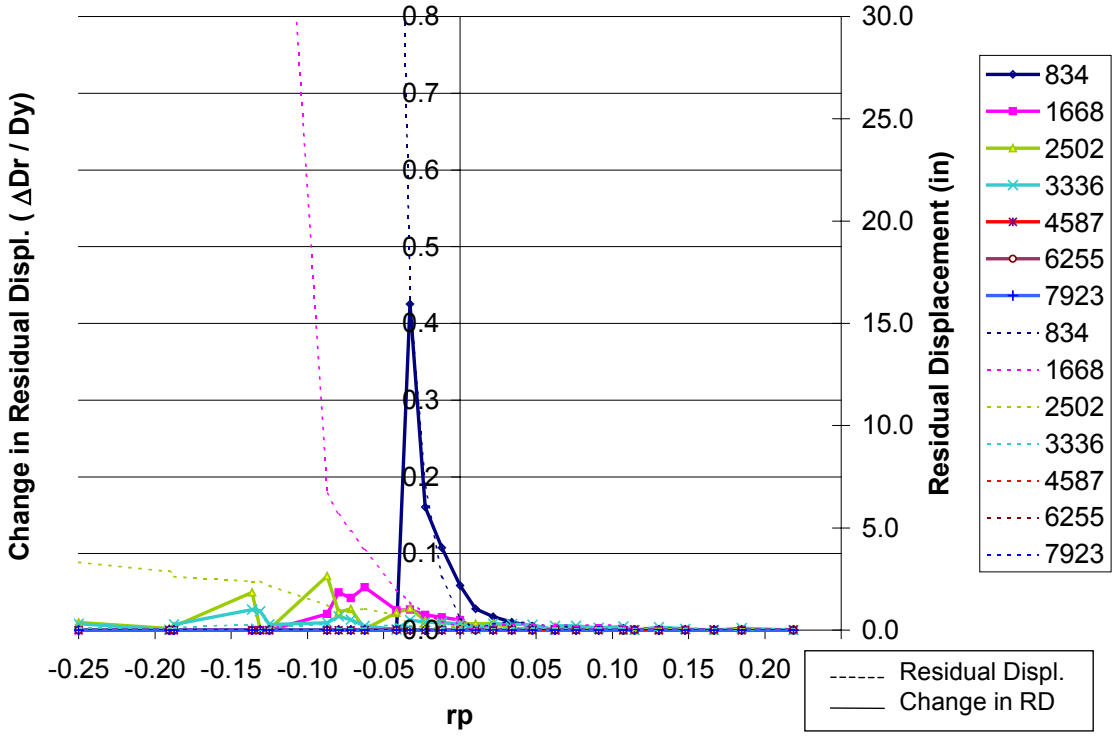


Figure C3.6.3.2b – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

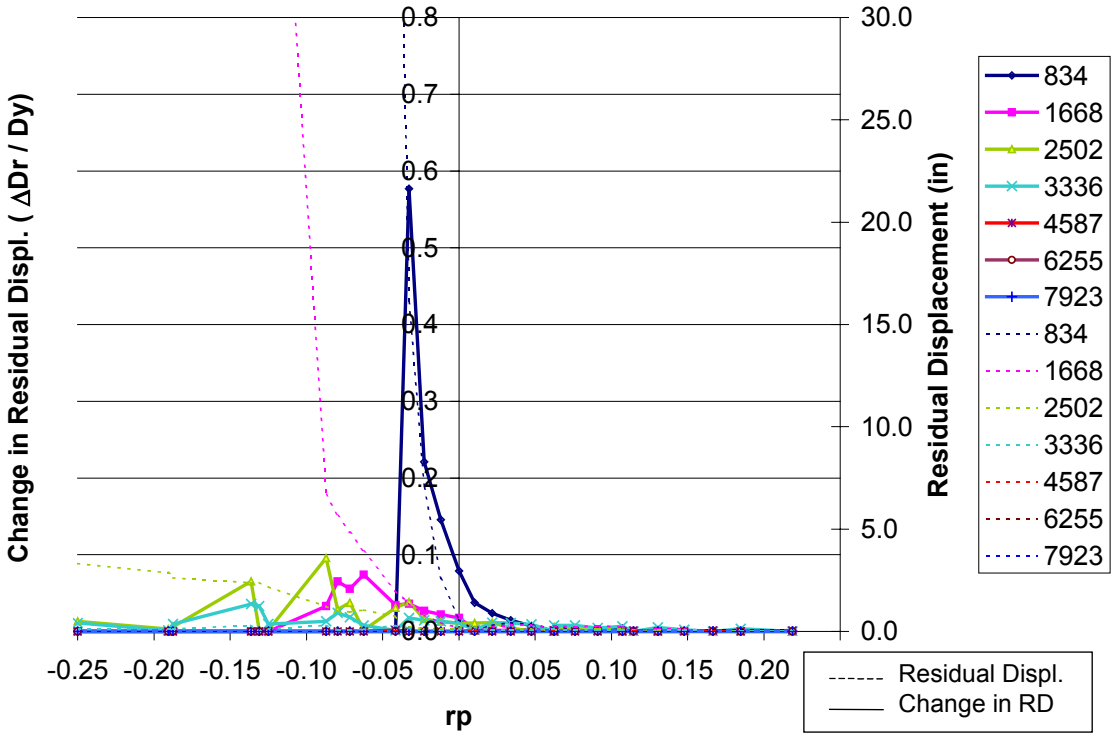


Figure C3.6.3.2c – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

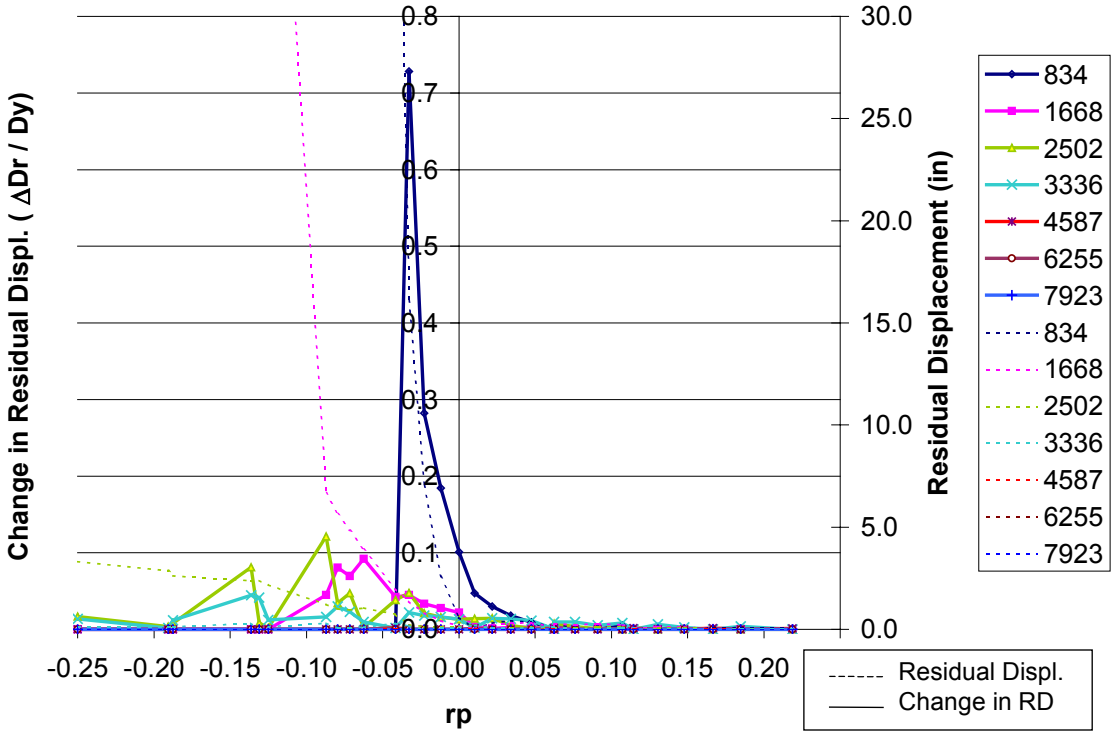


Figure C3.6.3.2d – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

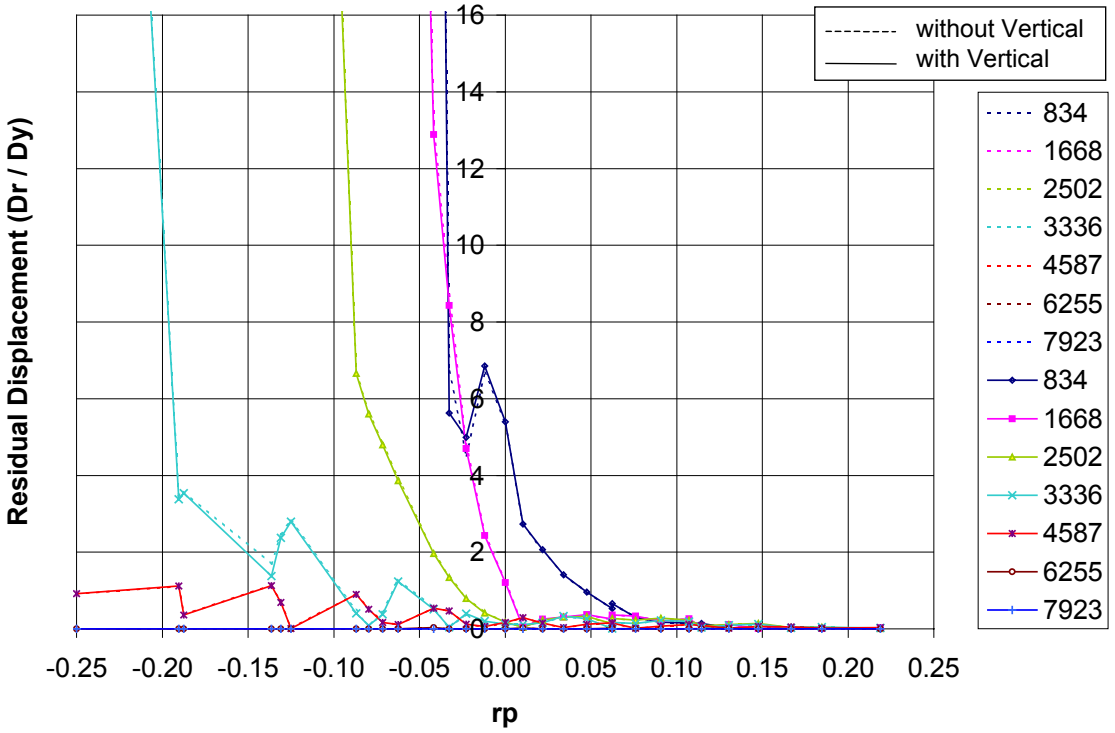


Figure C3.6.3.3a – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

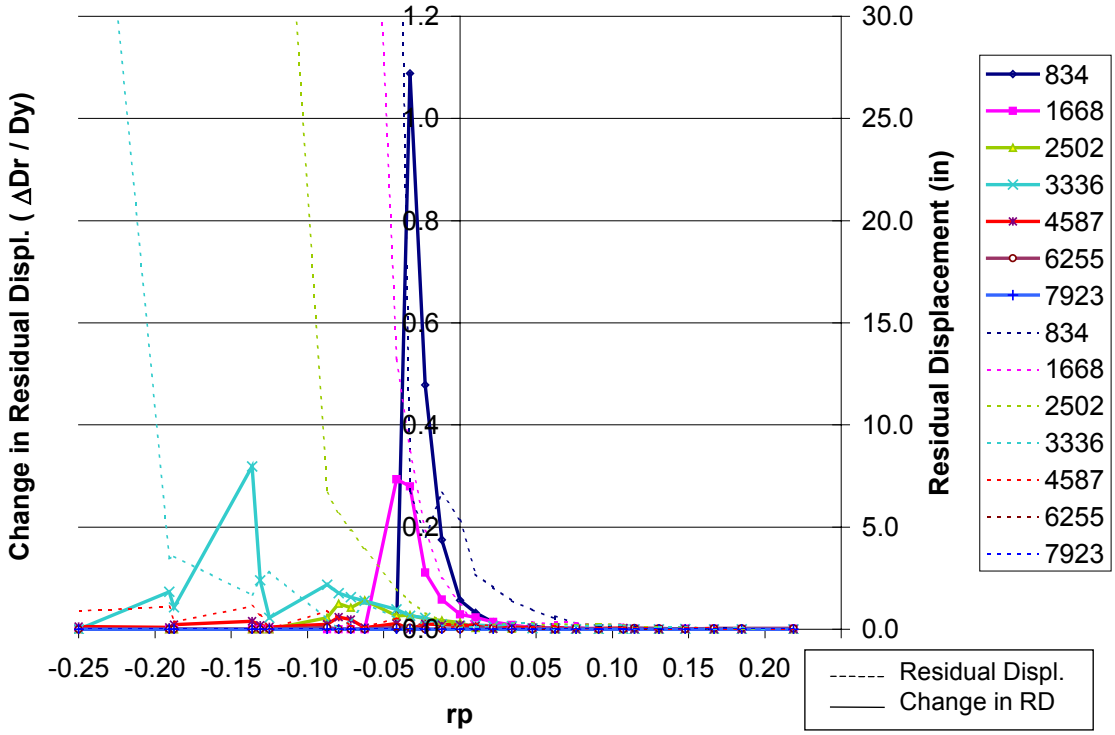


Figure C3.6.3.3b – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

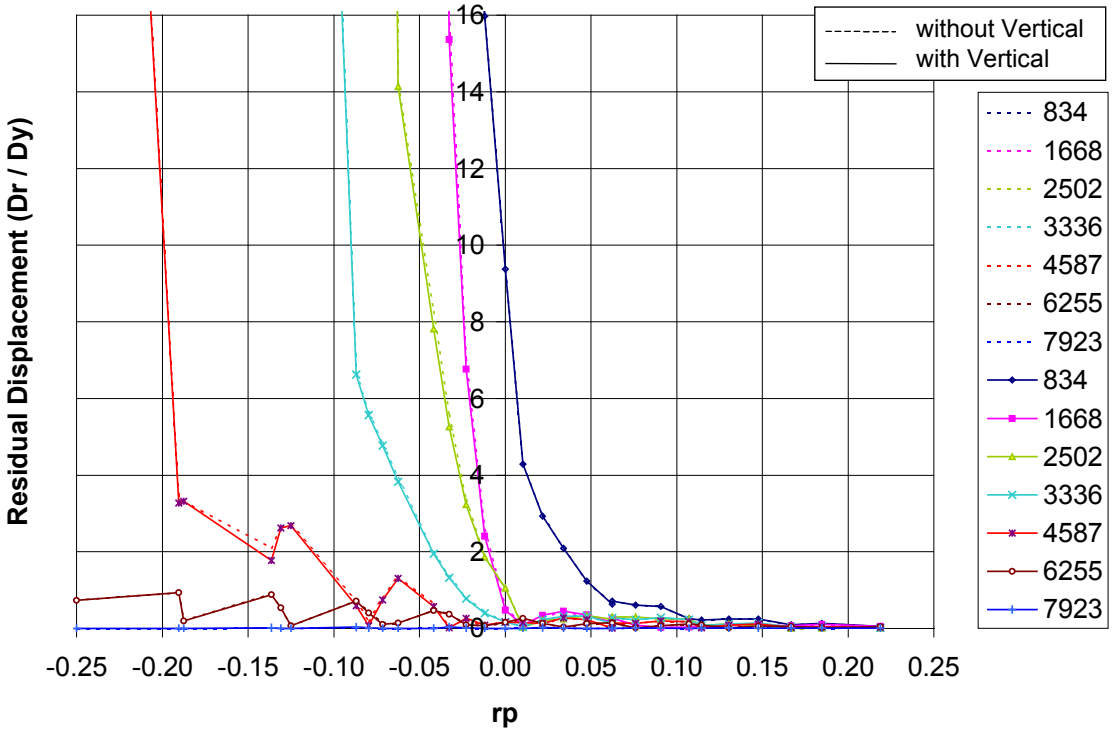


Figure C3.6.3.4a – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

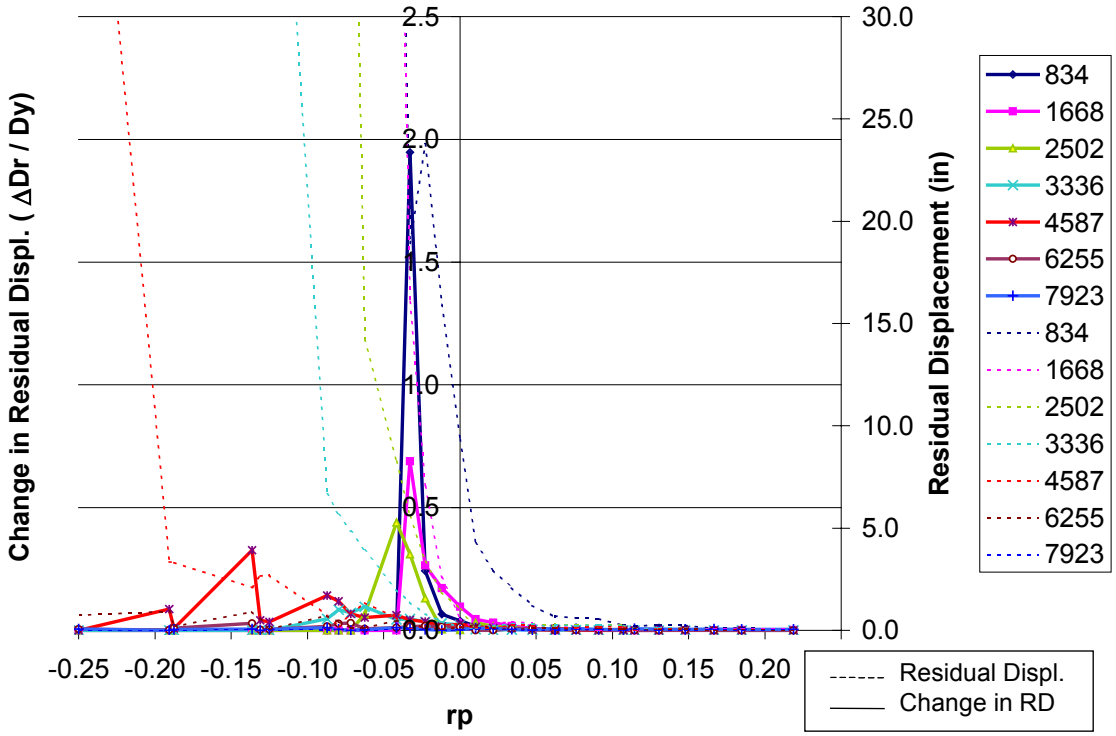


Figure C3.6.3.4b – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

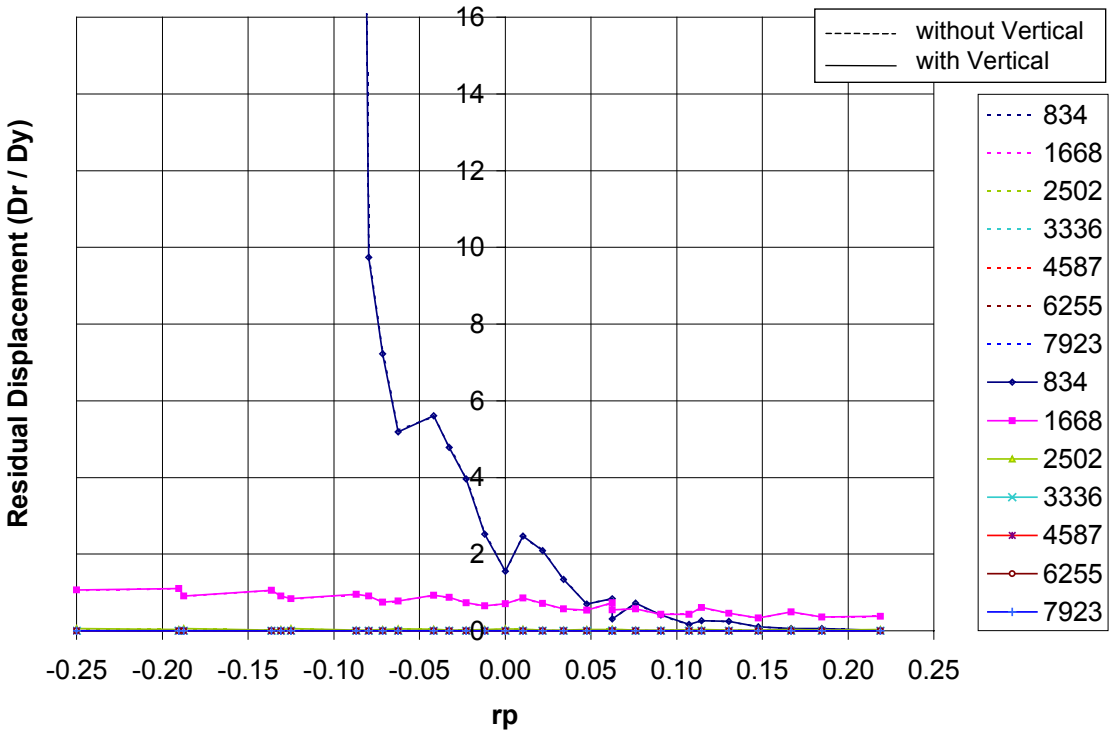


Figure C3.6.4.1a – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

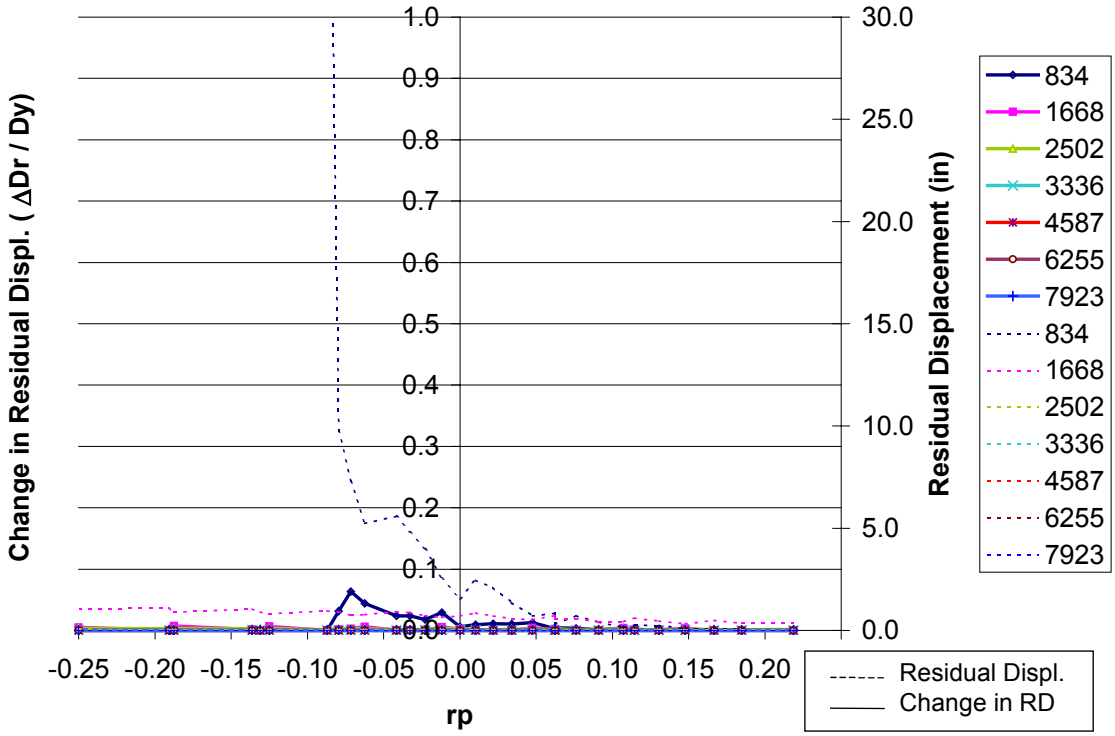


Figure C3.6.4.1b – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

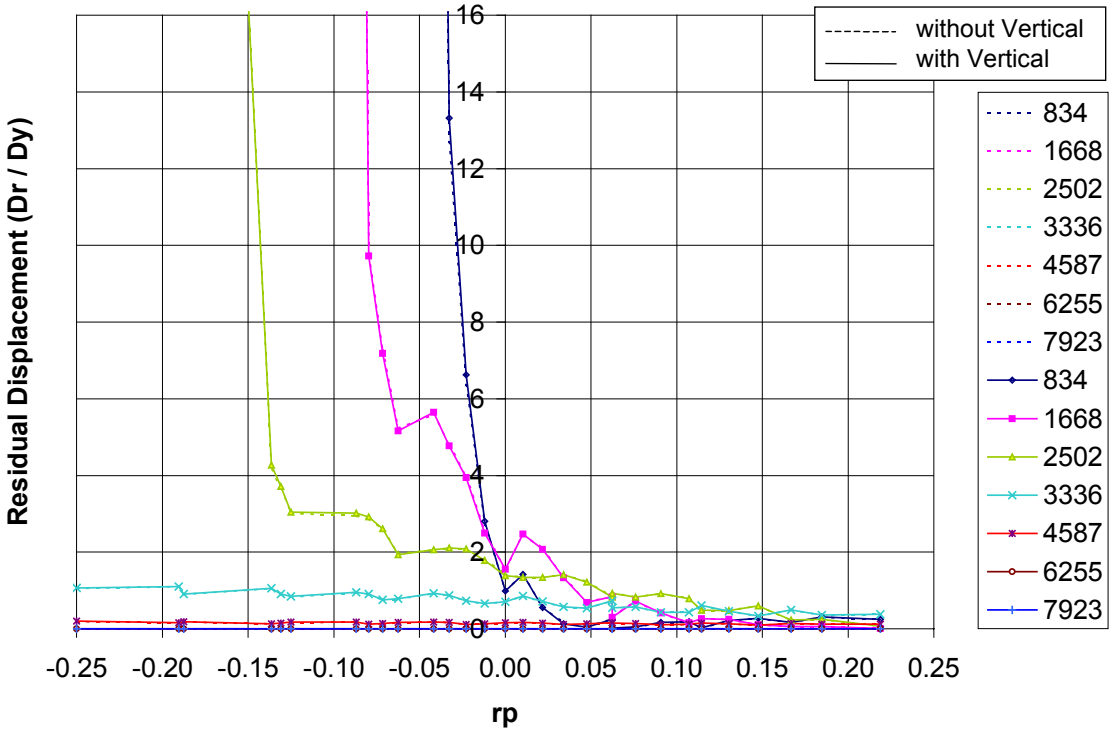


Figure C3.6.4.2a – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

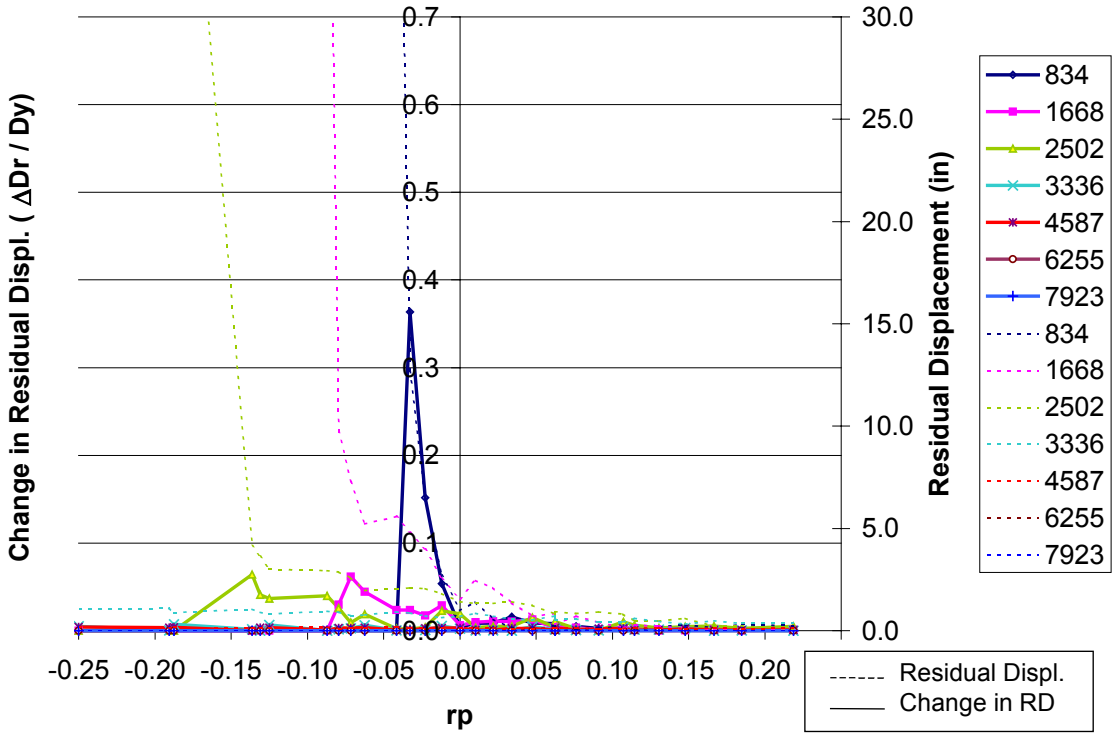


Figure C3.6.4.2b – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

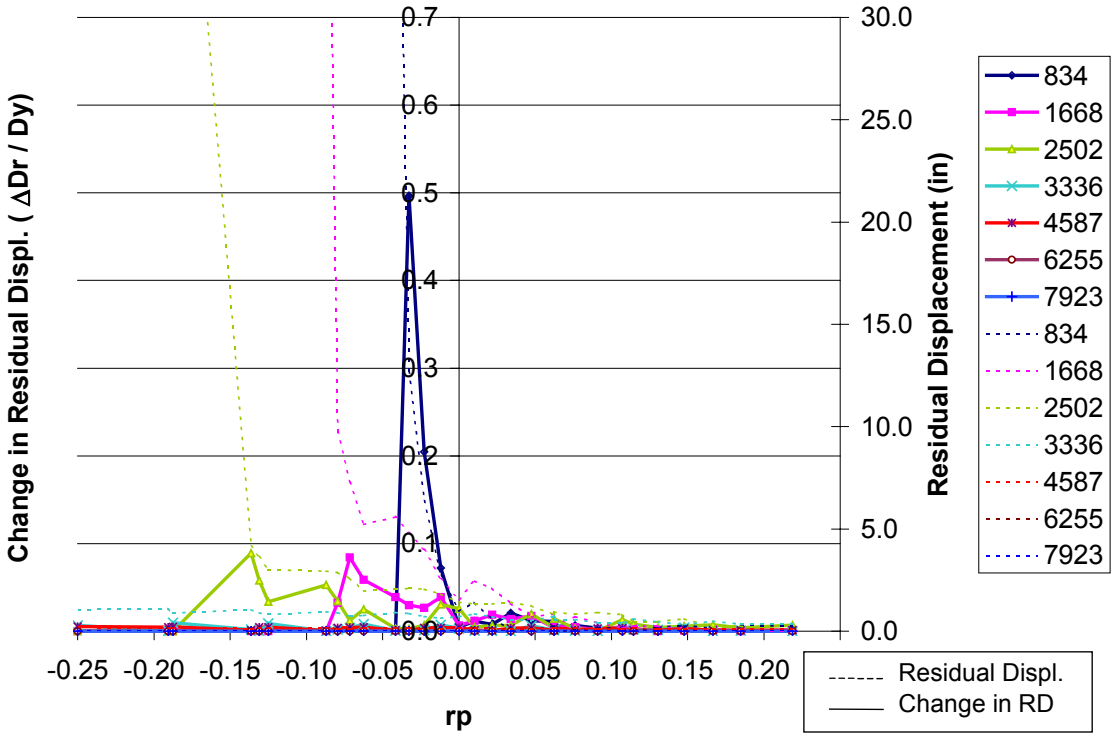


Figure C3.6.4.2c – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

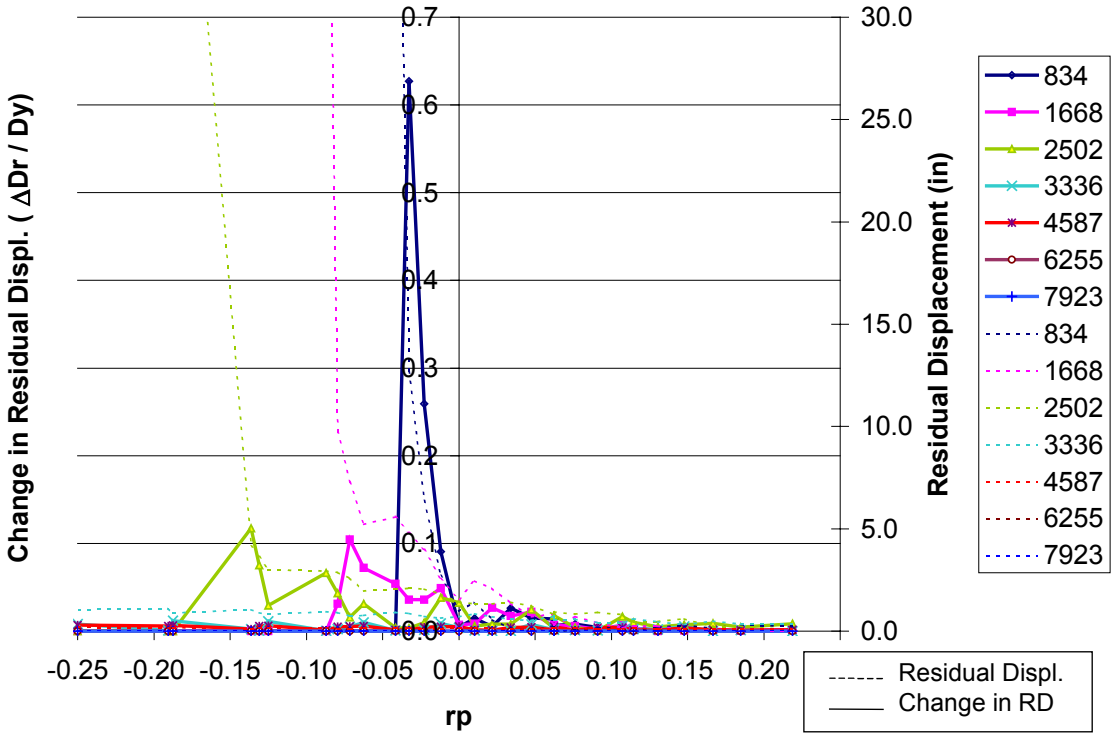


Figure C3.6.4.2d – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

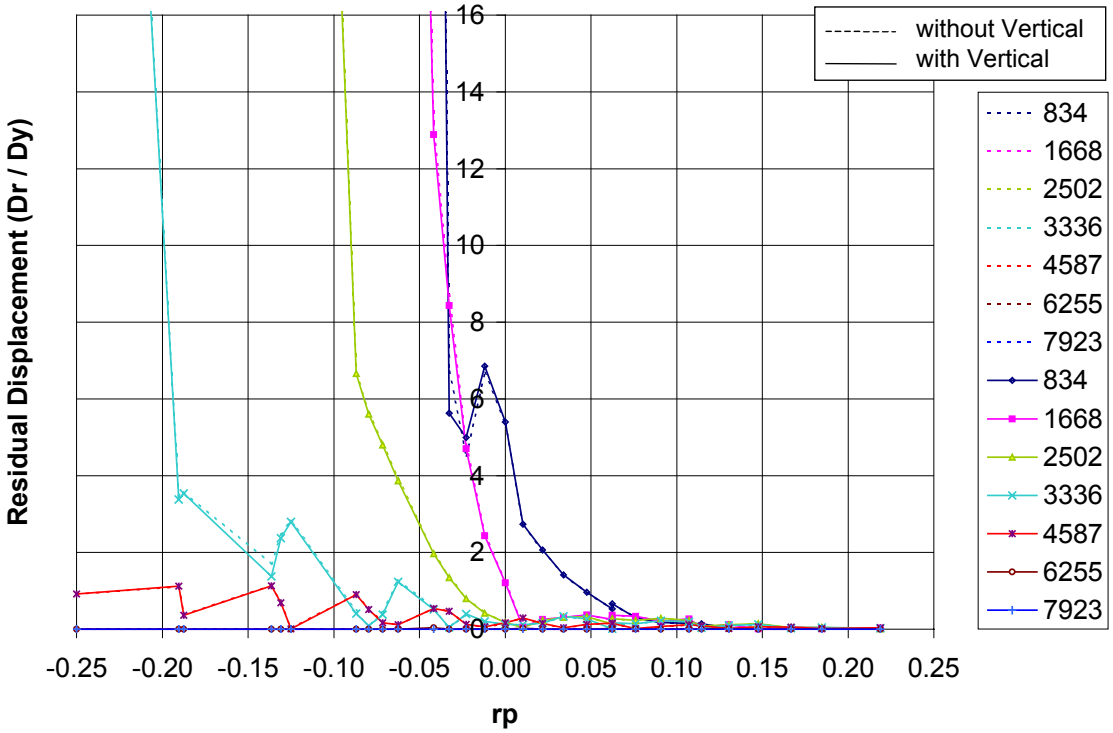


Figure C3.6.4.3a – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

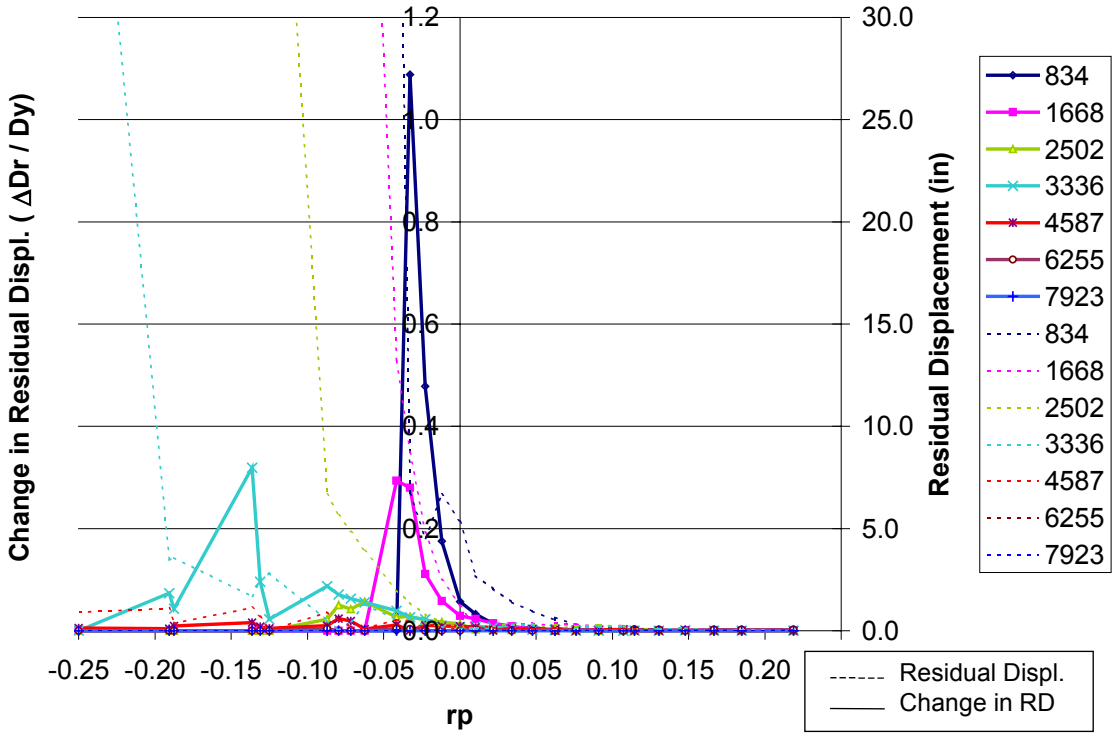


Figure C3.6.4.3b – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

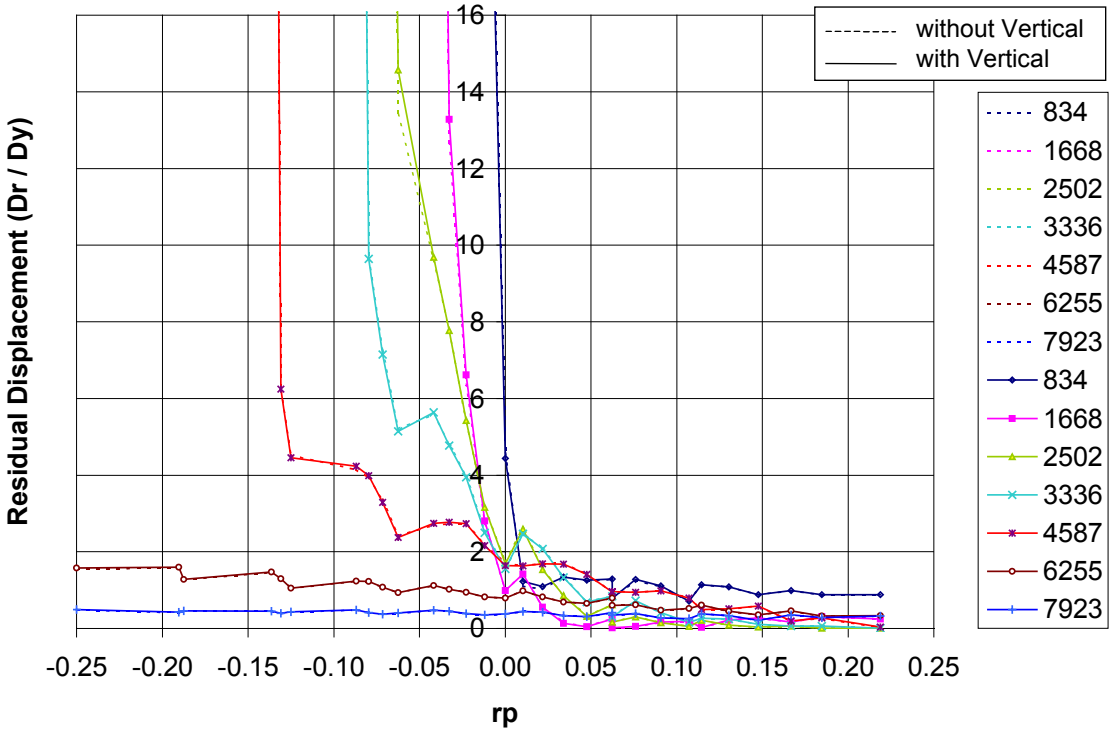


Figure C3.6.4.4a – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

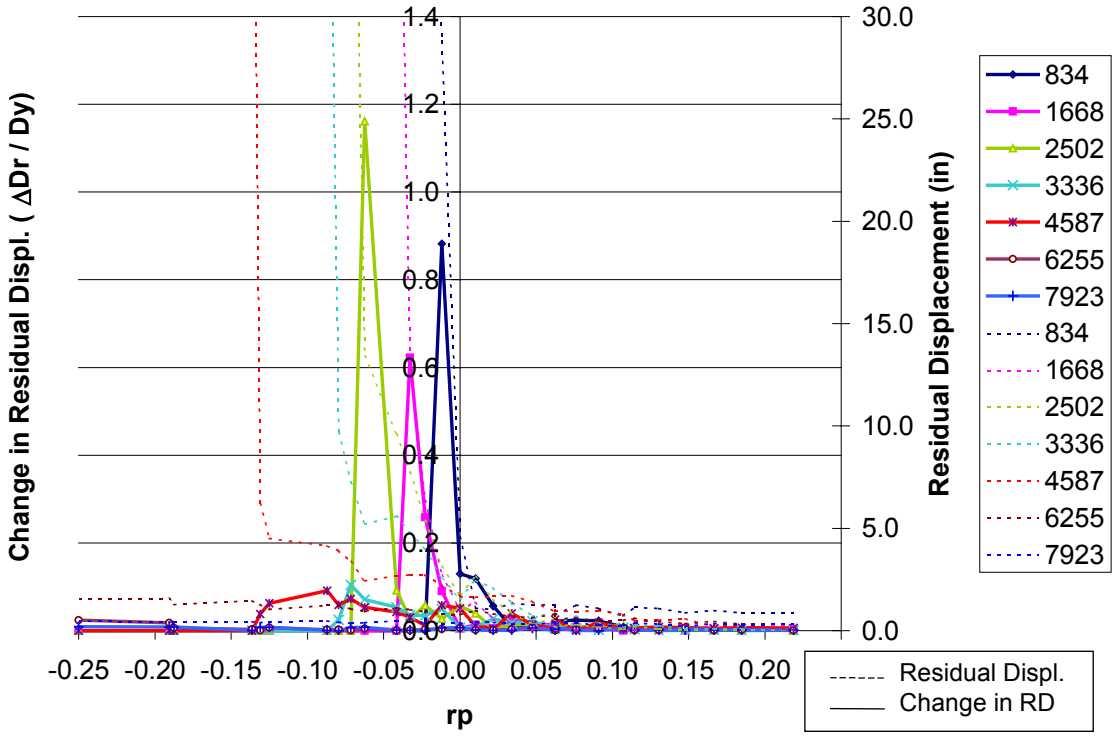


Figure C3.6.4.4b – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

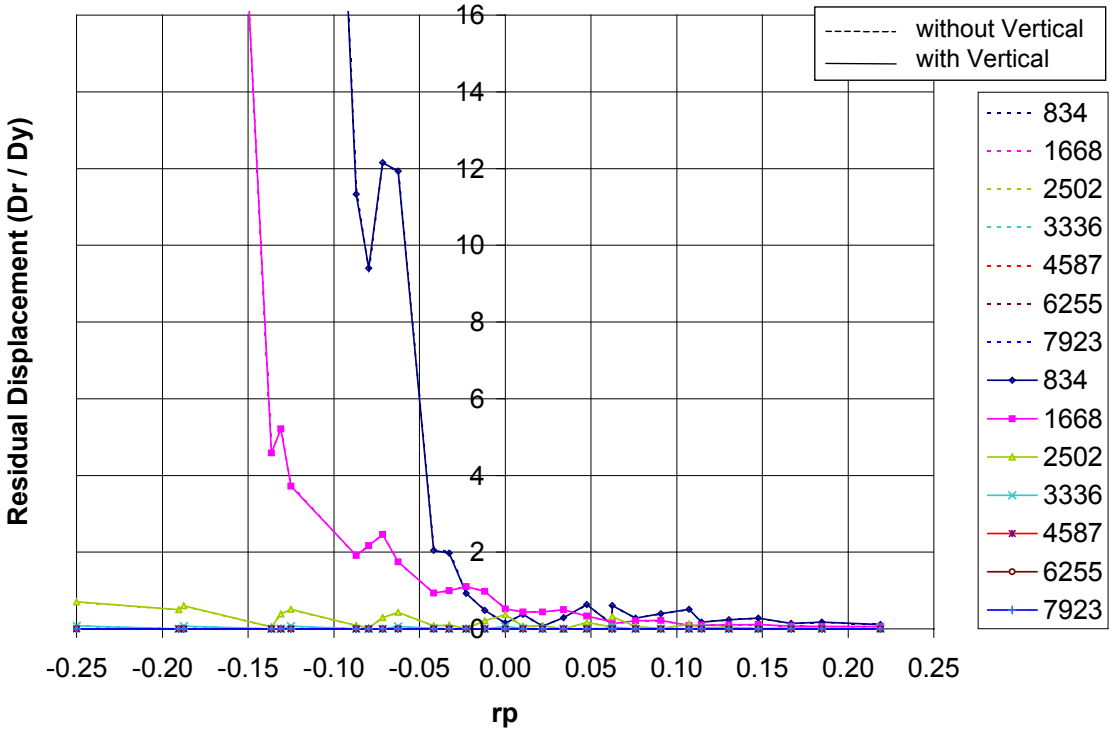


Figure C3.6.5.1a – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

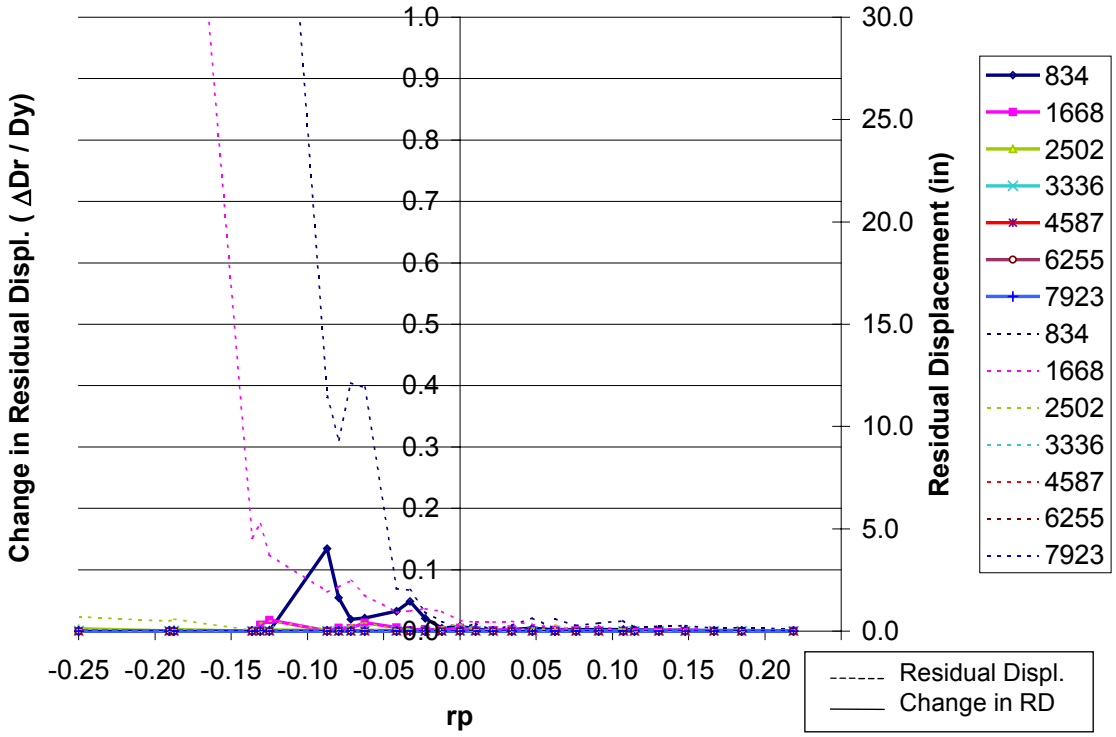


Figure C3.6.5.1b – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

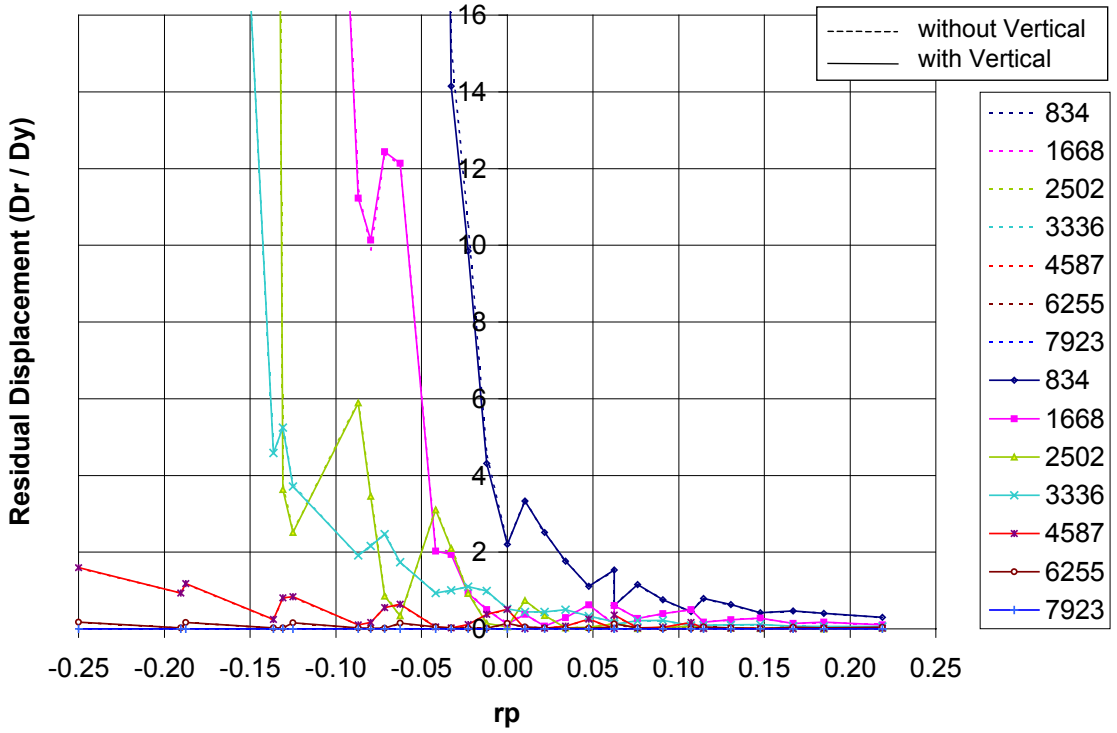


Figure C3.6.5.2a – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

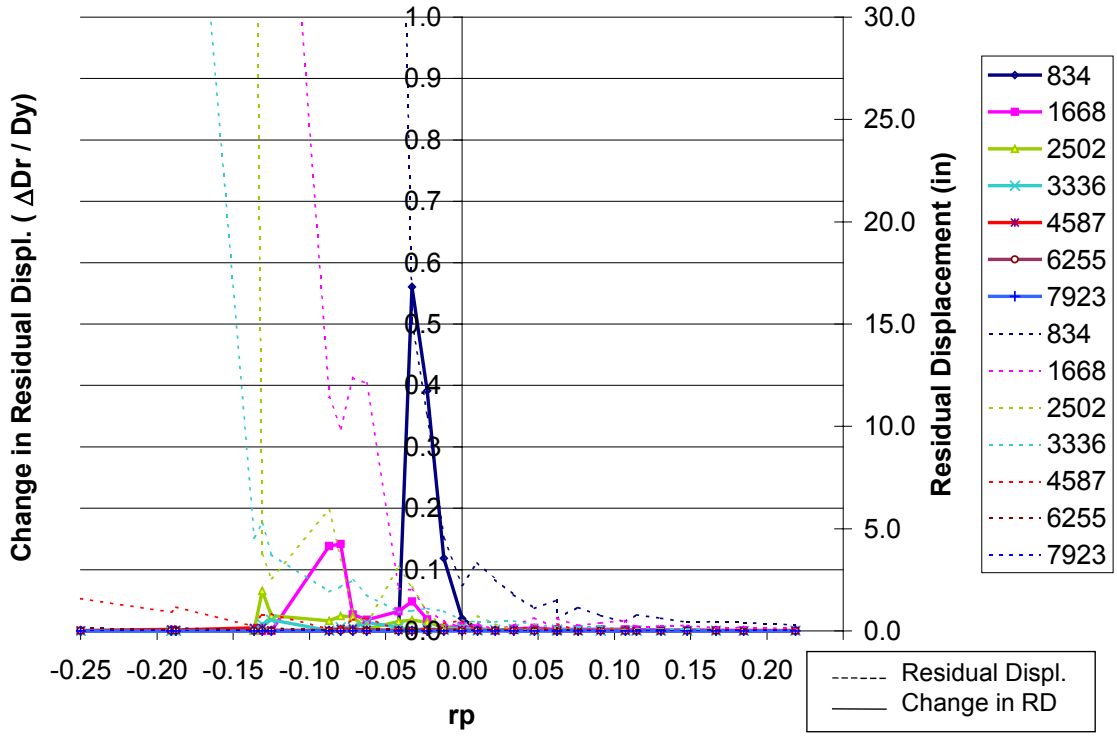


Figure C3.6.5.2b – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

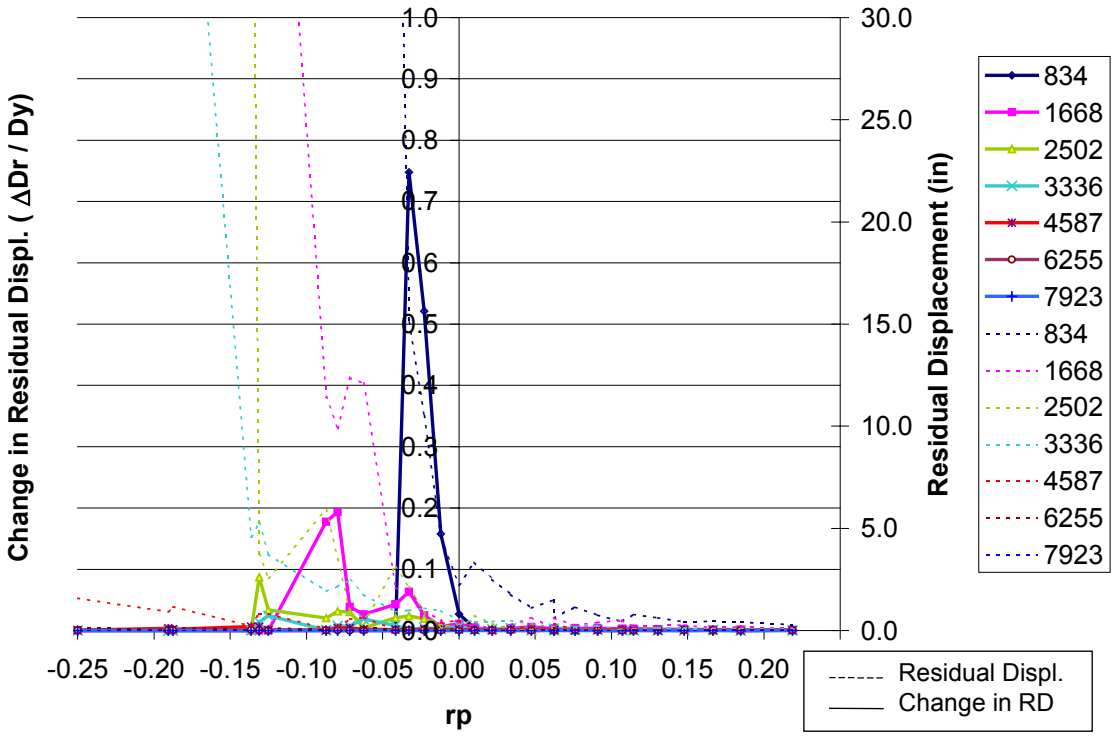


Figure C3.6.5.2c – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

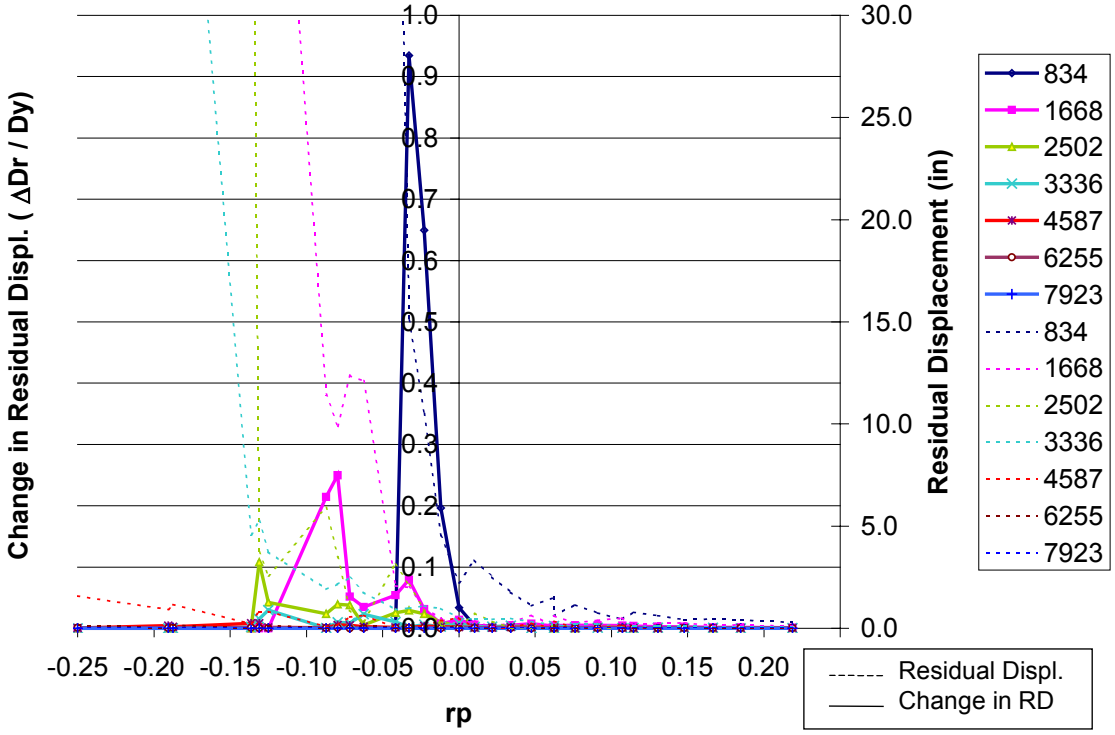


Figure C3.6.5.2d – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

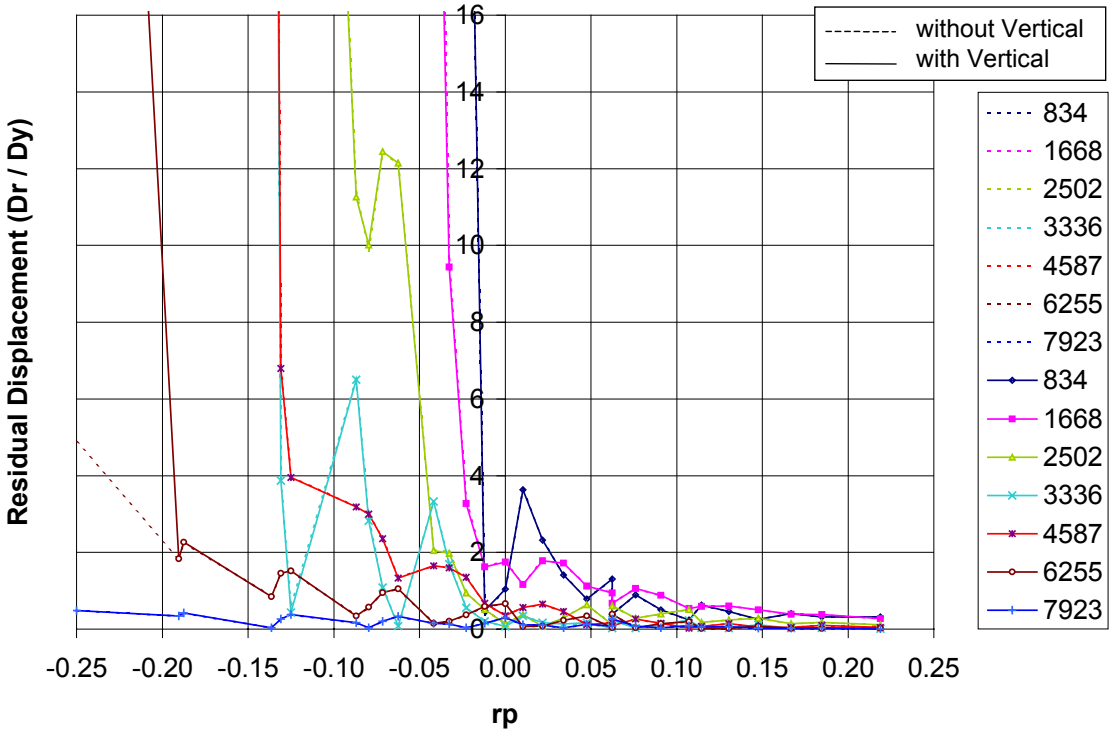


Figure C3.6.5.3a – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

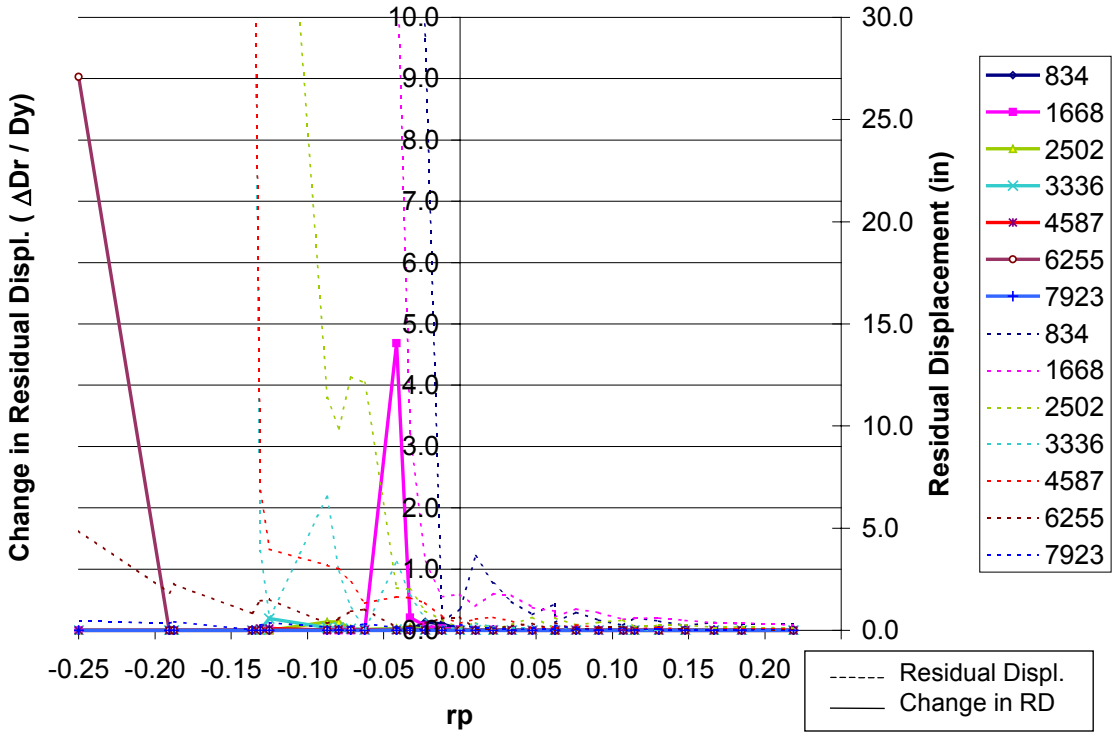


Figure C3.6.5.3b – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

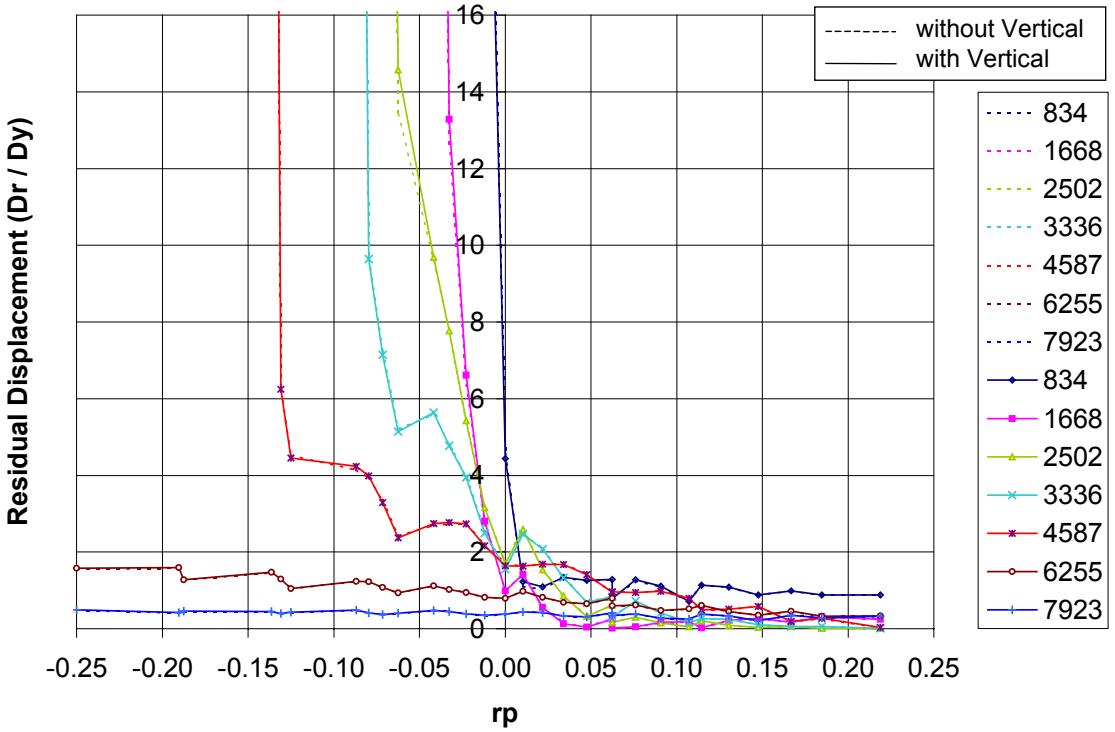


Figure C3.6.5.4a – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

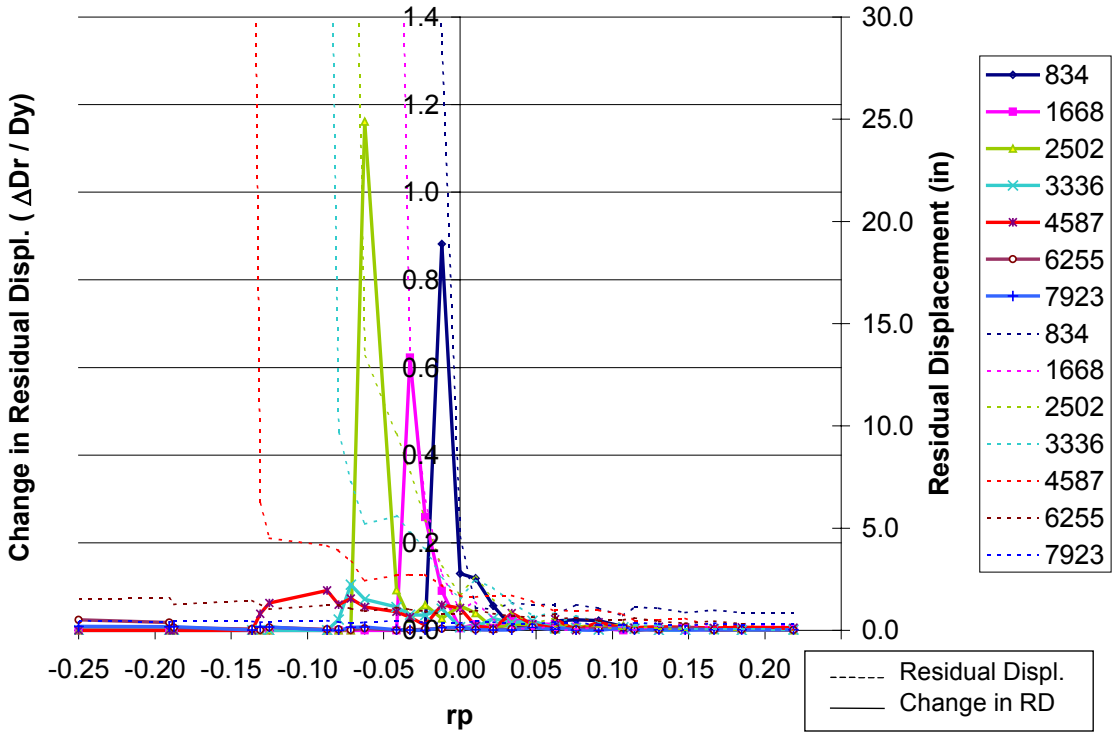


Figure C3.6.5.4b – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

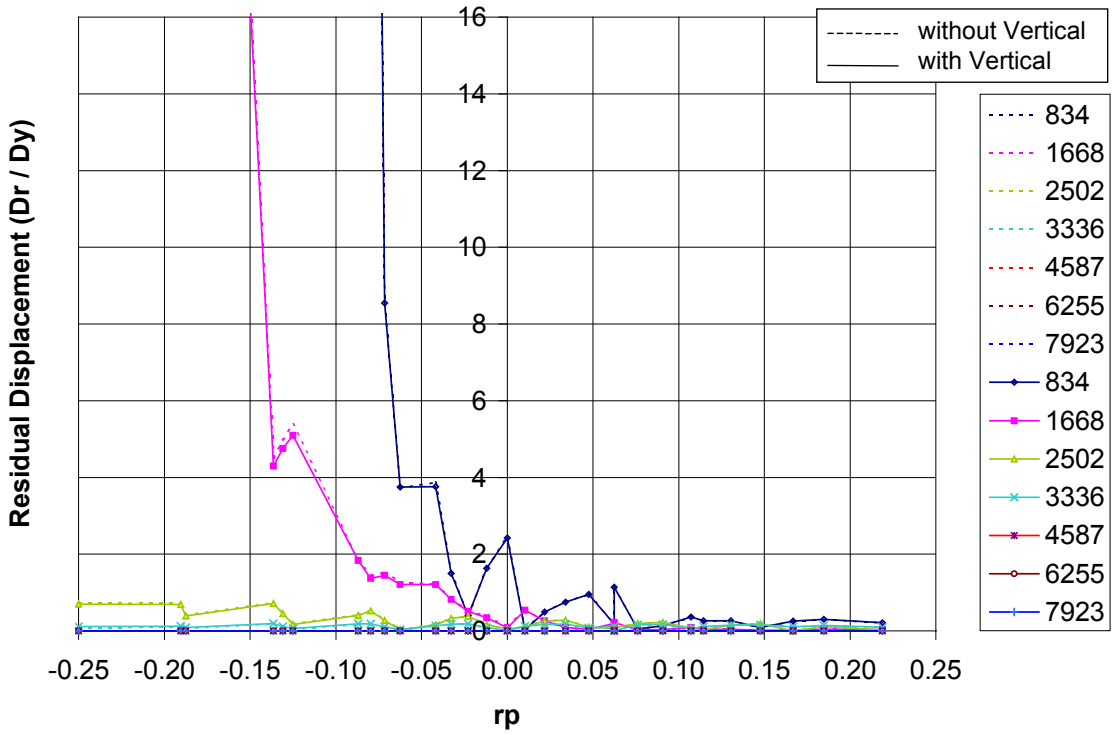


Figure C3.6.6.1a – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

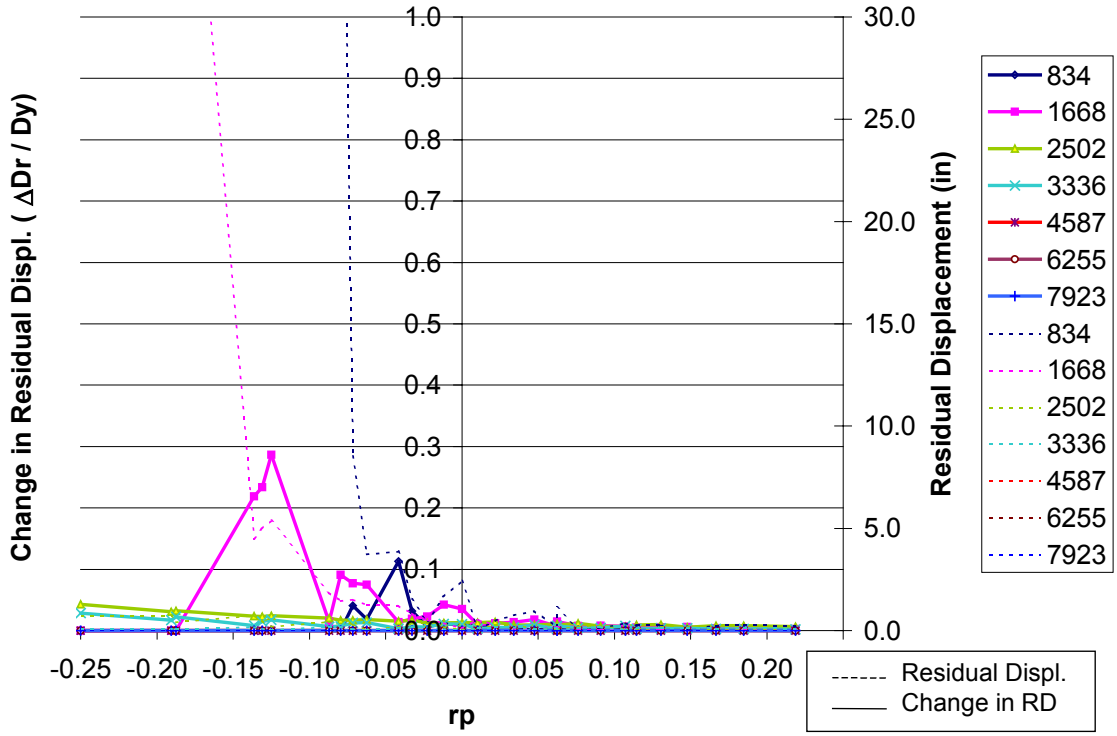


