Zero\_ID: 1 Tau: 40.5 Mean absolute residual (%): 0.94 120  $pCO_2 (\mu atm)$ 110 -100 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 1 Tau: 37.2 Mean absolute residual (%): 1.11 120 pCO<sub>2</sub> (µatm) 100 -90 -200 400 600 Duration of Flush period (s)

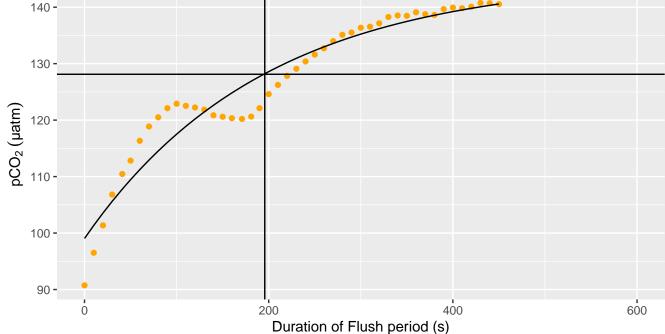
Zero\_ID: 1 Tau: 50 Mean absolute residual (%): 1.63 130 -120 pCO<sub>2</sub> (µatm) 100 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 1 Tau: 92.4 Mean absolute residual (%): 2.34 130  $pCO_2$  (µatm) 120 -110 -100 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 1 Tau: 158.8 Mean absolute residual (%): 2.19 140 -130  $pCO_2 (\mu atm)$ 120 **-**110 -100 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 1 Tau: 188.2 Mean absolute residual (%): 1.89 140 -130 pCO<sub>2</sub> (µatm) 100 -90 -400 600 200 Duration of Flush period (s)

Zero\_ID: 1 Tau: 195.7 Mean absolute residual (%): 1.67

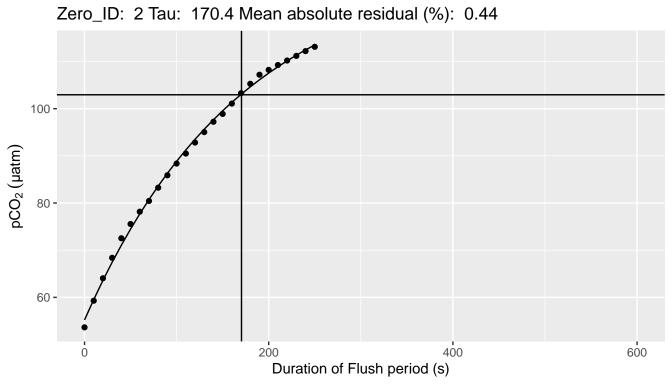


Zero\_ID: 1 Tau: 191.3 Mean absolute residual (%): 1.56 140 -130 pCO<sub>2</sub> (µatm) 120 -100 -90 -400 600 200

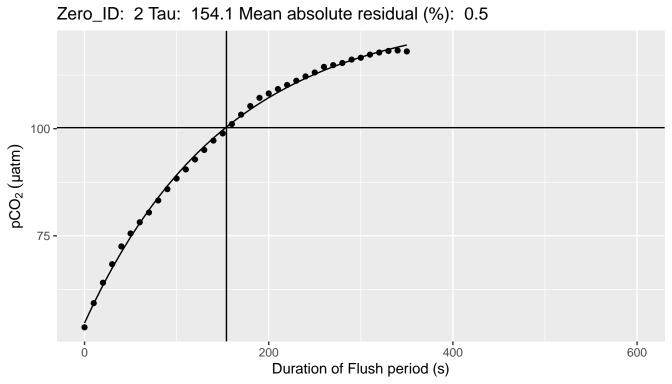
Duration of Flush period (s)

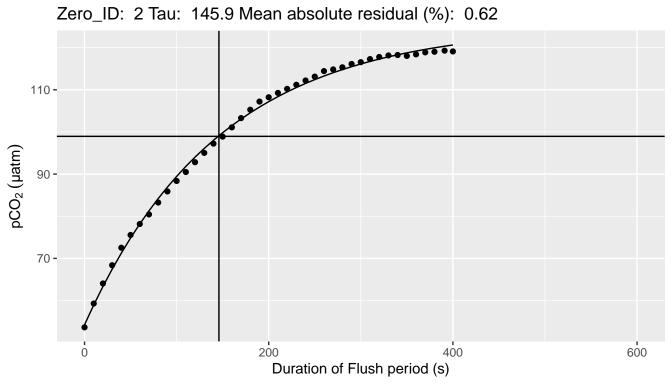
Zero\_ID: 2 Tau: 131.6 Mean absolute residual (%): 0.42 100 -90 pCO<sub>2</sub> (µatm) 70 -60 -200 400 600 Duration of Flush period (s)

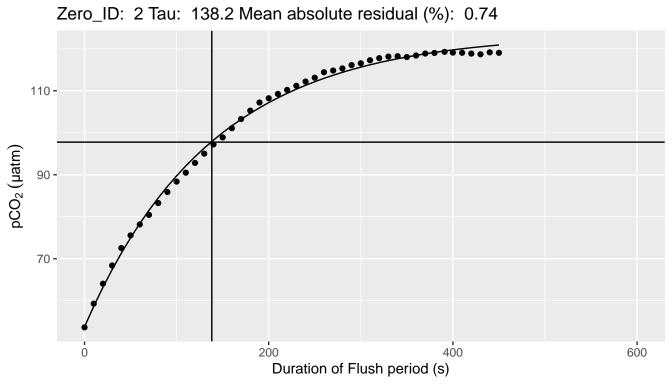
Zero\_ID: 2 Tau: 176.6 Mean absolute residual (%): 0.48 110 -100 -90  $pCO_2$  (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

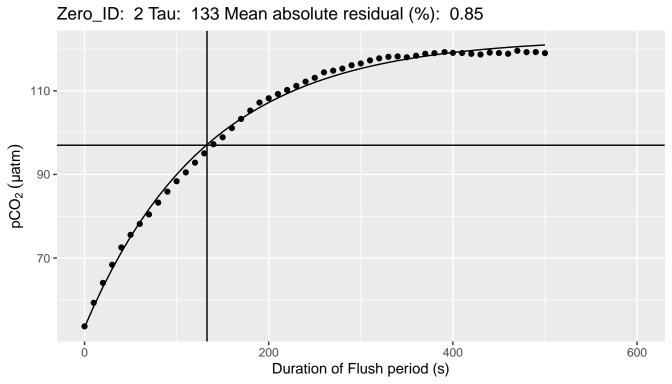


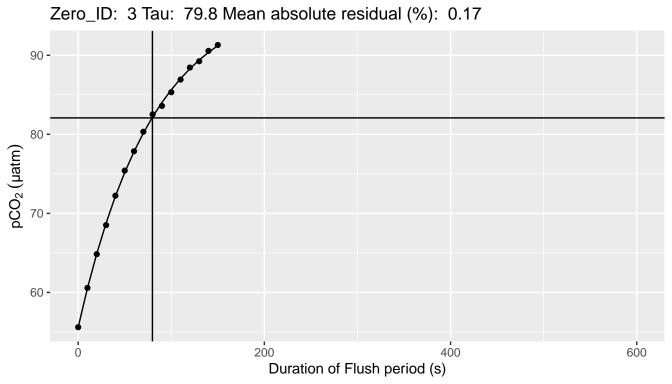
Zero\_ID: 2 Tau: 162.6 Mean absolute residual (%): 0.45 120 -100 pCO<sub>2</sub> (µatm) 60 -200 400 600 Duration of Flush period (s)

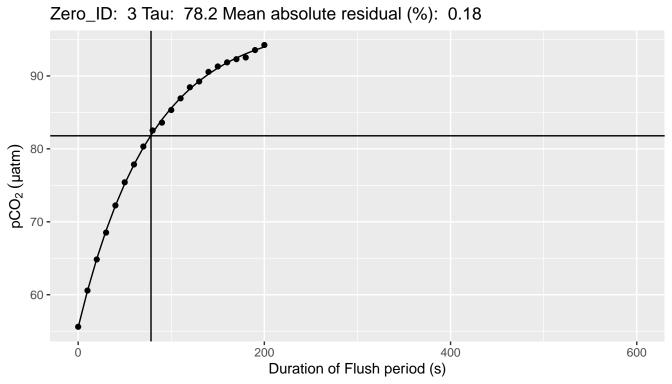


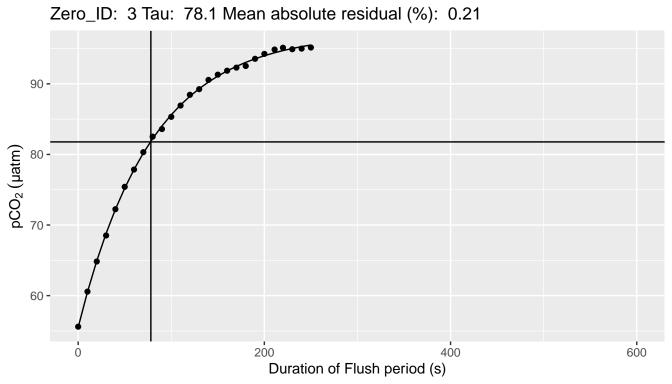


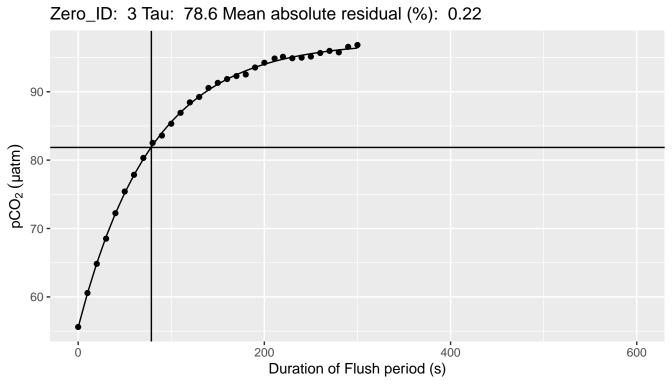


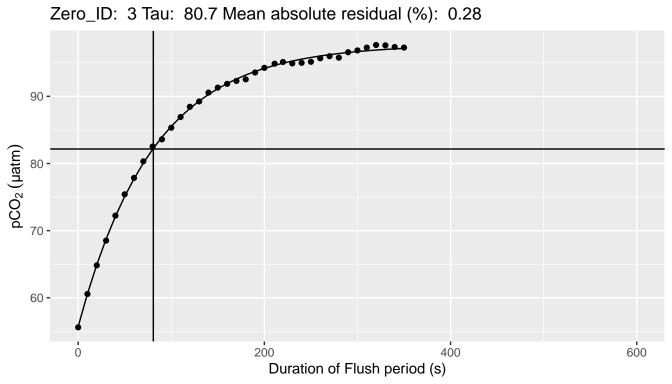








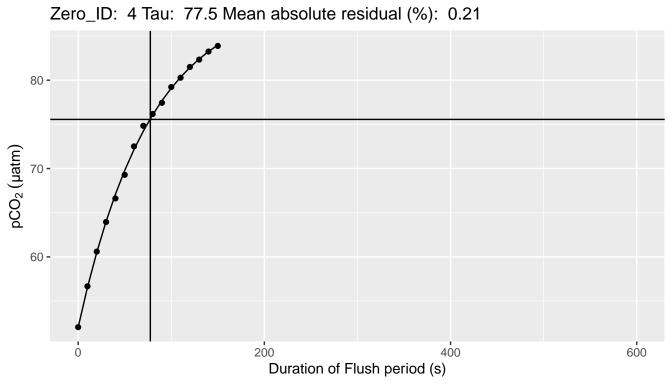


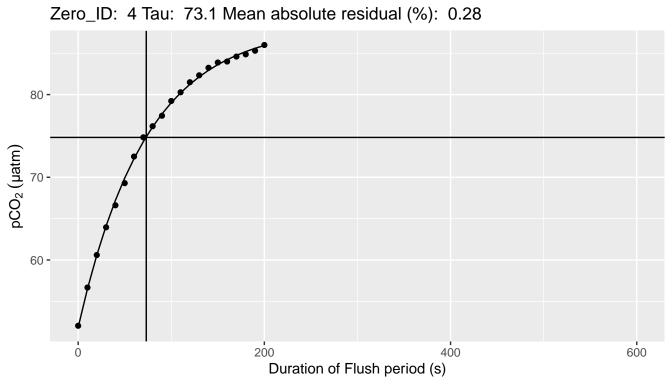


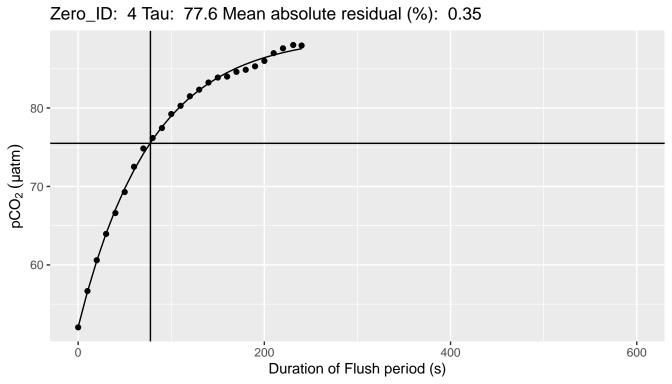
Zero\_ID: 3 Tau: 79.8 Mean absolute residual (%): 0.31 90 pCO<sub>2</sub> (µatm) 60 -200 400 600 Duration of Flush period (s)

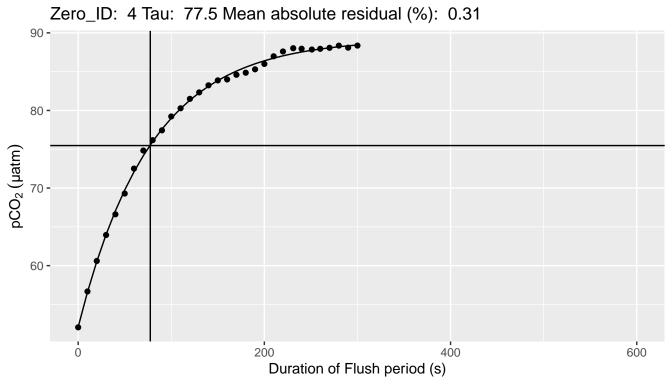
Zero\_ID: 3 Tau: 78.8 Mean absolute residual (%): 0.33 90 pCO<sub>2</sub> (µatm) 60 -200 400 600 Duration of Flush period (s)