Figure C3.6.6.1b – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

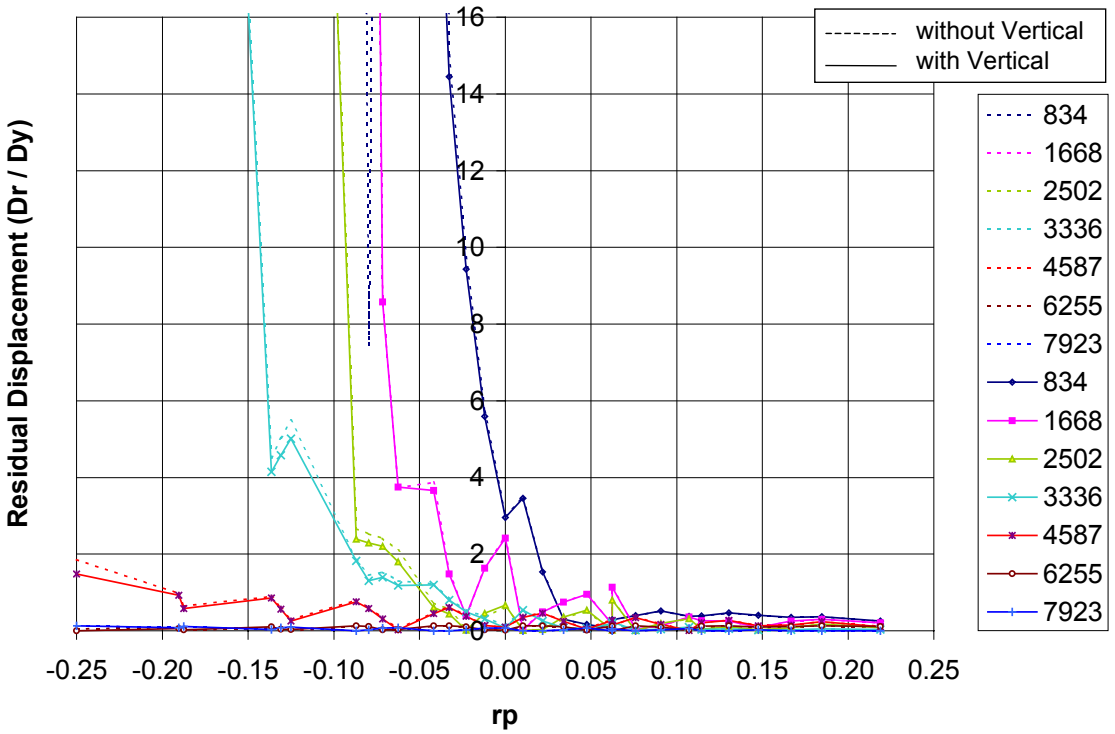


Figure C3.6.6.2a – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

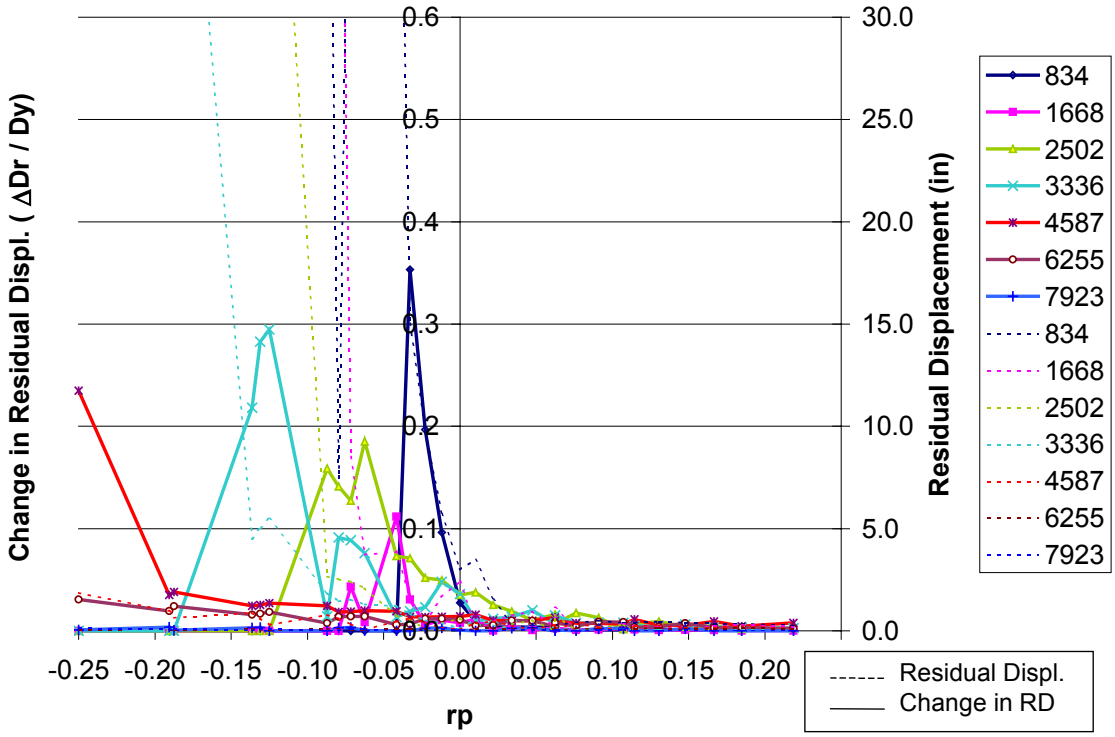


Figure C3.6.6.2b – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

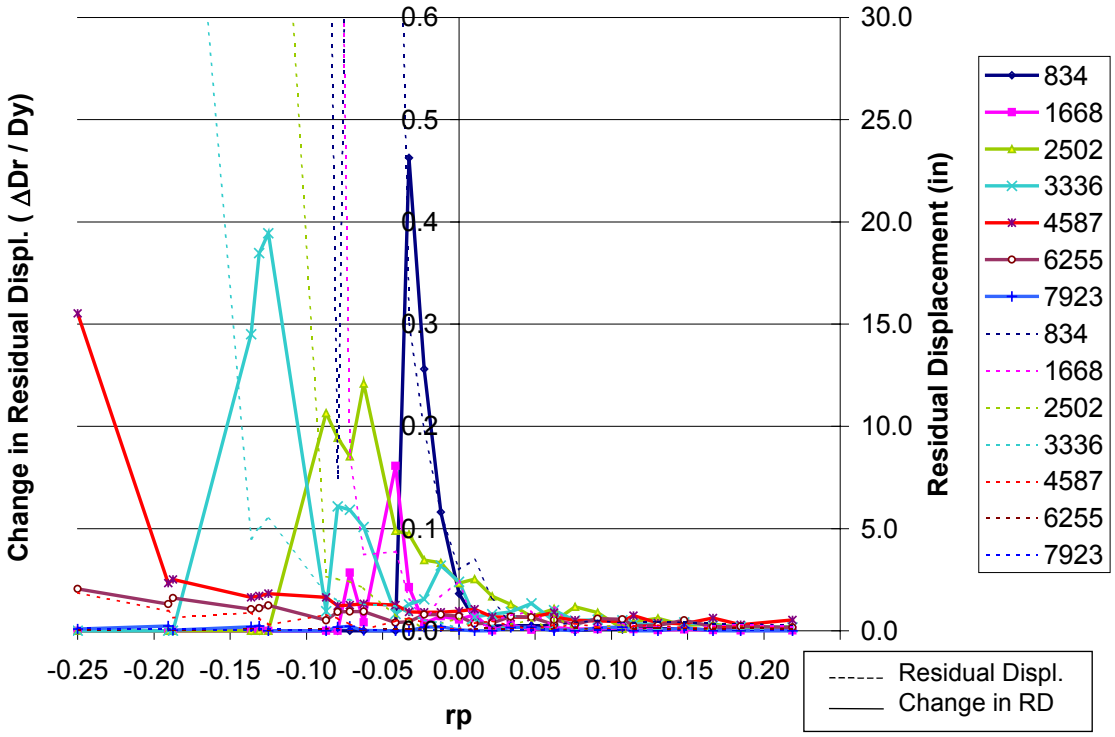


Figure C3.6.6.2c – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

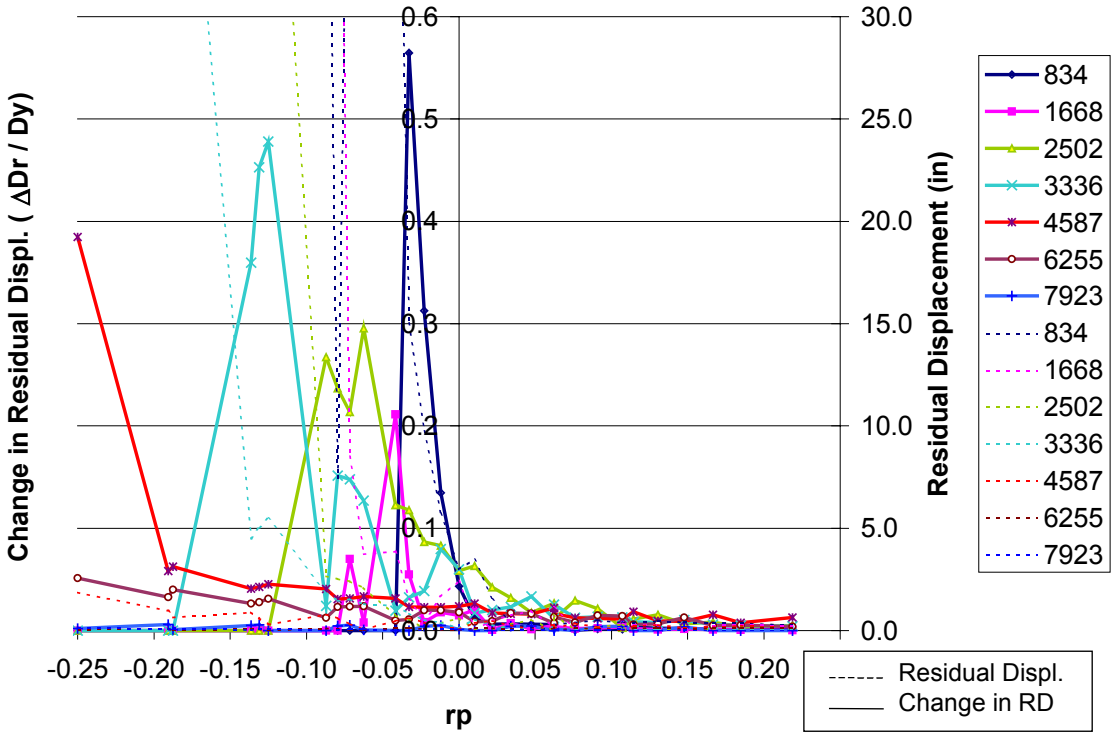


Figure C3.6.6.2d – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

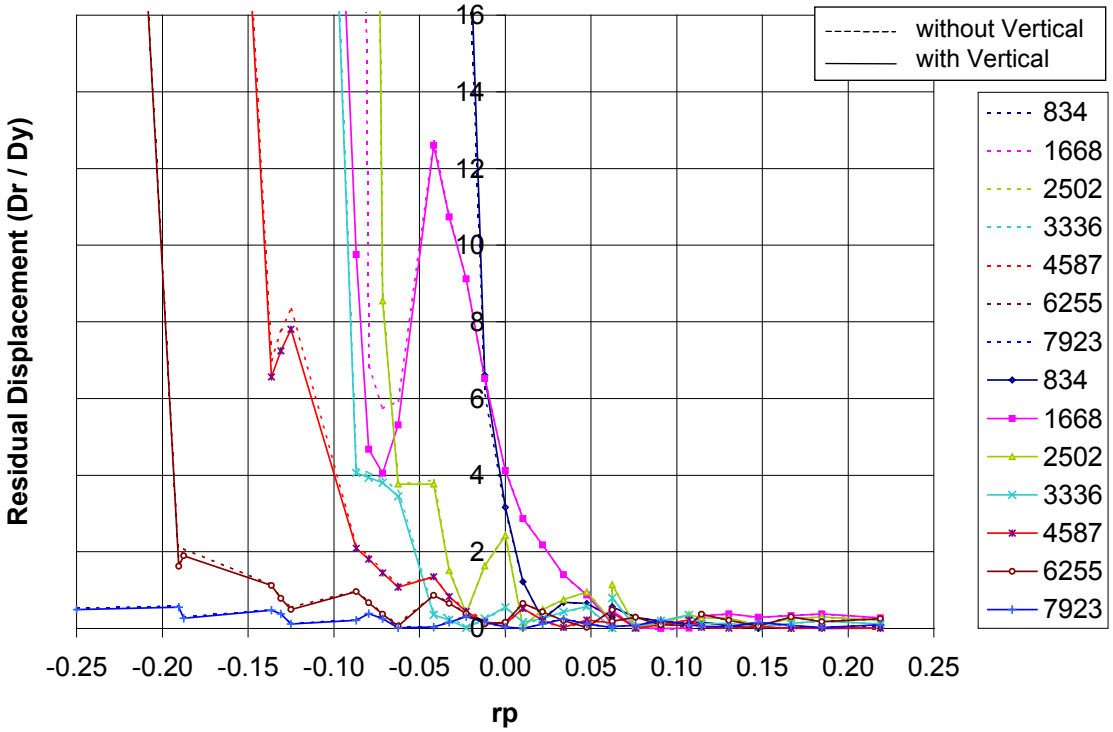


Figure C3.6.6.3a – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

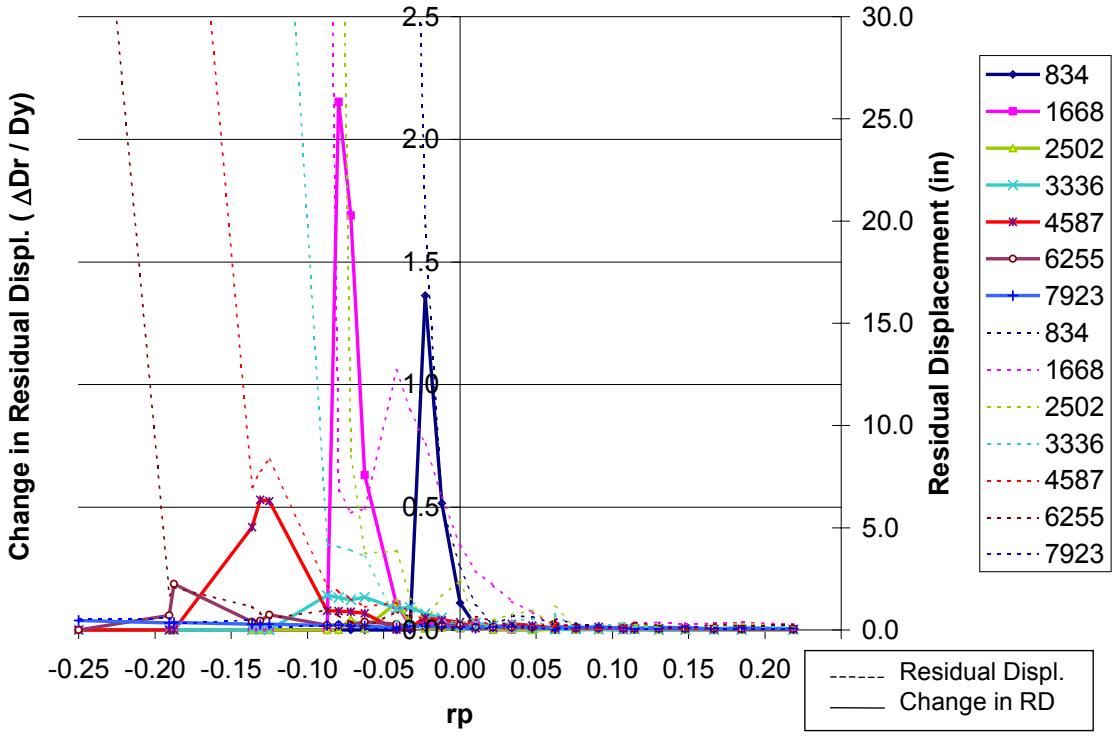


Figure C3.6.6.3b – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

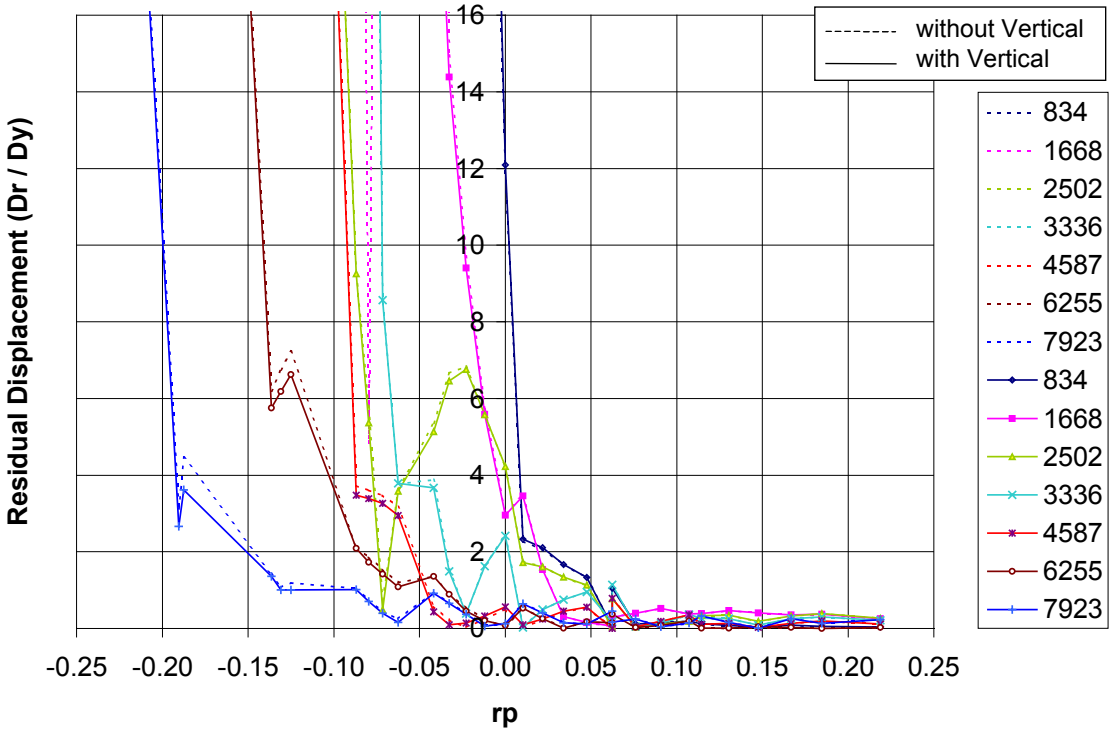


Figure C3.6.6.4a – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

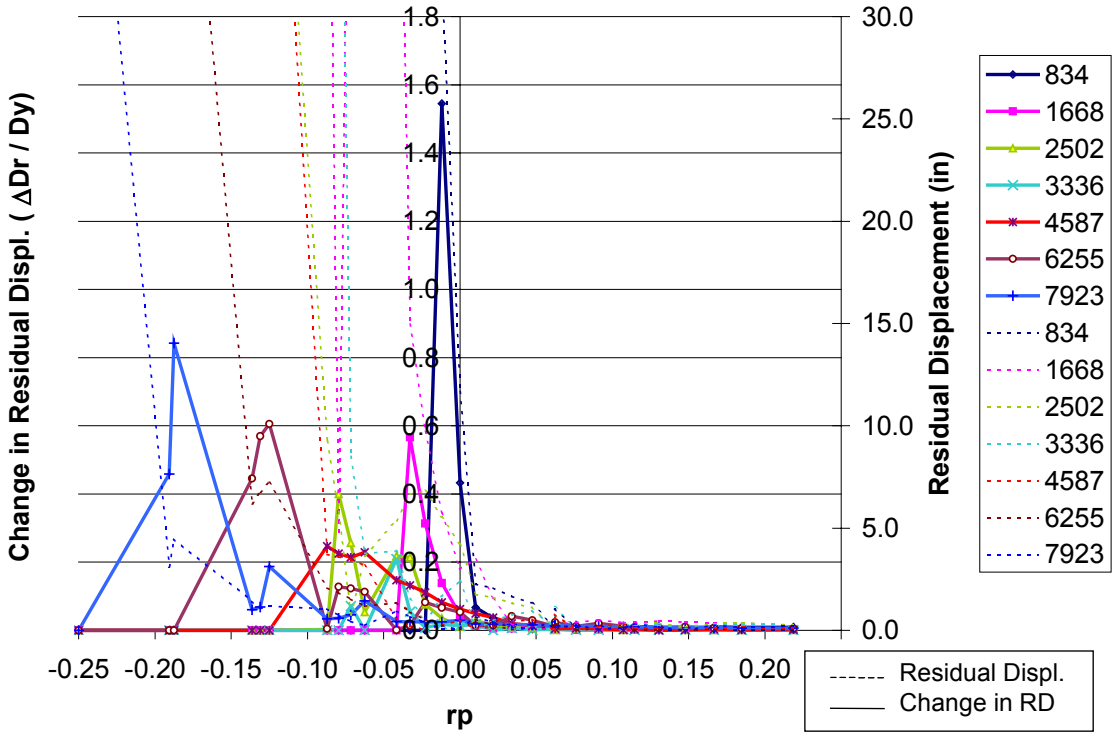


Figure C3.6.6.4b – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

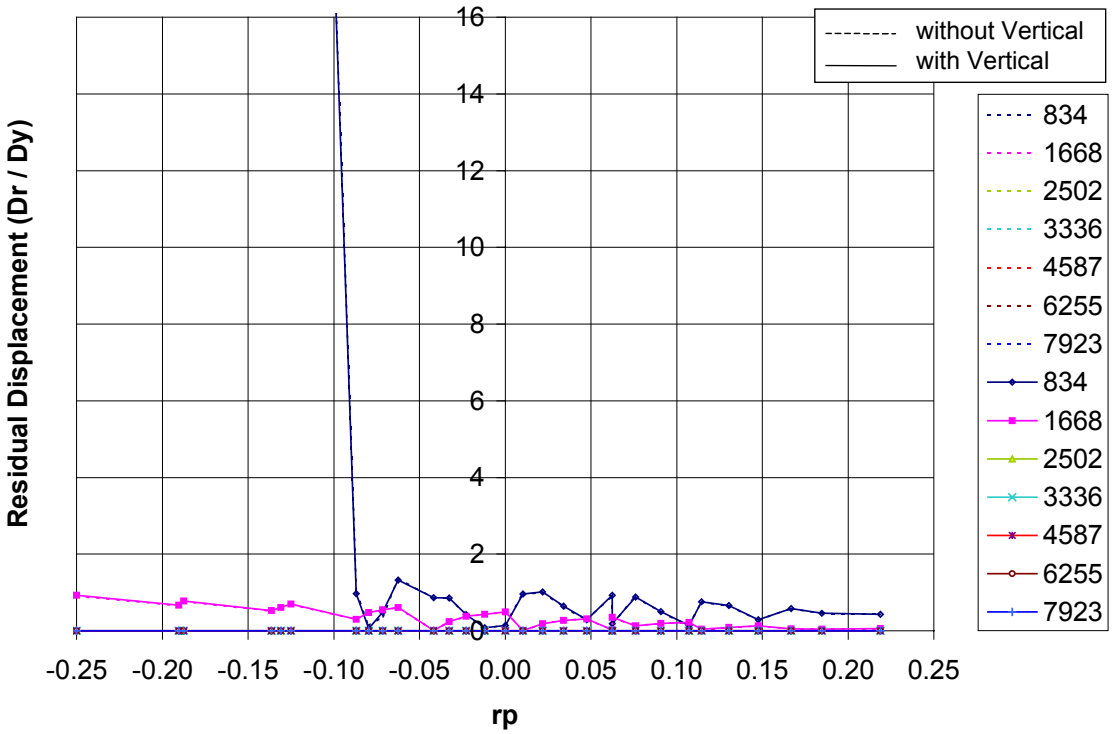


Figure C3.6.7.1a – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

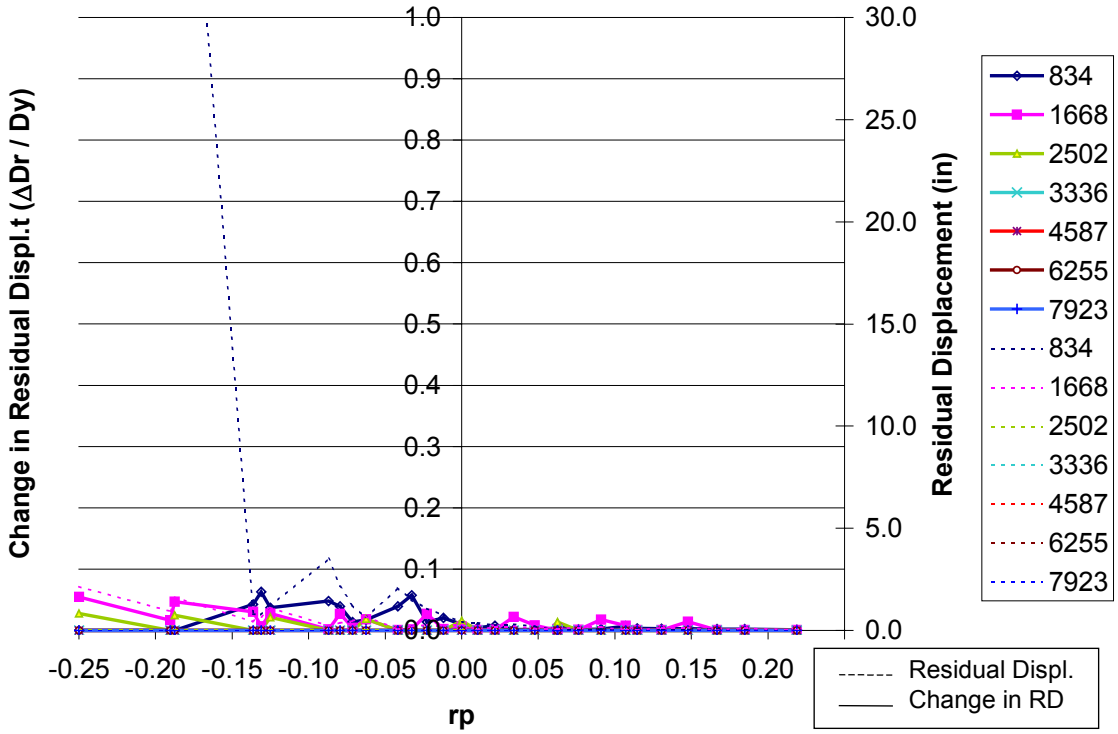


Figure C3.6.7.1b – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

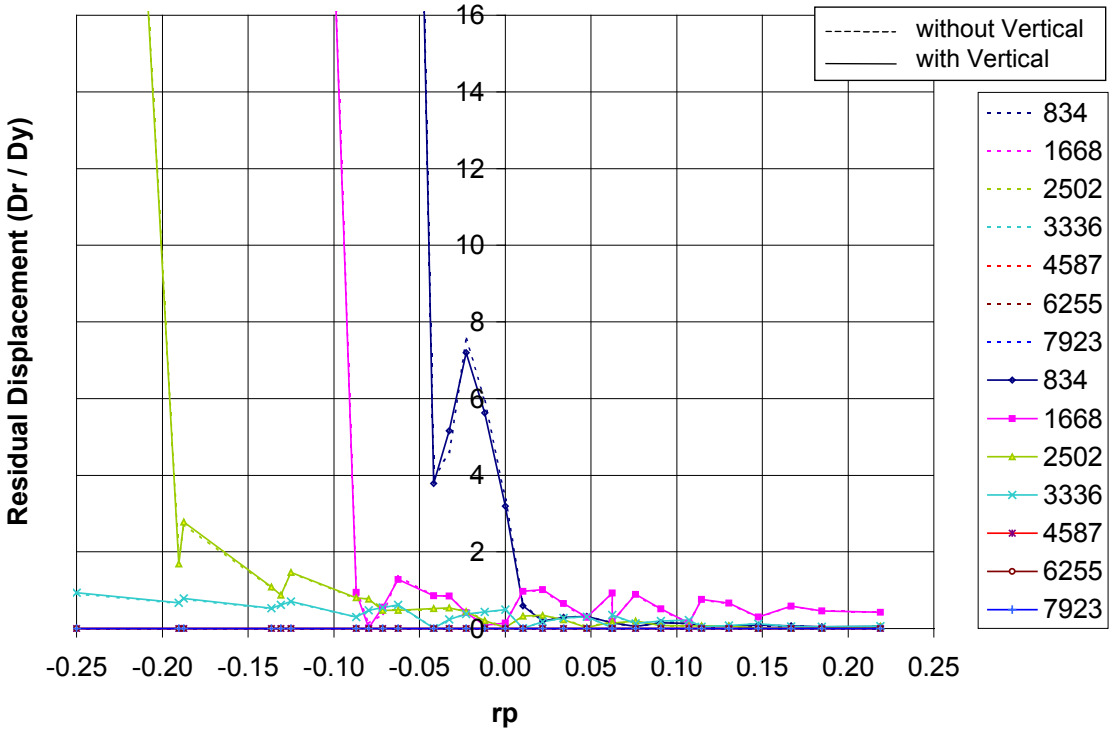


Figure C3.6.7.2a – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

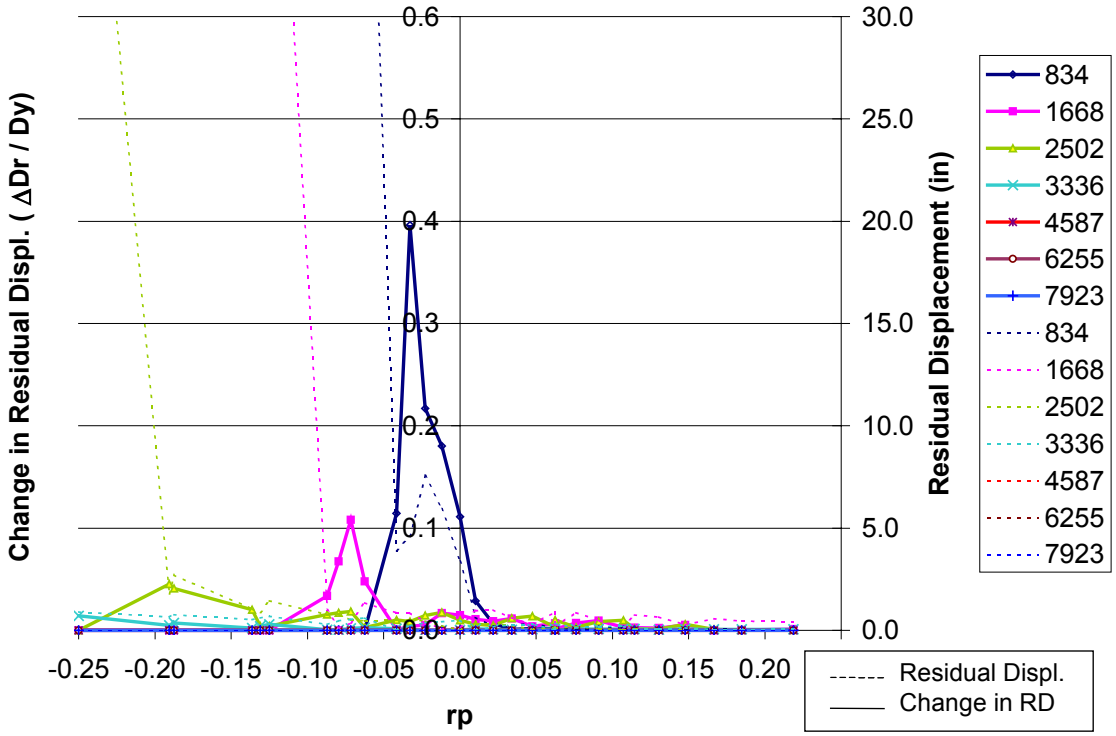


Figure C3.6.7.2b – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

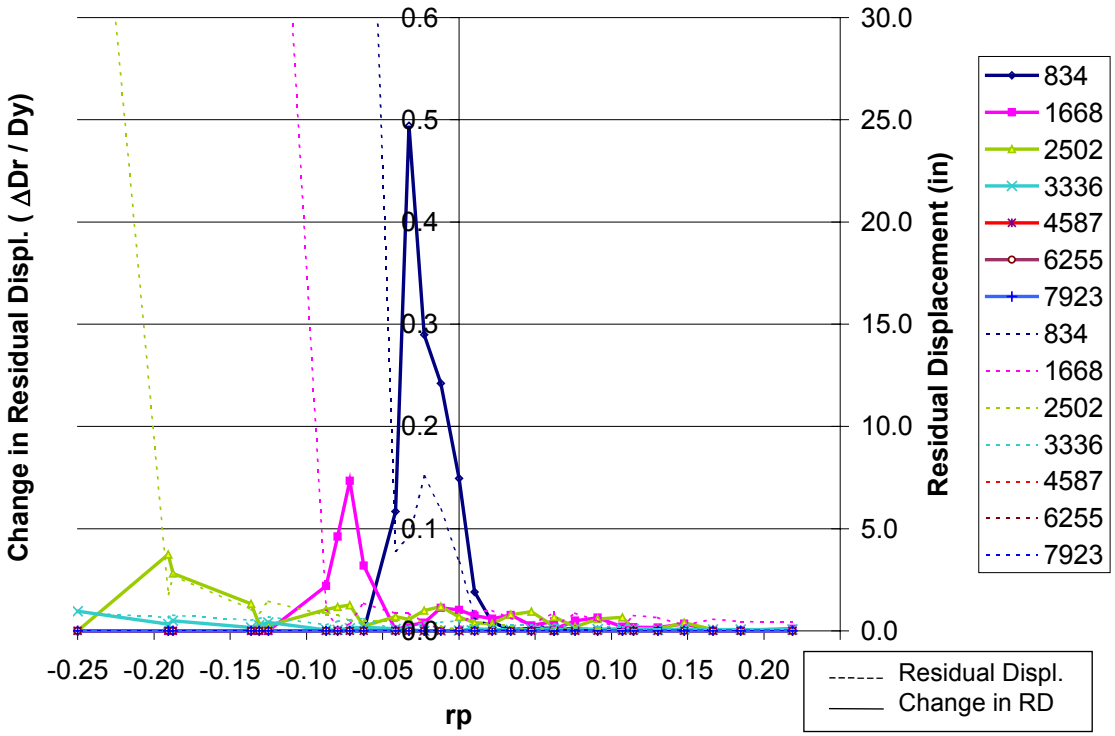


Figure C3.6.7.2c – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

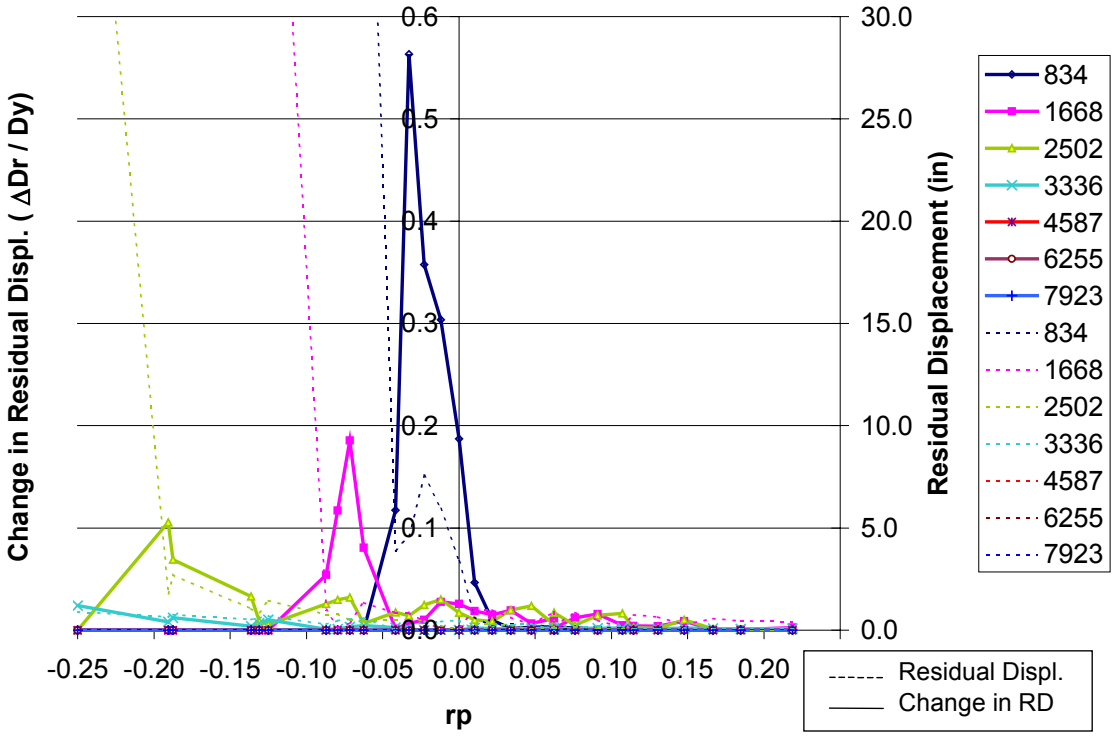


Figure C3.6.7.2d – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

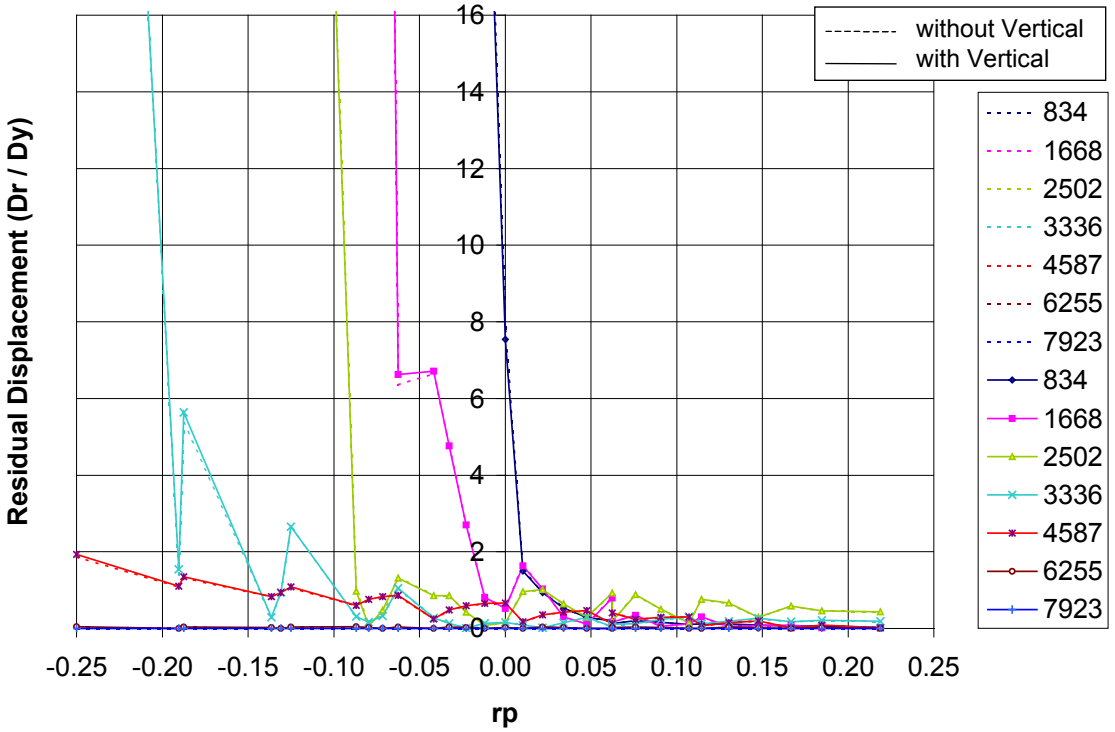


Figure C3.6.7.3a – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

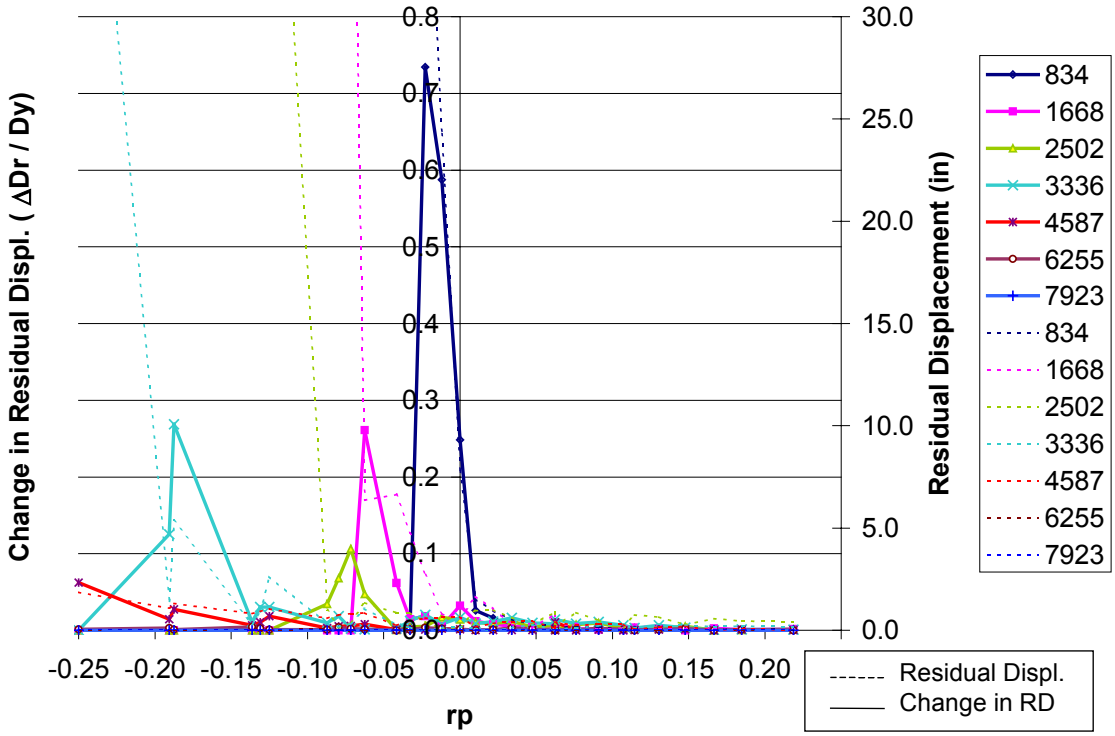


Figure C3.6.7.3b – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

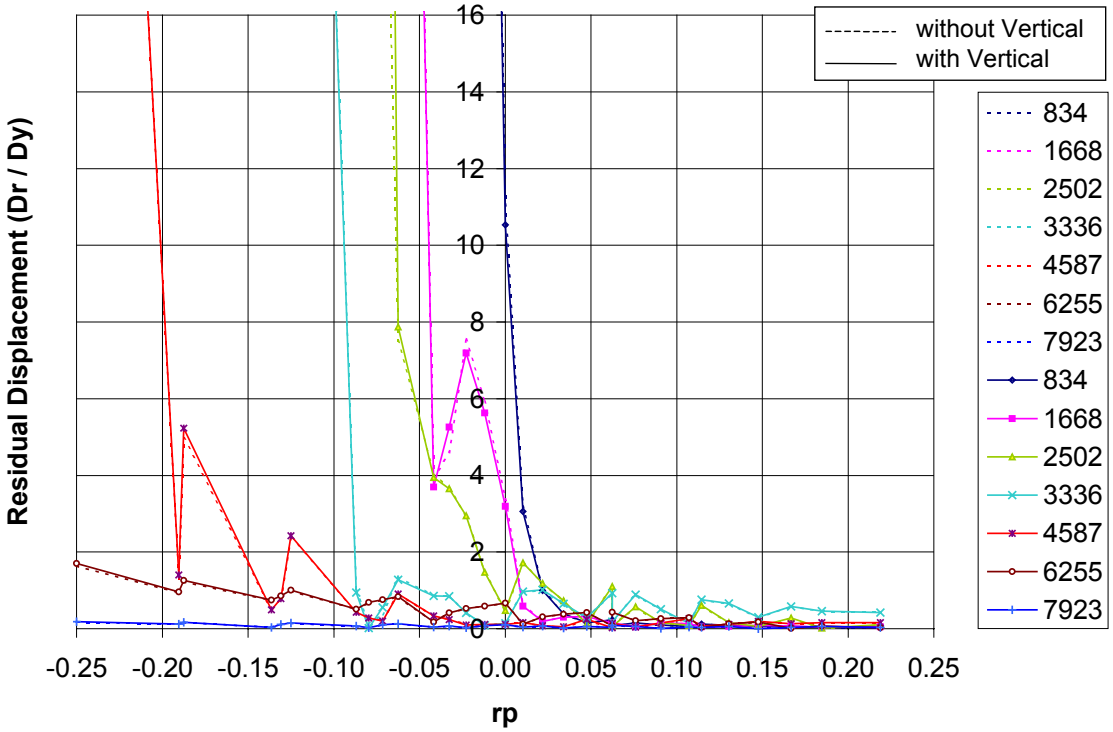


Figure C3.6.7.4a – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

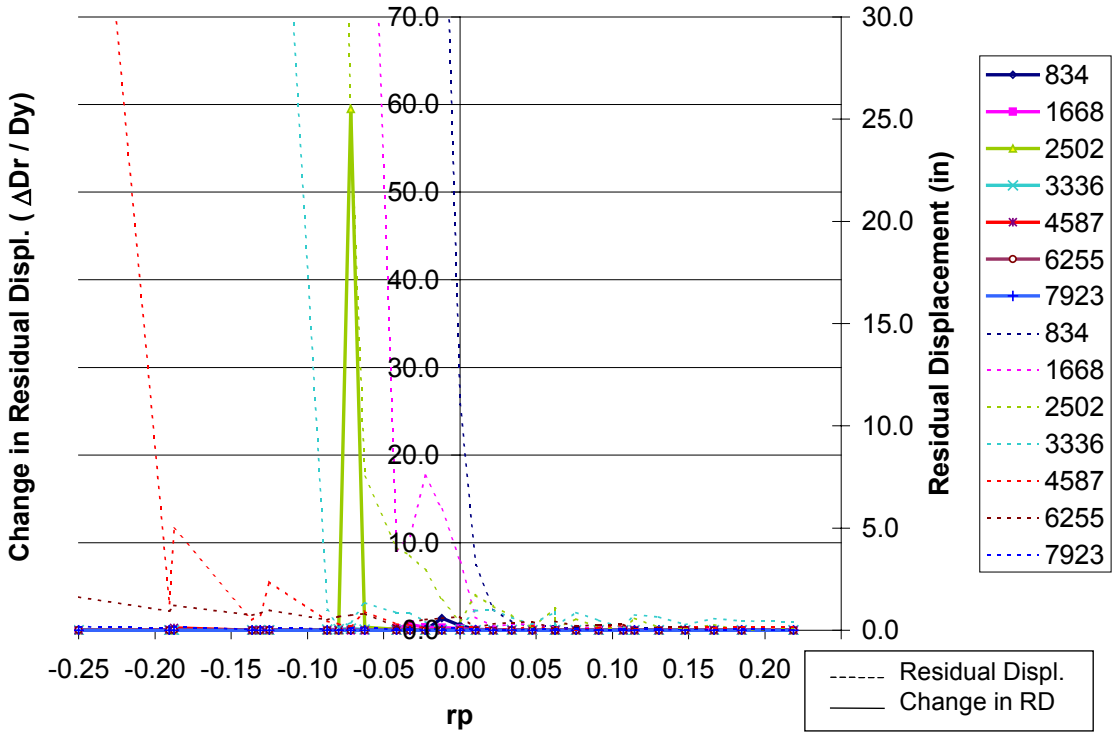


Figure C3.6.7.4b – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

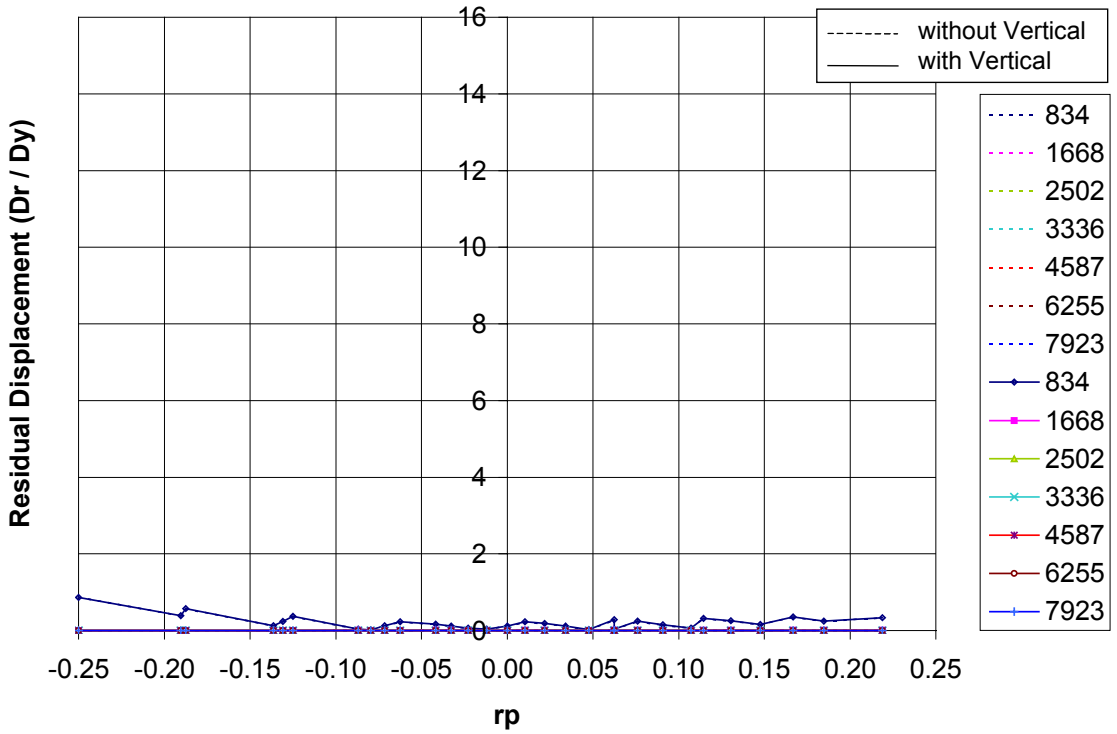


Figure C3.6.8.1a – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

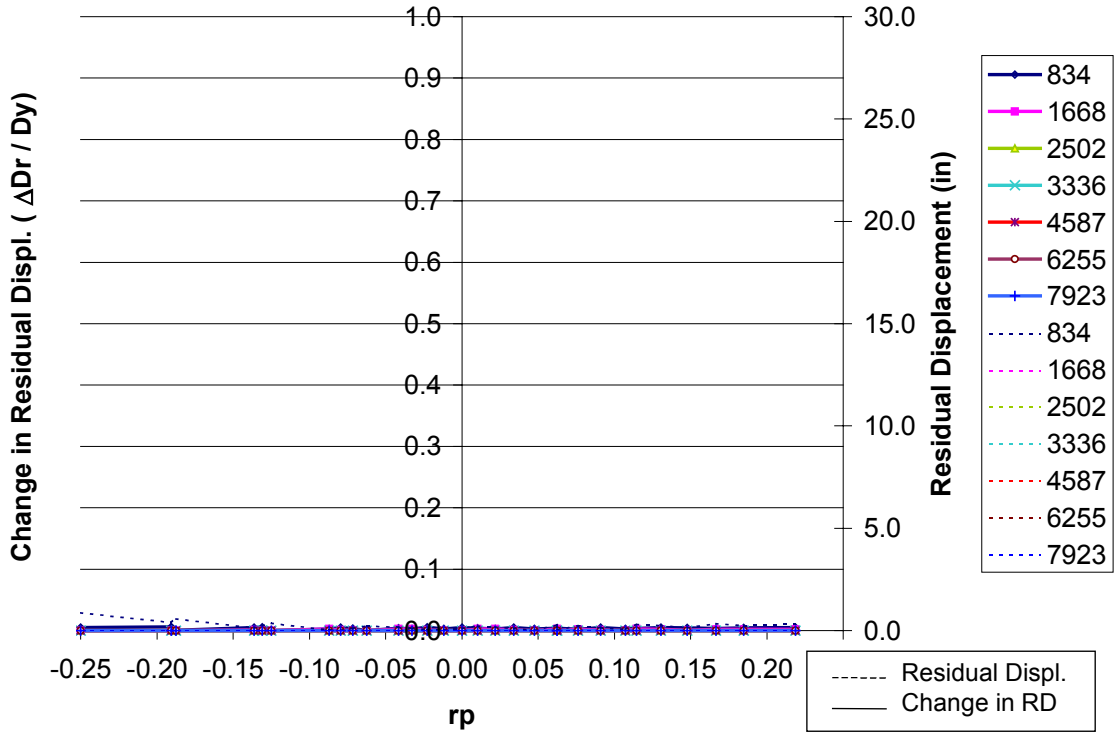


Figure C3.6.8.1b – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

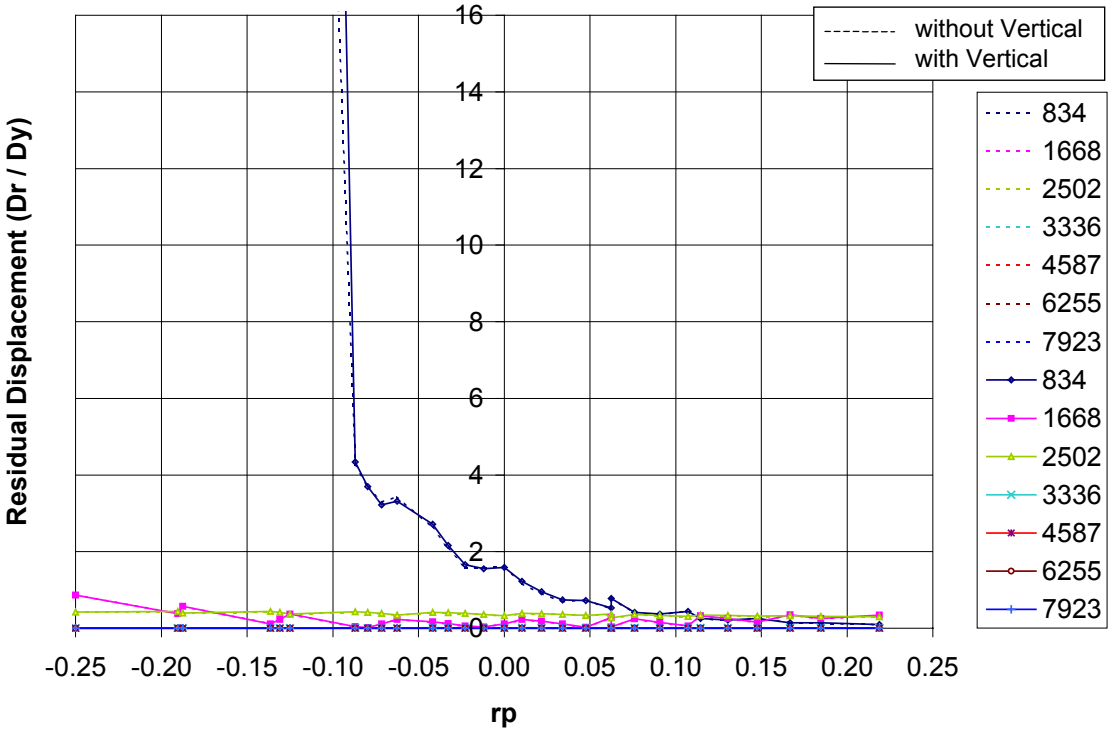


Figure C3.6.8.2a – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

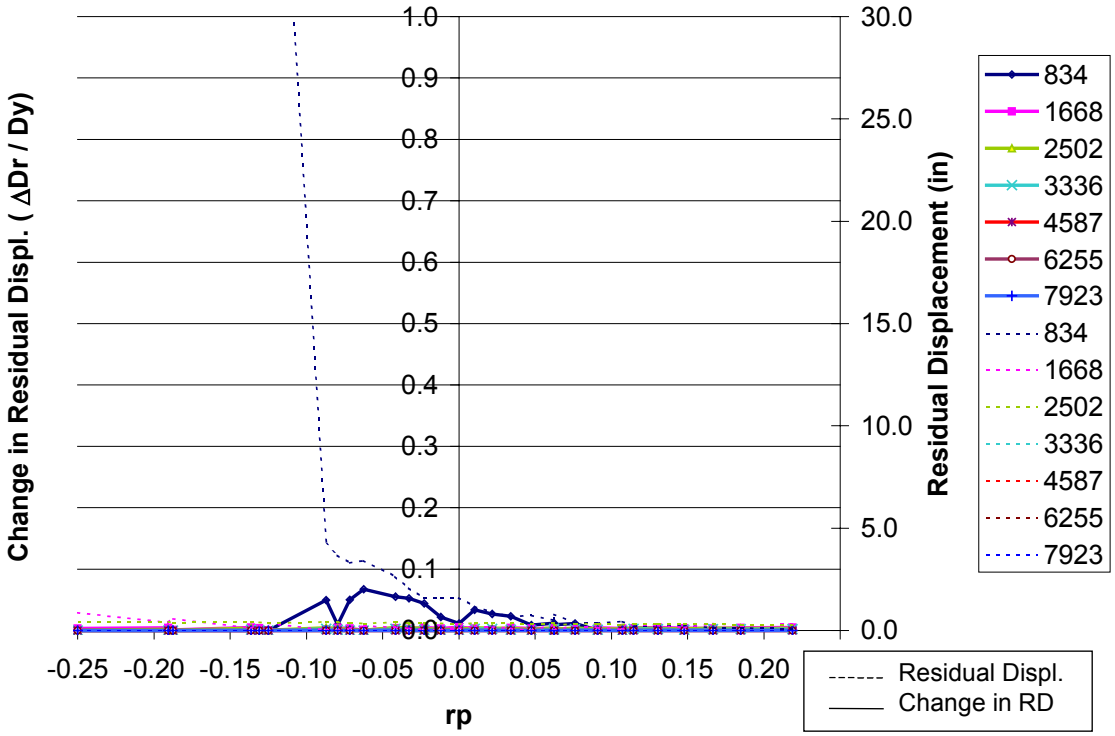


Figure C3.6.8.2b – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

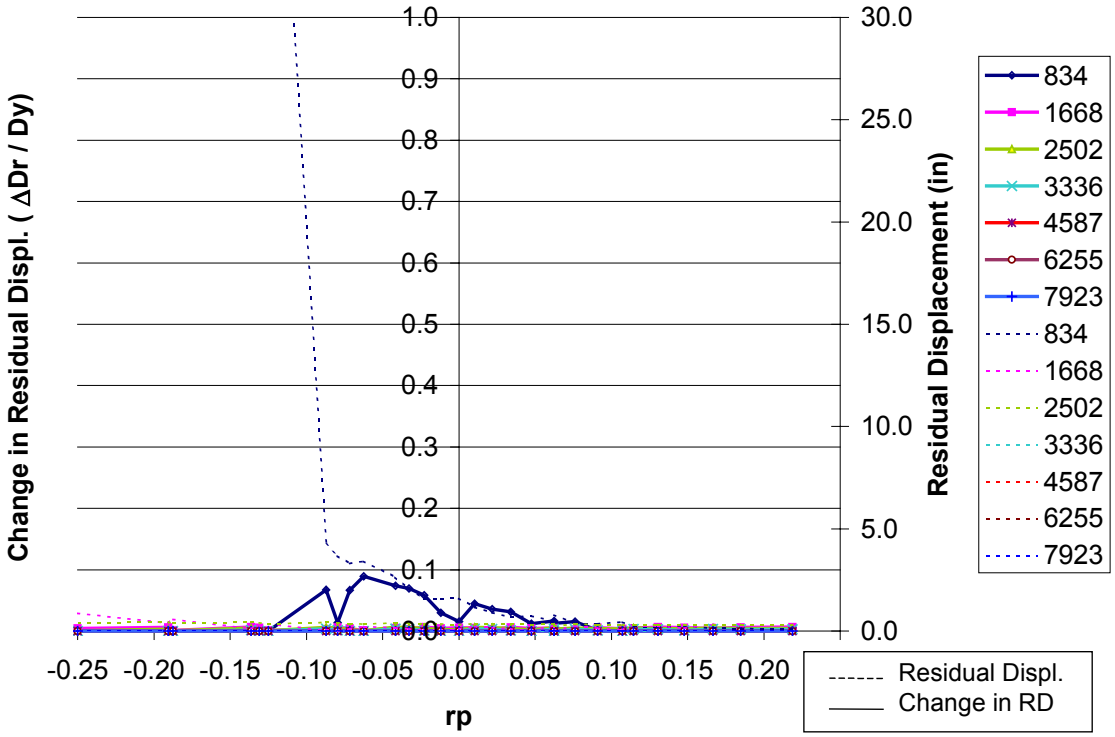


Figure C3.6.8.2c – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

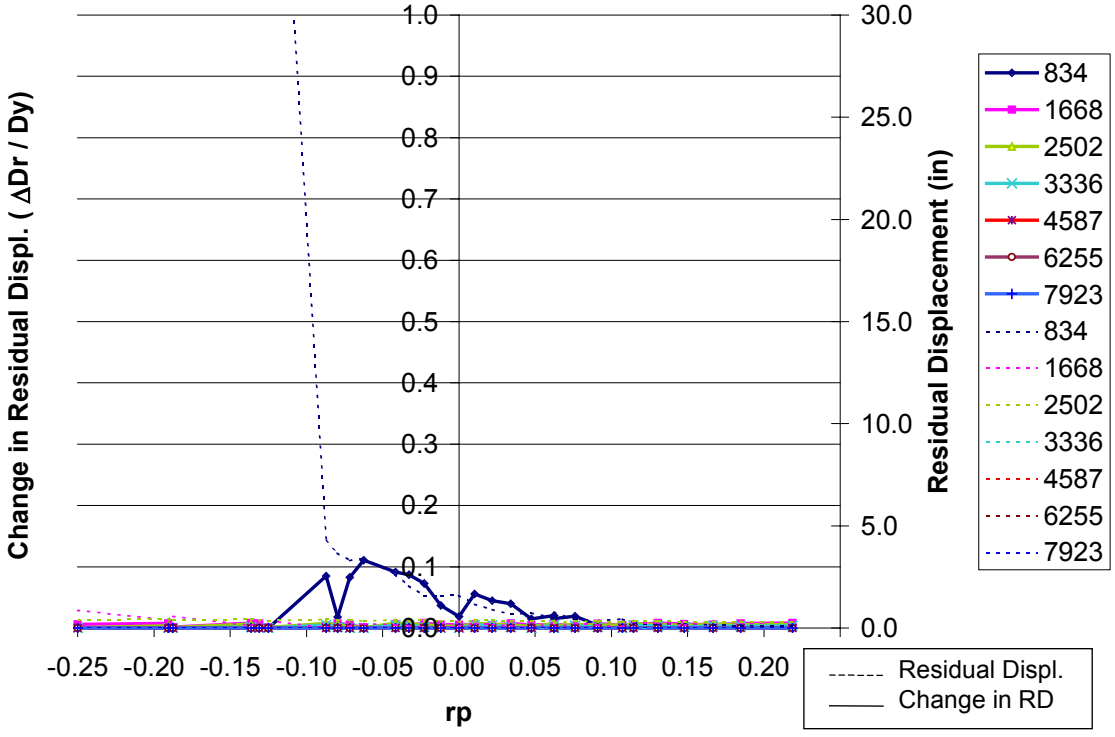


Figure C3.6.8.2d – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

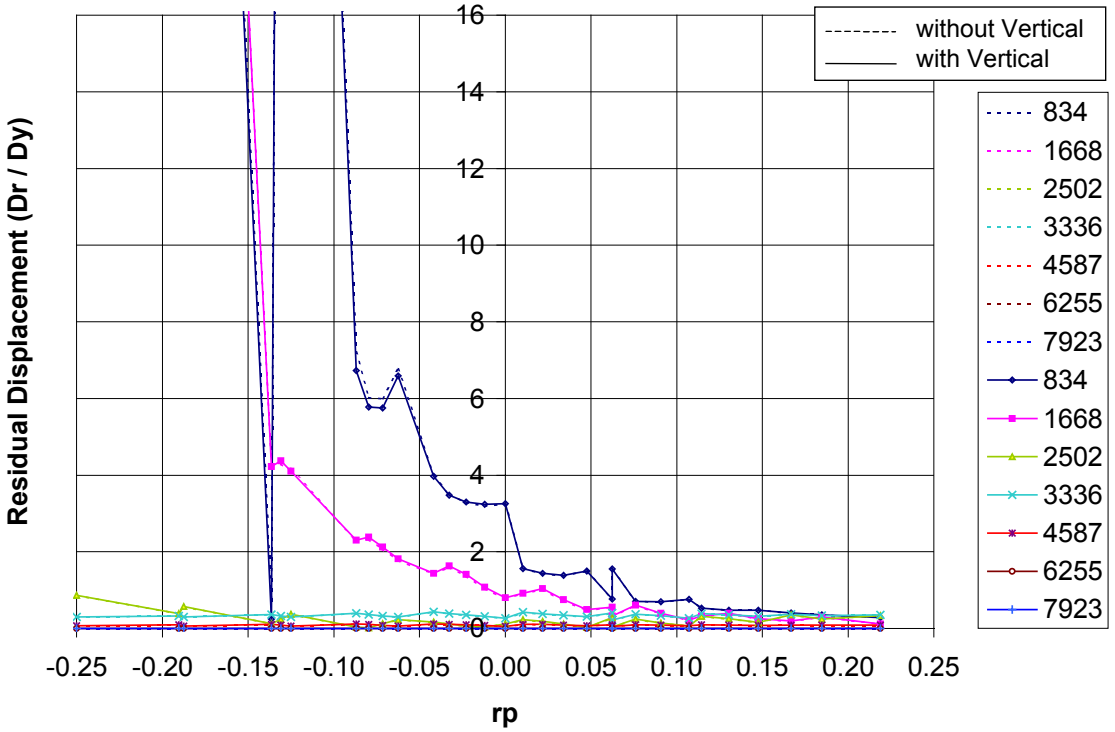


Figure C3.6.8.3a – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

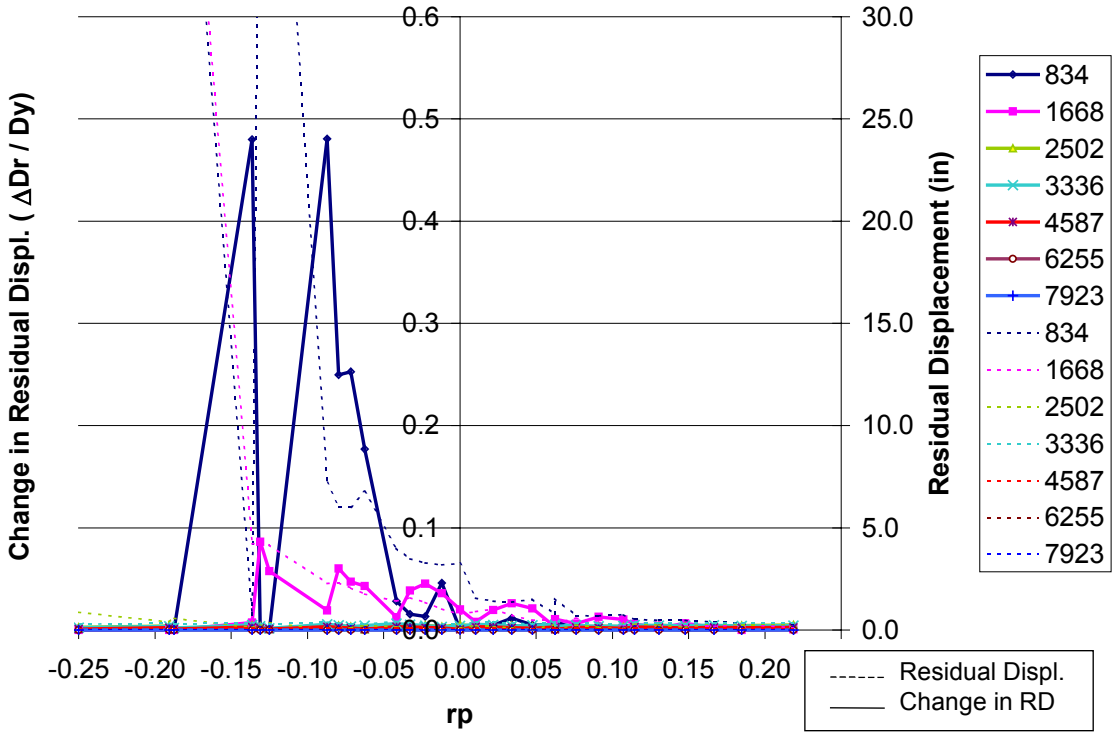


Figure C3.6.8.3b – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

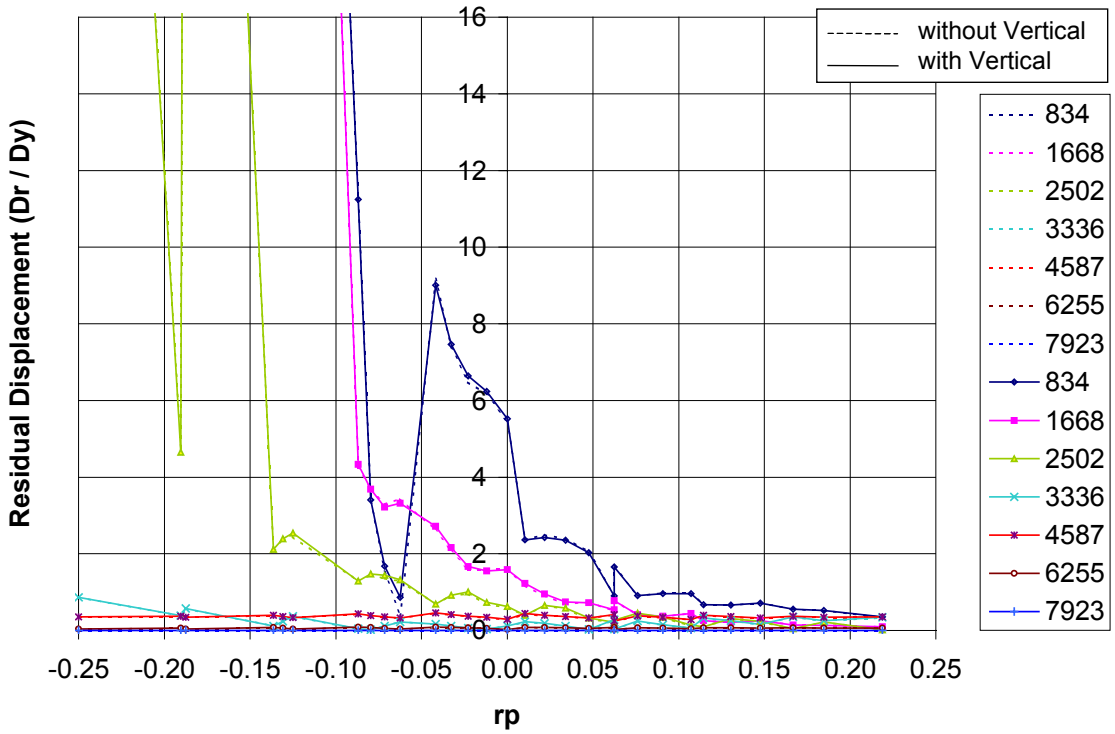


Figure C3.6.8.4a – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.278 Seconds.

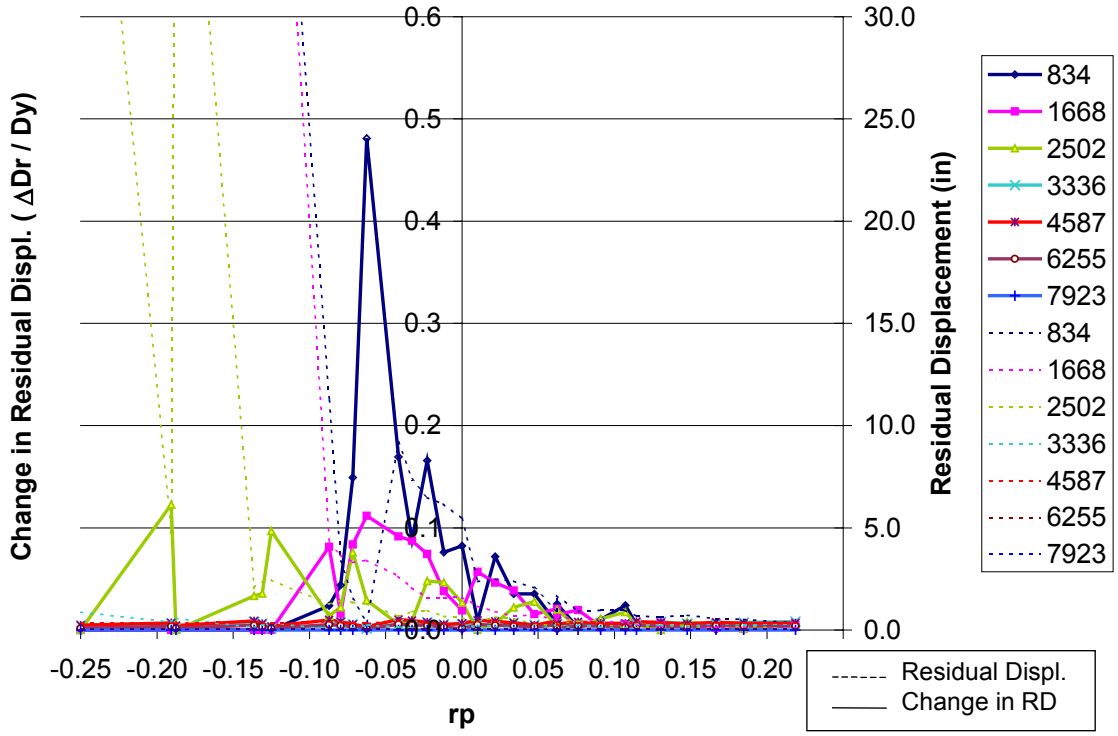


Figure C3.6.8.4b – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.278 Seconds.