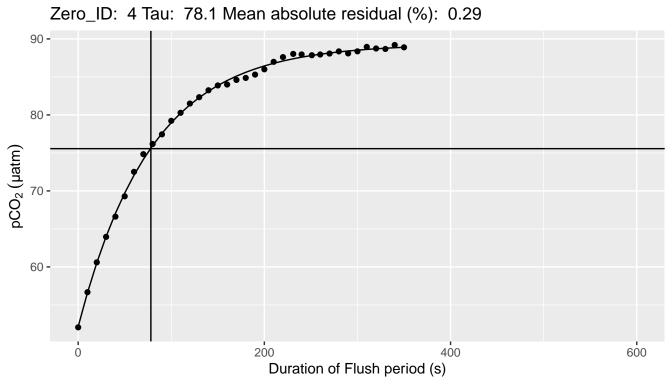
Zero\_ID: 3 Tau: 78.5 Mean absolute residual (%): 0.33 90 pCO<sub>2</sub> (µatm) 60 -200 400 600 Duration of Flush period (s)

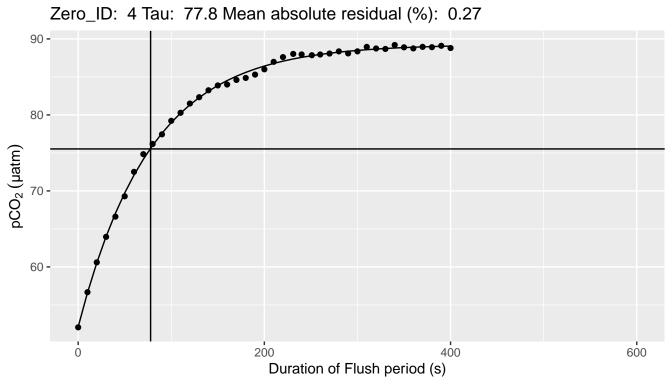


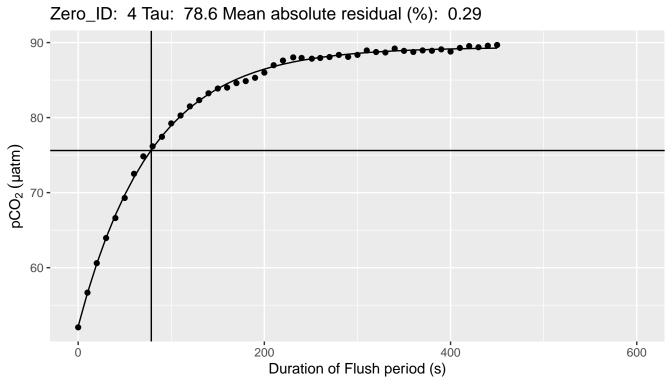


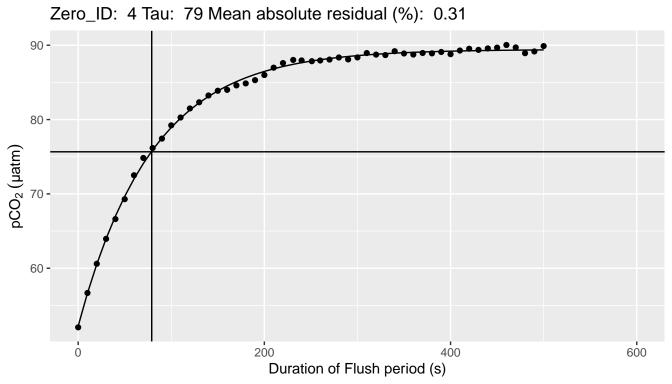


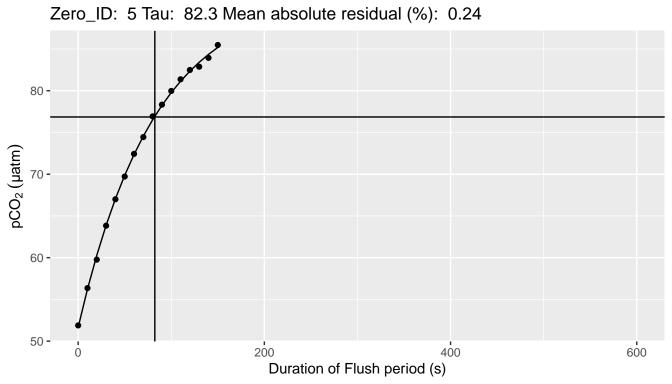


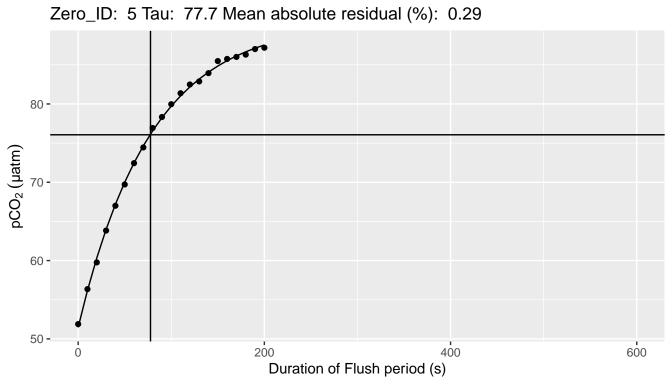


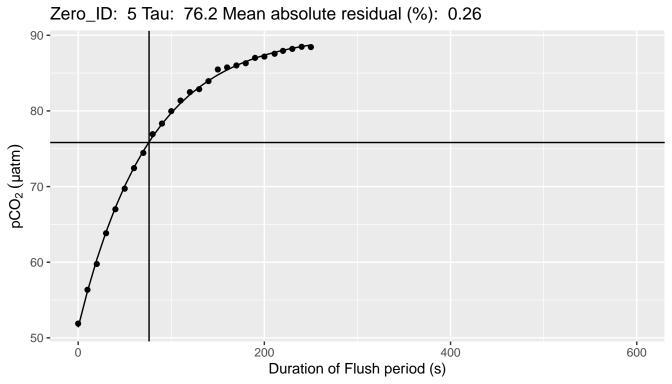


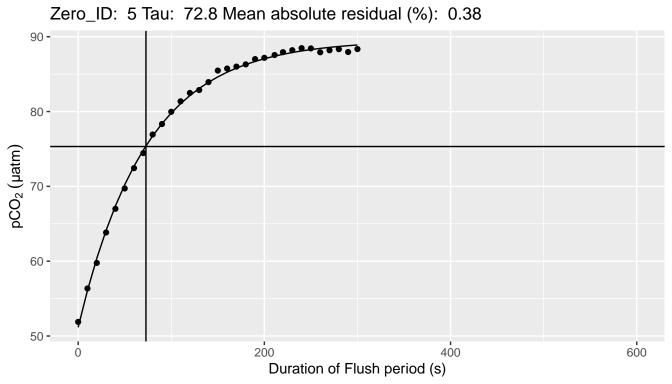


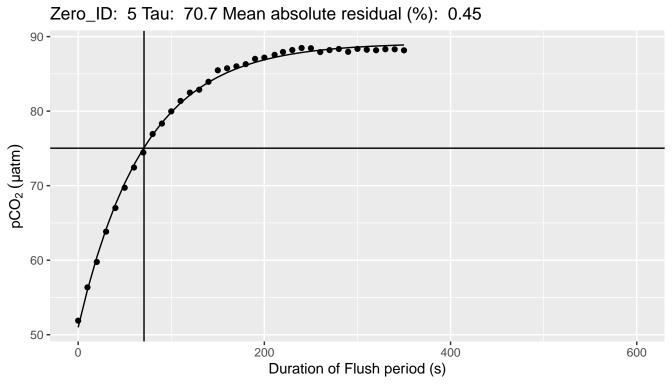


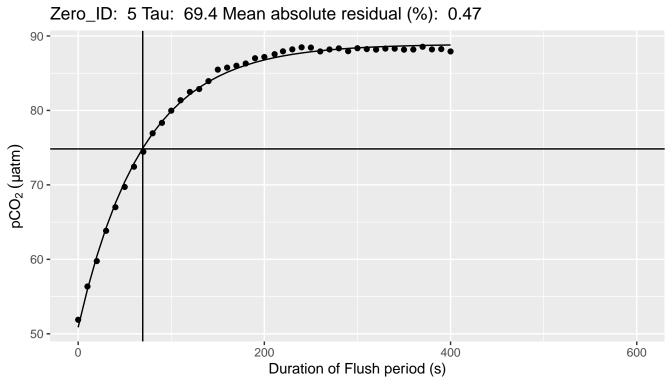


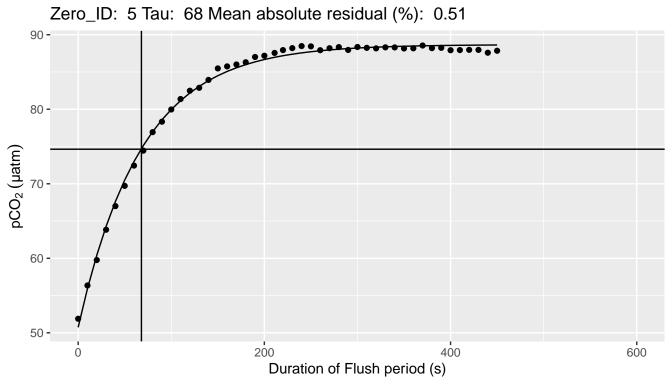


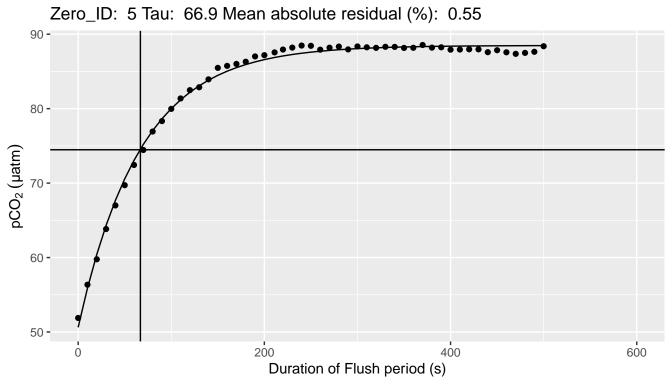


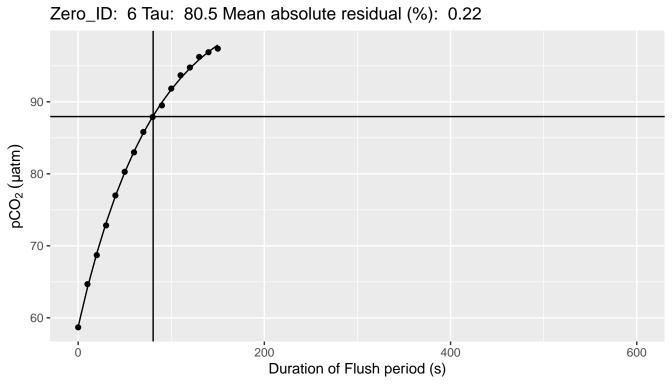








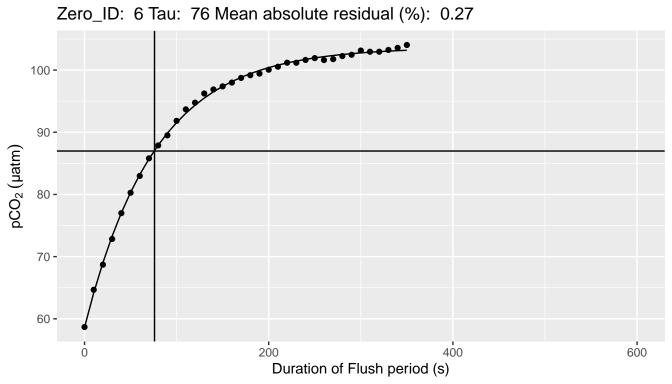




Zero\_ID: 6 Tau: 75.1 Mean absolute residual (%): 0.28 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

Zero\_ID: 6 Tau: 74.9 Mean absolute residual (%): 0.24 100 -90 pCO<sub>2</sub> (µatm) 70 -60 -200 400 600 Duration of Flush period (s)

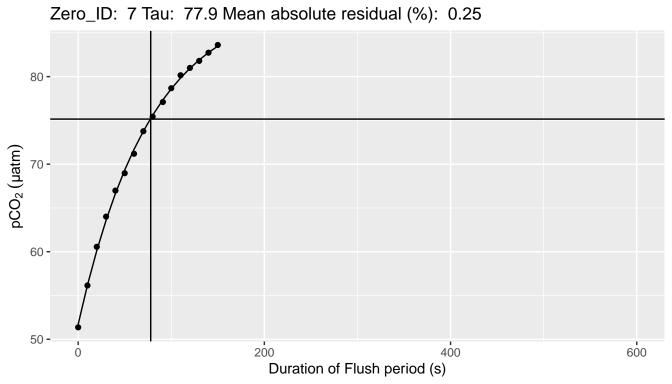
Zero\_ID: 6 Tau: 74.8 Mean absolute residual (%): 0.25 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

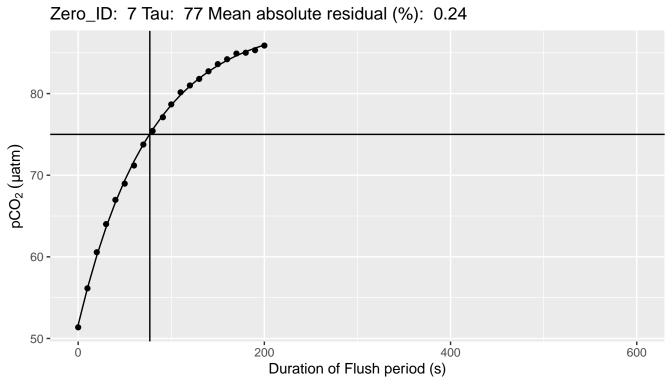


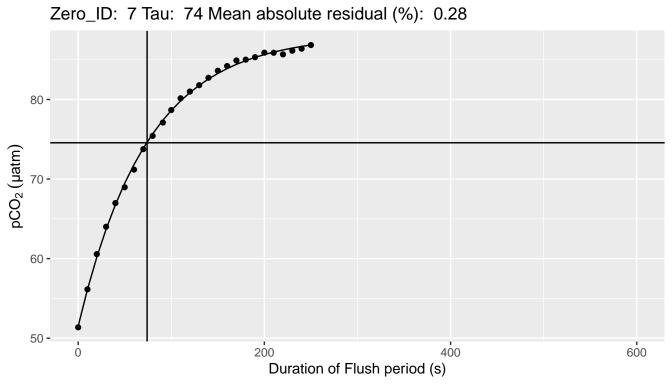
Zero\_ID: 6 Tau: 81.4 Mean absolute residual (%): 0.62 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