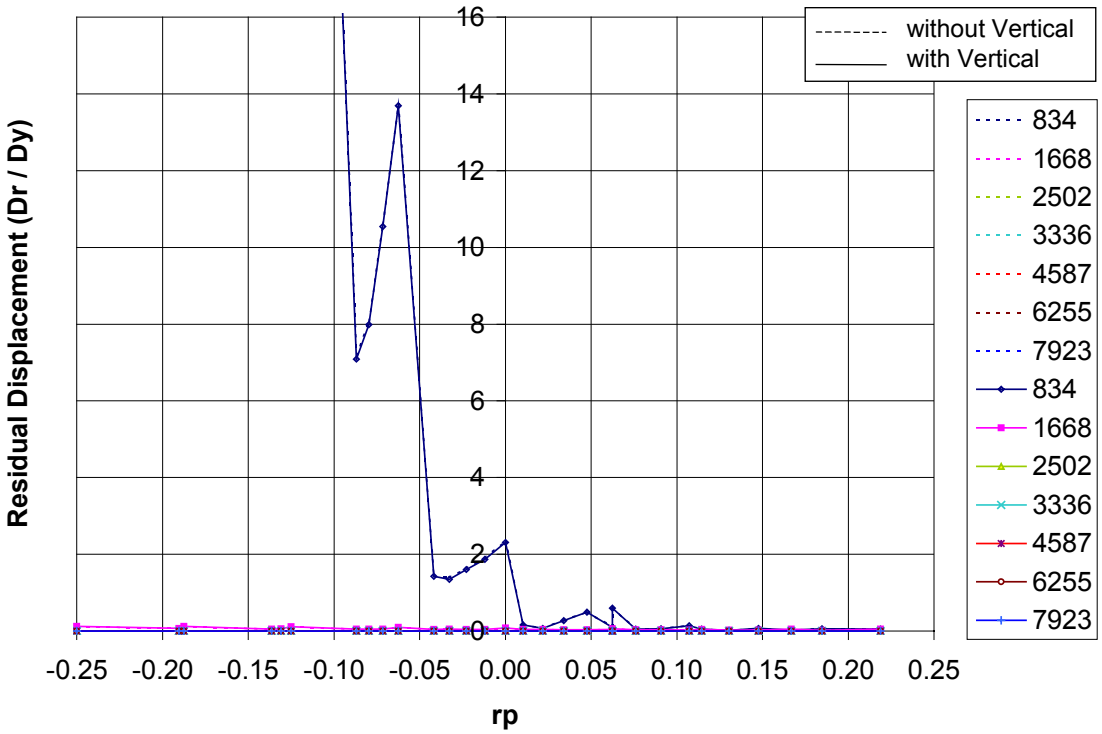


Figure C3.7.1.1a – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

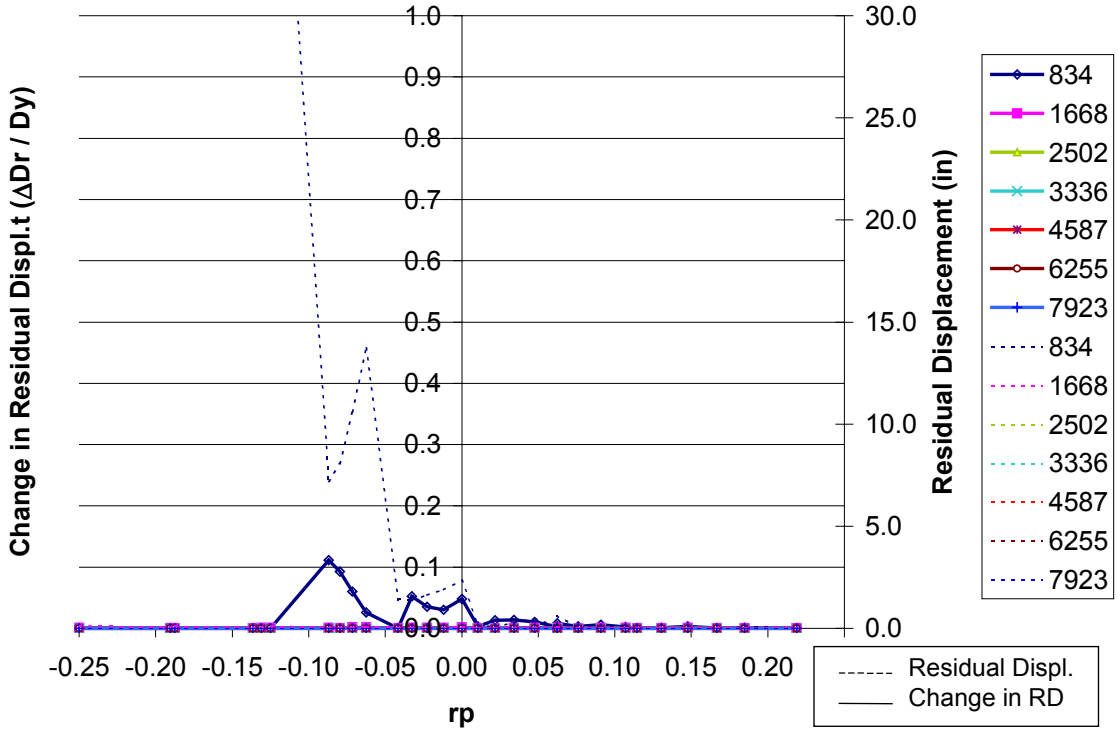


Figure C3.7.1.1b – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

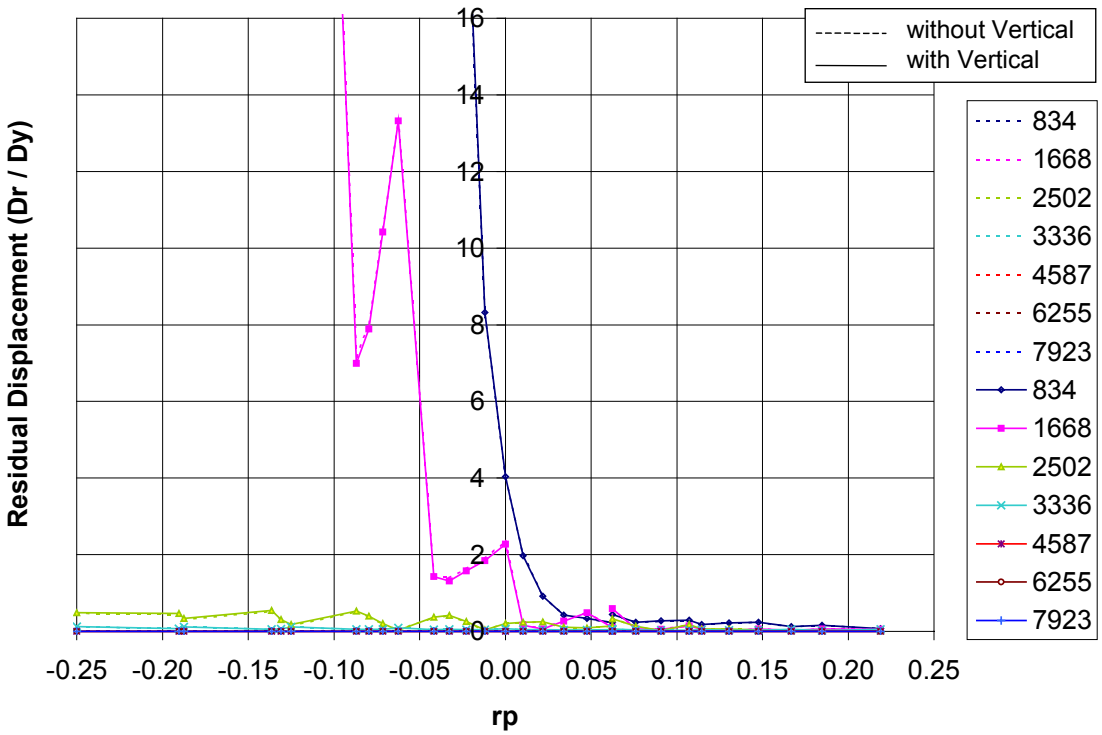


Figure C3.7.1.2a – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

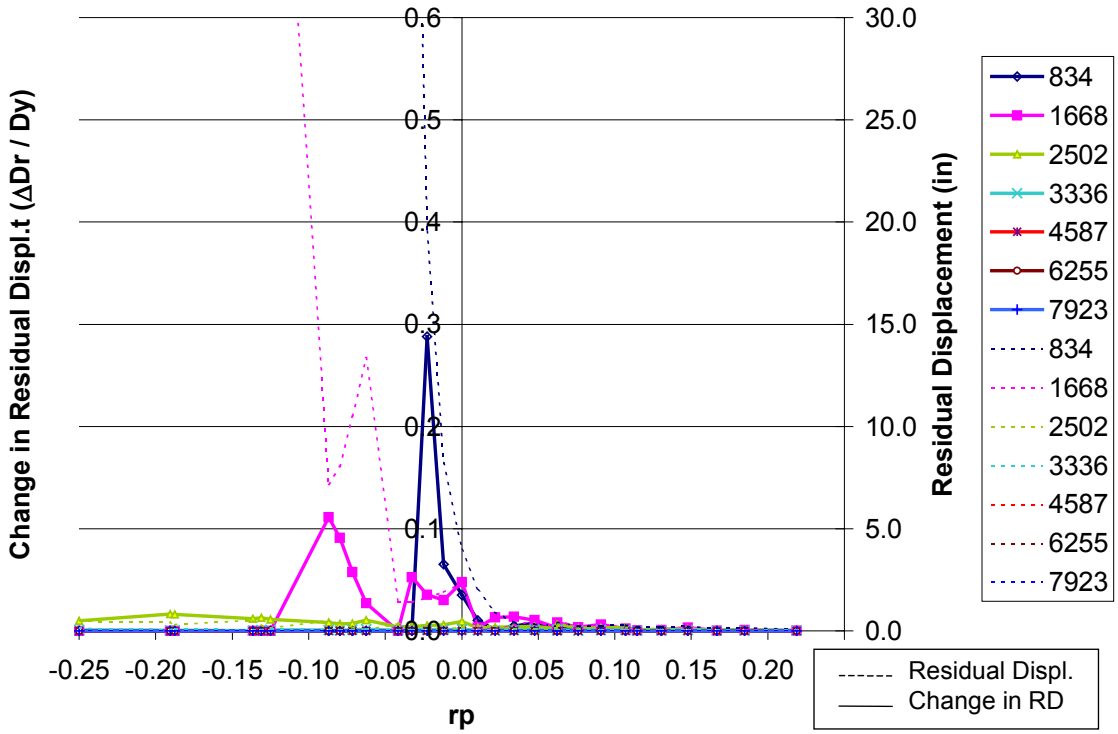


Figure C3.7.1.2b – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

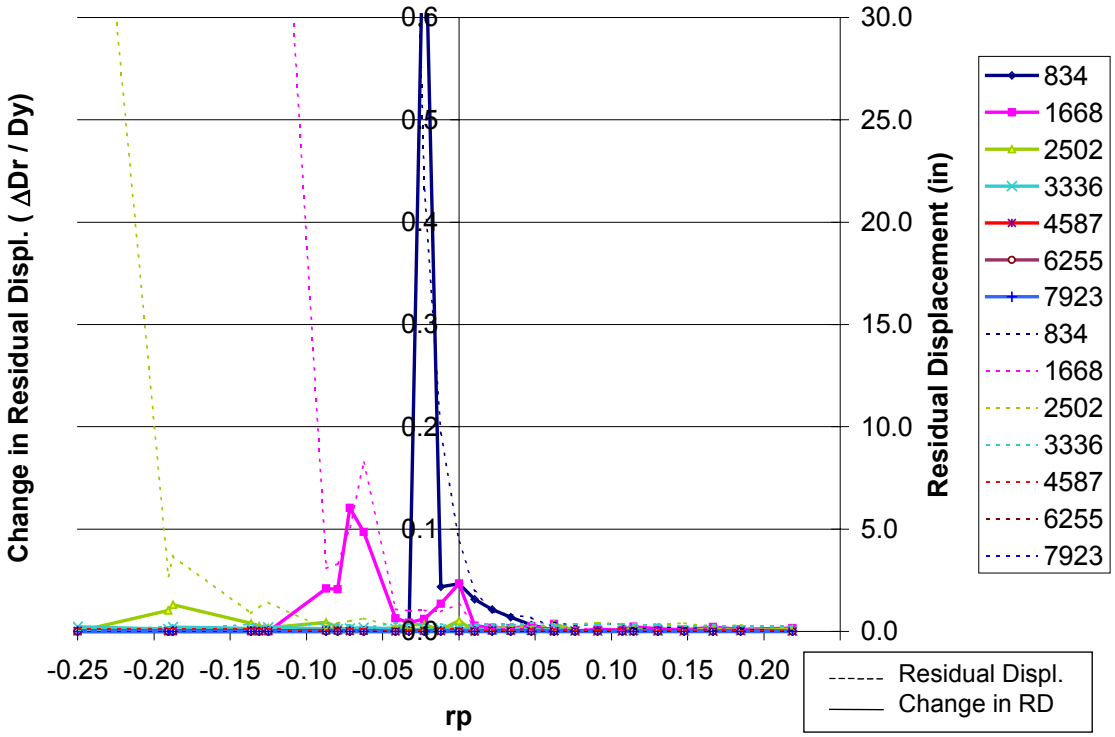


Figure C3.7.1.2c – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

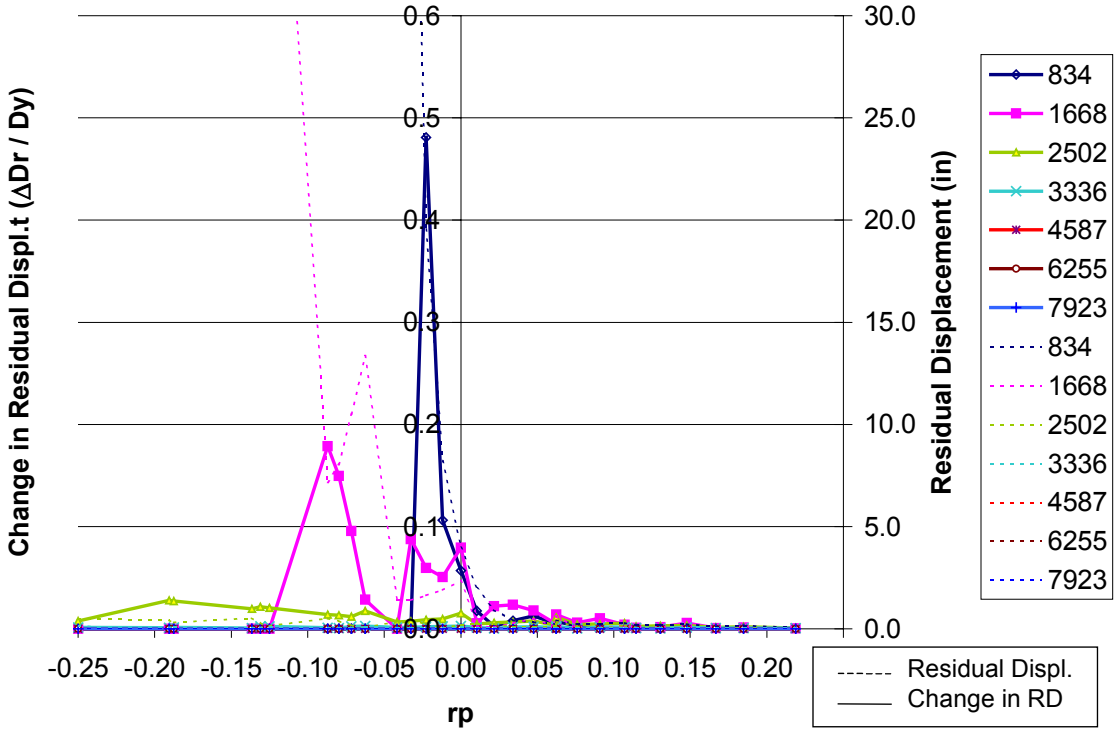


Figure C3.7.1.2d – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

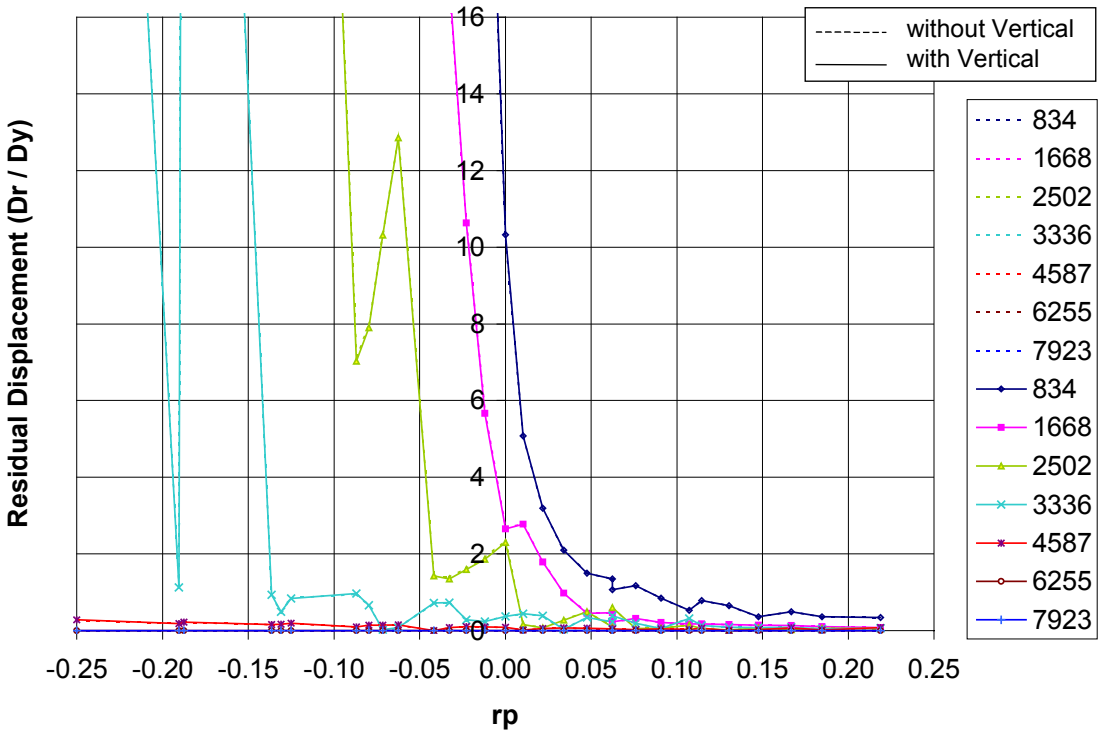


Figure C3.7.1.3a – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

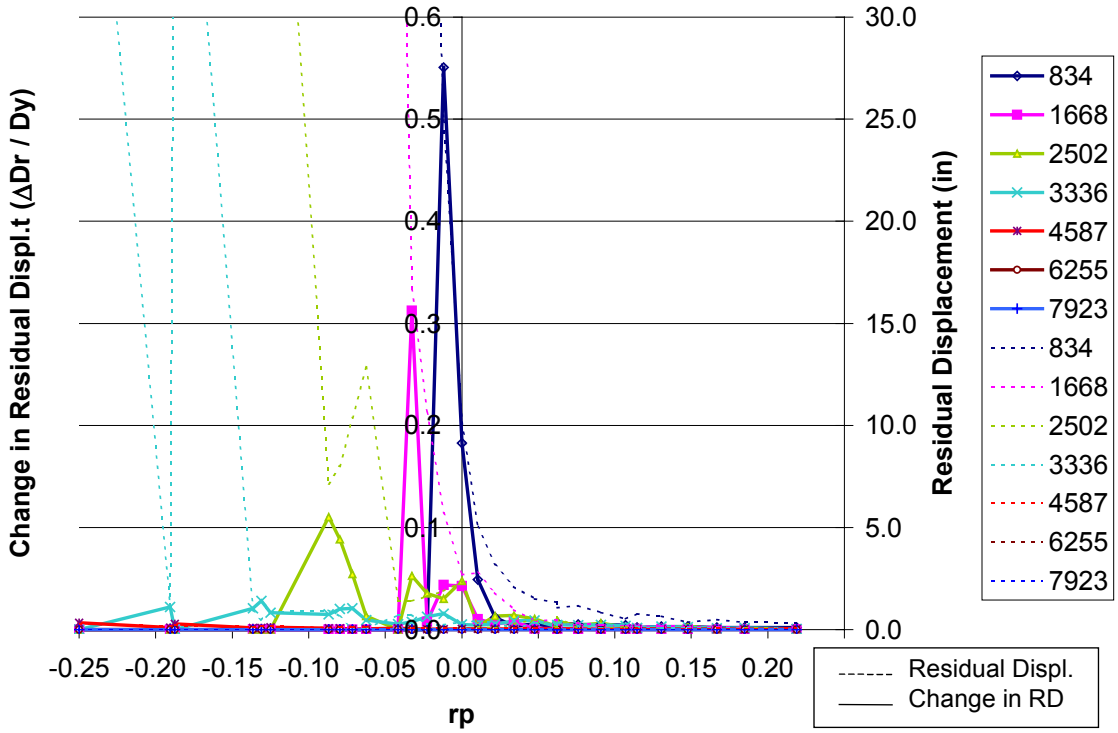


Figure C3.7.1.3b – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

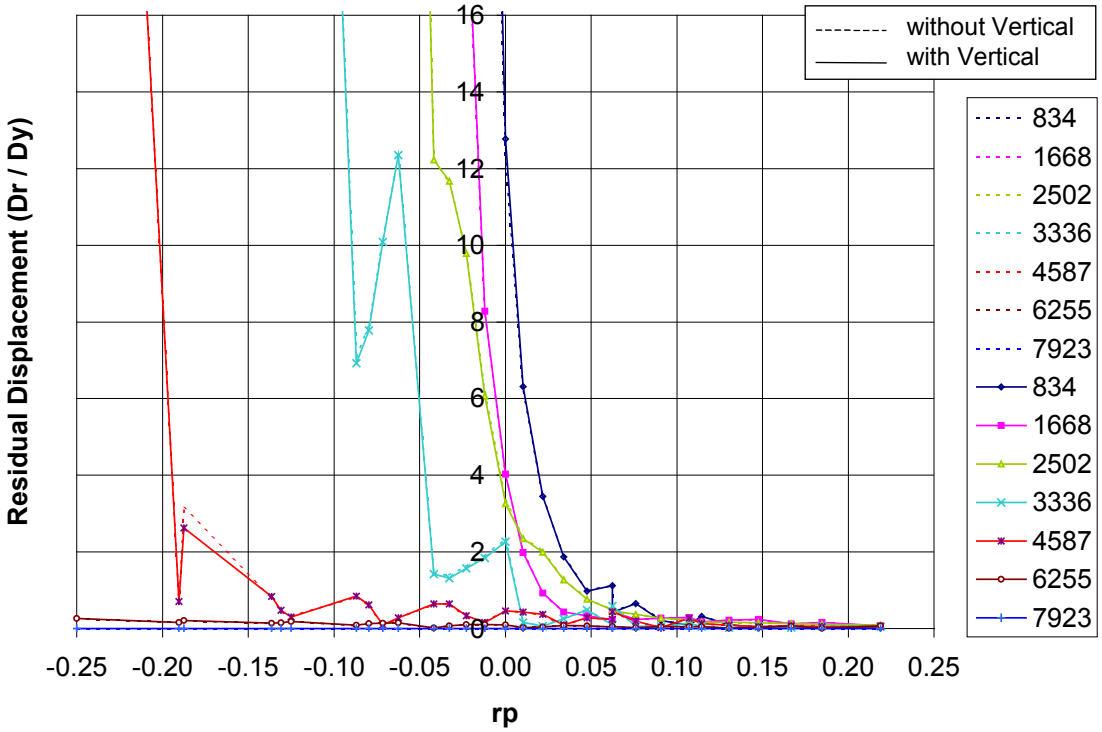


Figure C3.7.1.4a – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

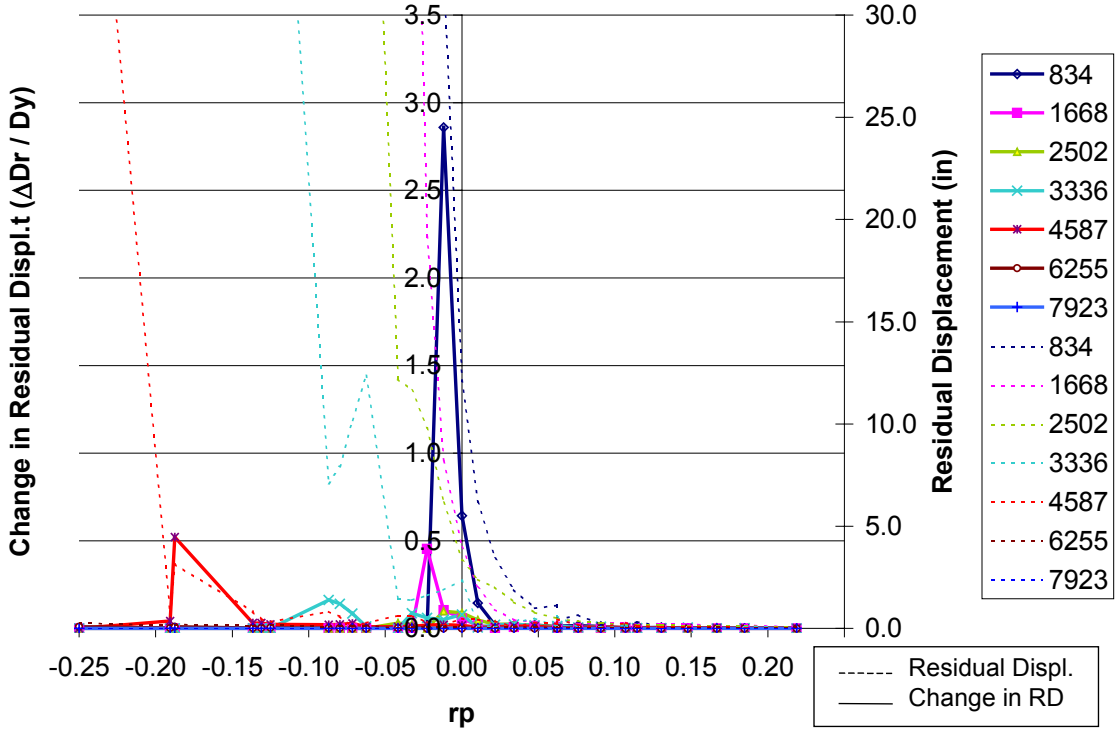


Figure C3.7.1.4b – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

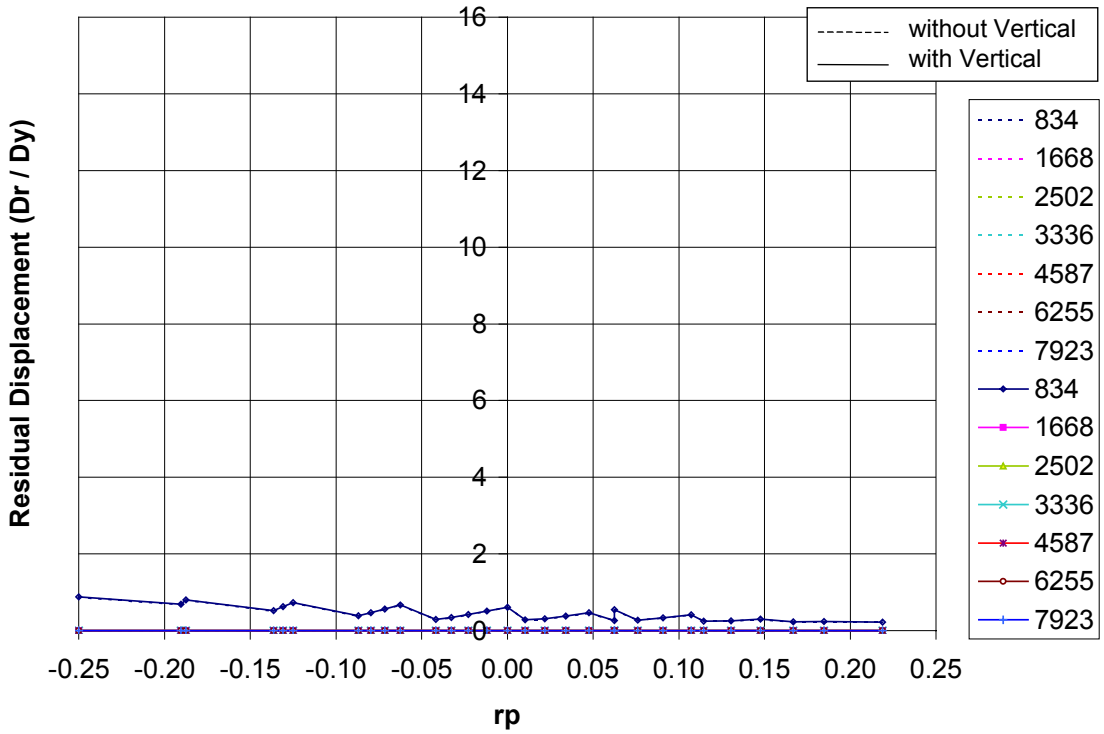


Figure C3.7.2.1a – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

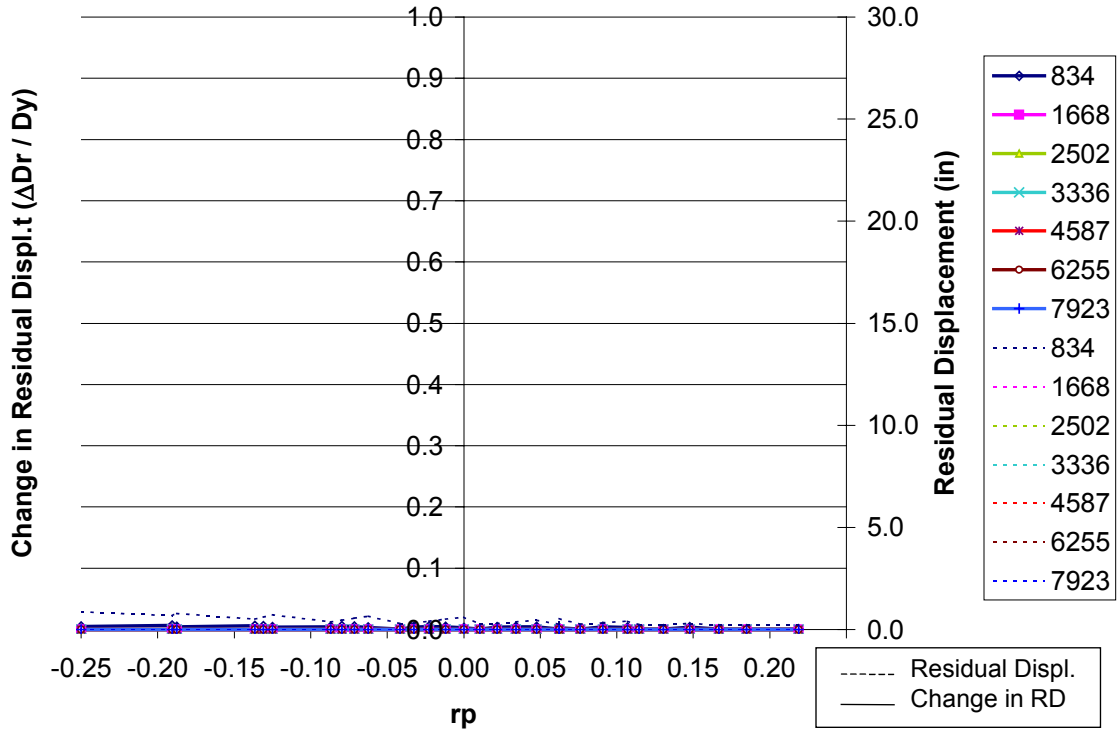


Figure C3.7.2.1b – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

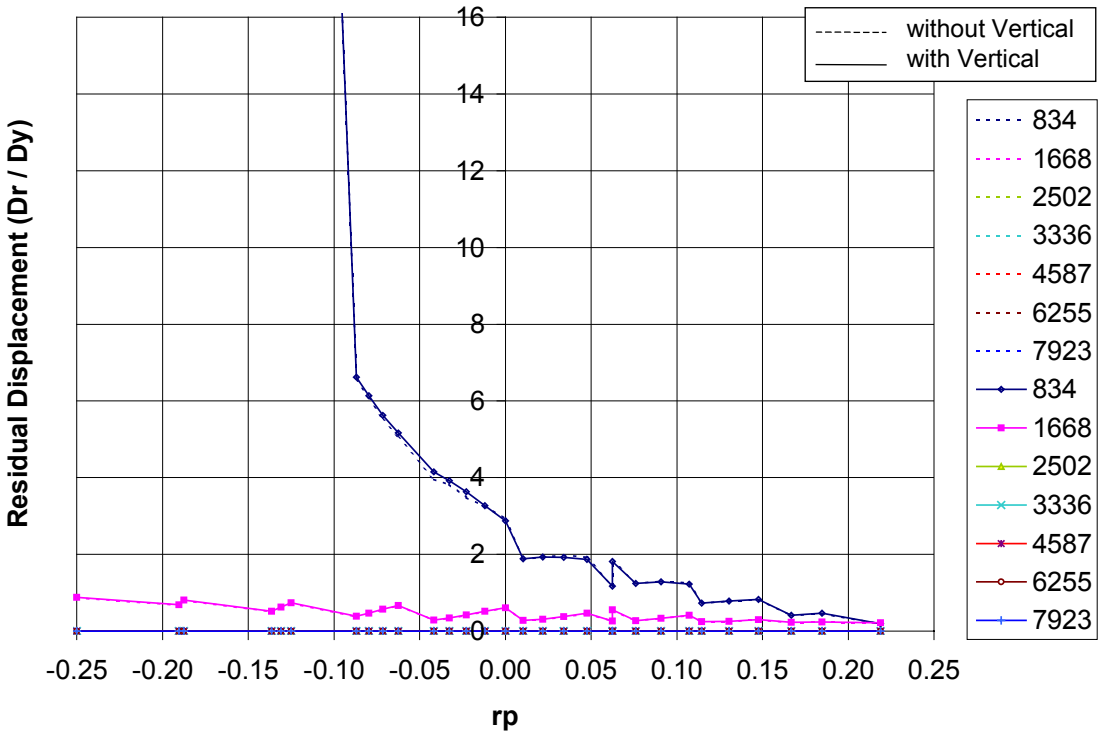


Figure C3.7.2.2a – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

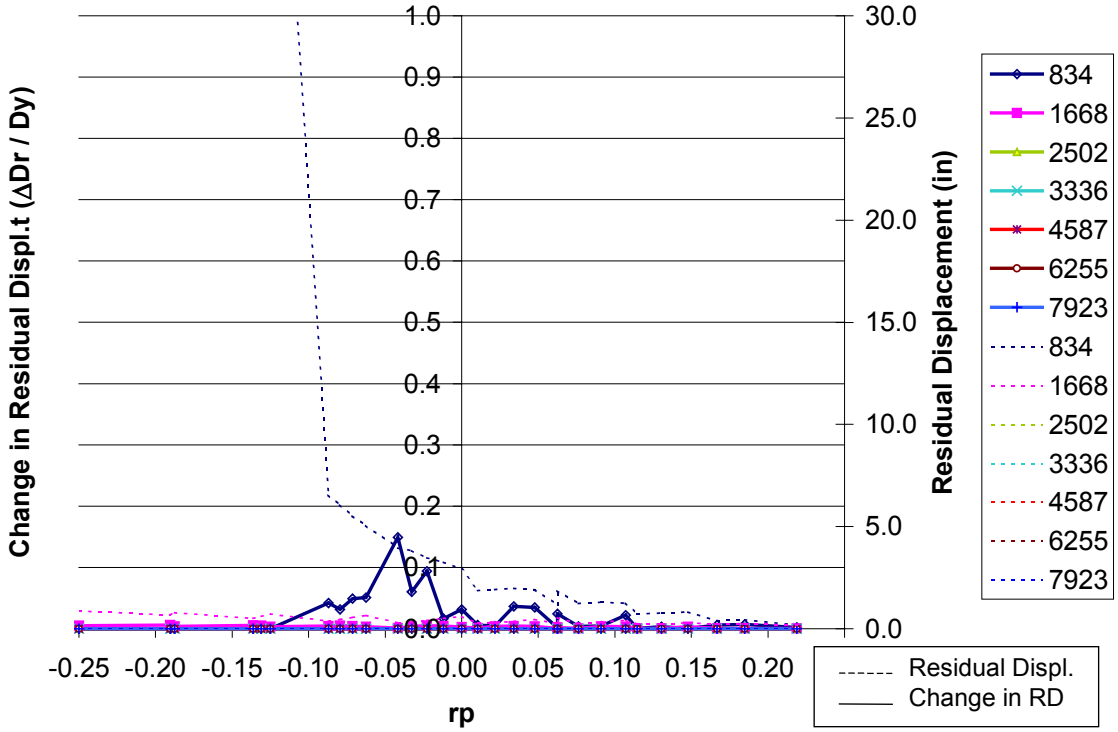


Figure C3.7.2.2b – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

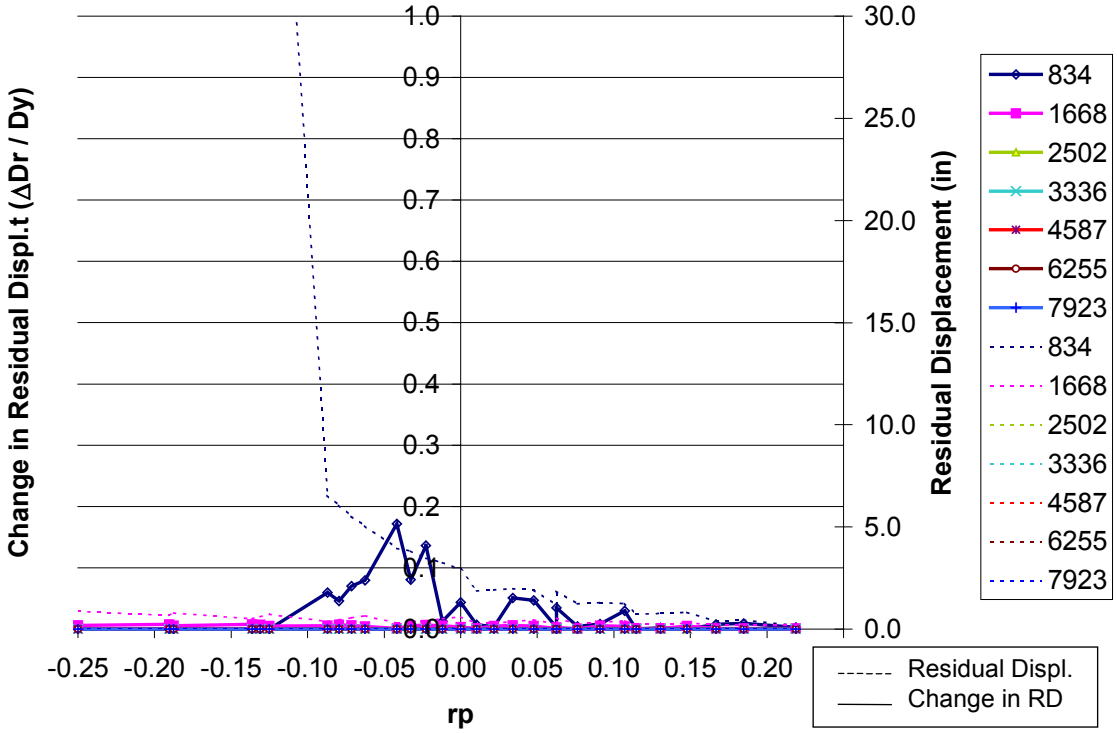


Figure C3.7.2.2c – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

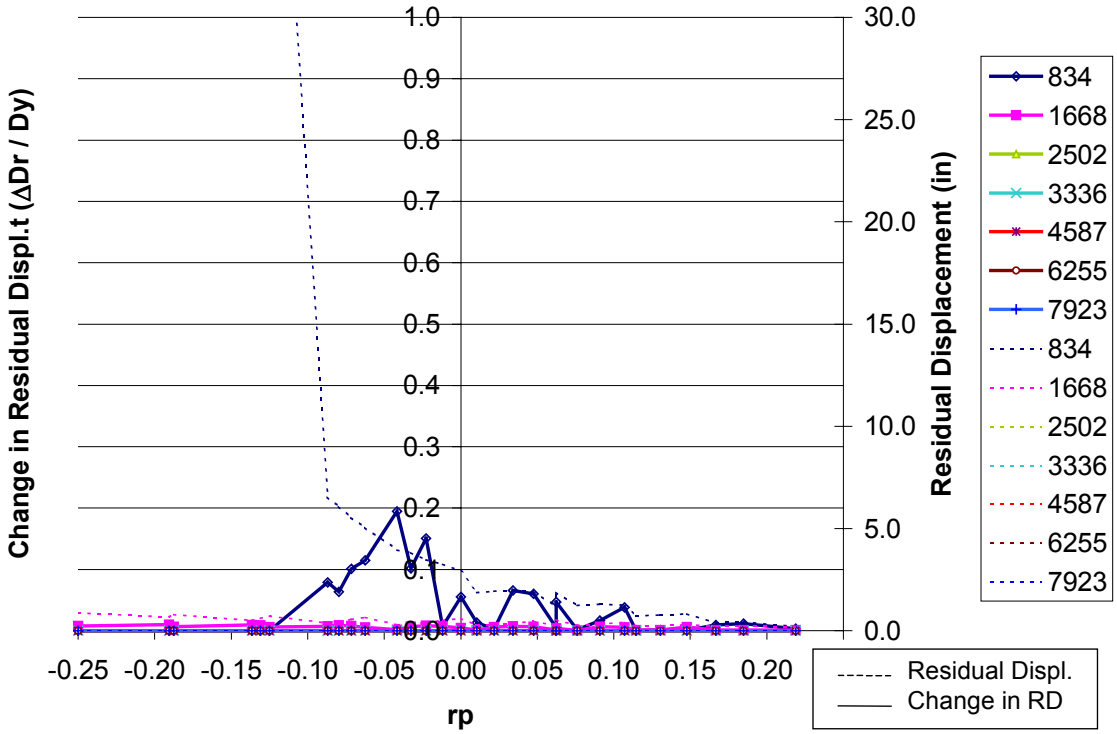


Figure C3.7.2.2d – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

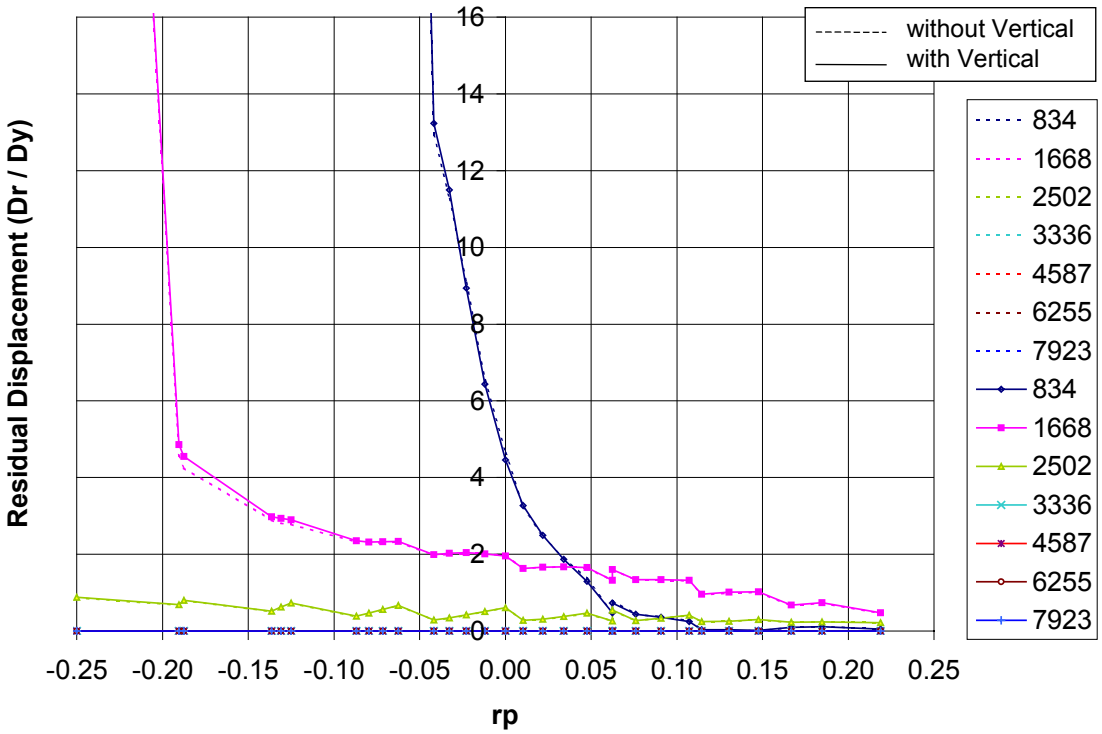


Figure C3.7.2.3a – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

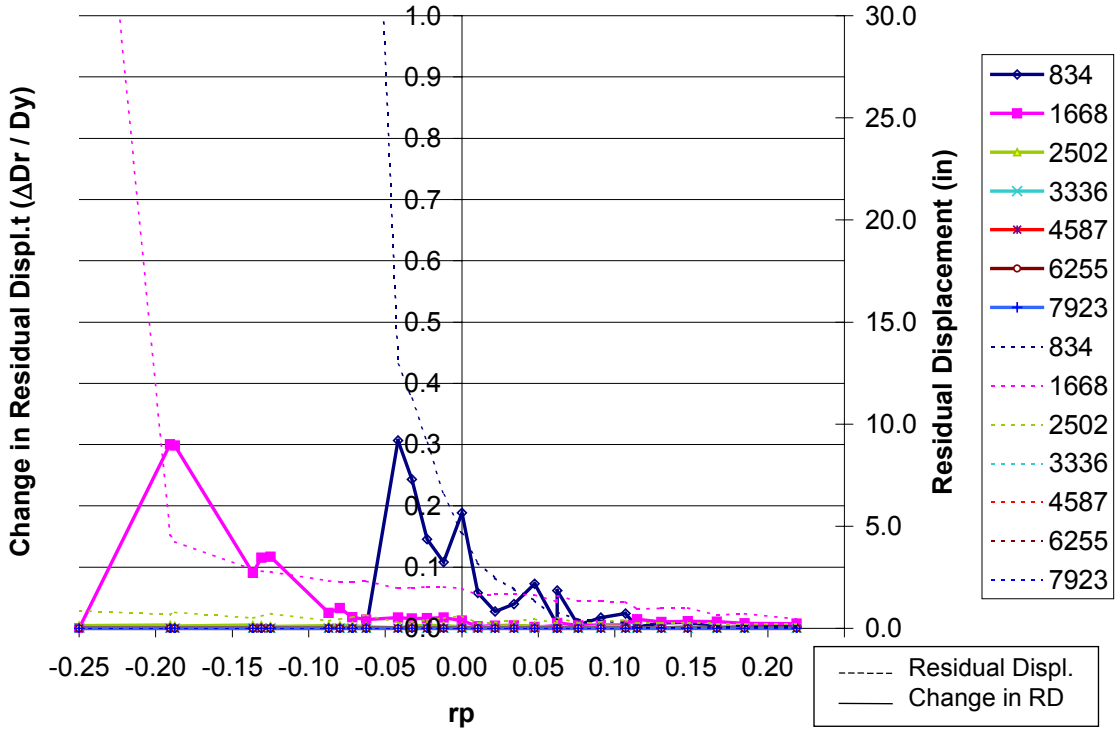


Figure C3.7.2.3b – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

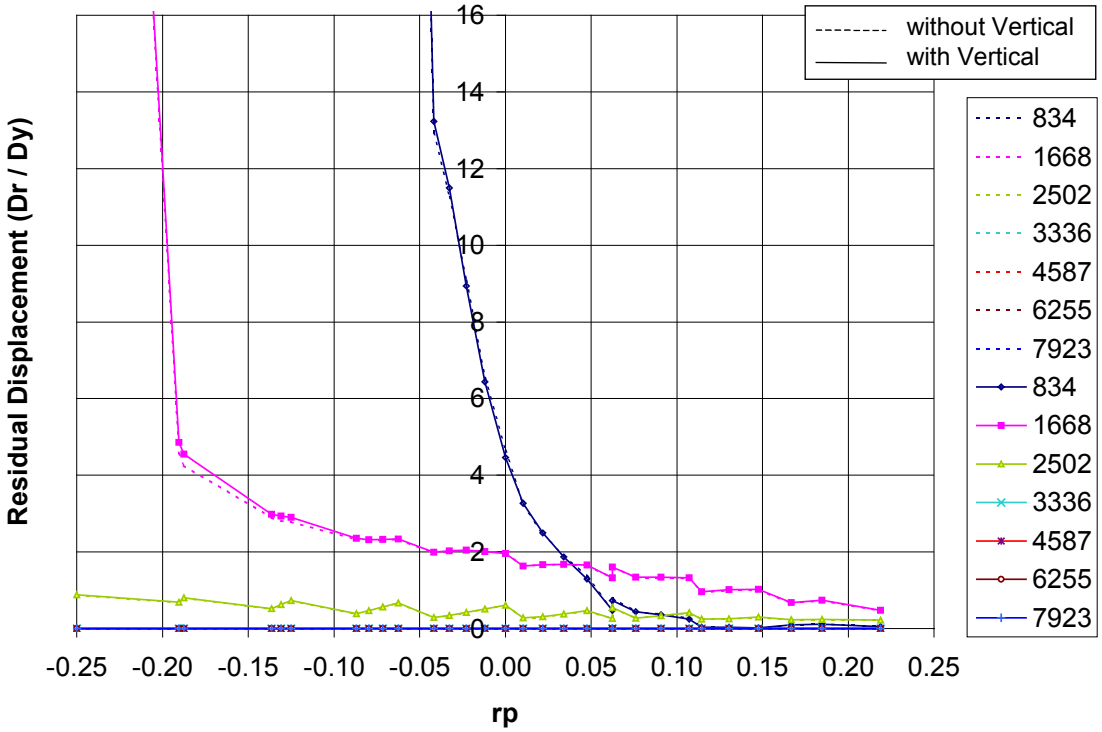


Figure C3.7.2.4a – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

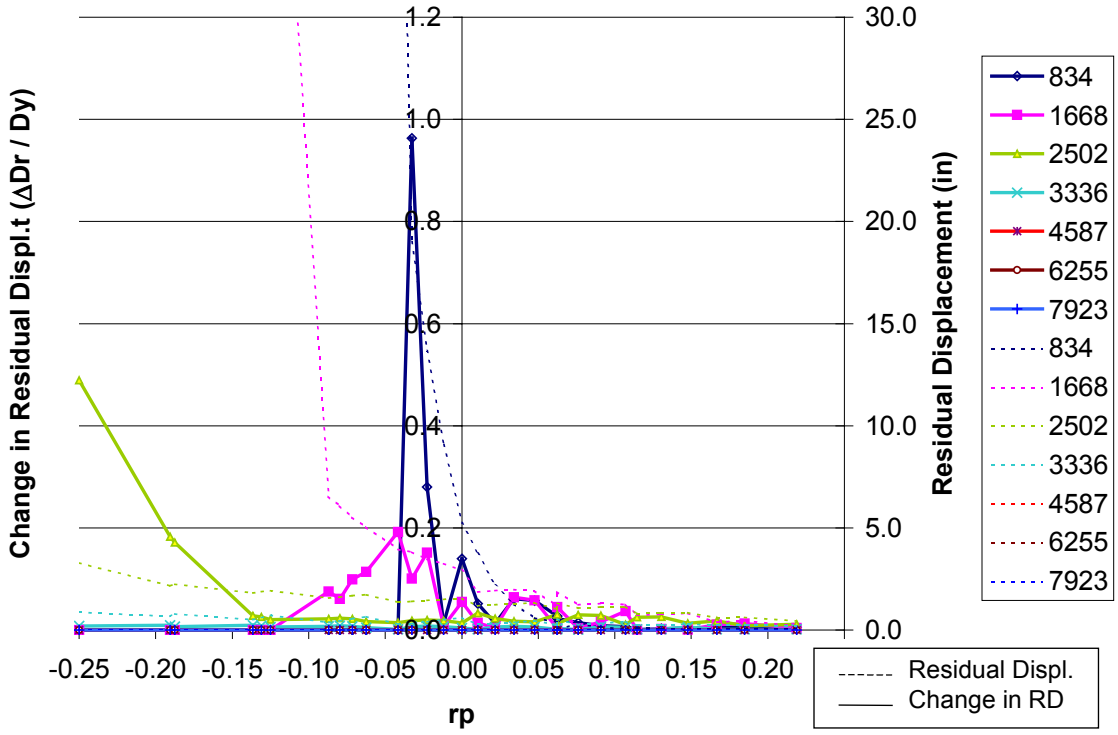


Figure C3.7.2.4b – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

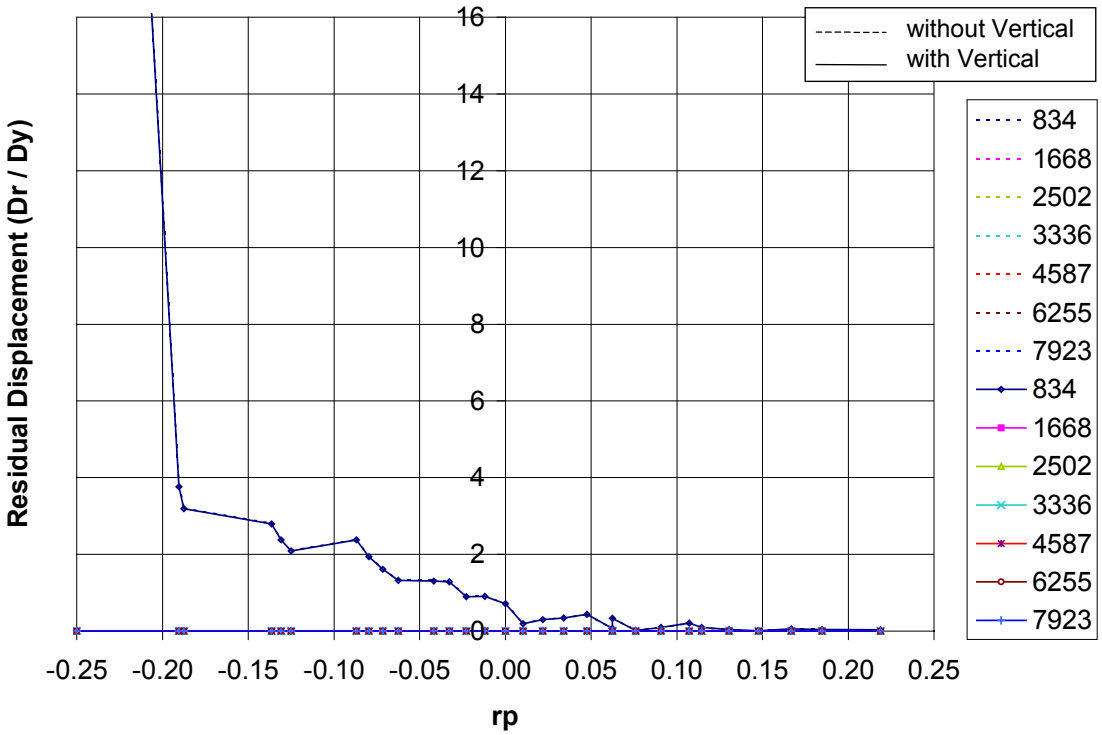


Figure C3.7.3.1a – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

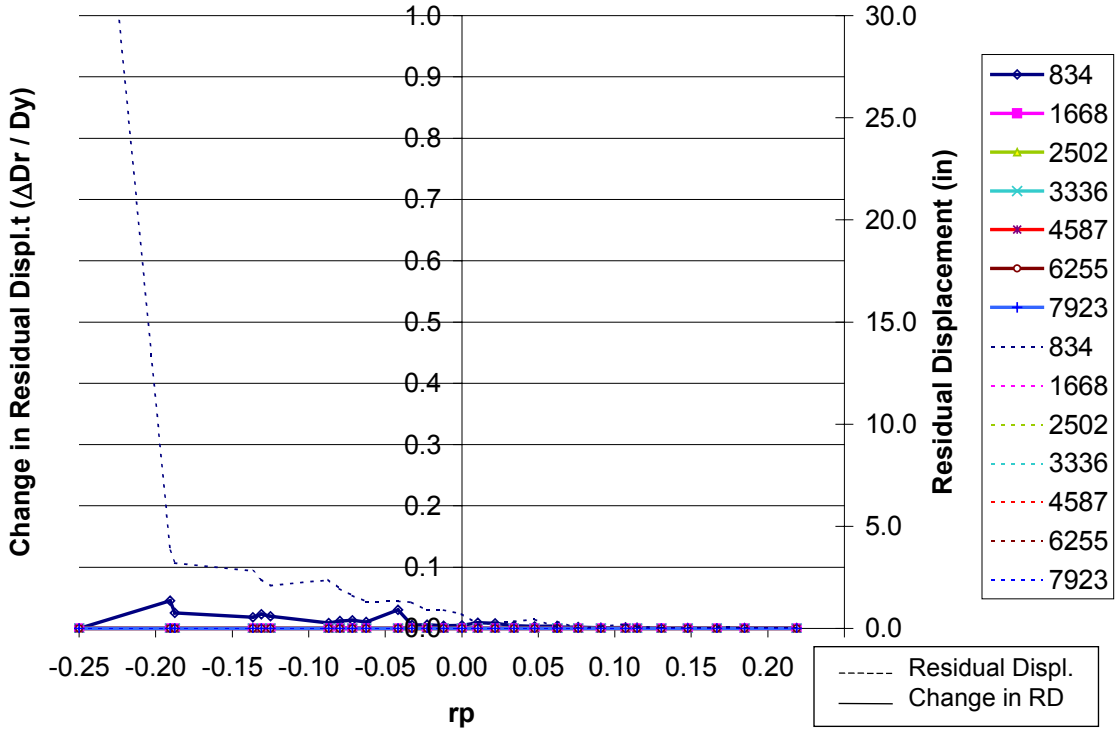


Figure C3.7.3.1b – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

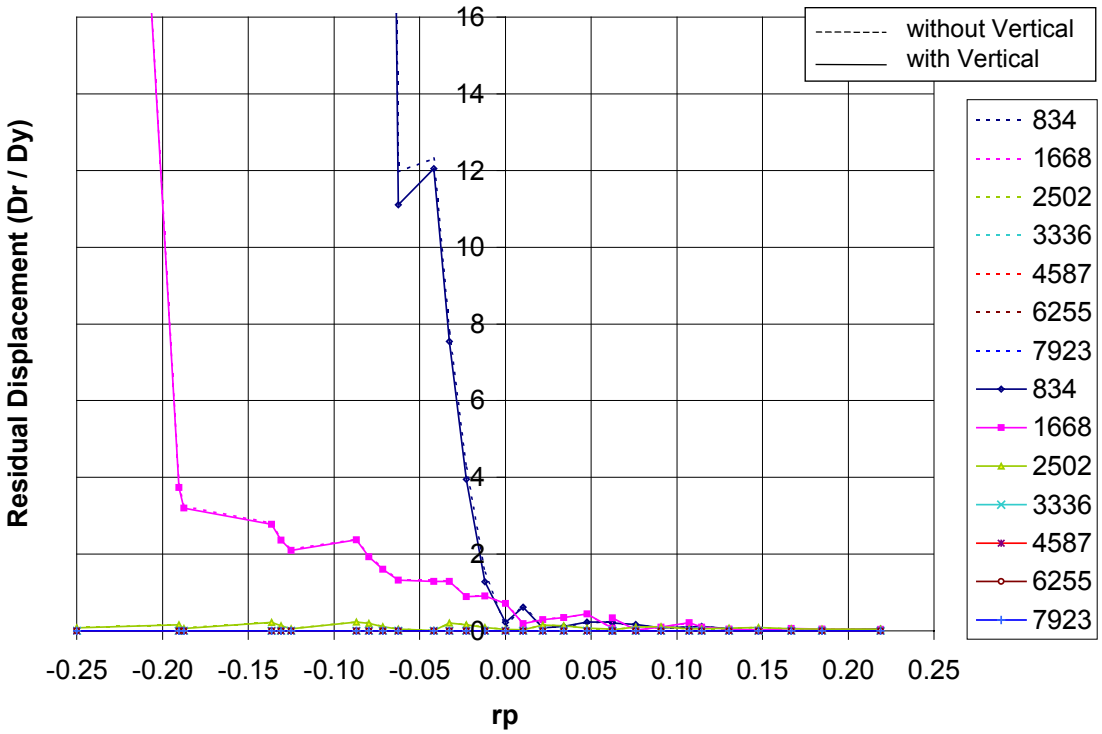


Figure C3.7.3.2a – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

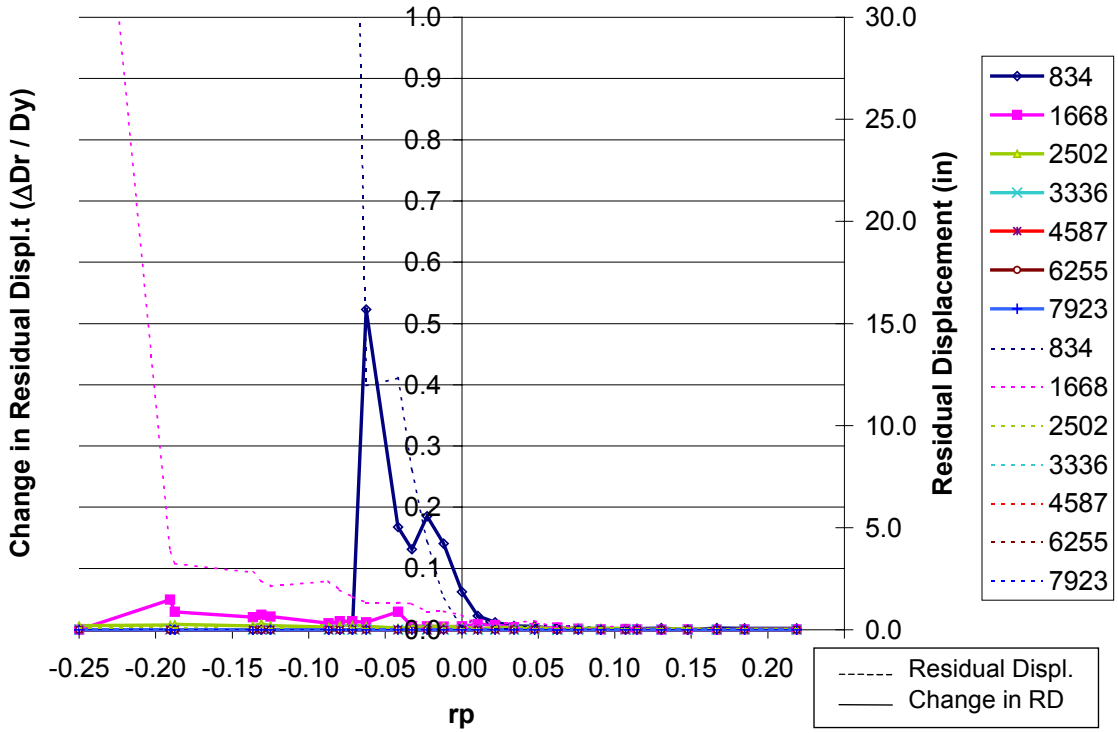


Figure C3.7.3.2b – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

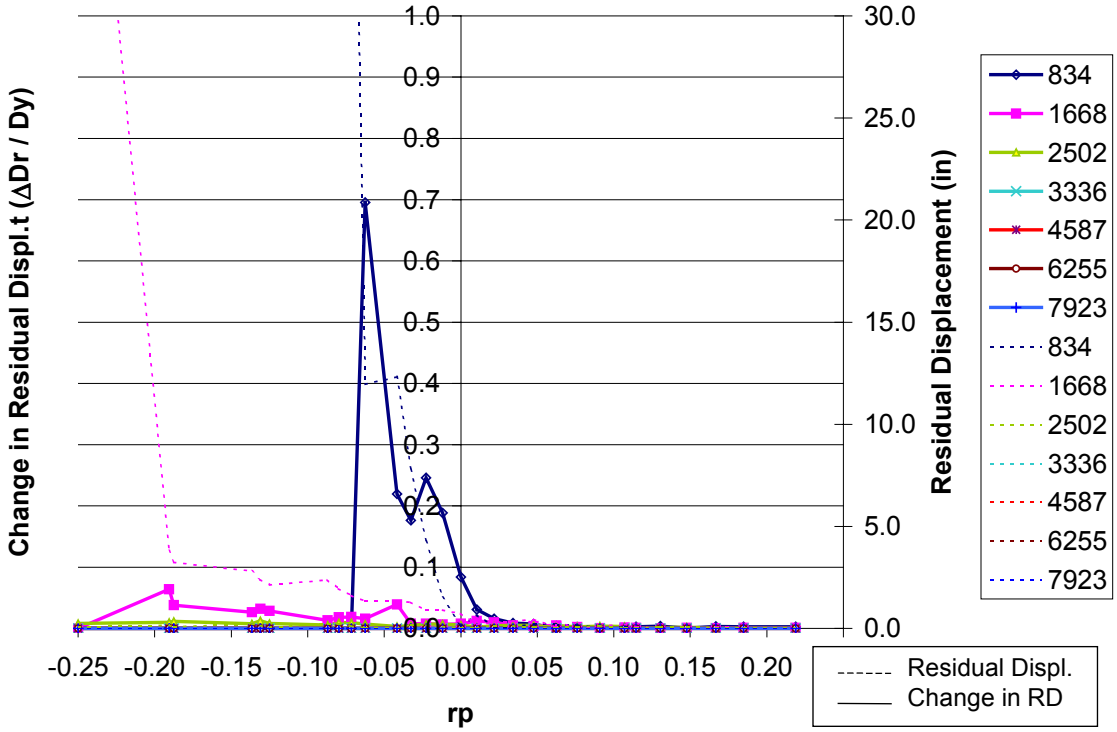


Figure C3.7.3.2c – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

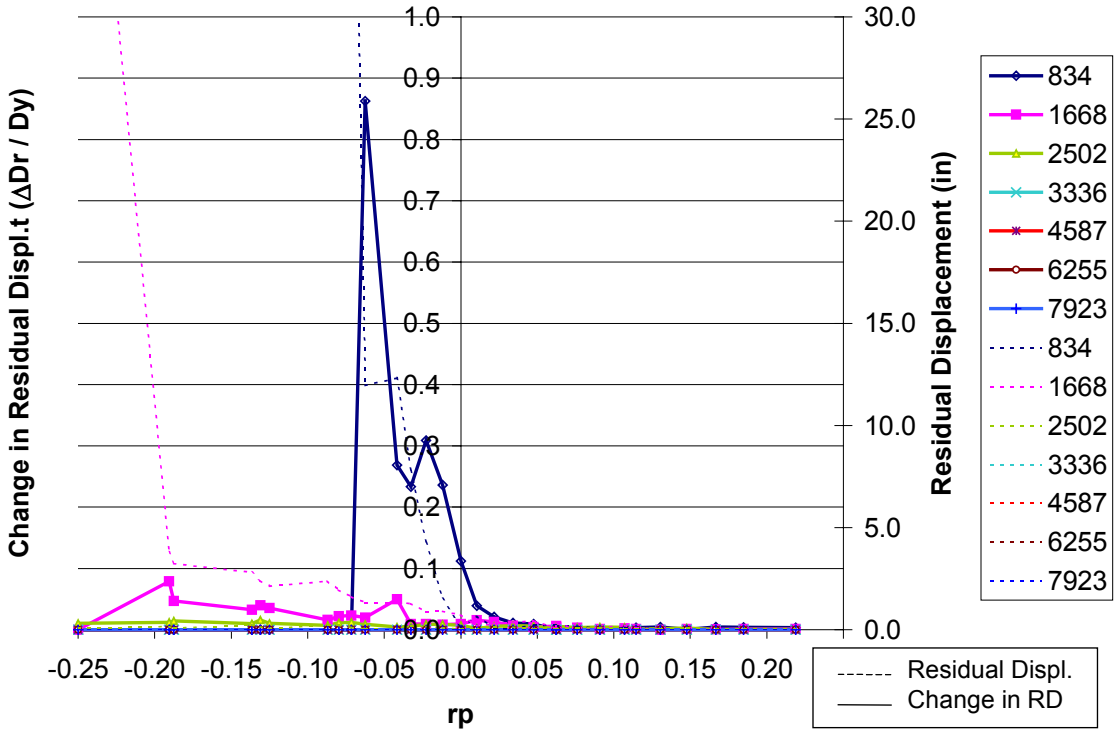


Figure C3.7.3.2d – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

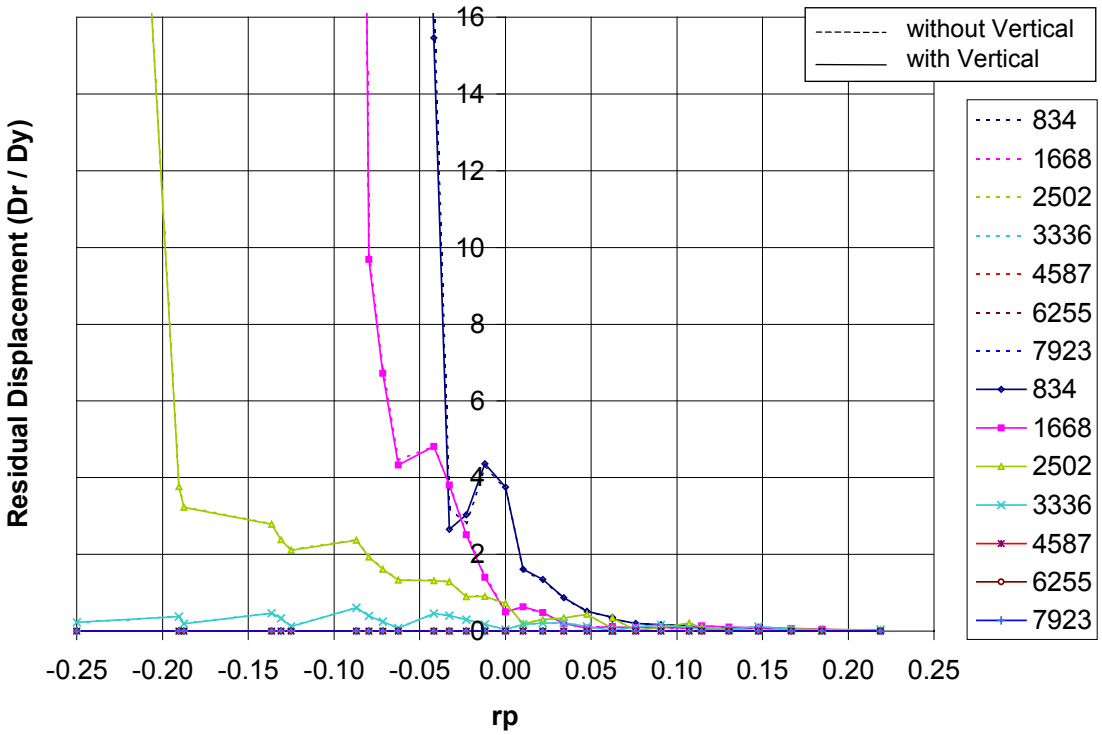


Figure C3.7.3.3a – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

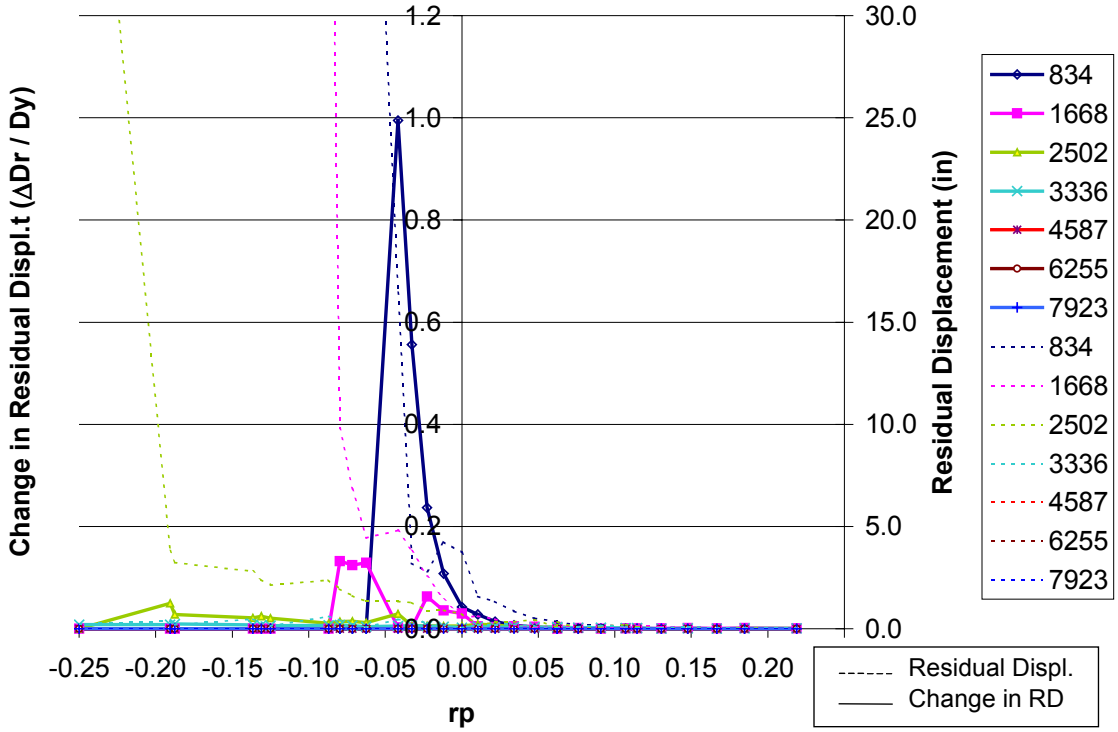


Figure C3.7.3.3b – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

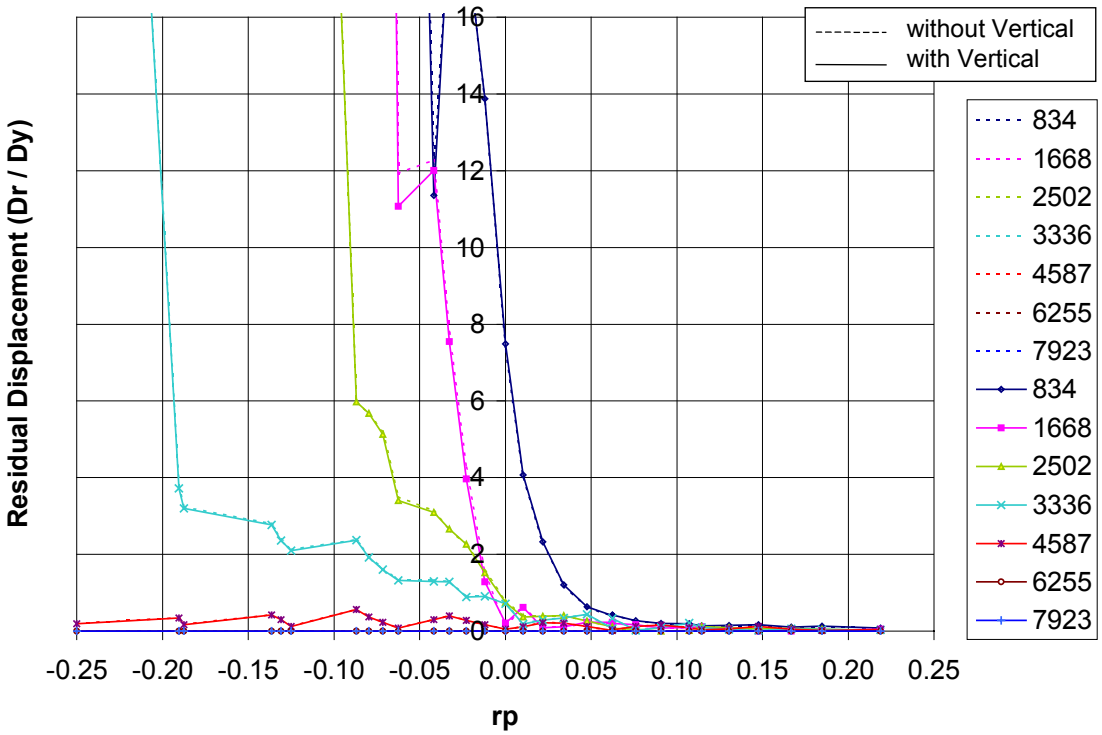


Figure C3.7.3.4a – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

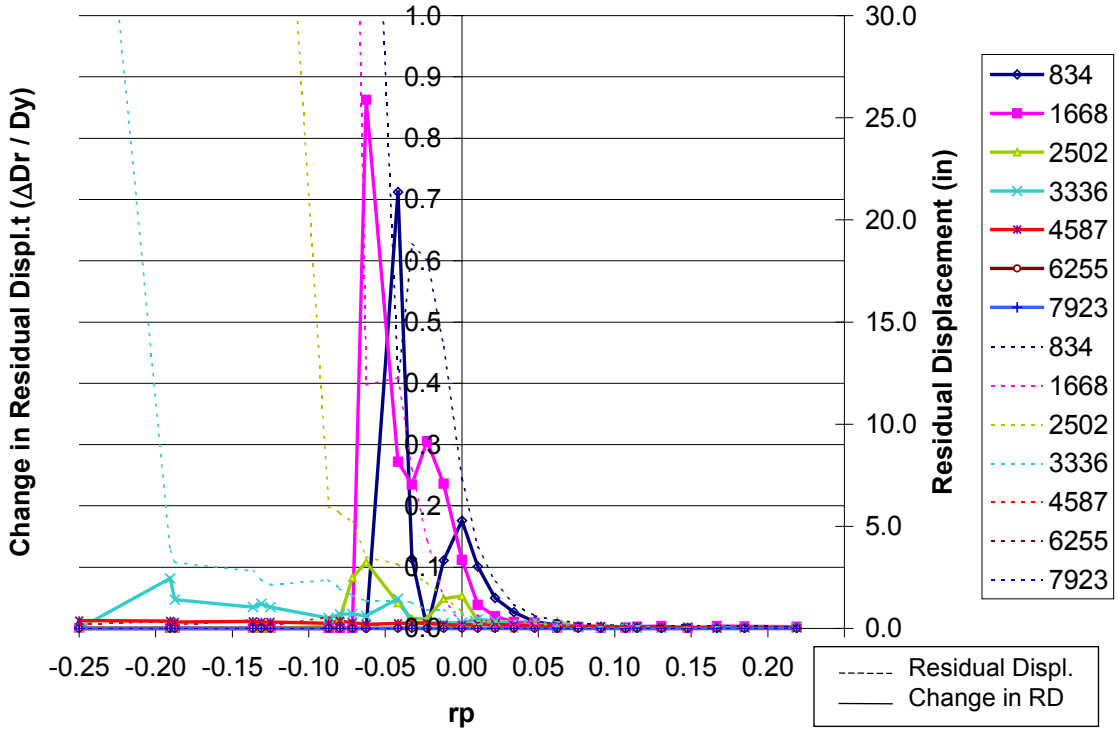


Figure C3.7.3.4b – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

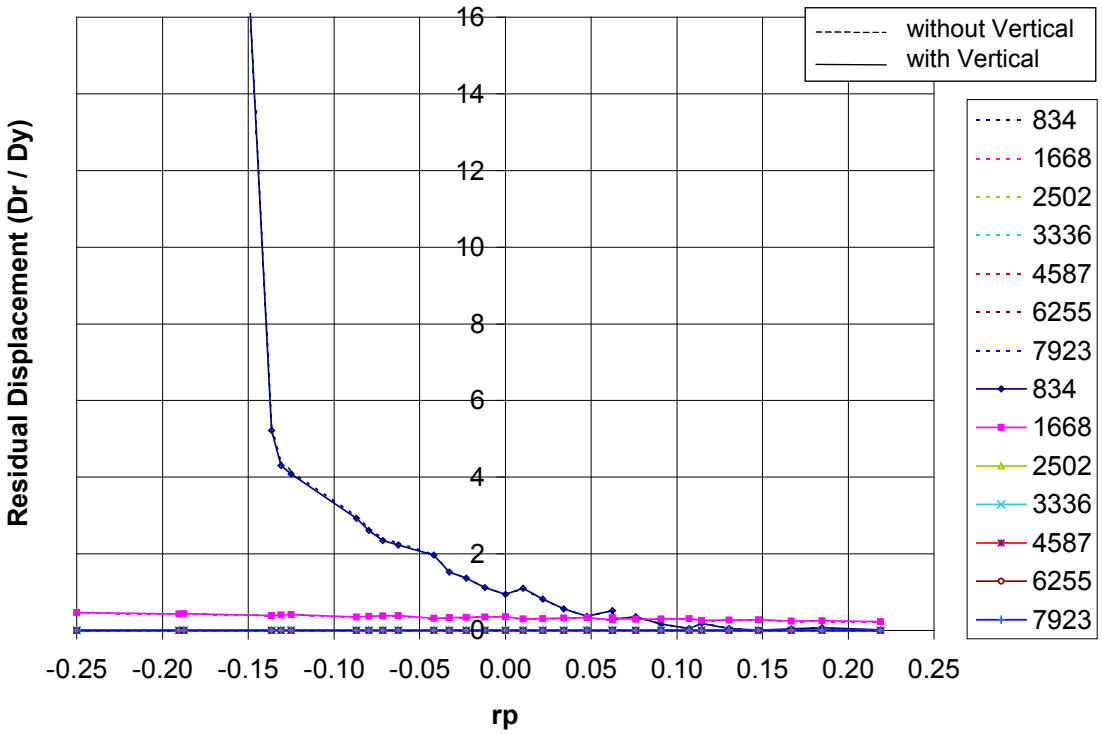


Figure C3.7.4.1a – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

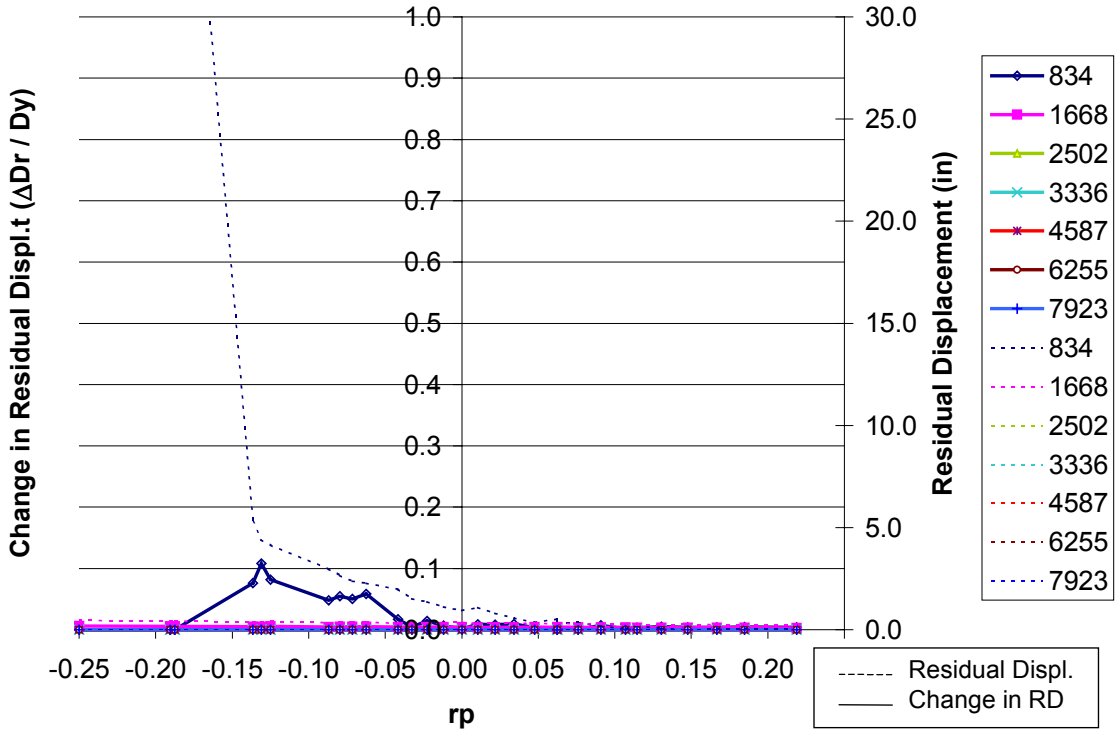


Figure C3.7.4.1b – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

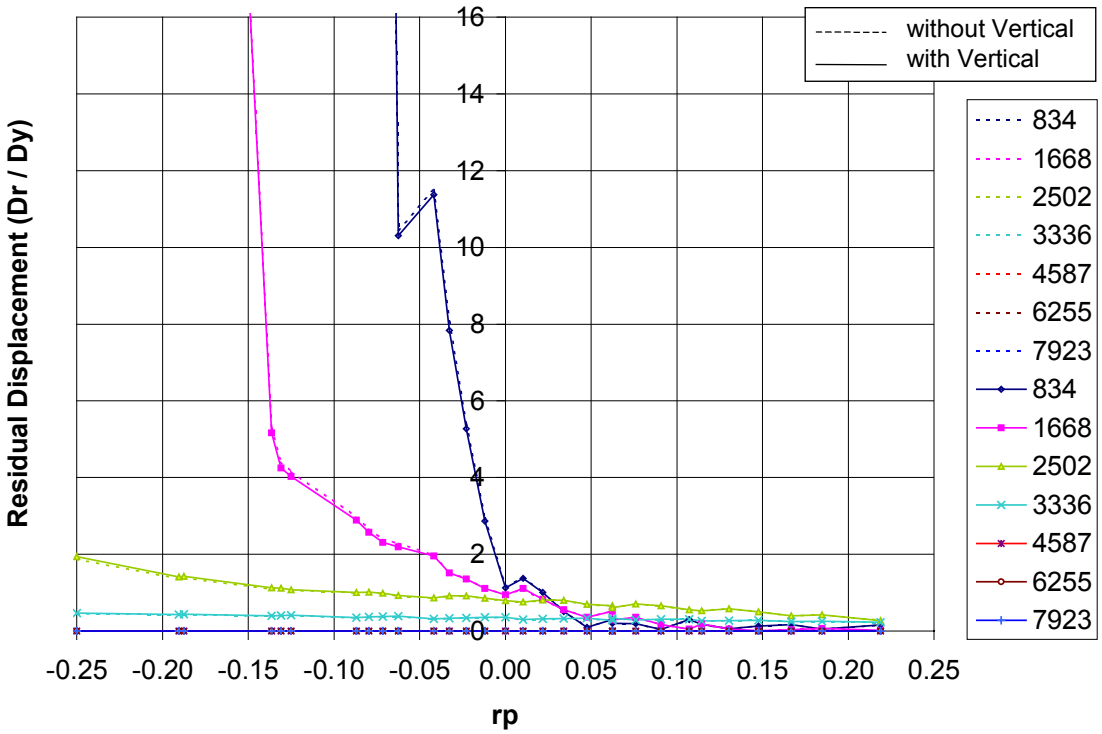


Figure C3.7.4.2a – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

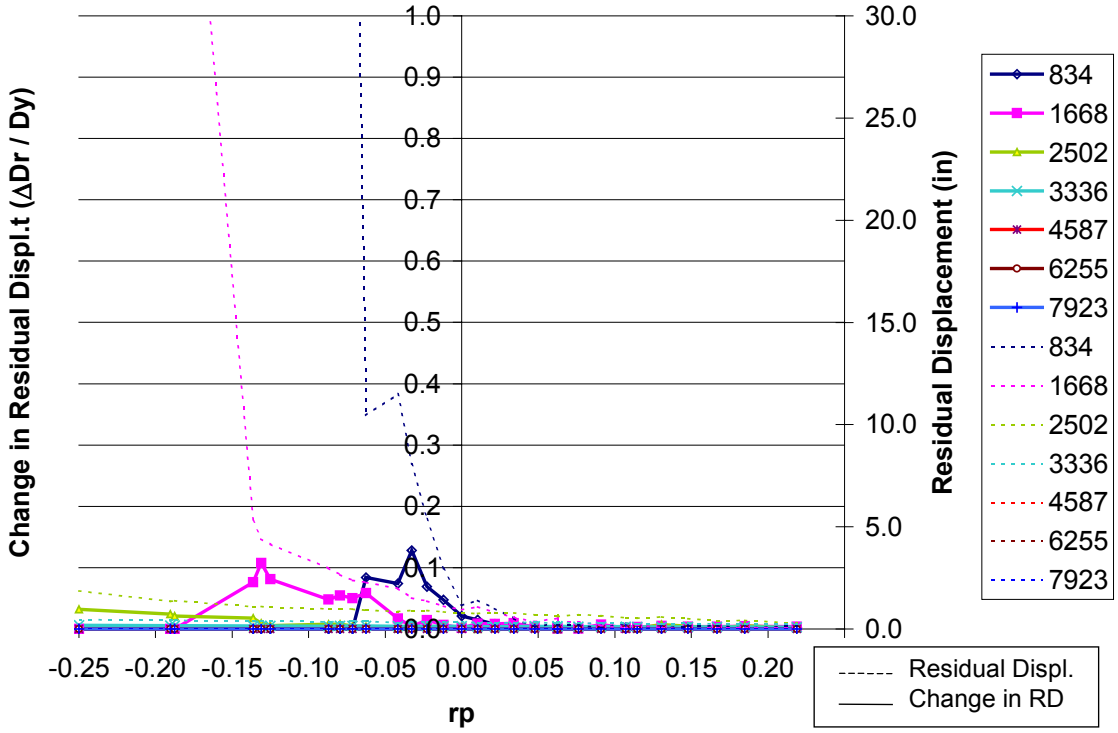


Figure C3.7.4.2b – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

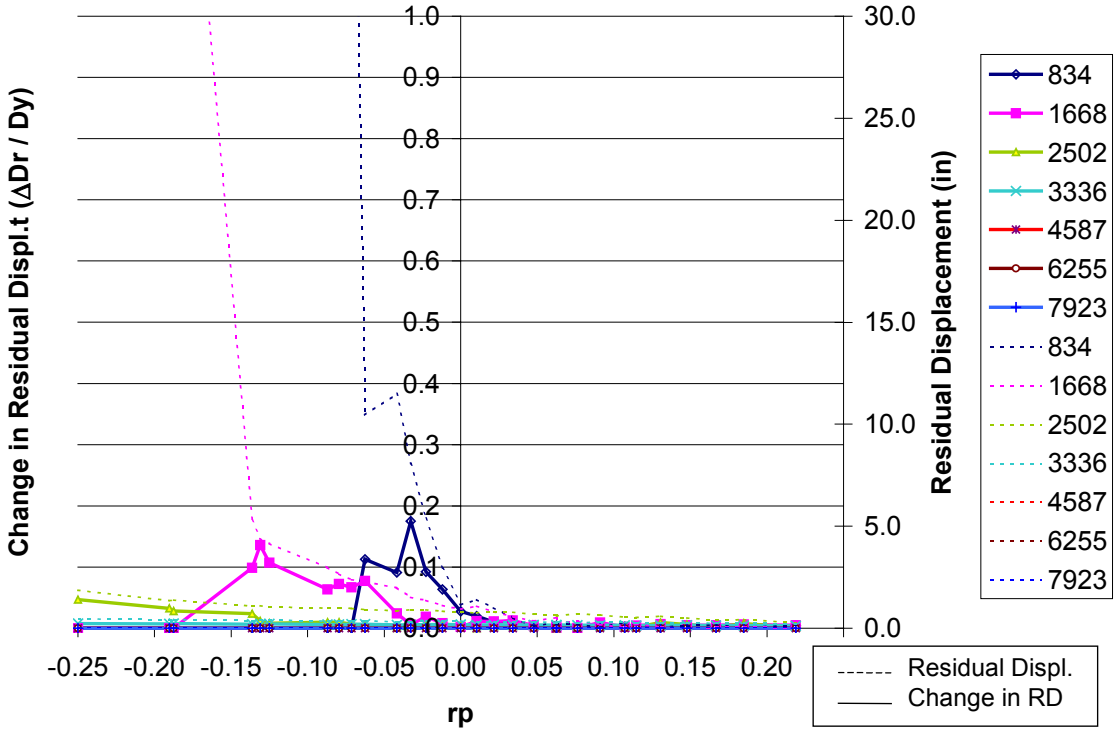


Figure C3.7.4.2c – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

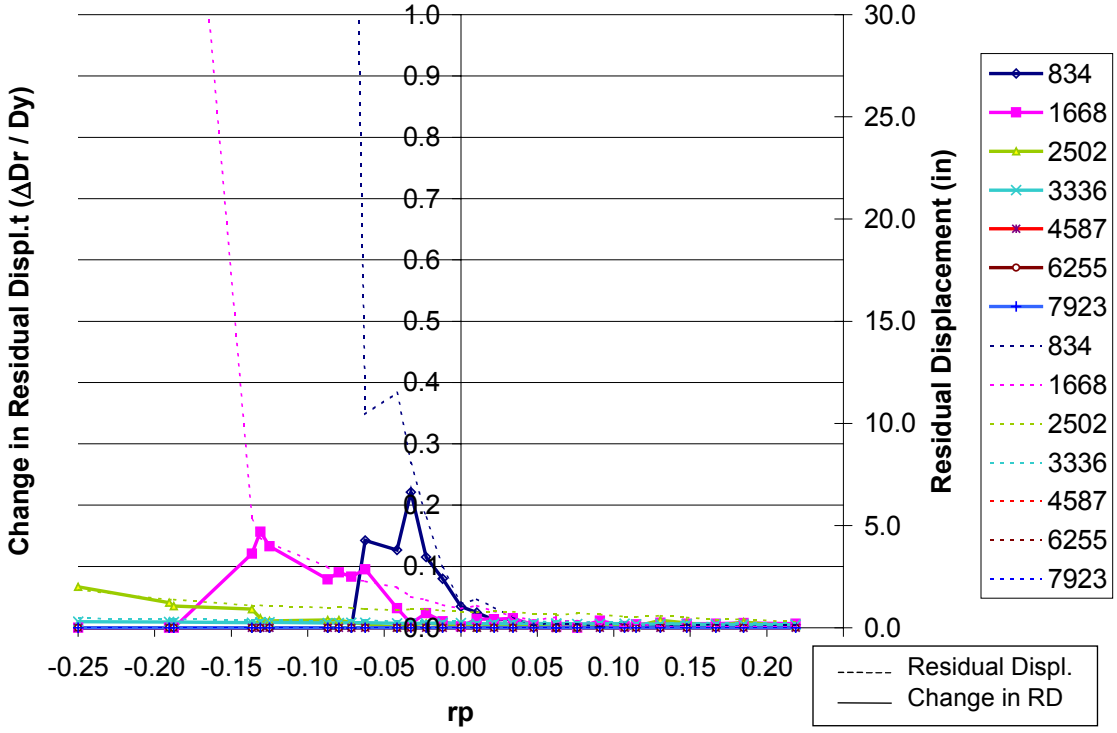


Figure C3.7.4.2d – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

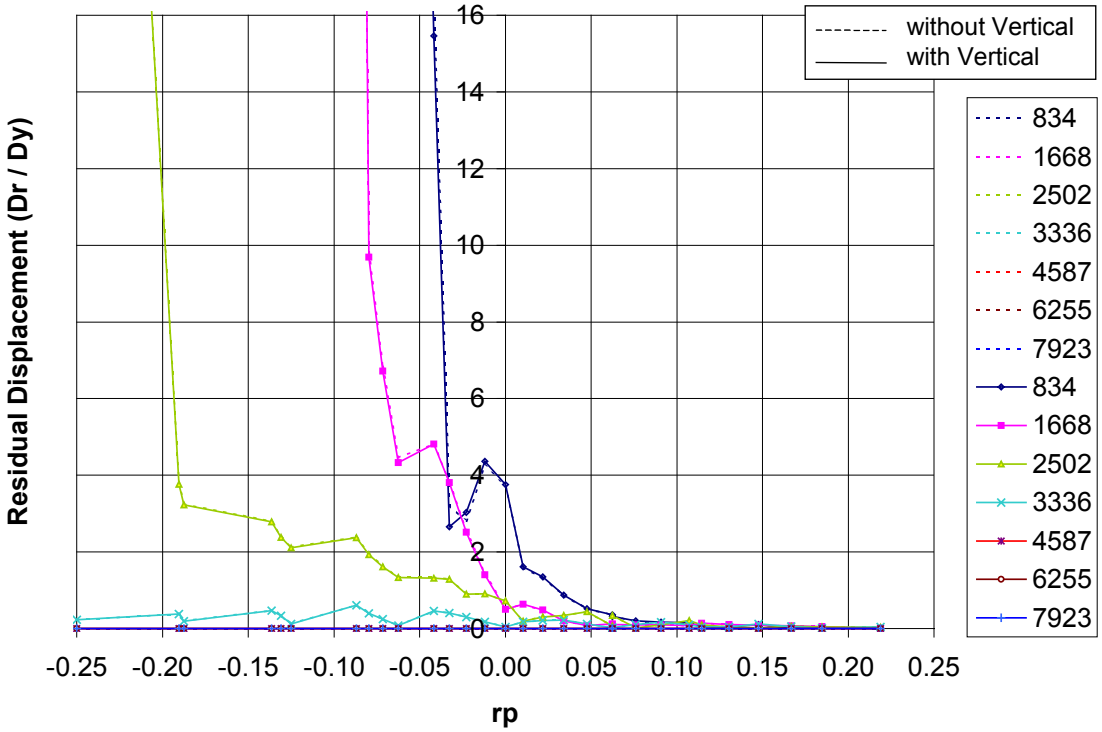


Figure C3.7.4.3a – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

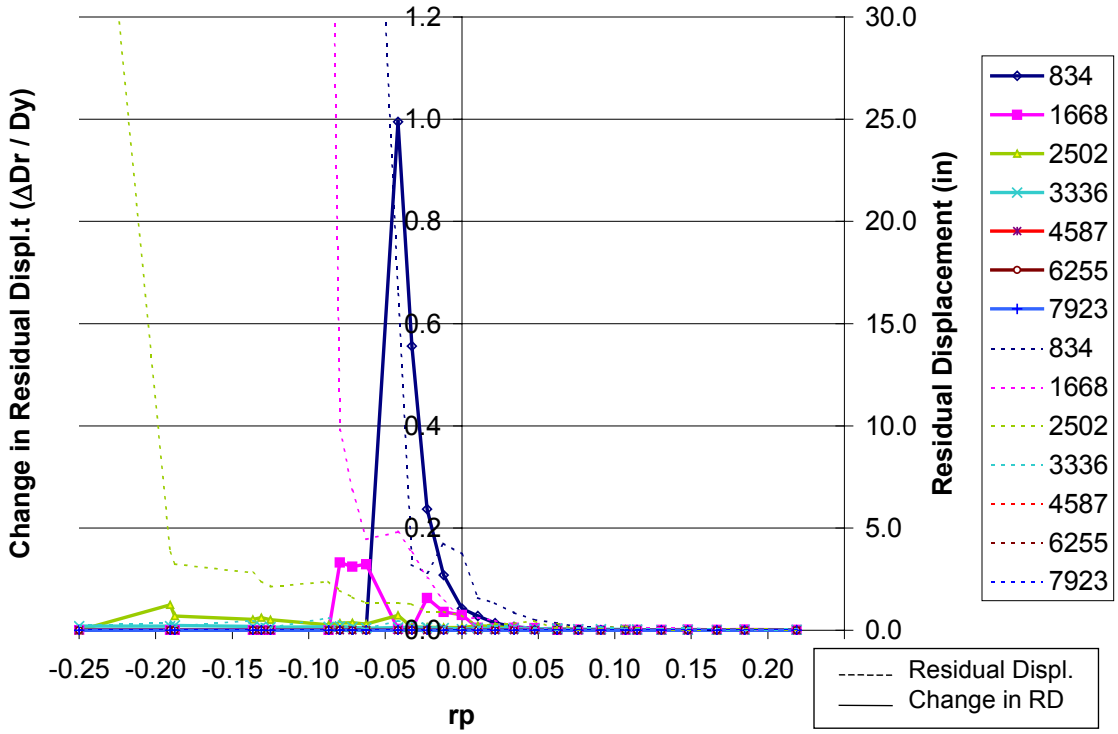


Figure C3.7.4.3b – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

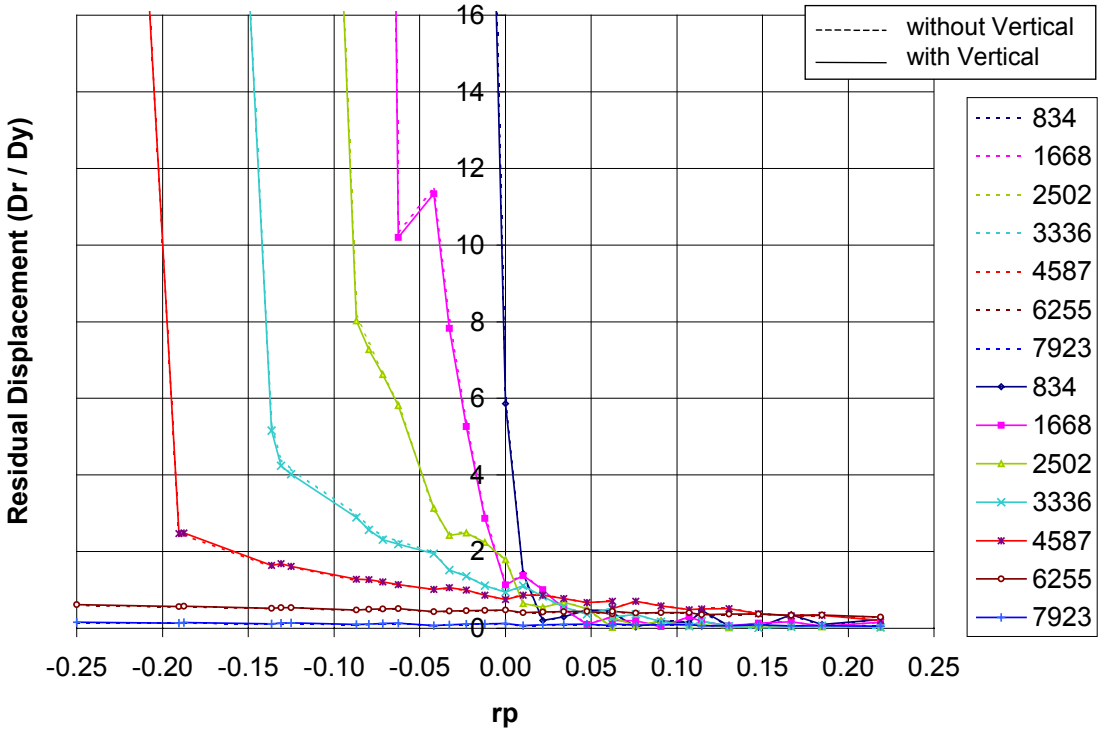


Figure C3.7.4.4a – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

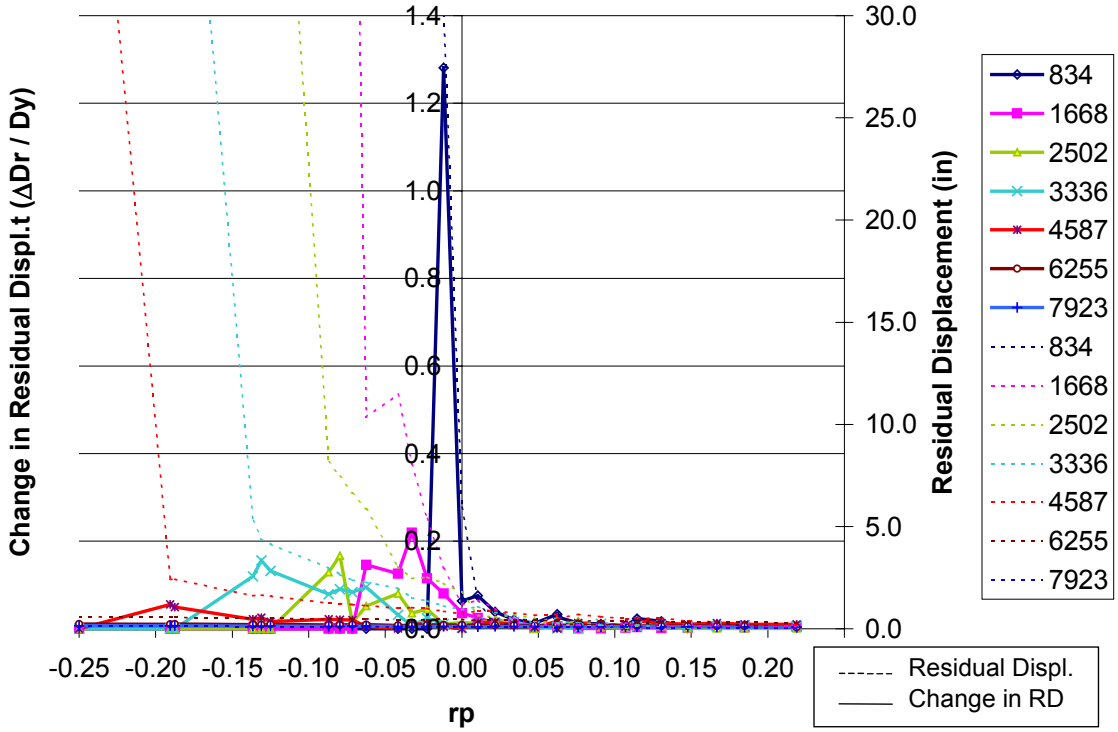


Figure C3.7.4.4b – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

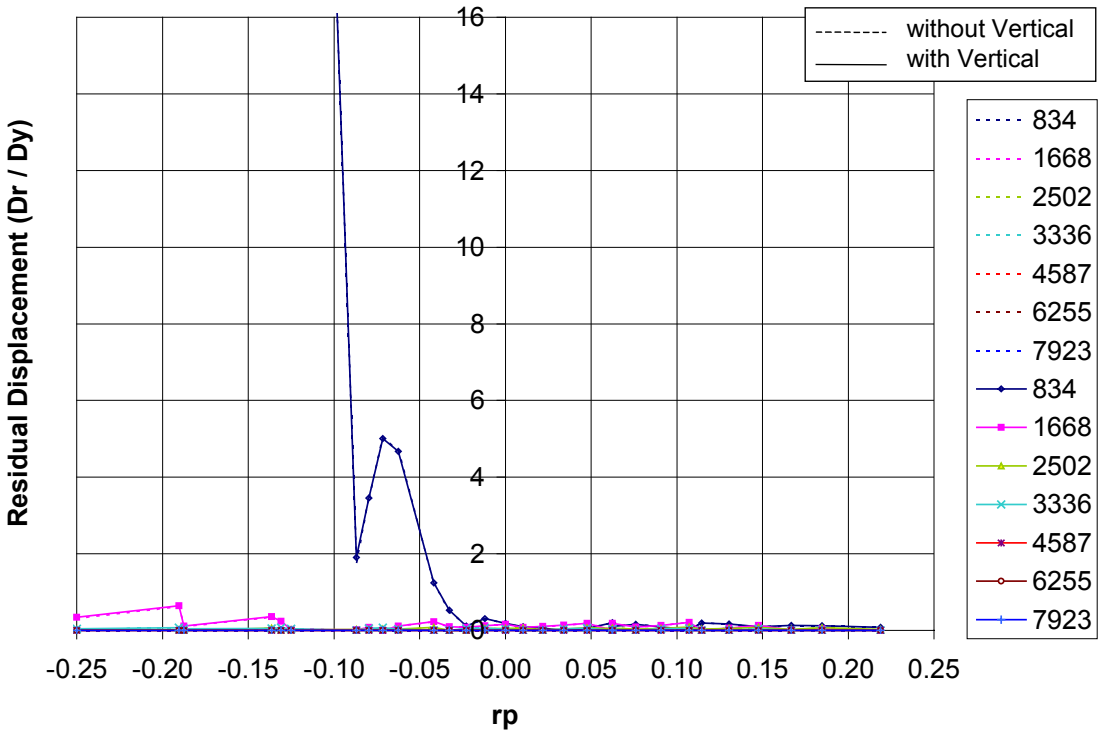


Figure C3.7.5.1a – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

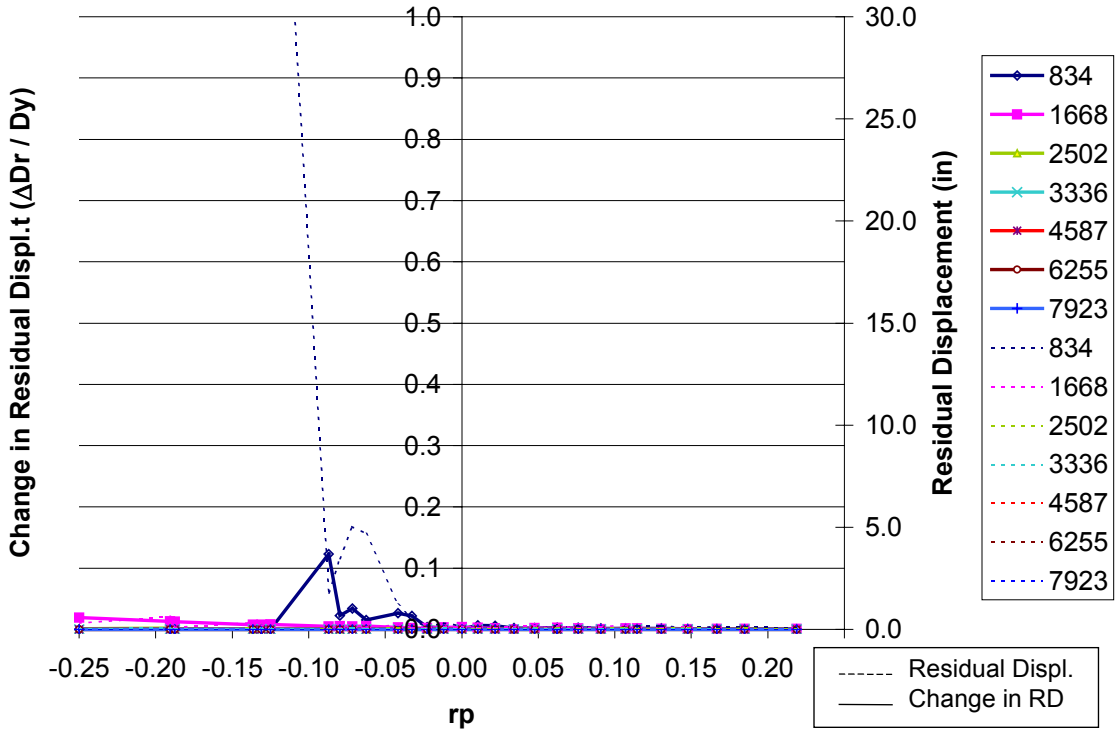


Figure C3.7.5.1b – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

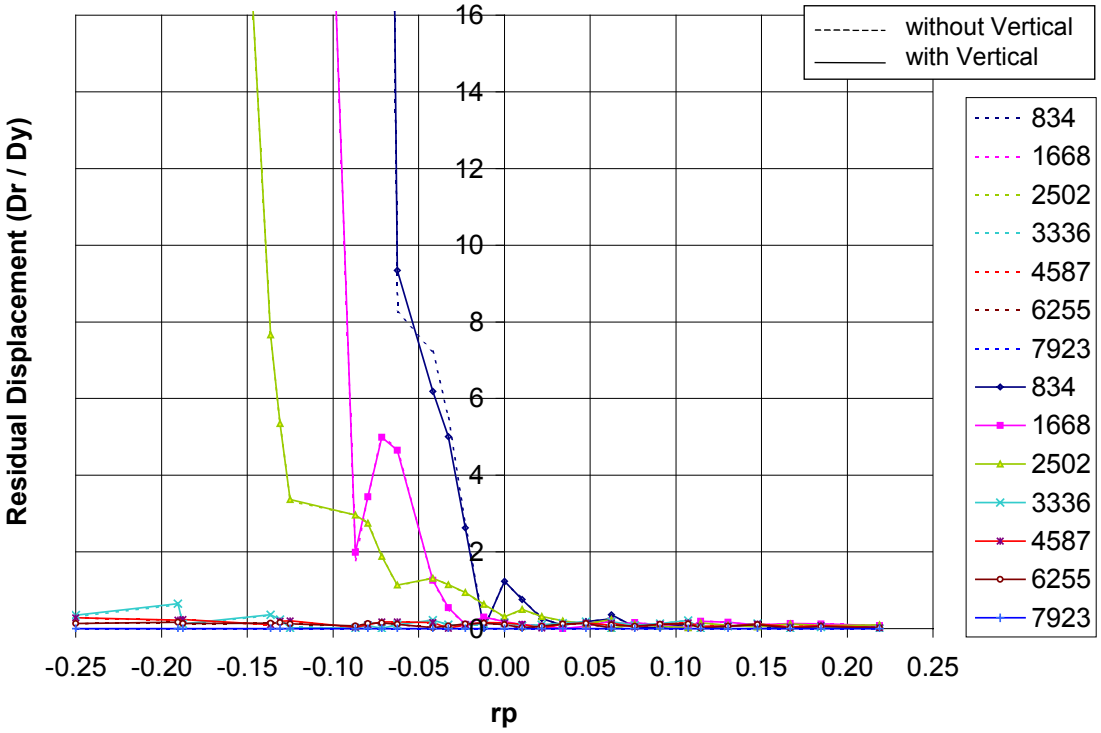


Figure C3.7.5.2a – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

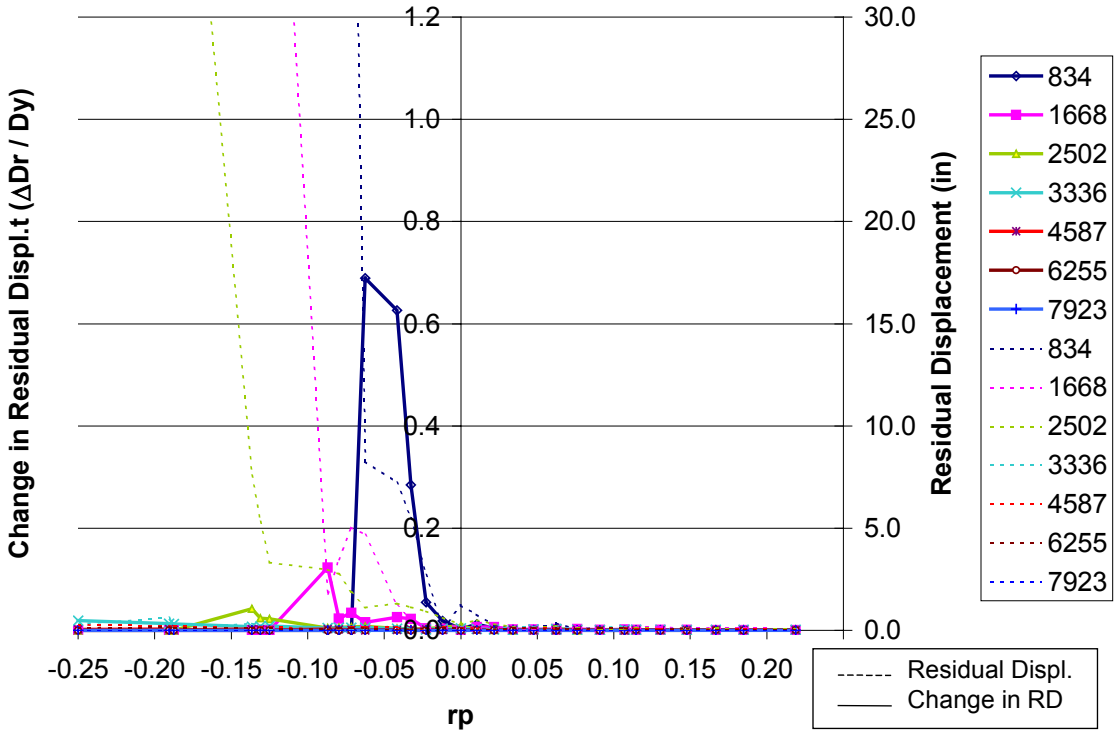


Figure C3.7.5.2b – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

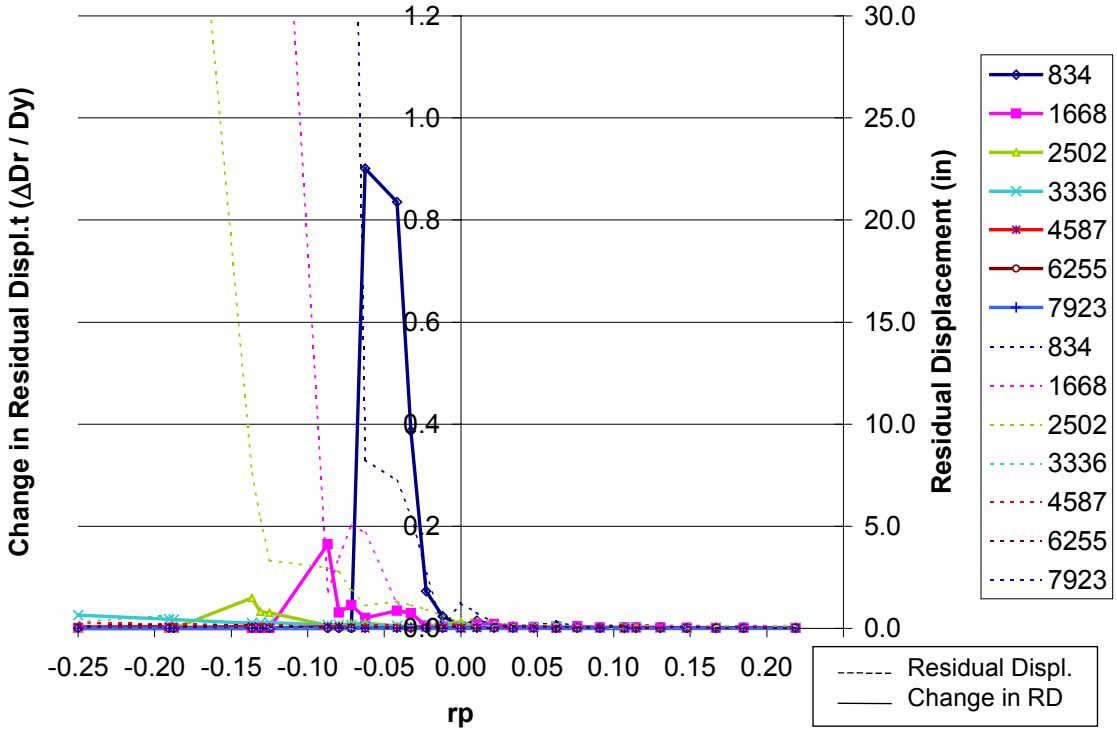


Figure C3.7.5.2c – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

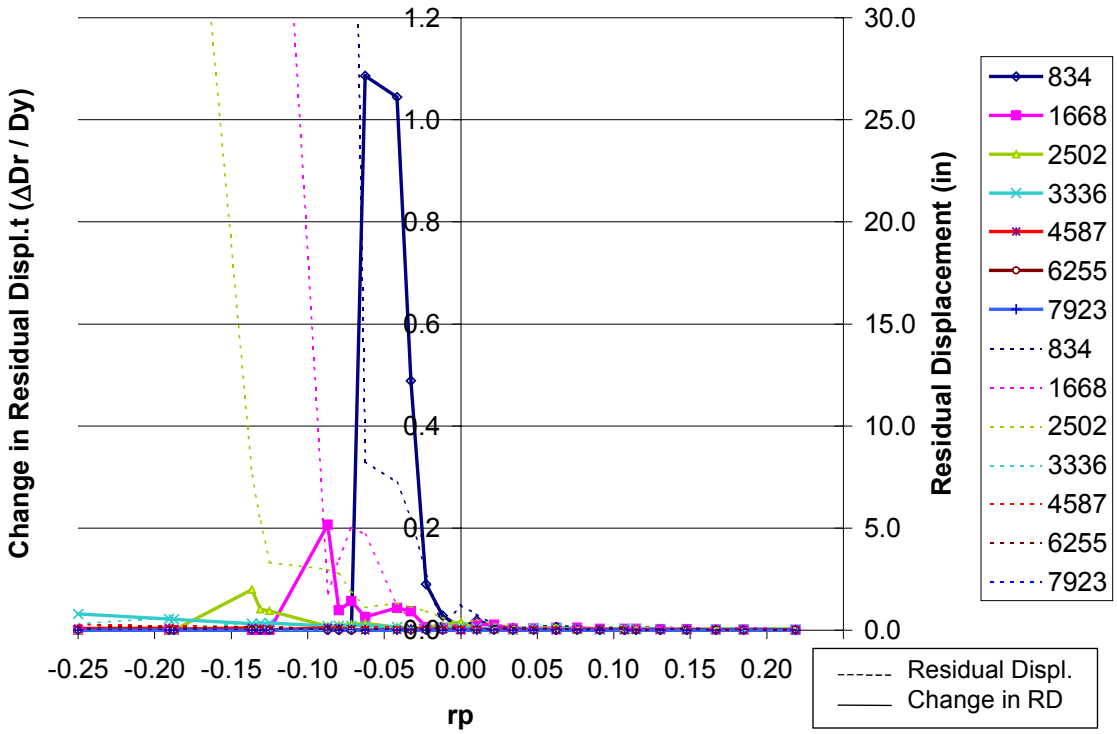


Figure C3.7.5.2d – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

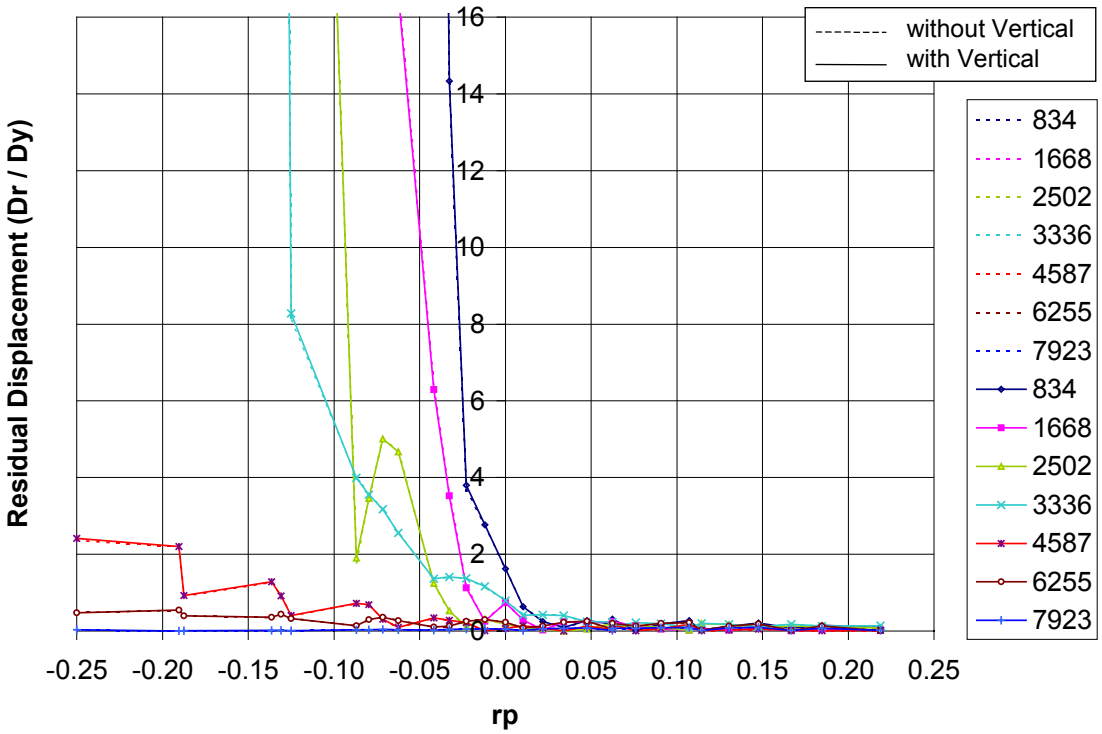


Figure C3.7.5.3a – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

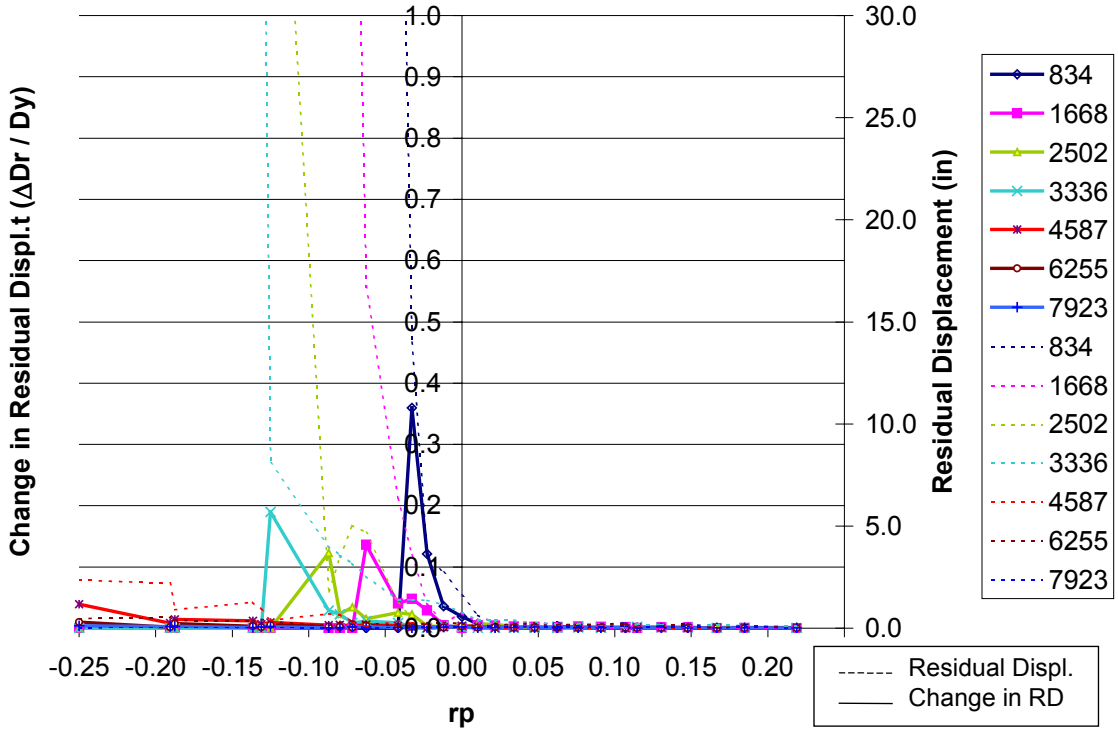


Figure C3.7.5.3b – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

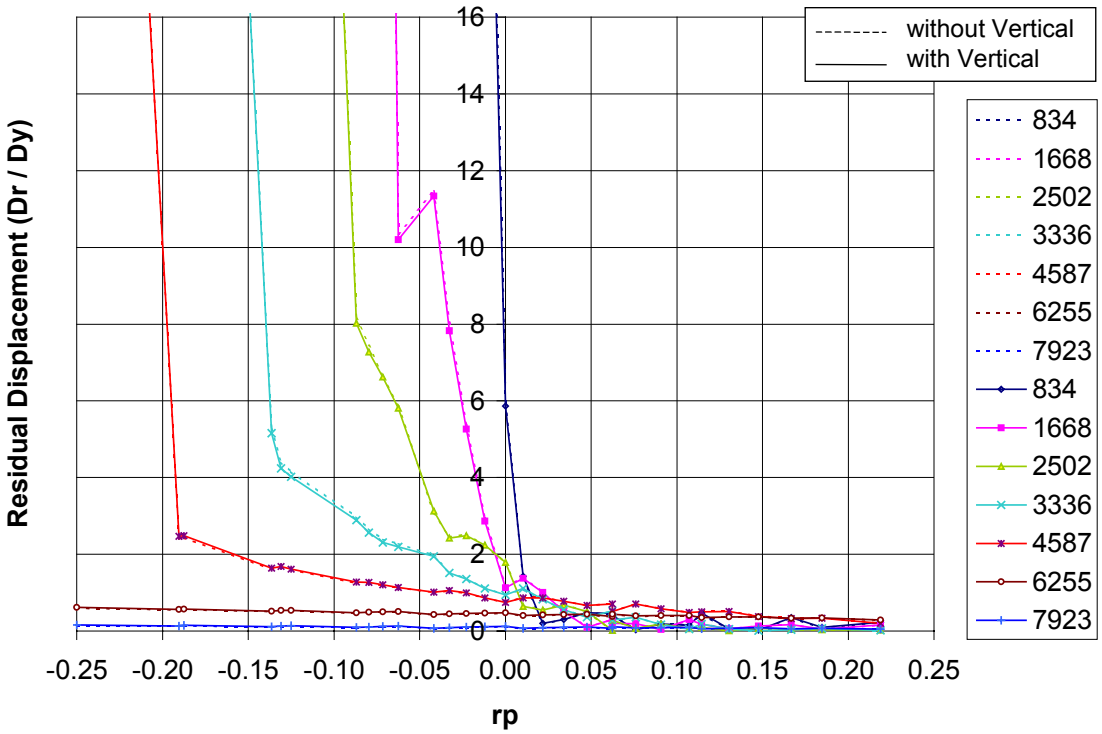


Figure C3.7.5.4a – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

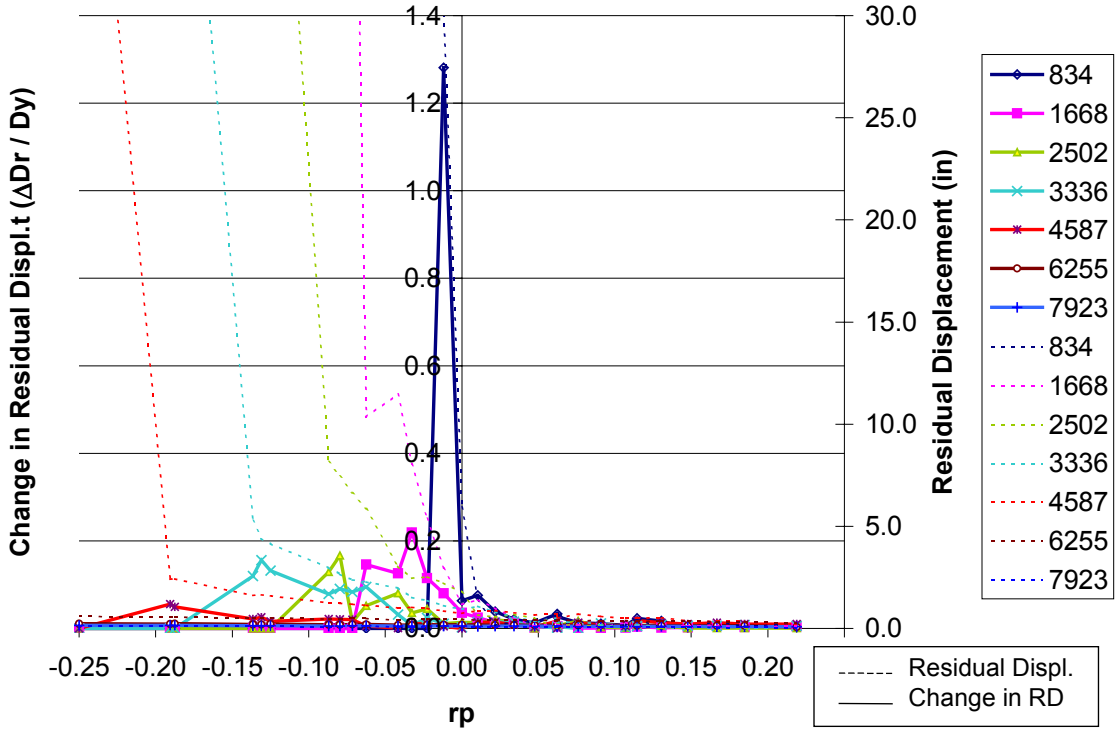


Figure C3.7.5.4b – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

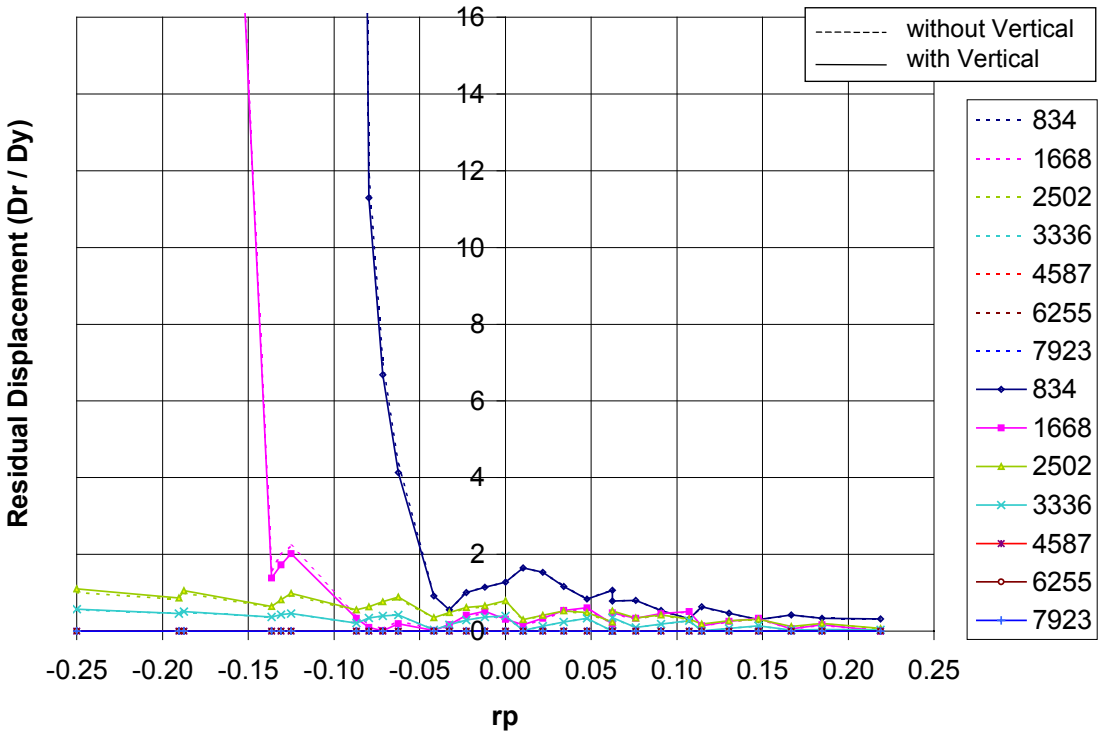


Figure C3.7.6.1a – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

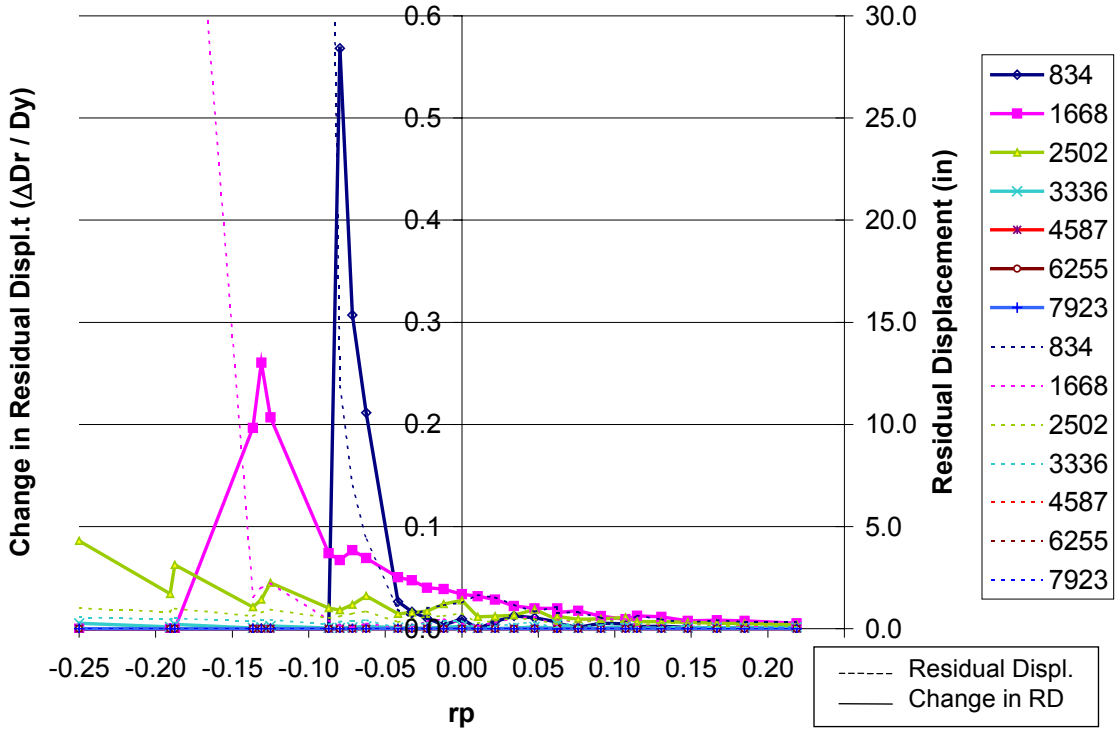


Figure C3.7.6.1b – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

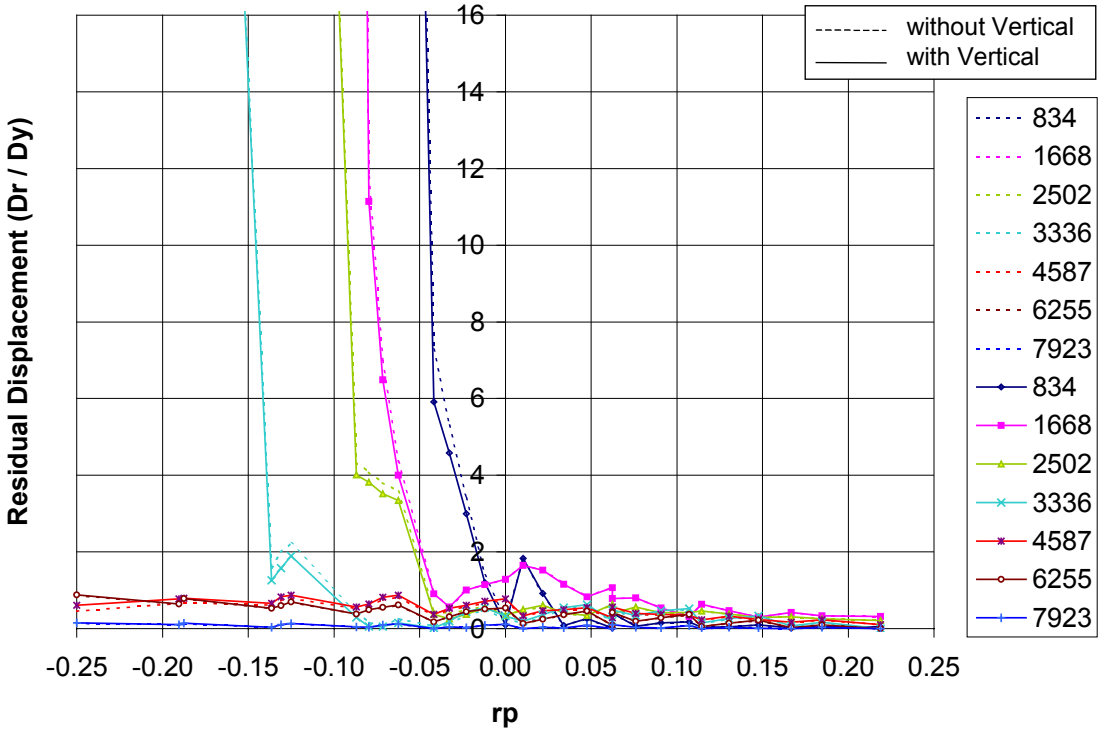


Figure C3.7.6.2a – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

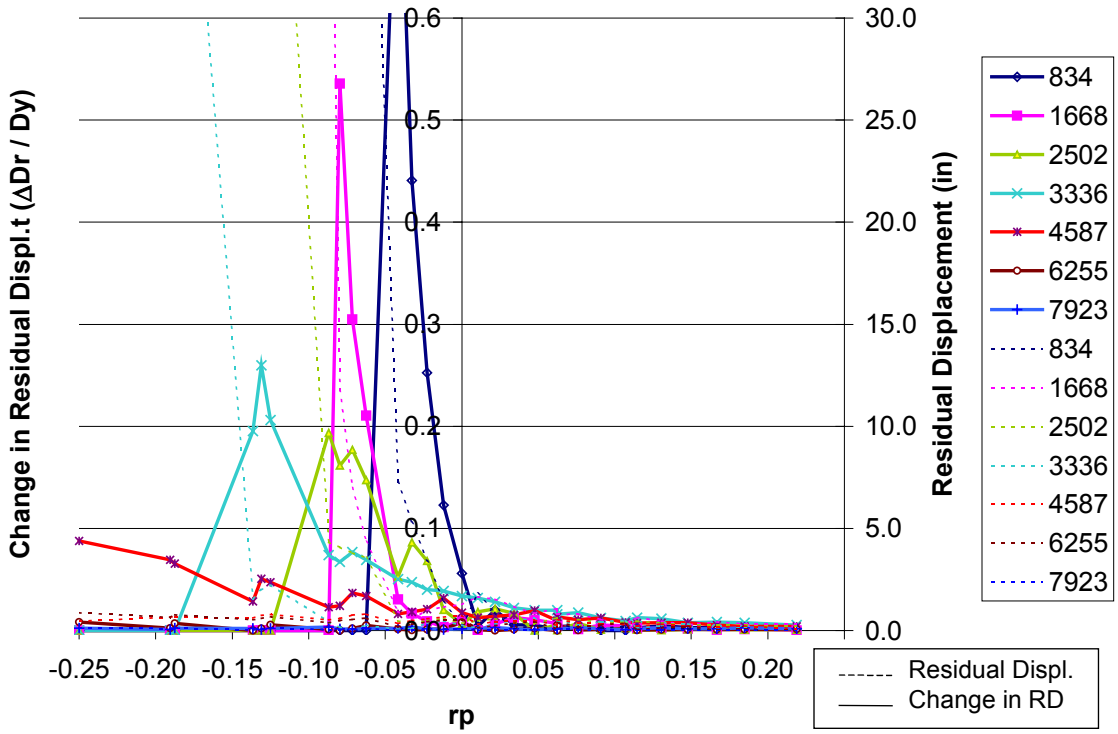


Figure C3.7.6.2b – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

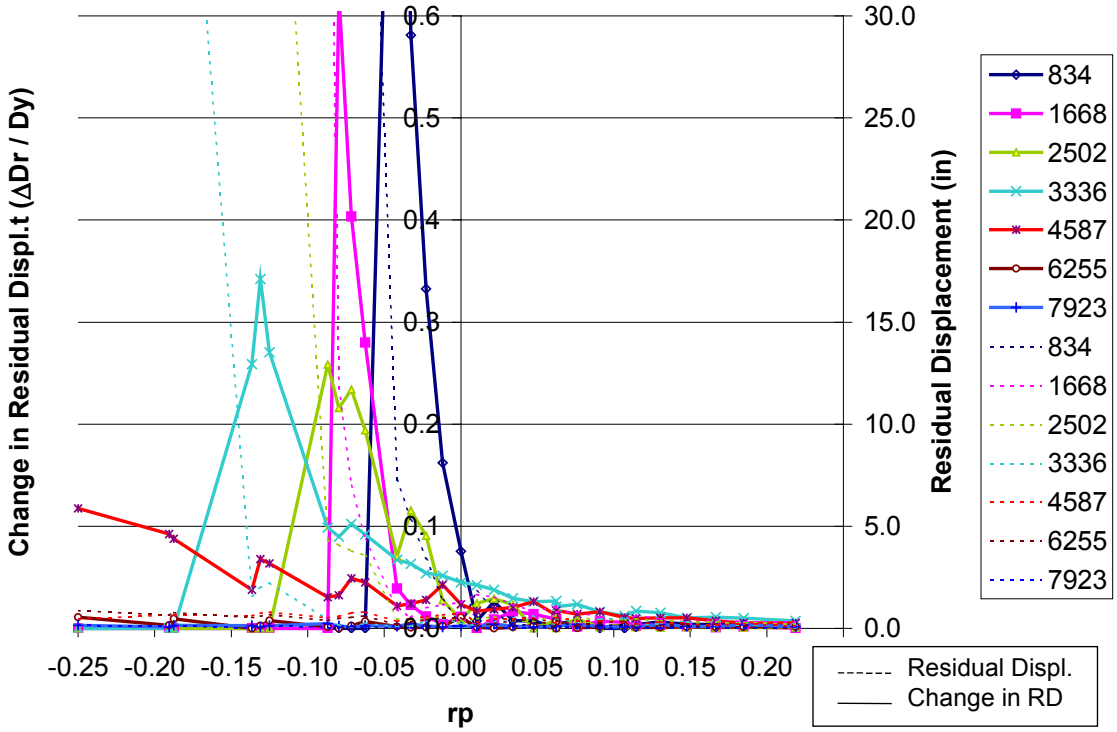


Figure C3.7.6.2c – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

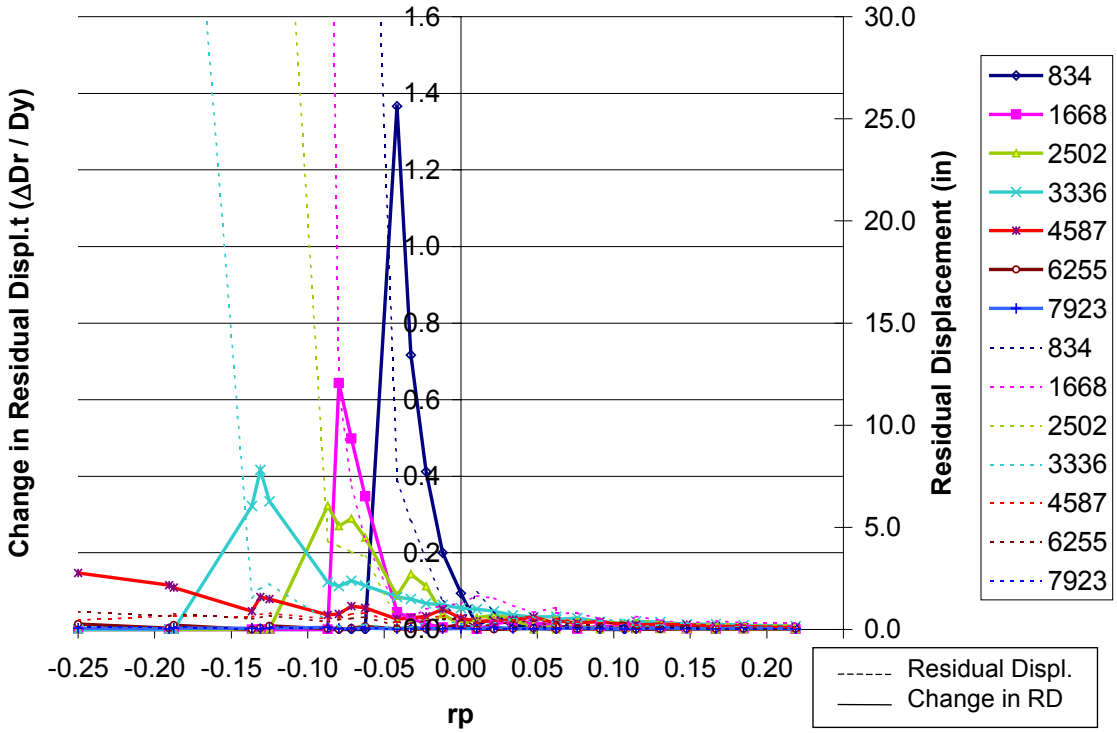


Figure C3.7.6.2d – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

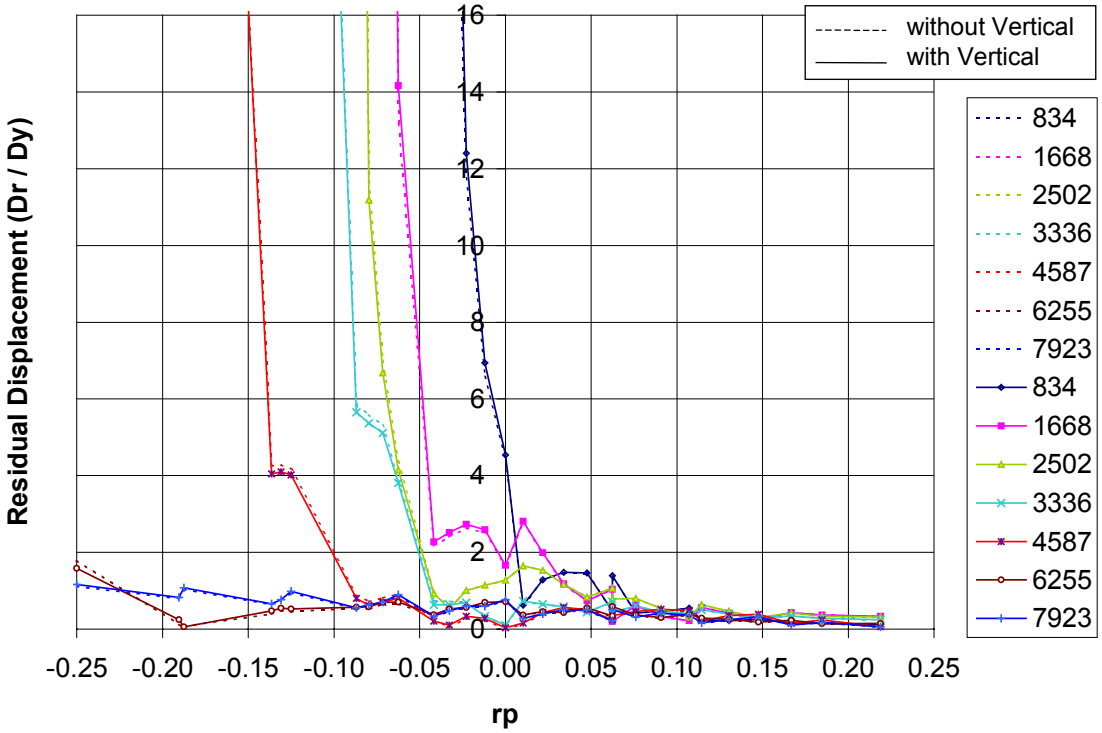


Figure C3.7.6.3a – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

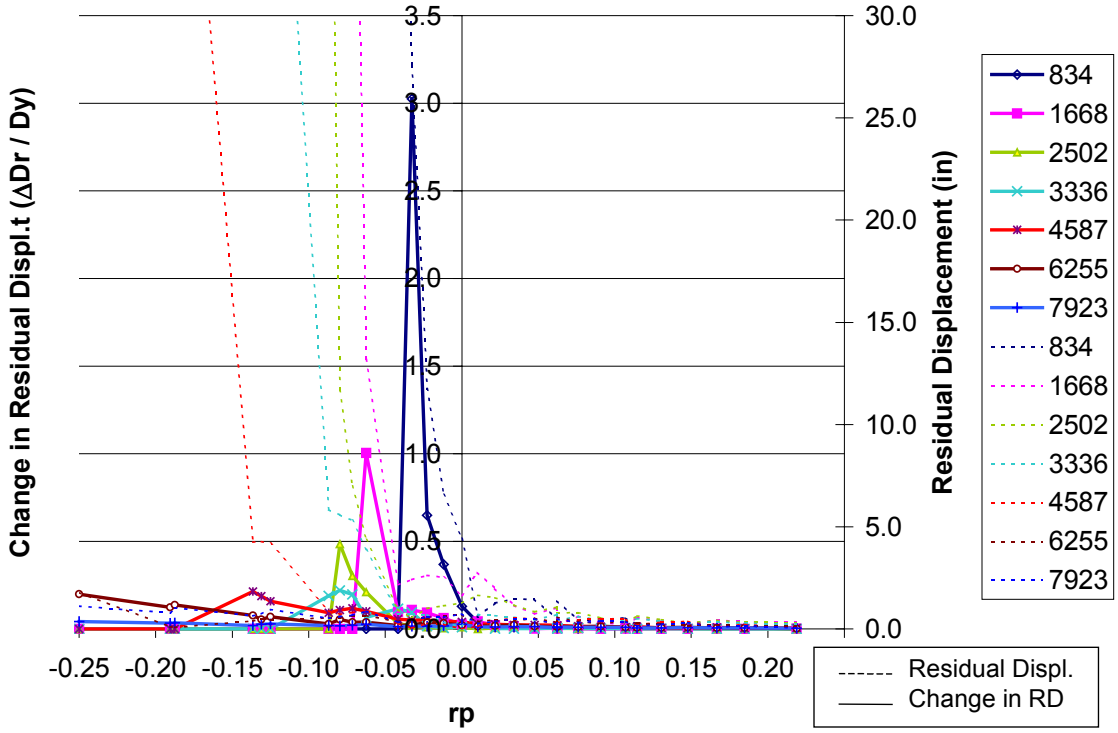


Figure C3.7.6.3b – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

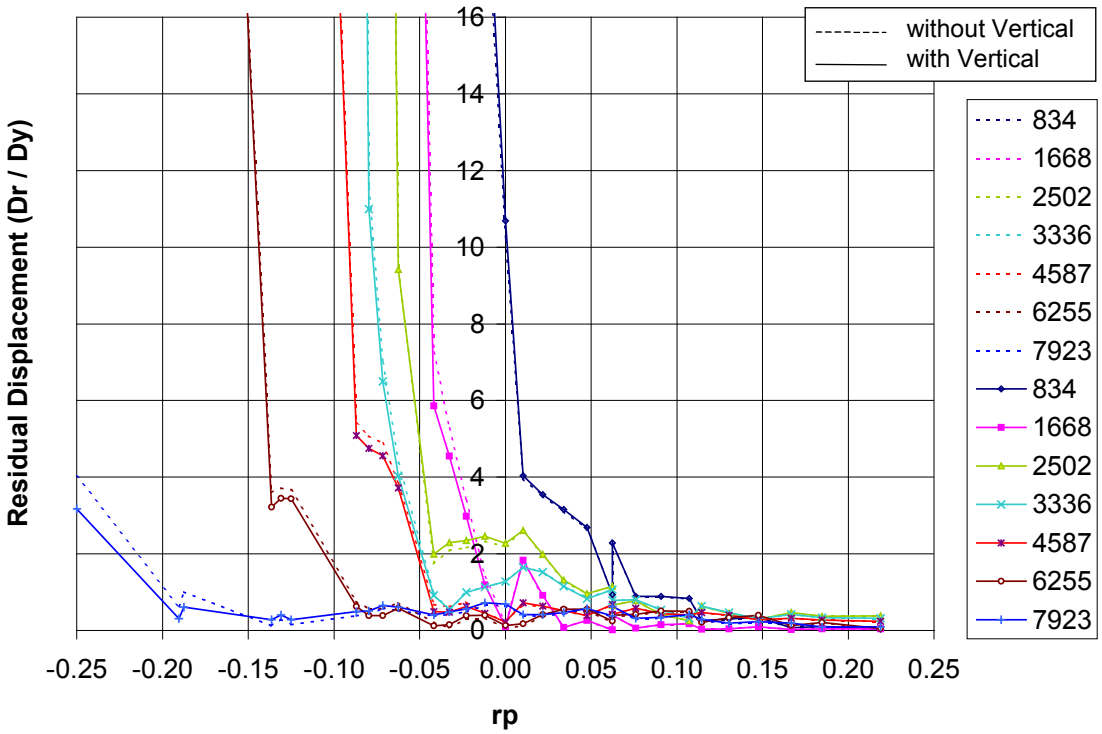


Figure C3.7.6.4a – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

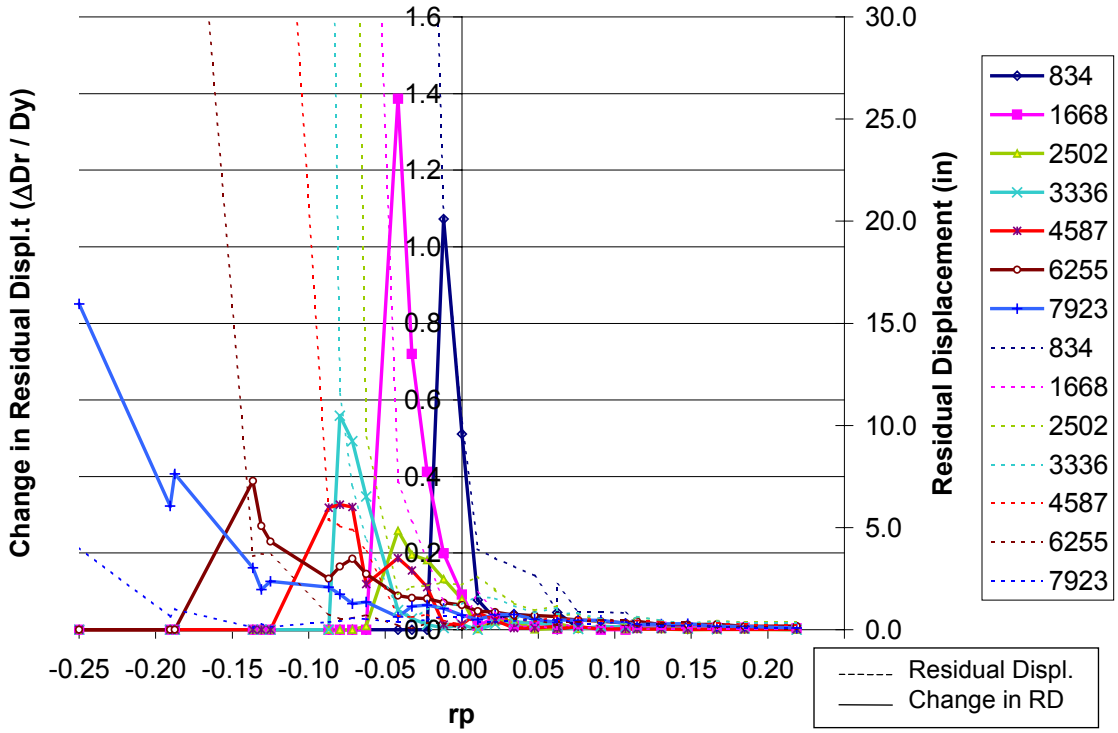


Figure C3.7.6.4b – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

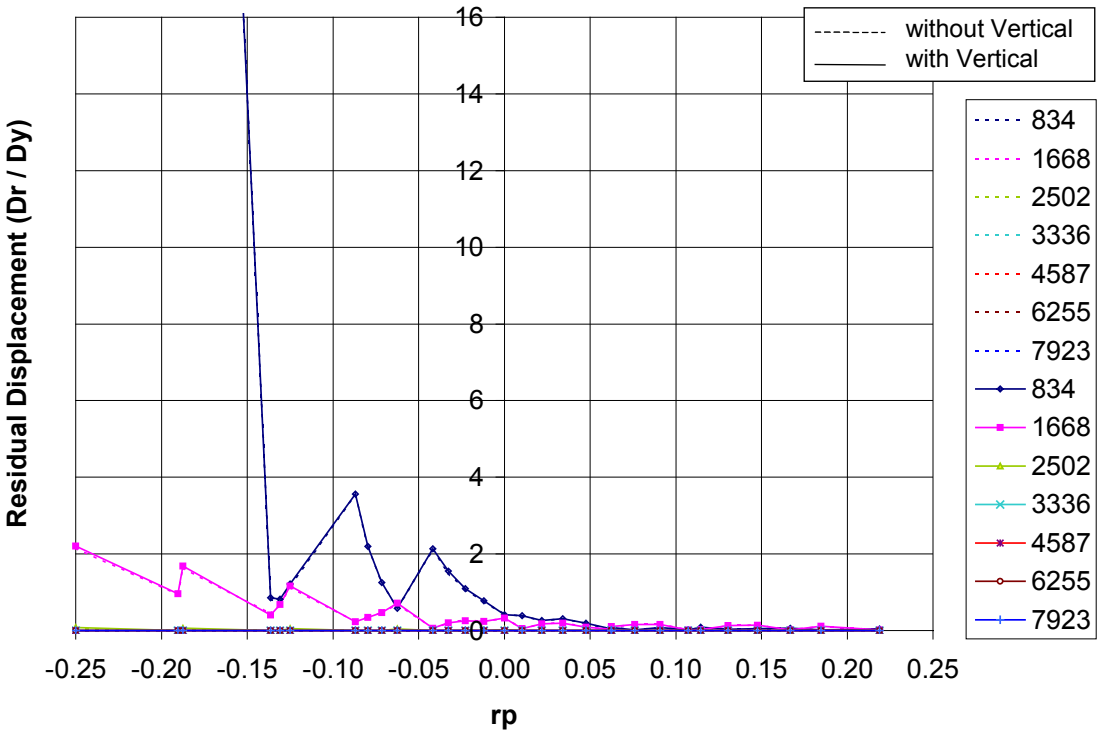


Figure C3.7.7.1a – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

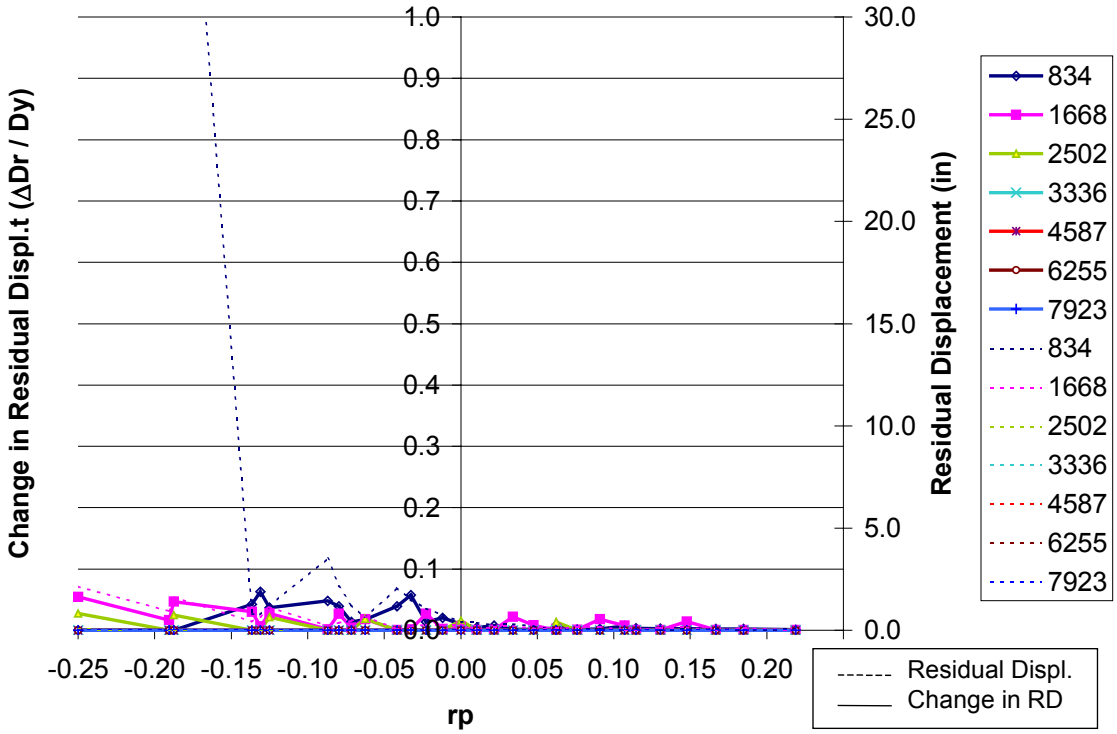


Figure C3.7.7.1b – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

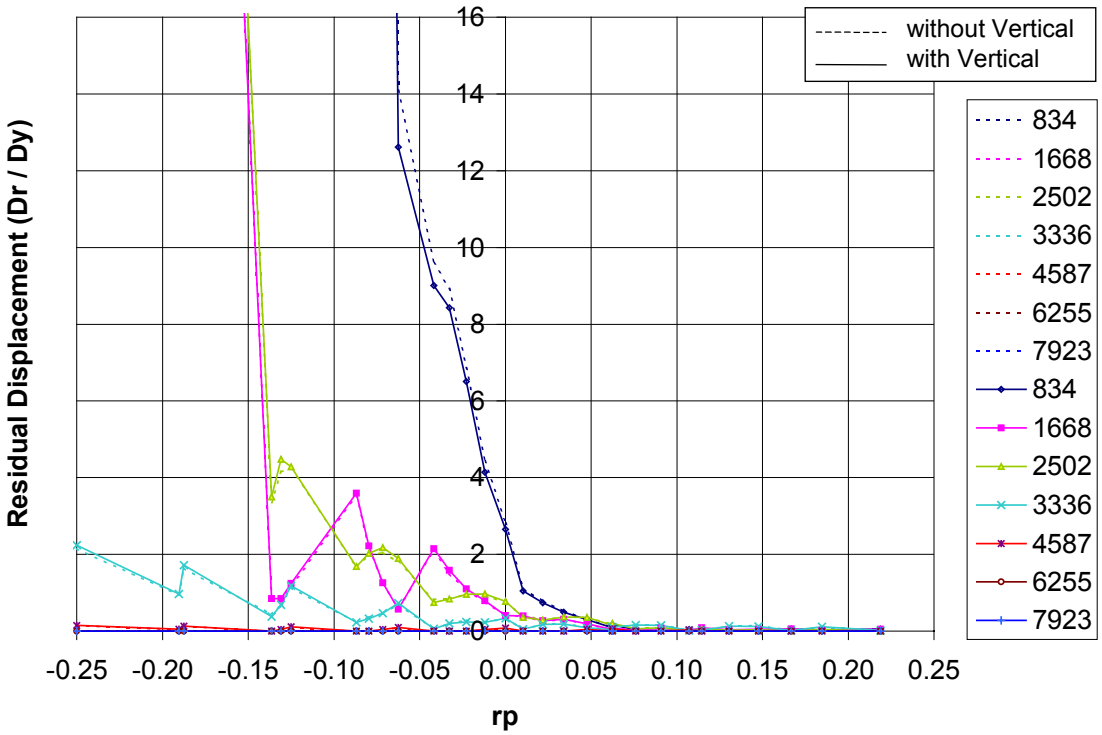


Figure C3.7.7.2a – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

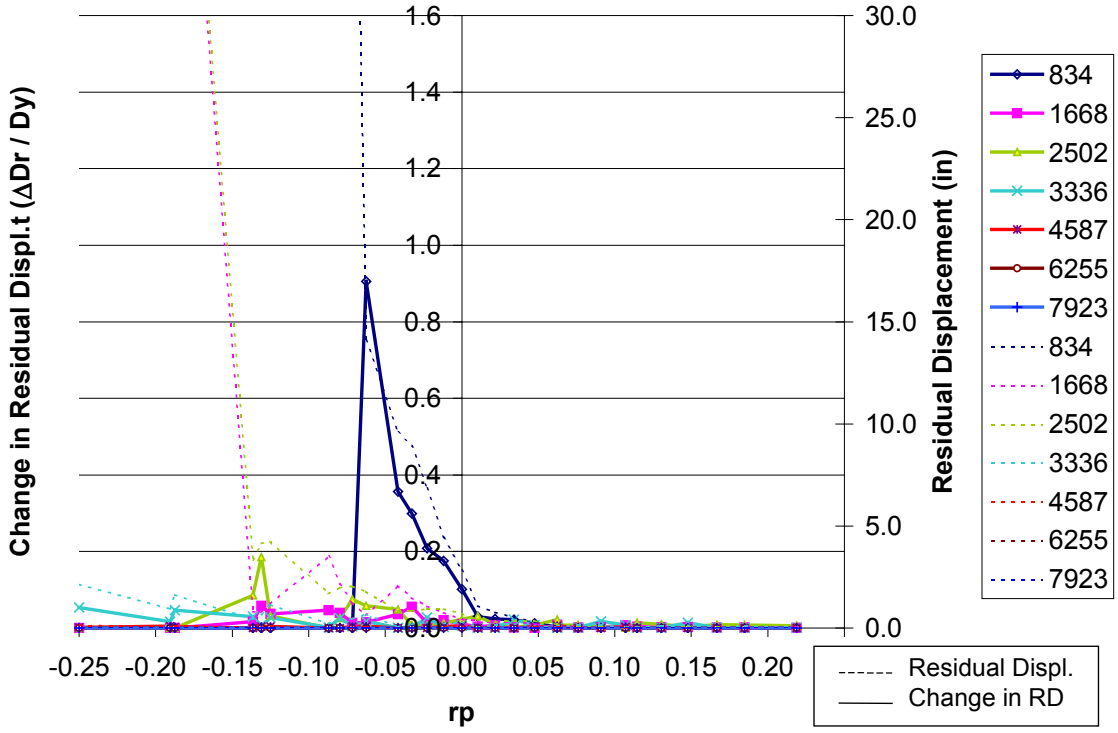


Figure C3.7.7.2b – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

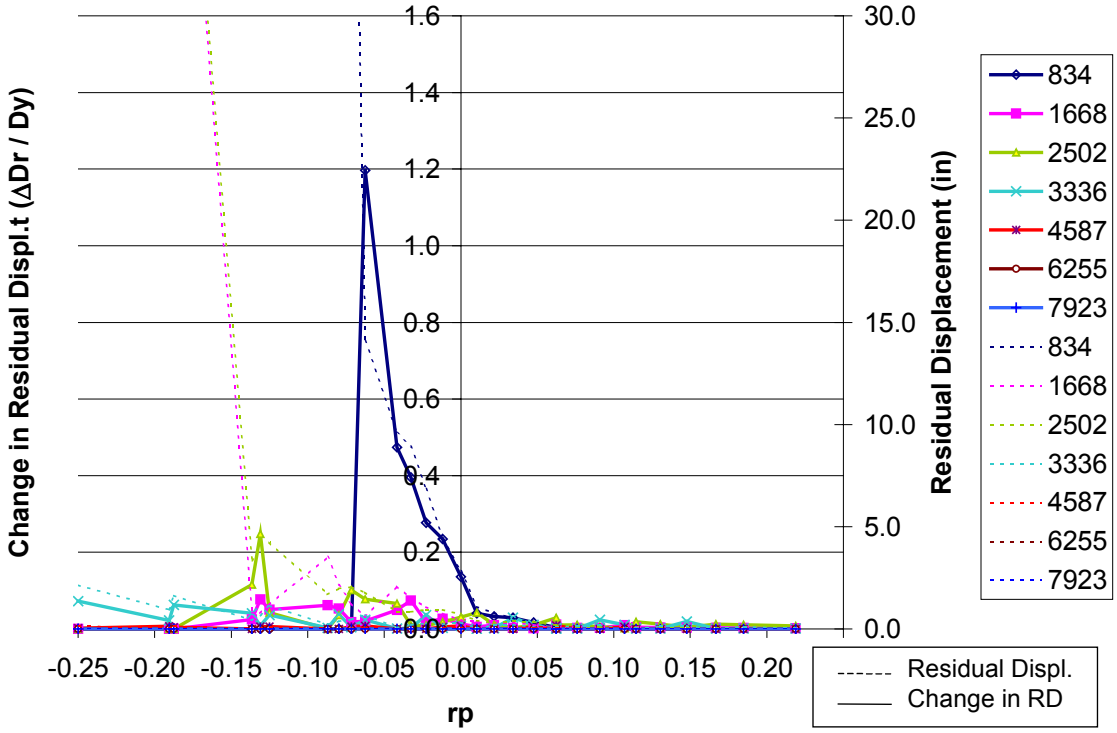


Figure C3.7.7.2c – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

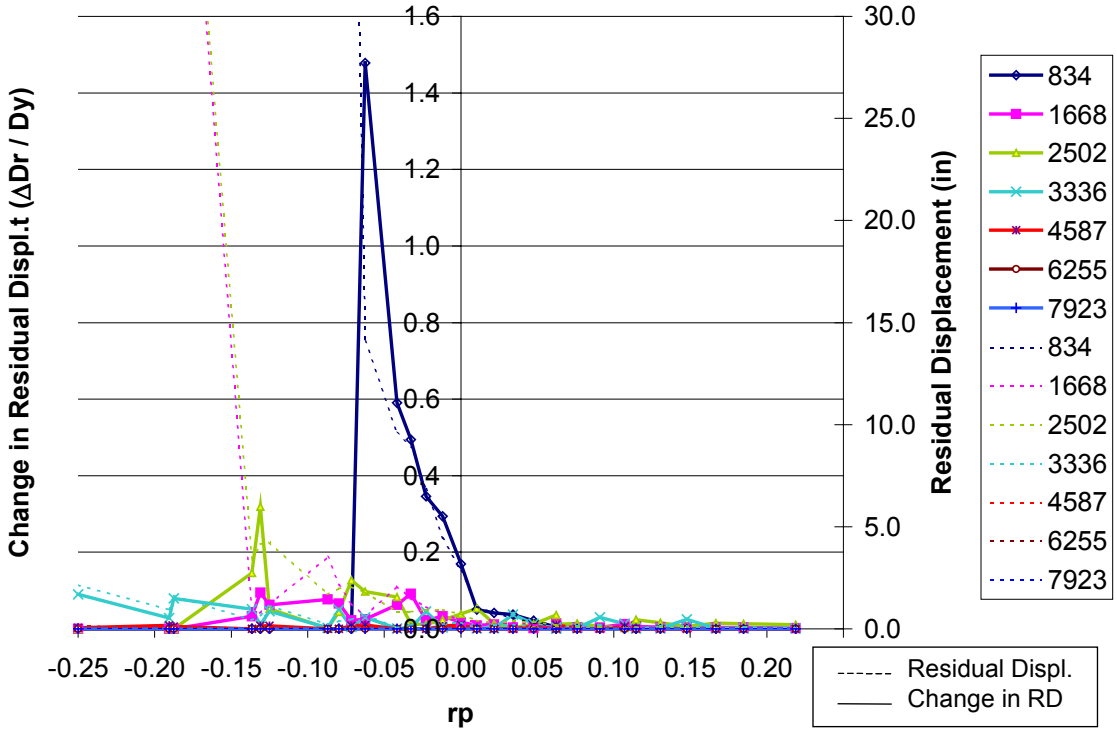


Figure C3.7.7.2d – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

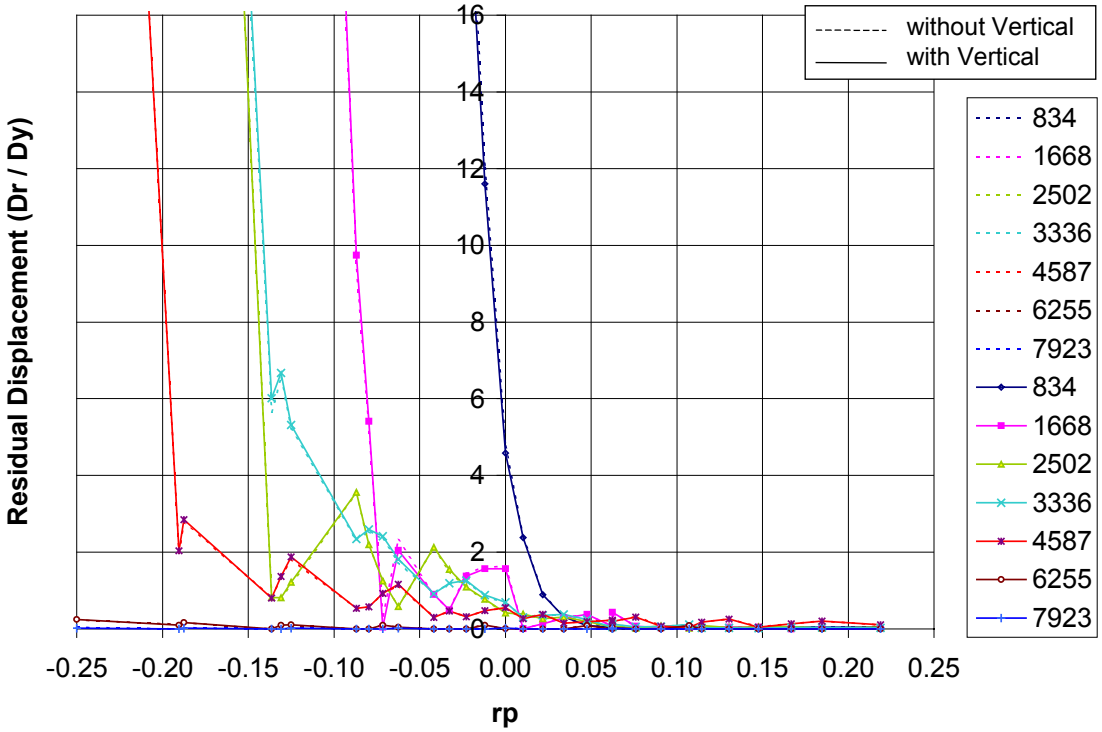


Figure C3.7.7.3a – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

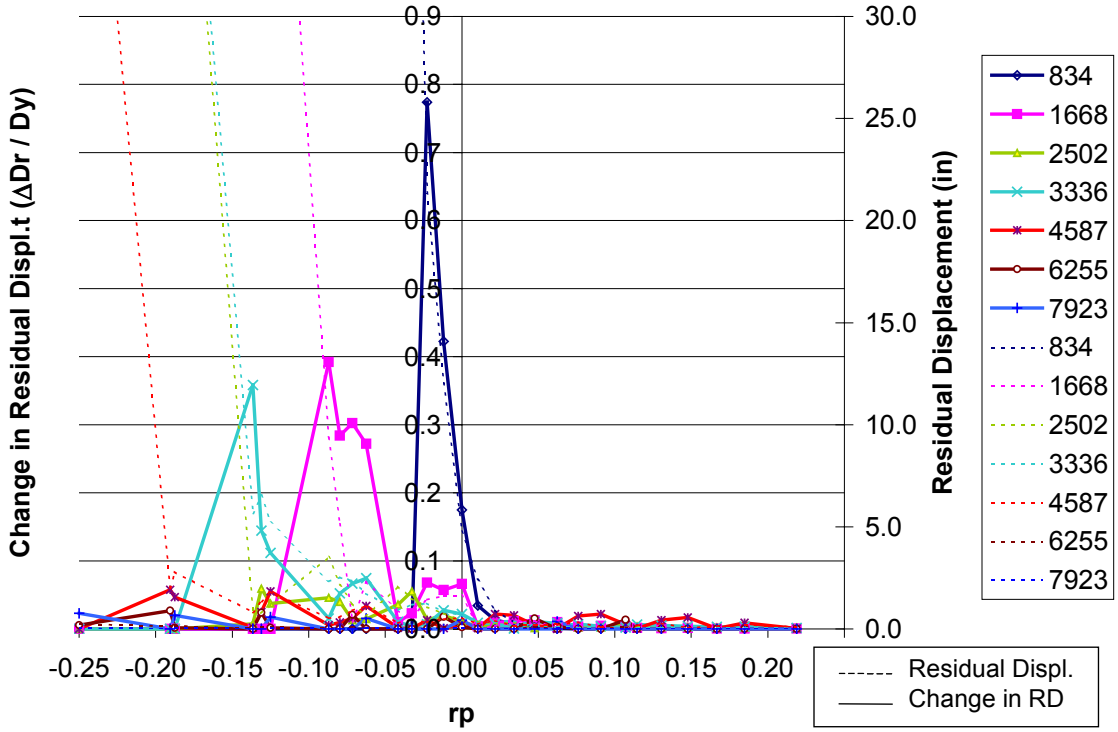


Figure C3.7.7.3b – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

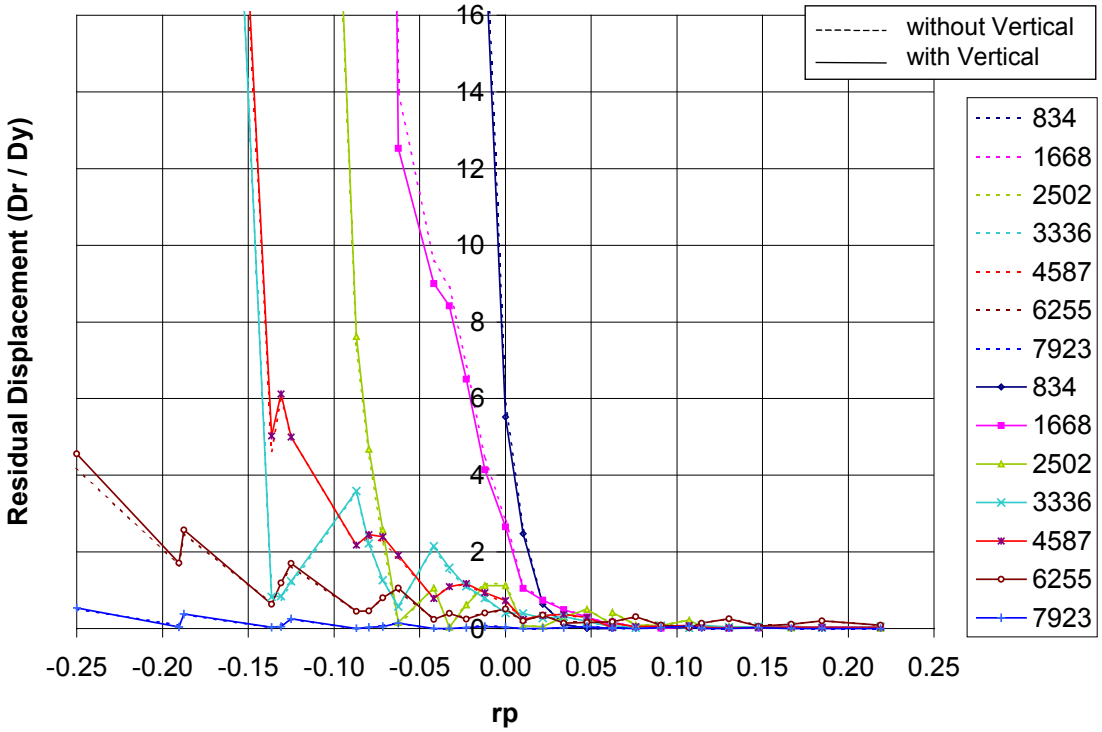


Figure C3.7.7.4a – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.459 Seconds.

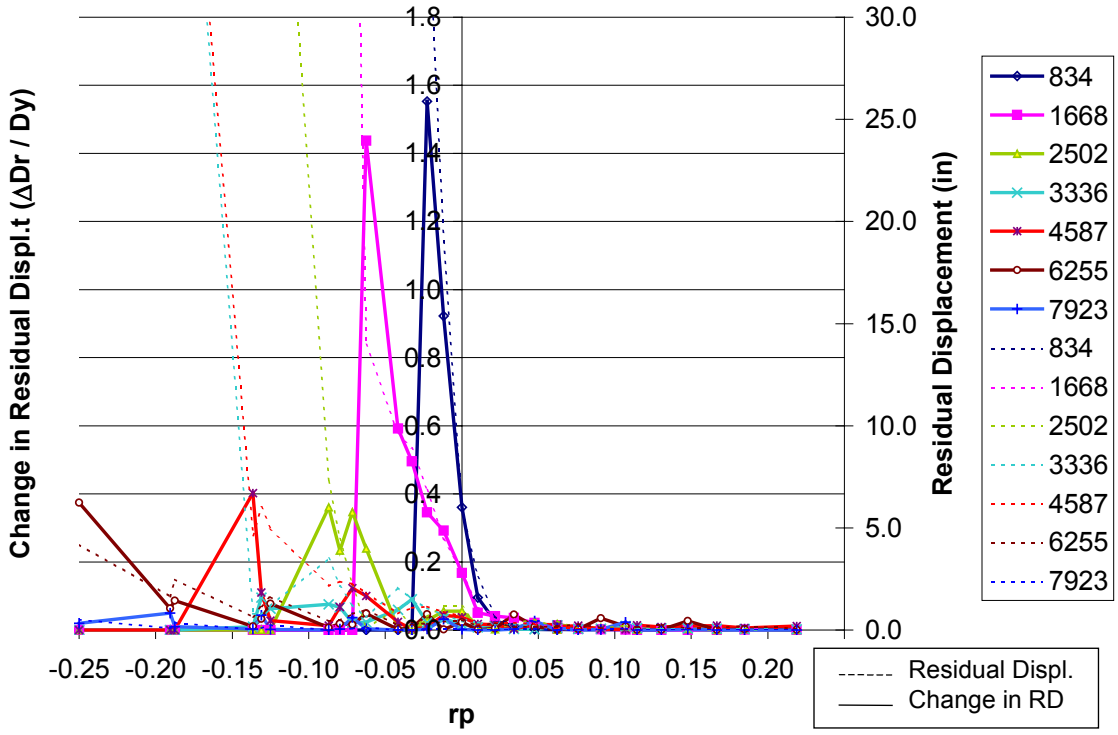


Figure C3.7.7.4b – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.459 Seconds.