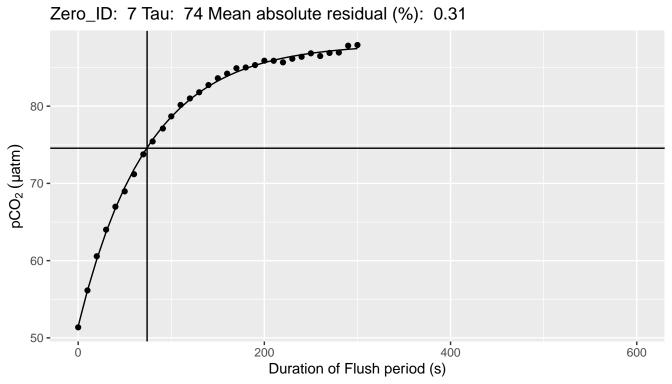
Zero\_ID: 6 Tau: 87.7 Mean absolute residual (%): 0.94 110 -100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

Zero\_ID: 6 Tau: 91.7 Mean absolute residual (%): 1.04 110 -100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

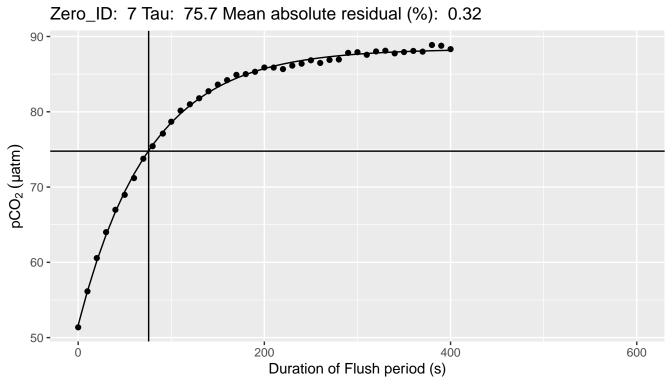


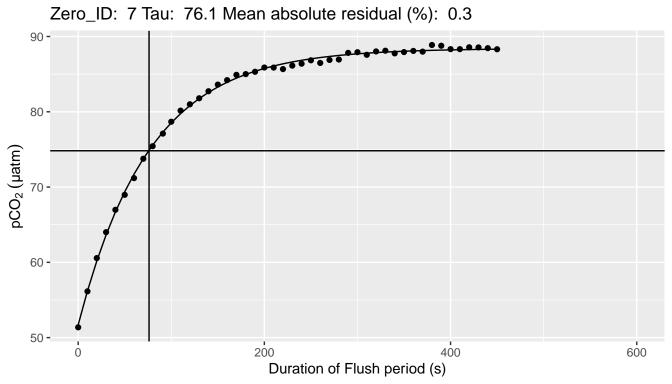


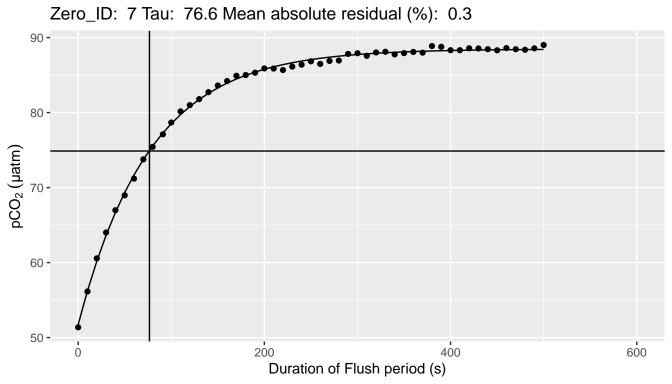


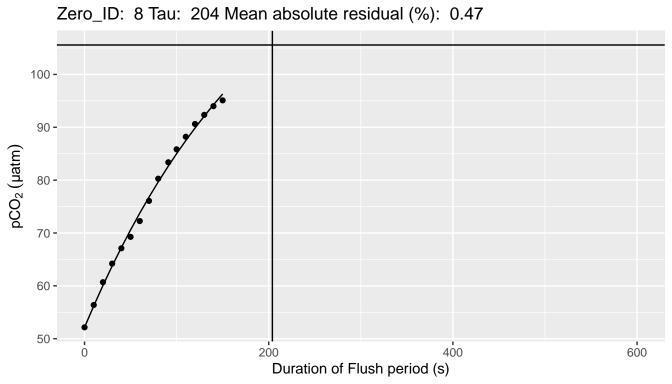


Zero\_ID: 7 Tau: 74.7 Mean absolute residual (%): 0.3 80 pCO<sub>2</sub> (µatm) 60 -50 -200 600 400 Duration of Flush period (s)









Zero\_ID: 8 Tau: 134.4 Mean absolute residual (%): 0.75 100 -90  $pCO_2$  (µatm) 80 -70 -60 -50 -200 400 600 Duration of Flush period (s)

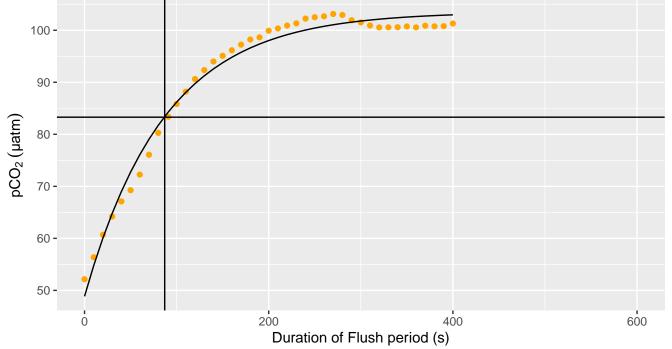
Zero\_ID: 8 Tau: 116.5 Mean absolute residual (%): 0.81 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -50 -200 400 600 Duration of Flush period (s)

Zero\_ID: 8 Tau: 104.2 Mean absolute residual (%): 0.94 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -50 -200 400 600 Duration of Flush period (s)

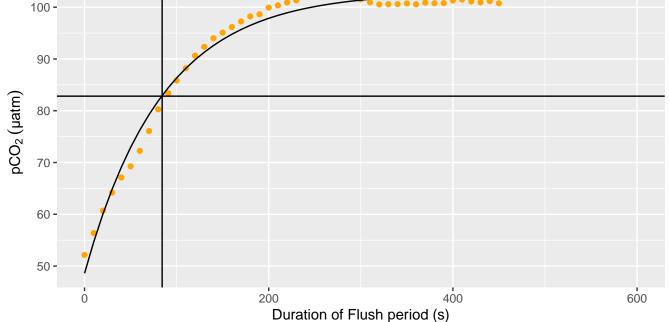
Zero\_ID: 8 Tau: 92.4 Mean absolute residual (%): 1.44 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -50 -200 400 600

Duration of Flush period (s)

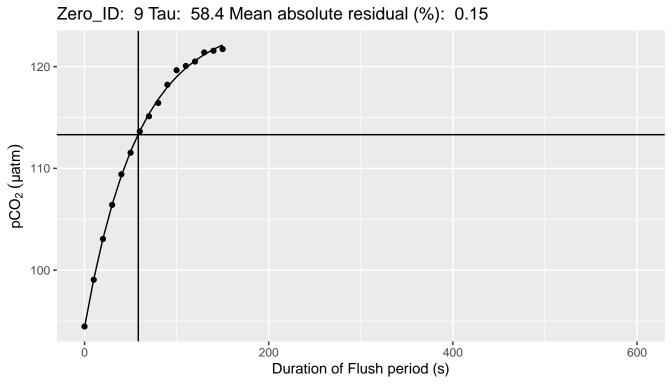
Zero\_ID: 8 Tau: 87.1 Mean absolute residual (%): 1.58

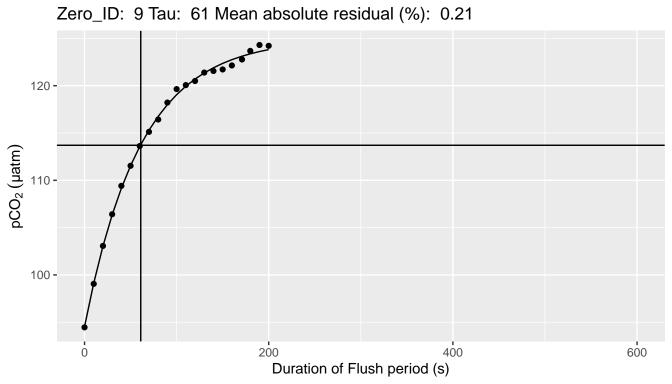


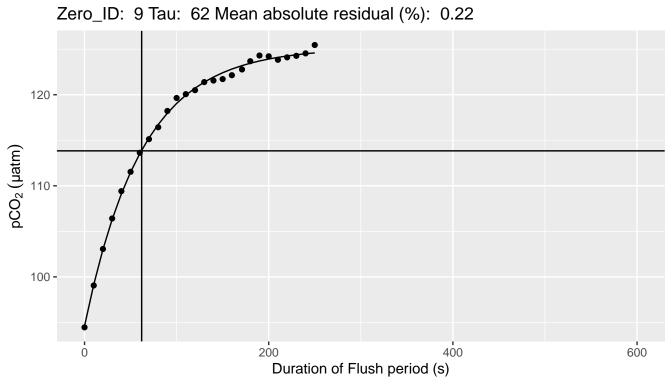
Zero\_ID: 8 Tau: 84.3 Mean absolute residual (%): 1.56



Zero\_ID: 8 Tau: 83.2 Mean absolute residual (%): 1.49 100 pCO<sub>2</sub> (µatm) 80 -60 -200 400 600 Duration of Flush period (s)







Zero\_ID: 9 Tau: 75.1 Mean absolute residual (%): 0.69 130 -120  $pCO_2 (\mu atm)$ 100 -200 400 600 Duration of Flush period (s)

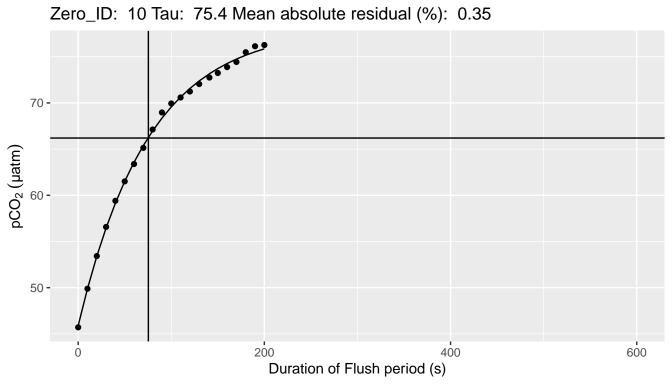
Zero\_ID: 9 Tau: 100.3 Mean absolute residual (%): 1.09 130 -120 pCO<sub>2</sub> (µatm) 100 -200 400 600 Duration of Flush period (s)

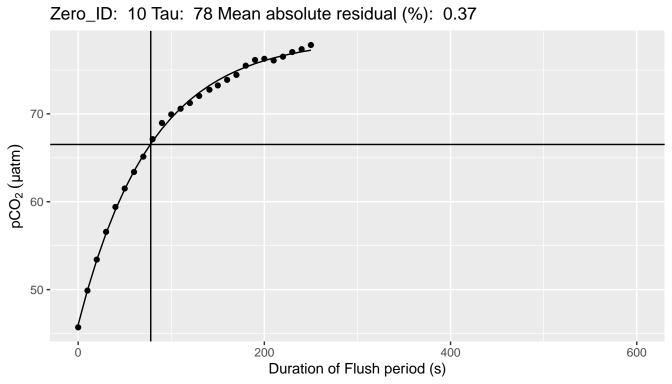
Zero\_ID: 9 Tau: 115.1 Mean absolute residual (%): 1.12 130 -120  $pCO_2$  (µatm) 100 -200 400 600 Duration of Flush period (s)

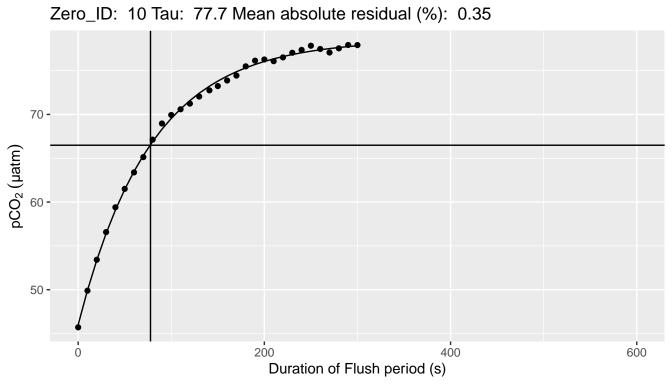
Zero\_ID: 9 Tau: 122.4 Mean absolute residual (%): 1.07 130 -120 pCO<sub>2</sub> (µatm) 100 -200 400 600 Duration of Flush period (s)

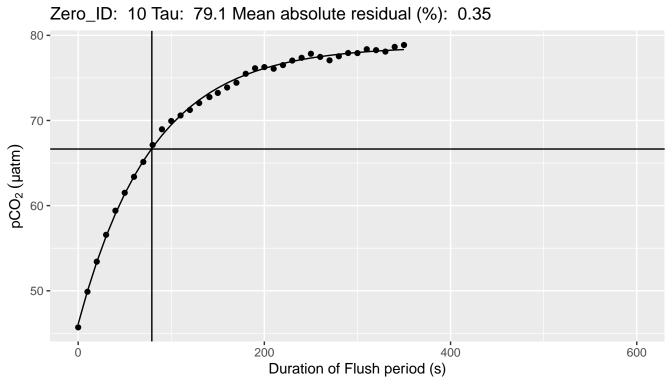
Zero\_ID: 9 Tau: 115.3 Mean absolute residual (%): 1.12 130 -120  $pCO_2$  (µatm) 100 -200 400 600 Duration of Flush period (s)

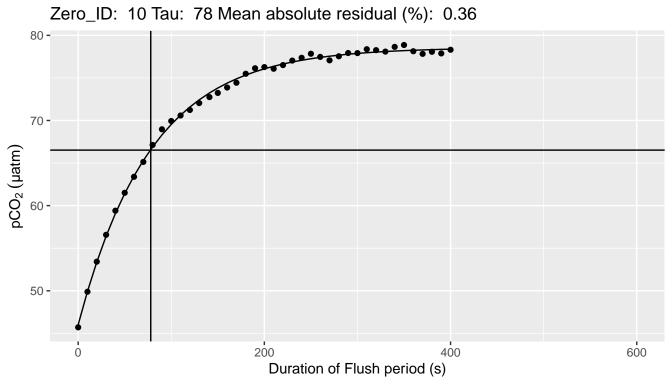
Zero\_ID: 10 Tau: 70.2 Mean absolute residual (%): 0.23 70 -65  $pCO_2$  (µatm) 55 -50 -45 -200 600 400 Duration of Flush period (s)