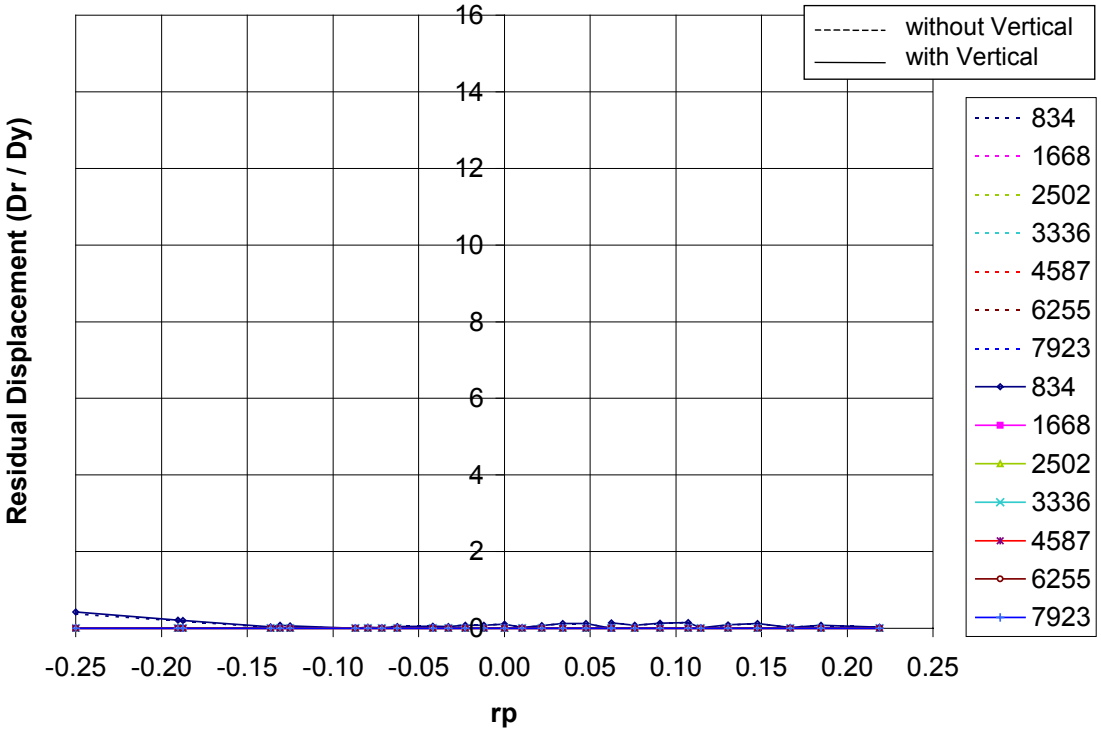


Figure C3.7.8.1a – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

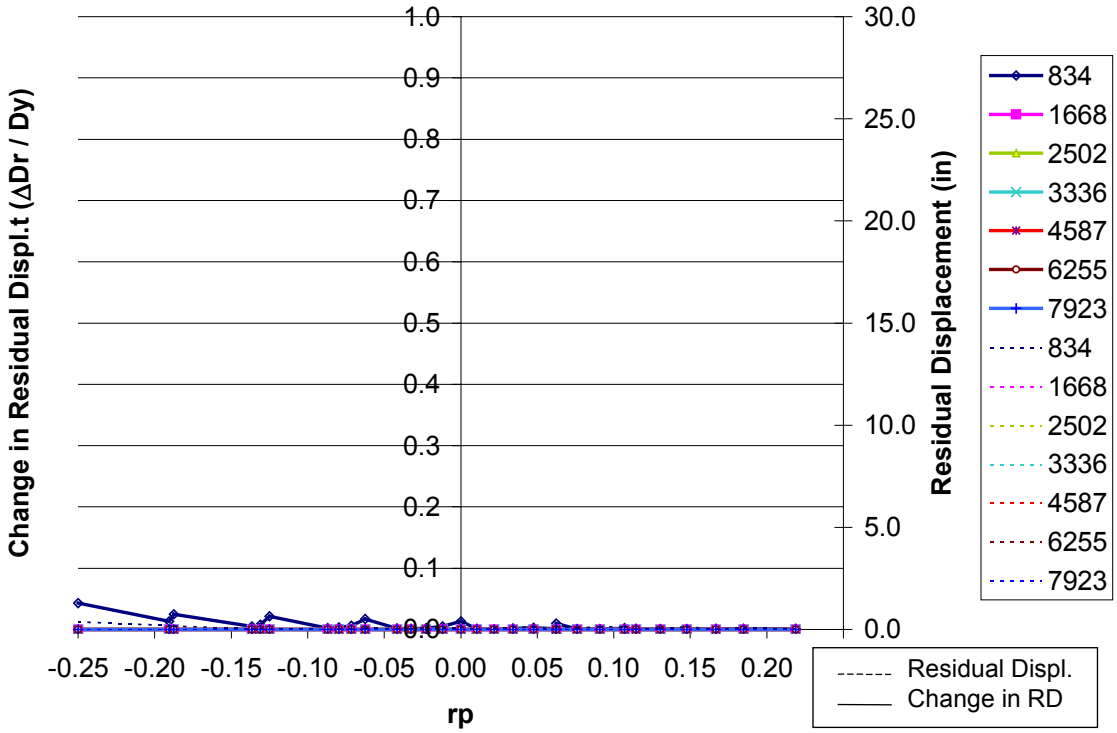


Figure C3.7.8.1b – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

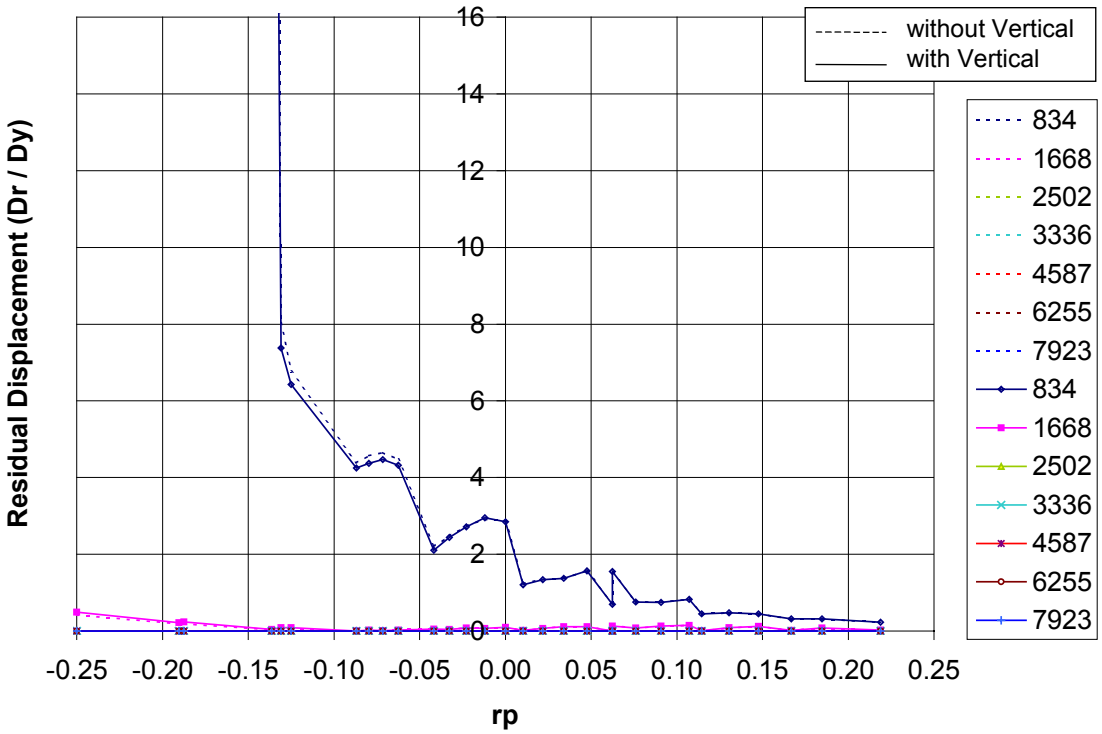


Figure C3.7.8.2a – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

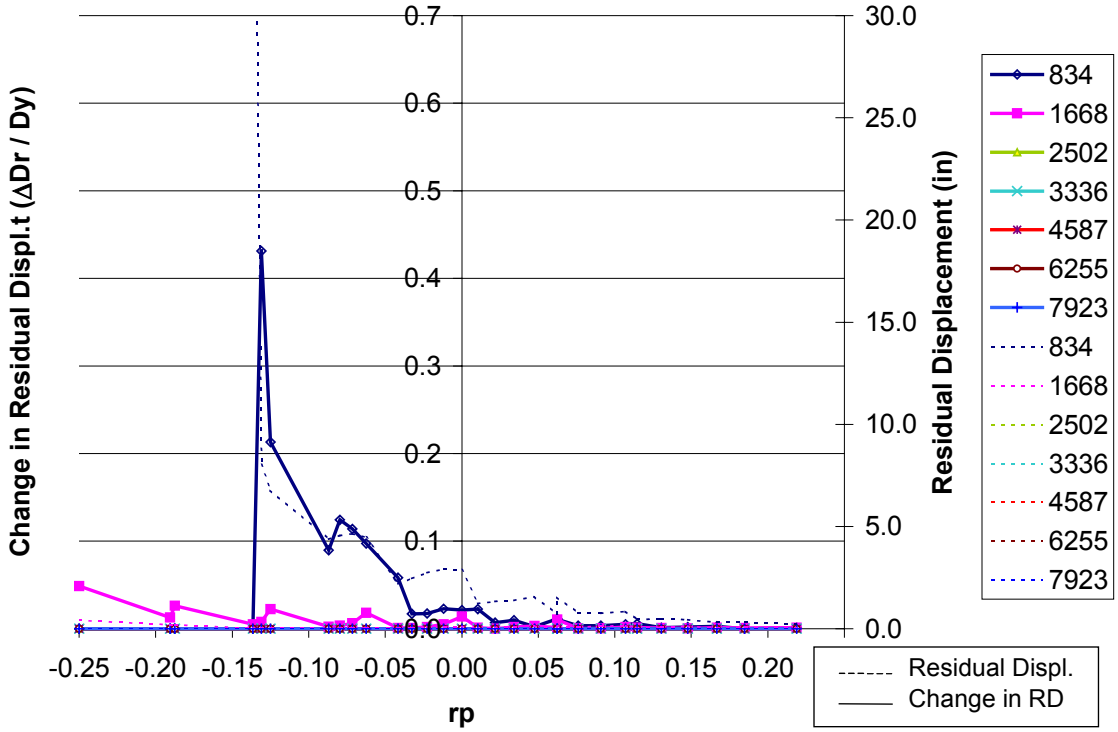


Figure C3.7.8.2b – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

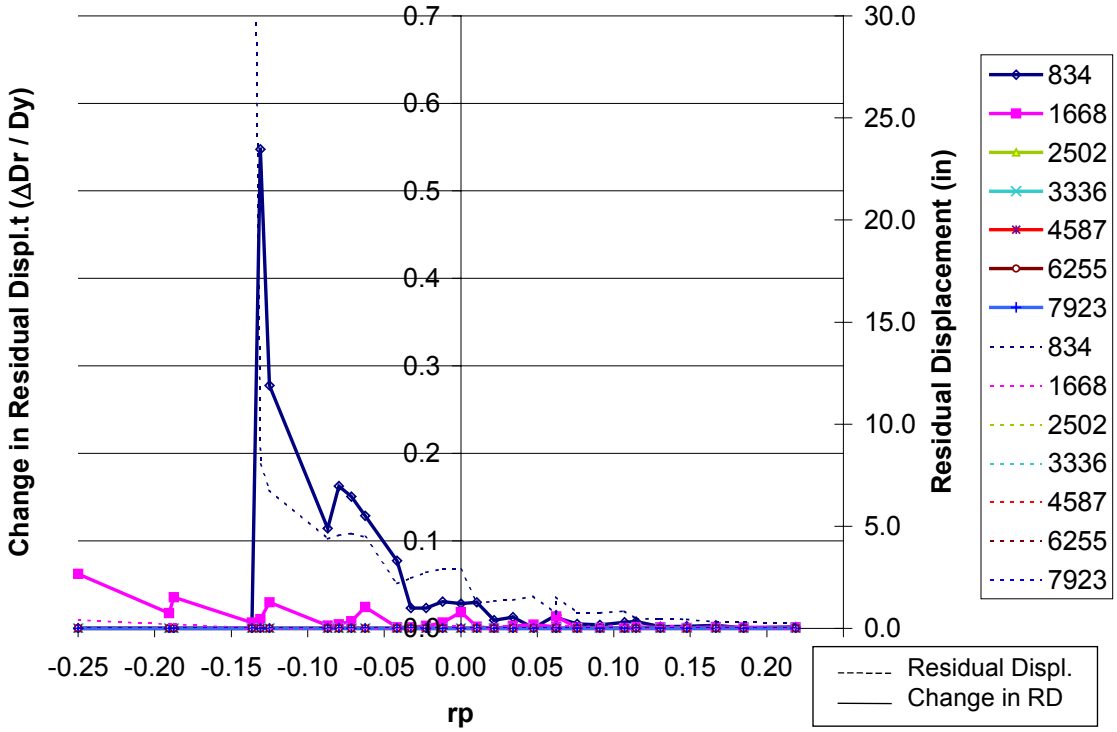


Figure C3.7.8.2c – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

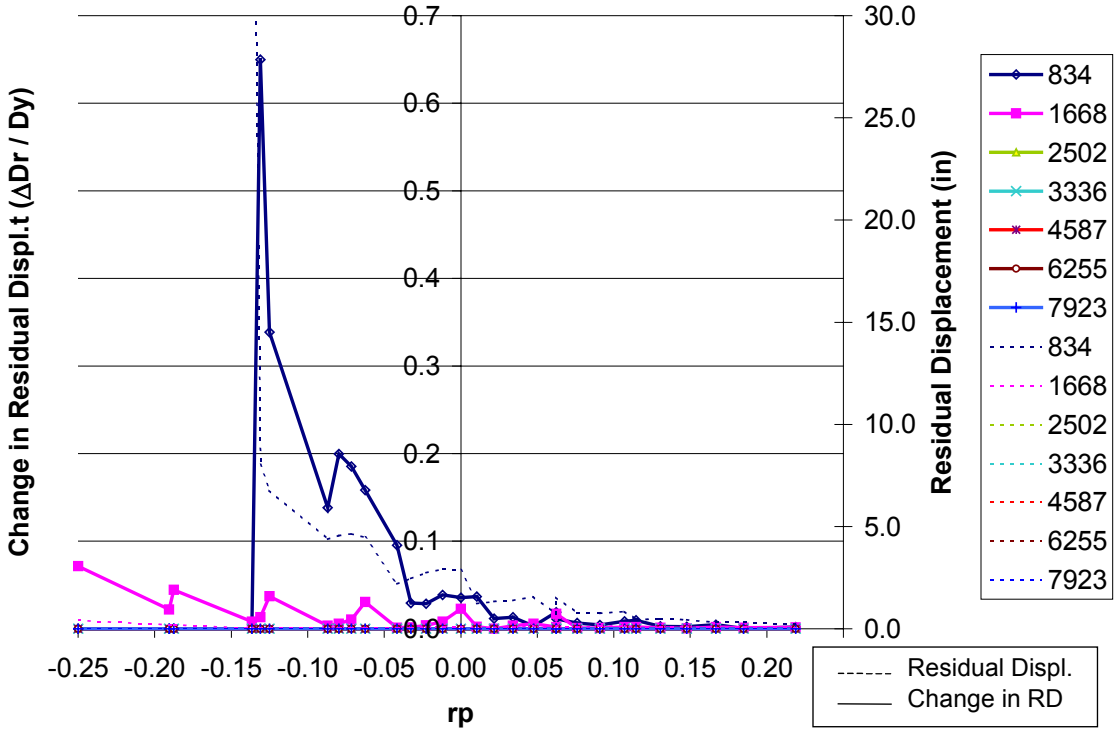


Figure C3.7.8.2d – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

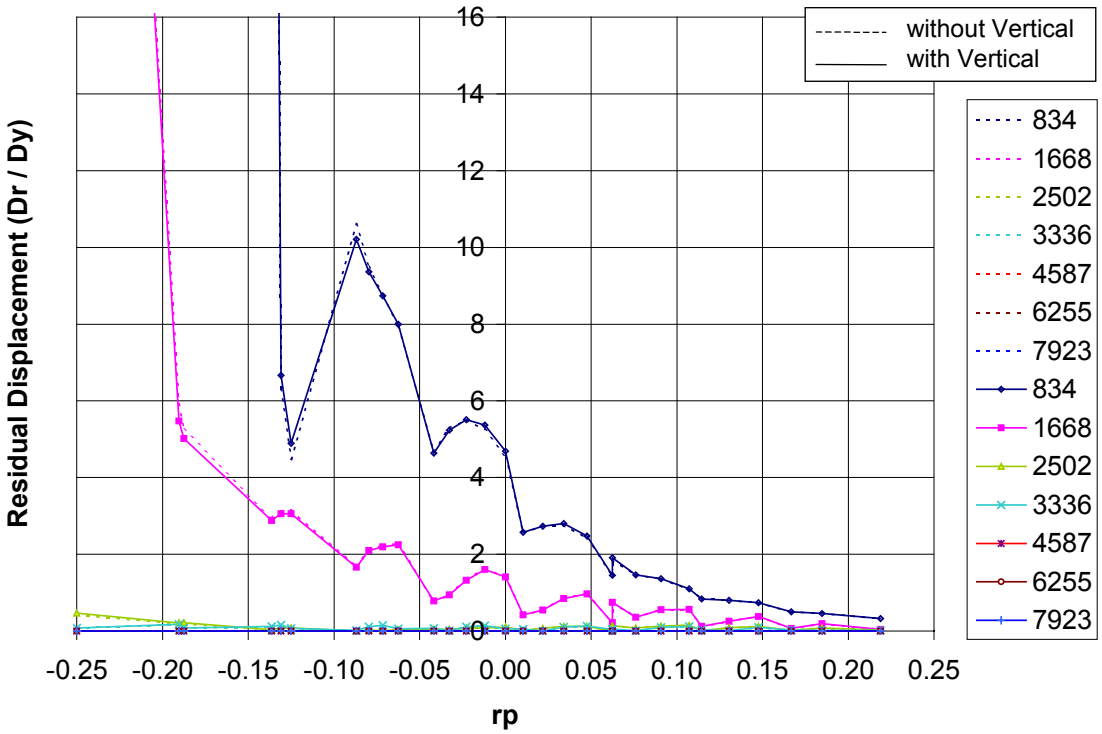


Figure C3.7.8.3a – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

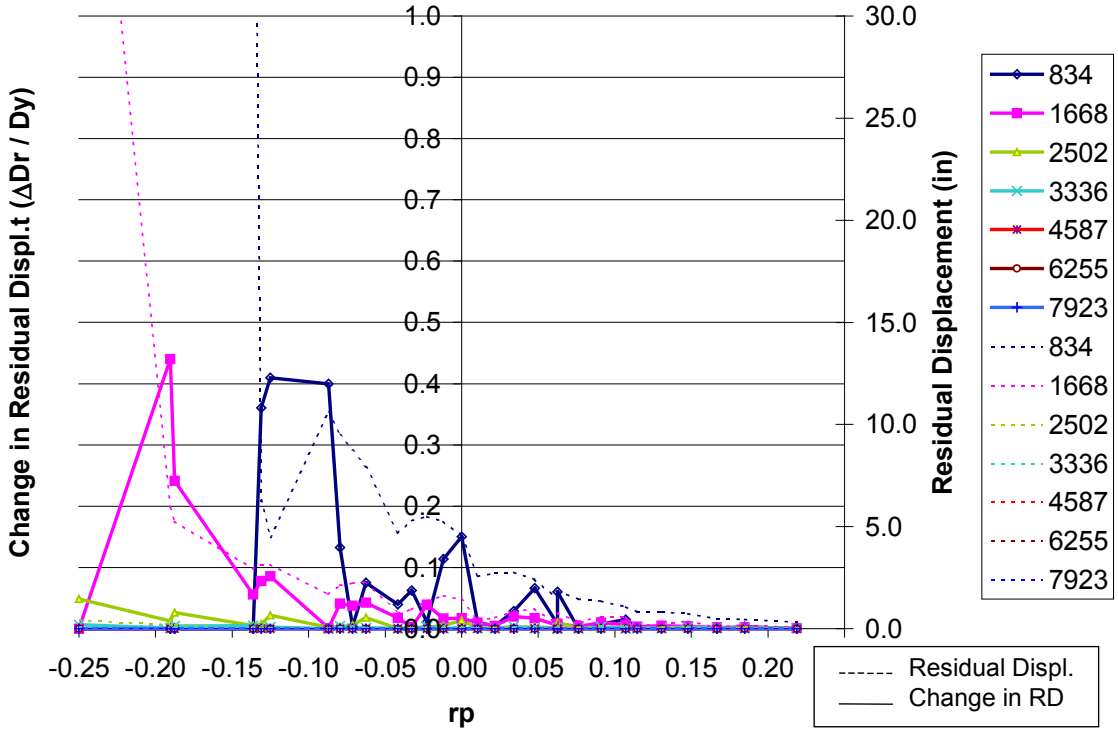


Figure C3.7.8.3b – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

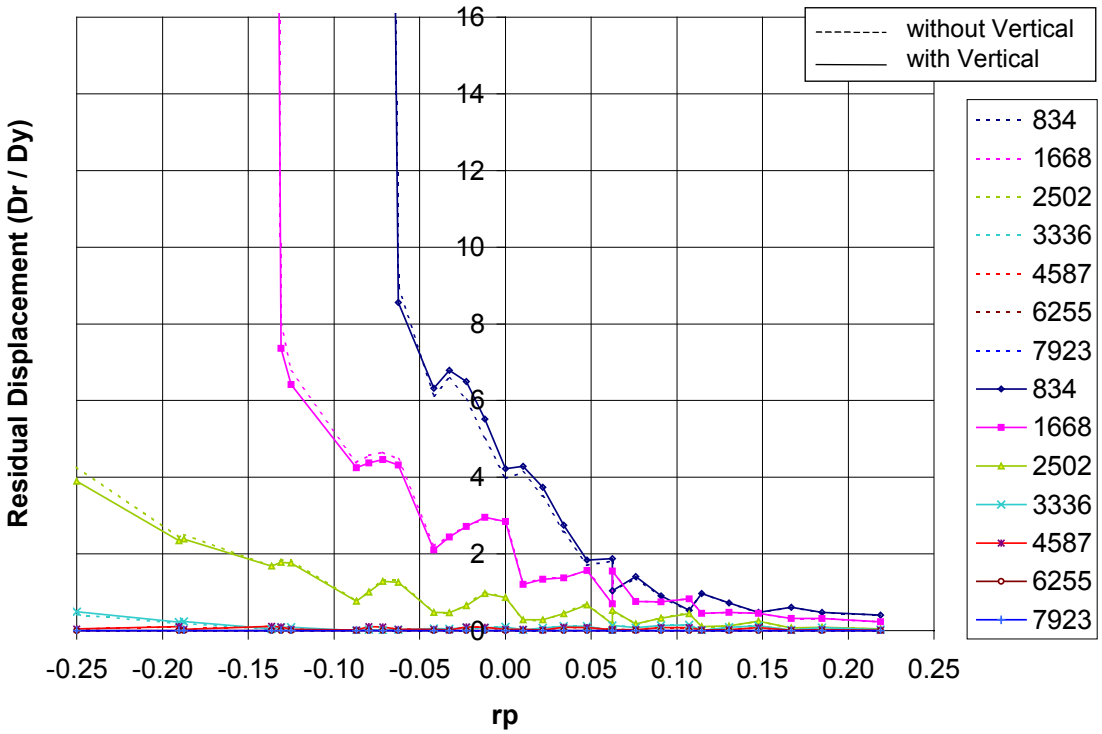


Figure C3.7.8.4a – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

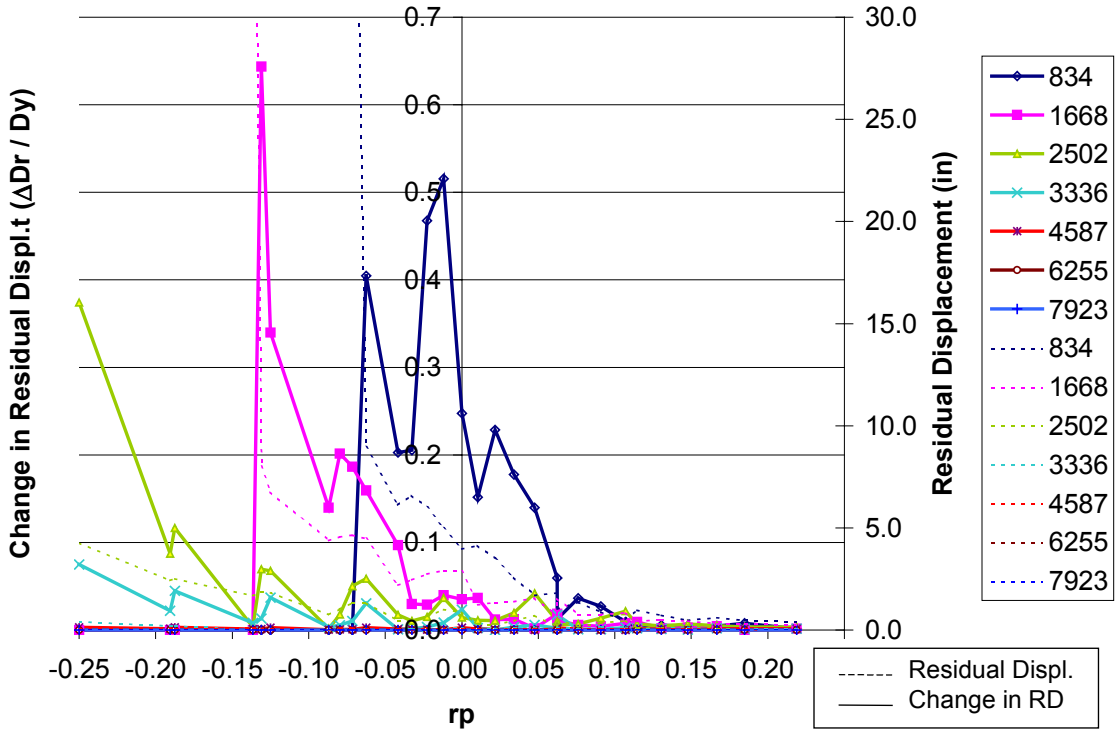


Figure C3.7.8.4b – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

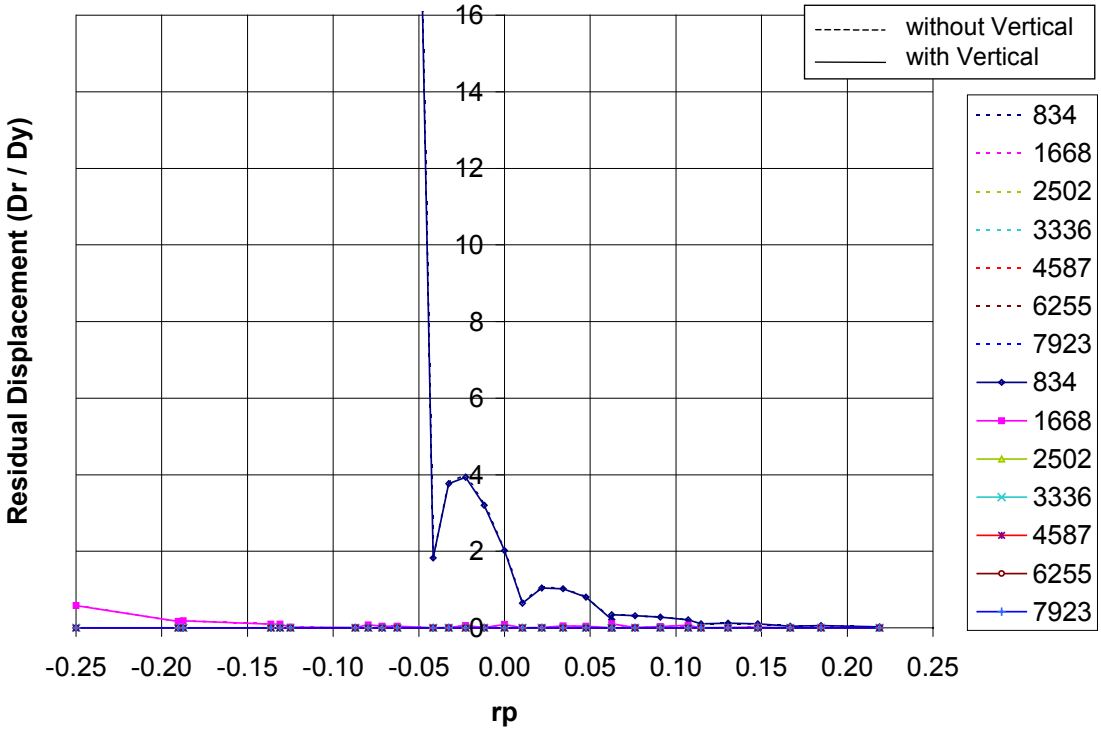


Figure C3.8.1.1a – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

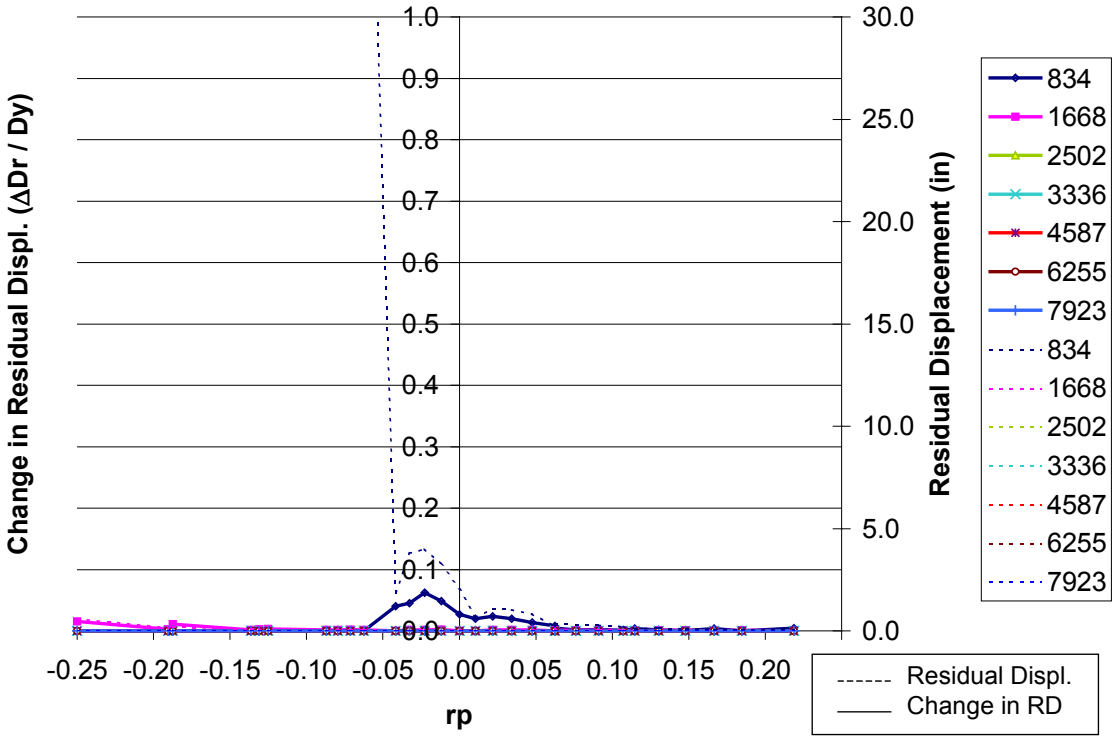


Figure C3.8.1.1b – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

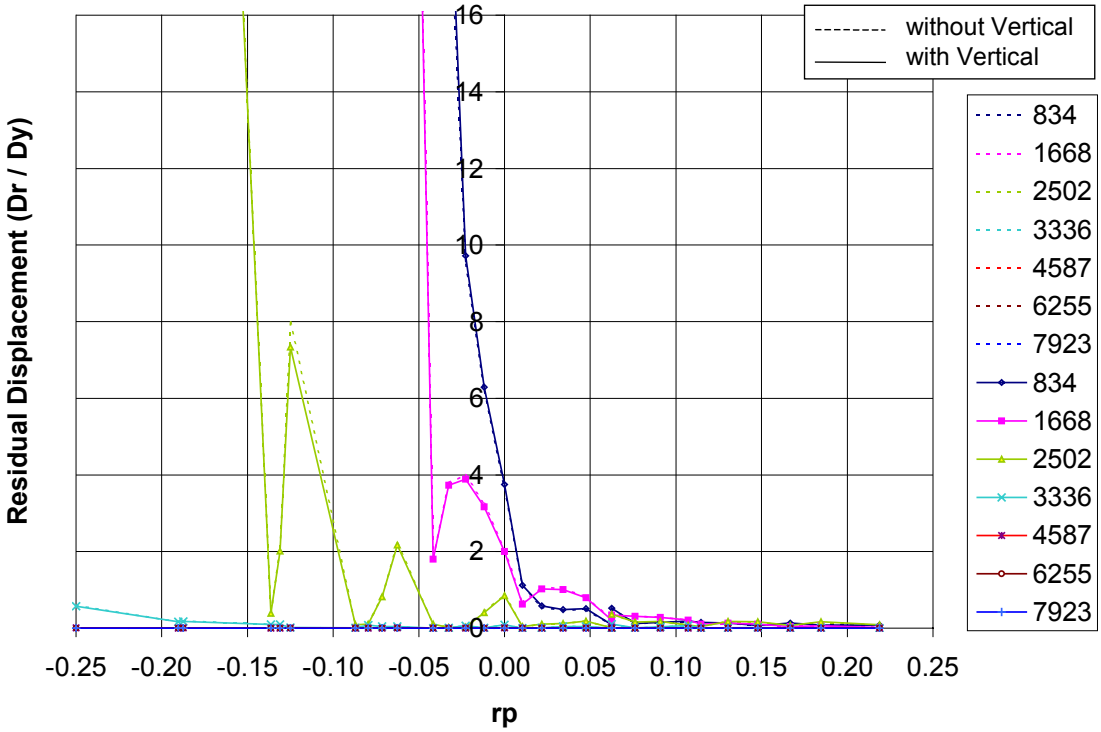


Figure C3.8.1.2a – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

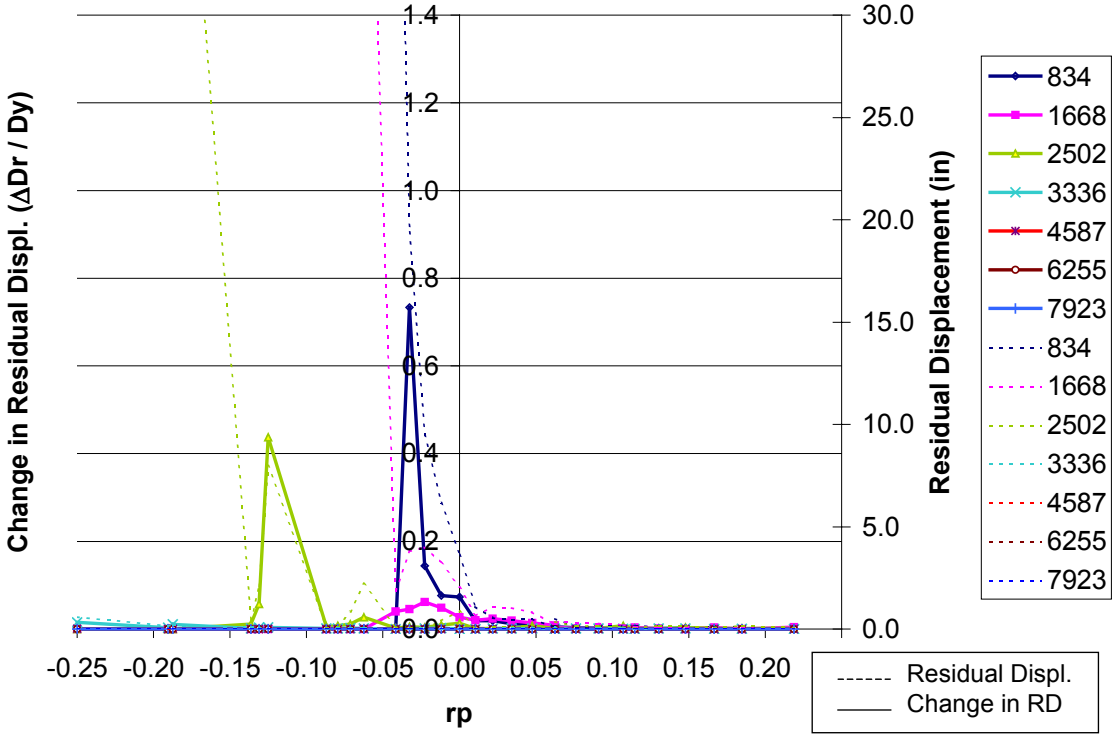


Figure C3.8.1.2b – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

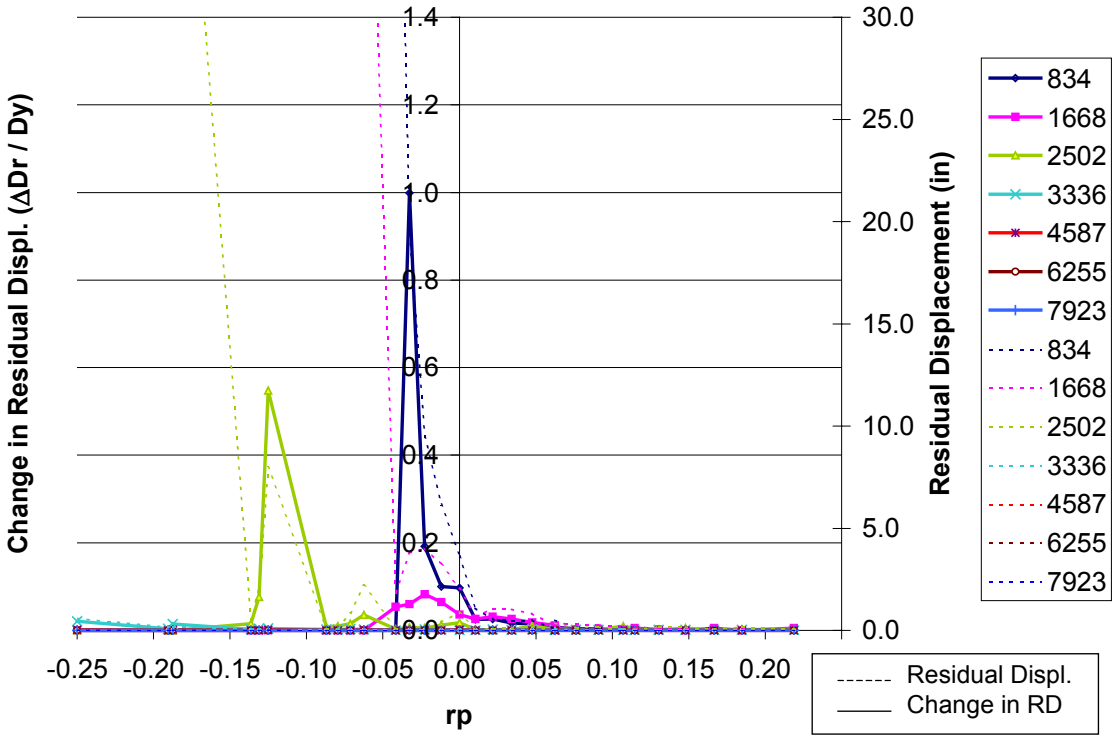


Figure C3.8.1.2c – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

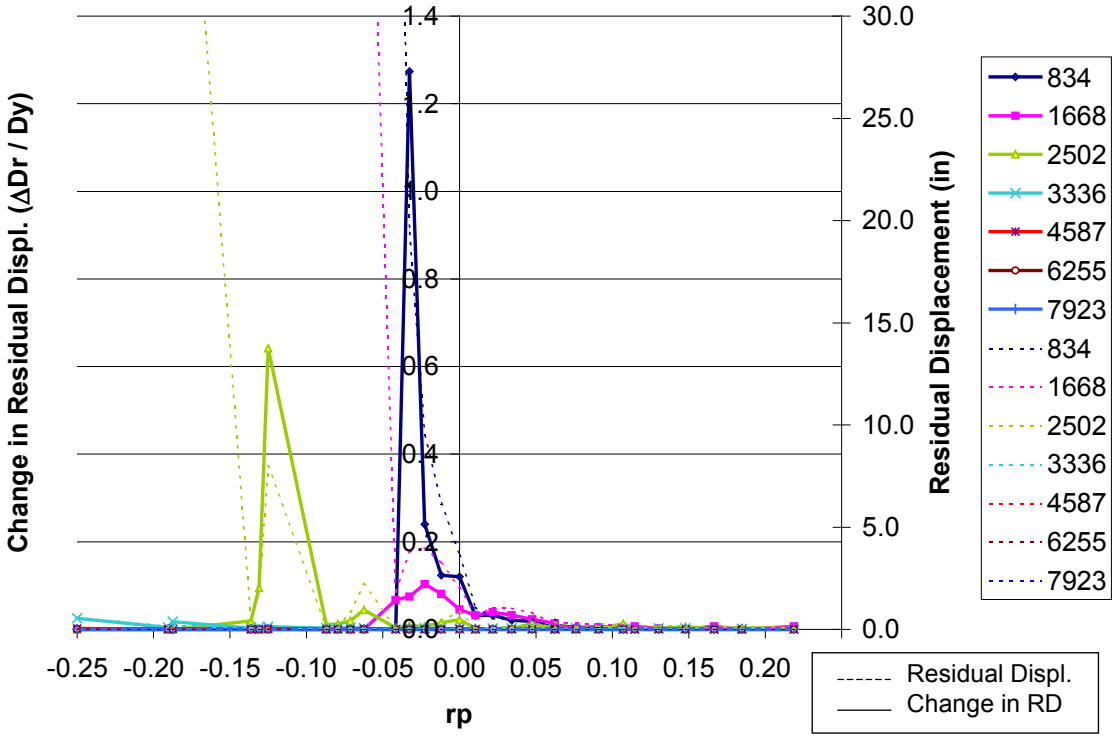


Figure C3.8.1.2d – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

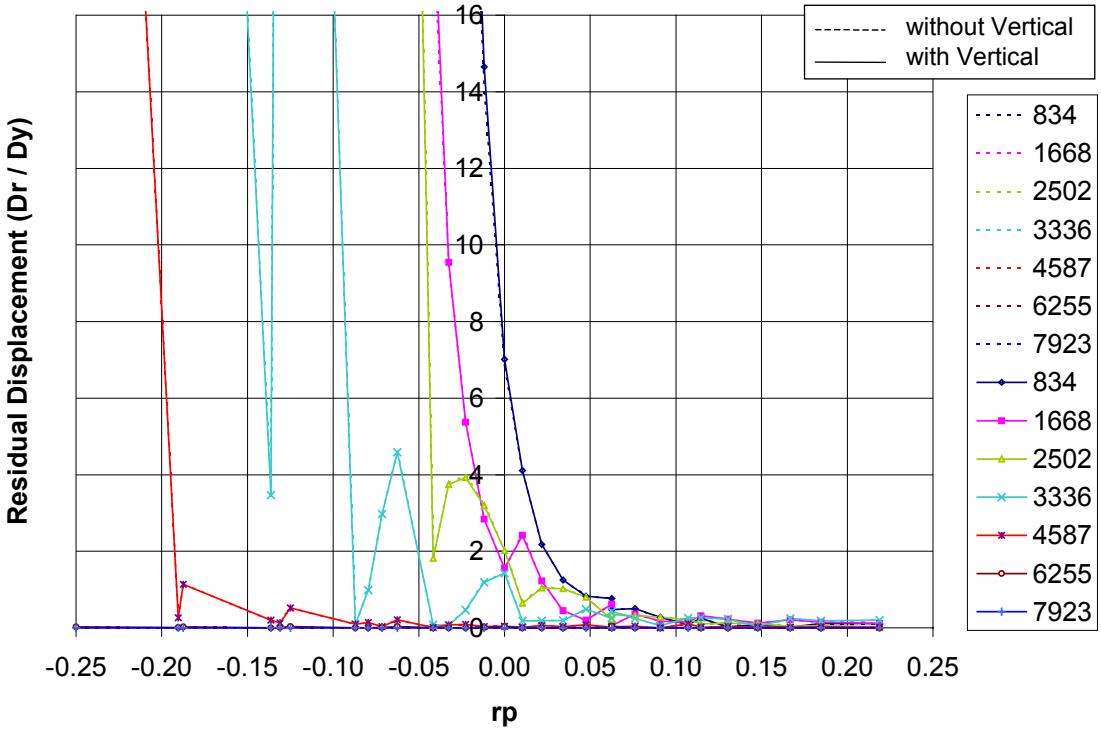


Figure C3.8.1.3a – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

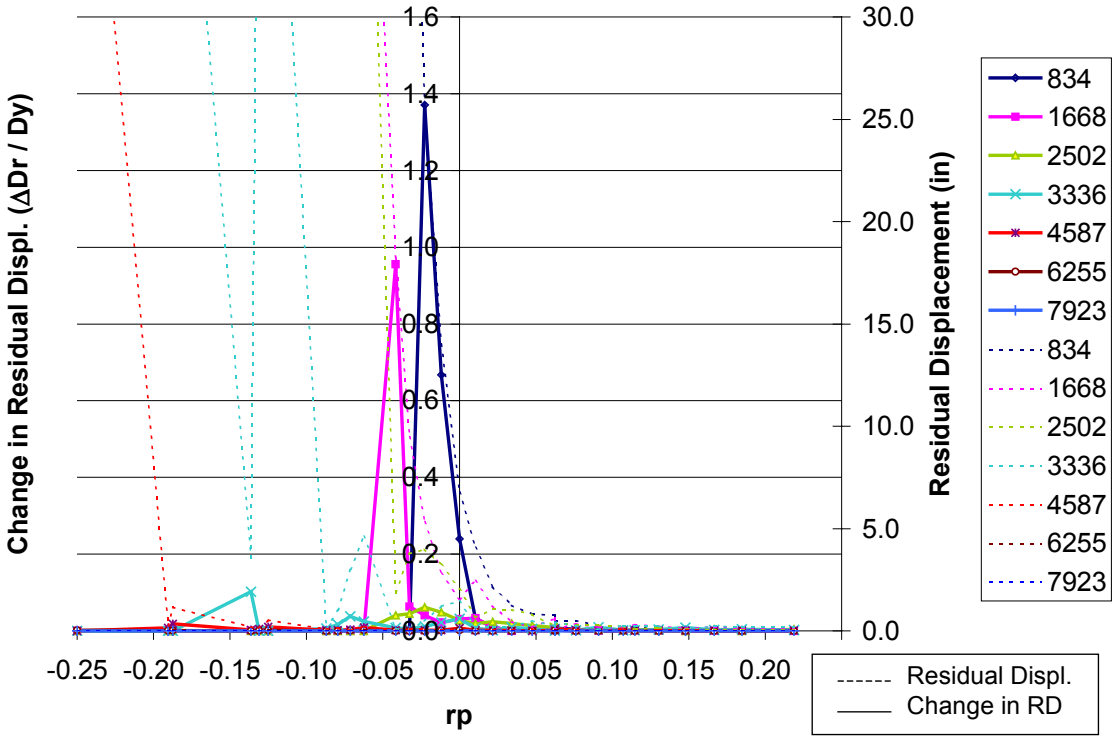


Figure C3.8.1.3b – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

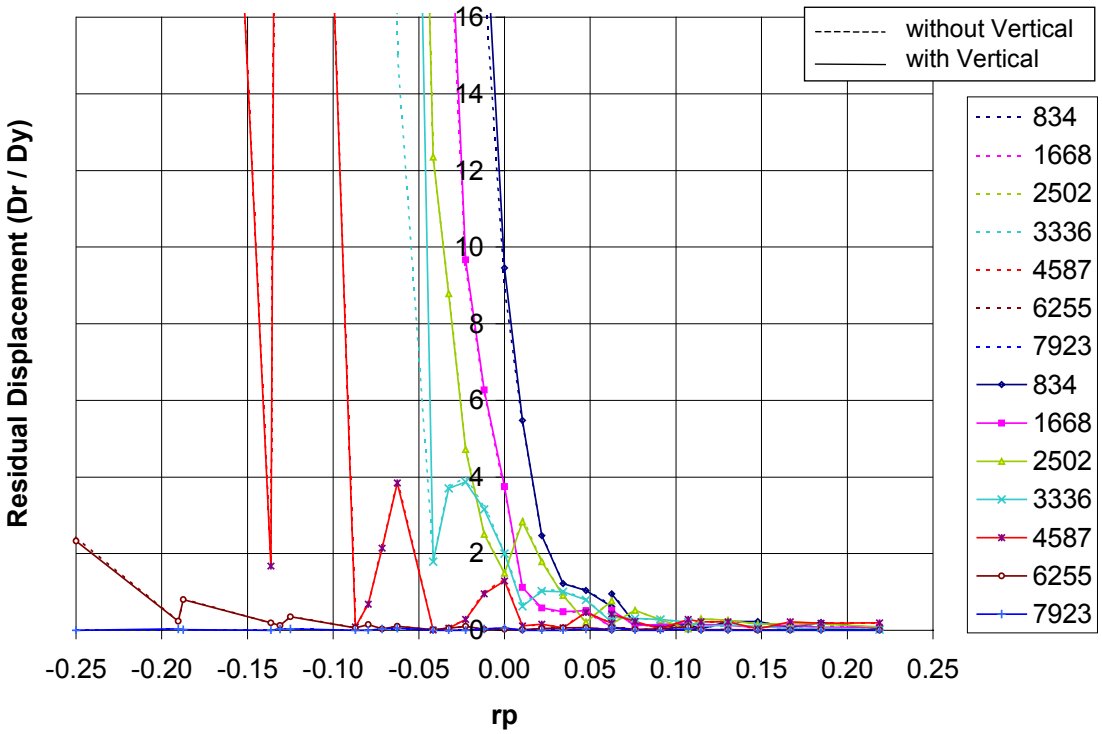


Figure C3.8.1.4a – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

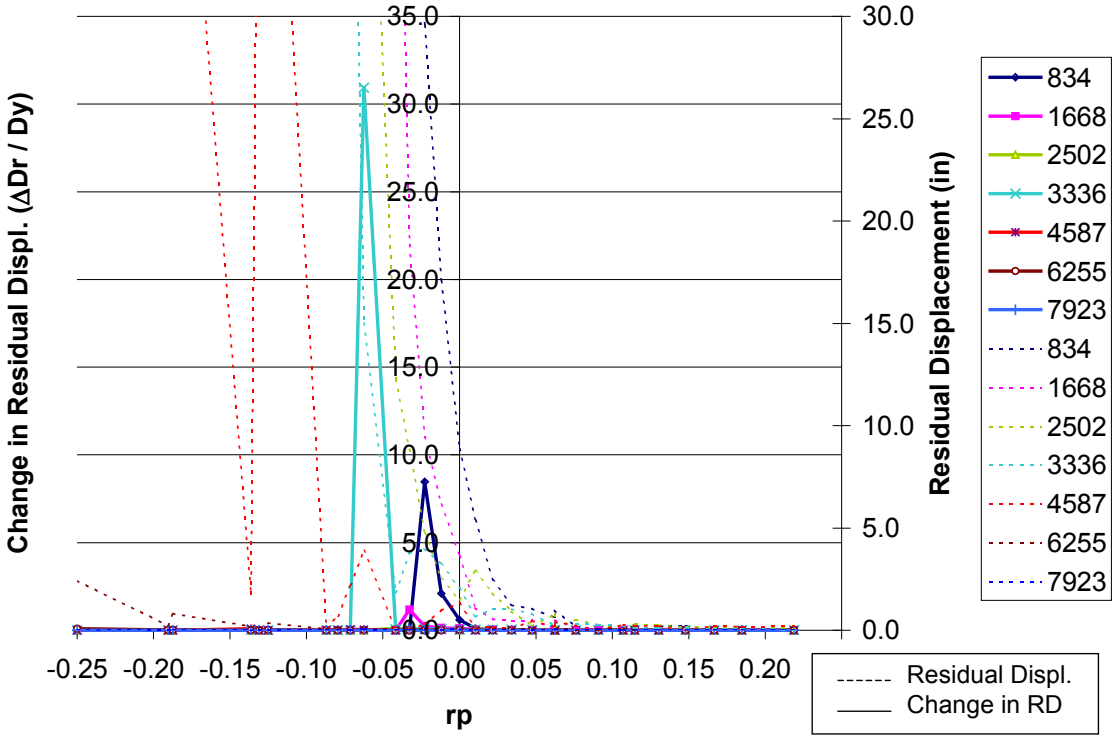


Figure C3.8.1.4b – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

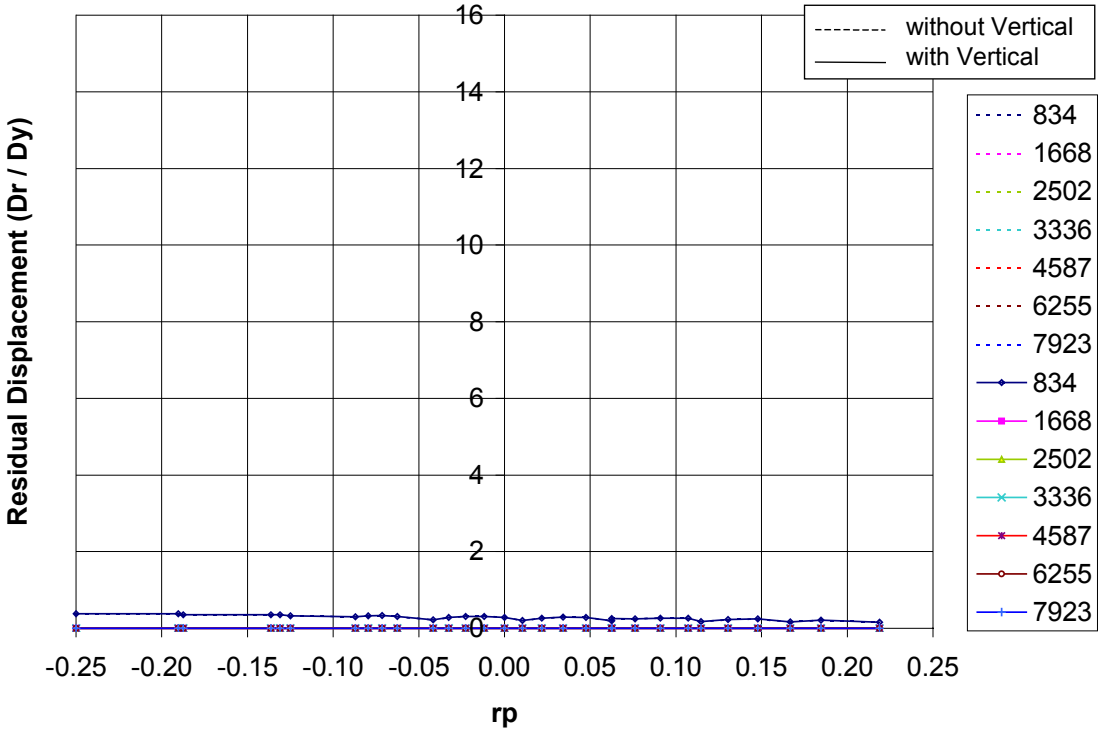


Figure C3.8.2.1a – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

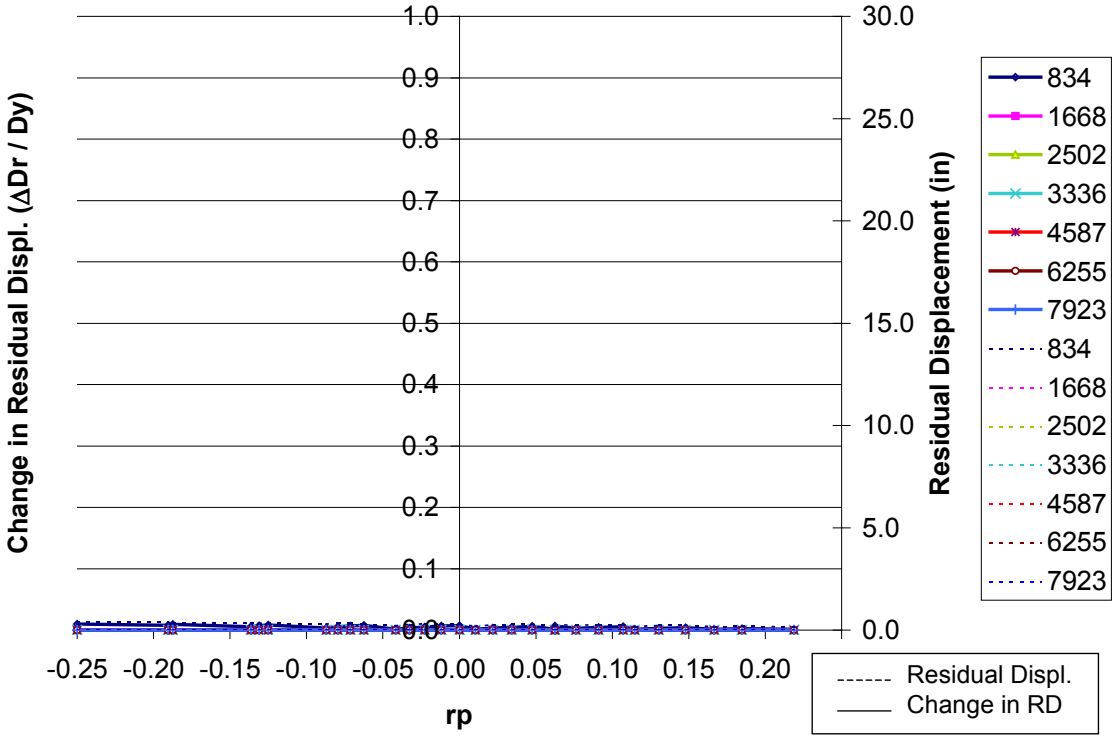


Figure C3.8.2.1b – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

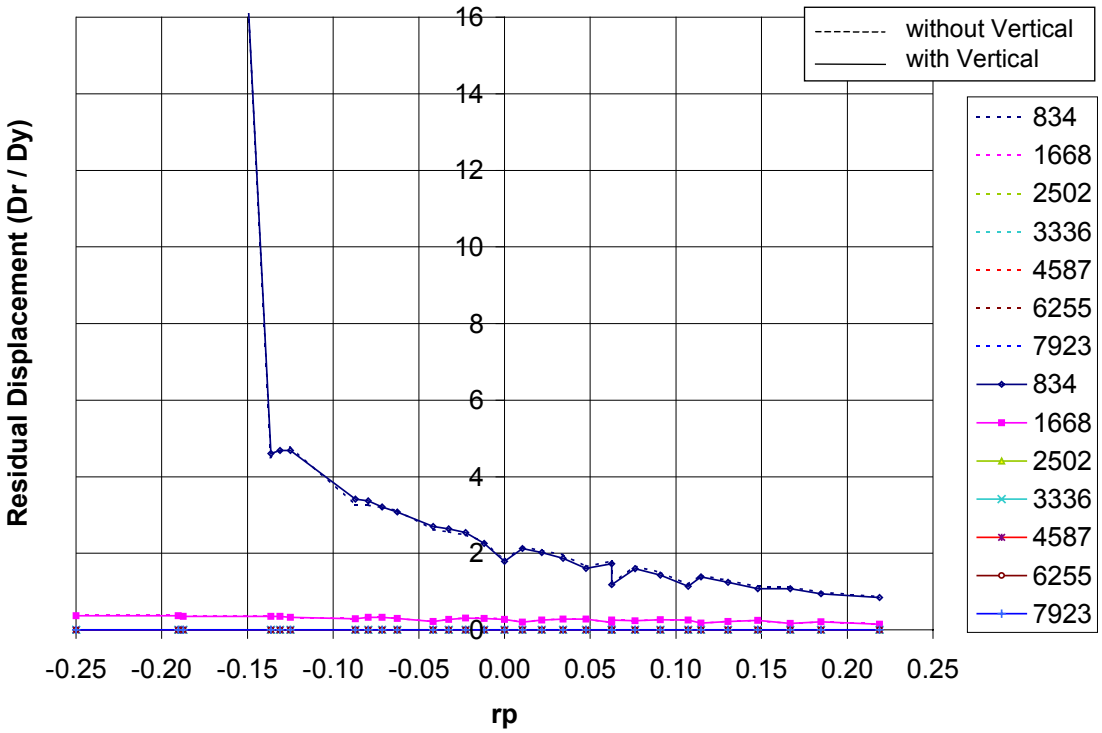


Figure C3.8.2.2a – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

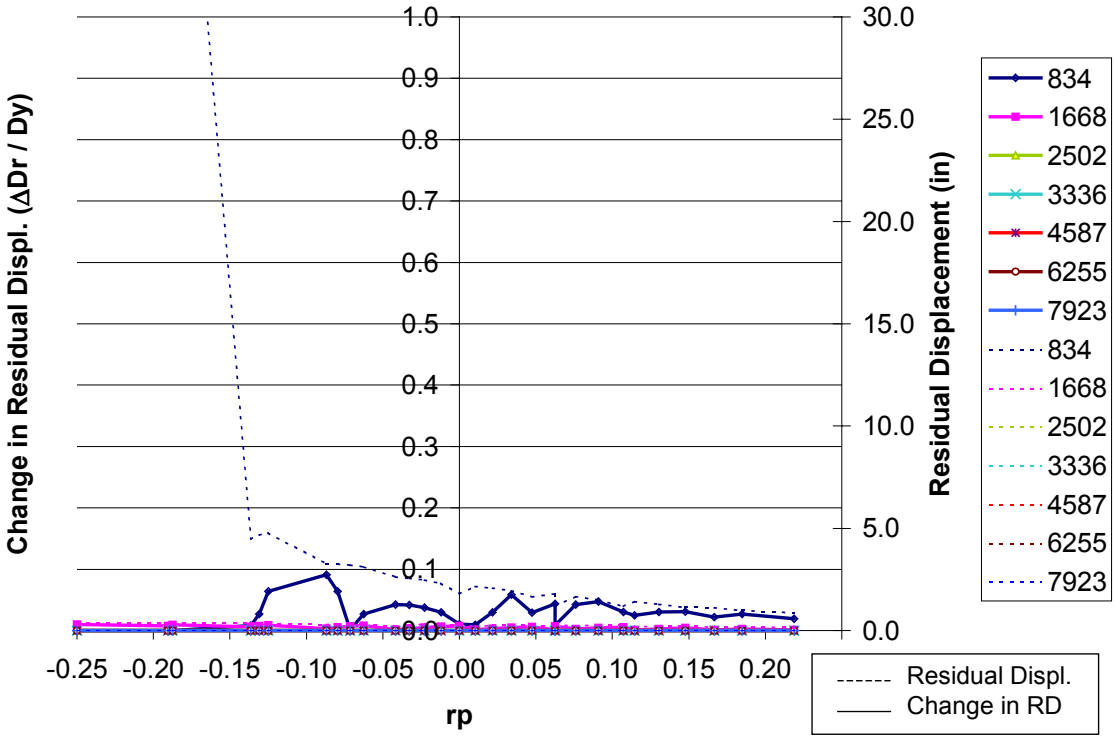


Figure C3.8.2.2b – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

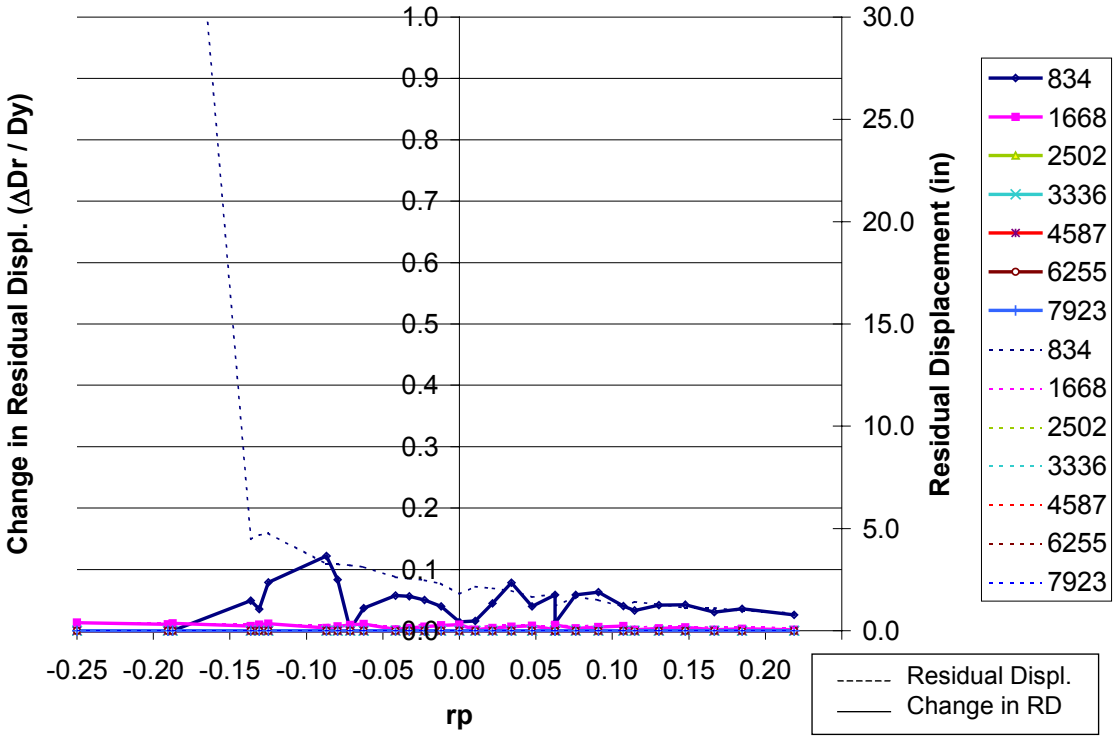


Figure C3.8.2.2c – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

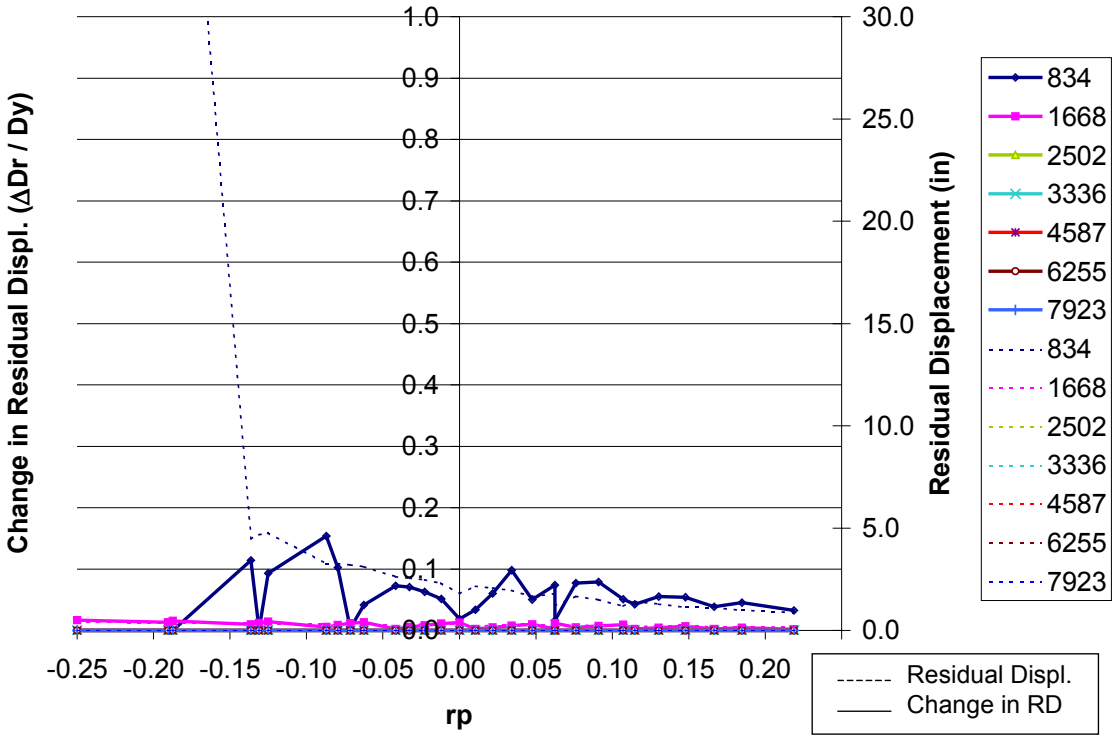


Figure C3.8.2.2d – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

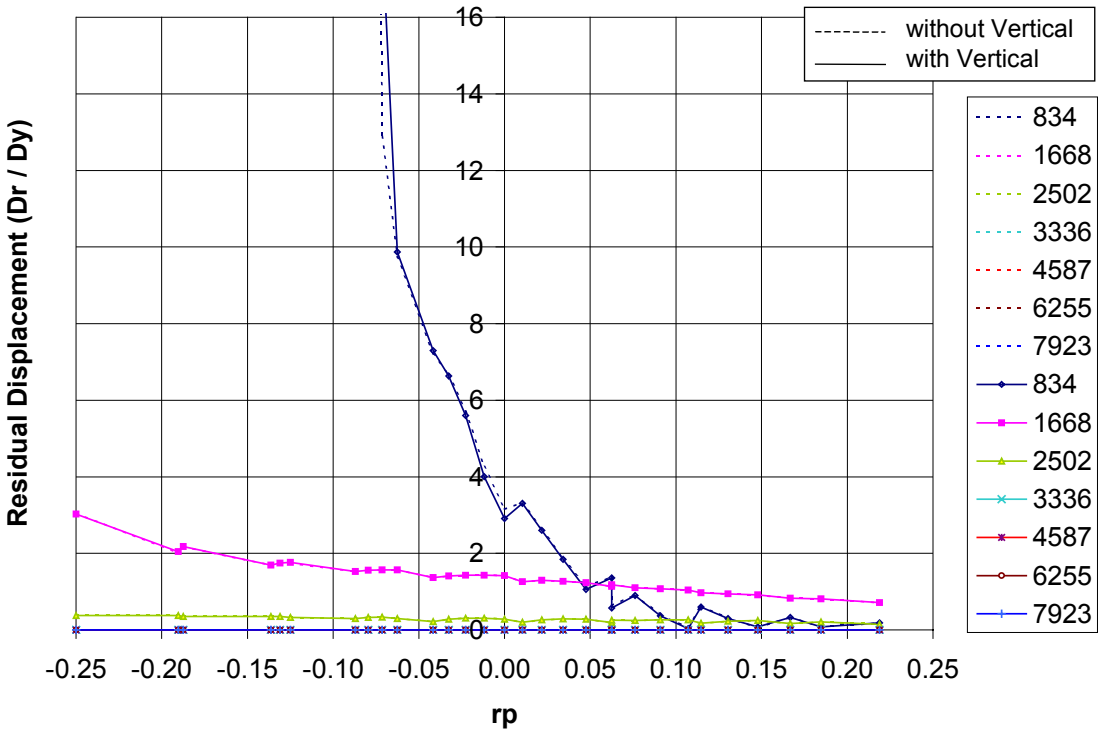


Figure C3.8.2.3a – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

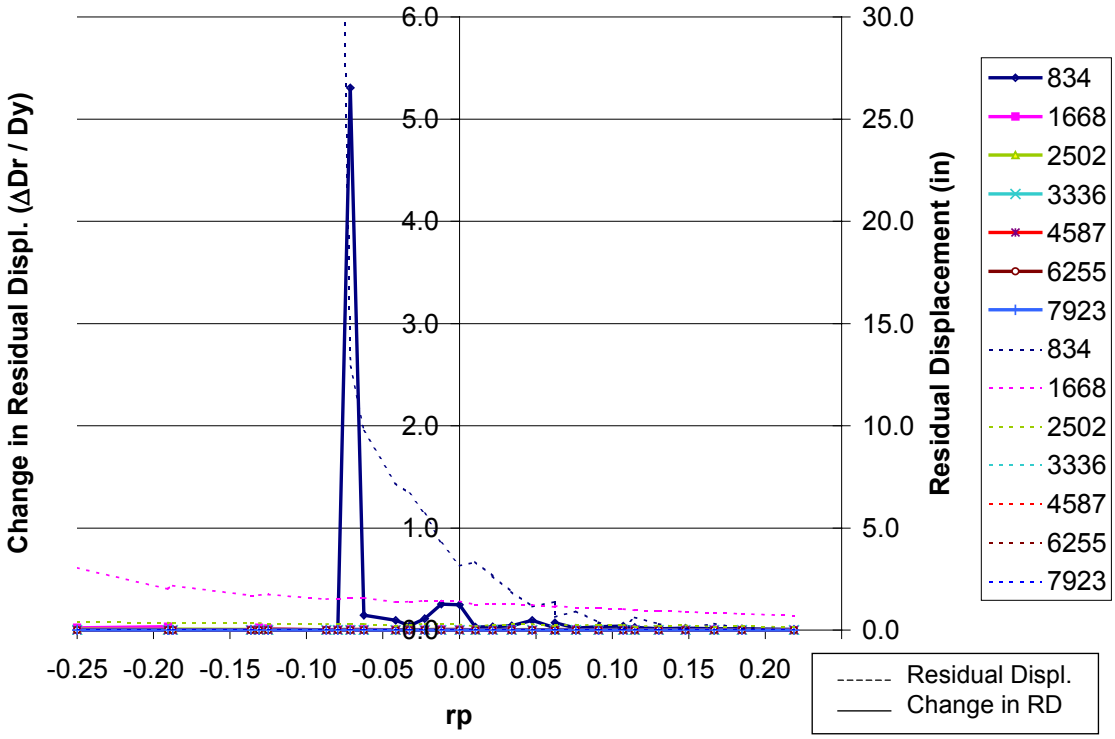


Figure C3.8.2.3b – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

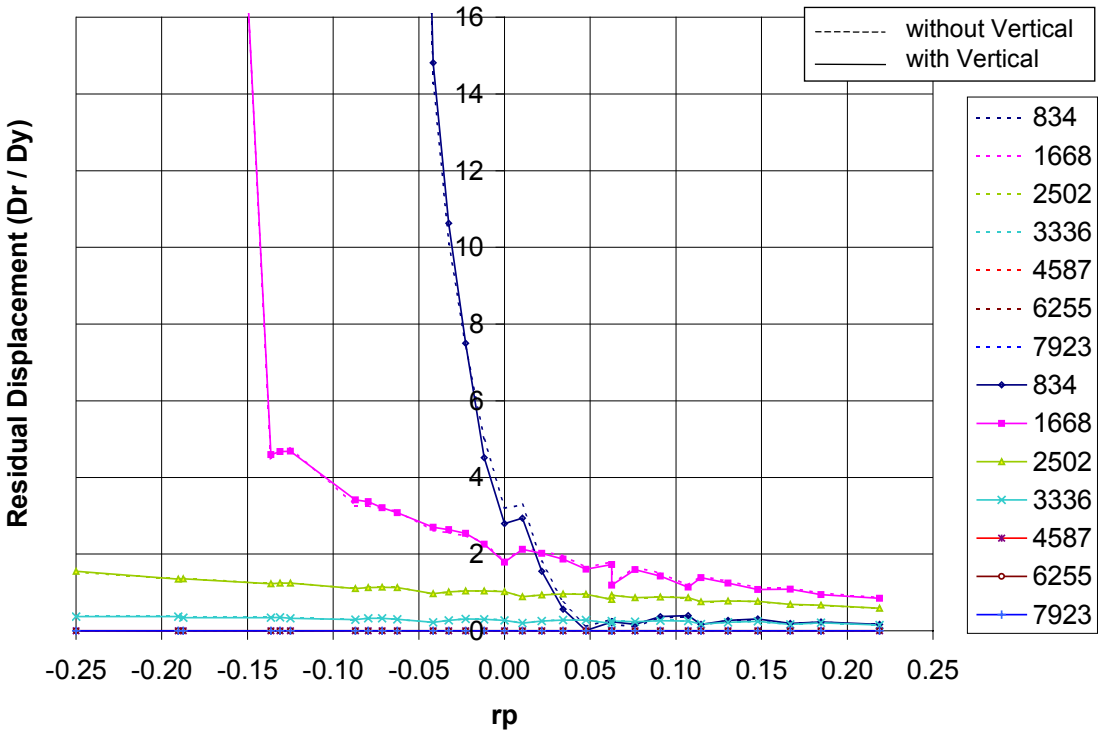


Figure C3.8.2.4a – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

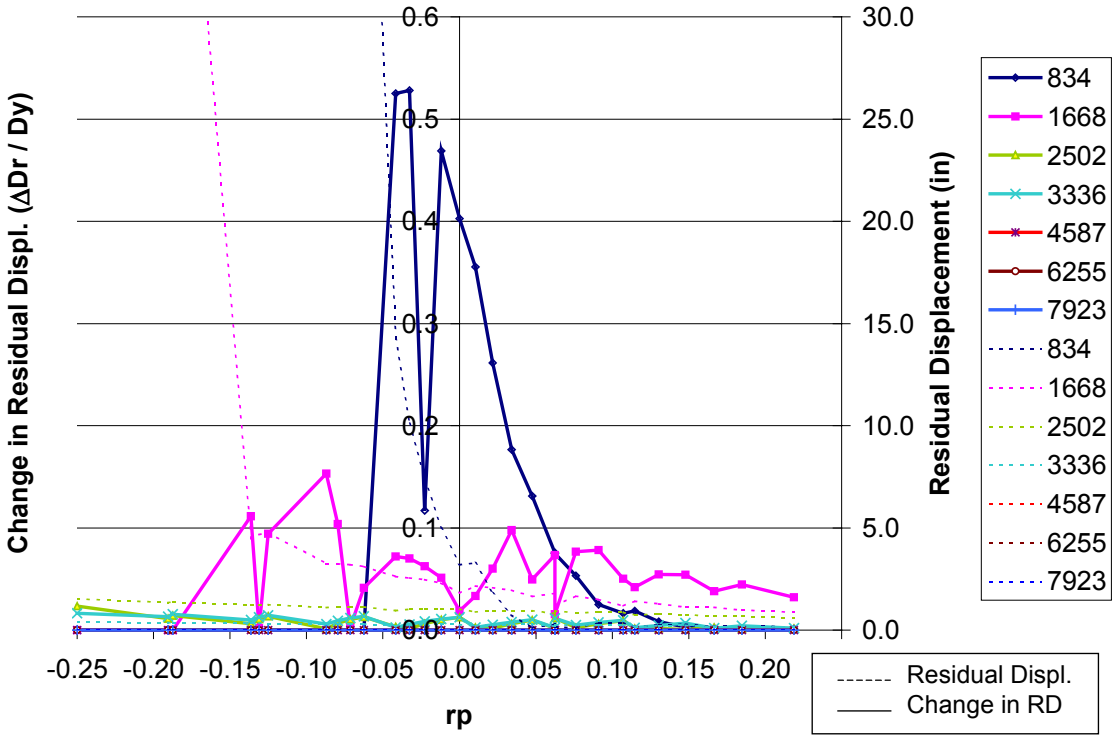


Figure C3.8.2.4b – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

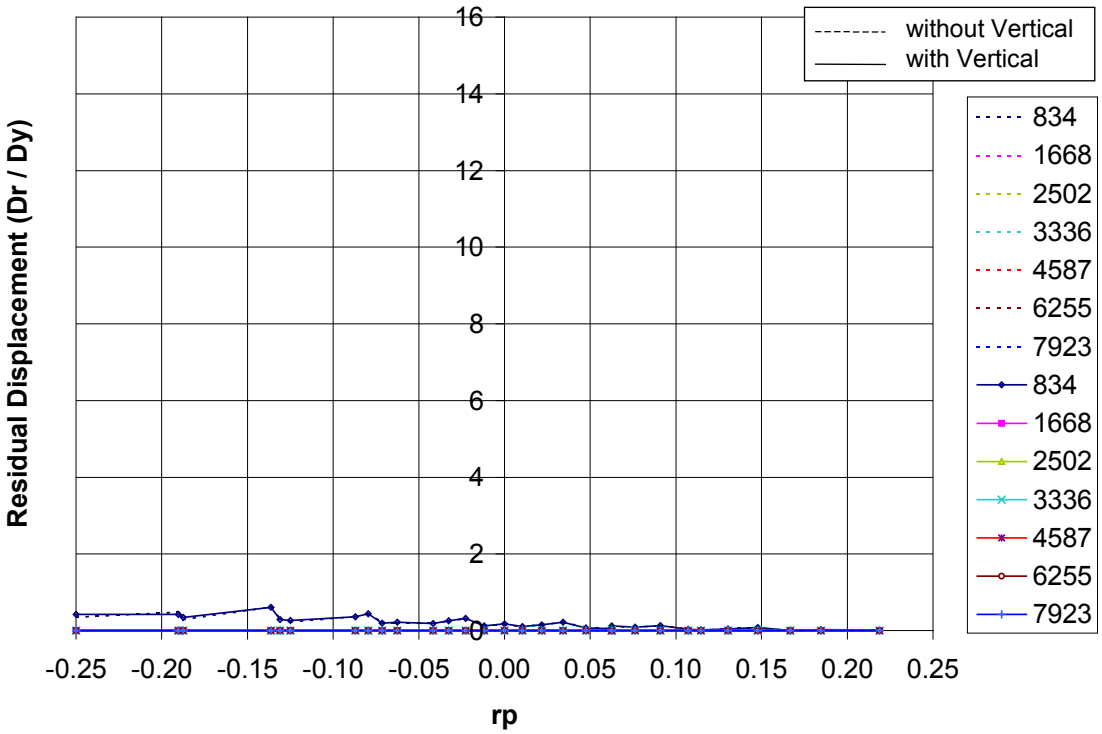


Figure C3.8.3.1a – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

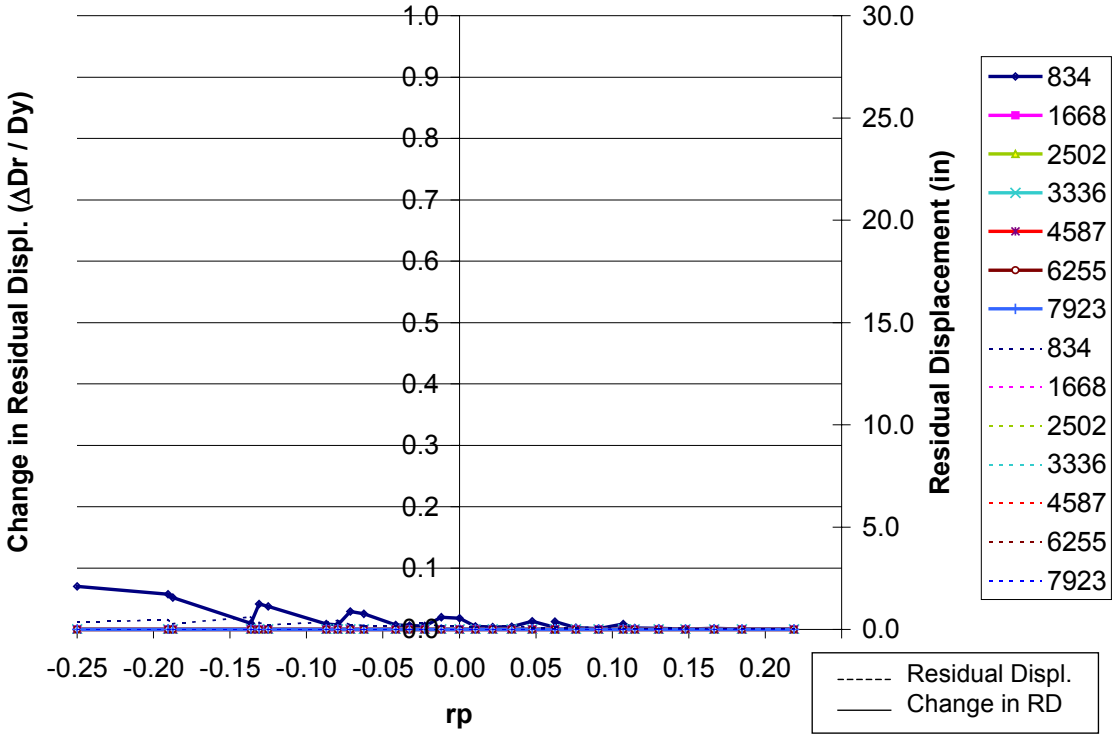


Figure C3.8.3.1b – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

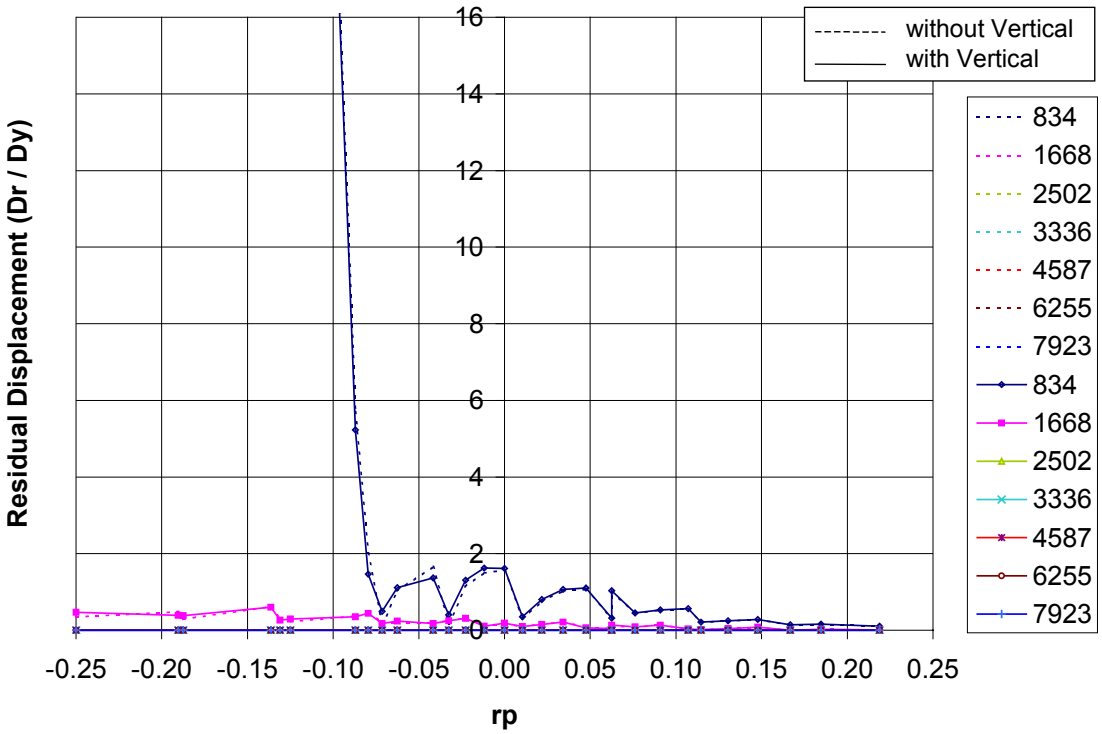


Figure C3.8.3.2a – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

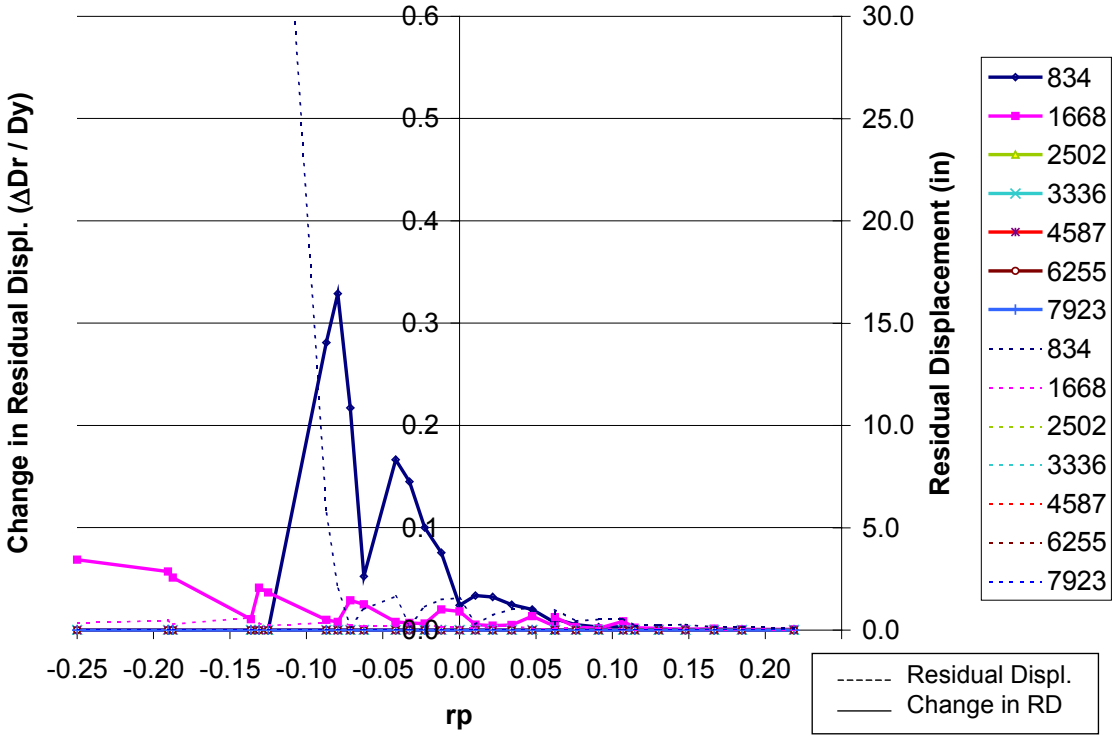


Figure C3.8.3.2b – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

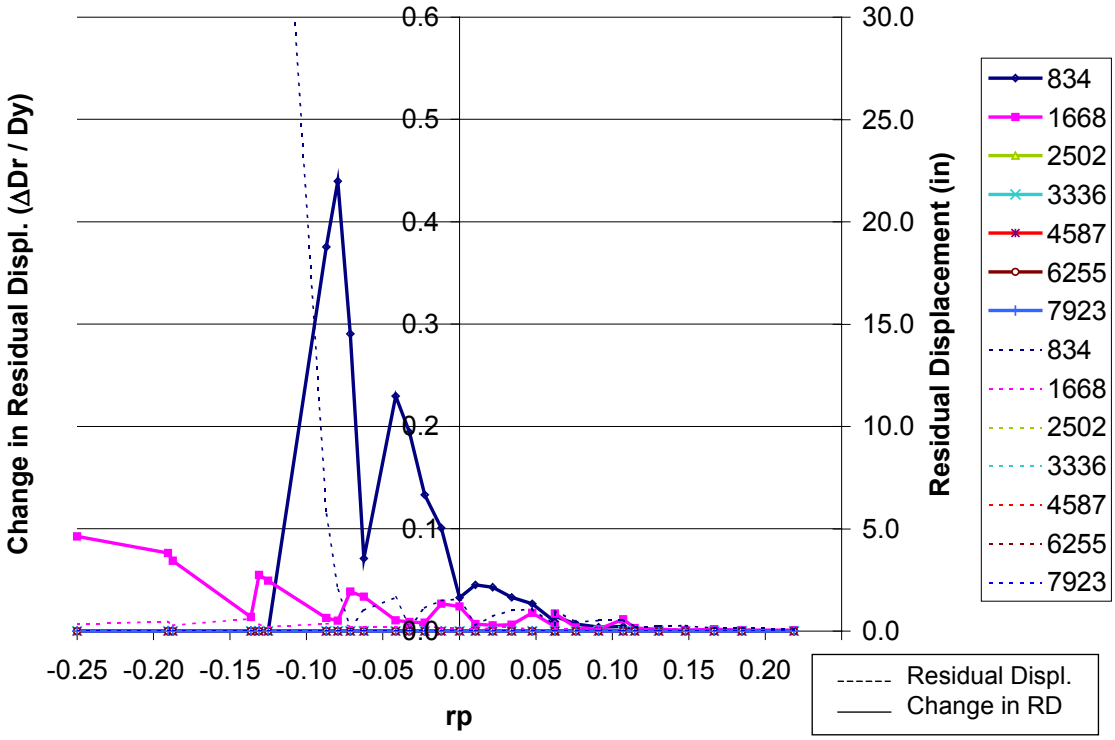


Figure C3.8.3.2c – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

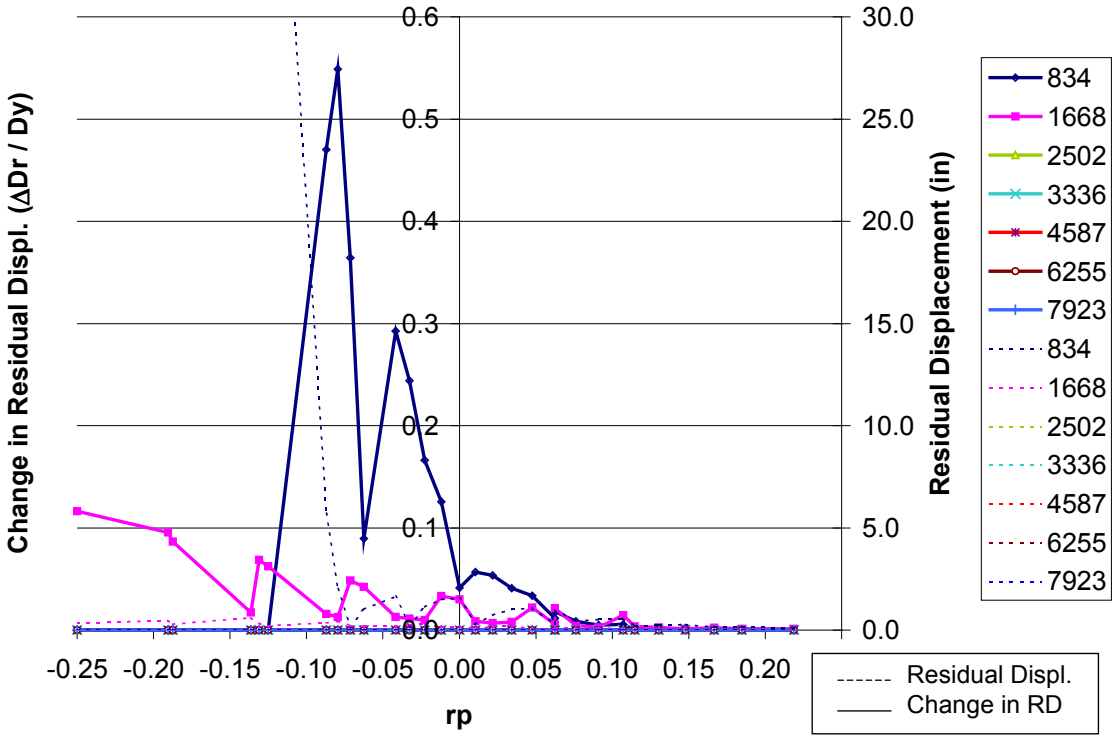


Figure C3.8.3.2d – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

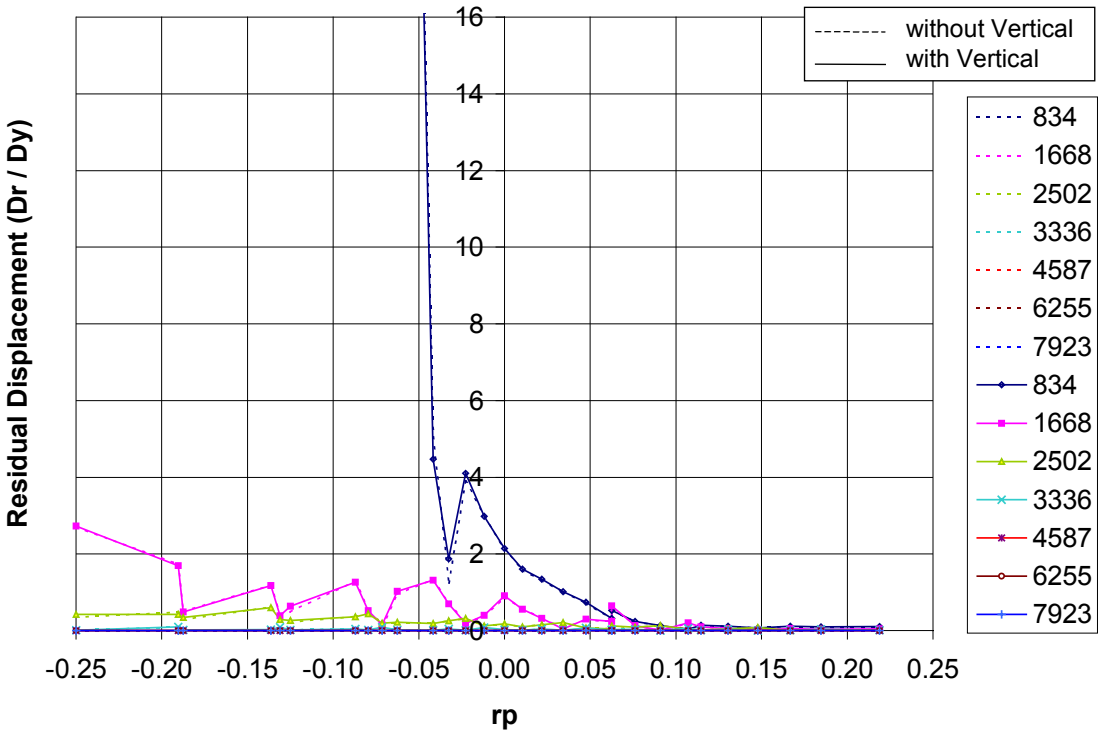


Figure C3.8.3.3a – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

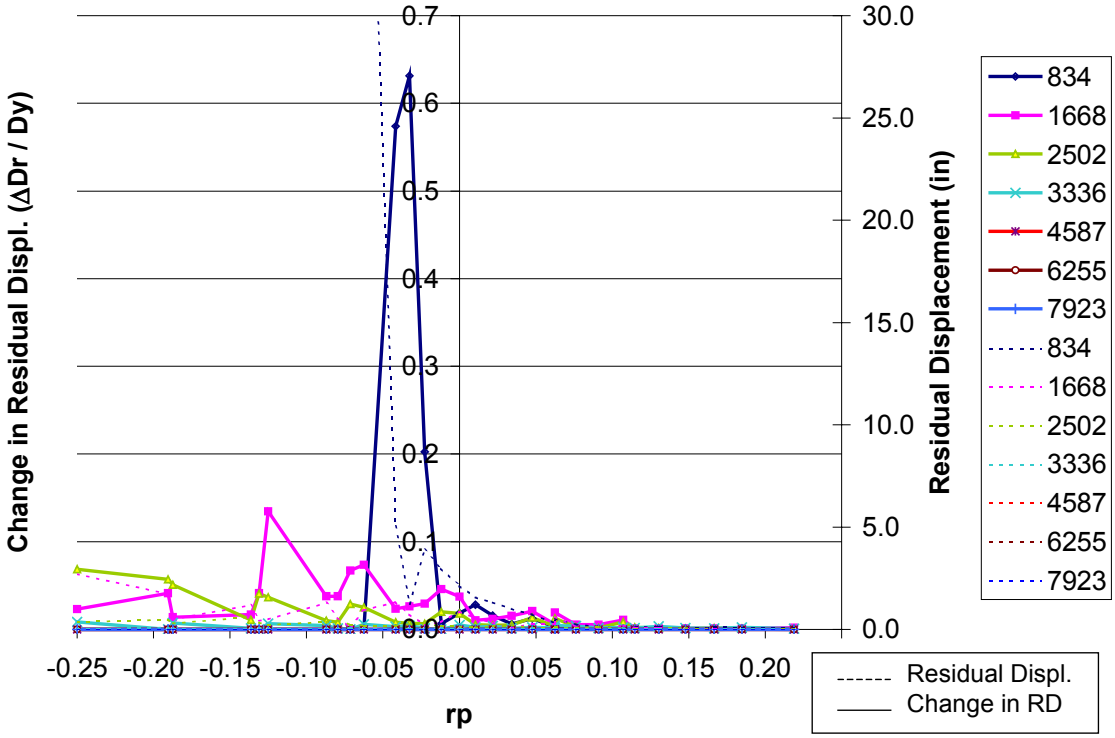


Figure C3.8.3.3b – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

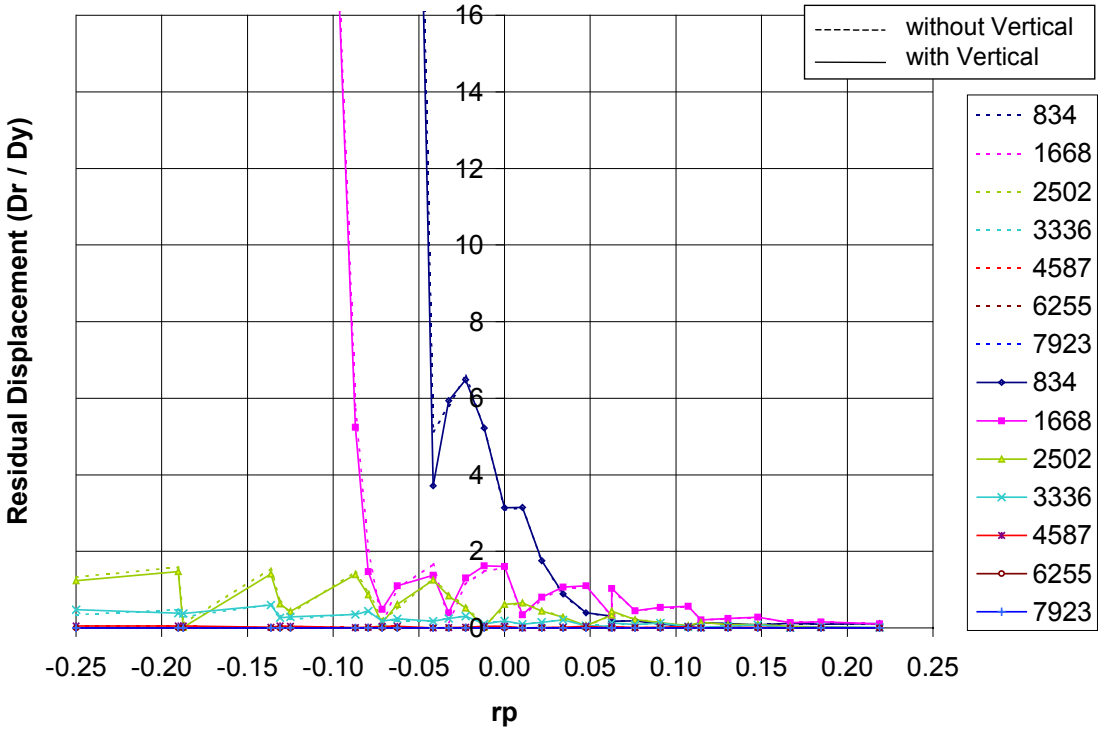


Figure C3.8.3.4a – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

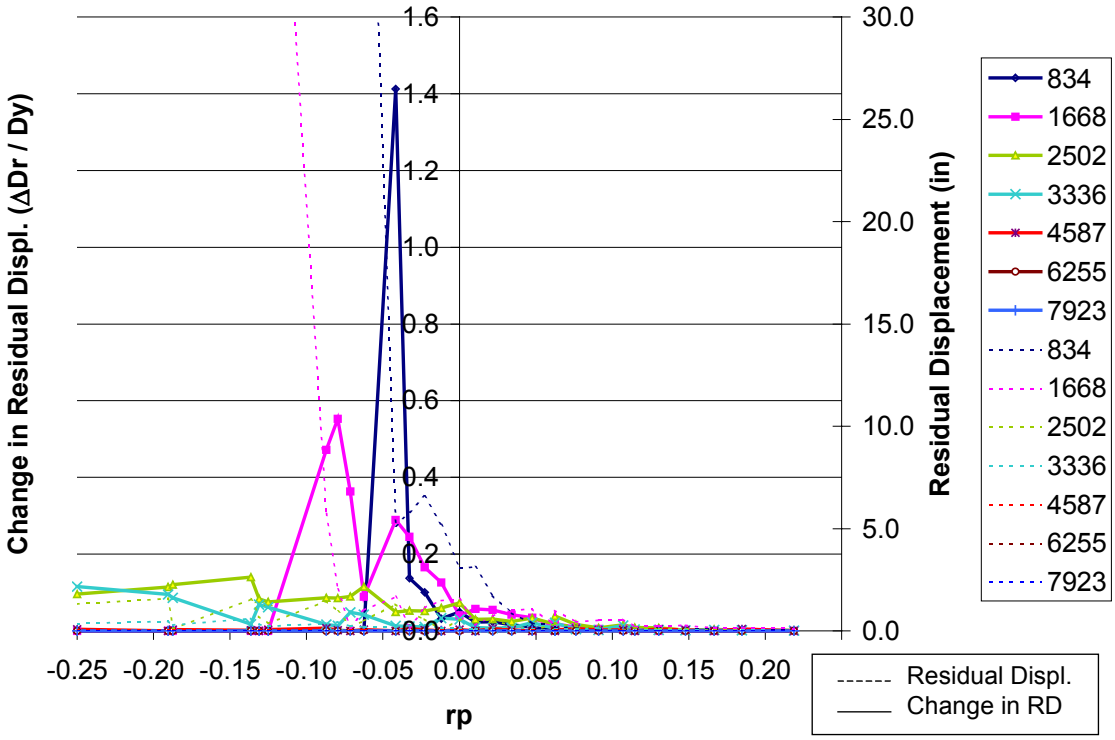


Figure C3.8.3.4b – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

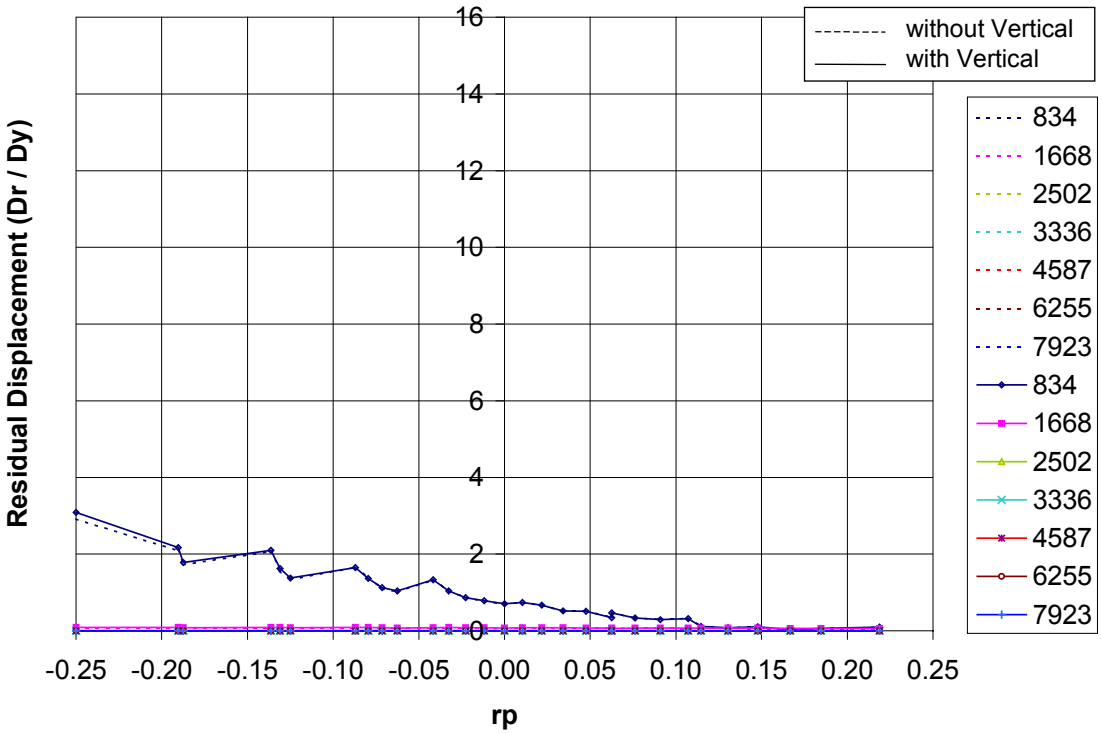


Figure C3.8.4.1a – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

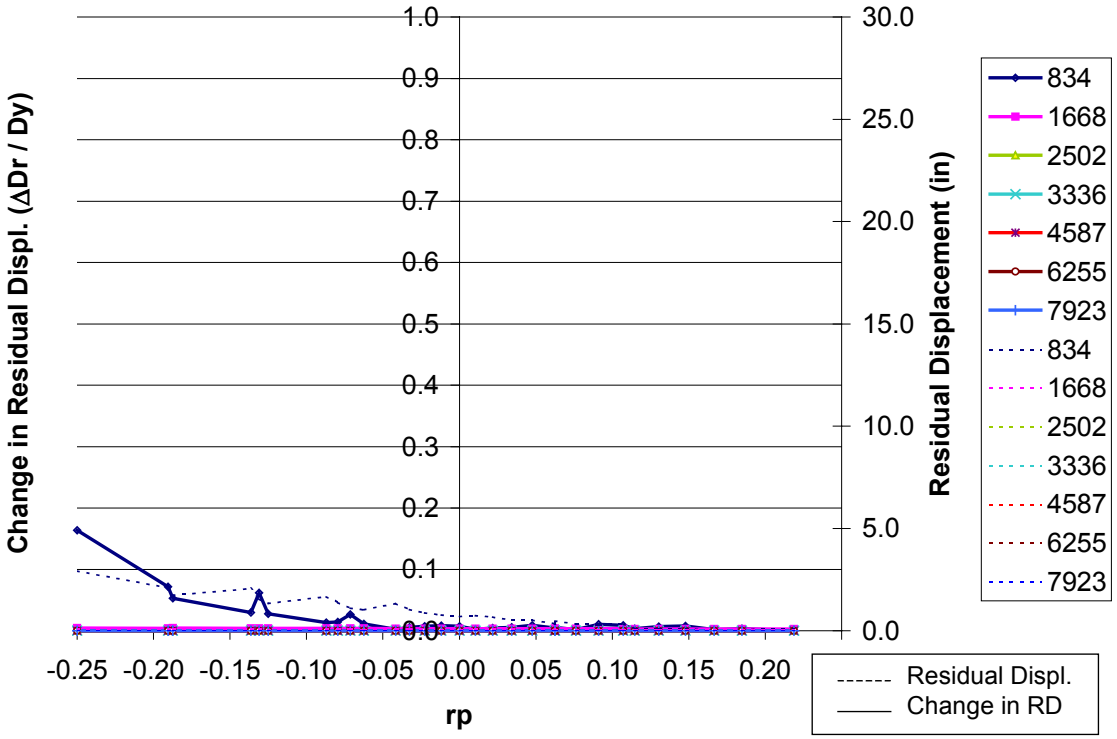


Figure C3.8.4.1b – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

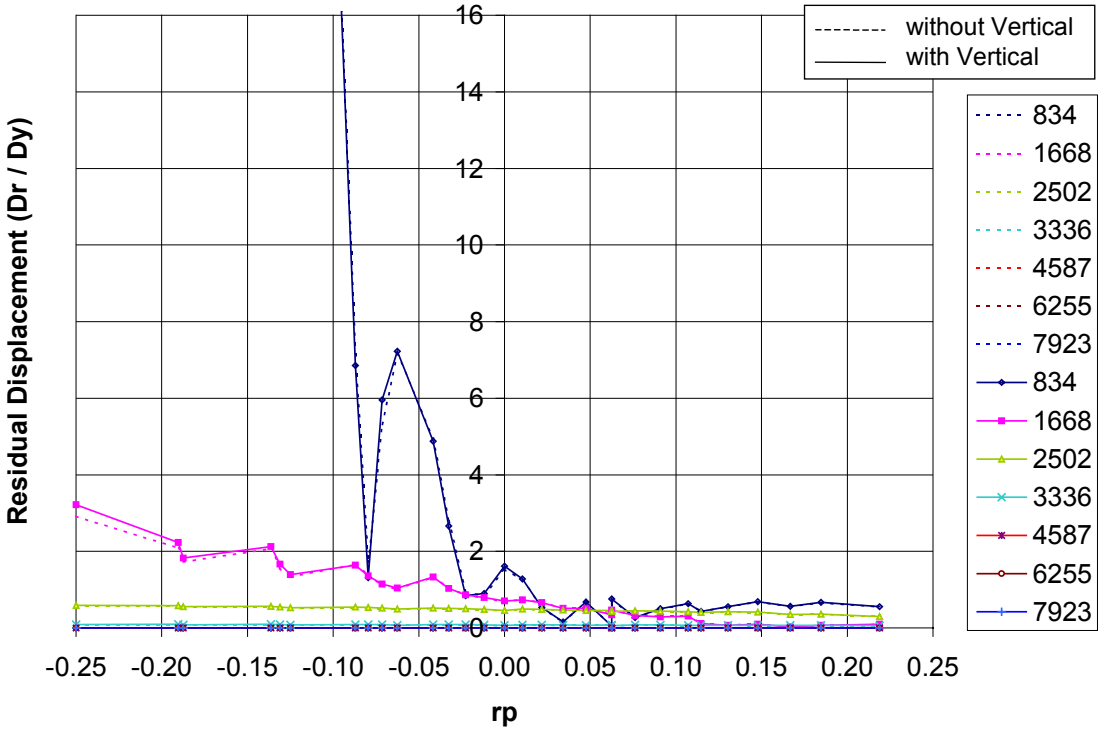


Figure C3.8.4.2a – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

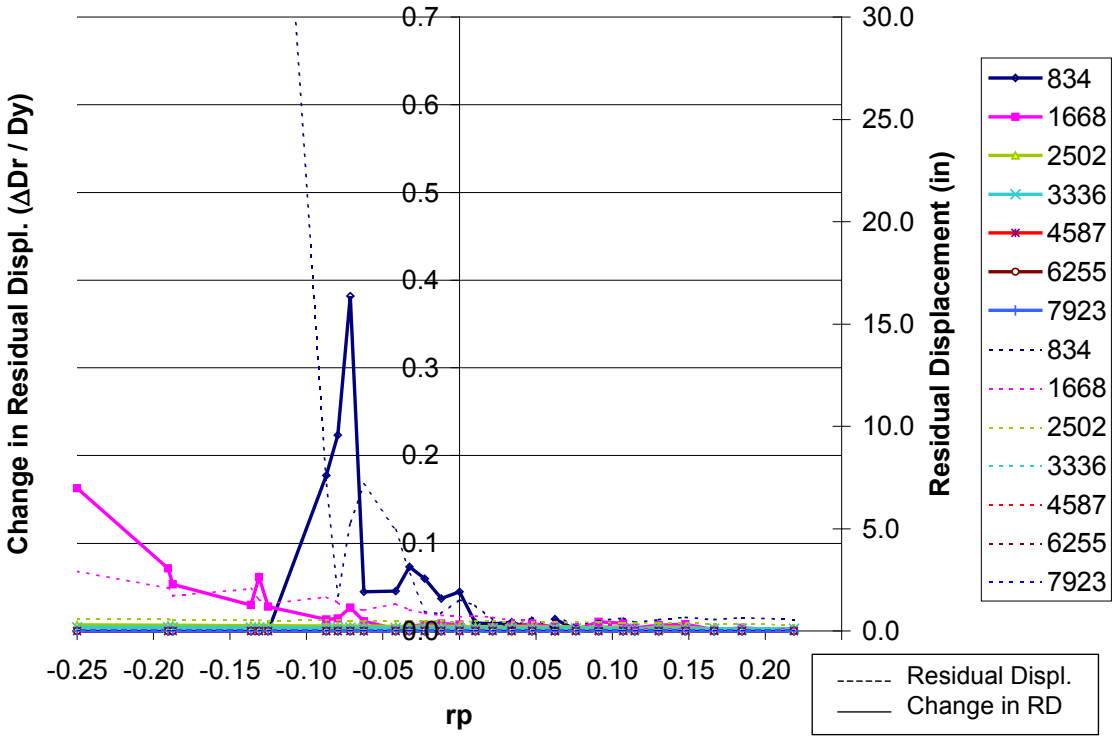


Figure C3.8.4.2b – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

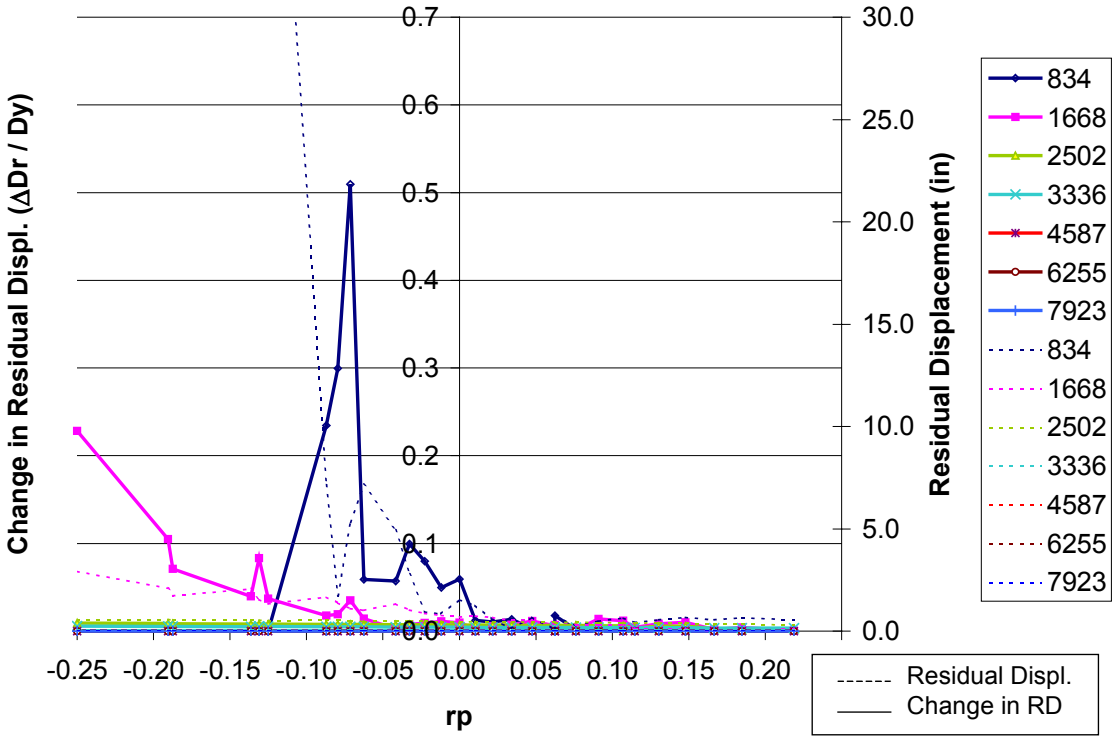


Figure C3.8.4.2c – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