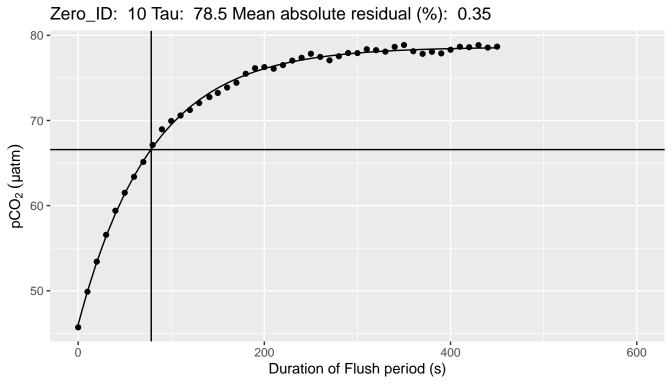


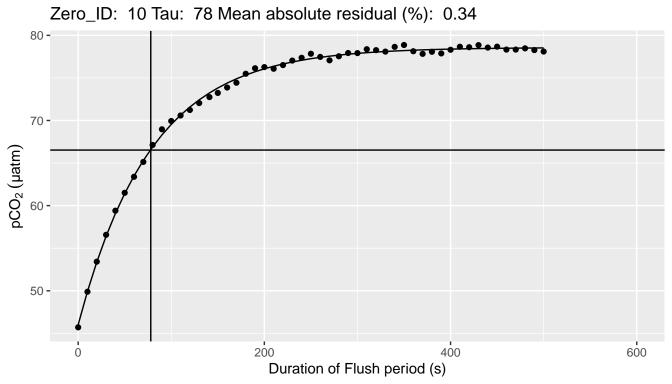


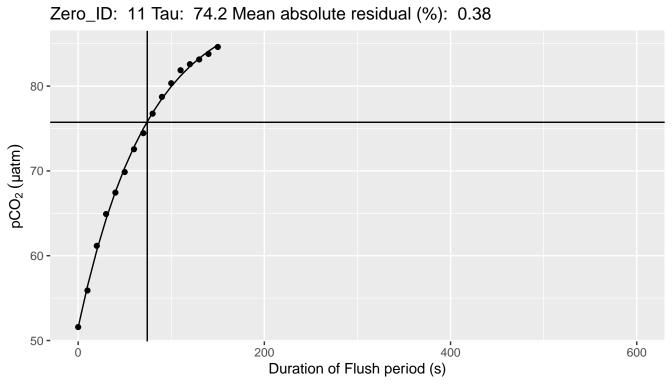


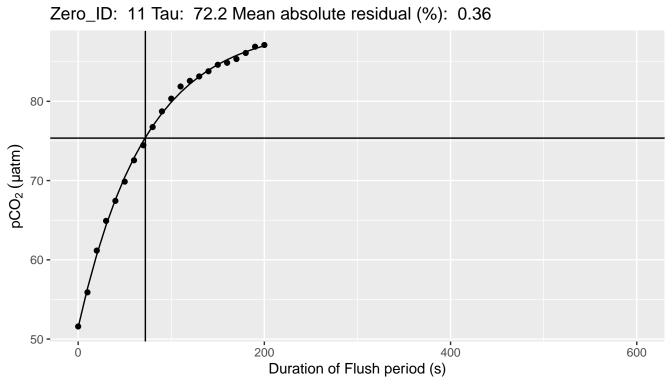


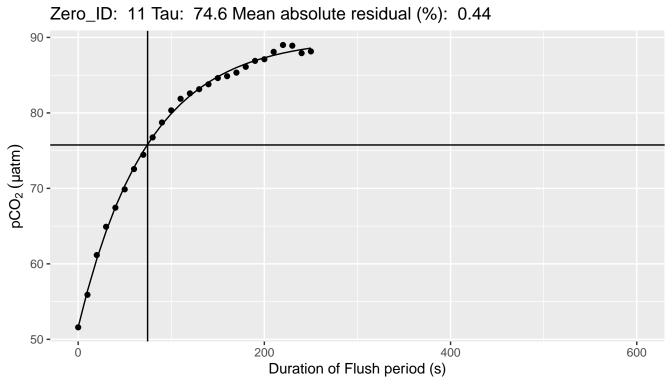


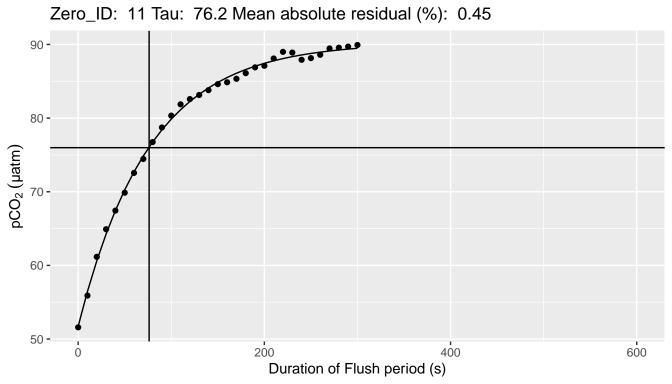


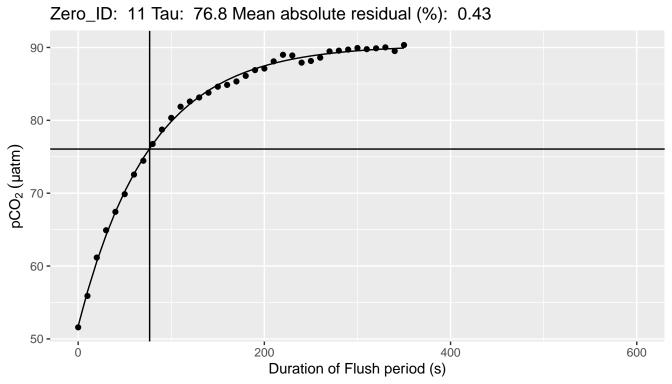








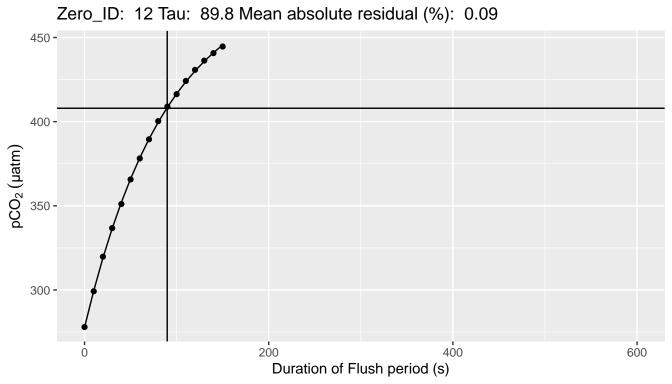


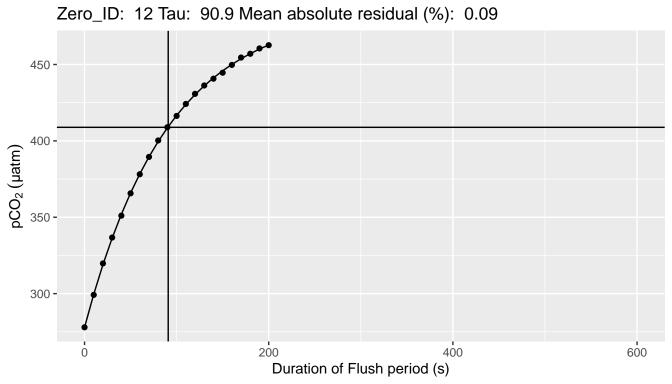


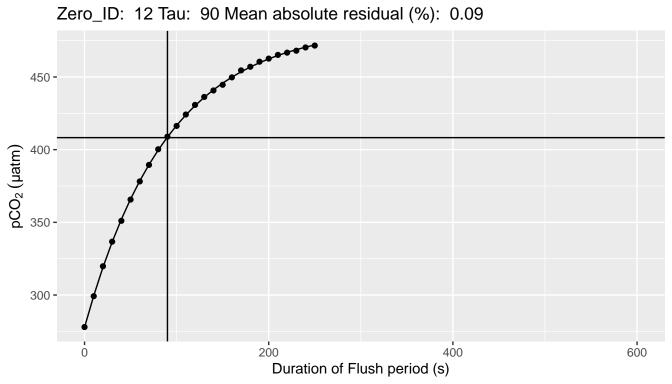
Zero\_ID: 11 Tau: 77.4 Mean absolute residual (%): 0.48 90 -80 pCO<sub>2</sub> (µatm) 60 -50 -200 400 600 Duration of Flush period (s)

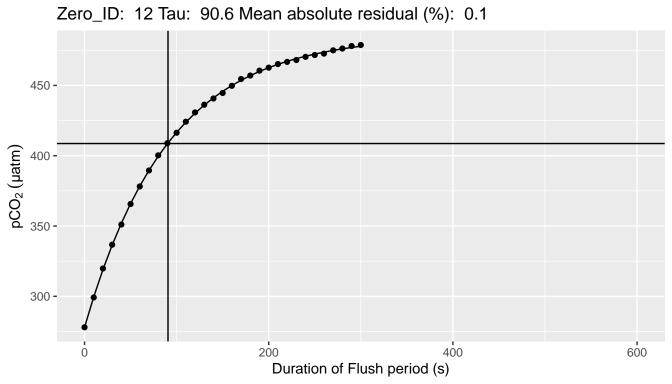
Zero\_ID: 11 Tau: 74.8 Mean absolute residual (%): 0.59 90 -80 pCO<sub>2</sub> (µatm) 60 -50 -200 400 600 Duration of Flush period (s)

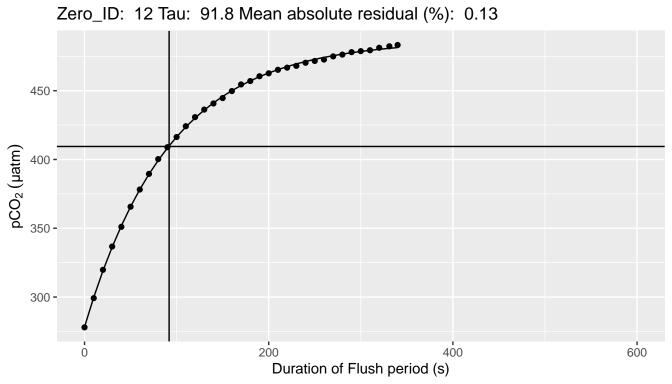
Zero\_ID: 11 Tau: 74.2 Mean absolute residual (%): 0.62 90 -80 pCO<sub>2</sub> (µatm) 60 -50 -200 600 400 Duration of Flush period (s)

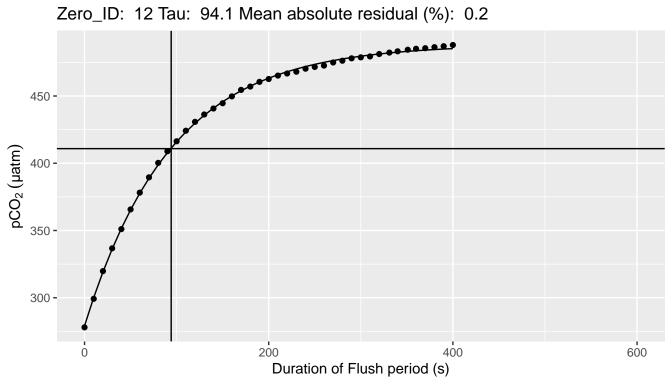










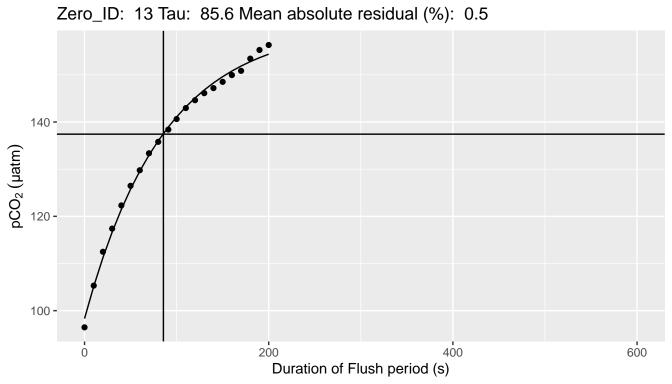


Zero\_ID: 12 Tau: 97.1 Mean absolute residual (%): 0.31 500 -450 pCO<sub>2</sub> (µatm) 350 -300 -200 400 600 Duration of Flush period (s)

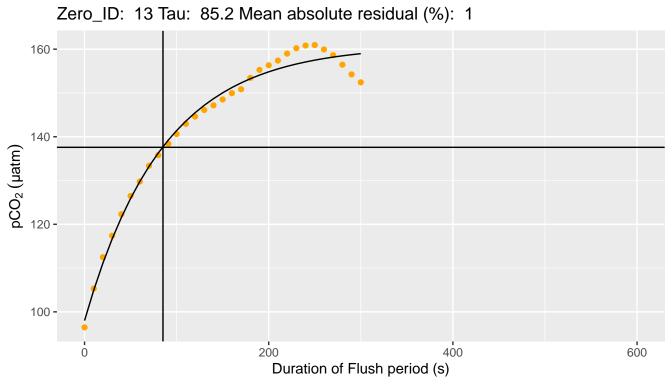
Zero\_ID: 12 Tau: 98.6 Mean absolute residual (%): 0.35 500 -450 pCO<sub>2</sub> (µatm) 350 -300 -

200 400 600 Duration of Flush period (s)

Zero\_ID: 13 Tau: 72.2 Mean absolute residual (%): 0.23 150 **-**140 pCO<sub>2</sub> (matm) 120 -130 -110 -100 -200 400 600 Duration of Flush period (s)



Zero\_ID: 13 Tau: 101.9 Mean absolute residual (%): 0.62 160 -140 pCO<sub>2</sub> (µatm) 100 -200 400 600 Duration of Flush period (s)



Zero\_ID: 13 Tau: 64.1 Mean absolute residual (%): 2.2 160 -140  $pCO_2$  (µatm) 120 -100 -200 400 600 Duration of Flush period (s)

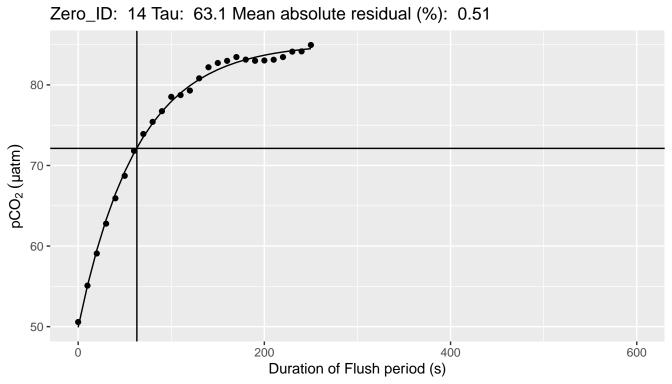
Zero\_ID: 13 nls model failed 160 -140 pCO<sub>2</sub> (µatm) 100 -200 400 600 Duration of Flush period (s)

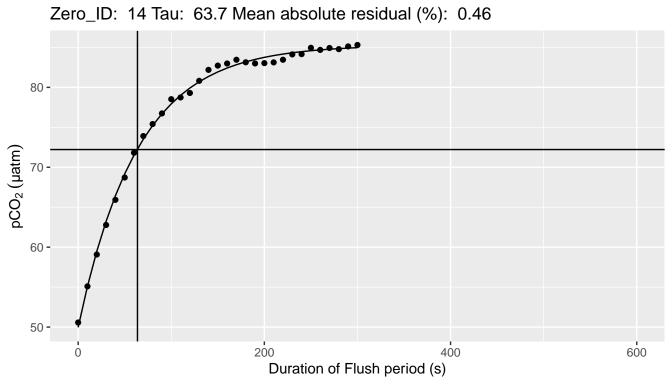
Zero\_ID: 13 nls model failed 160 -140 pCO<sub>2</sub> (µatm) 100 -200 400 600 Duration of Flush period (s)

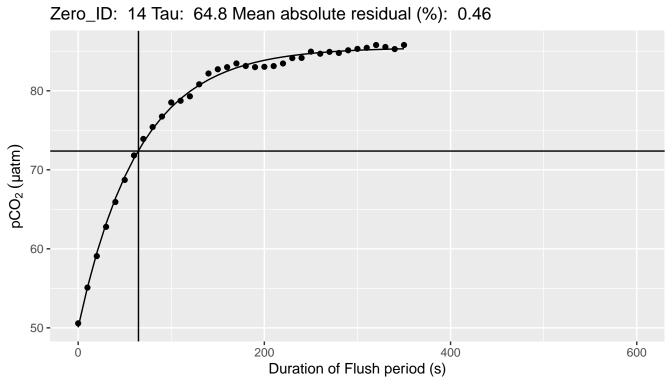
Zero\_ID: 13 nls model failed 160 -140 pCO<sub>2</sub> (µatm) 100 -200 400 600 Duration of Flush period (s)

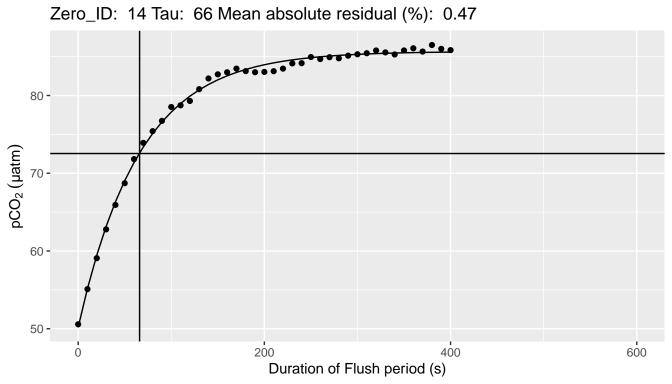
Zero\_ID: 14 Tau: 69.6 Mean absolute residual (%): 0.39 80 pCO<sub>2</sub> (µatm) 60 -50 -200 400 600 Duration of Flush period (s)

Zero\_ID: 14 Tau: 64.8 Mean absolute residual (%): 0.5 80 pCO<sub>2</sub> (µatm) 60 -50 -200 400 600 Duration of Flush period (s)





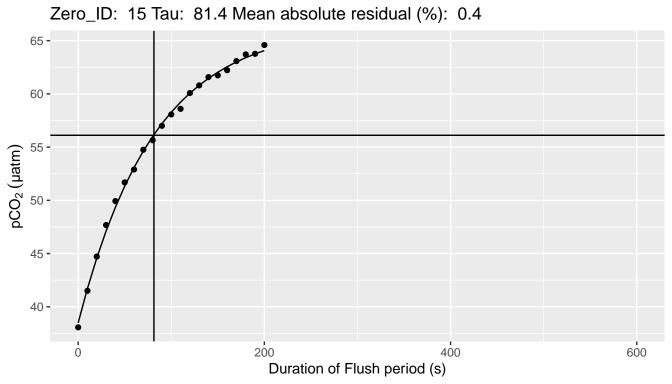


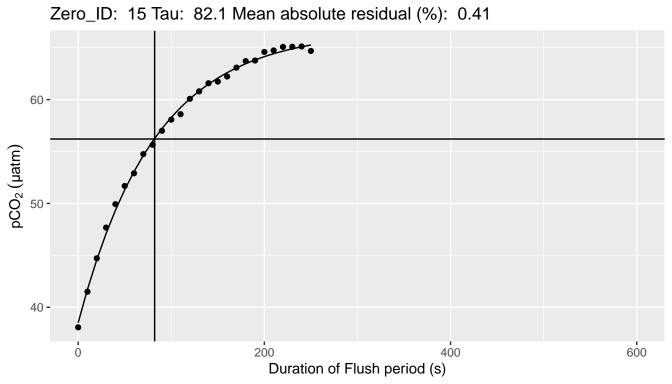


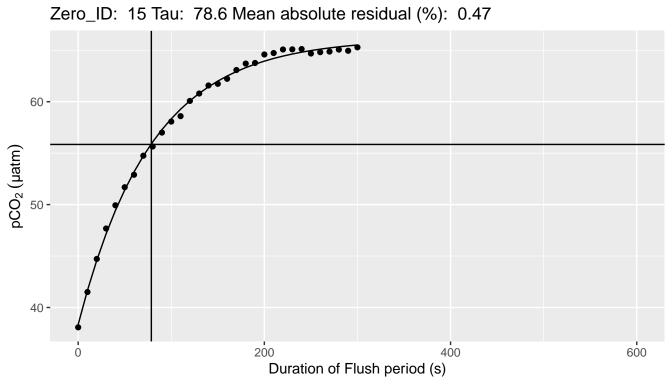
Zero\_ID: 14 Tau: 66.9 Mean absolute residual (%): 0.48 80  $pCO_2$  (µatm) 60 -50 -200 400 600 Duration of Flush period (s)

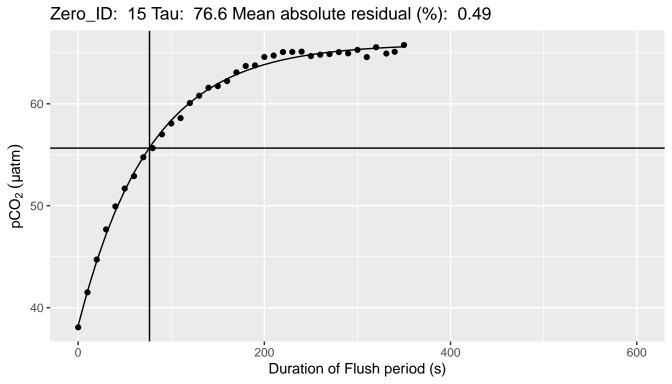
Zero\_ID: 14 Tau: 68.9 Mean absolute residual (%): 0.57 80 pCO<sub>2</sub> (µatm) 60 -50 -200 400 600 Duration of Flush period (s)

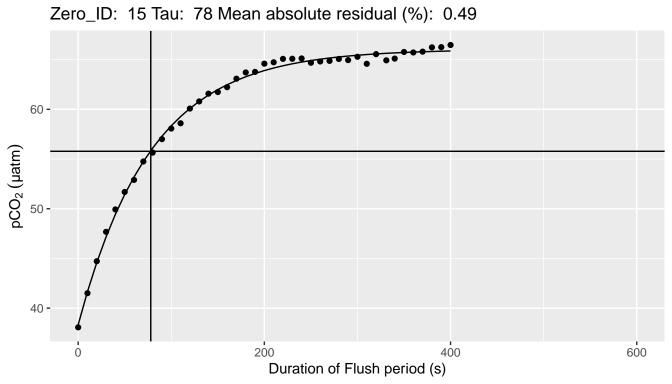
Zero\_ID: 15 Tau: 74.7 Mean absolute residual (%): 0.39 60 -55  $pCO_2$  (µatm) 45 -40 -200 400 600 Duration of Flush period (s)