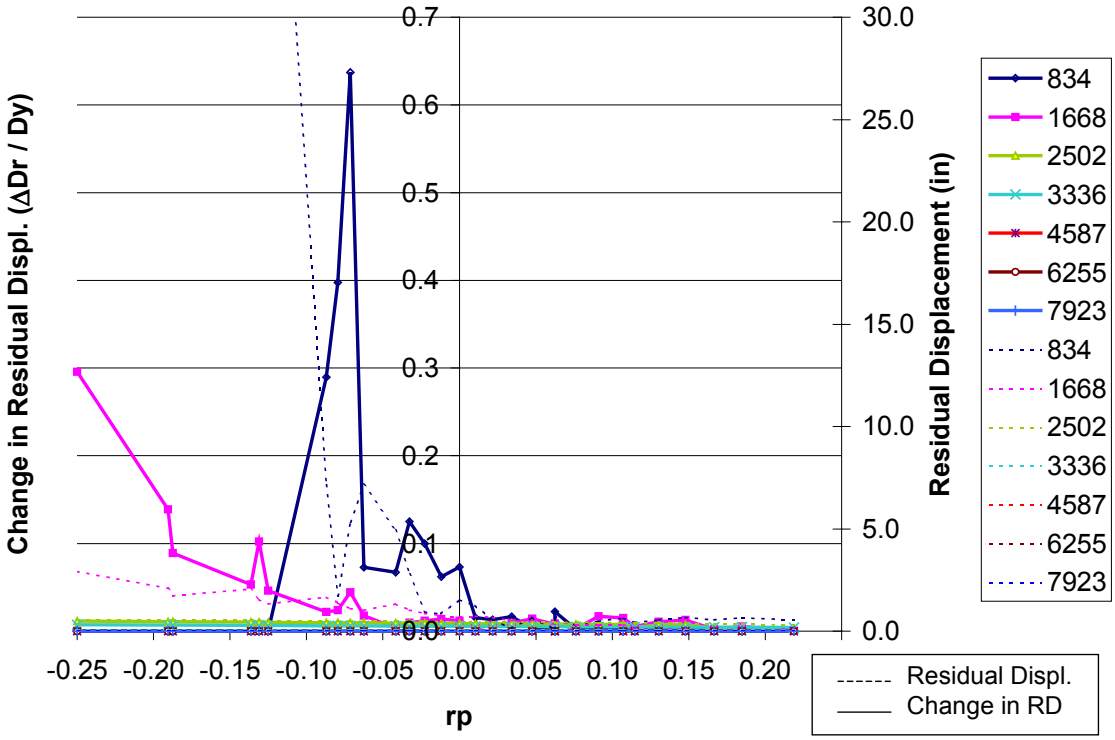


Figure C3.8.4.2d – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

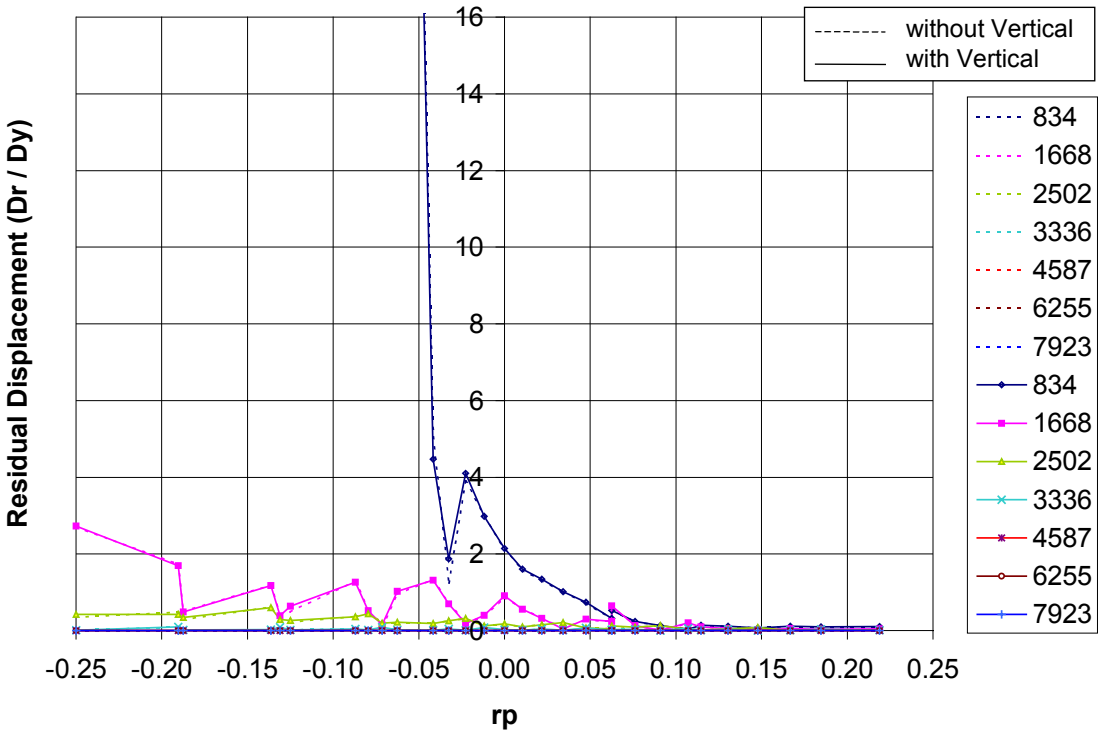


Figure C3.8.4.3a – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

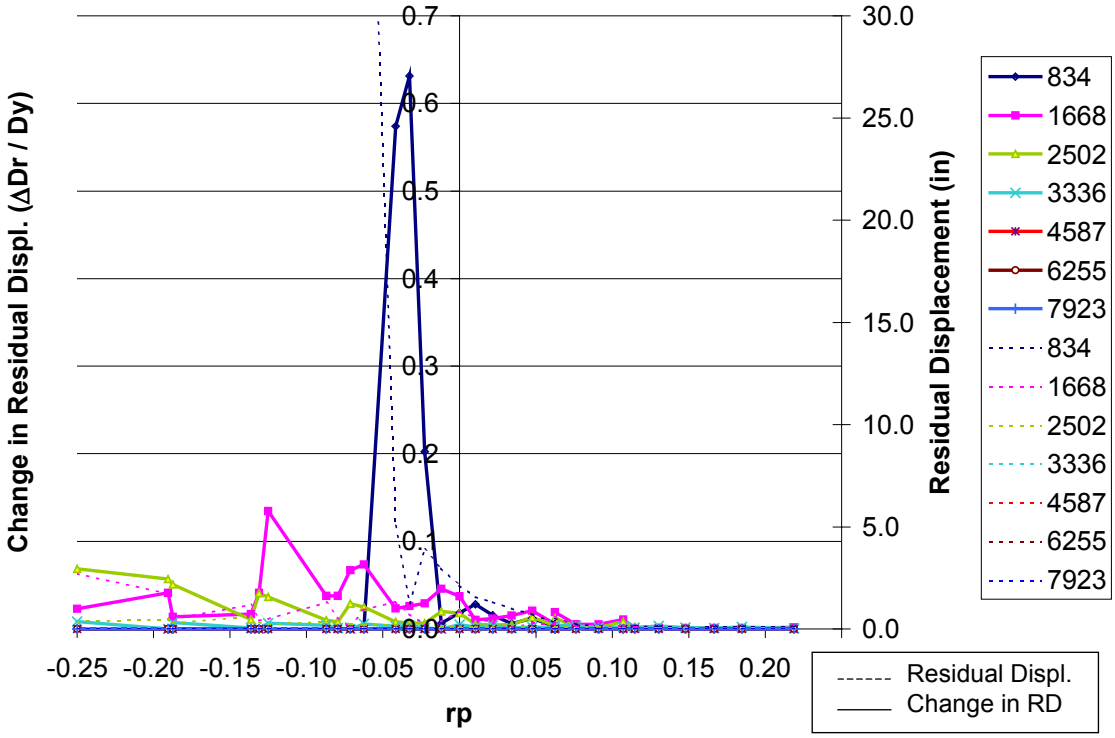


Figure C3.8.4.3b – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

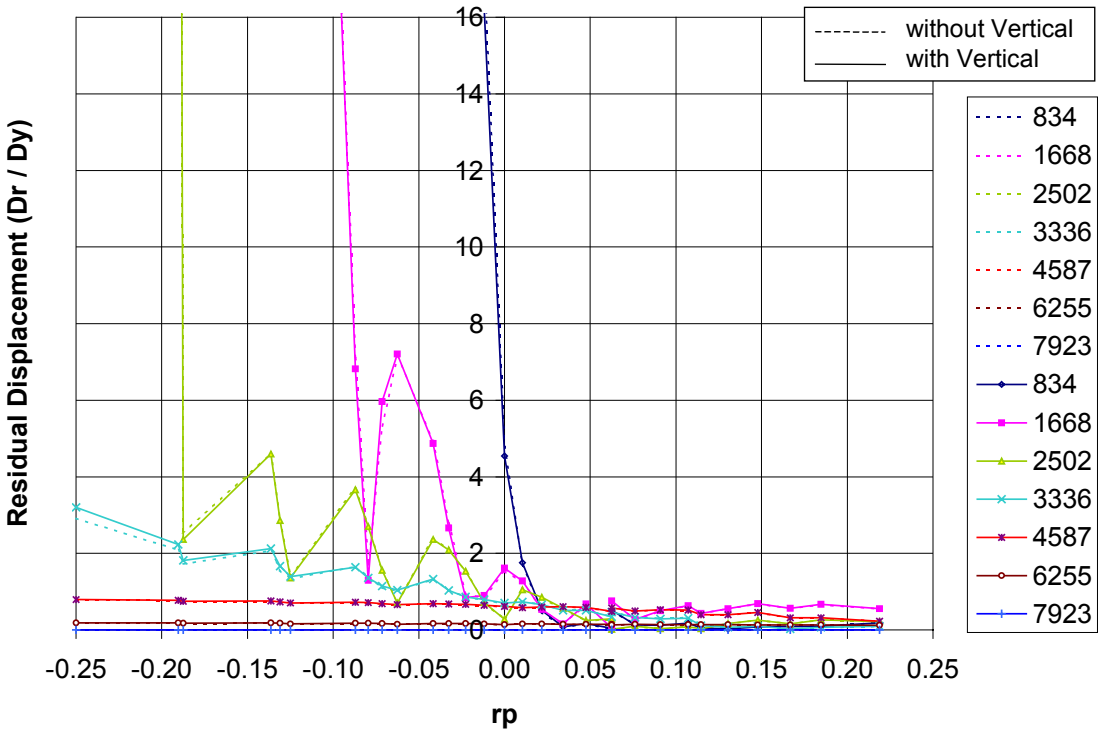


Figure C3.8.4.4a – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

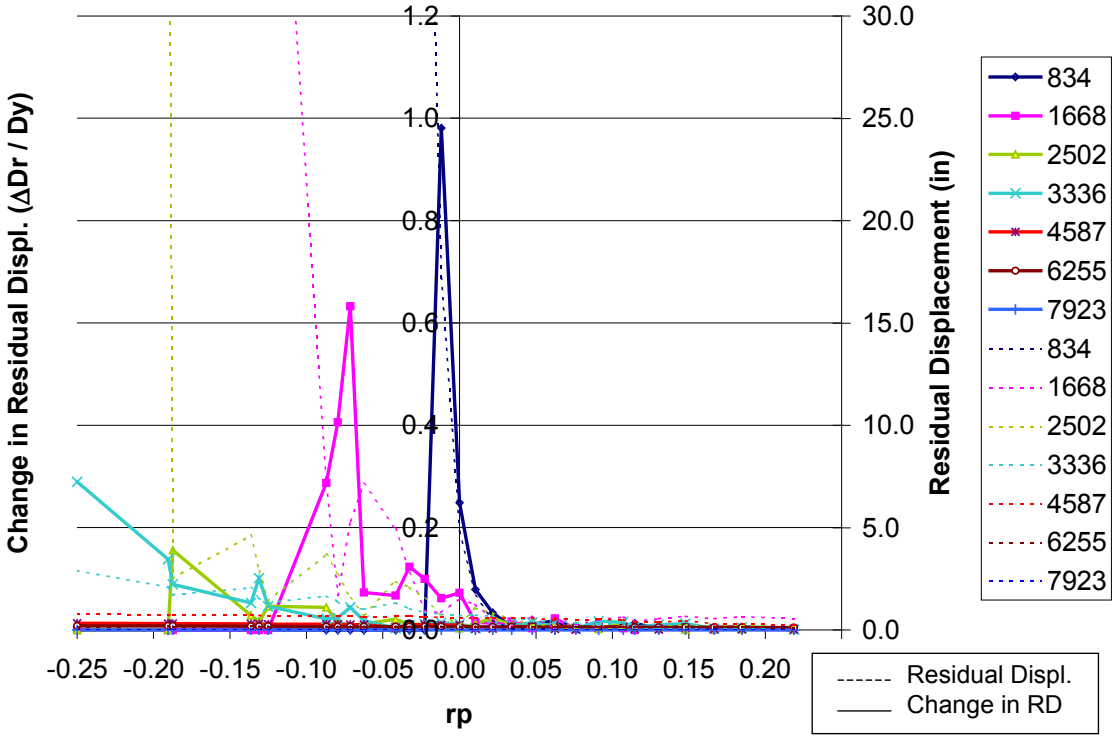


Figure C3.8.4.4b – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

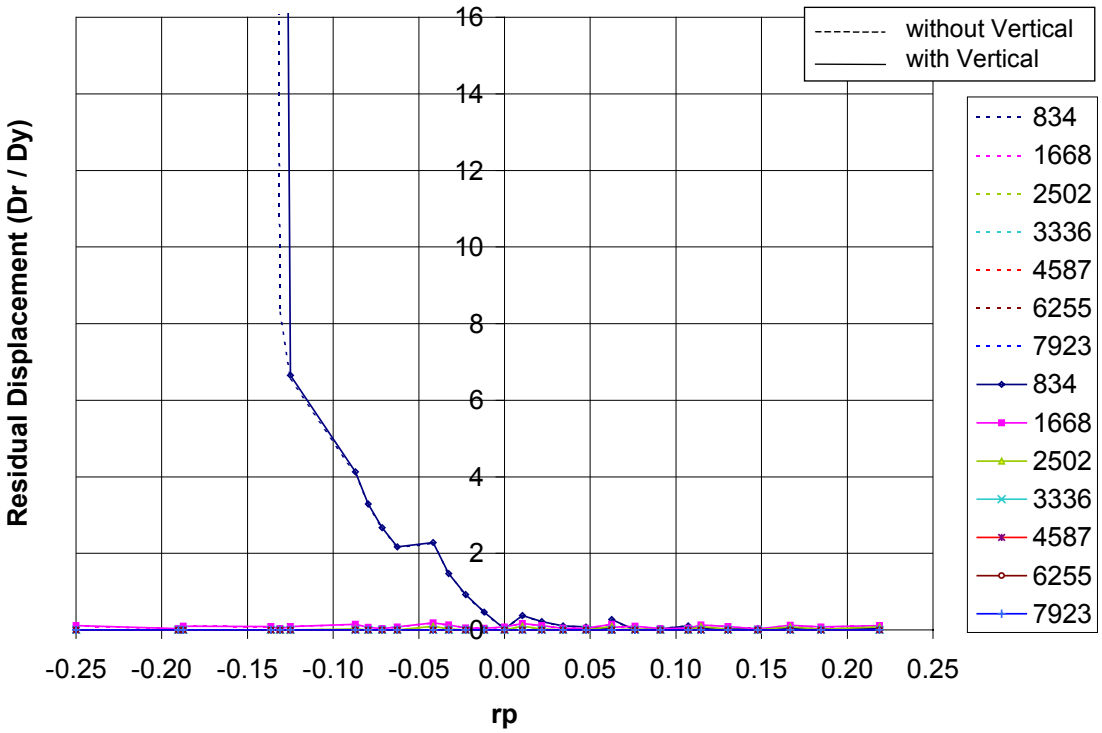


Figure C3.8.5.1a – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

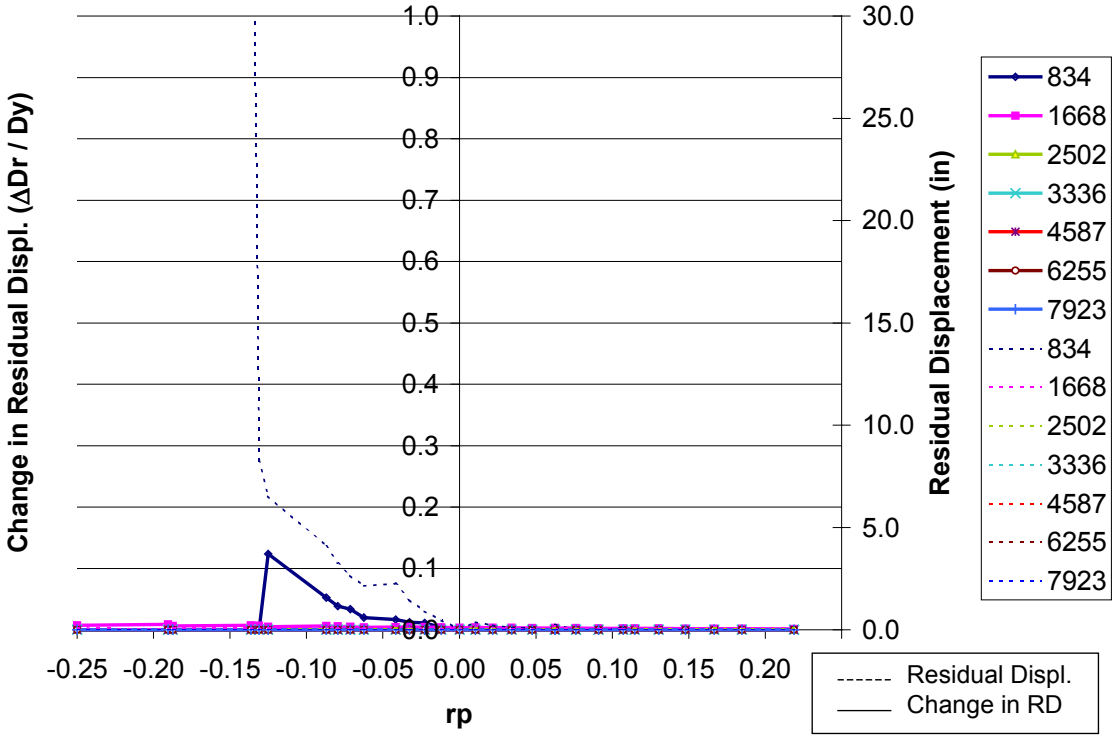


Figure C3.8.5.1b – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

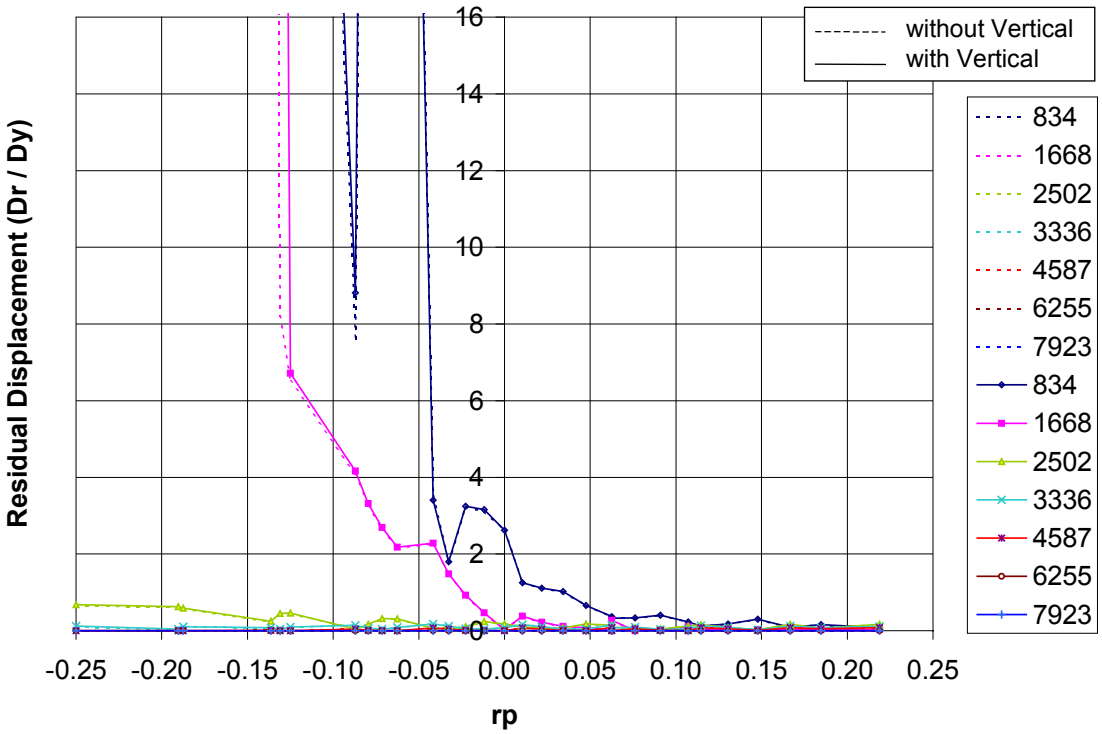


Figure C3.8.5.2a – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

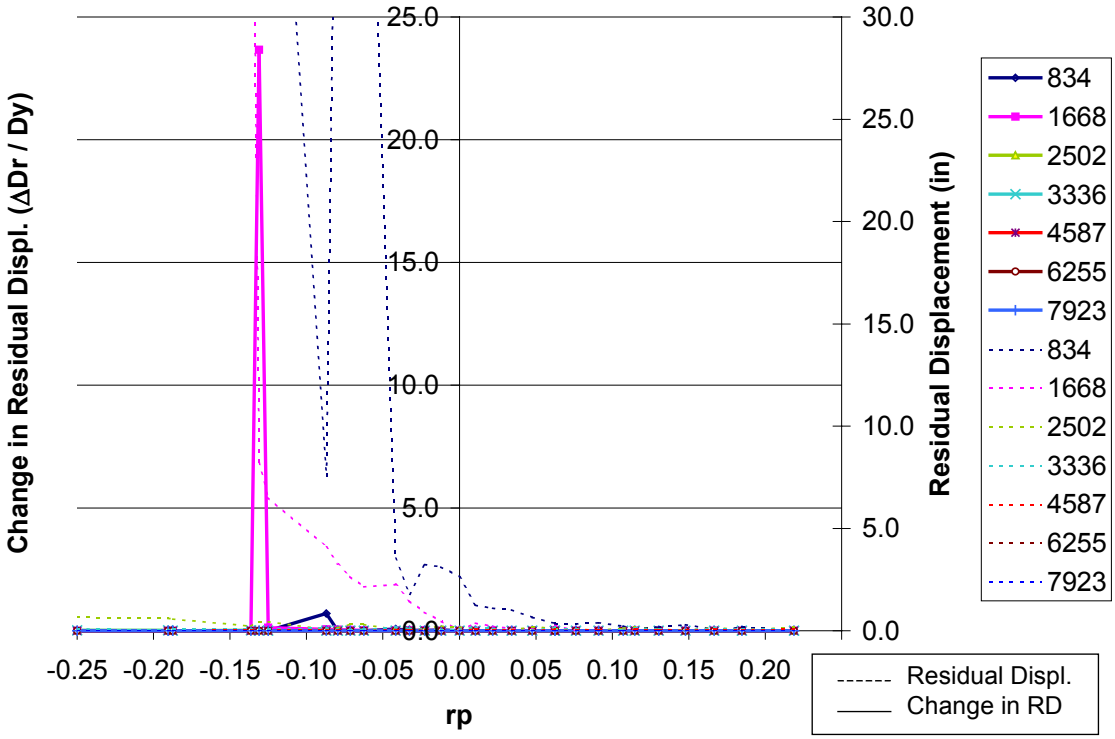


Figure C3.8.5.2b – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

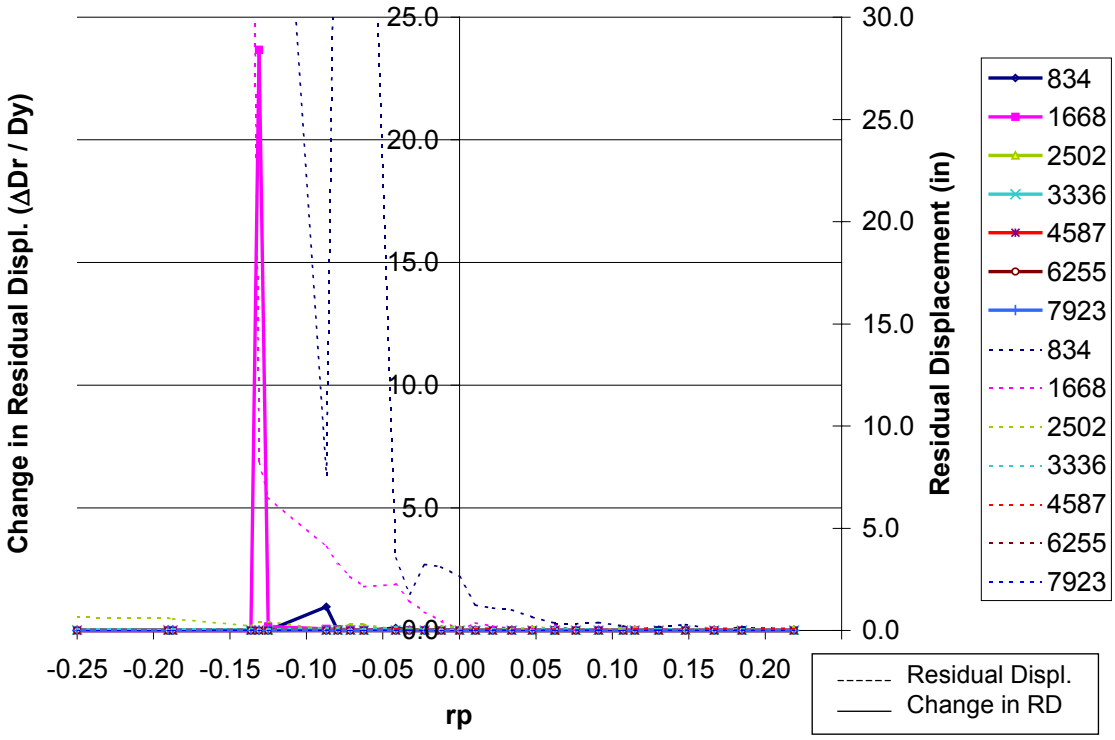


Figure C3.8.5.2c – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

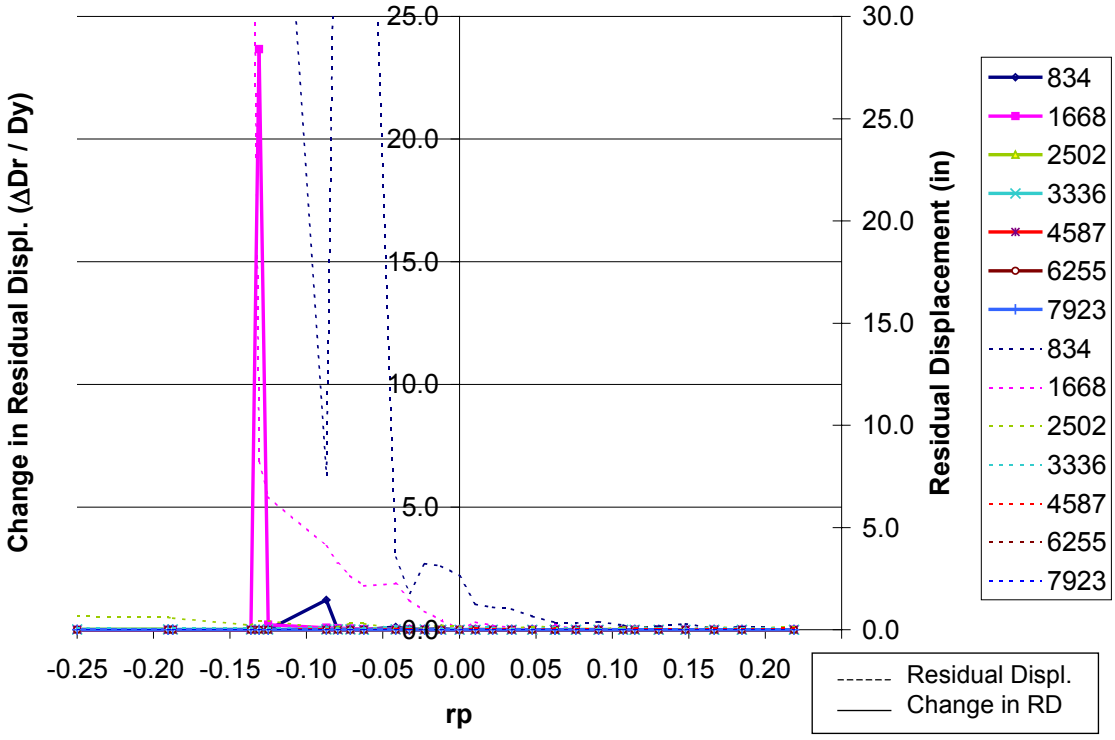


Figure C3.8.5.2d – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

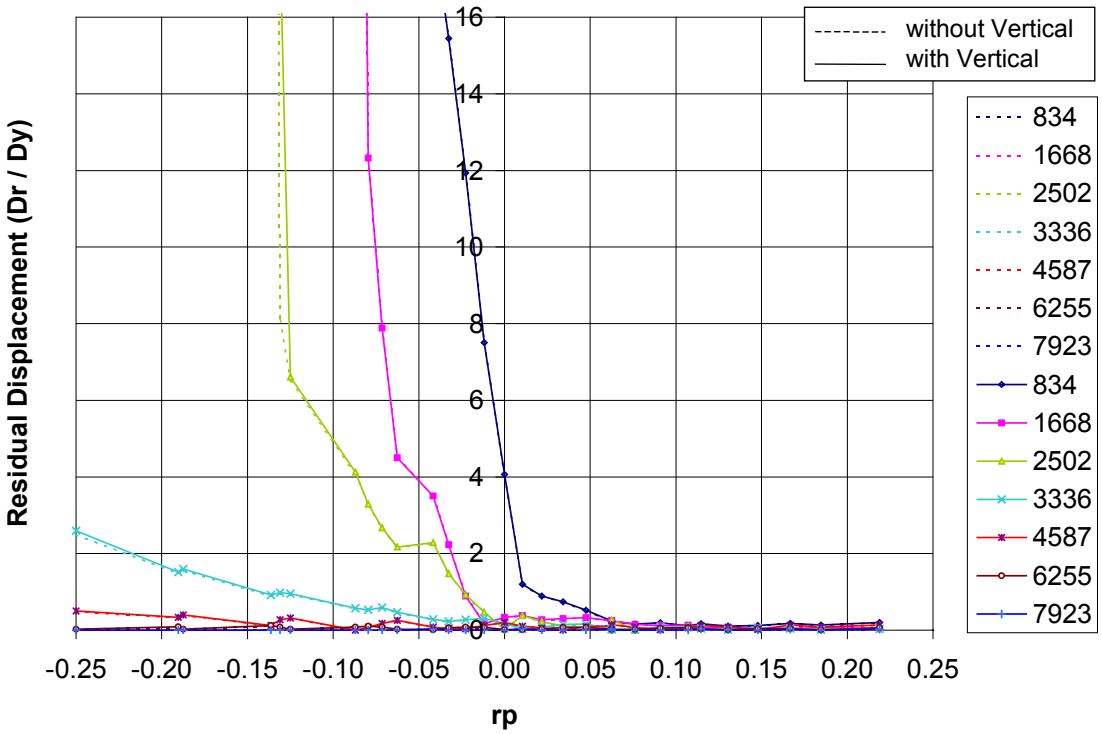


Figure C3.8.5.3a – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

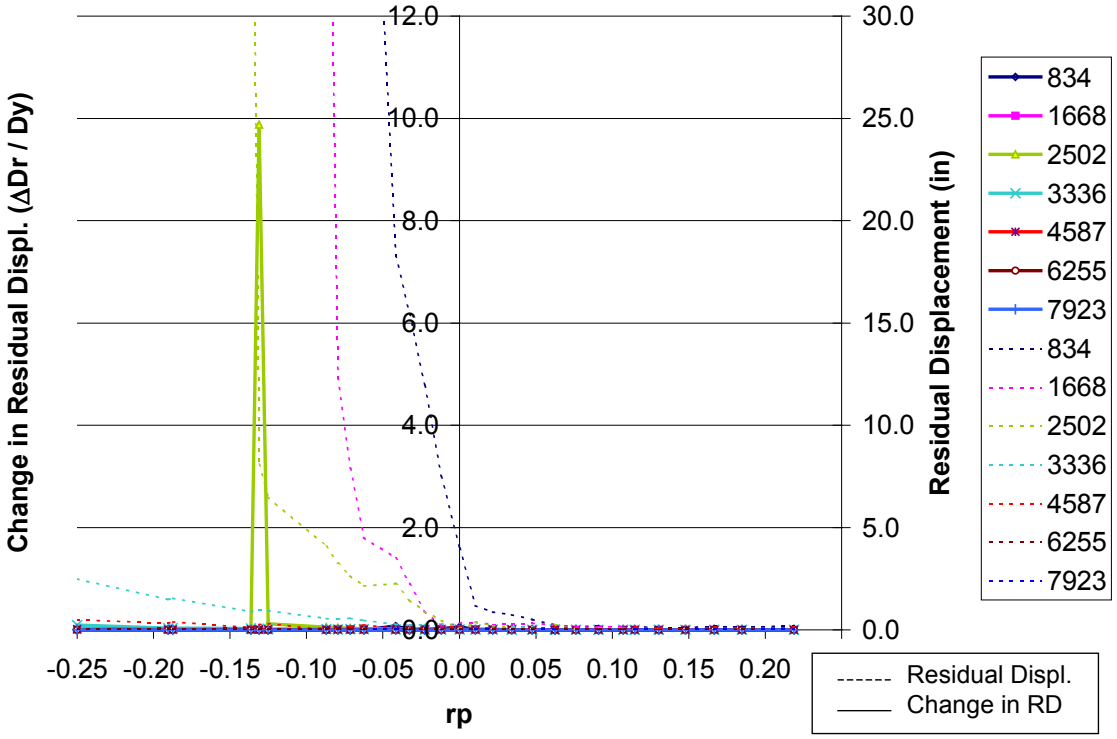


Figure C3.8.5.3b – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

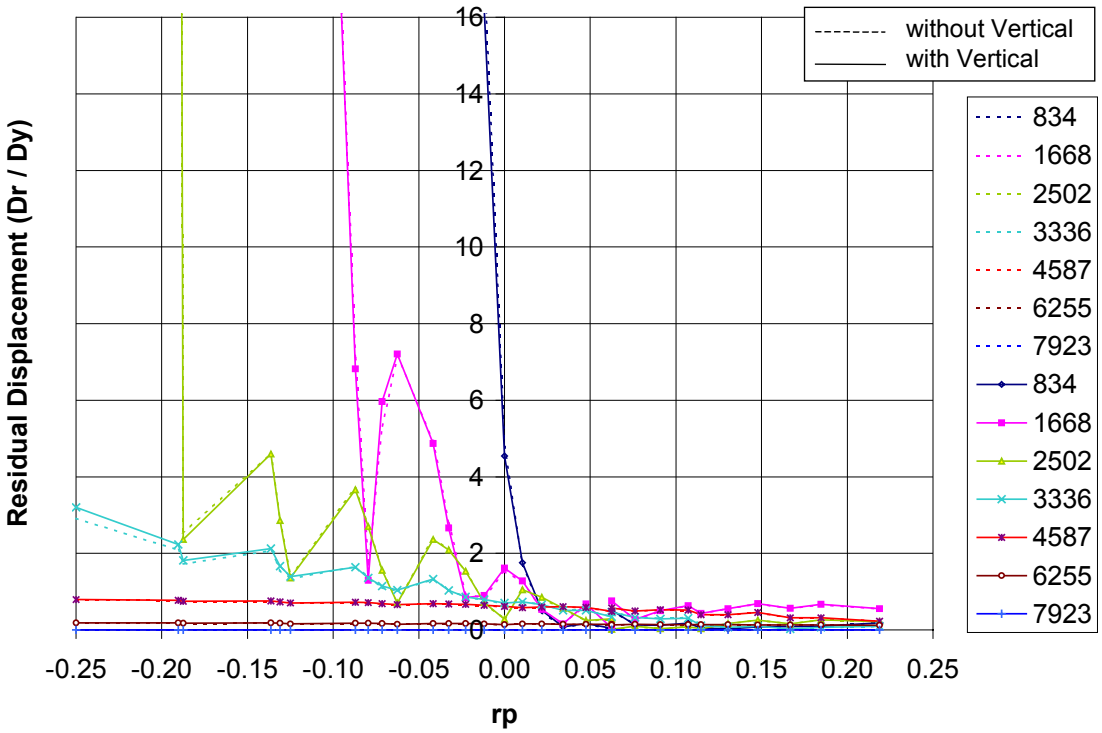


Figure C3.8.5.4a – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

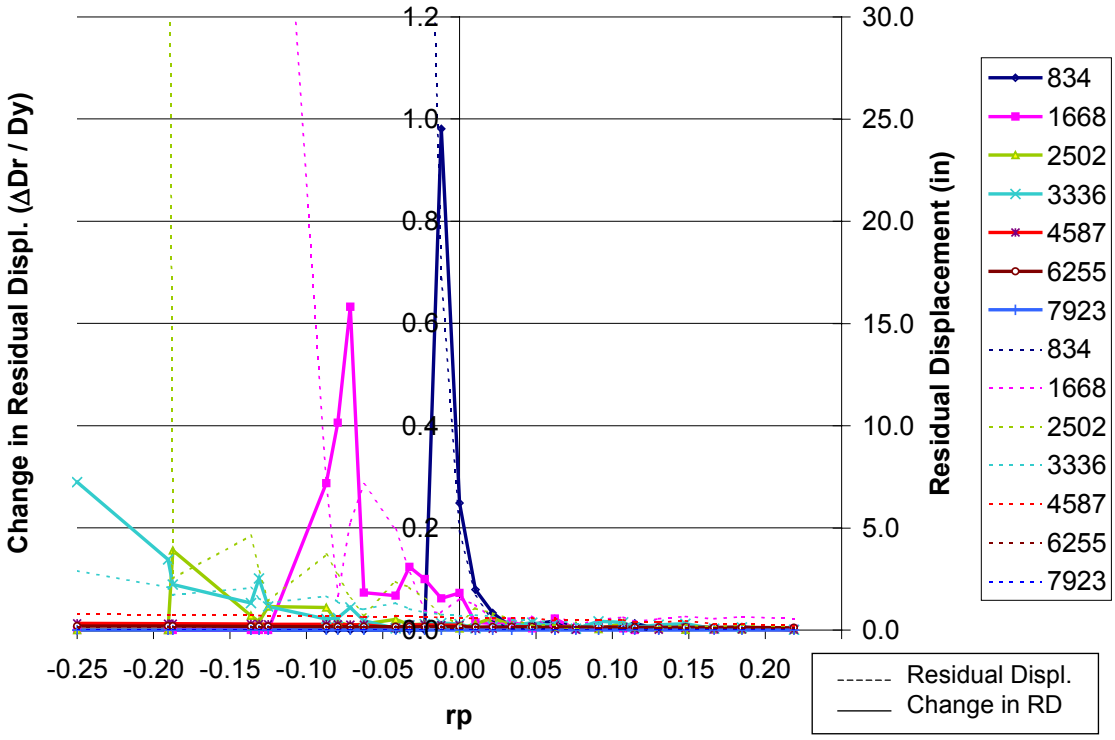


Figure C3.8.5.4b – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

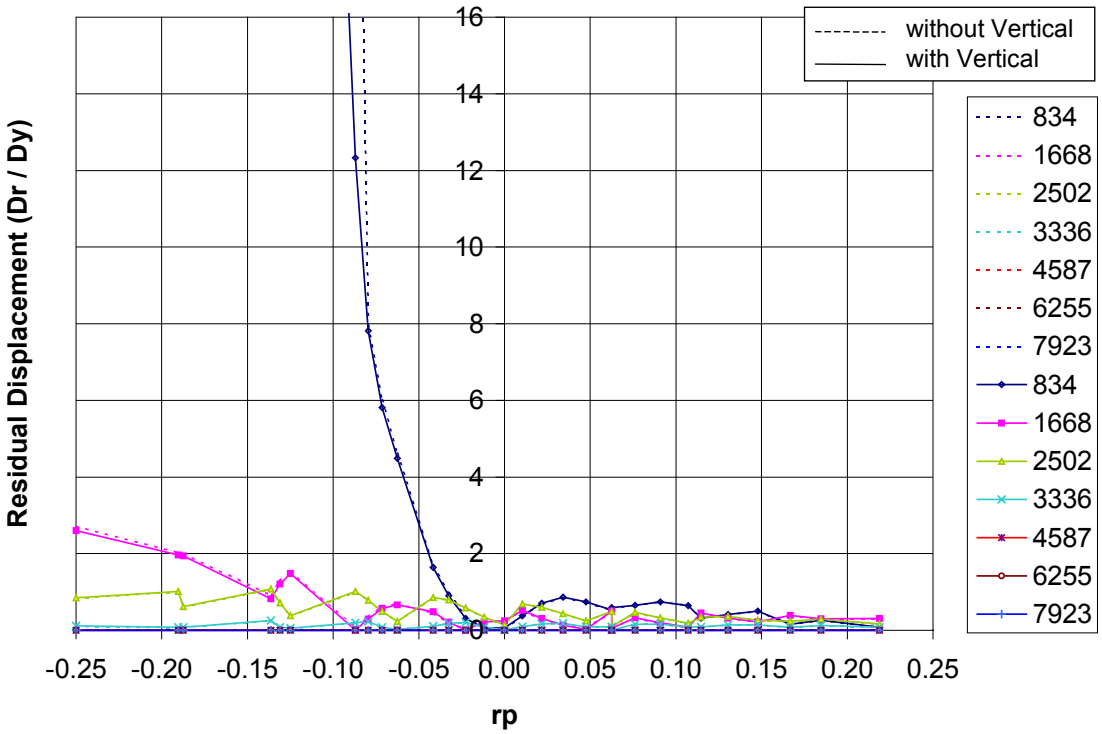


Figure C3.8.6.1a – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

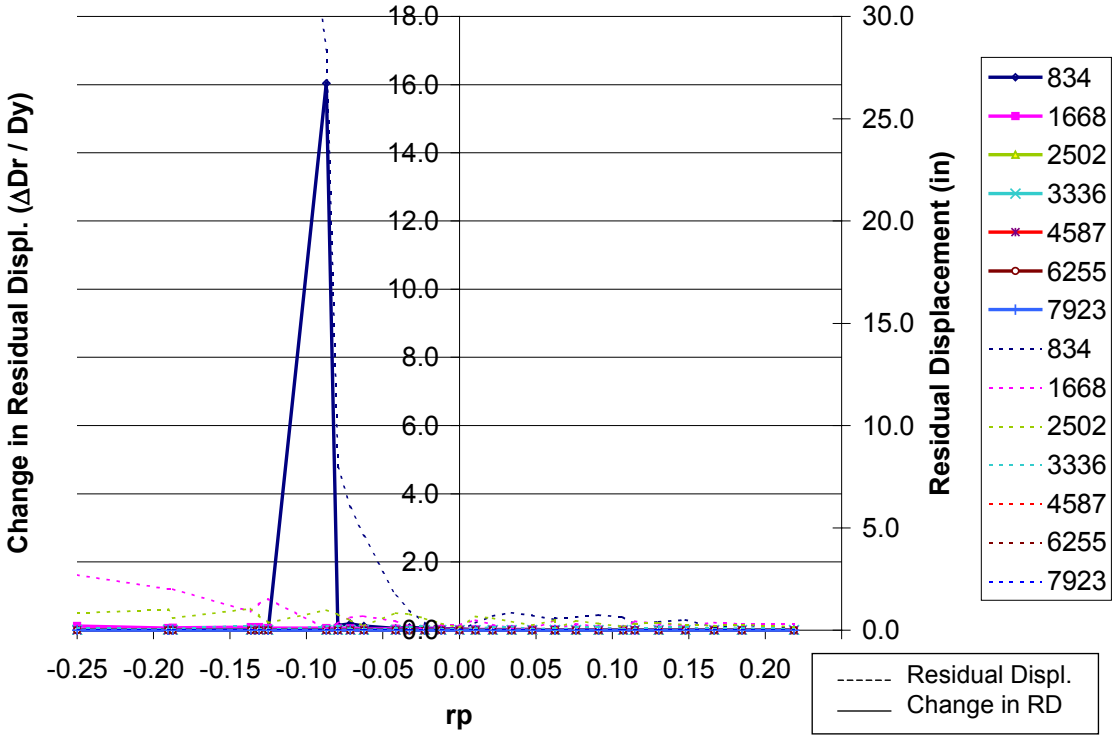


Figure C3.8.6.1b – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

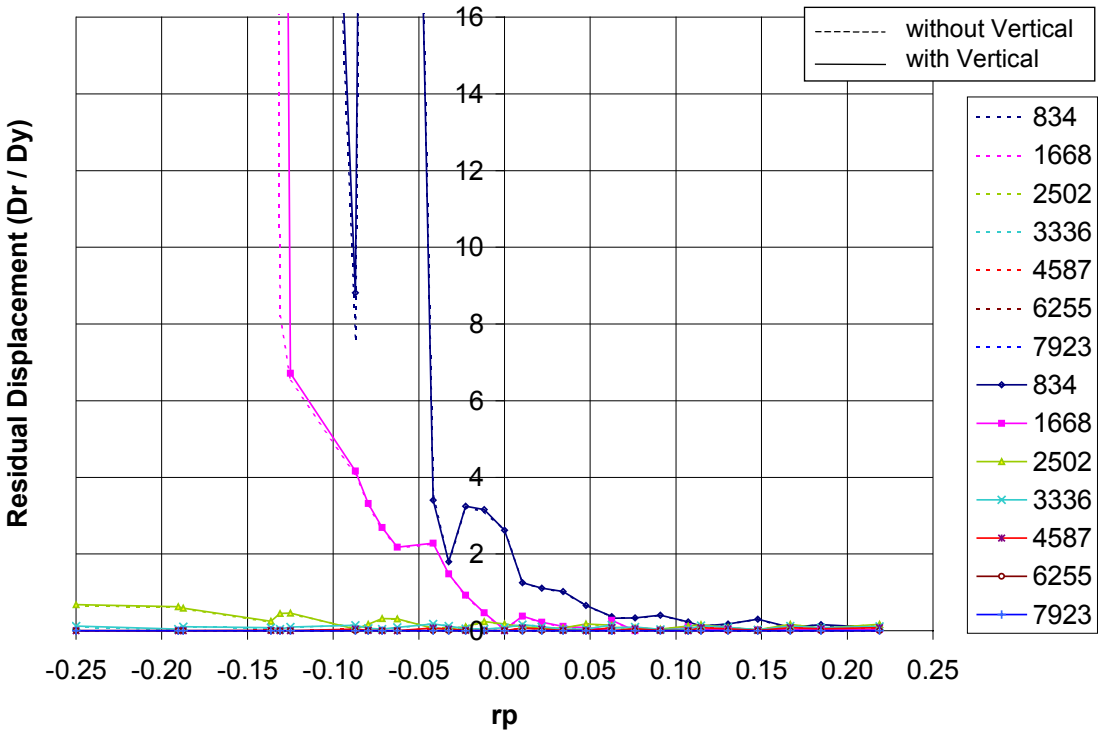


Figure C3.8.6.2a – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

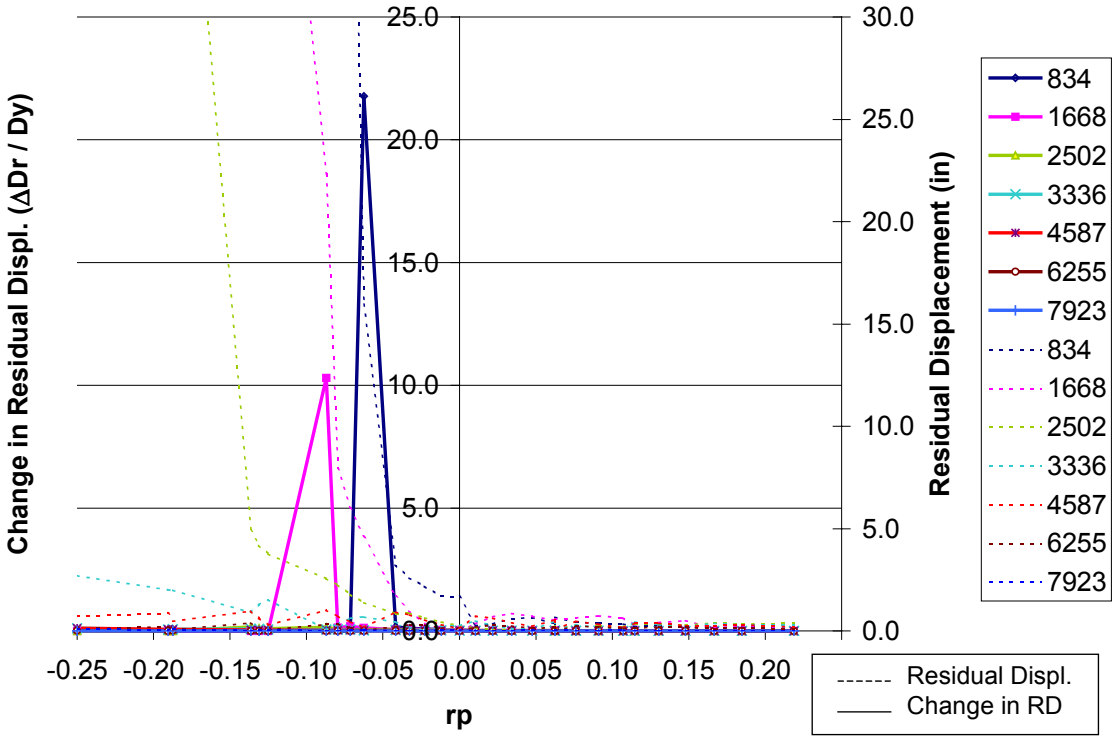


Figure C3.8.6.2b – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

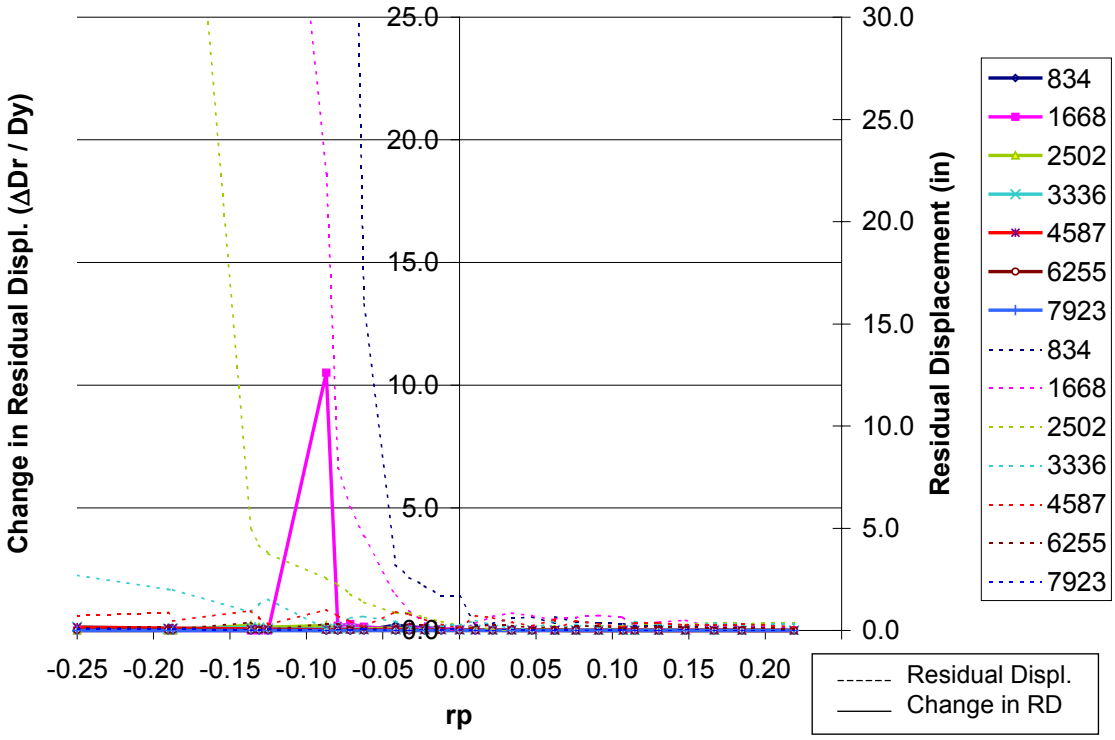


Figure C3.8.6.2c – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

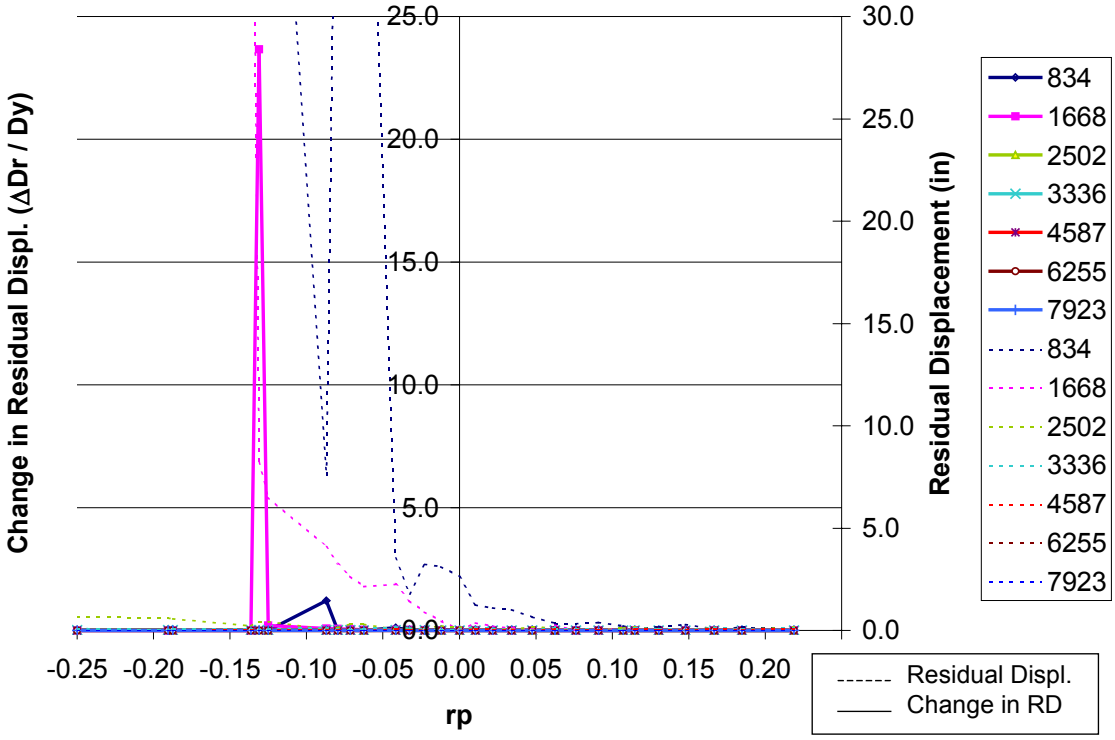


Figure C3.8.6.2d – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

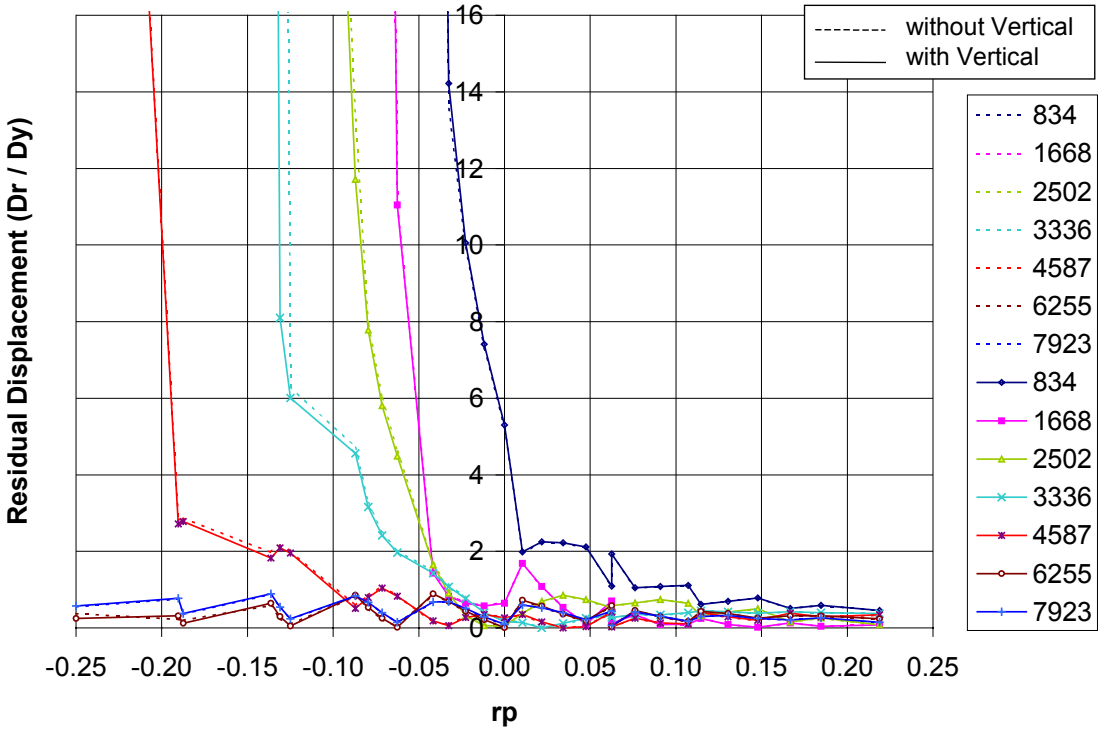


Figure C3.8.6.3a – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

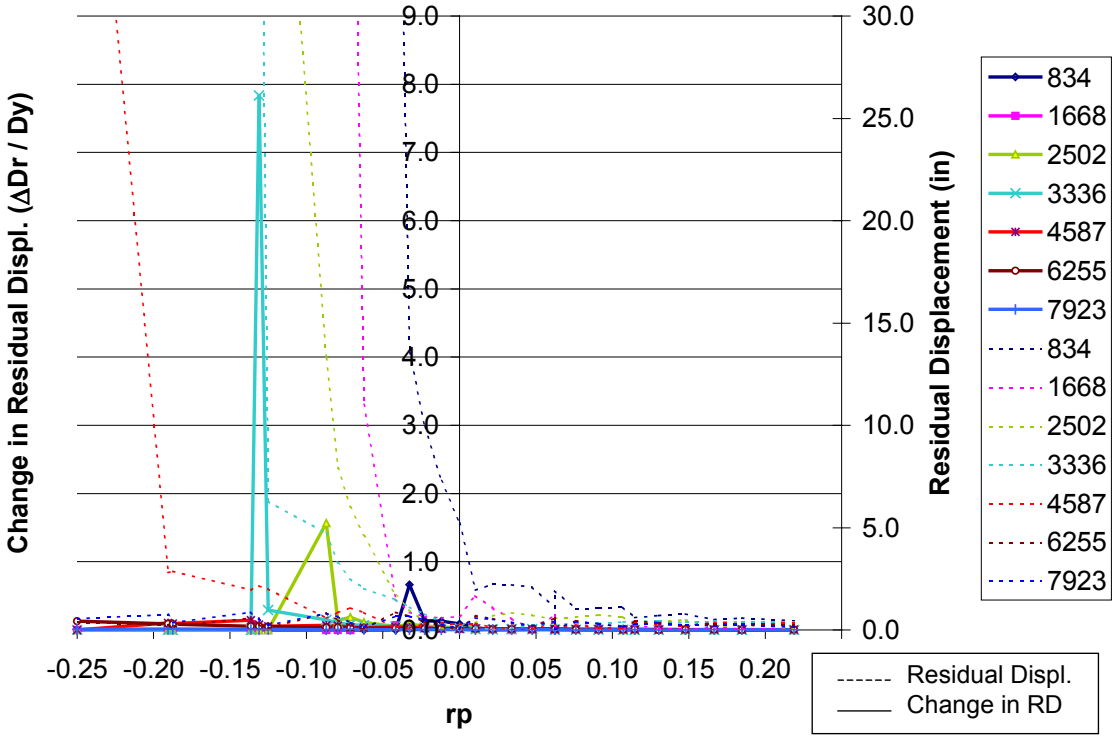


Figure C3.8.6.3b – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

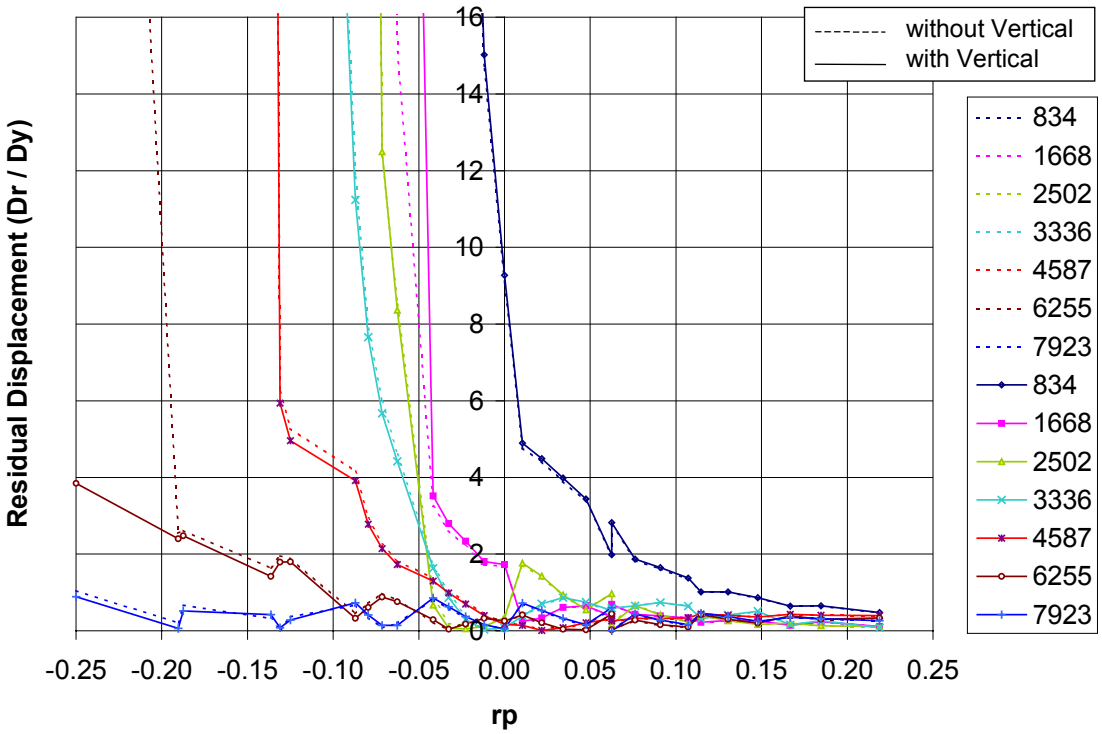


Figure C3.8.6.4a – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

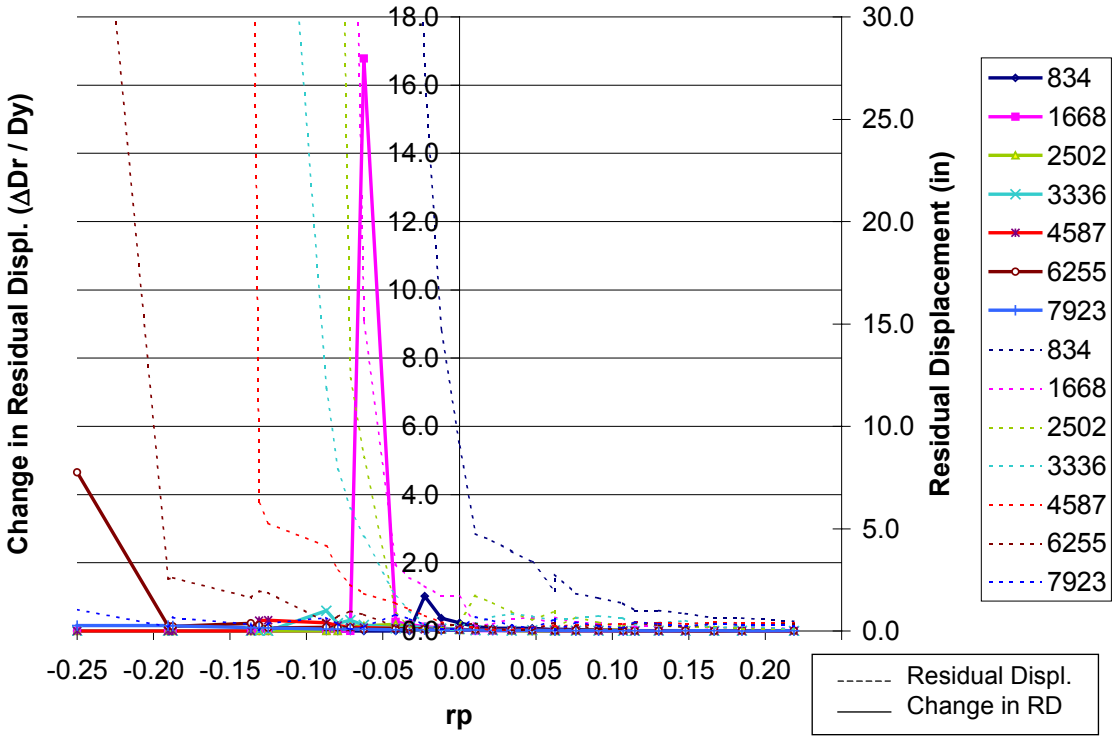


Figure C3.8.6.4b – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

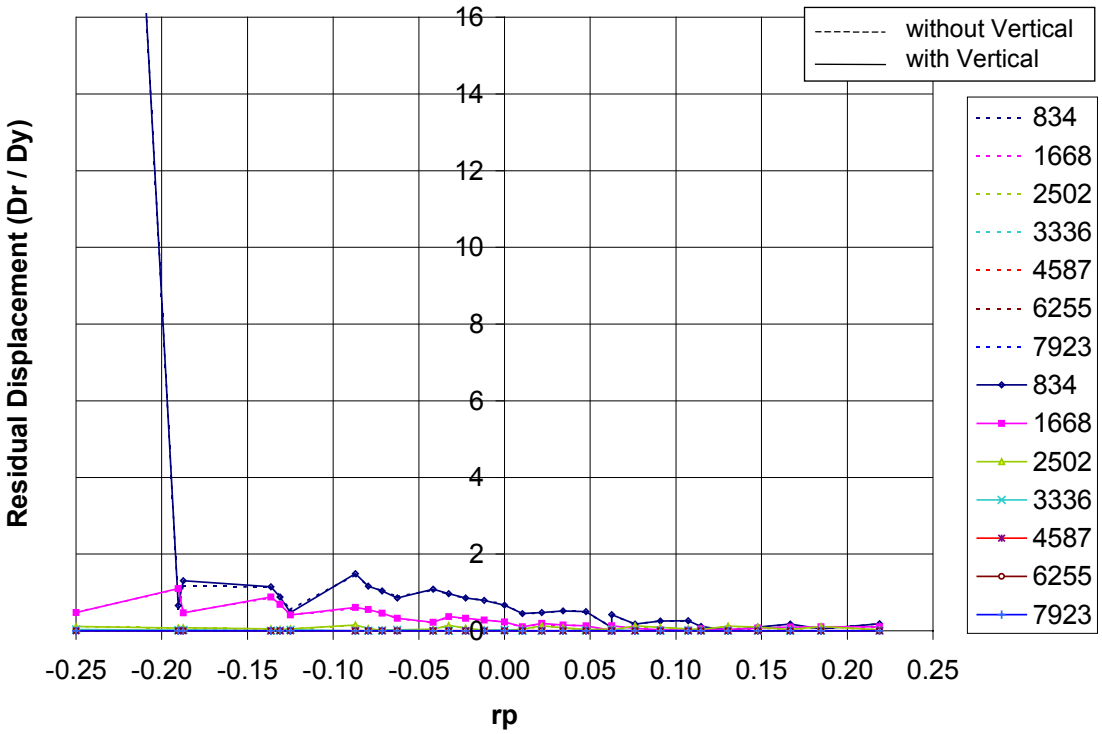


Figure C3.8.7.1a – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

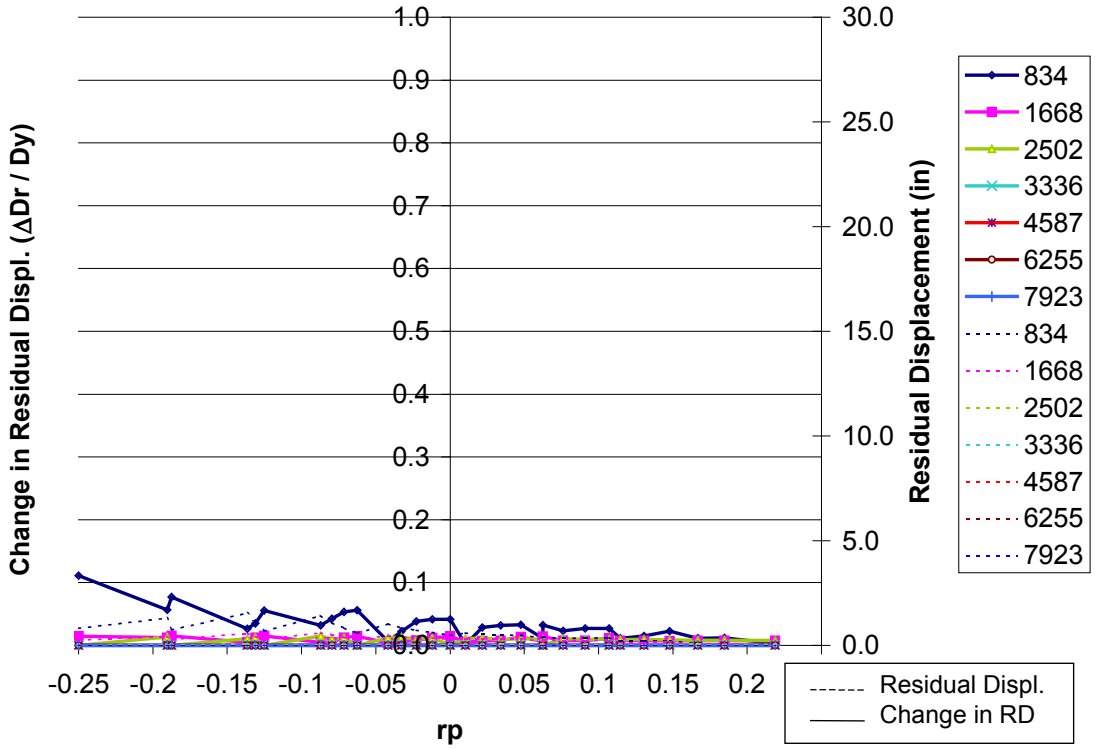


Figure C3.8.7.1b – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

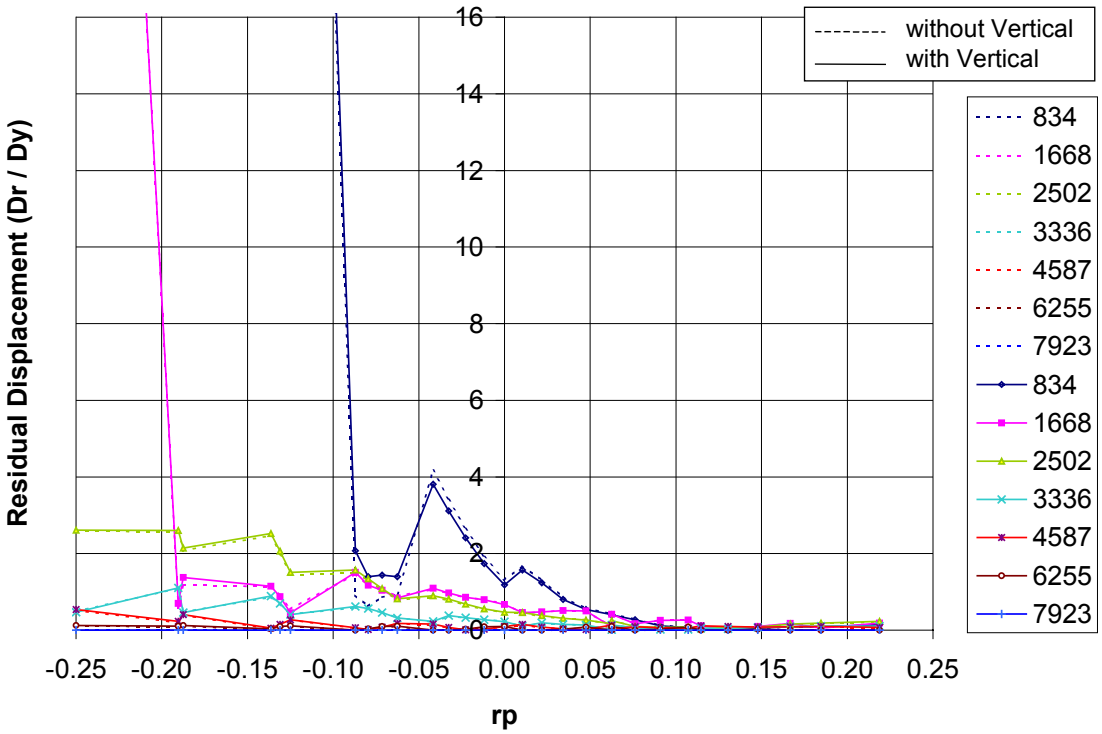


Figure C3.8.7.2a – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

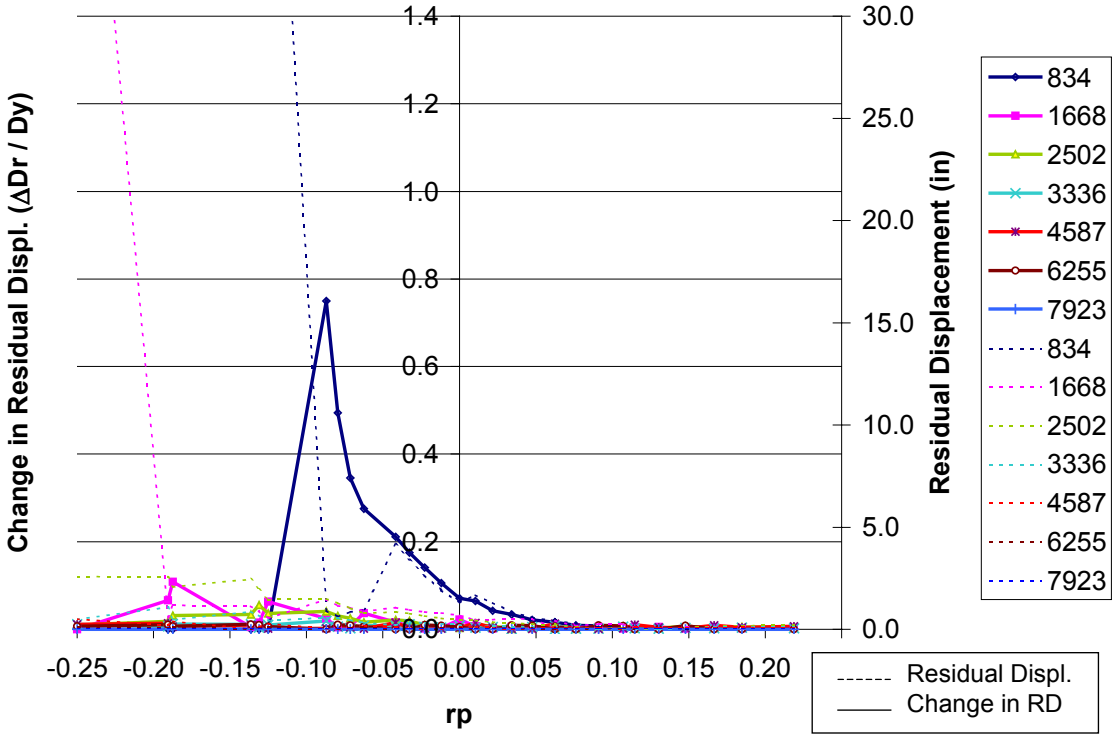


Figure C3.8.7.2b – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

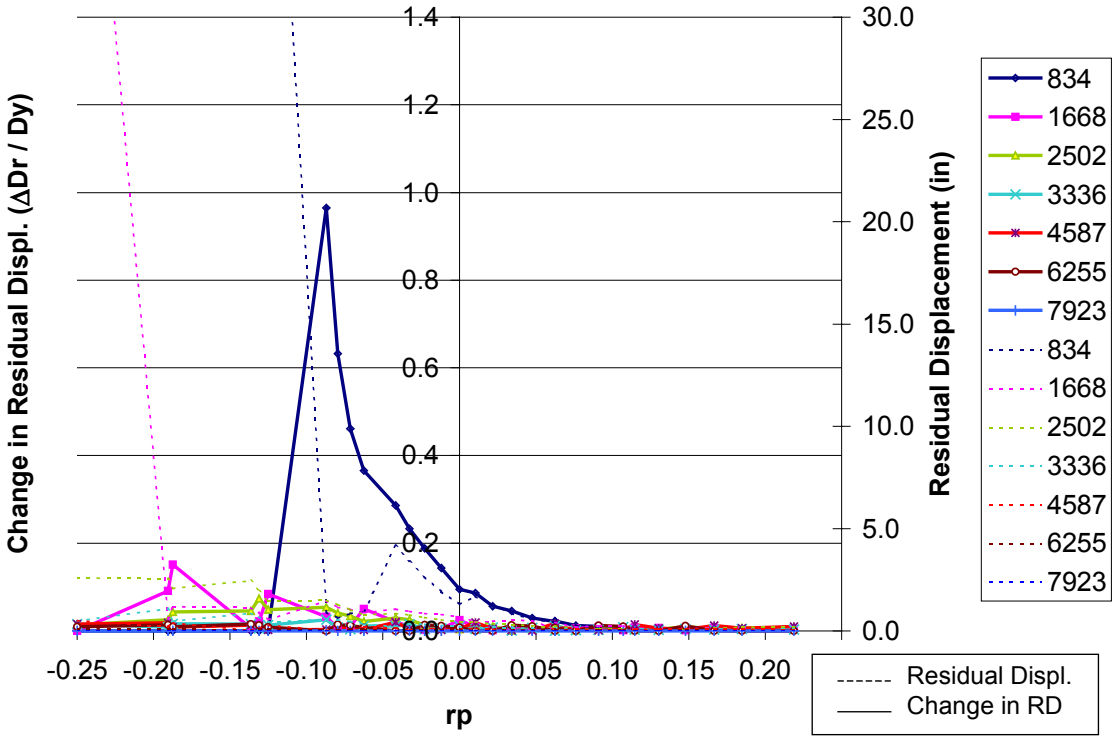


Figure C3.8.7.2c – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

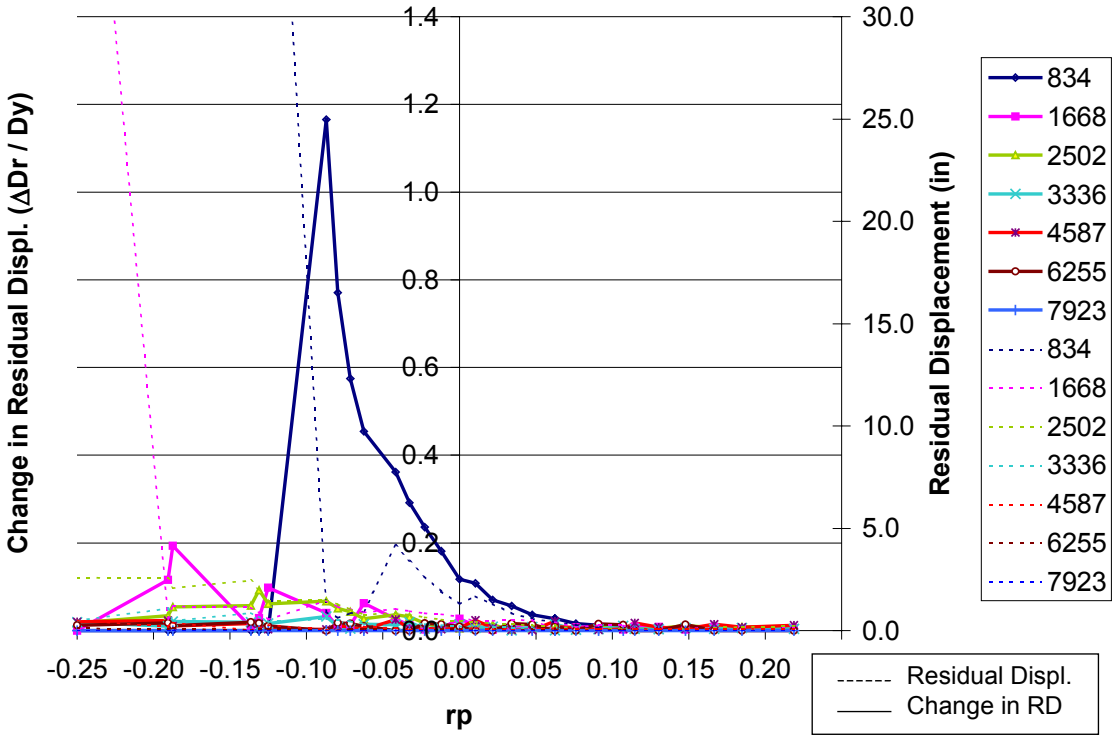


Figure C3.8.7.2d – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

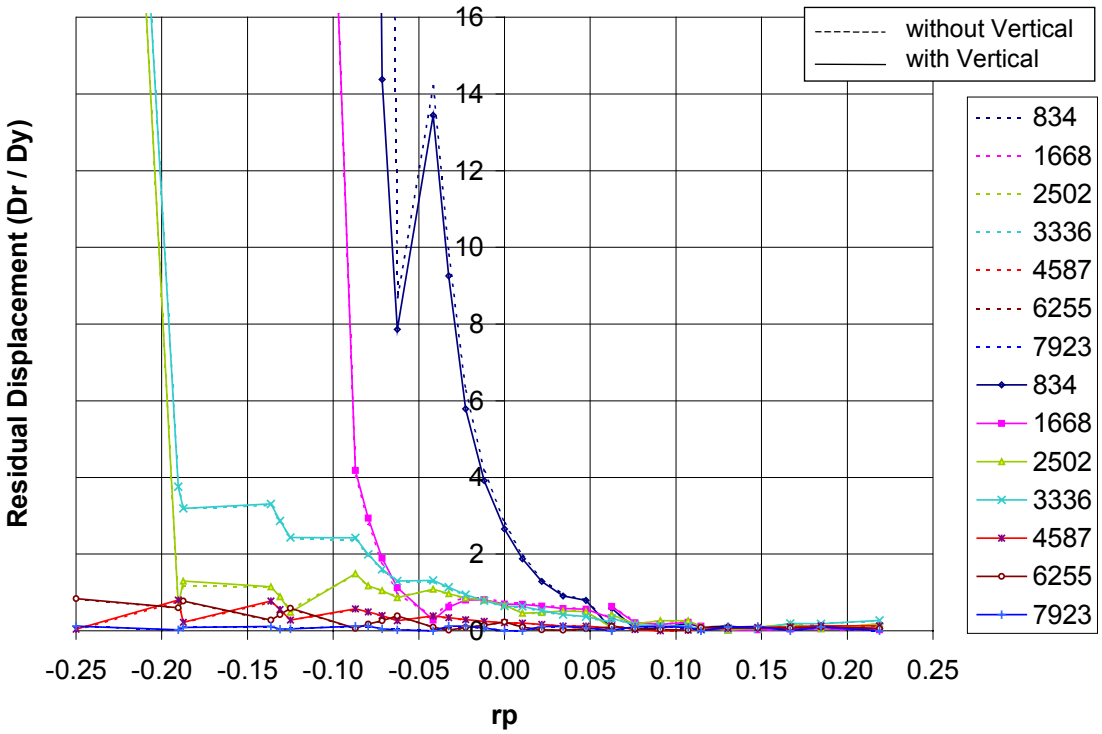


Figure C3.8.7.3a – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

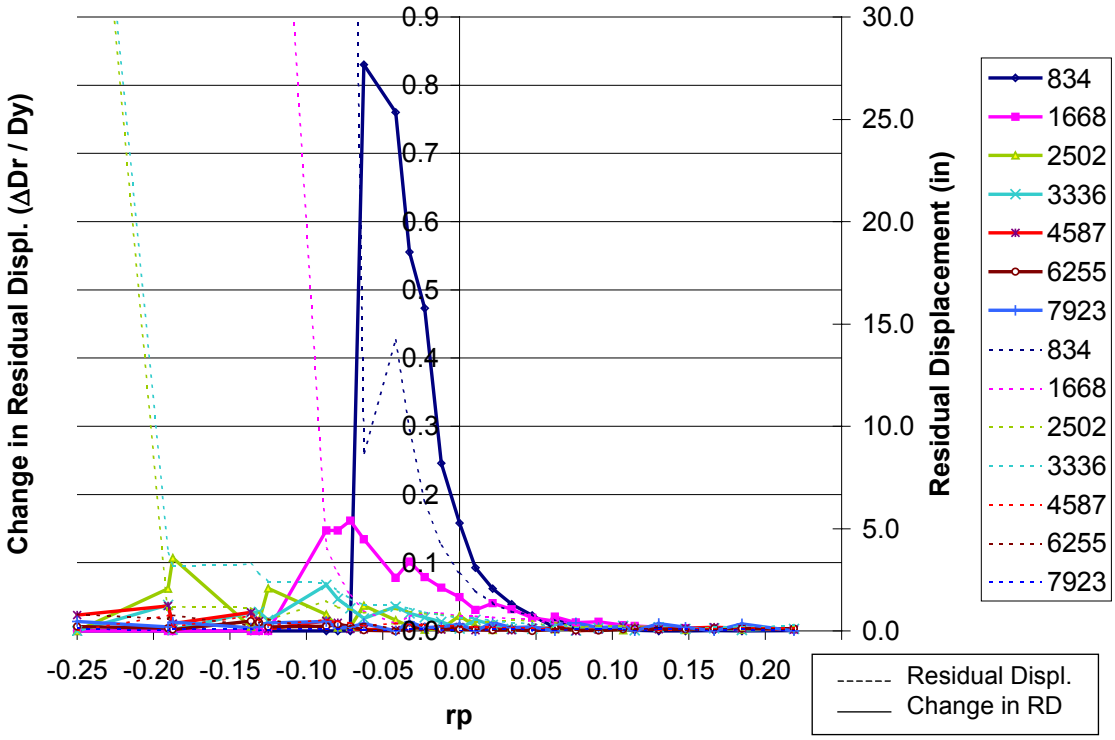


Figure C3.8.7.3b – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

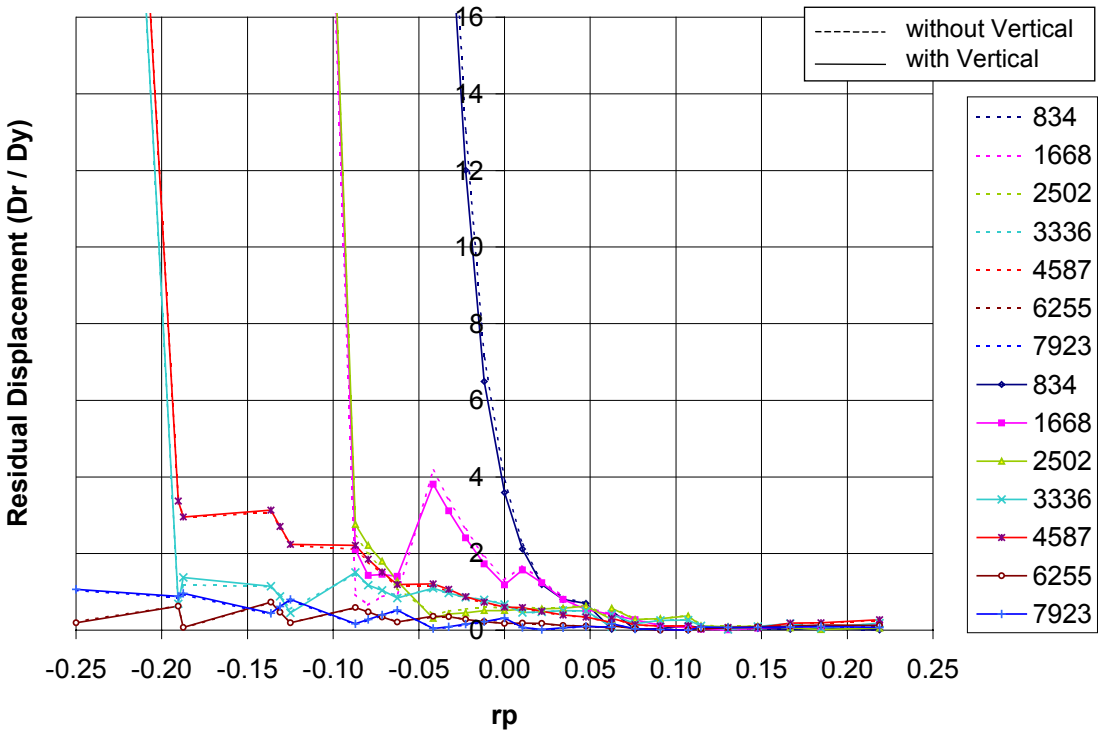


Figure C3.8.7.4a – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

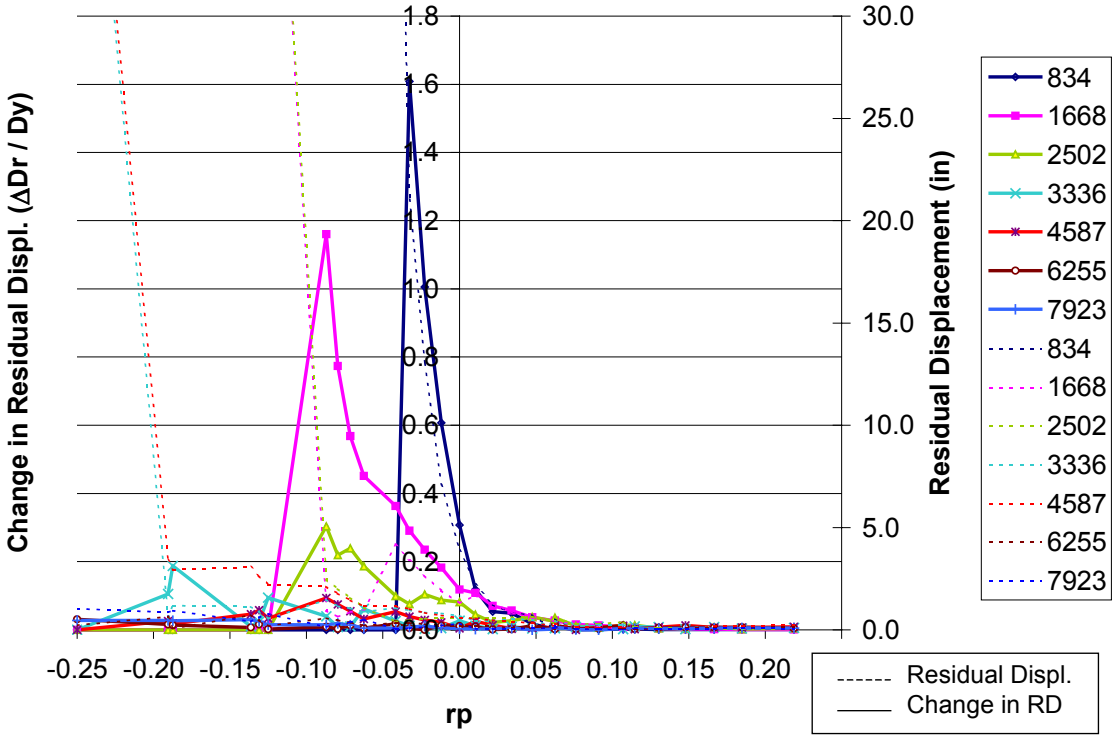


Figure C3.8.7.4b – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

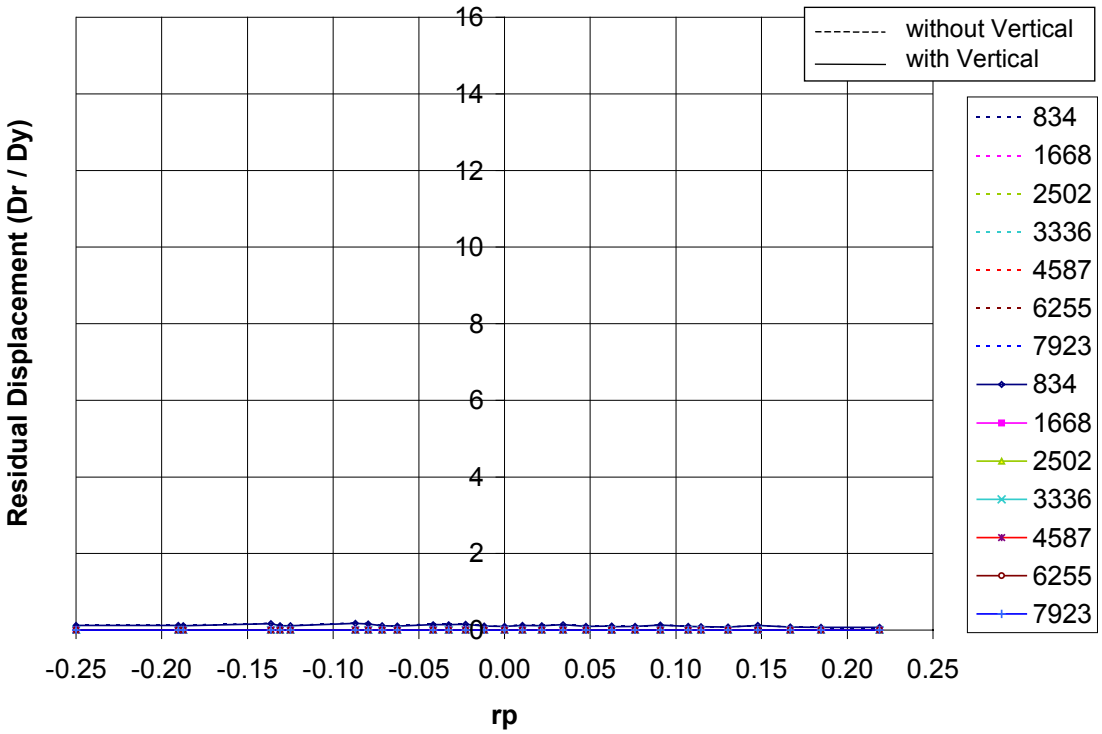


Figure C3.8.8.1a – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

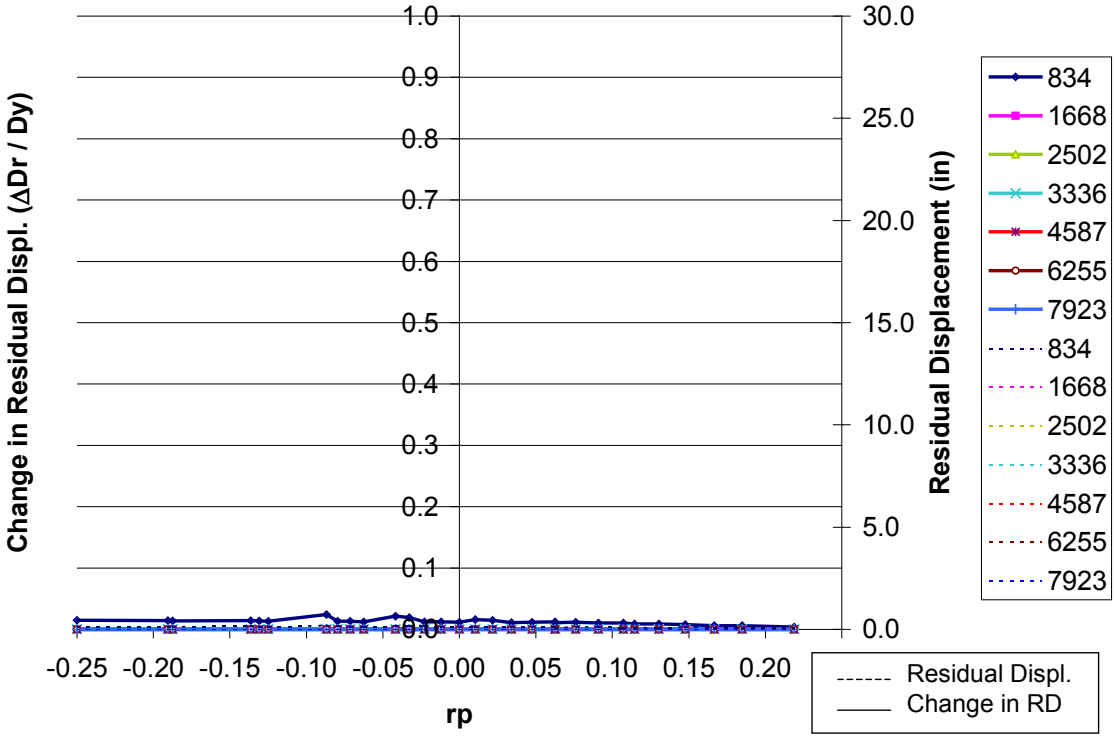


Figure C3.8.8.1b – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

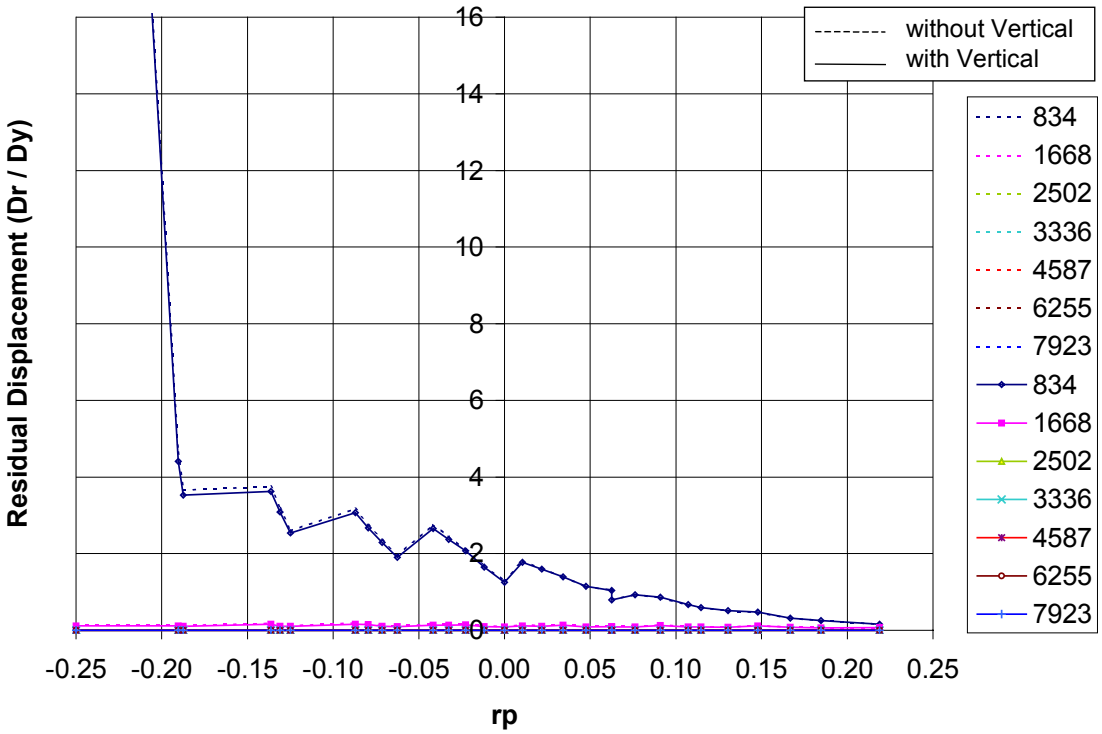


Figure C3.8.8.2a – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

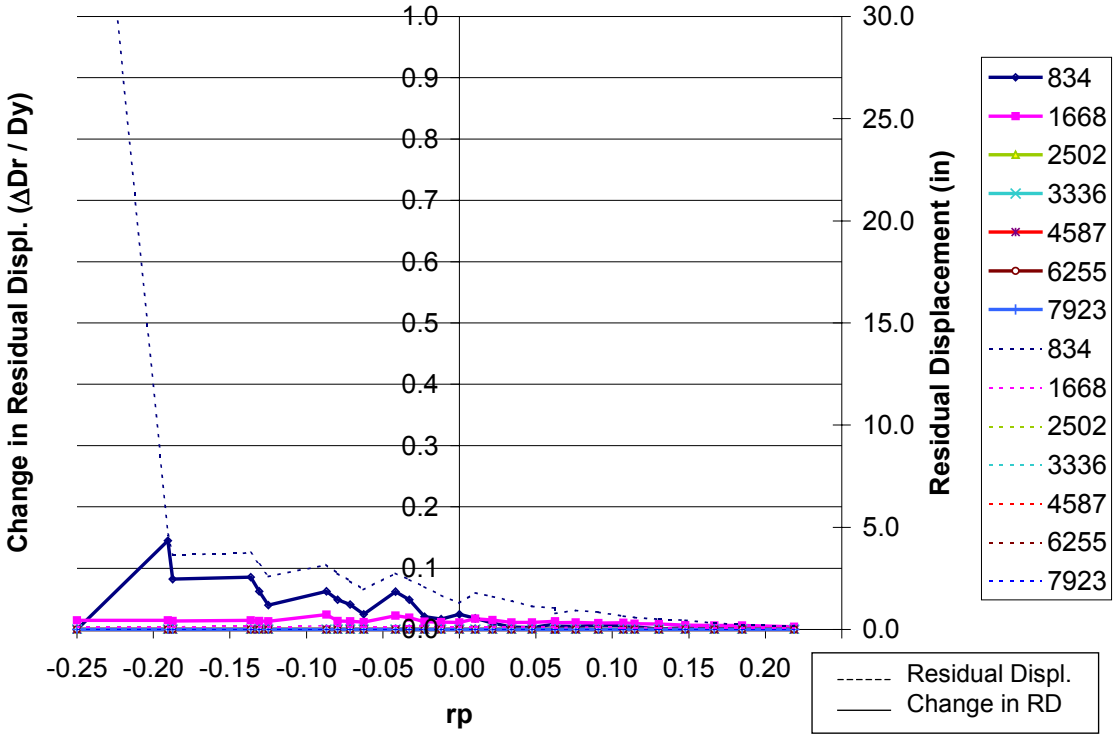


Figure C3.8.8.2b – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

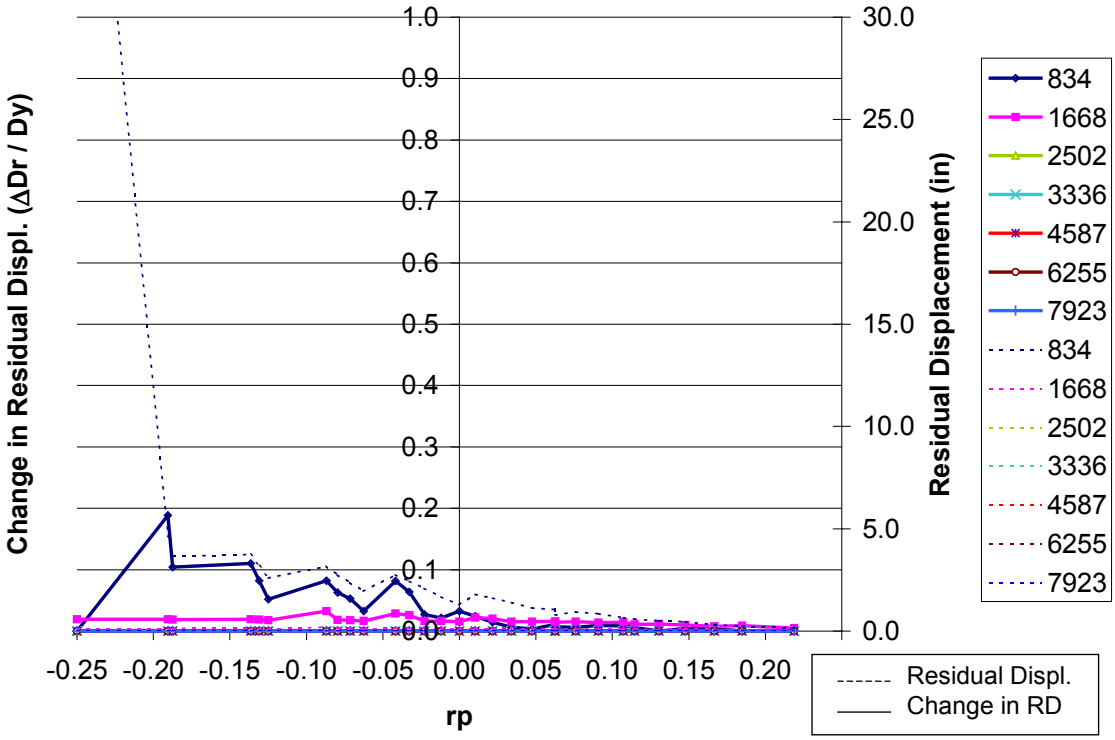


Figure C3.8.8.2c – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

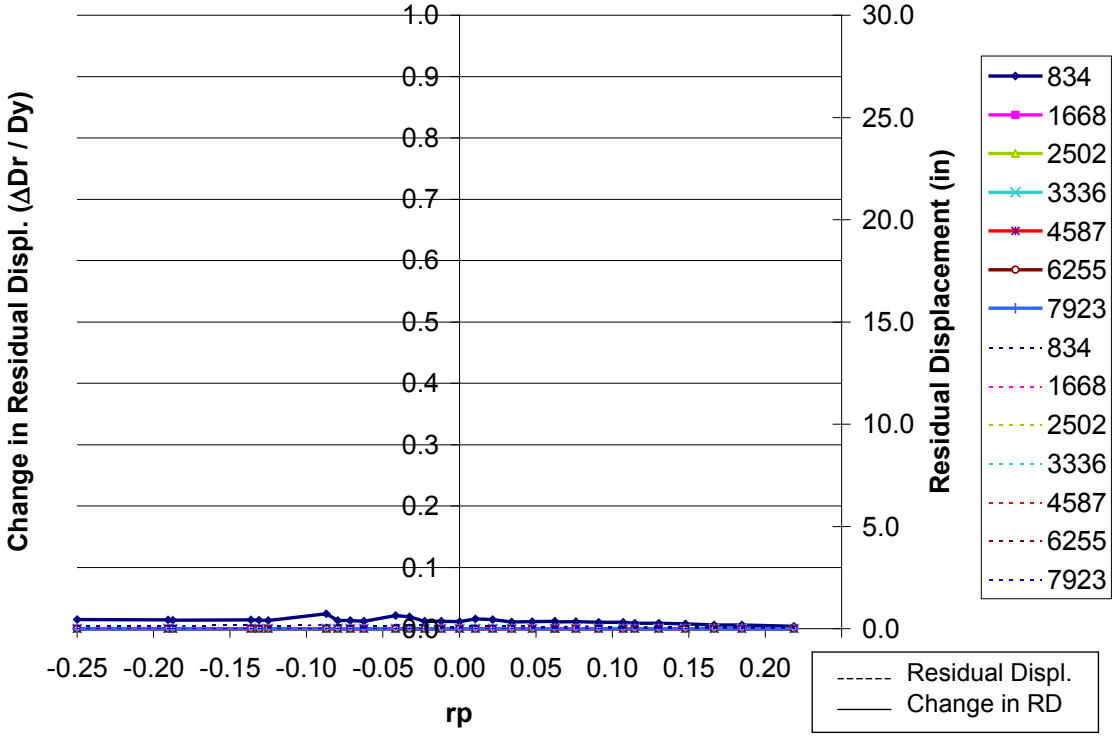


Figure C3.8.8.2d – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

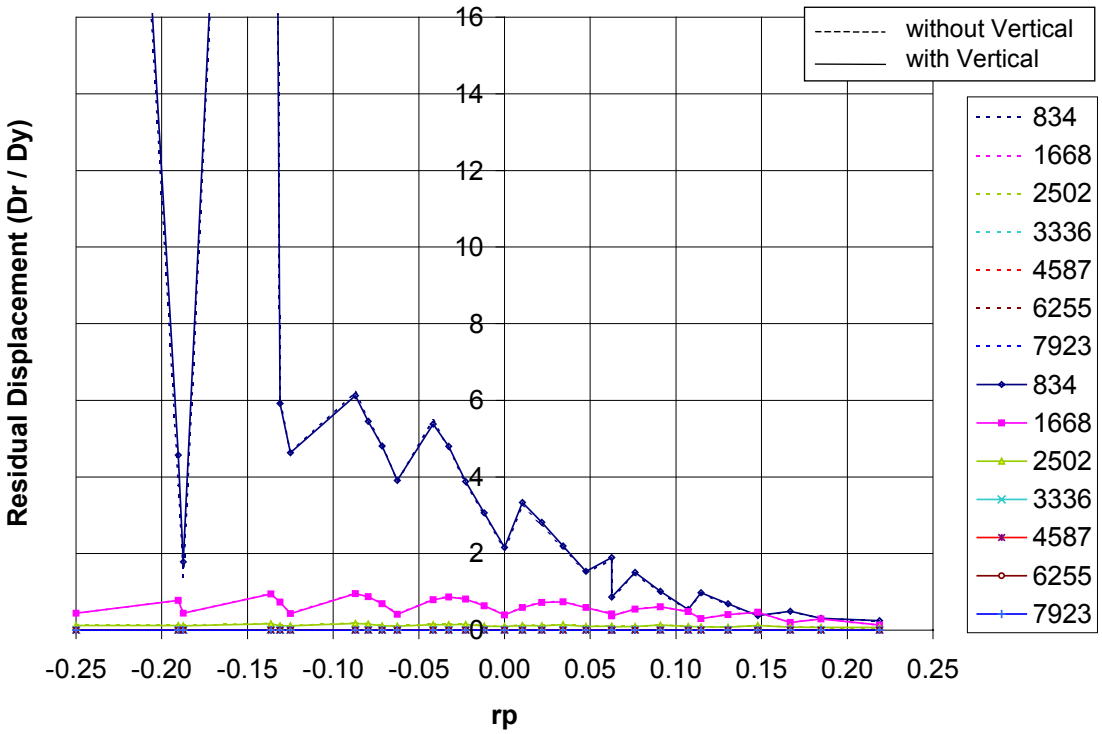


Figure C3.8.8.3a – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

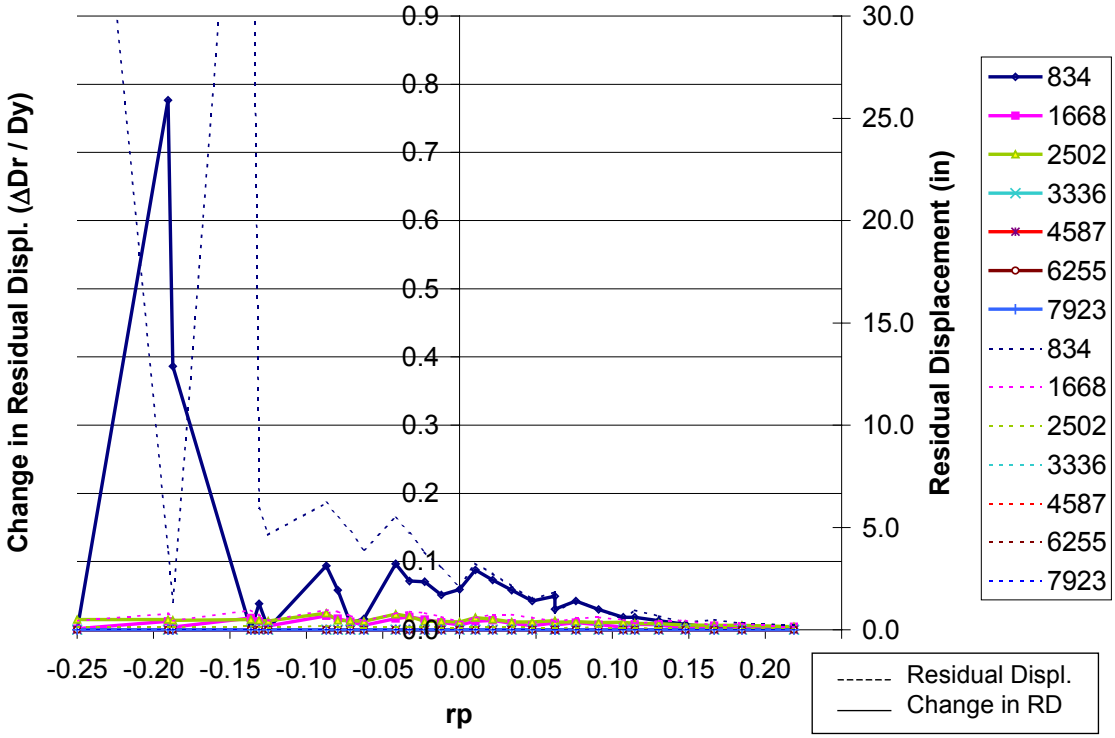


Figure C3.8.8.3b – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

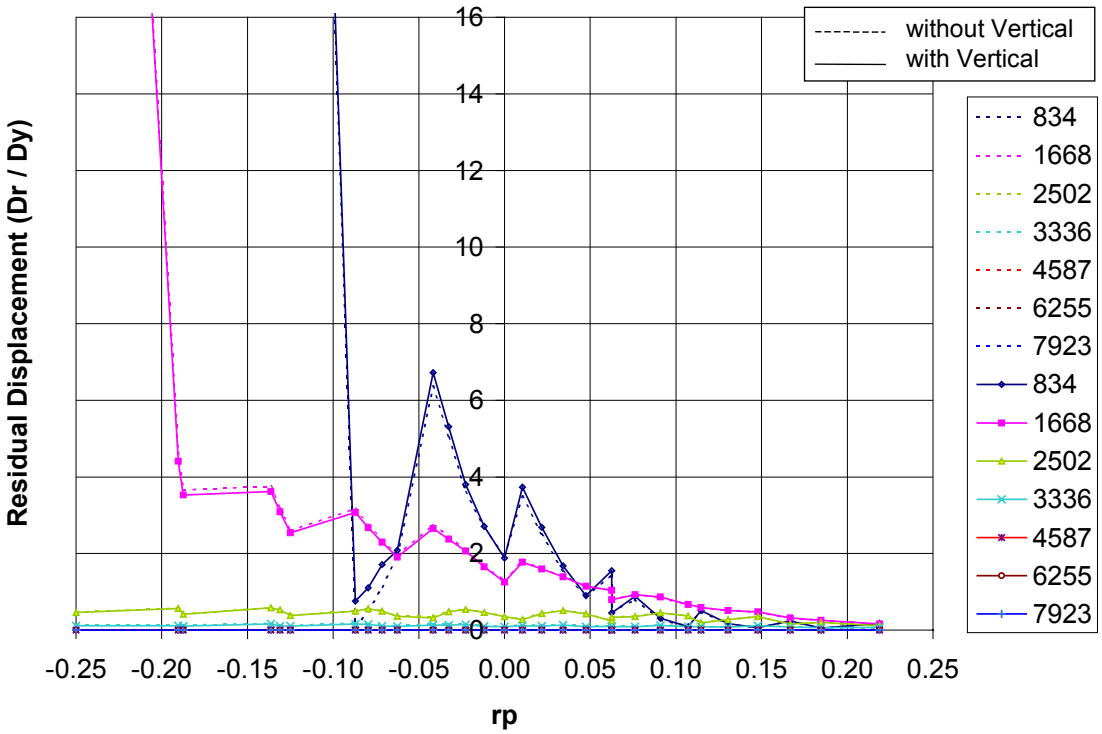


Figure C3.8.8.4a – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.635 Seconds.

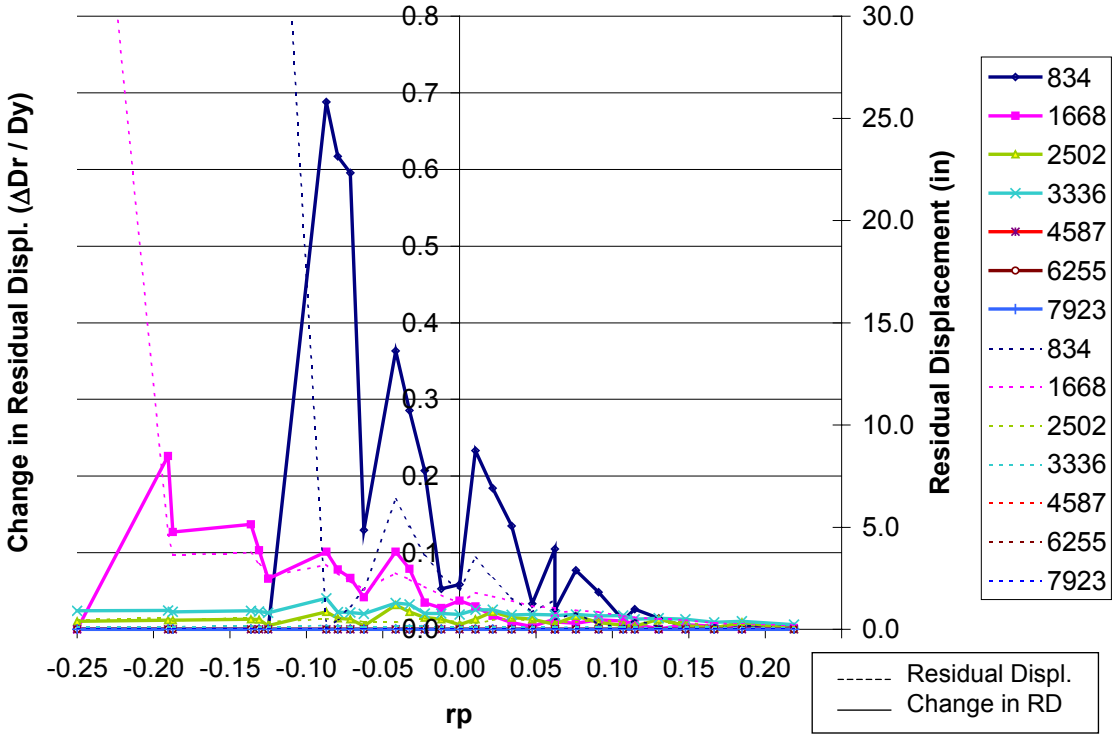


Figure C3.8.8.4b – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.635 Seconds.