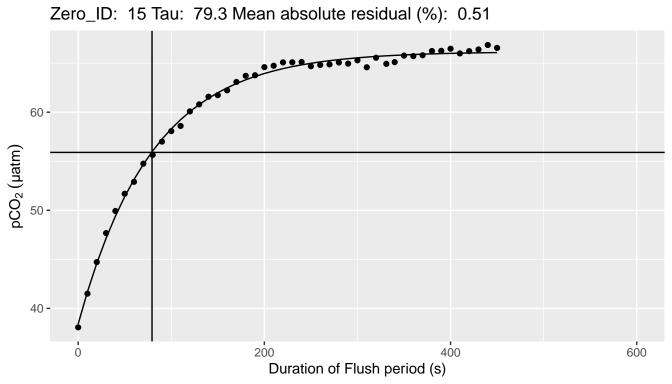


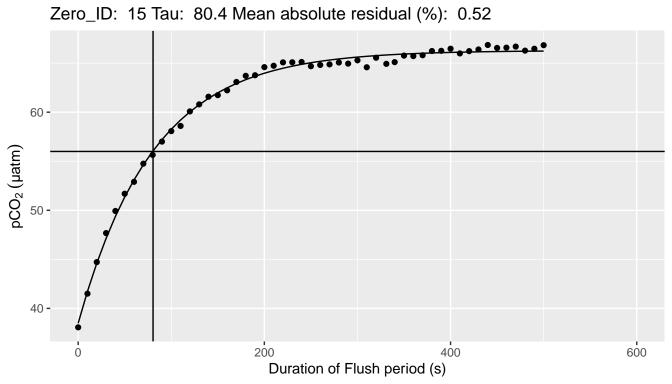


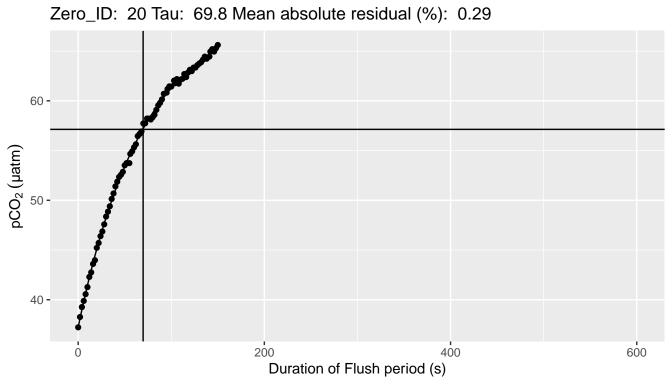


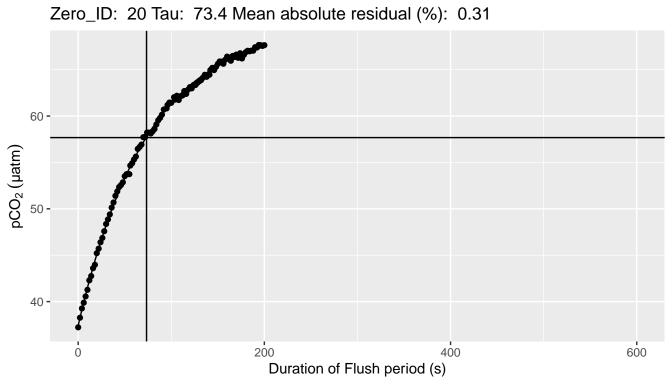


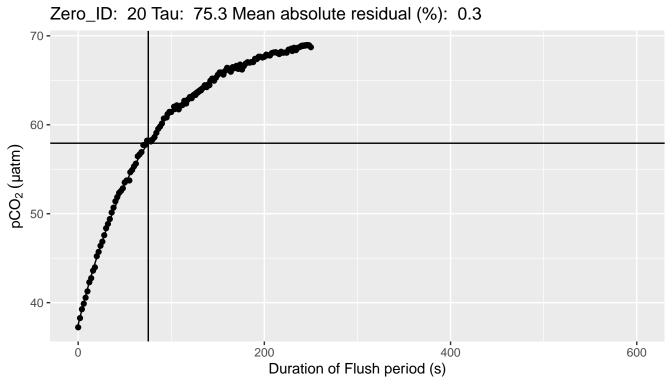


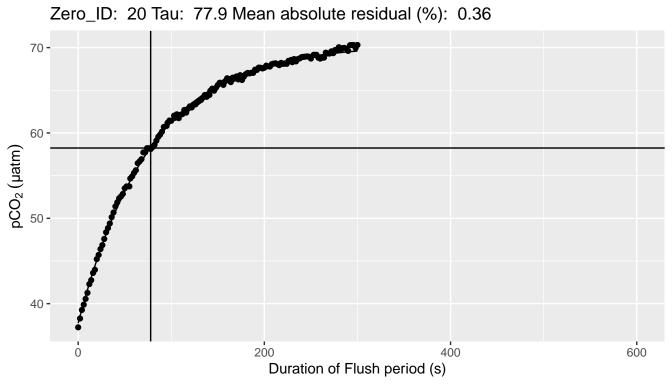


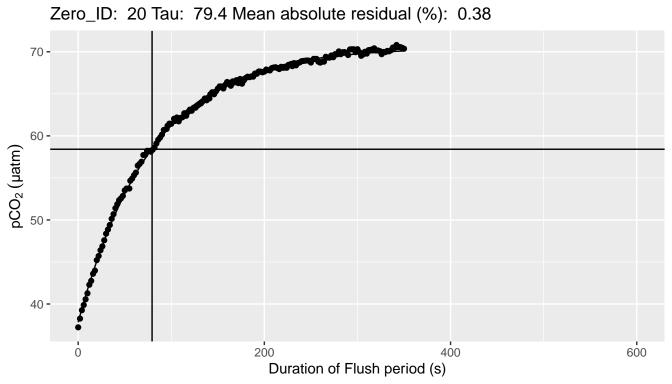


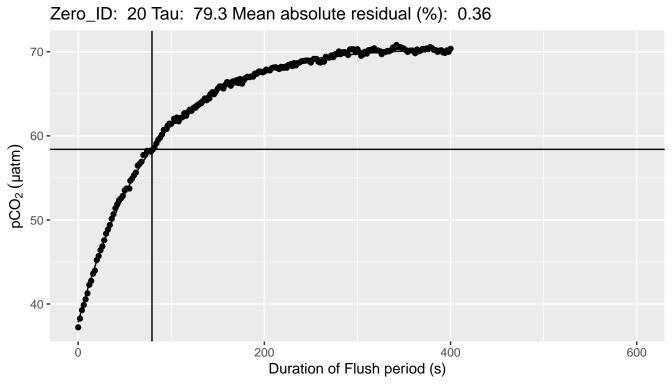


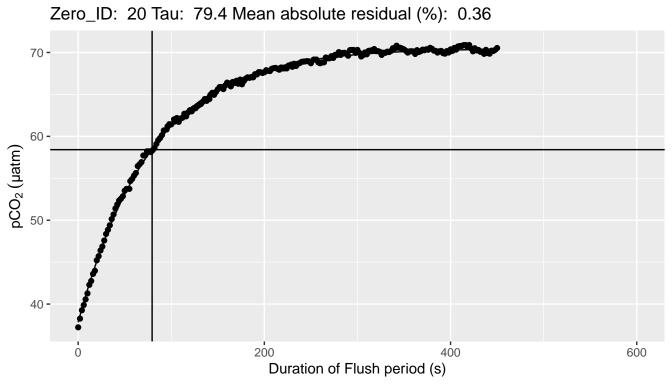


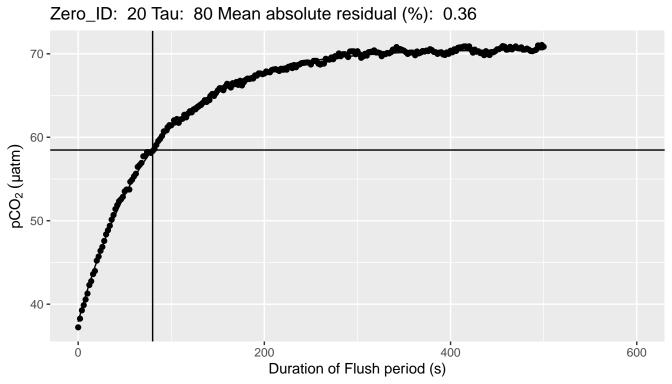


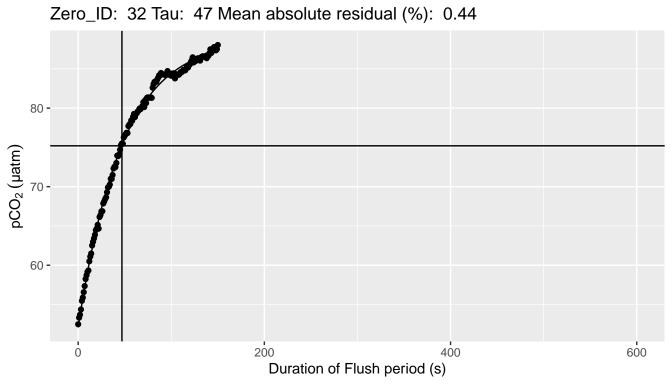


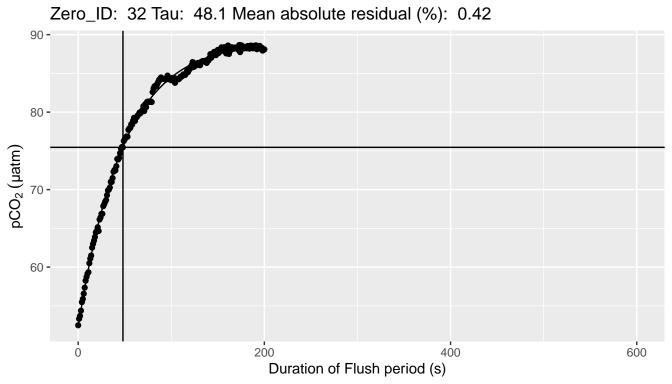


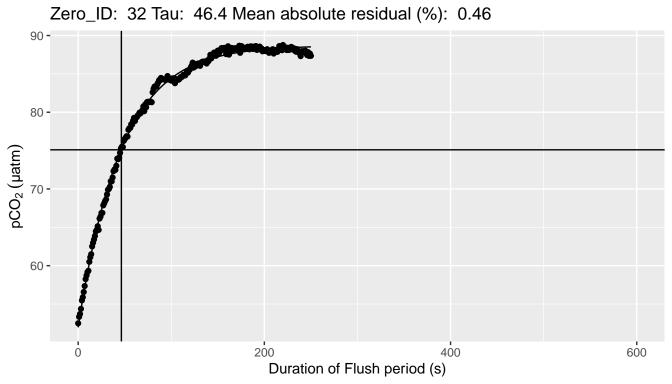


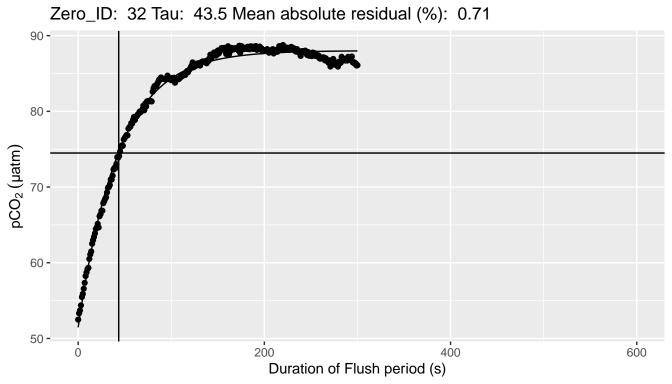


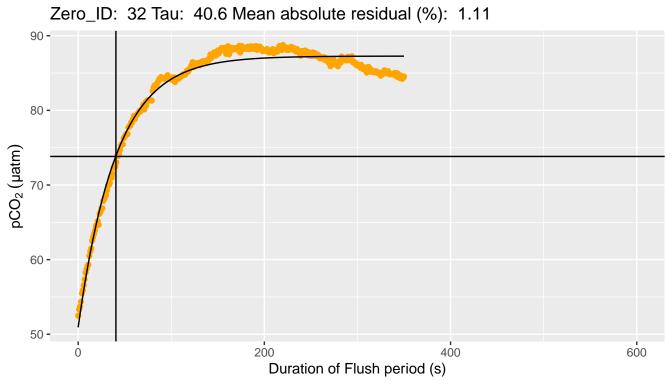


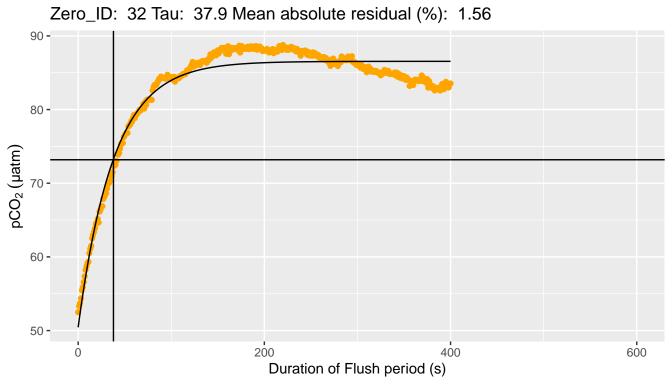


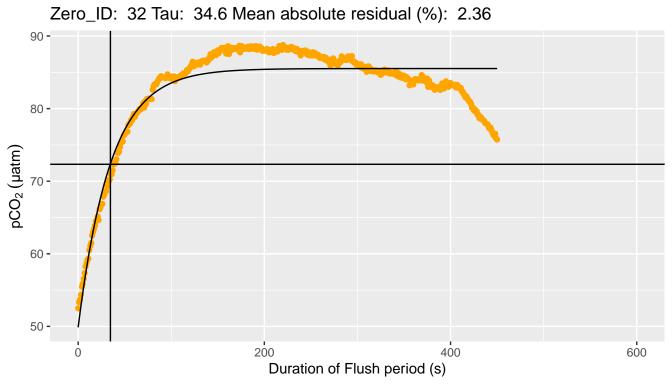


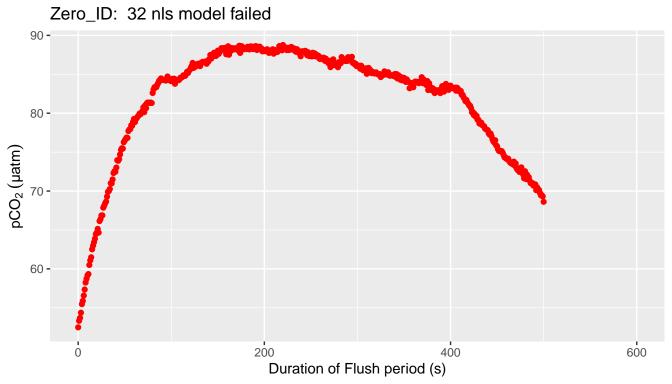


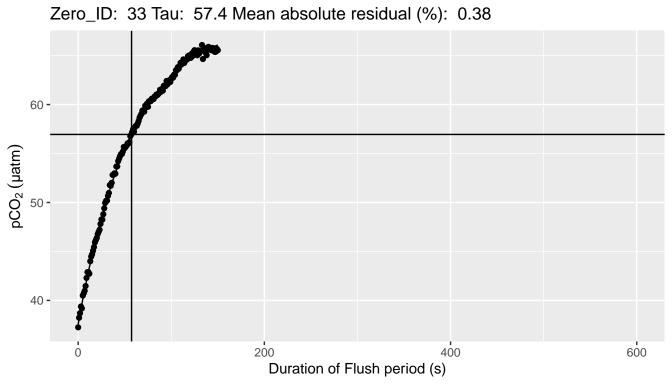


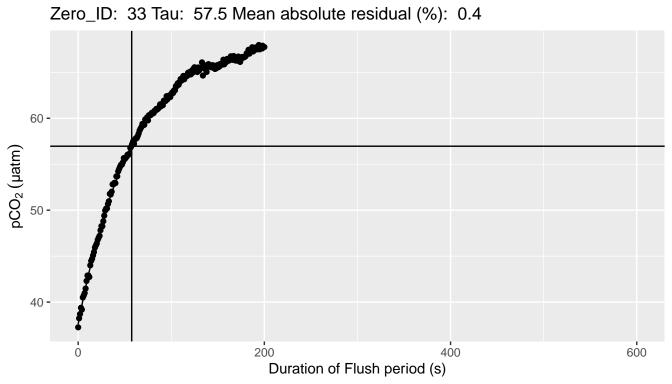


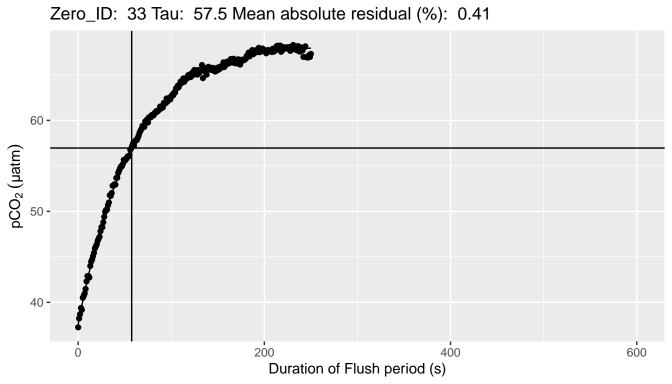


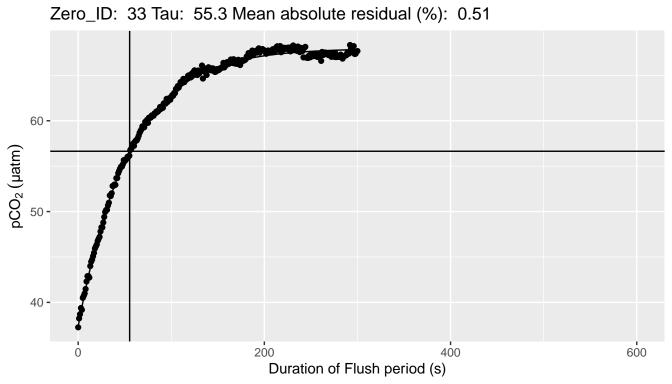


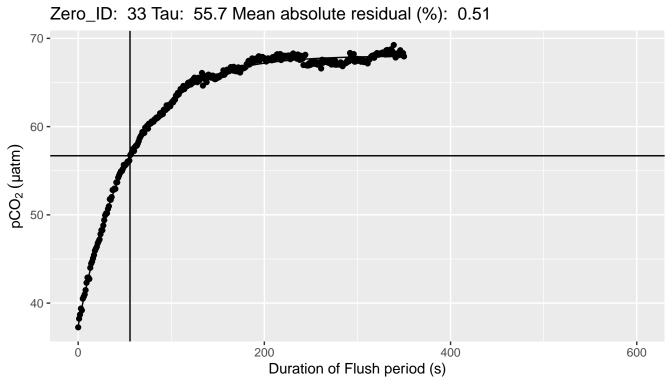