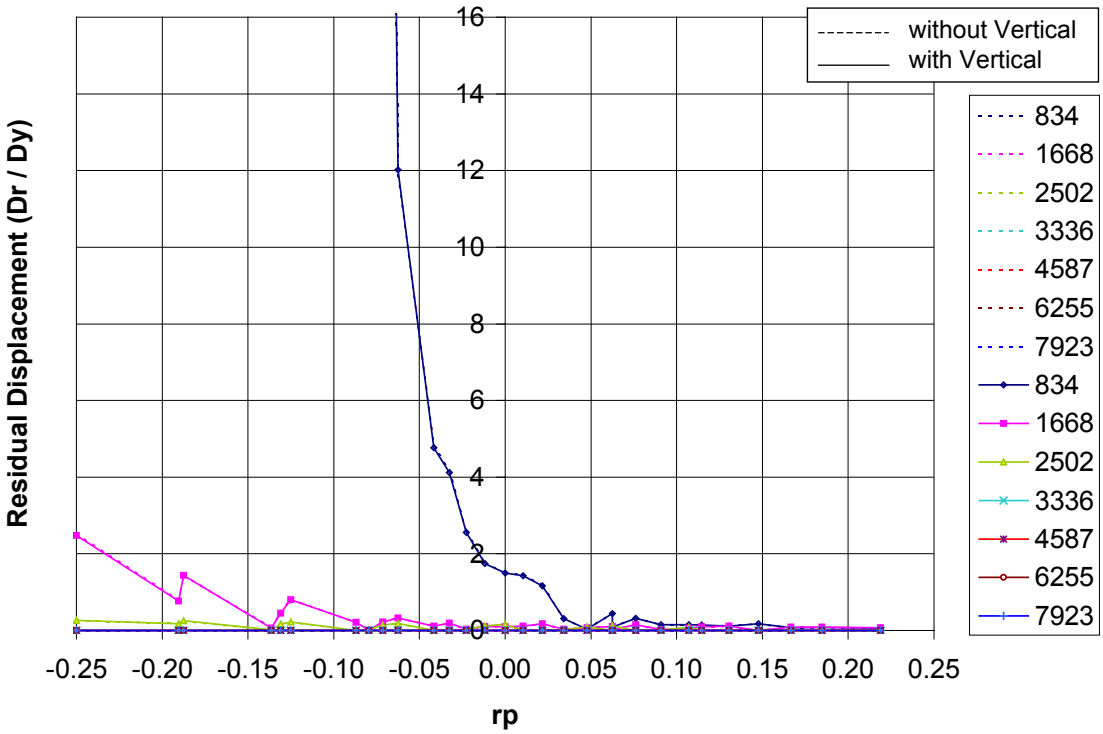


Figure C3.9.1.1a – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

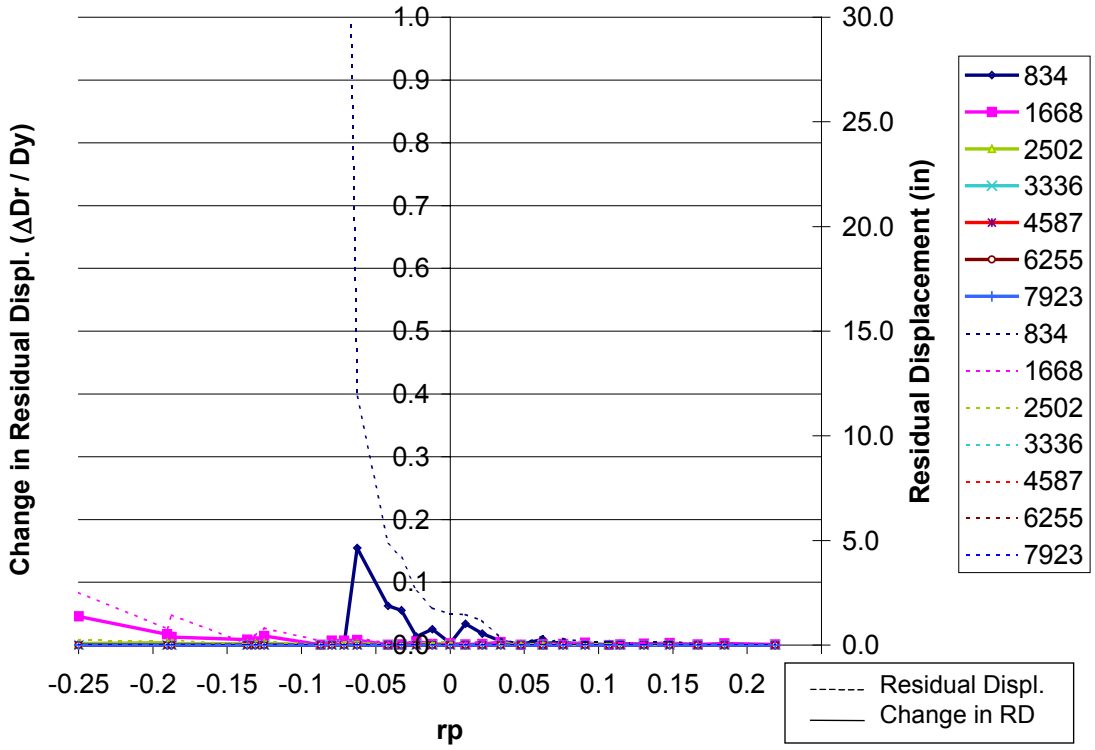


Figure C3.9.1.1b – EQ1, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

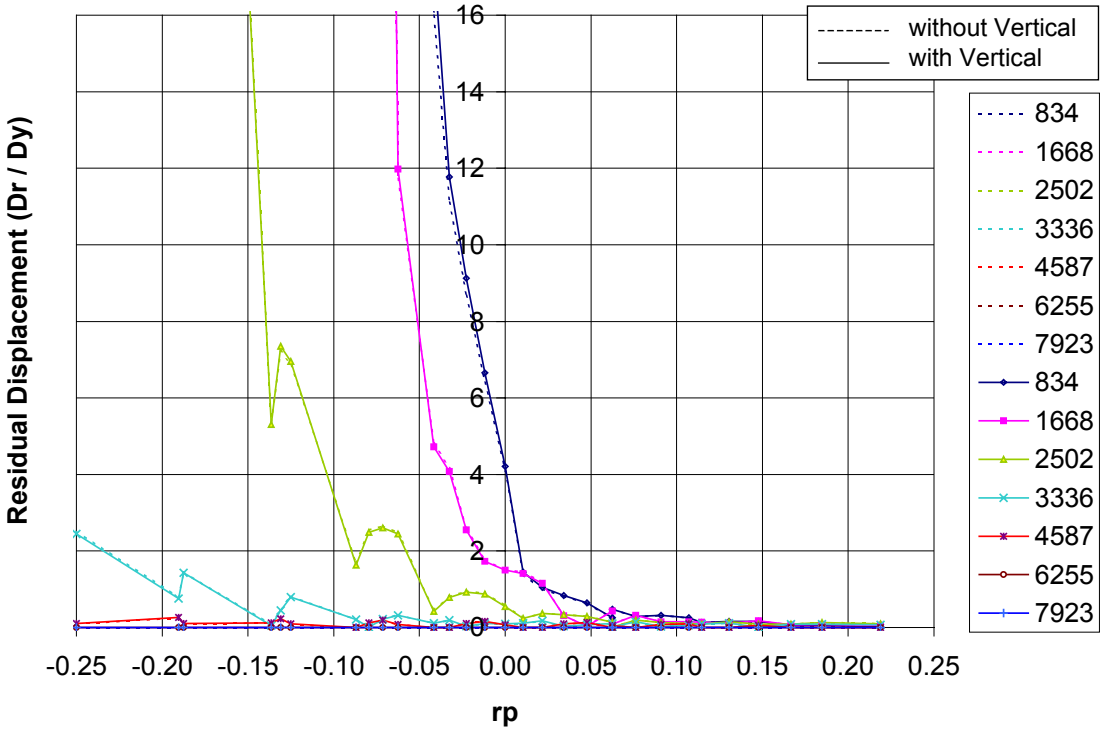


Figure C3.9.1.2a – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

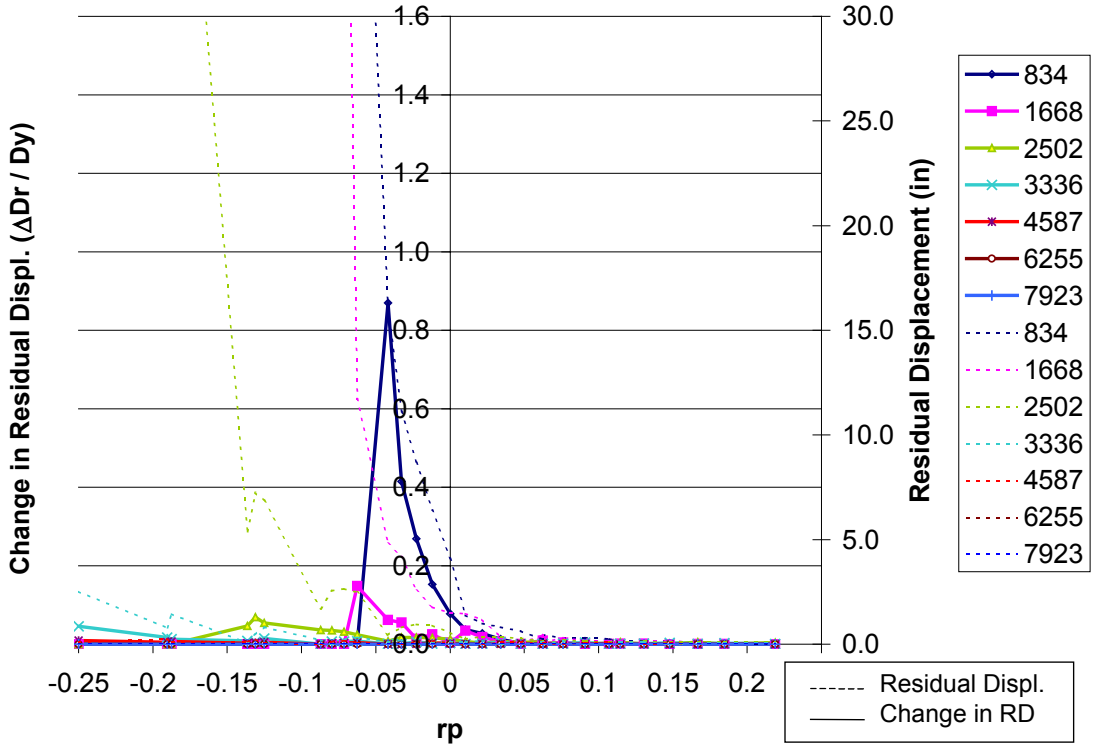


Figure C3.9.1.2b – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

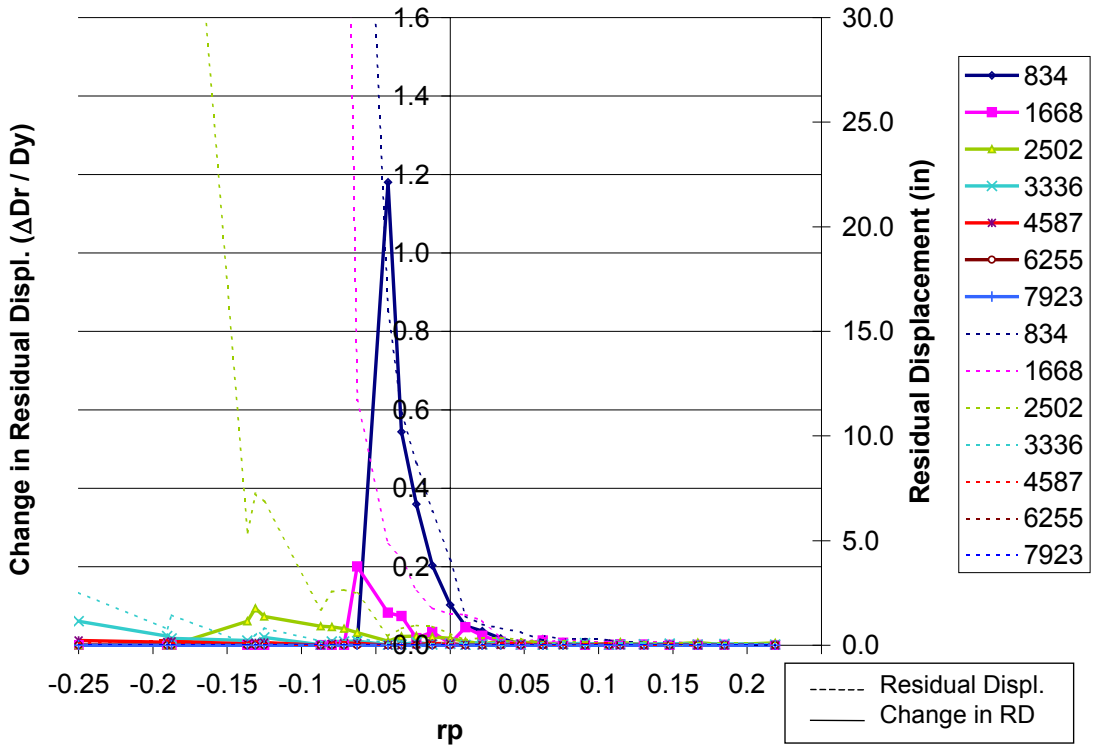


Figure C3.9.1.2c – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

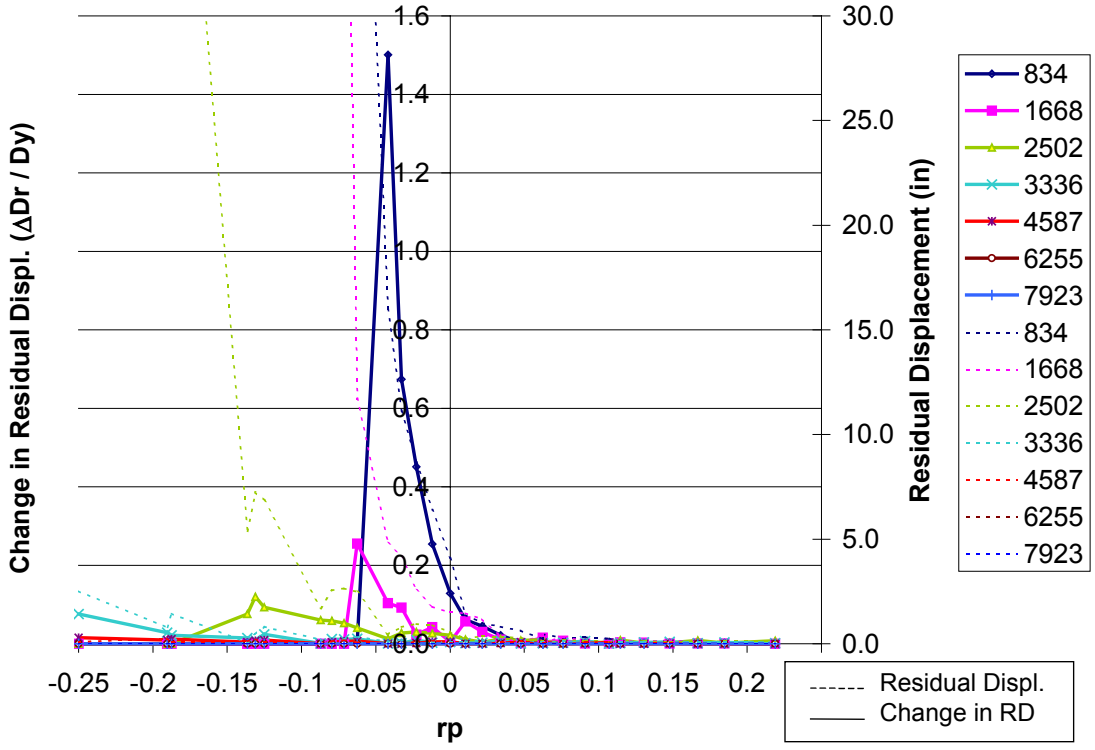


Figure C3.9.1.2d – EQ1, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

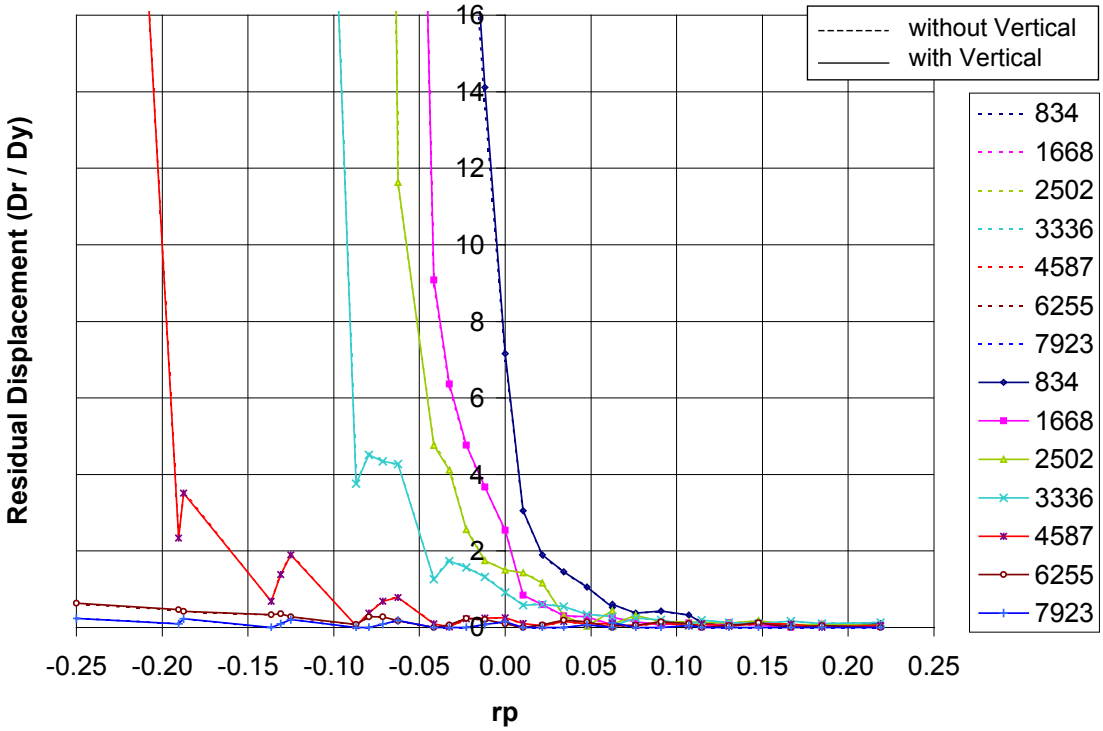


Figure C3.9.1.3a – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

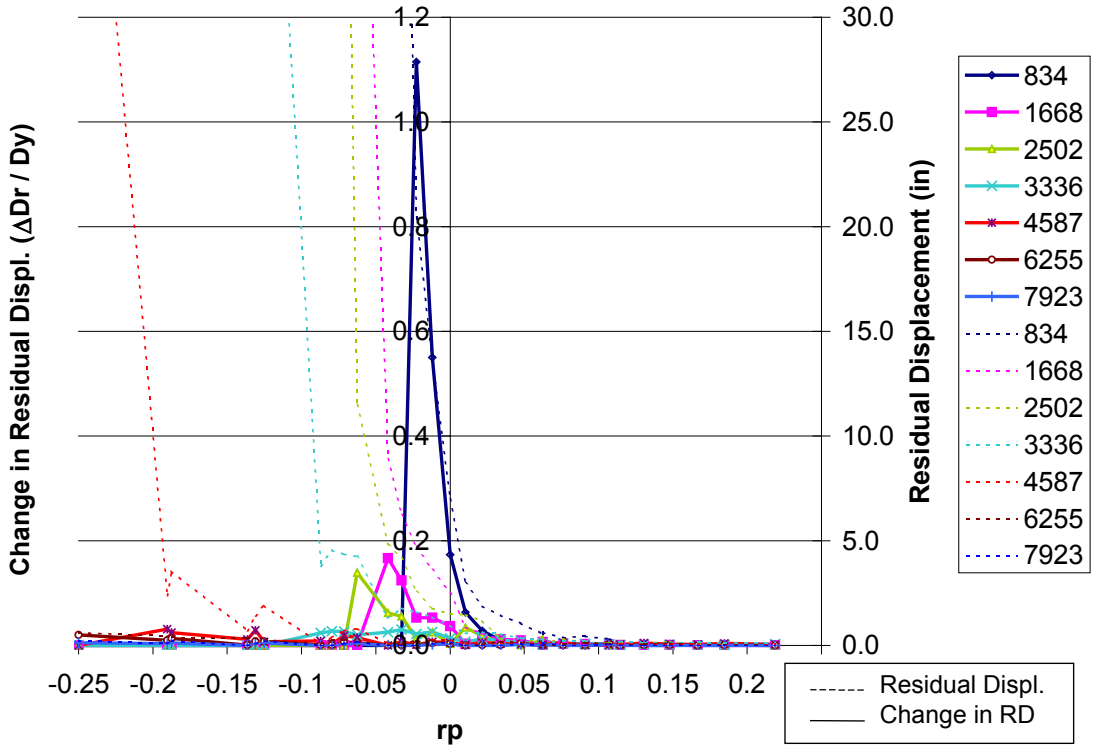


Figure C3.9.1.3b – EQ1, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

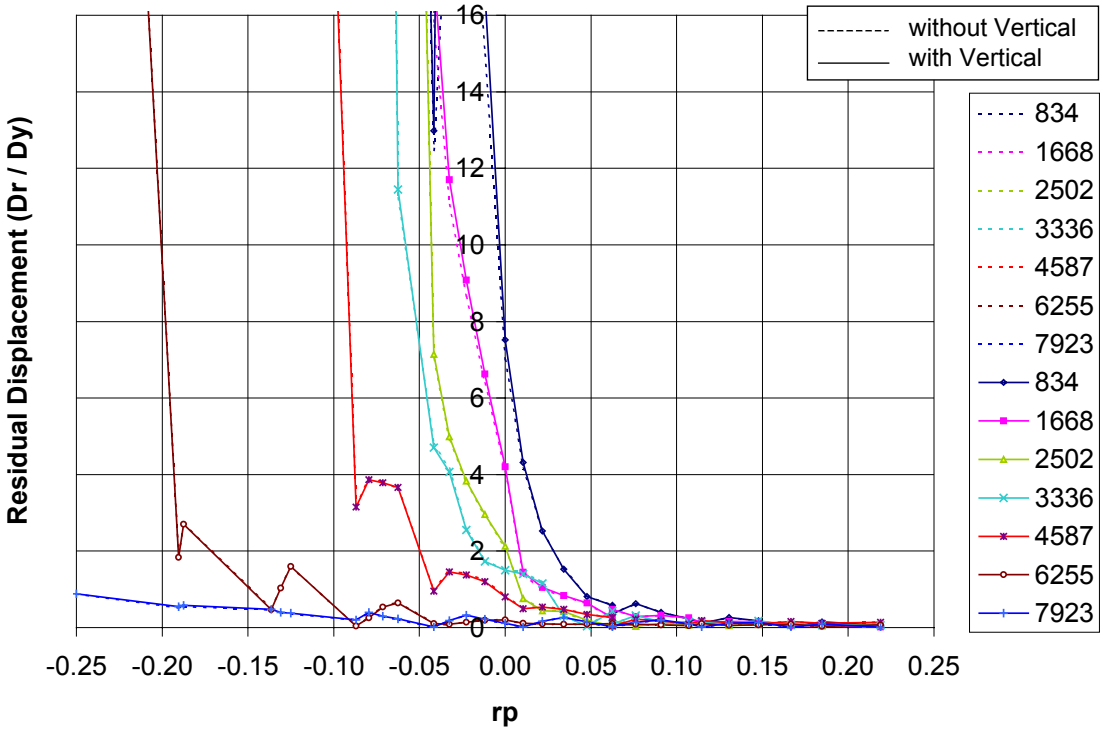


Figure C3.9.1.4a – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

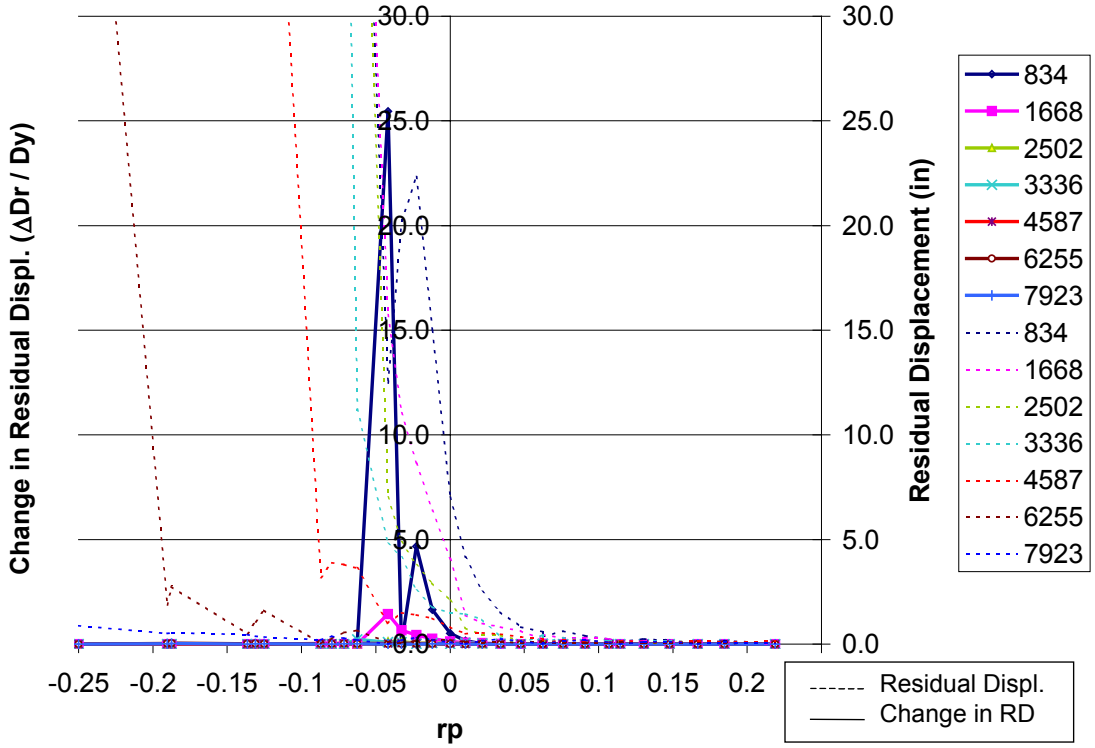


Figure C3.9.1.4b – EQ1, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

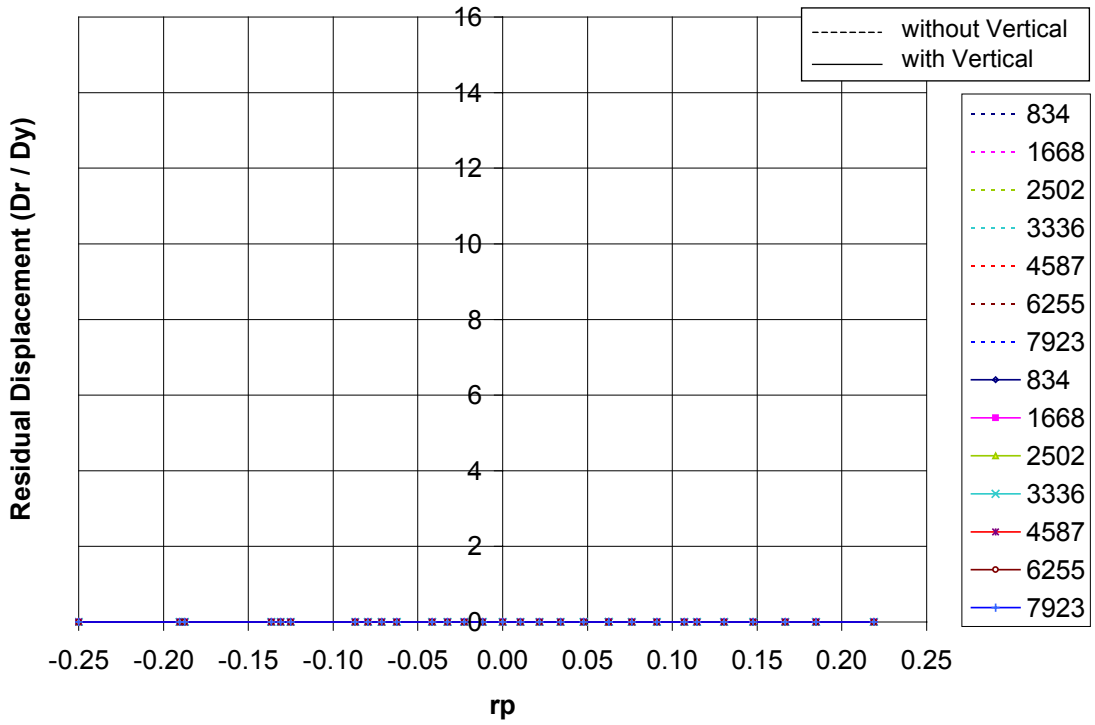


Figure C3.9.2.1a – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

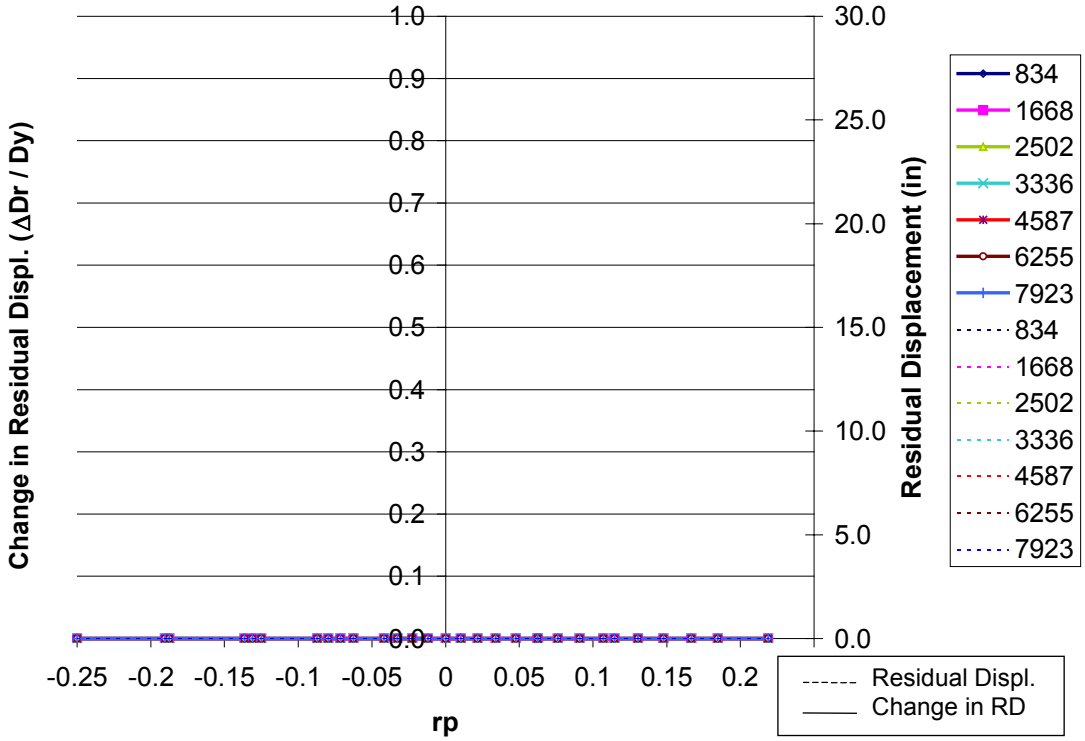


Figure C3.9.2.1b – EQ2, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

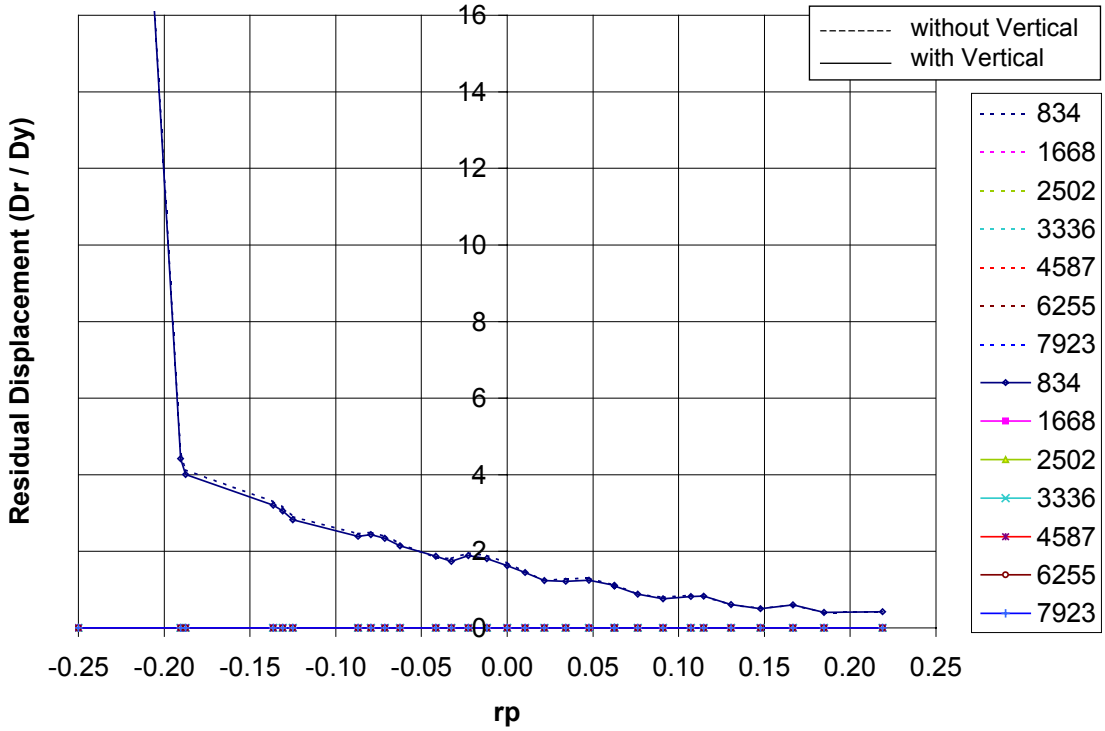


Figure C3.9.2.2a – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

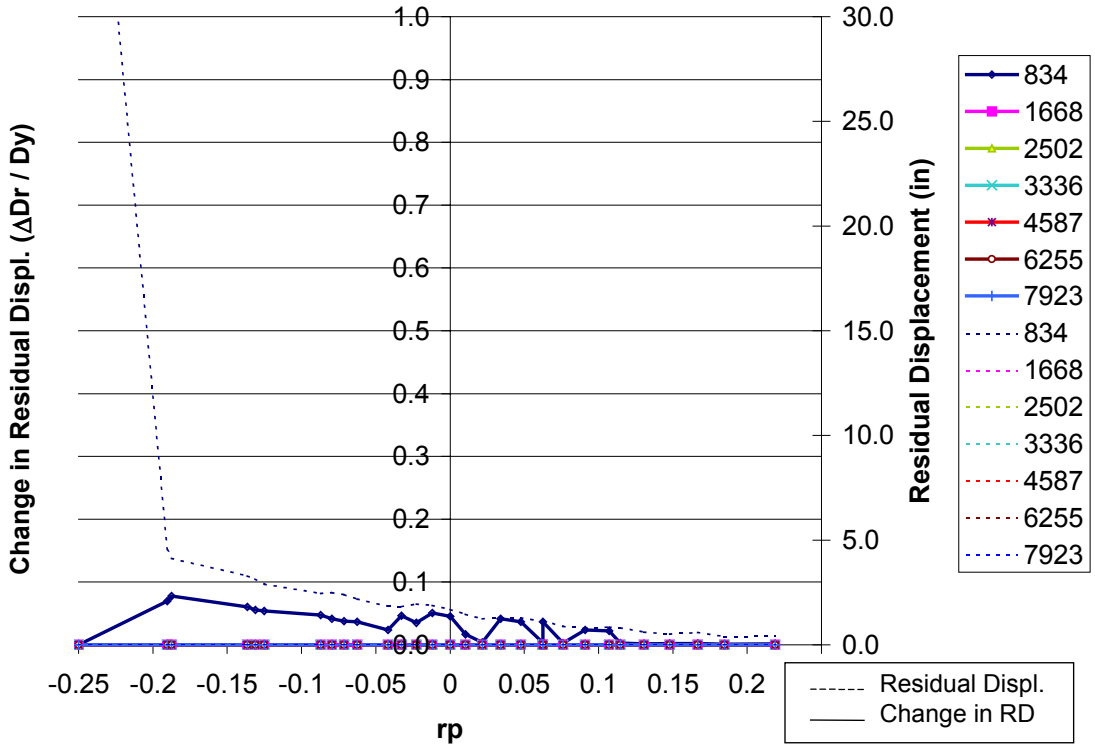


Figure C3.9.2.2b – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

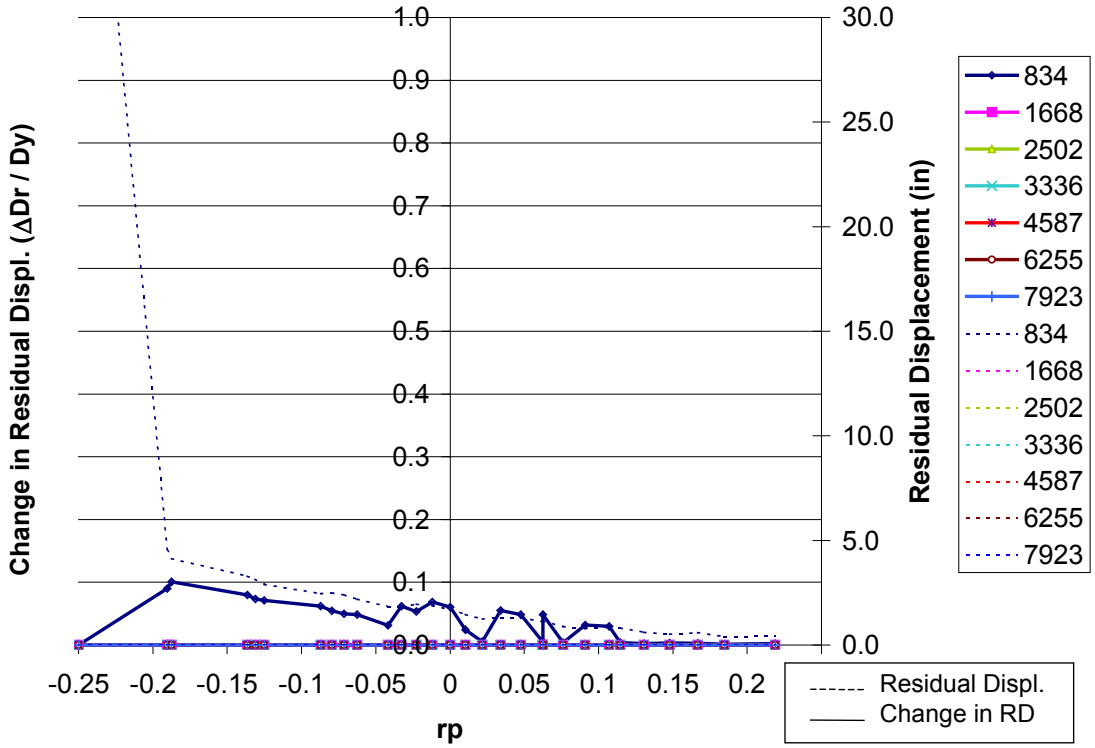


Figure C3.9.2.2c – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

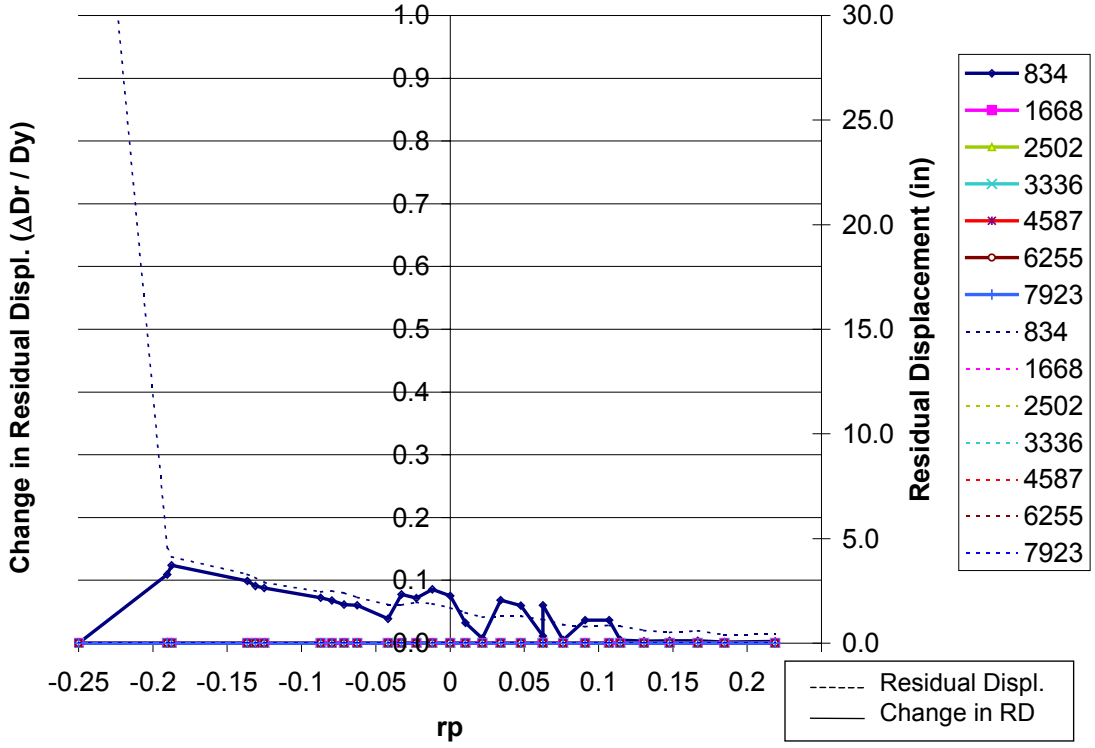


Figure C3.9.2.2d – EQ2, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

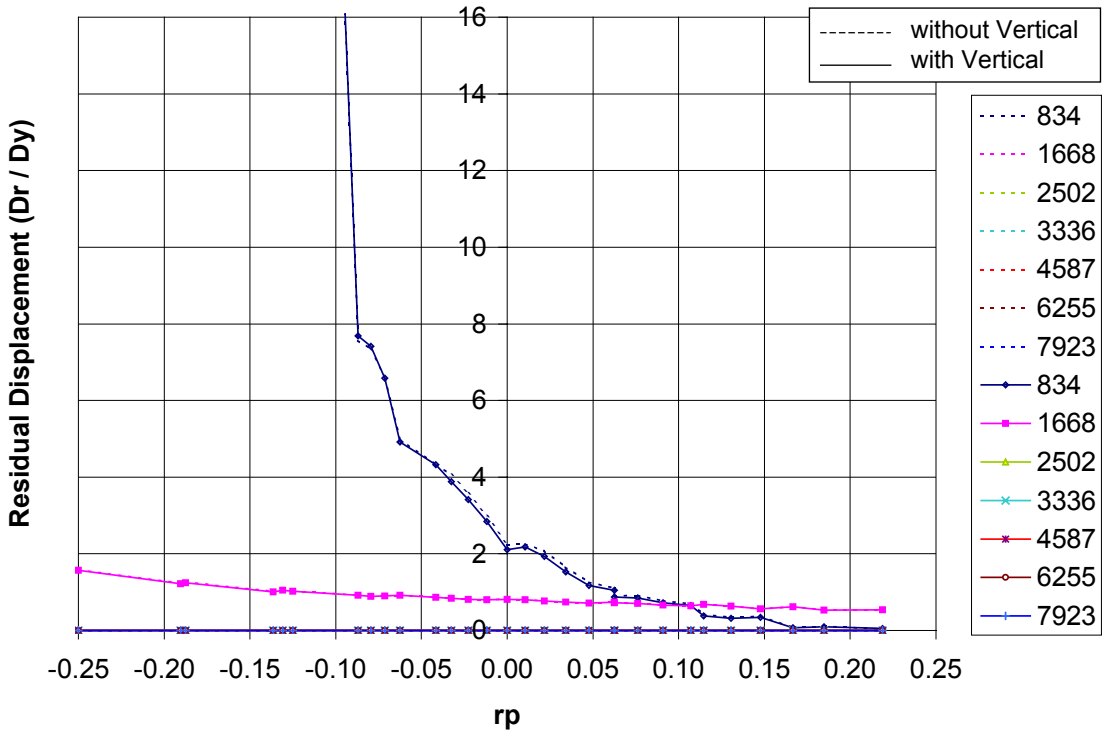


Figure C3.9.2.3a – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

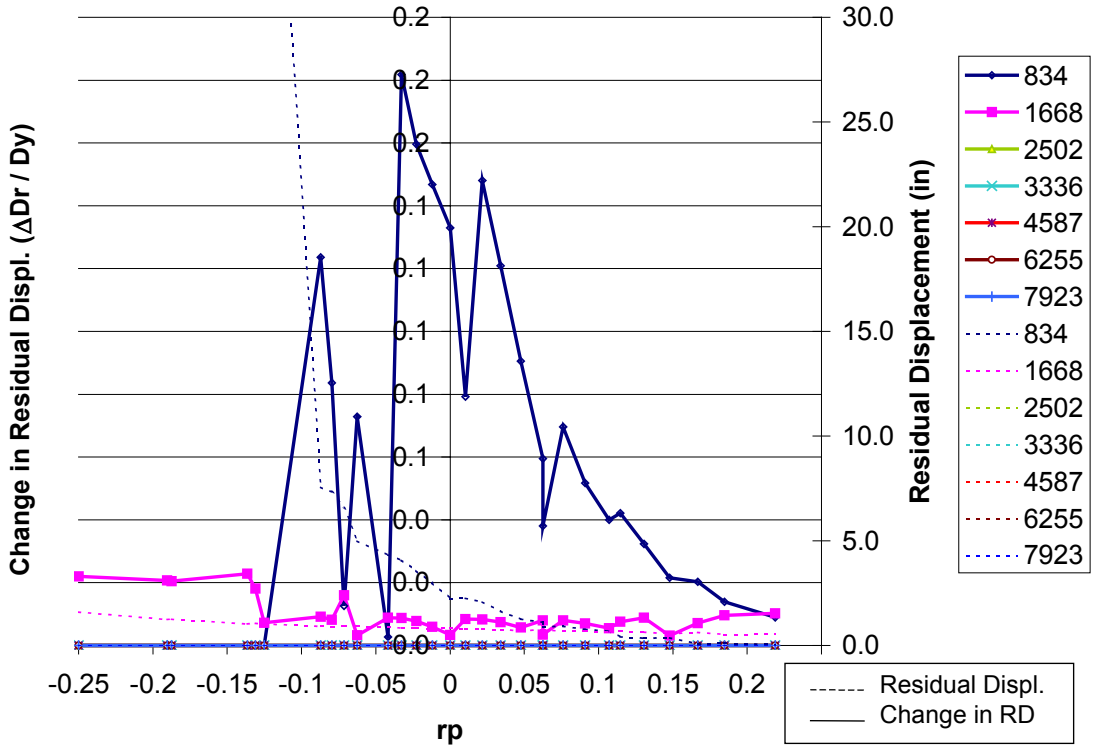


Figure C3.9.2.3b – EQ2, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

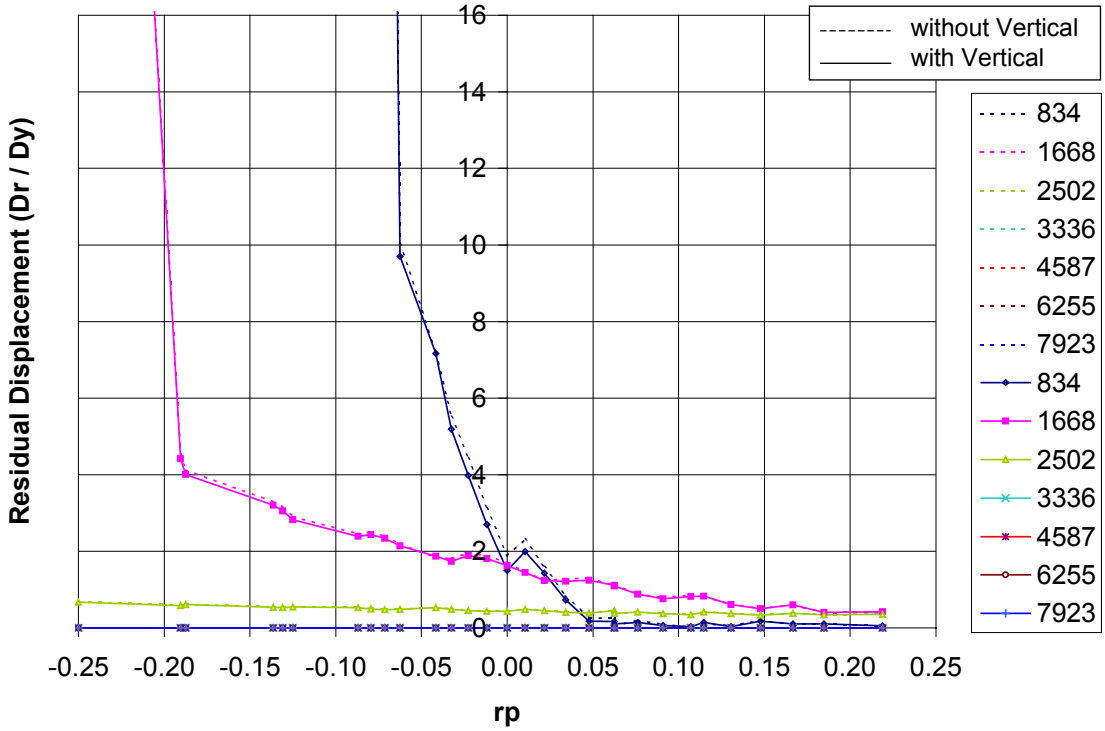


Figure C3.9.2.4a – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

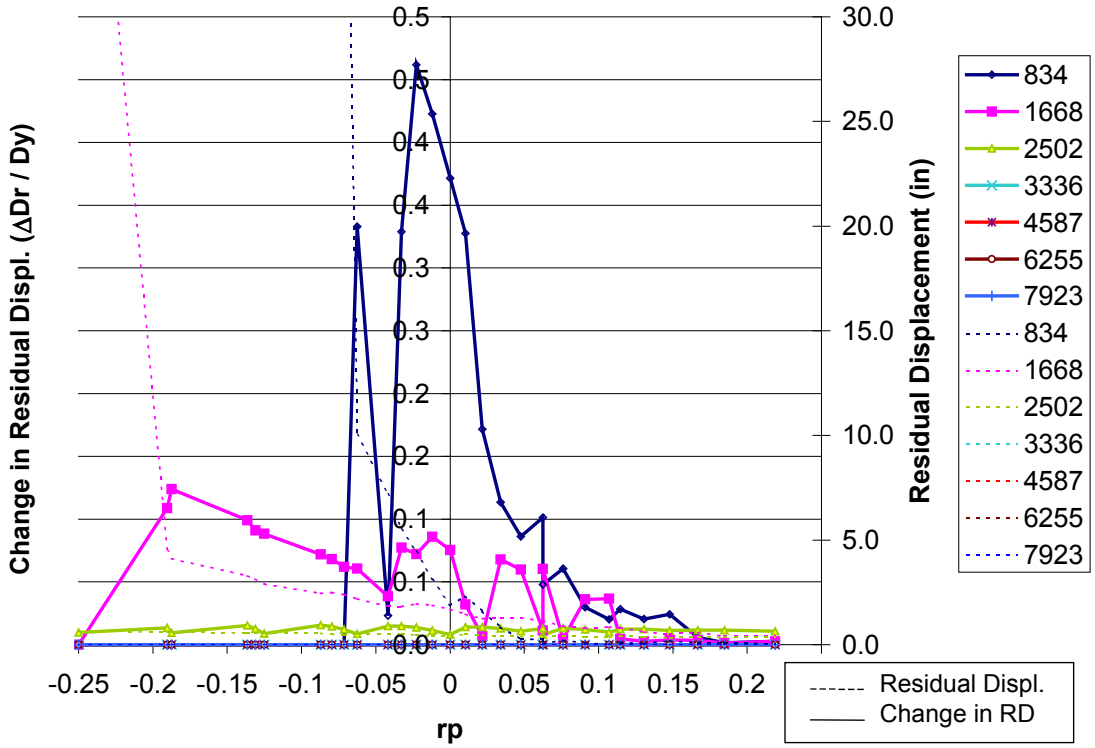


Figure C3.9.2.4b – EQ2, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

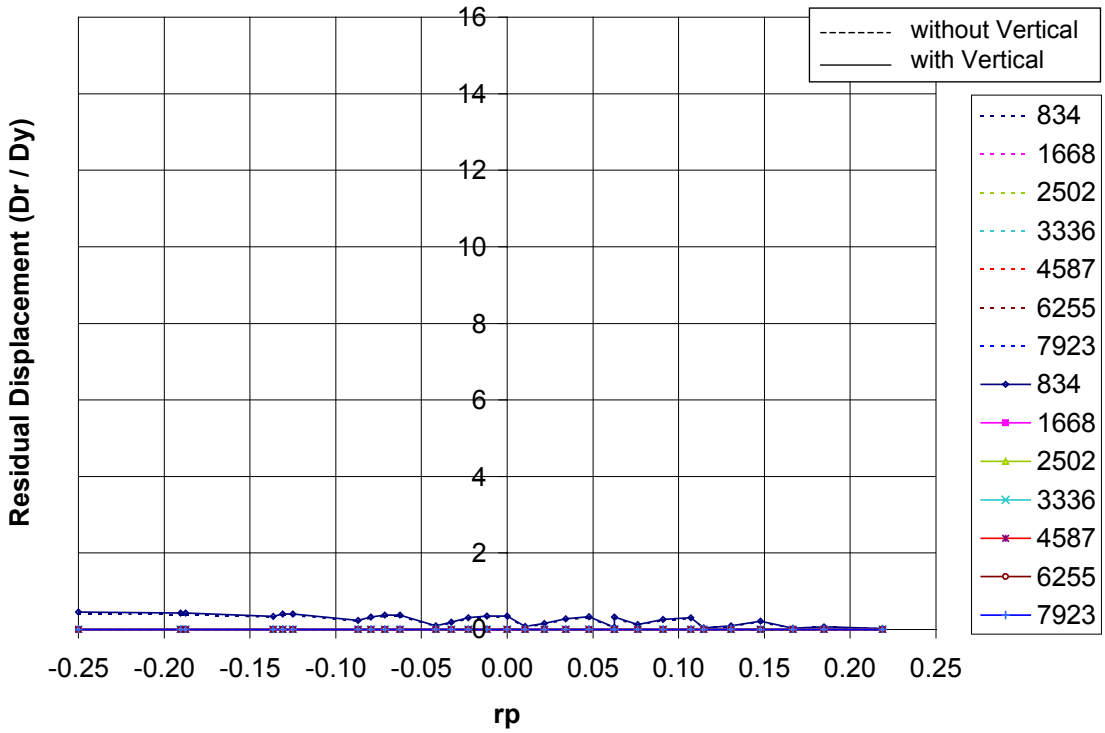


Figure C3.9.3.1a – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

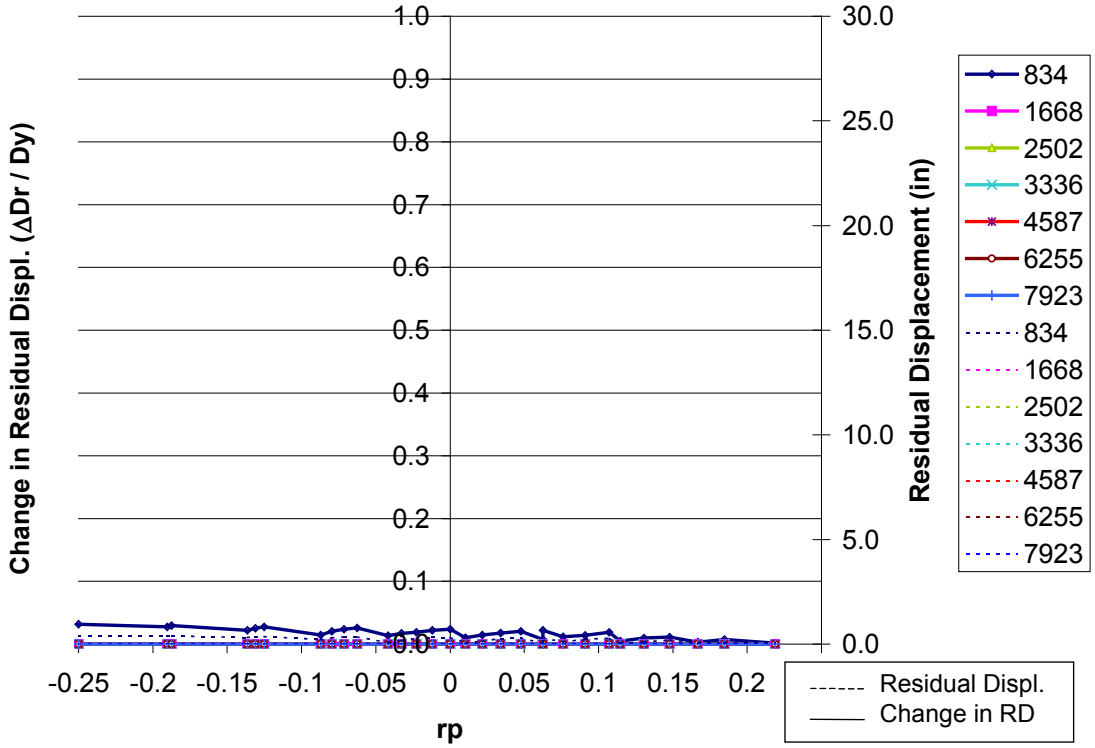


Figure C3.9.3.1b – EQ3, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

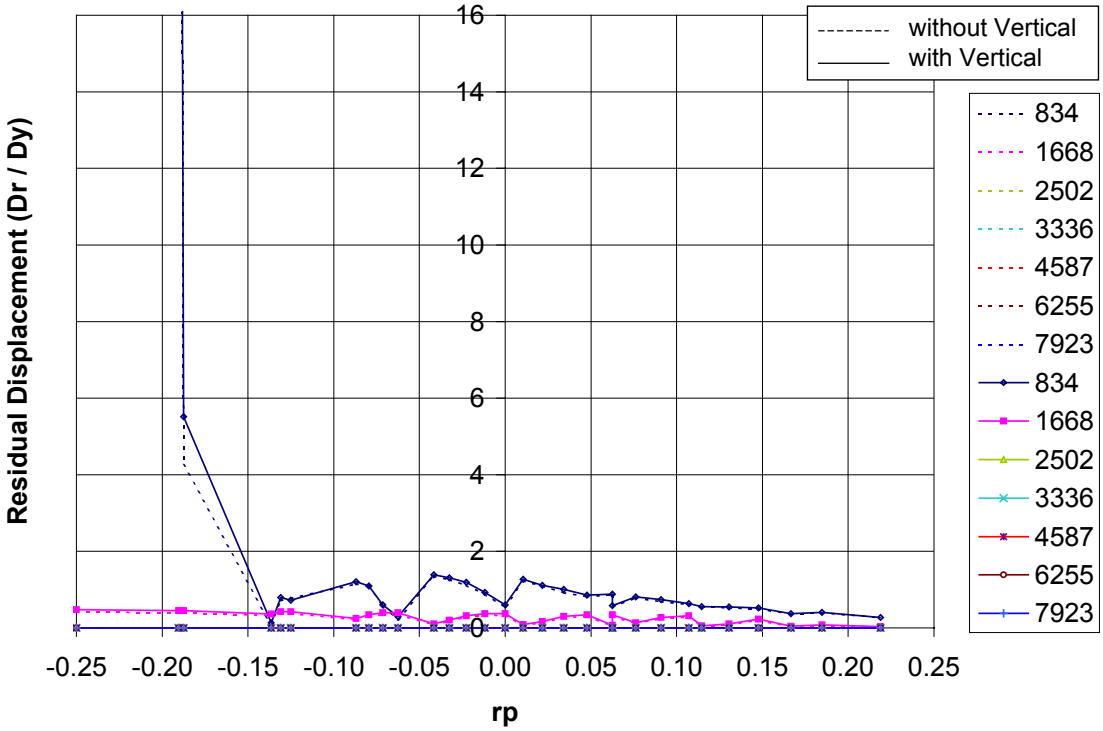


Figure C3.9.3.2a – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

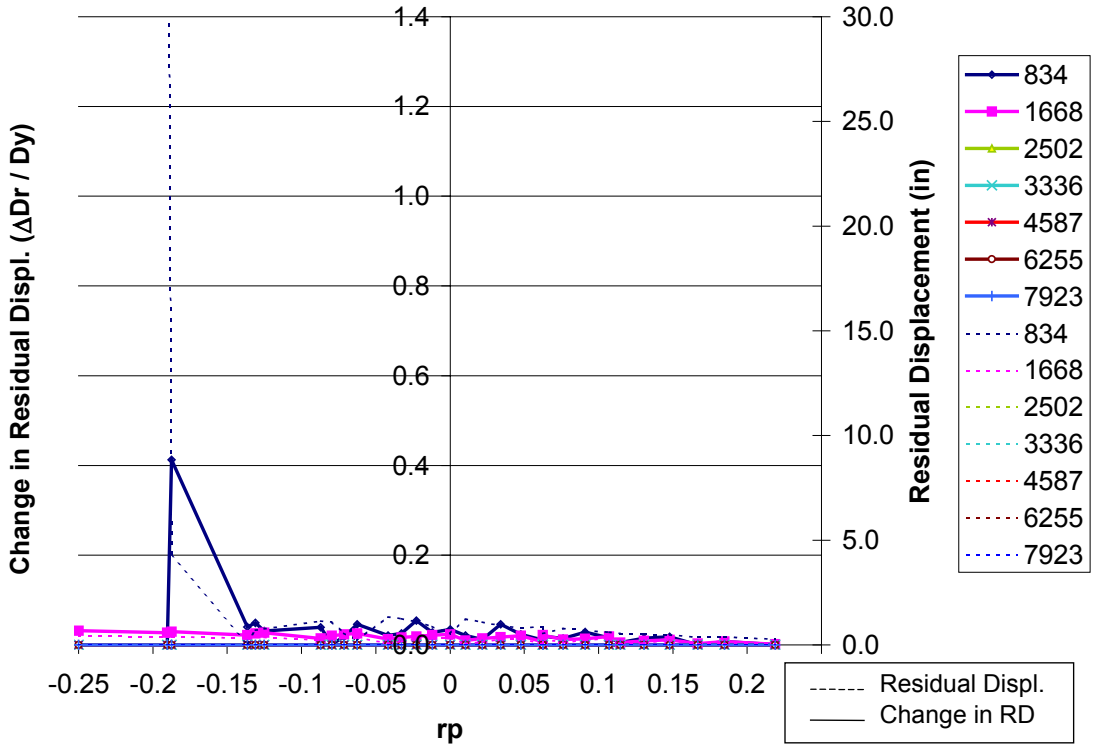


Figure C3.9.3.2b – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

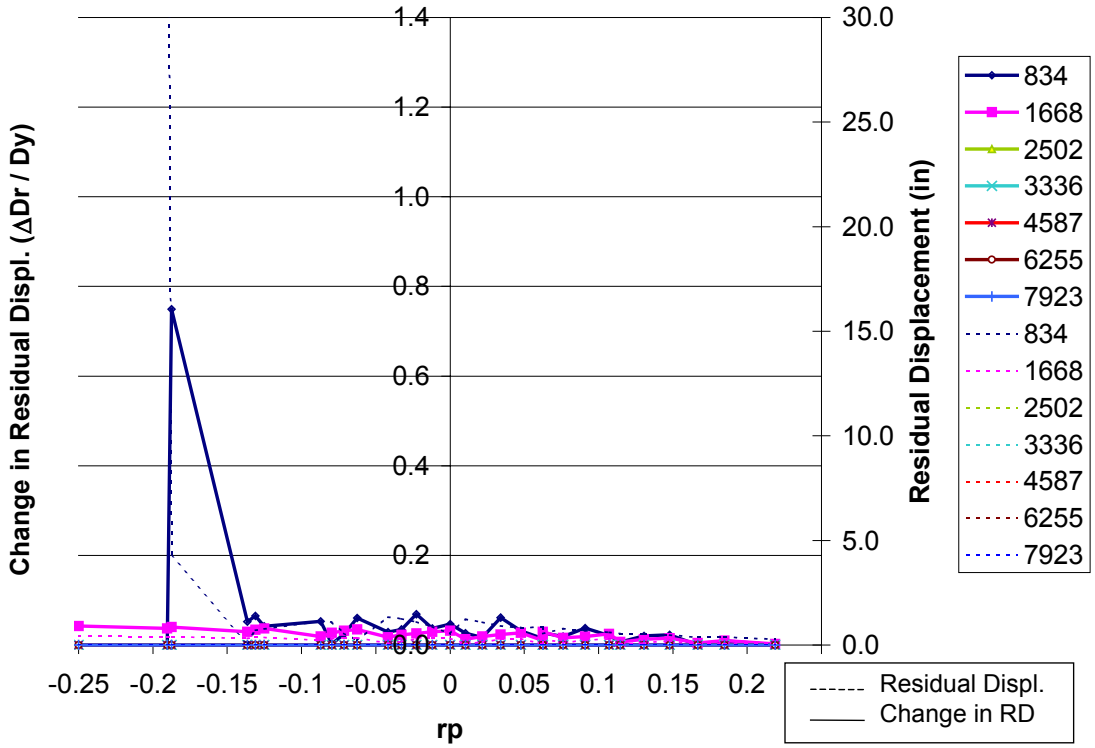


Figure C3.9.3.2c – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

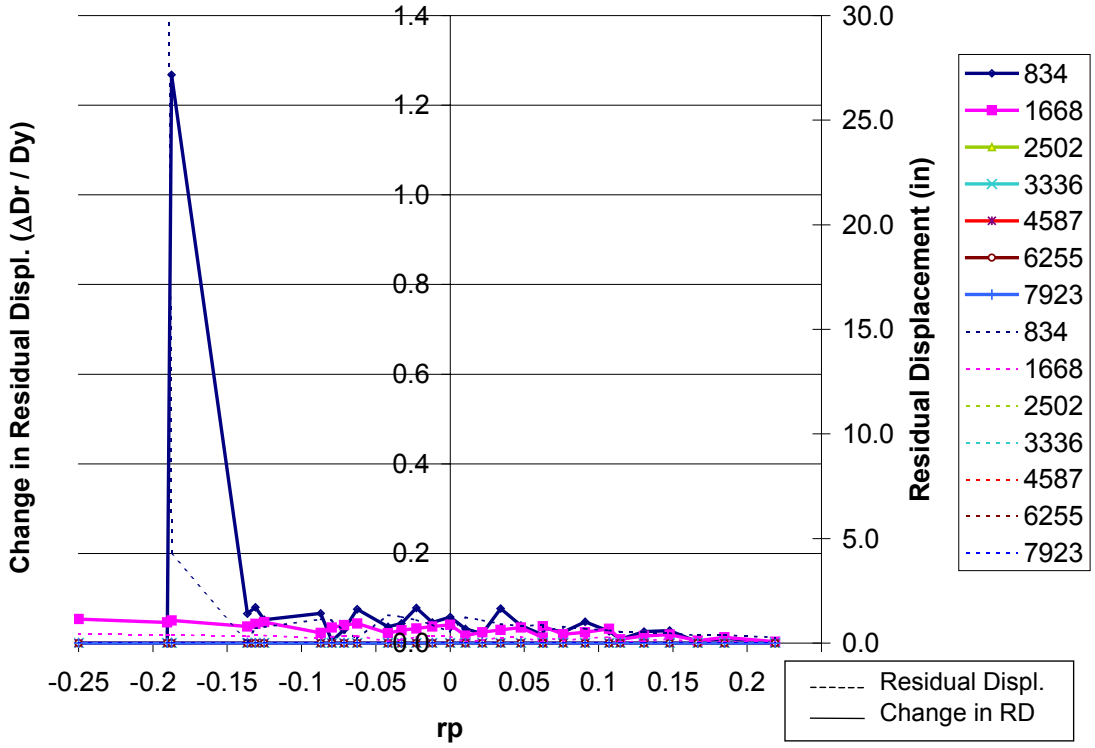


Figure C3.9.3.2d – EQ3, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

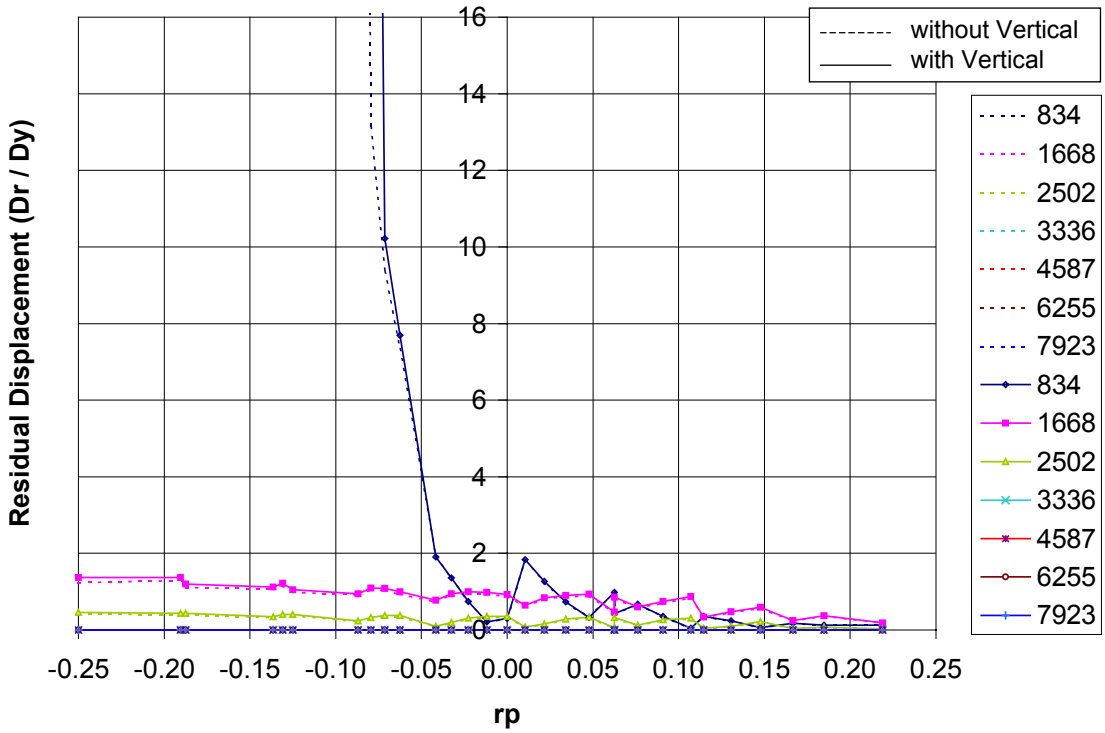


Figure C3.9.3.3a – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

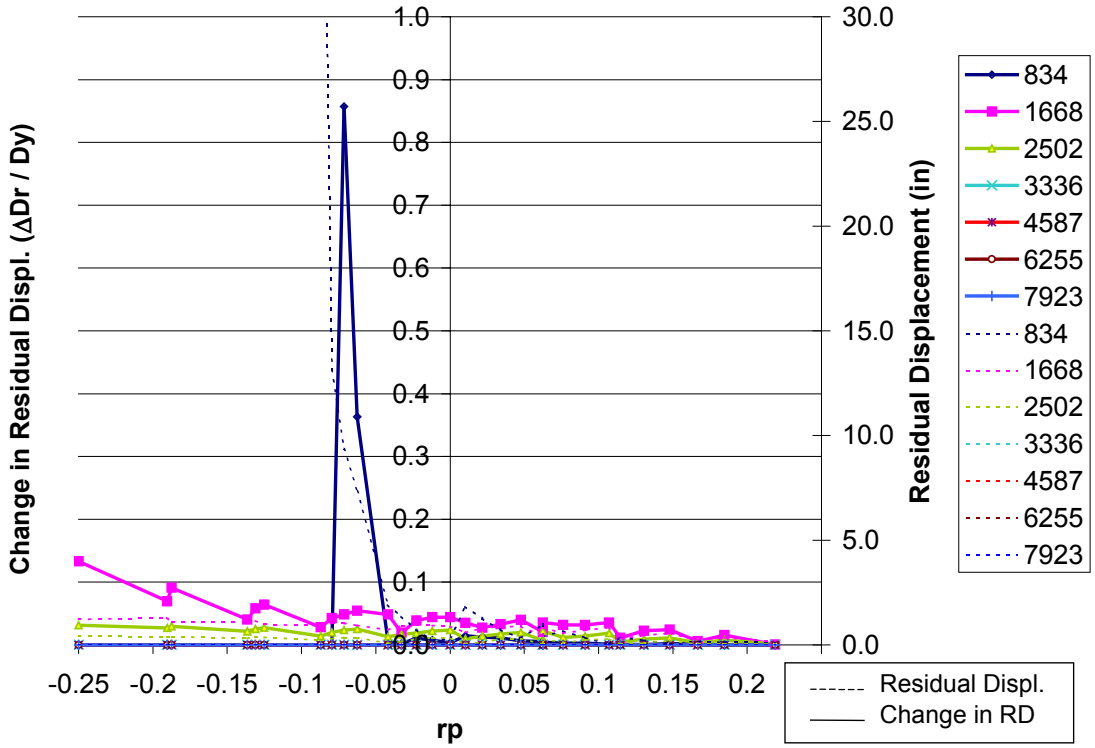


Figure C3.9.3.3b – EQ3, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

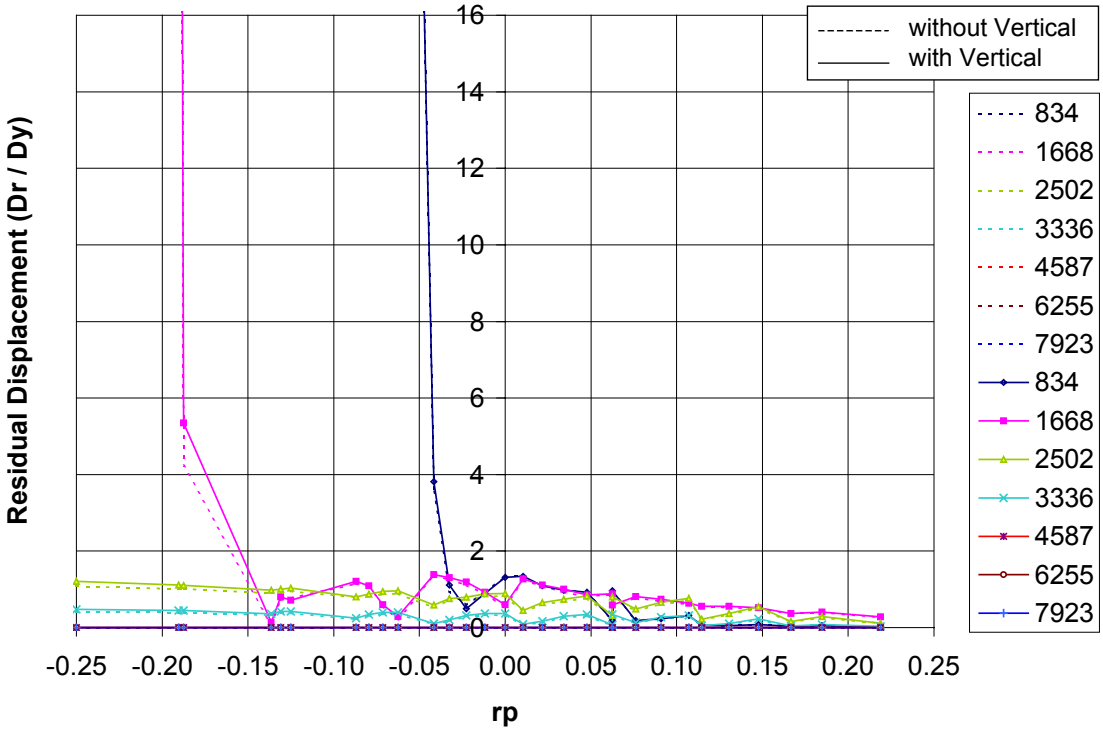


Figure C3.9.3.4a – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

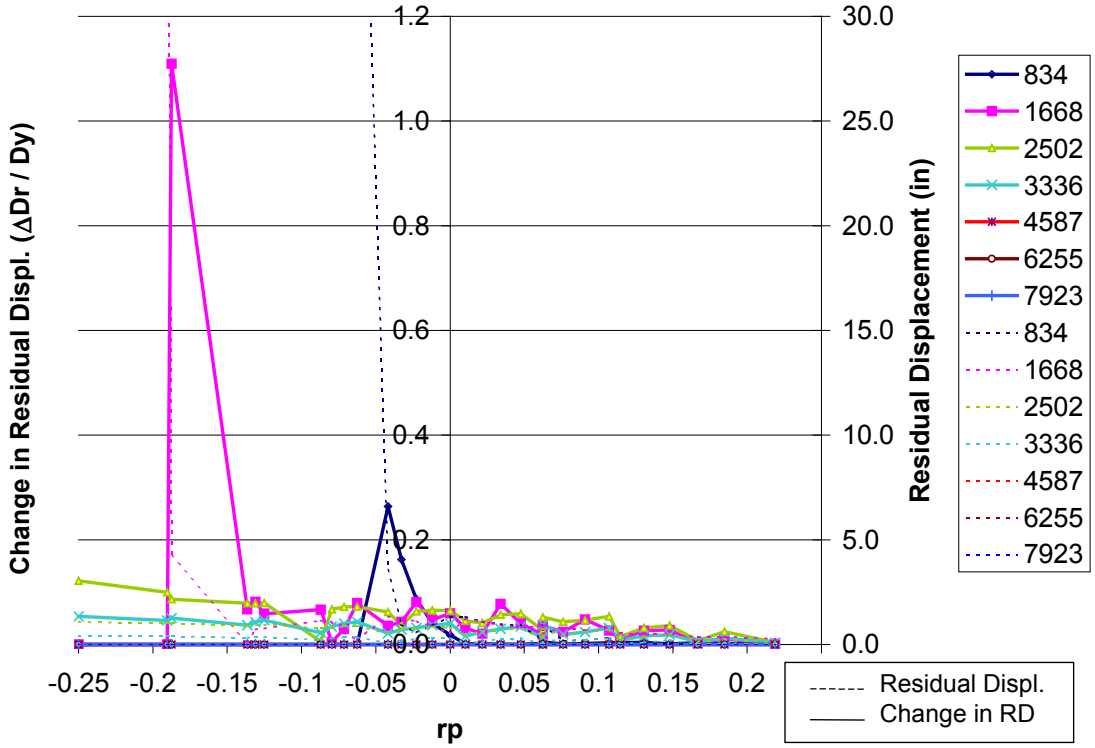


Figure C3.9.3.4b – EQ3, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

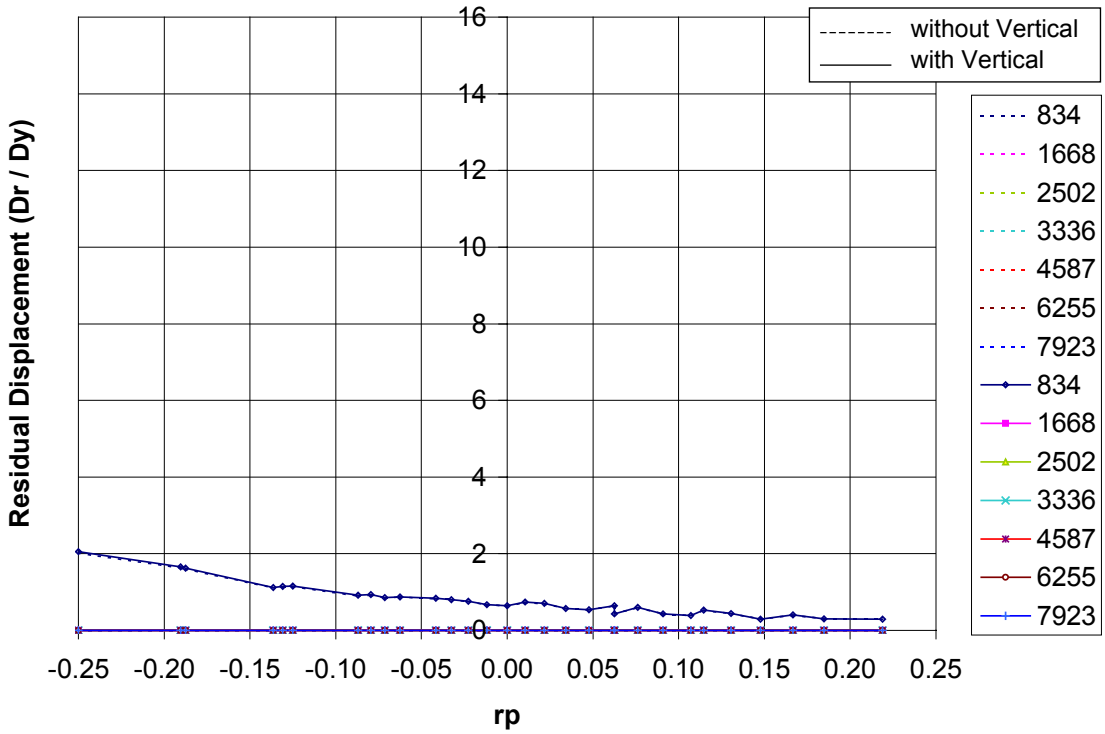


Figure C3.9.4.1a – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

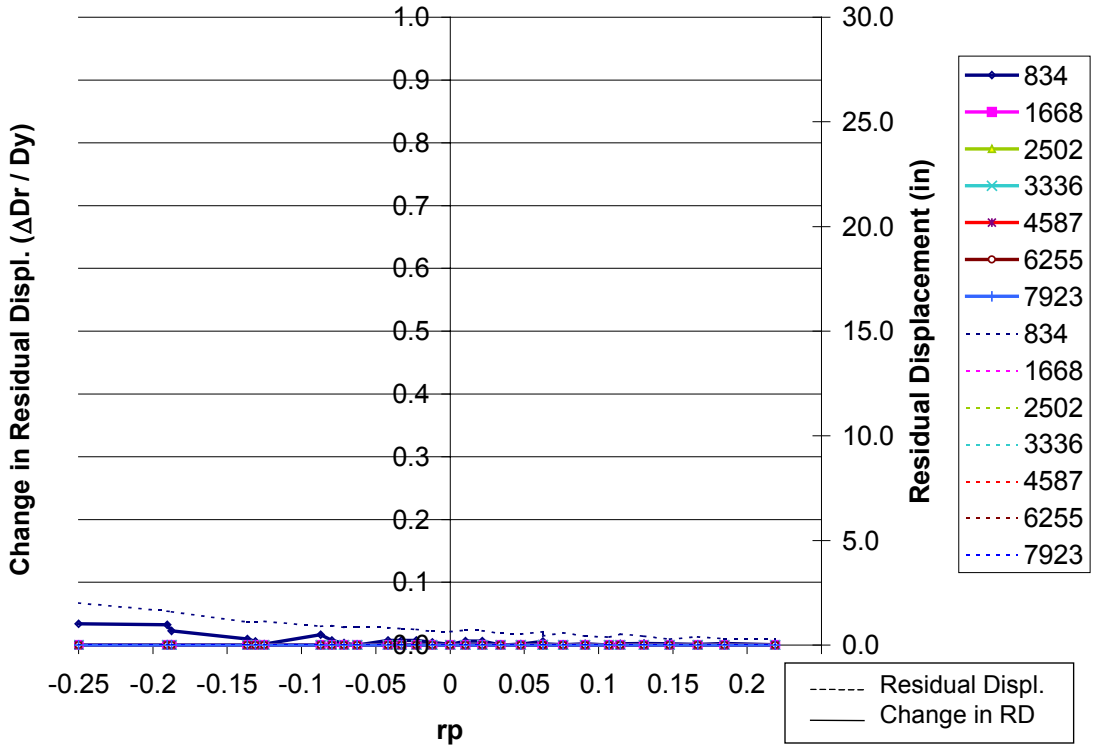


Figure C3.9.4.1b – EQ4, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

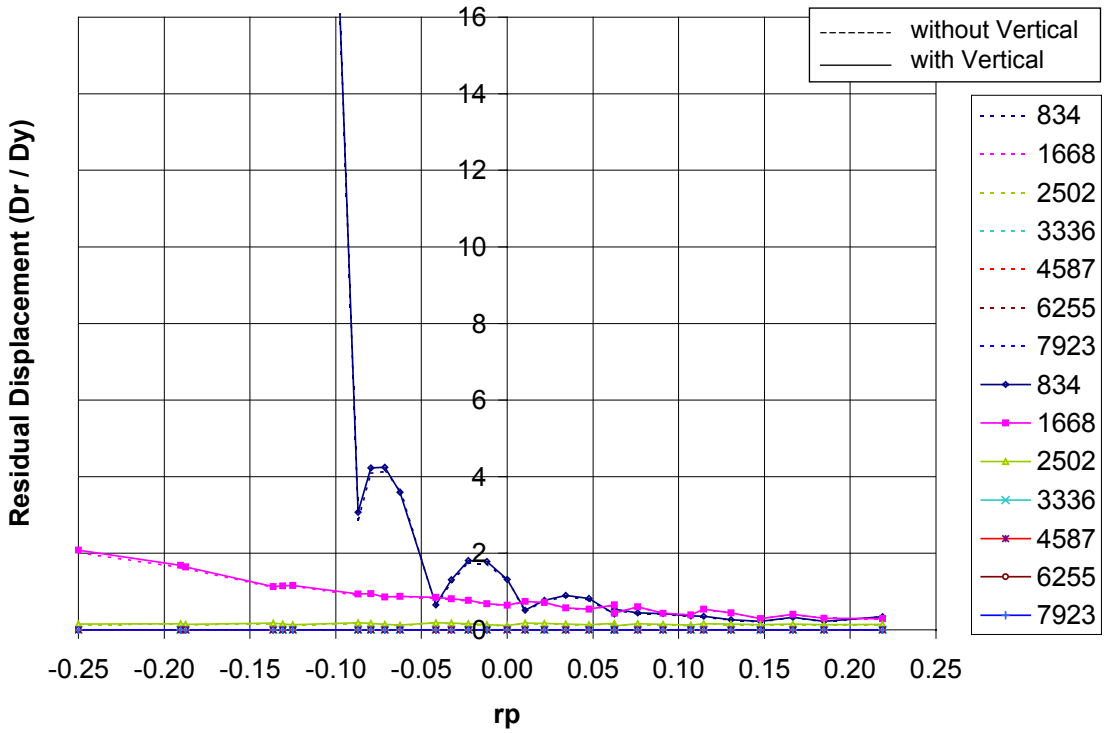


Figure C3.9.4.2a – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

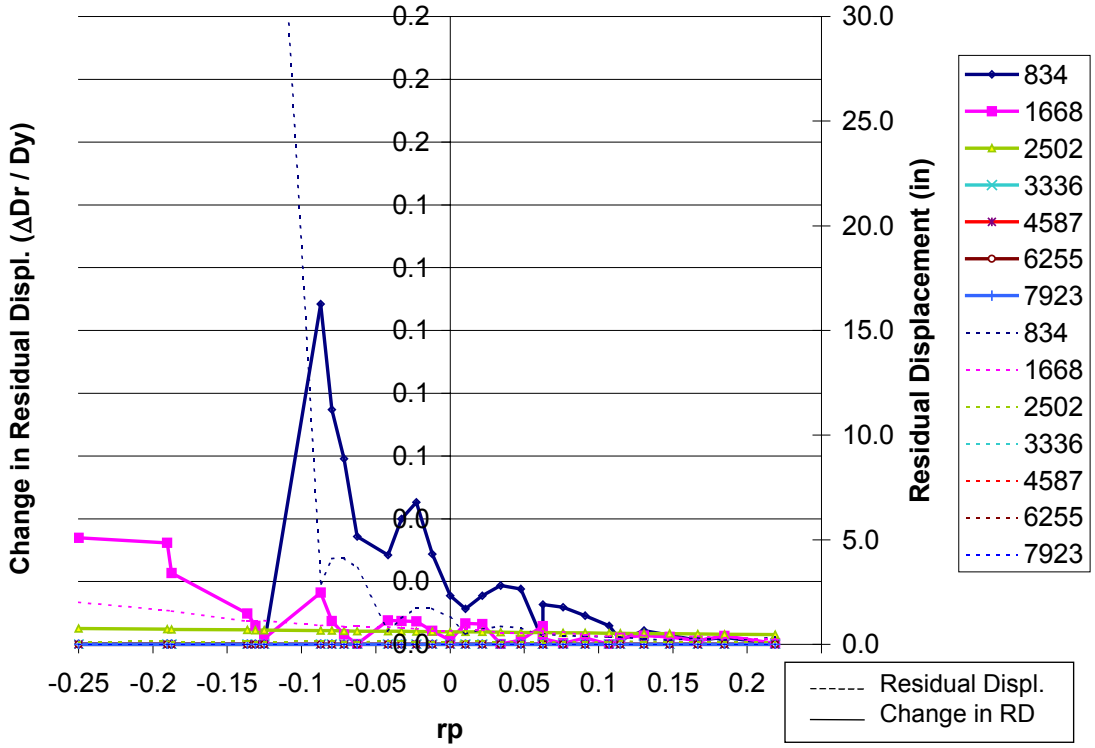


Figure C3.9.4.2b – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

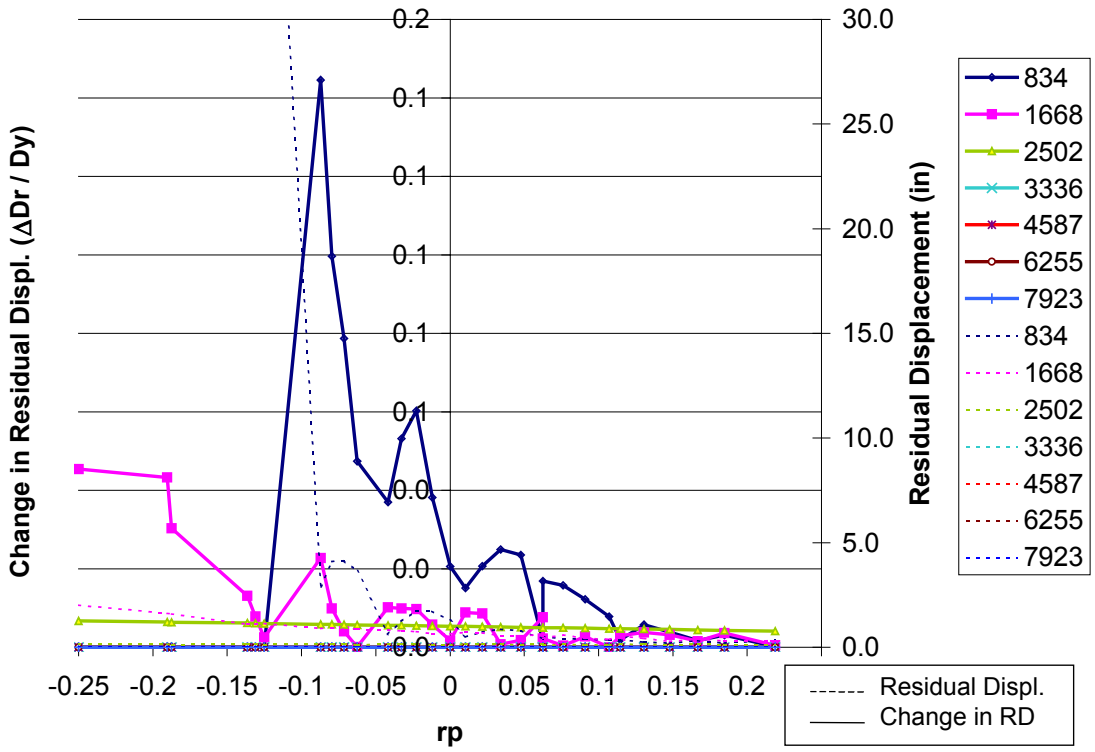


Figure C3.9.4.2c – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

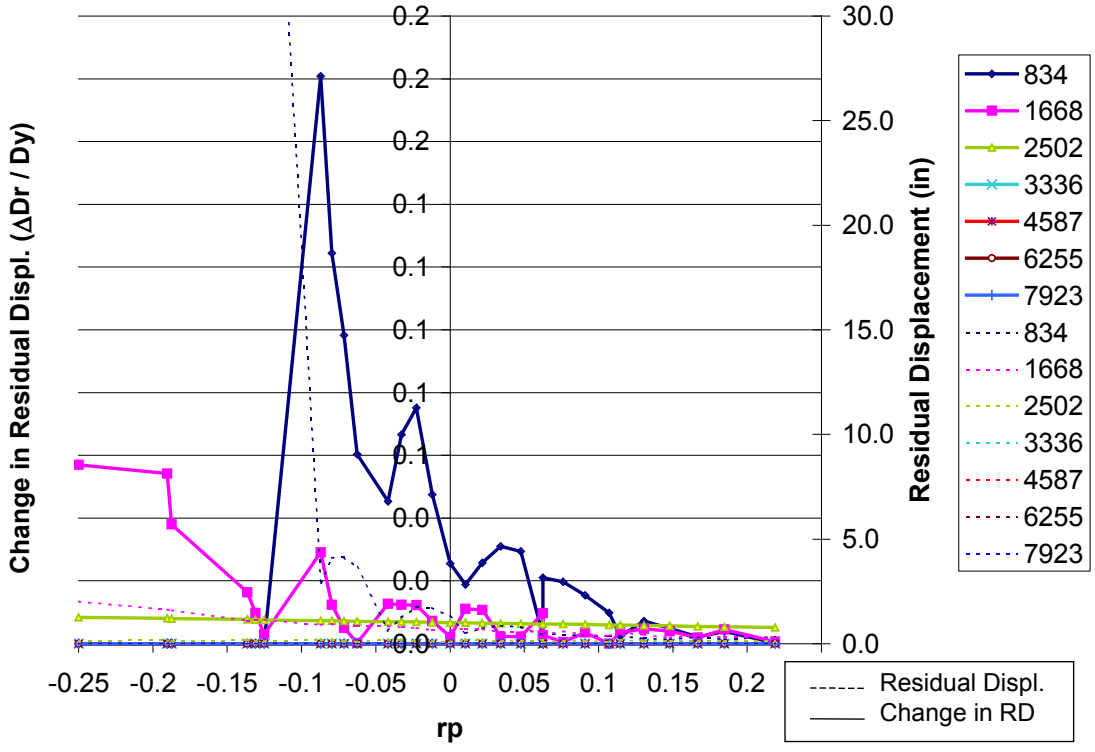


Figure C3.9.4.2d – EQ4, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

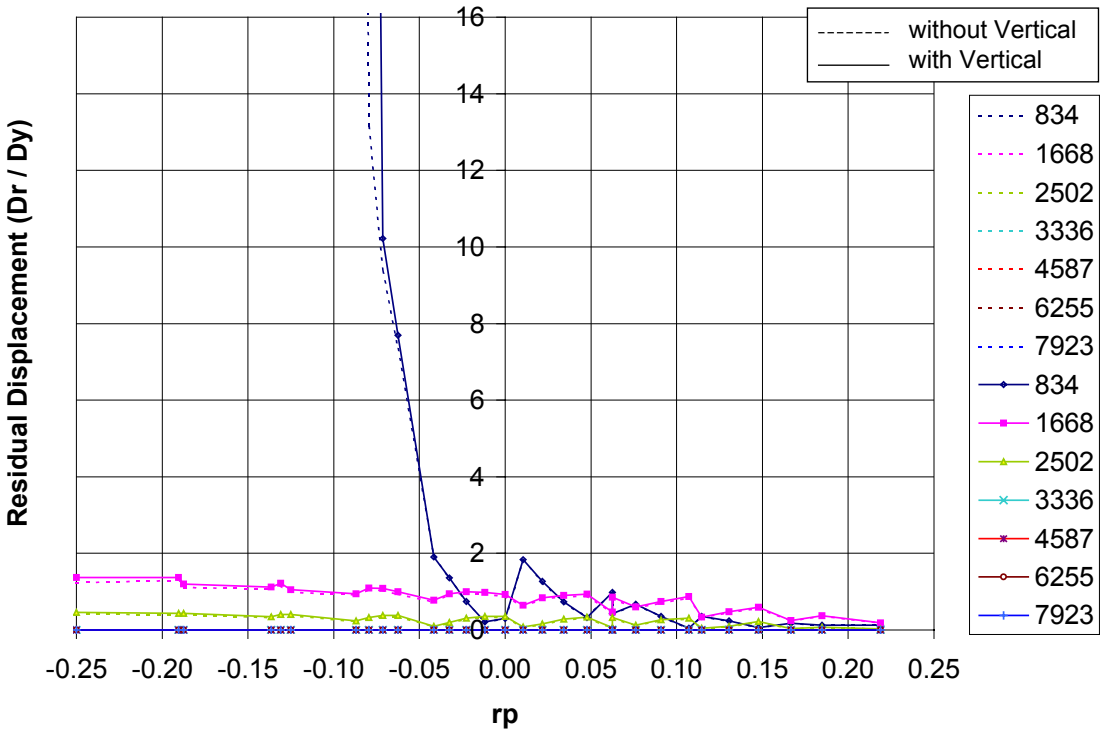


Figure C3.9.4.3a – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

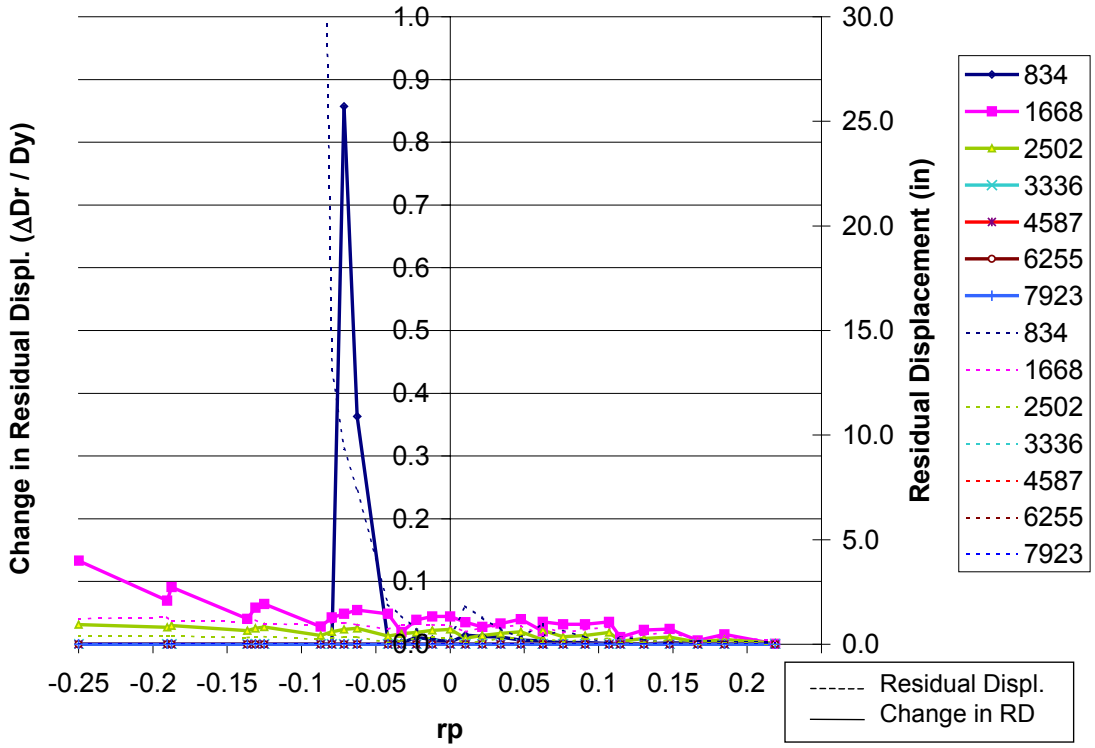


Figure C3.9.4.3b – EQ4, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

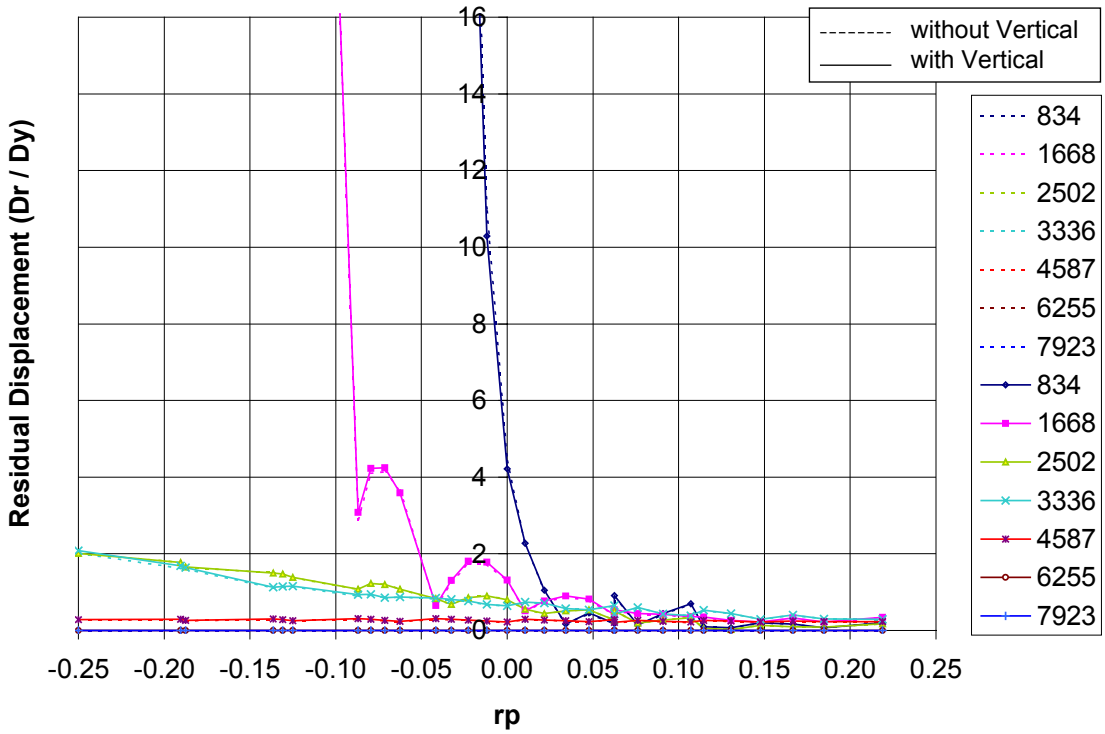


Figure C3.9.4.4a – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

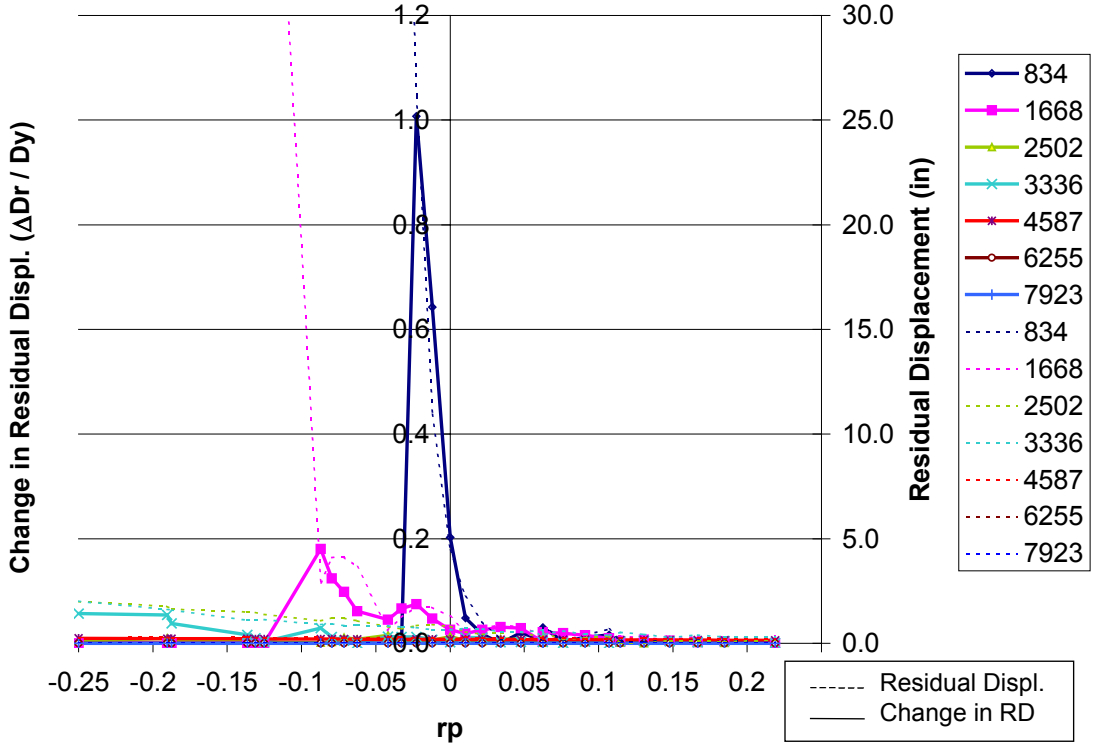


Figure C3.9.4.4b – EQ4, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

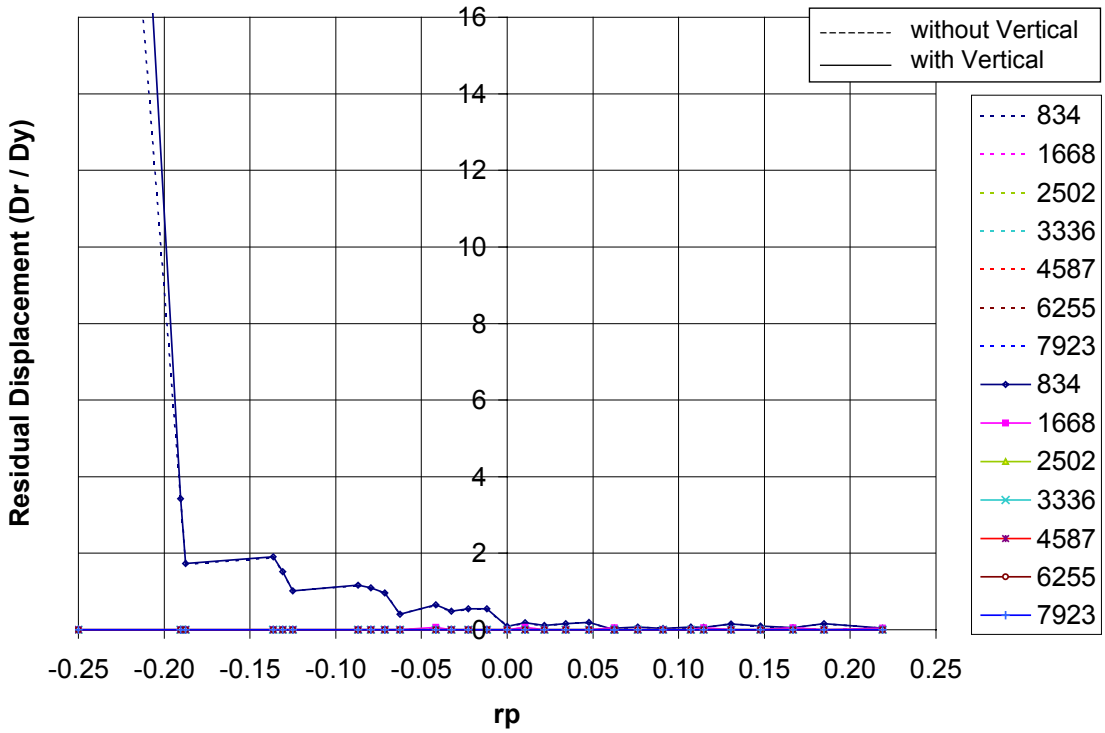


Figure C3.9.5.1a – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

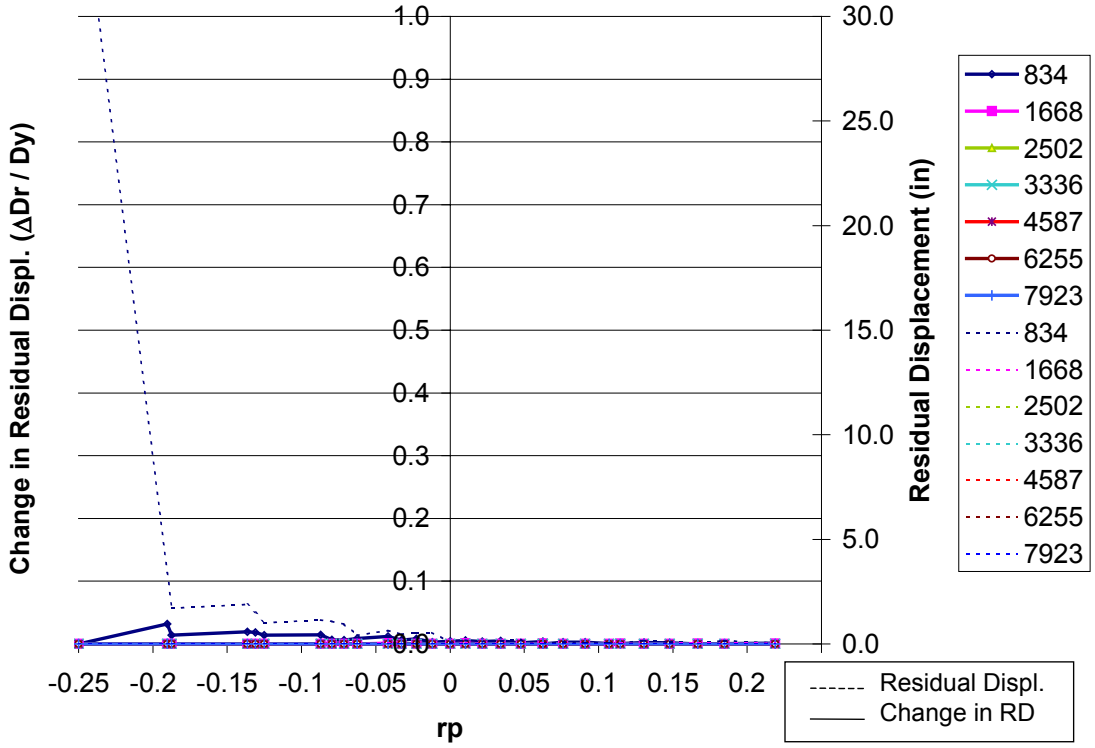