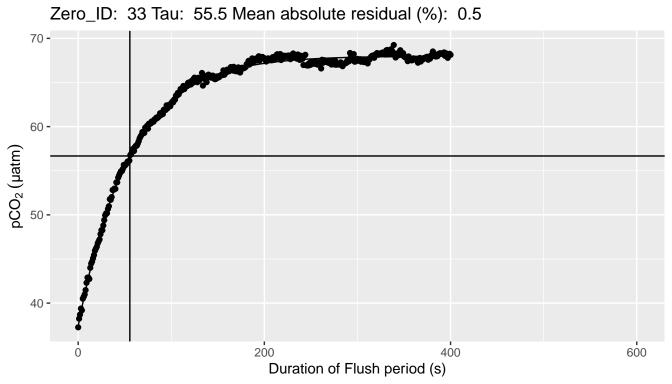


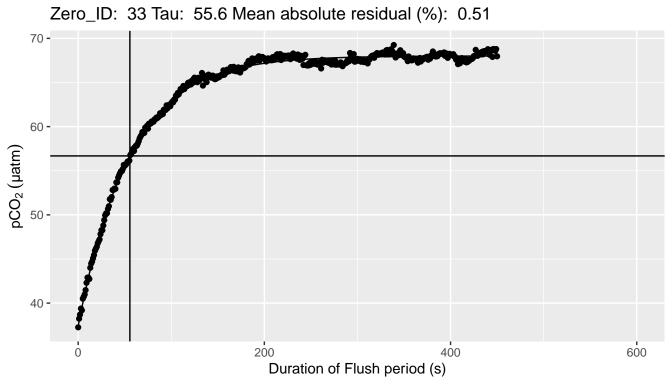


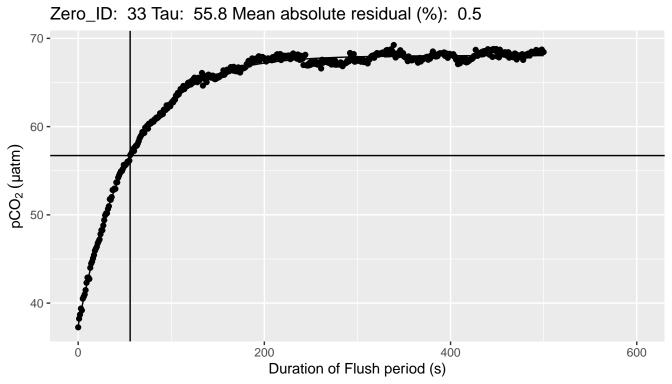


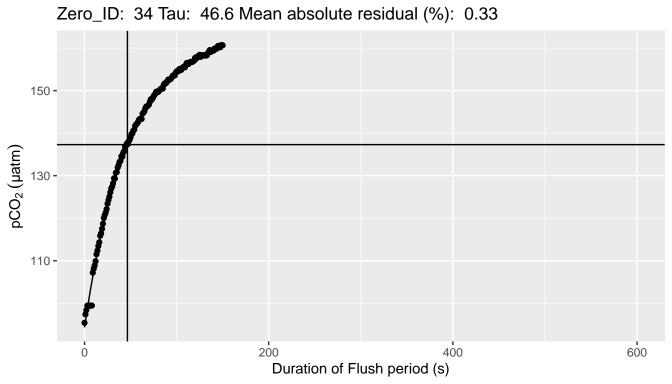


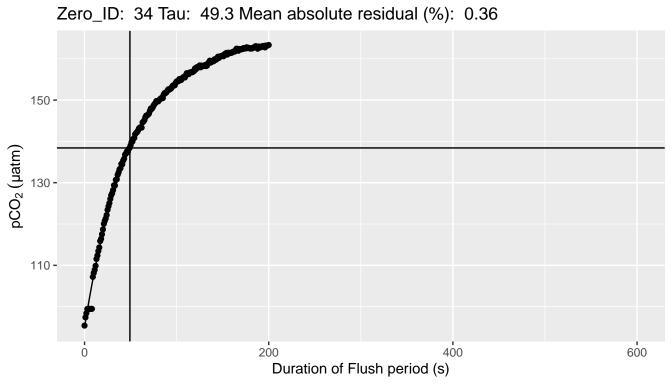


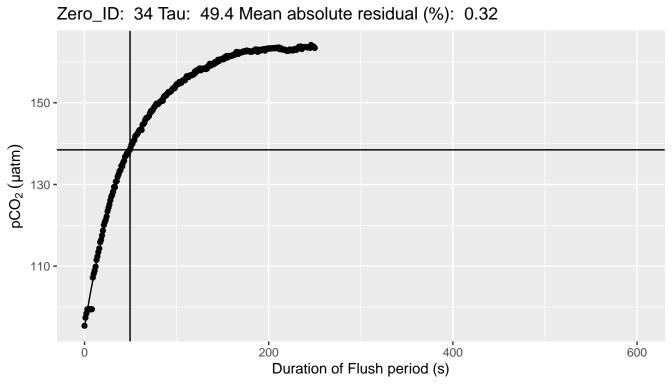


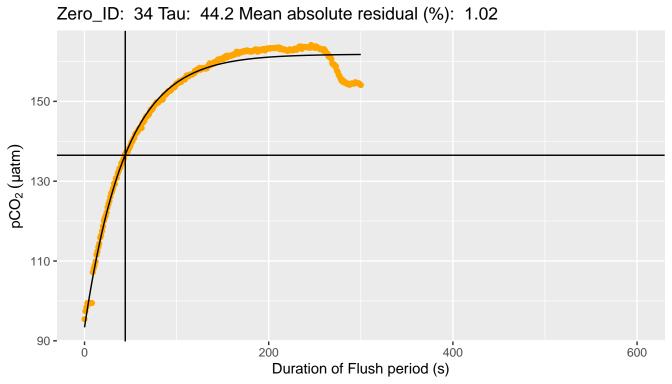


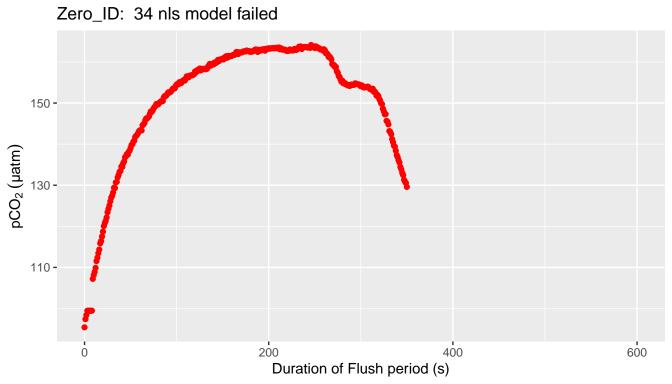


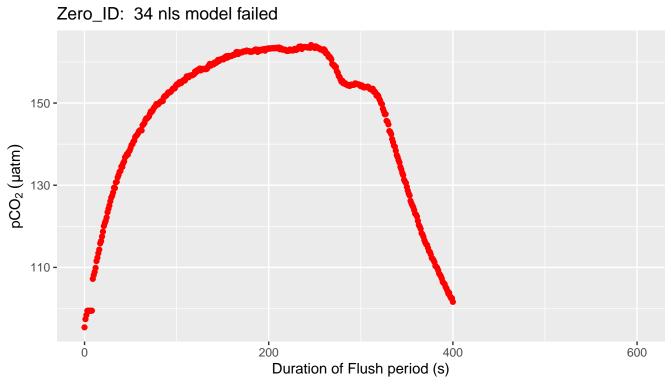


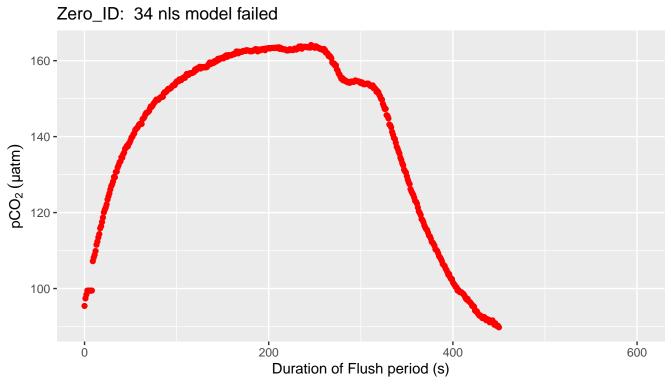


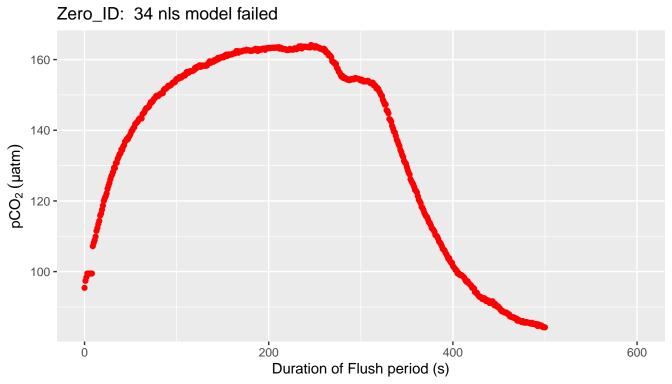


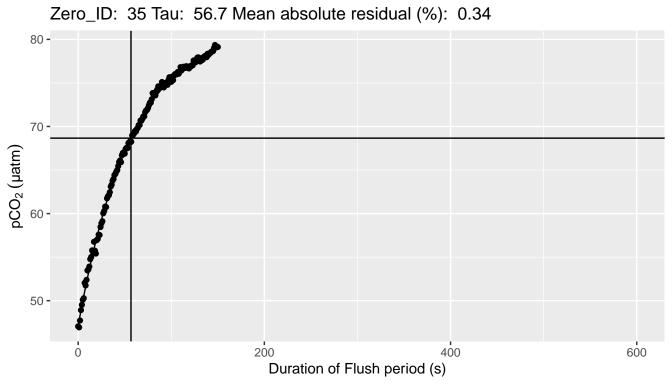


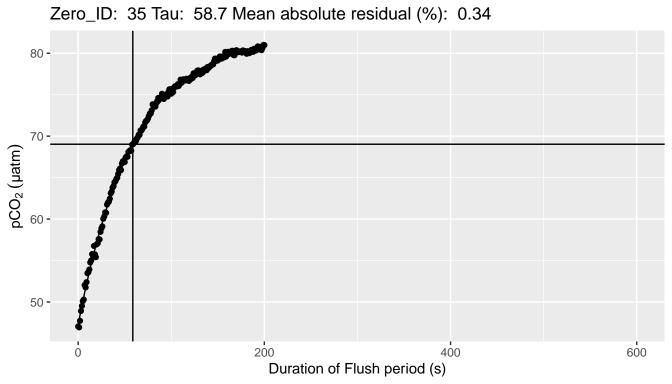


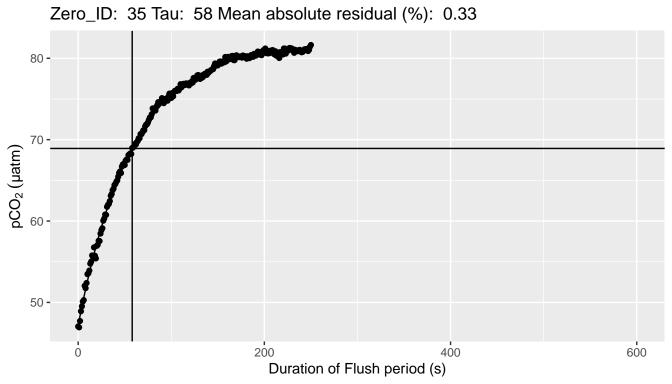


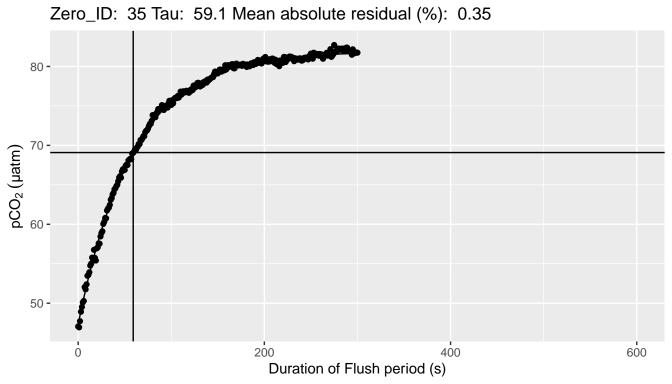


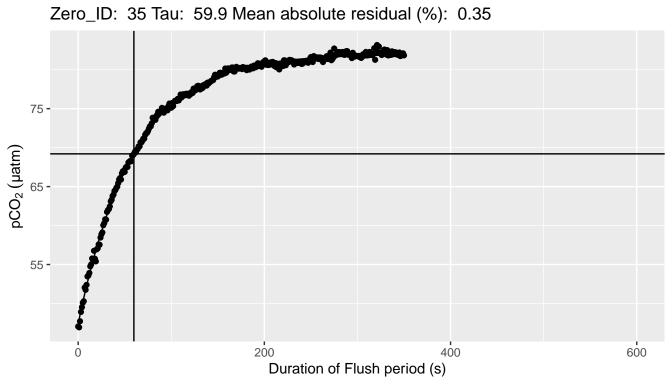


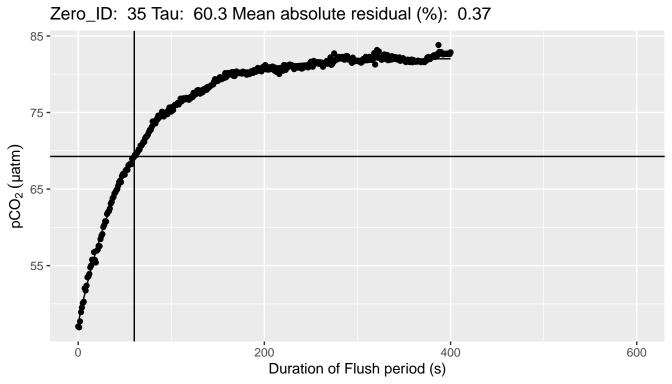


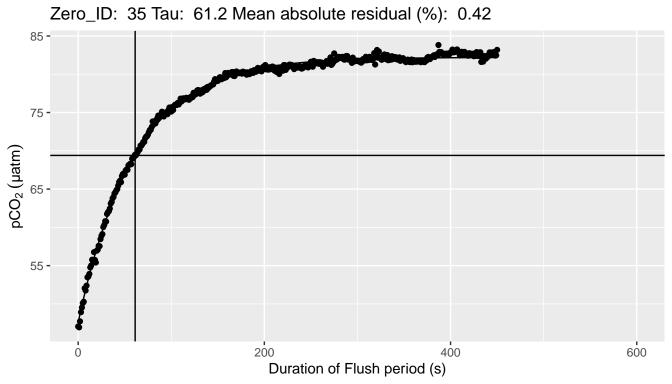


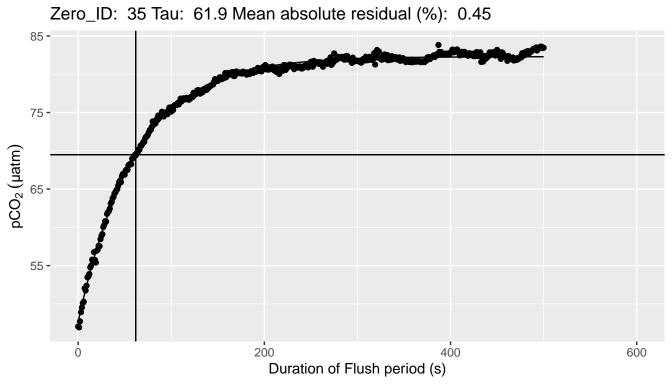


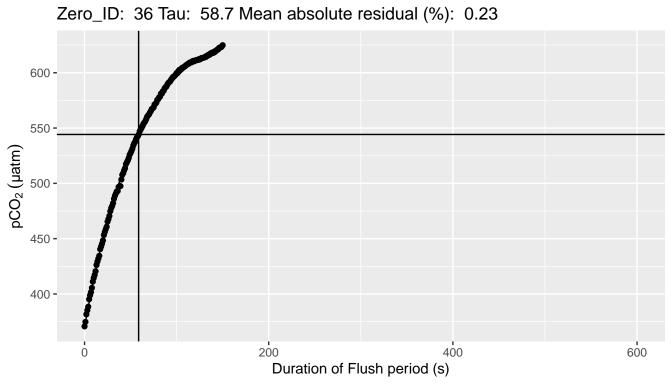












Zero\_ID: 36 Tau: 60.5 Mean absolute residual (%): 0.23 650 **-**600 -550 pCO<sub>2</sub> (µatm) 450 -400 -200 400 600 Duration of Flush period (s)