Figure C3.9.5.1b – EQ5, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

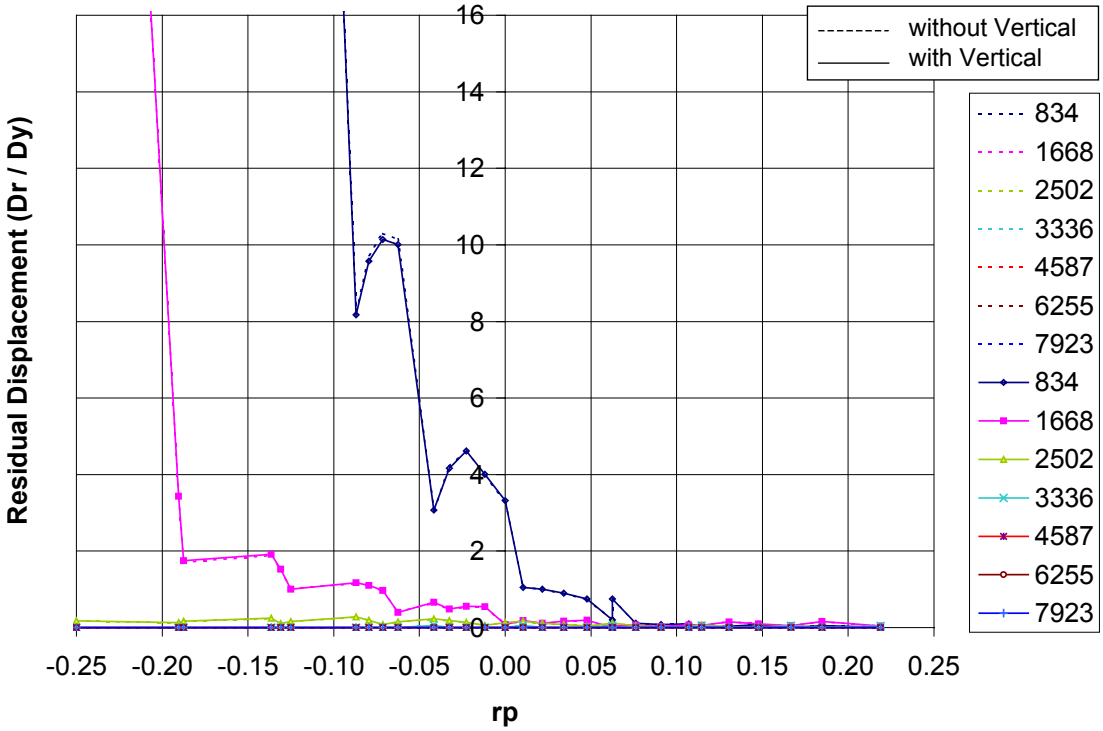


Figure C3.9.5.2a – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

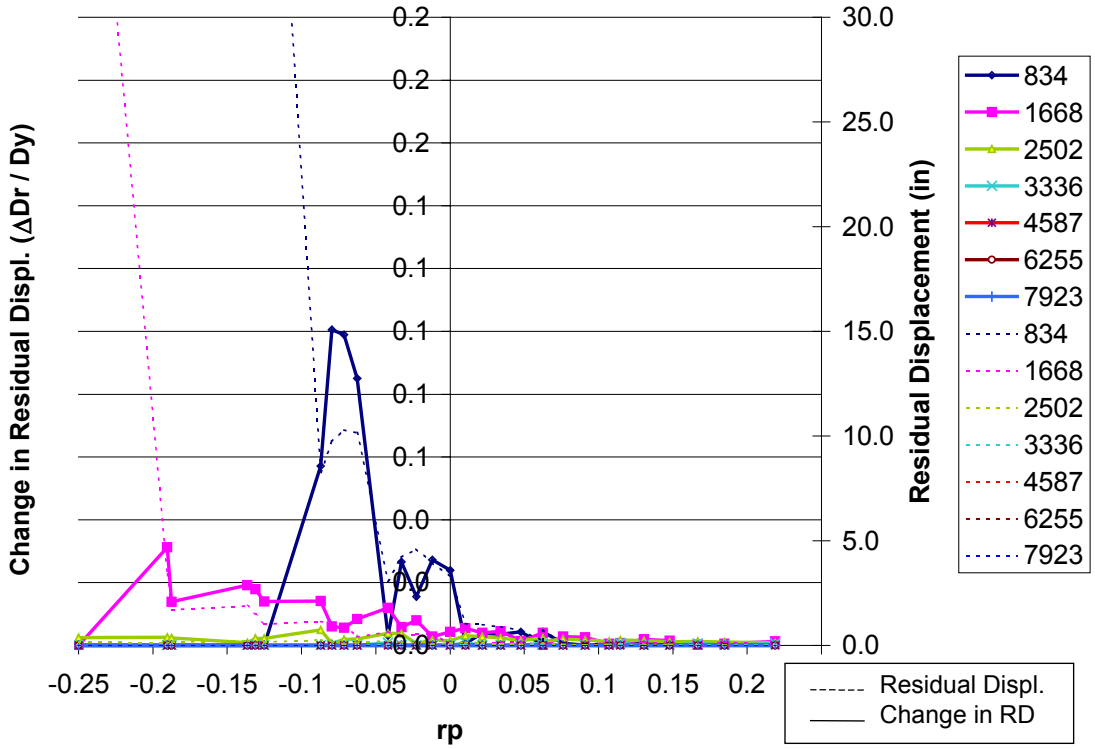


Figure C3.9.5.2b – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

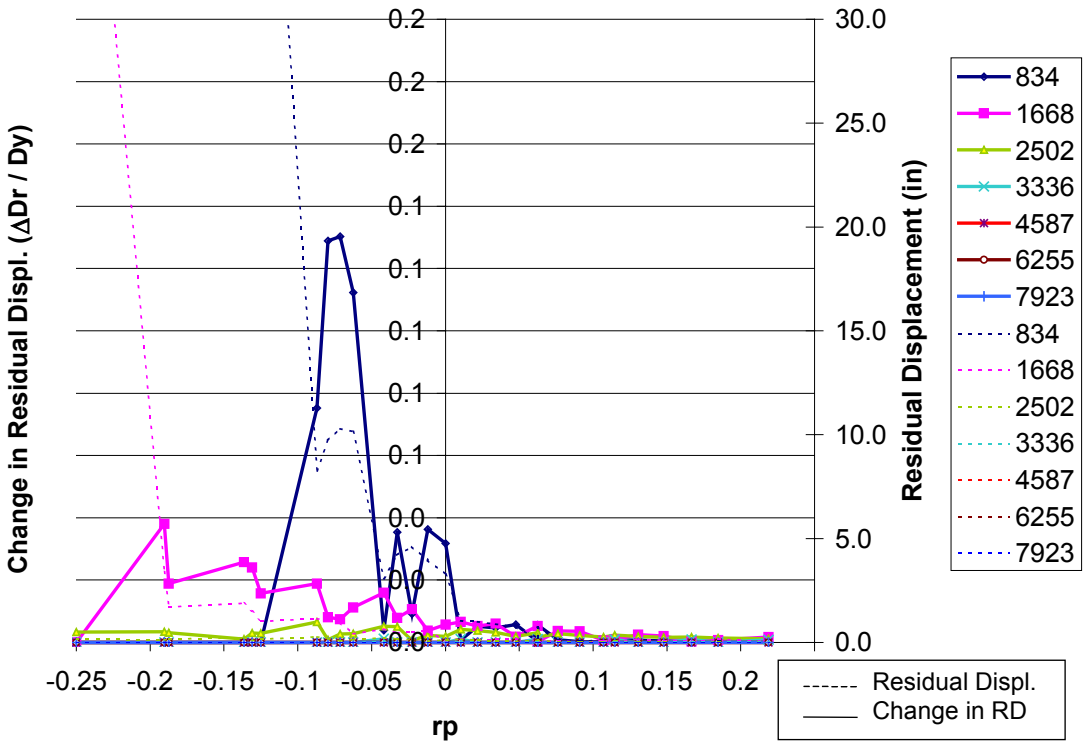


Figure C3.9.5.2c – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

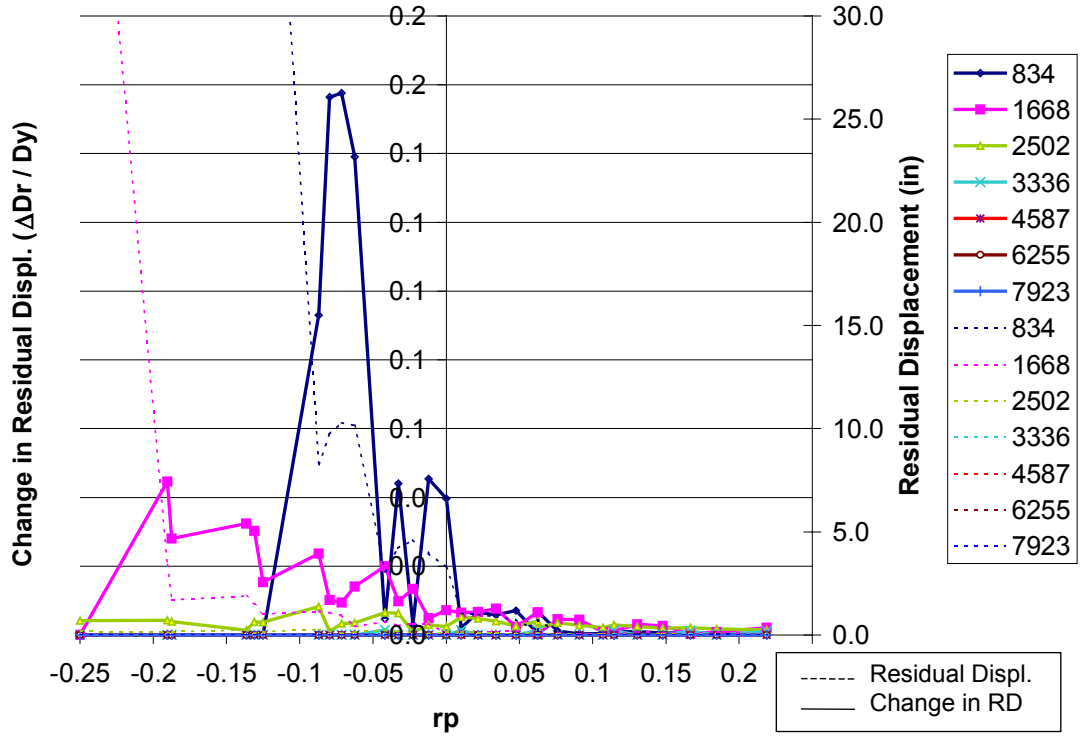


Figure C3.9.5.2d – EQ5, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

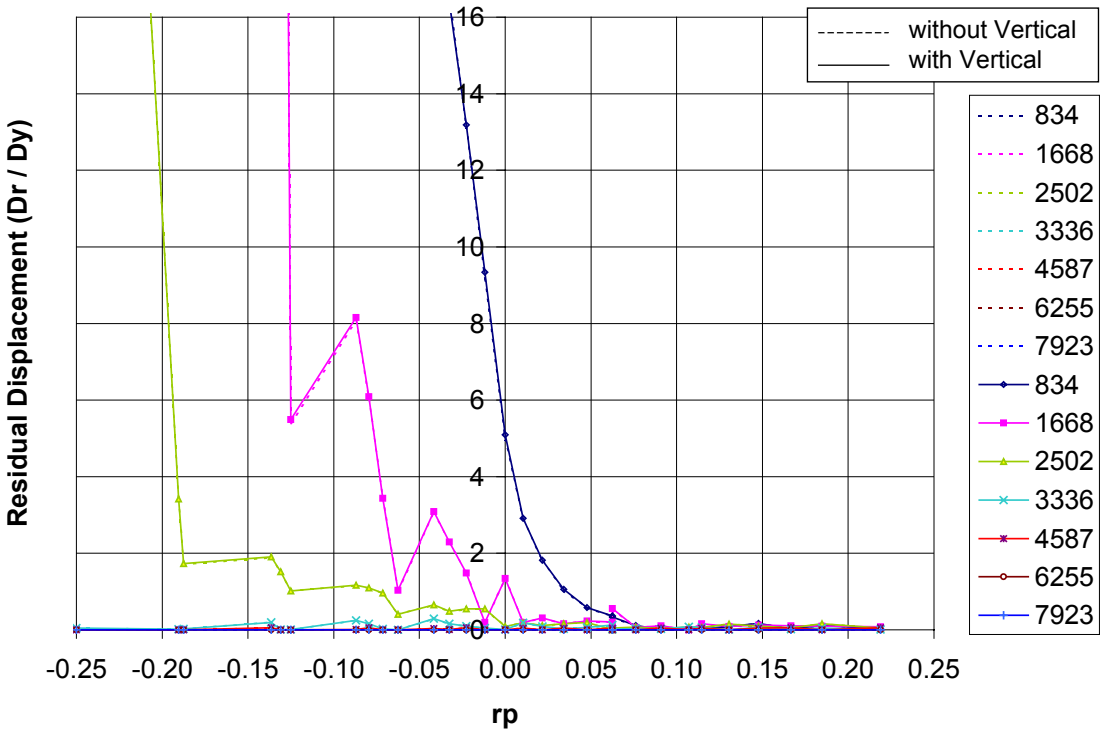


Figure C3.9.5.3a – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

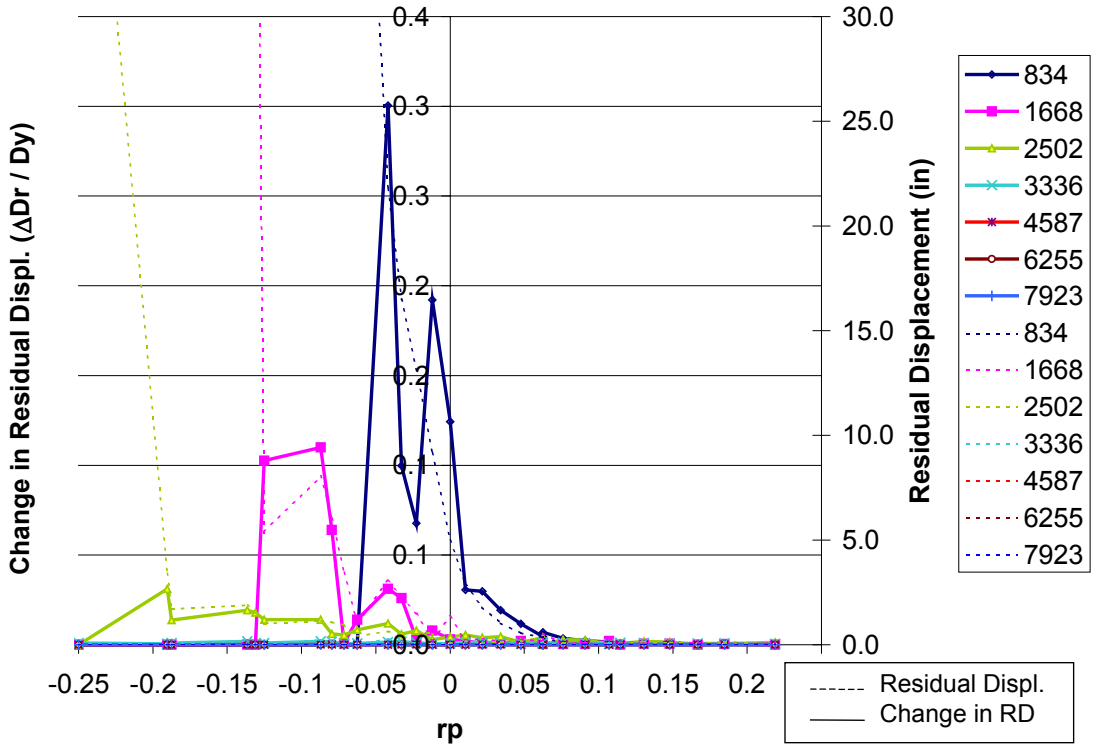


Figure C3.9.5.3b – EQ5, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

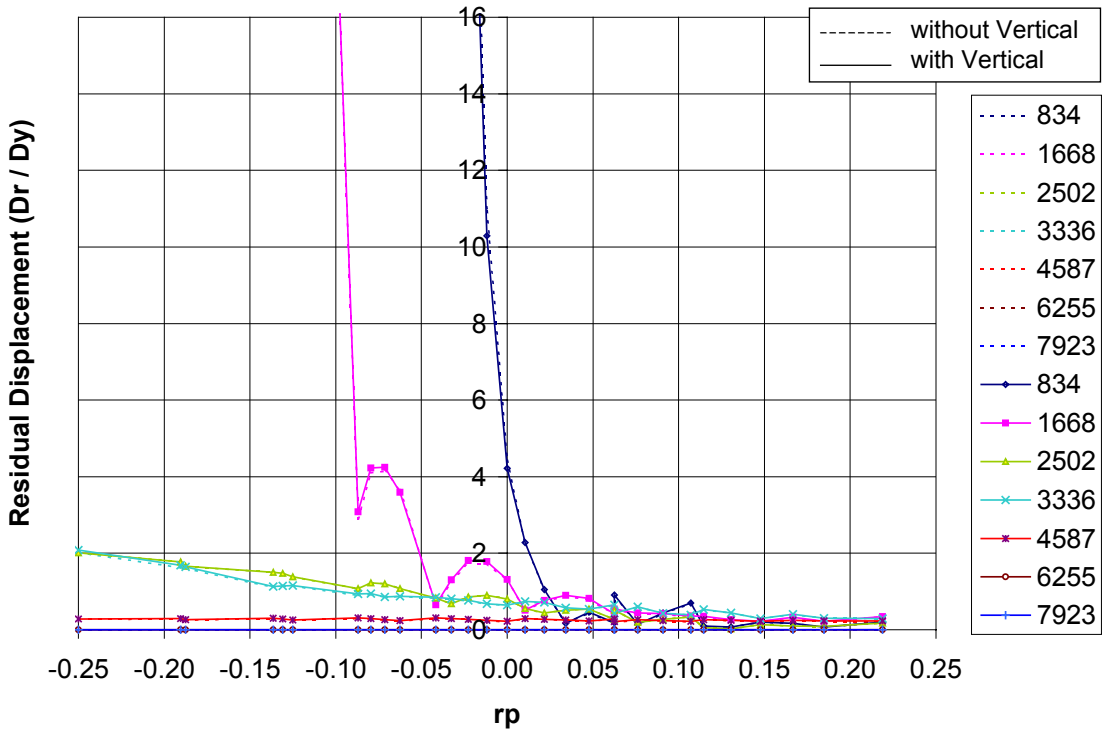


Figure C3.9.5.4a – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

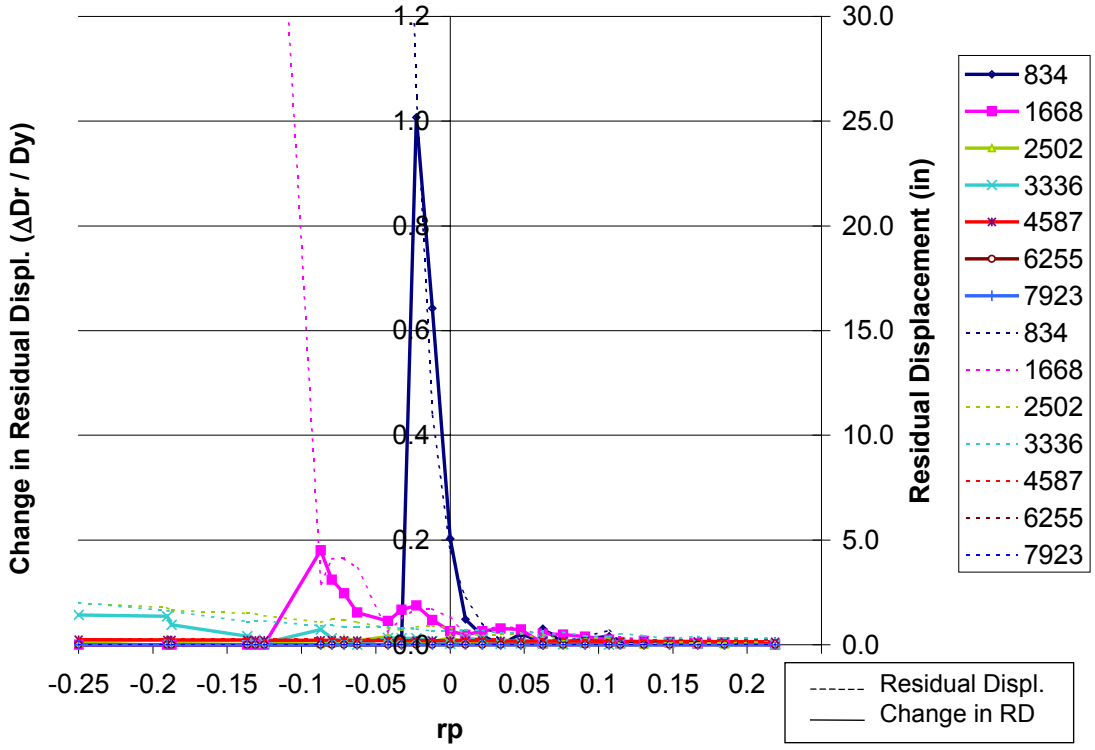


Figure C3.9.5.4b – EQ5, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

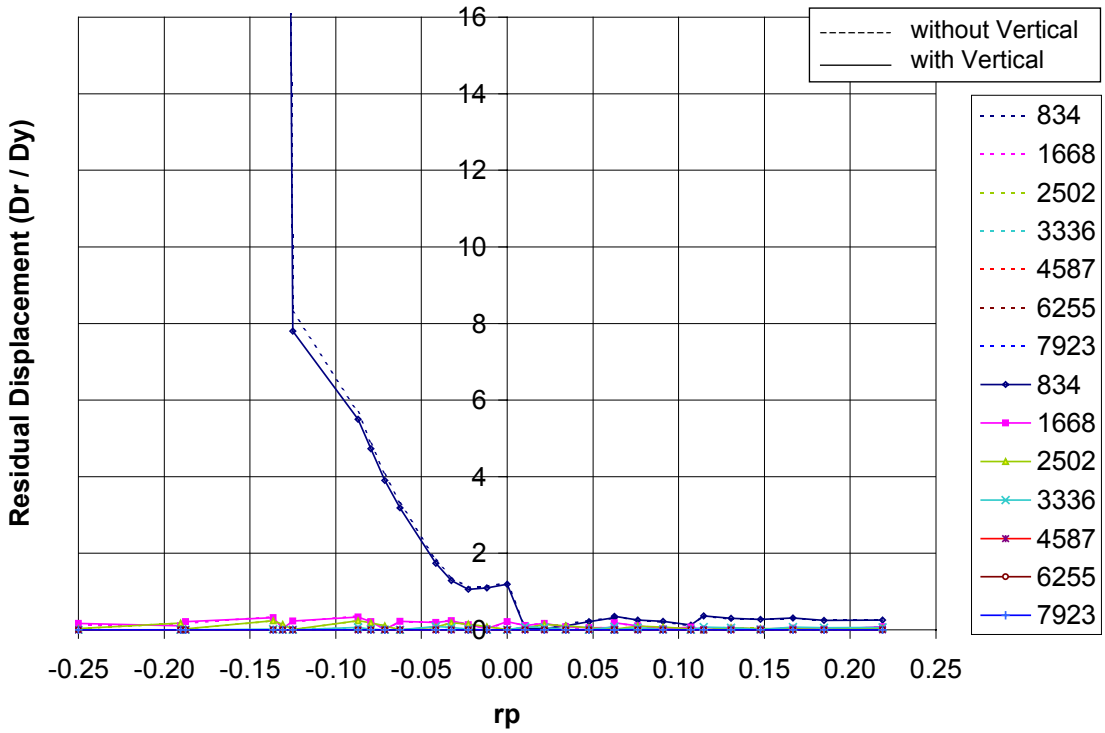


Figure C3.9.6.1a – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

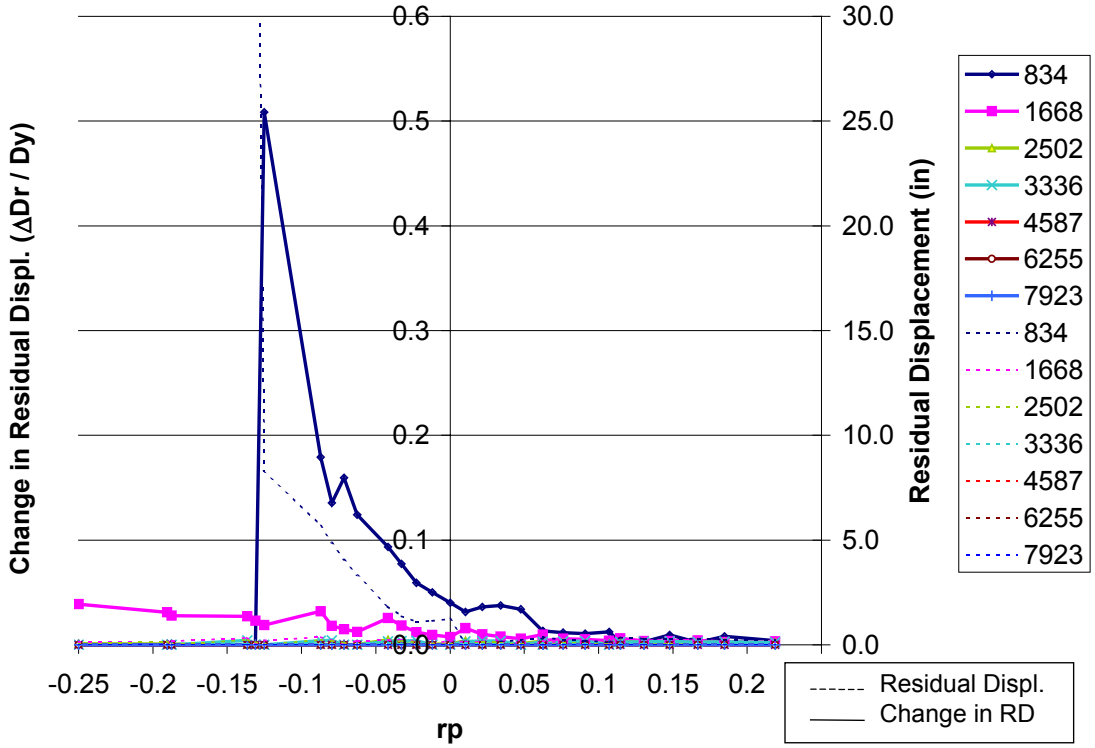


Figure C3.9.6.1b – EQ6, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

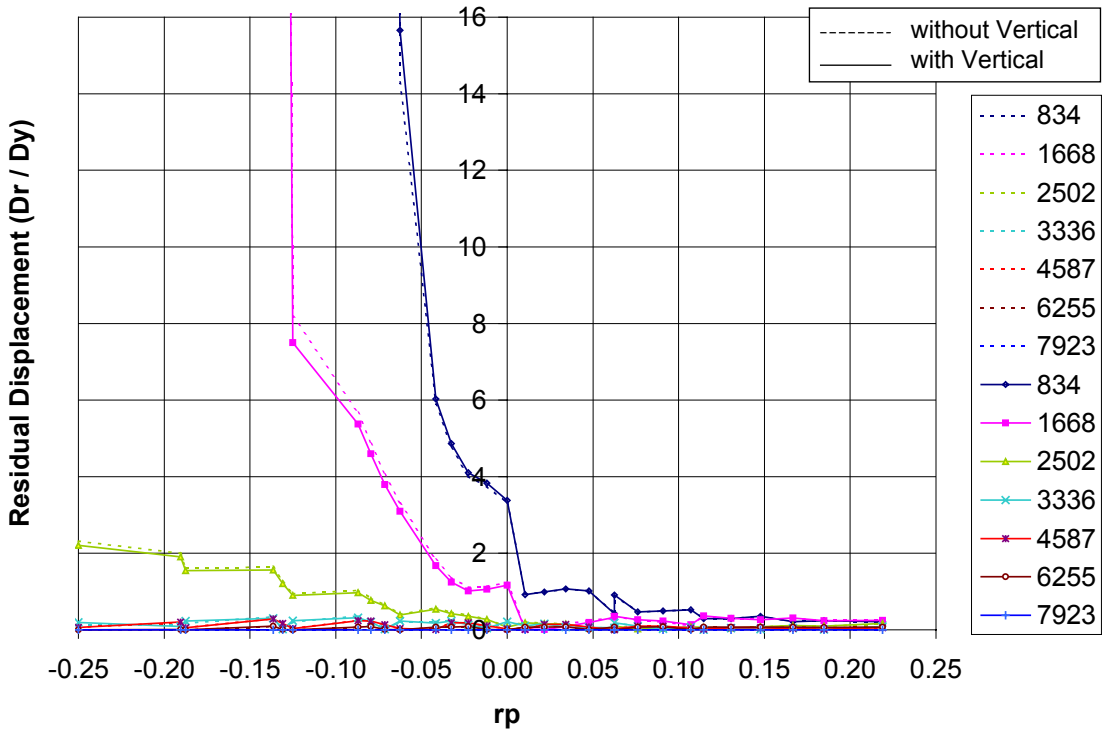


Figure C3.9.6.2a – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

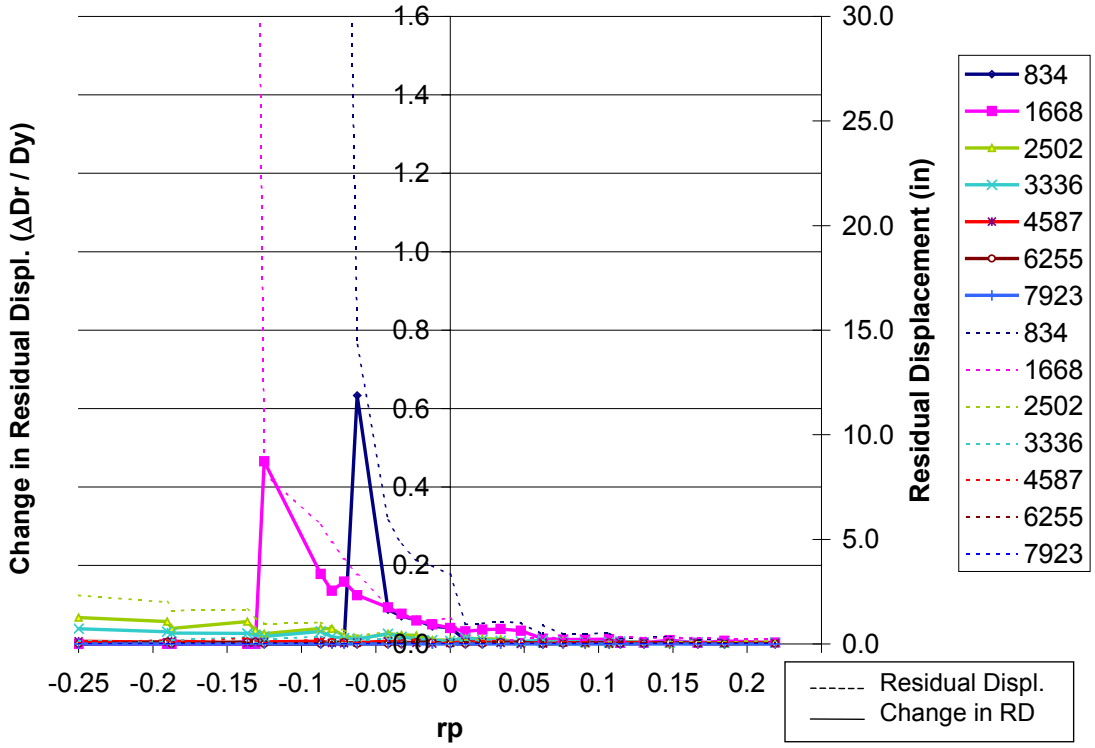


Figure C3.9.6.2b – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

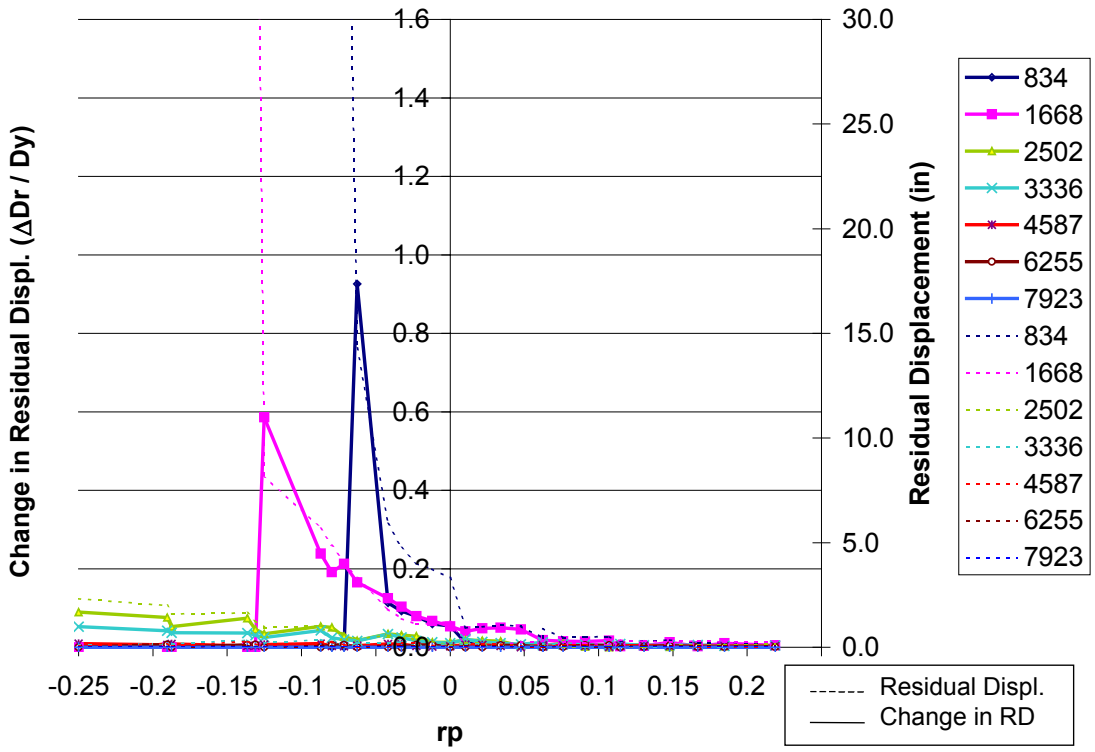


Figure C3.9.6.2c – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

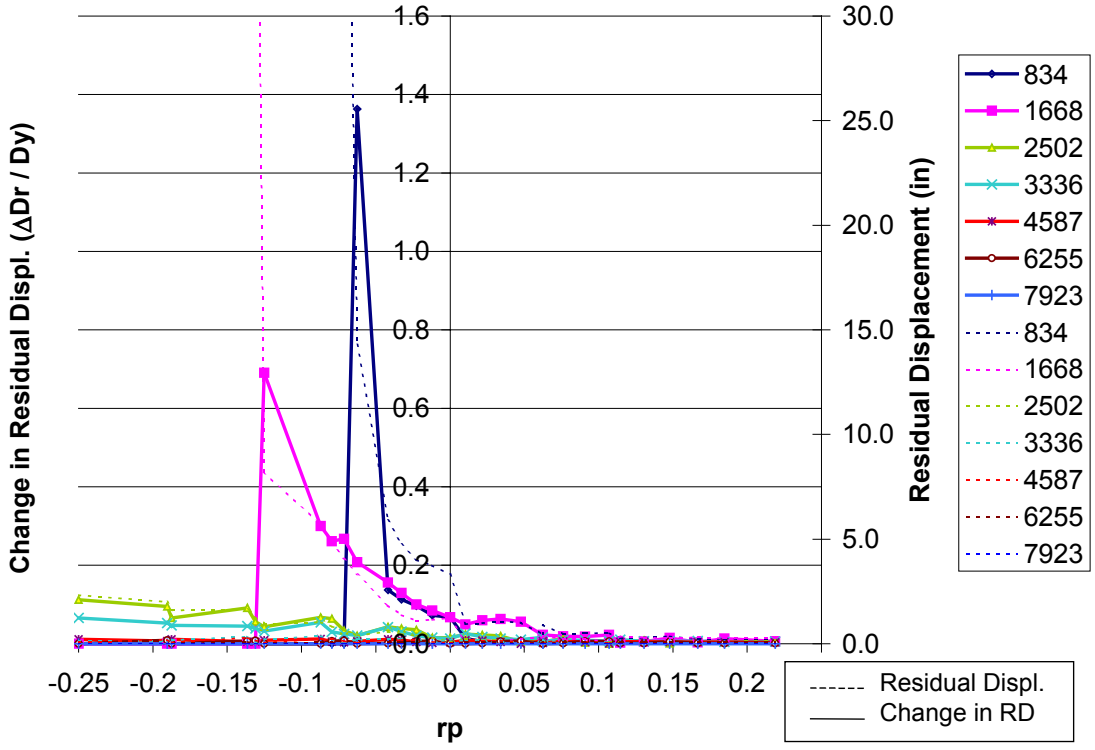


Figure C3.9.6.2d – EQ6, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

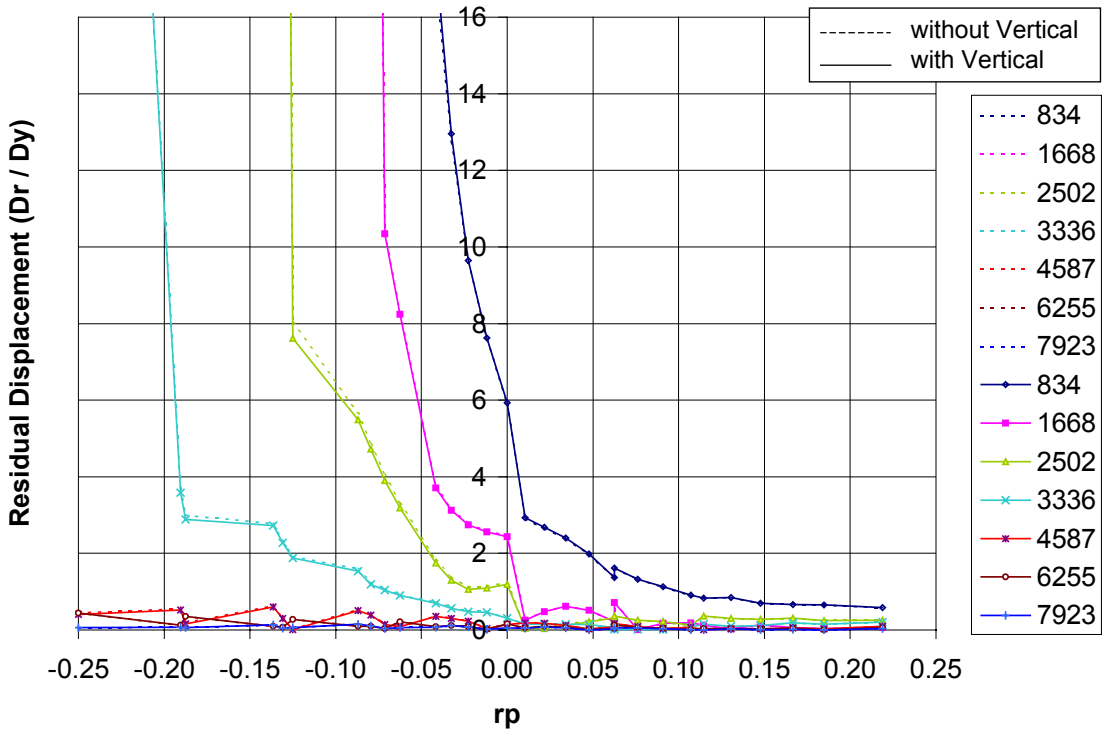


Figure C3.9.6.3a – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

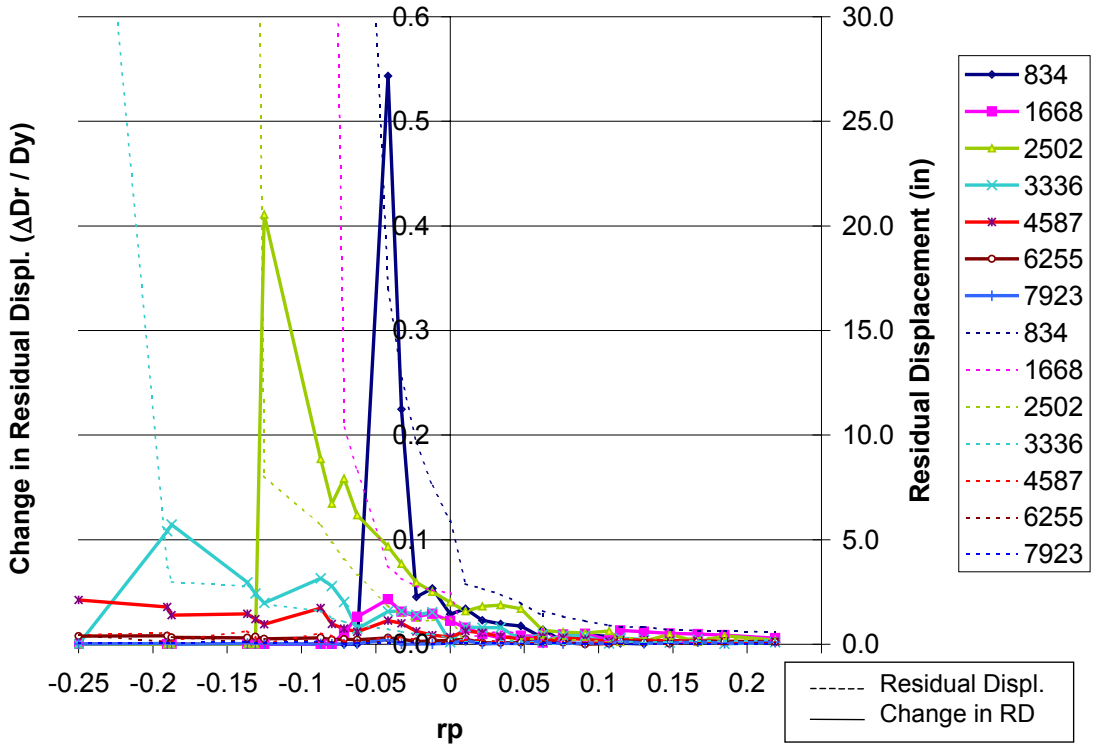


Figure C3.9.6.3b – EQ6, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

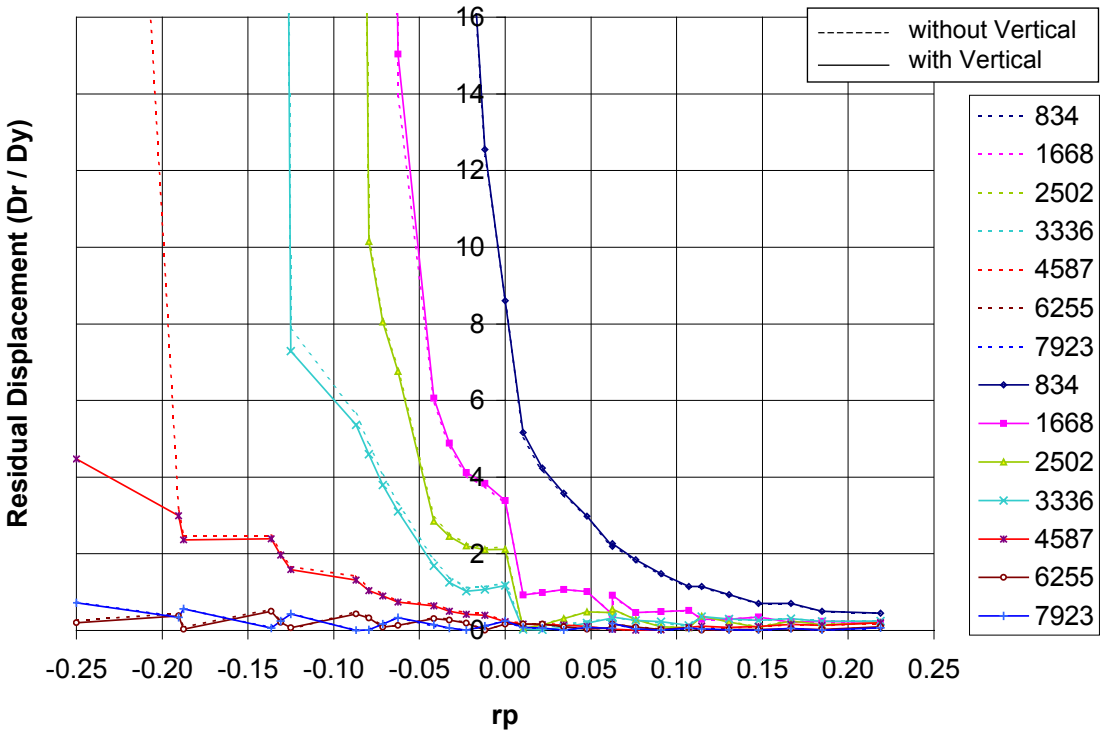


Figure C3.9.6.4a – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

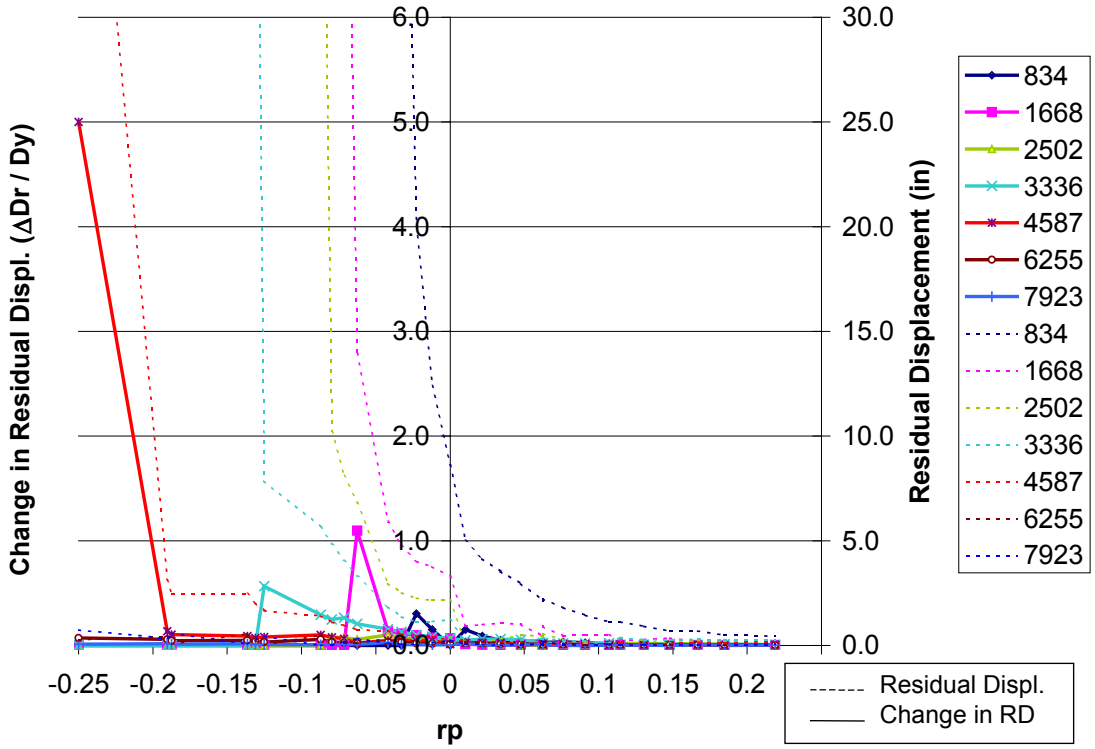


Figure C3.9.6.4b – EQ6, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

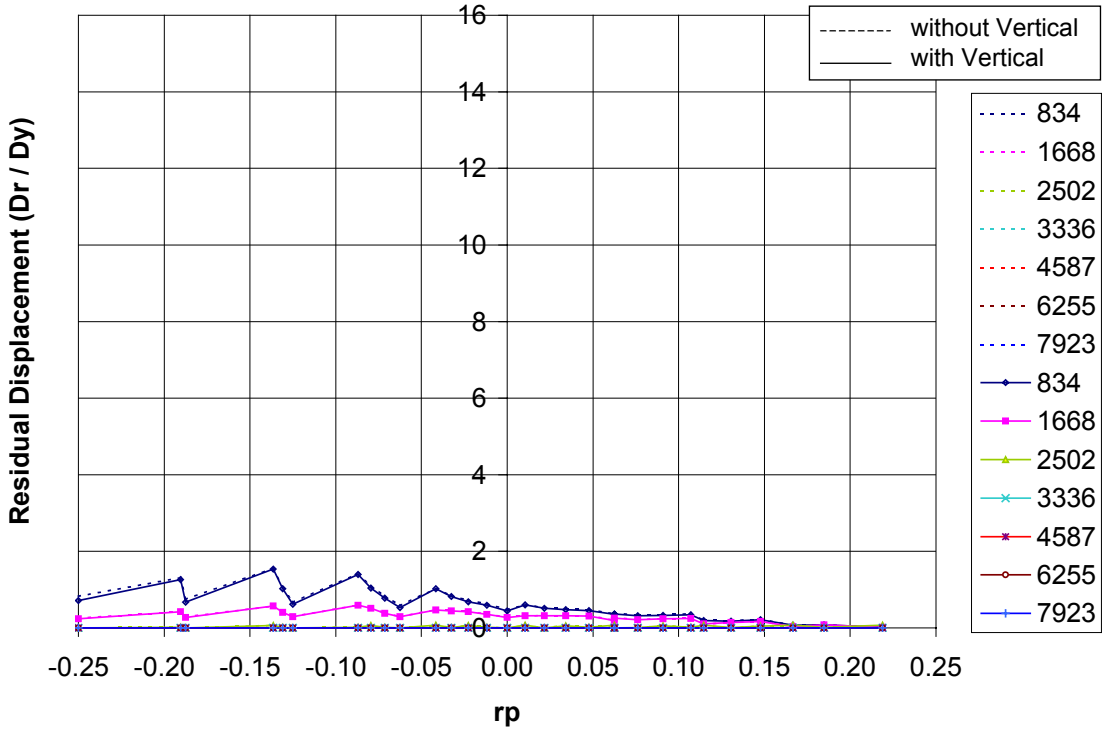


Figure C3.9.7.1a – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

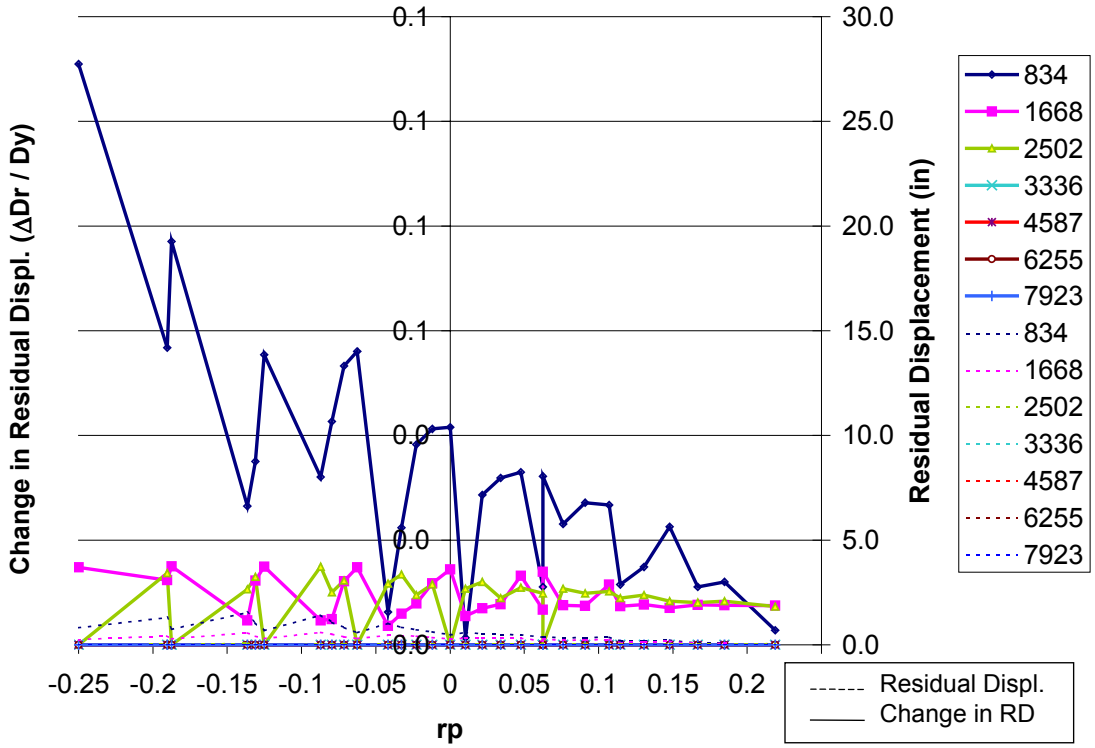


Figure C3.9.7.1b – EQ7, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

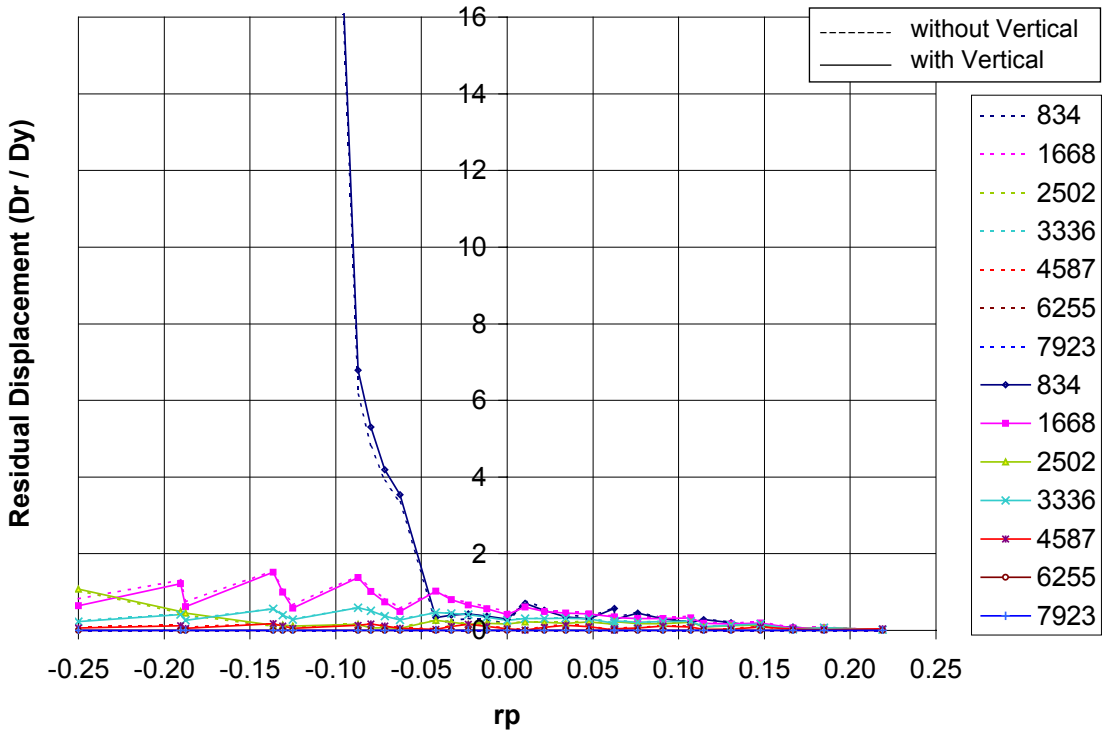


Figure C3.9.7.2a – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

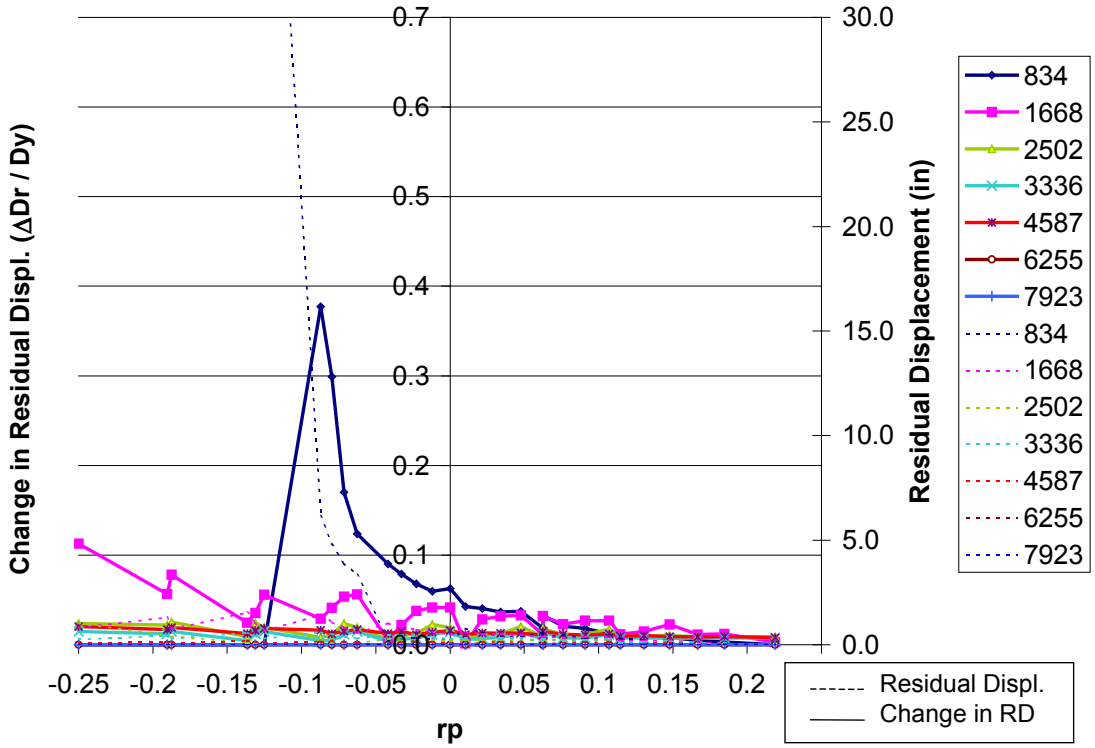


Figure C3.9.7.2b – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

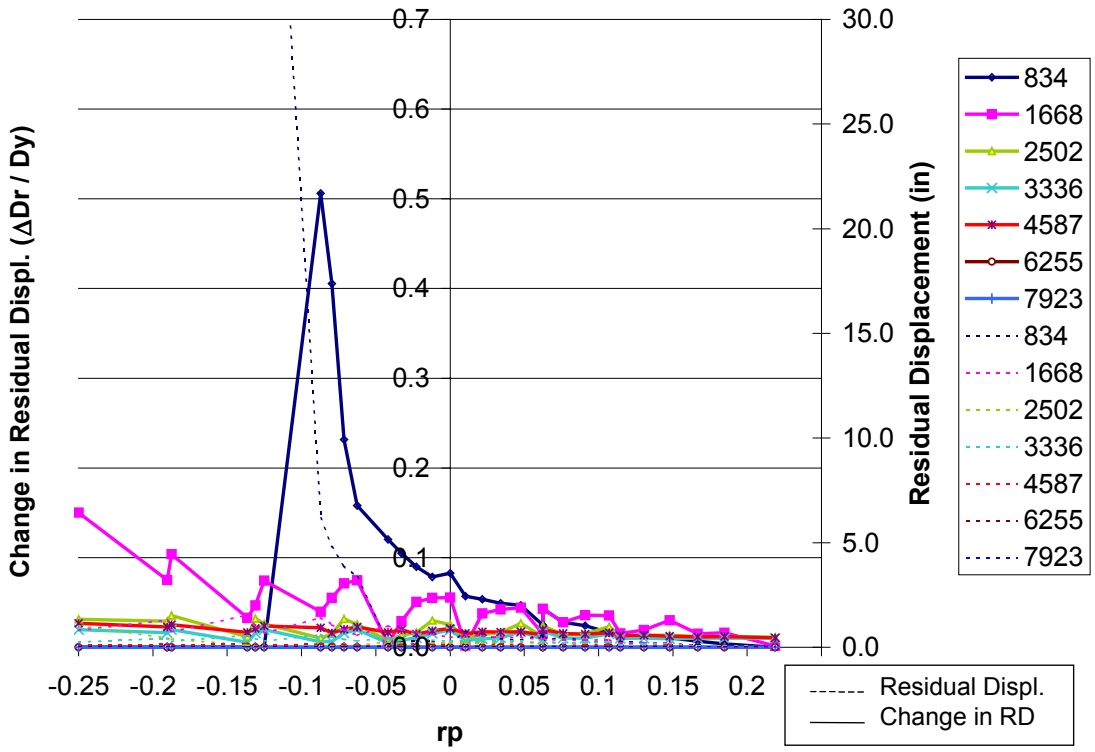


Figure C3.9.7.2c – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

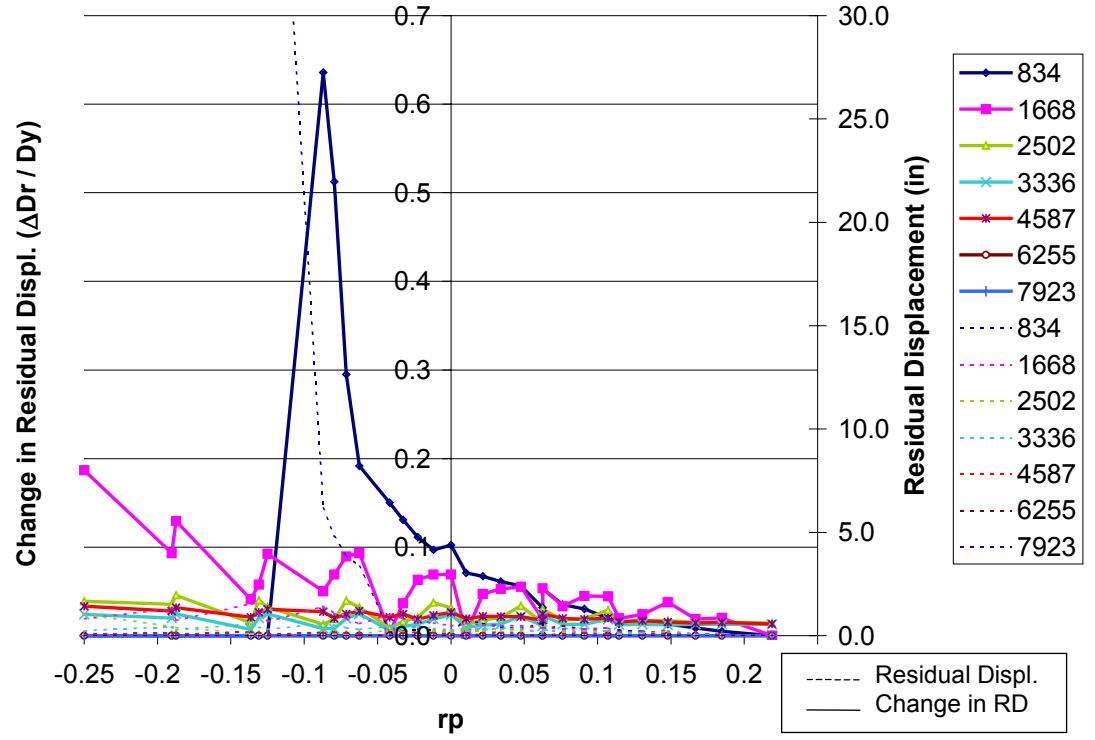


Figure C3.9.7.2d – EQ7, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

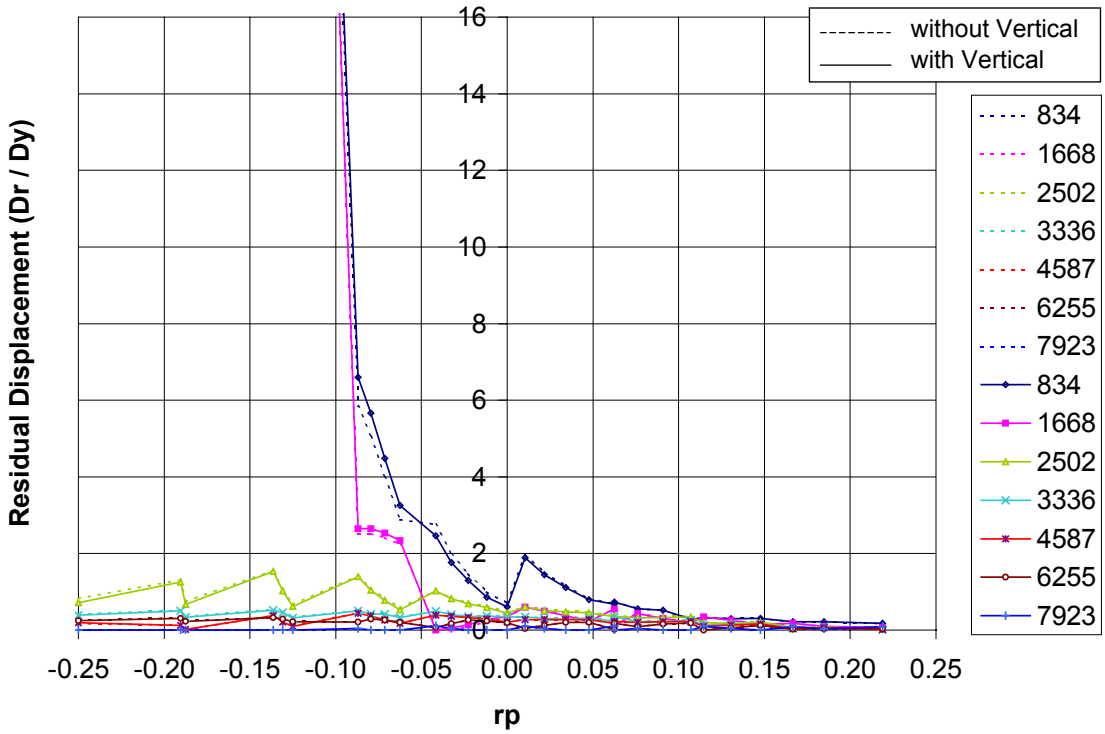


Figure C3.9.7.3a – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

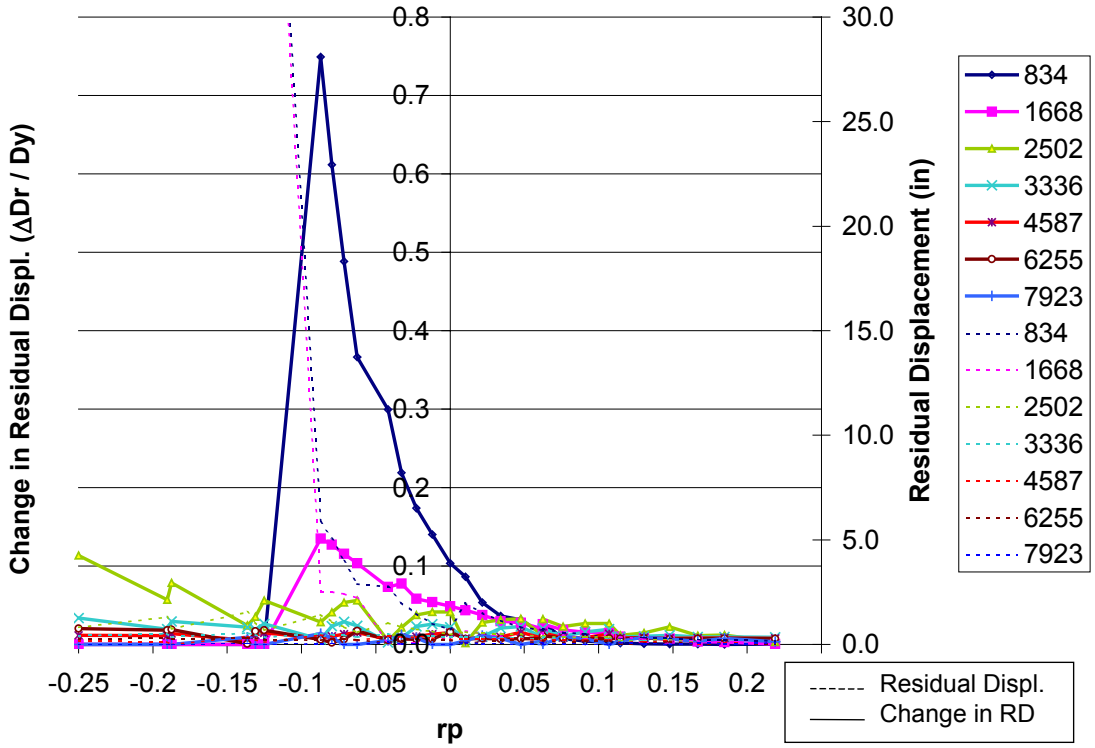


Figure C3.9.7.3b – EQ7, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

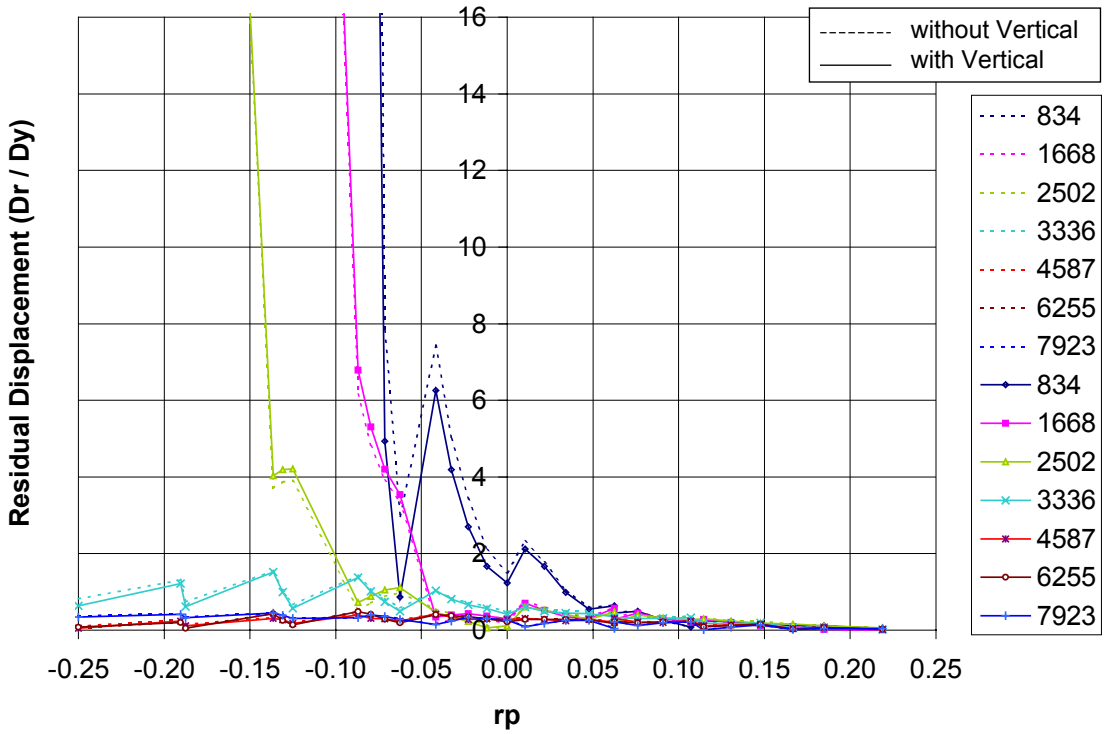


Figure C3.9.7.4a – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

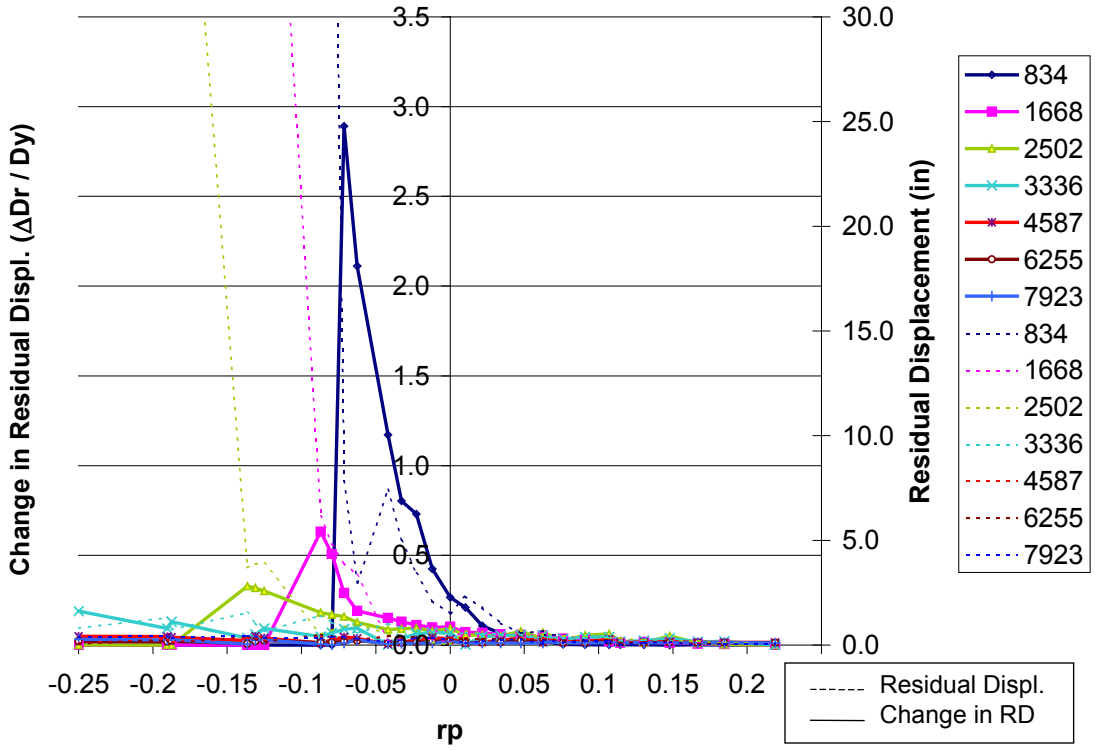


Figure C3.9.7.4b – EQ7, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

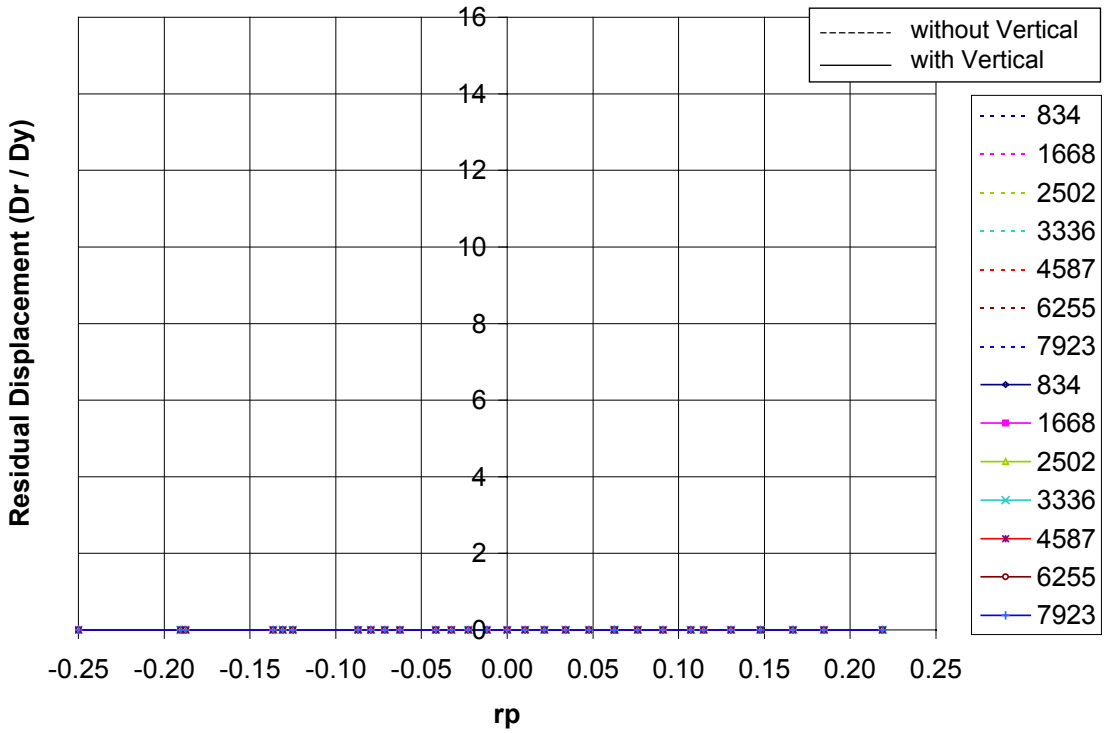


Figure C3.9.8.1a – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

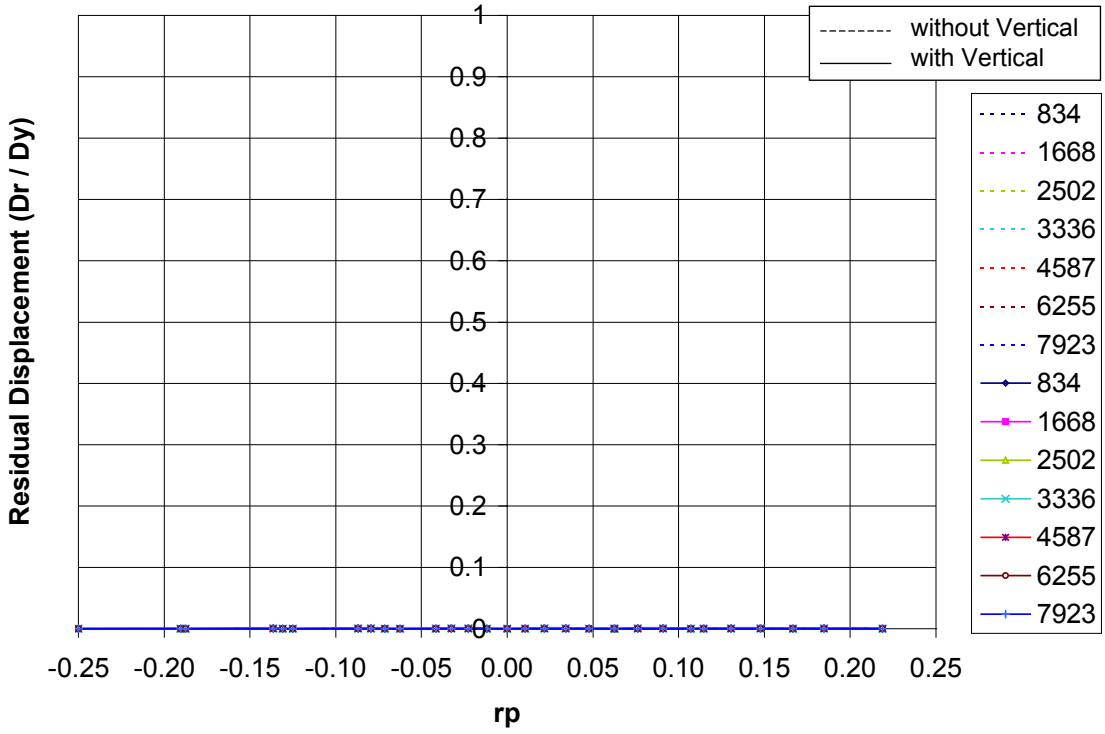


Figure C3.9.8.1b – EQ8, Lateral Scale = 0.1 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

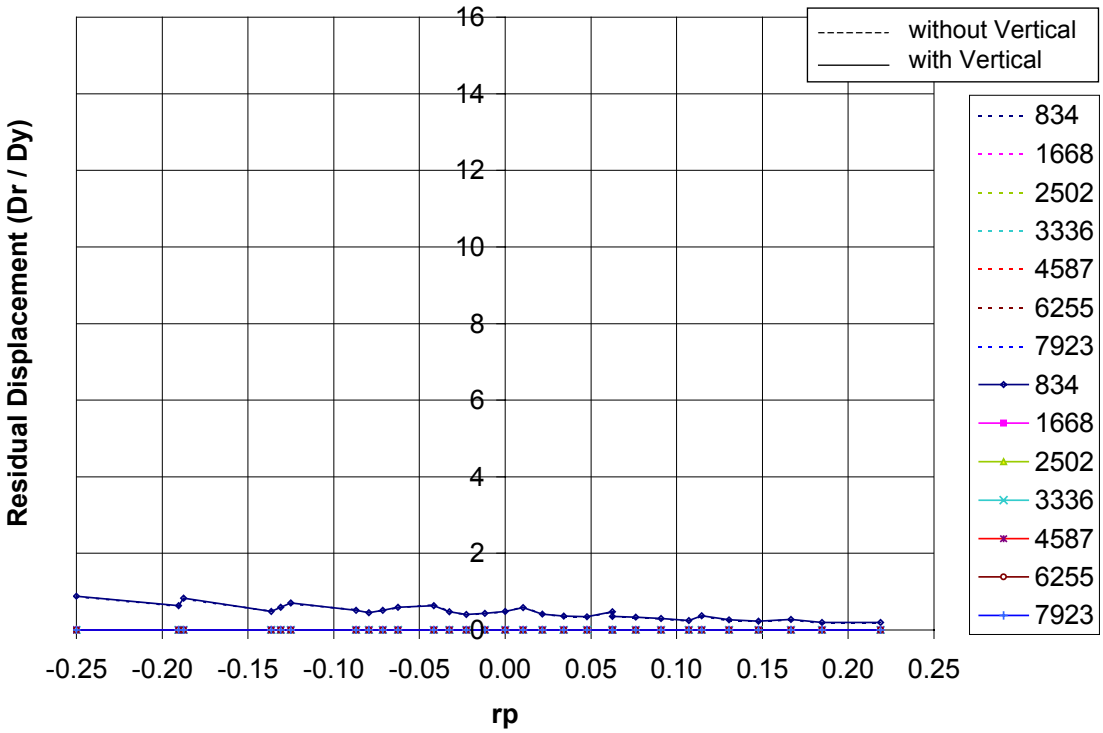


Figure C3.9.8.2a – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

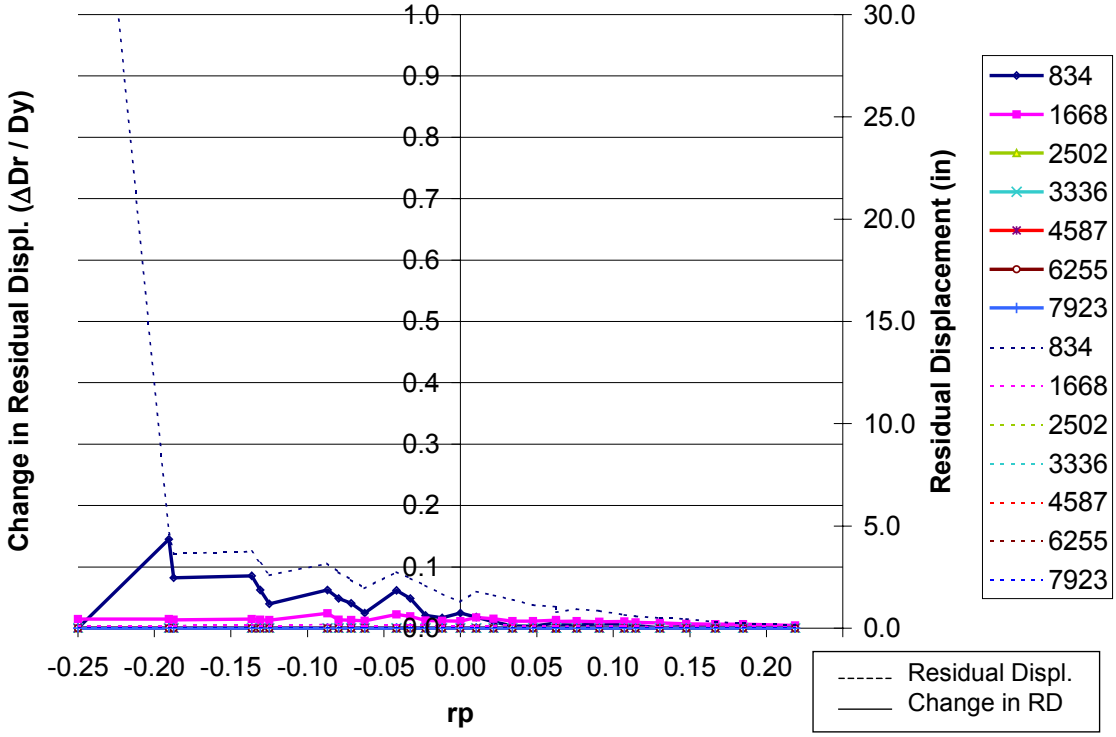


Figure C3.9.8.2b – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

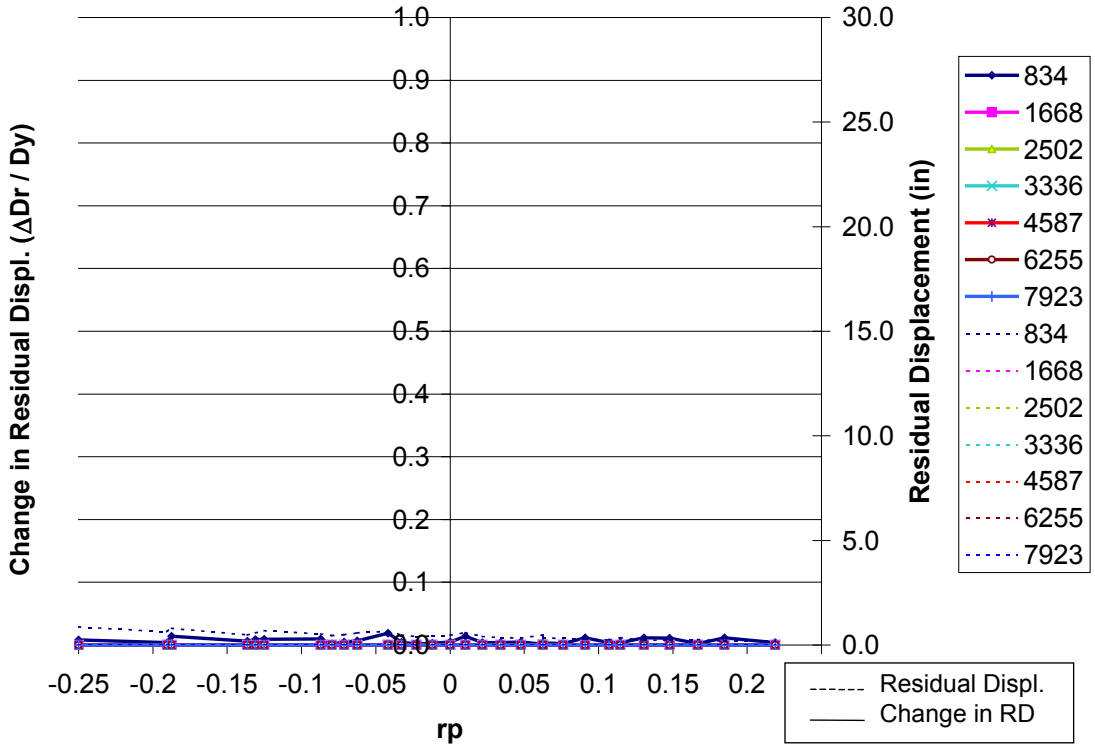


Figure C3.9.8.2c – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.0, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

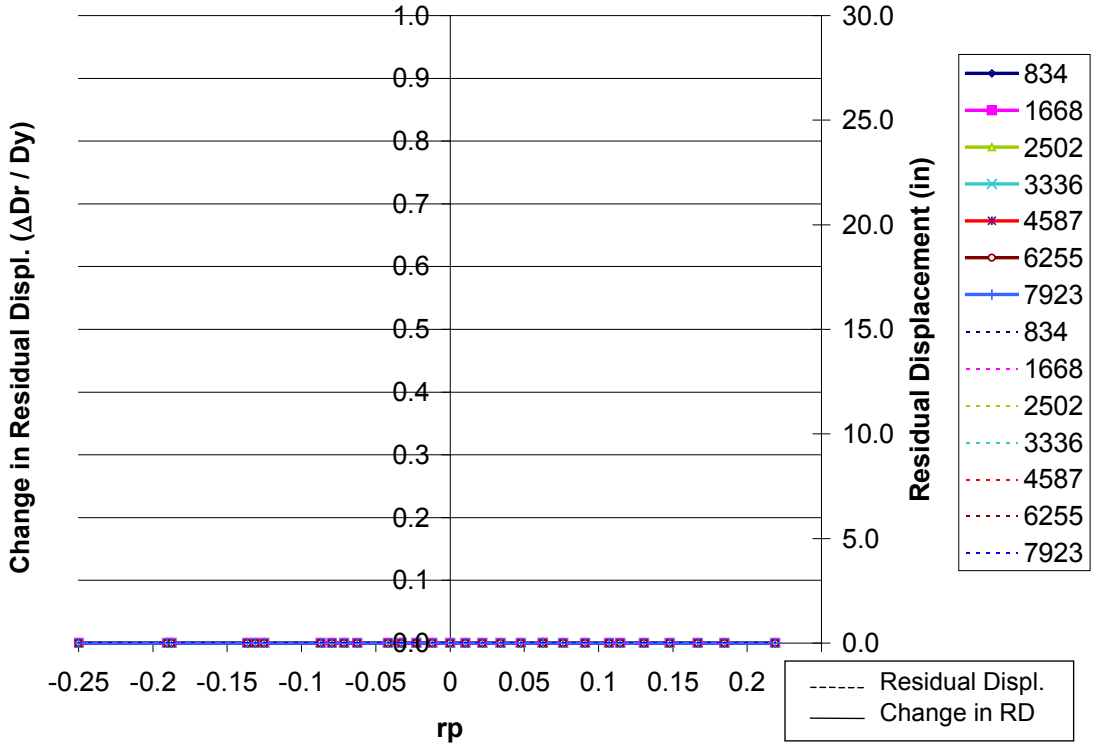


Figure C3.9.8.2d – EQ8, Lateral Scale = 0.2 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

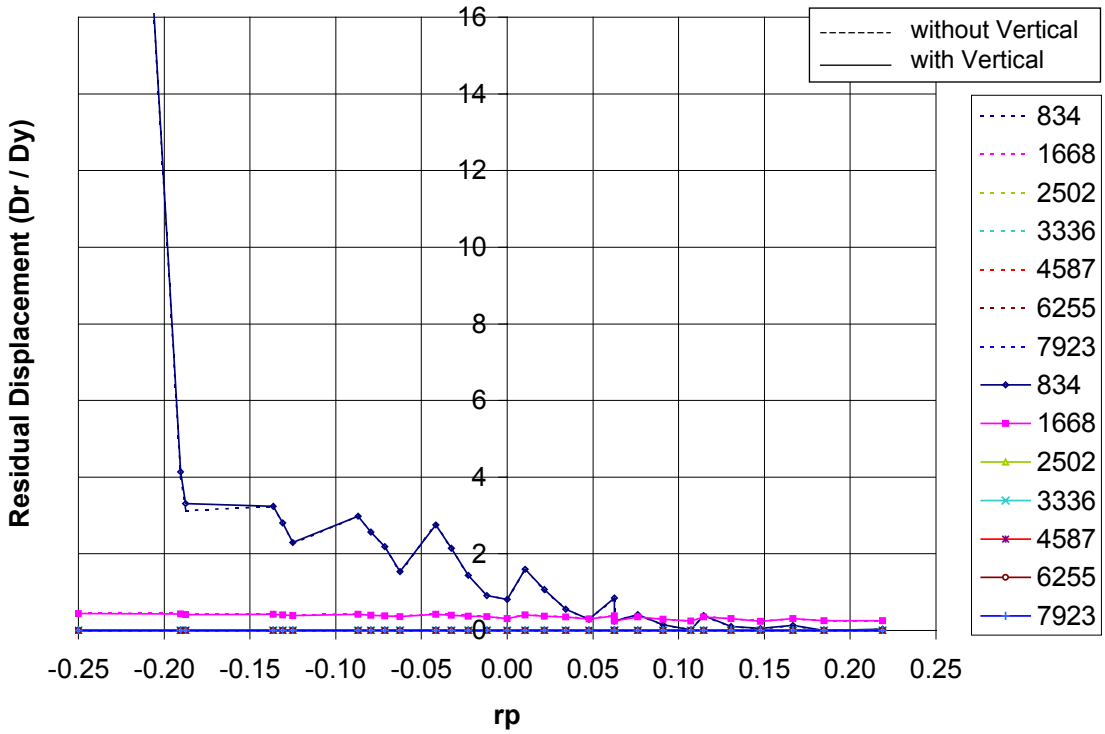


Figure C3.9.8.3a – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

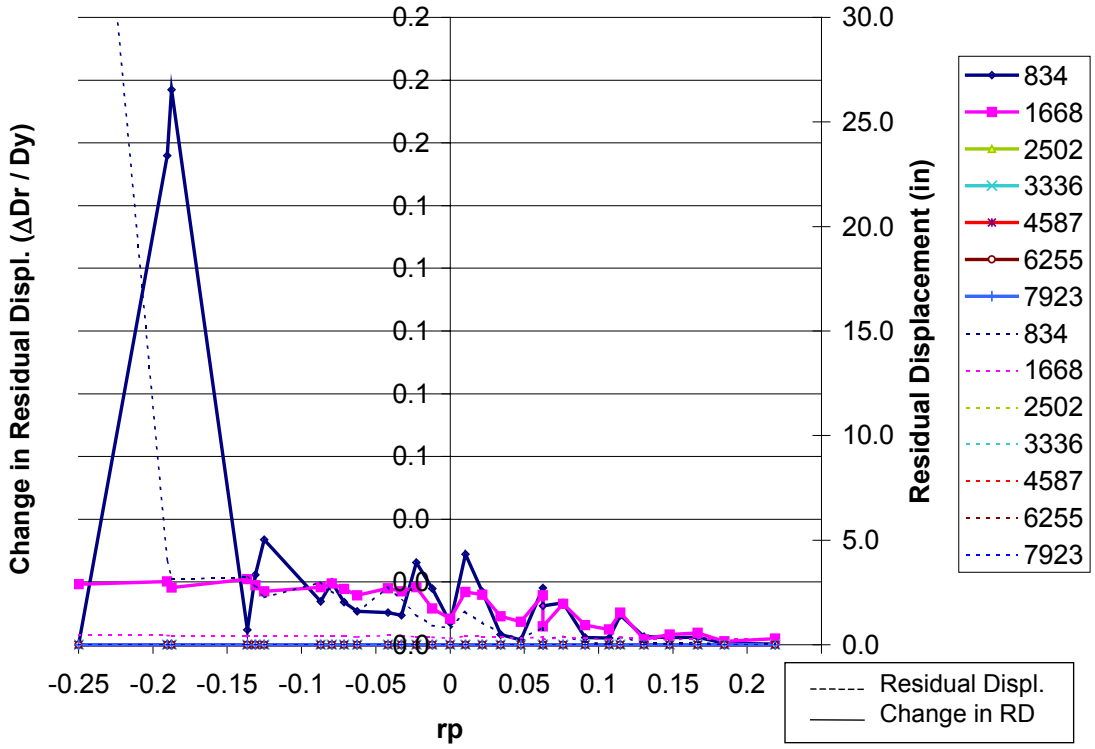


Figure C3.9.8.3b – EQ8, Lateral Scale = 0.3 g, Vertical Multiplier = 1.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.

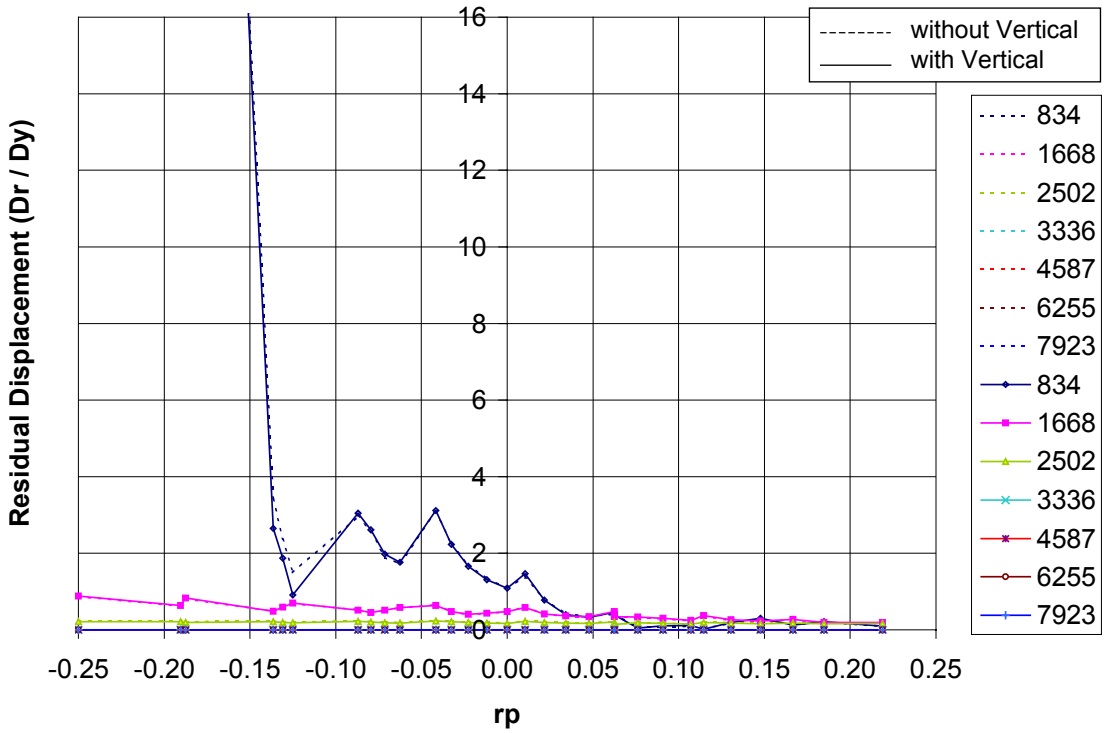


Figure C3.9.8.4a – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Ratio of Residual Displacement to Yield Displacement Verses r_p for Models with a Period of 1.808 Seconds.

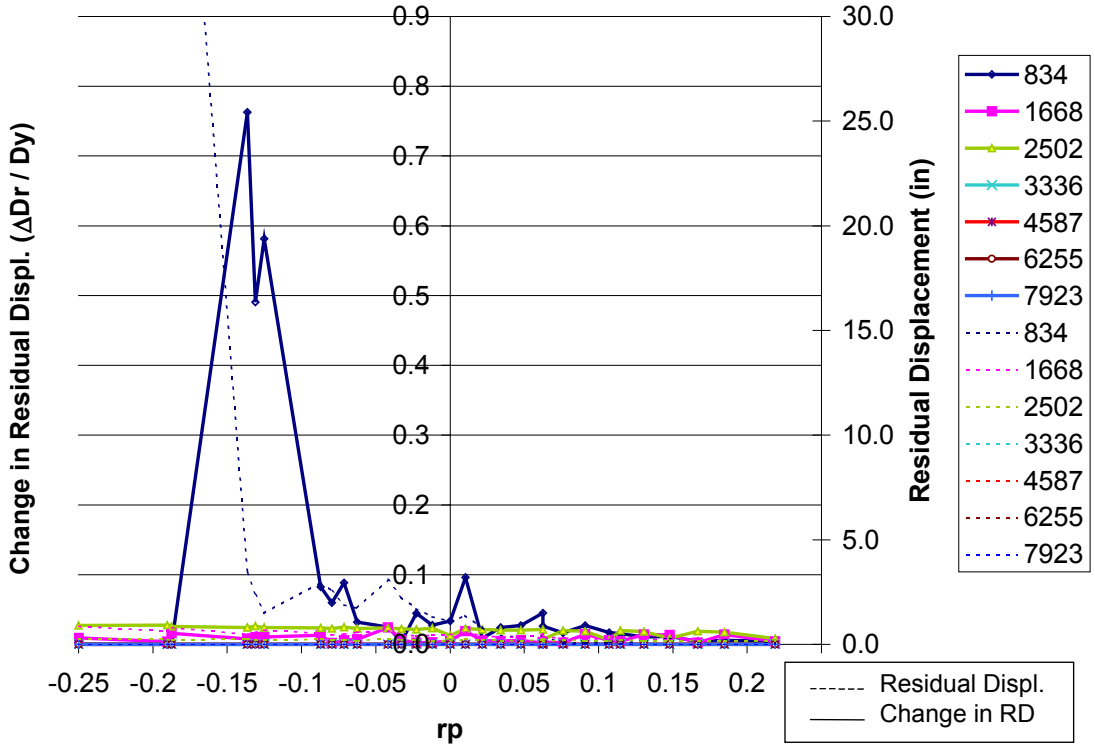


Figure C3.9.8.4b – EQ8, Lateral Scale = 0.4 g, Vertical Multiplier = 2.5, Change in Residual Displacements Due to the Inclusion of Vertical Accelerations for Models with a Period of 1.808 Seconds.