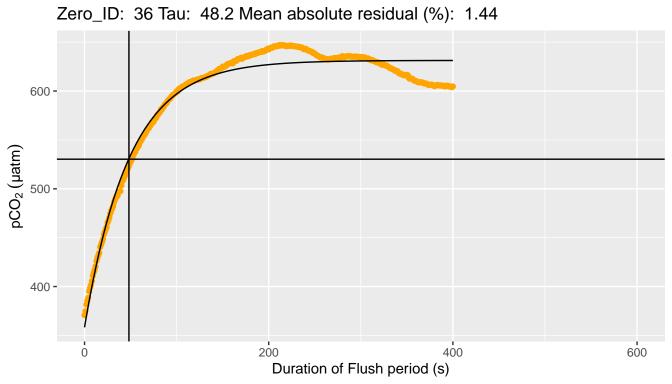
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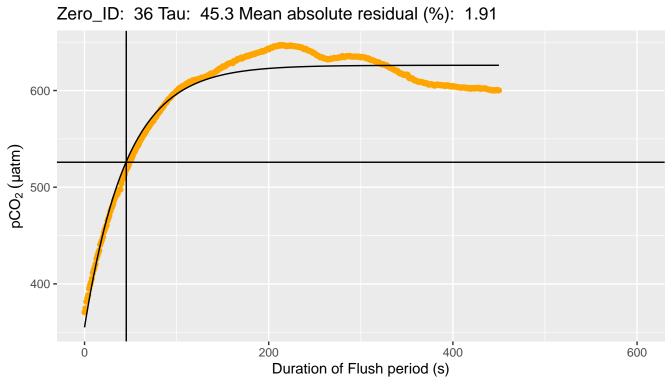
Duration of Flush period (s)

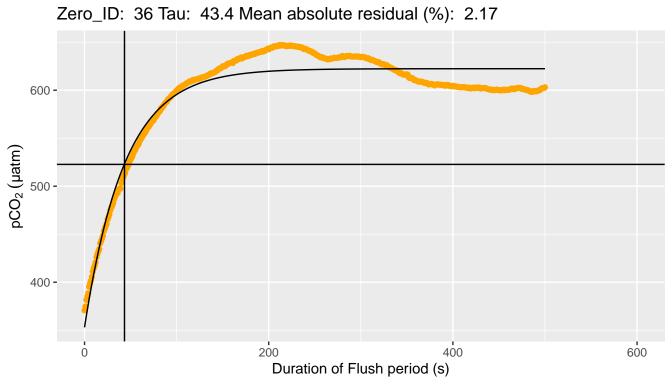
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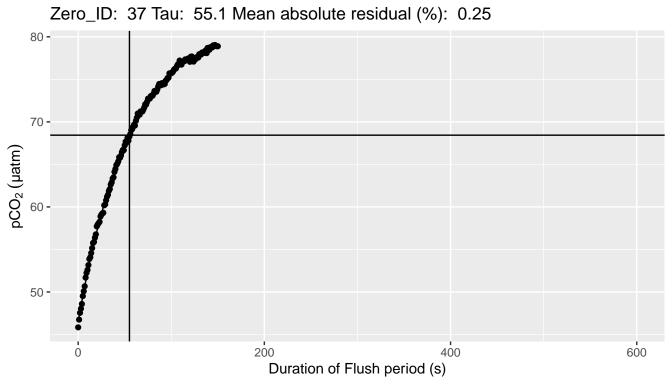
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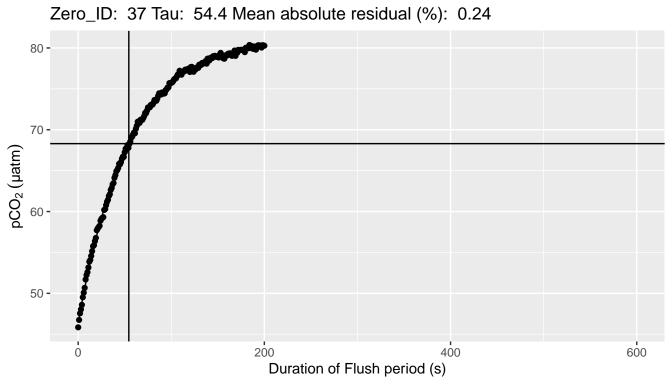
Duration of Flush period (s)

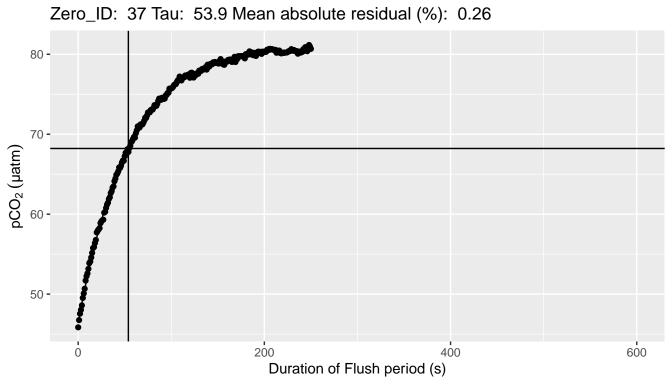


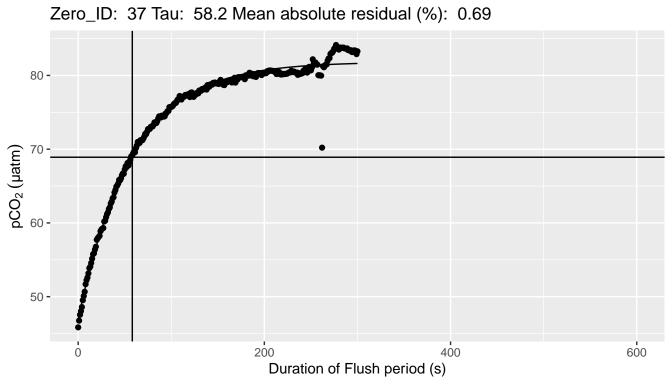


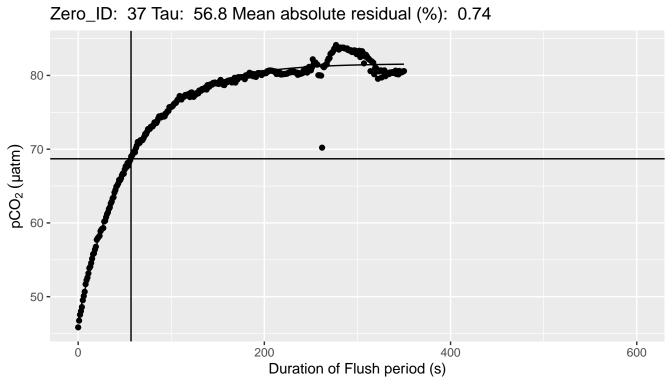


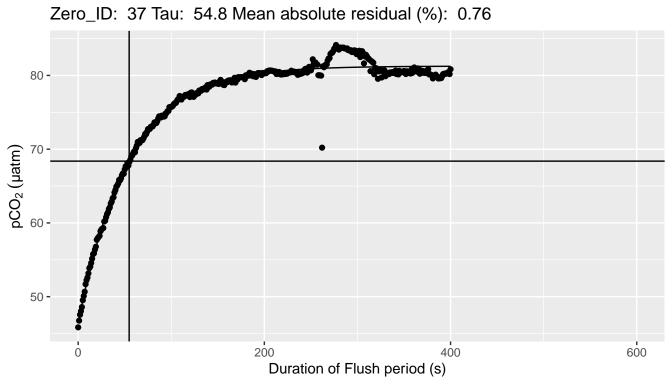


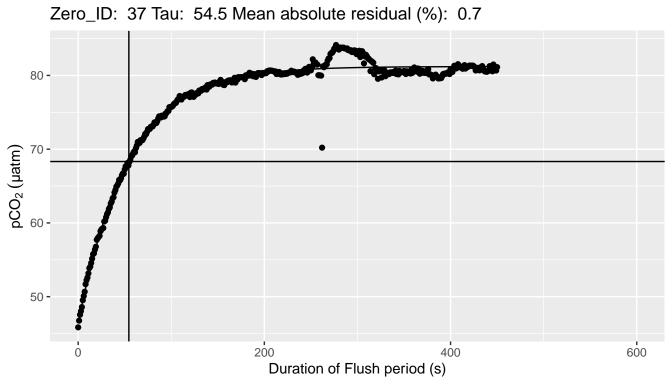


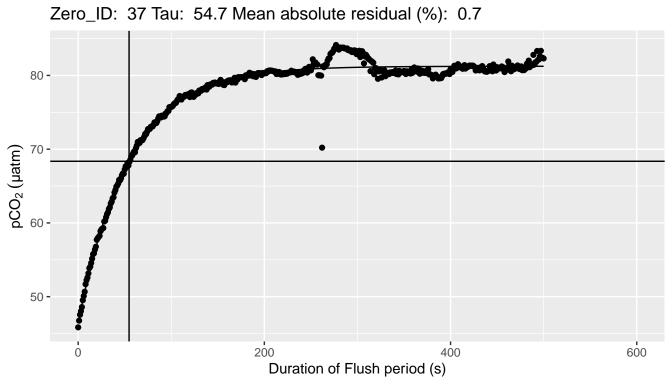


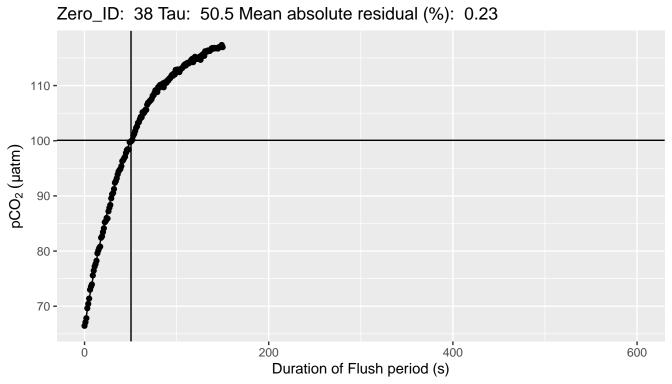


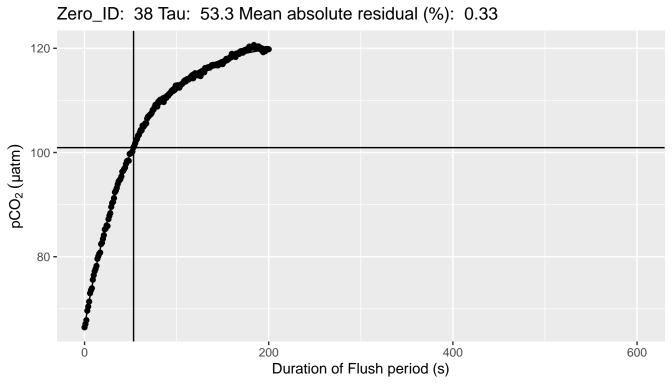


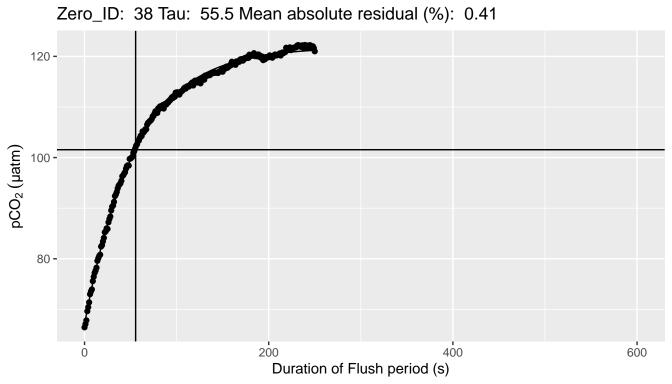


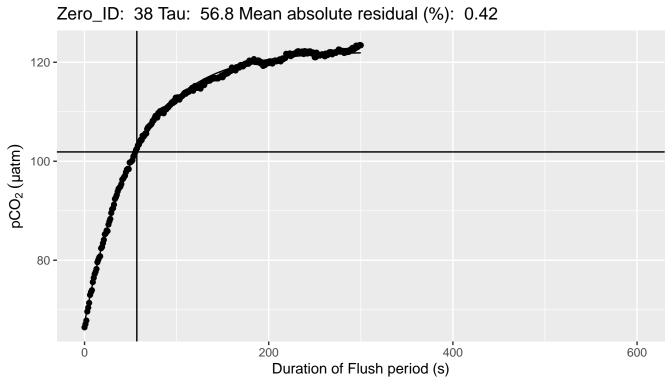


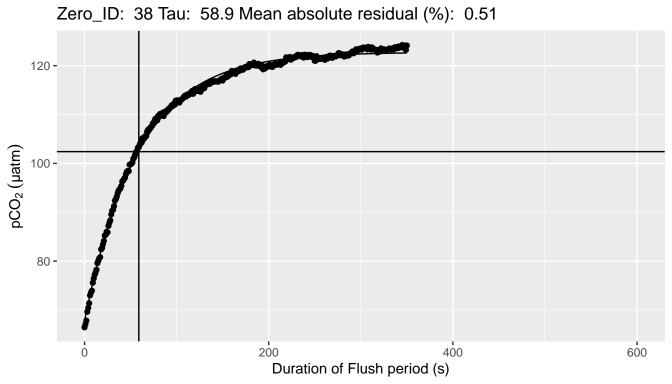


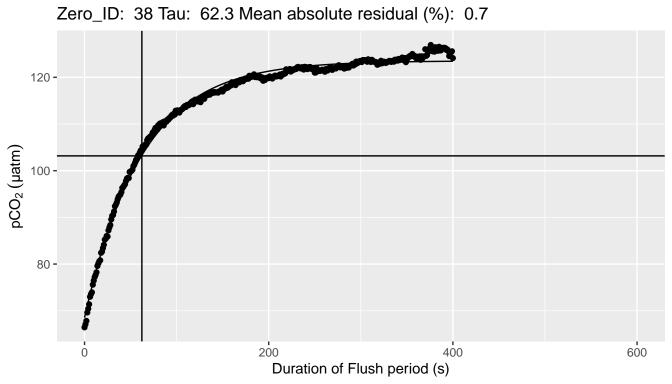


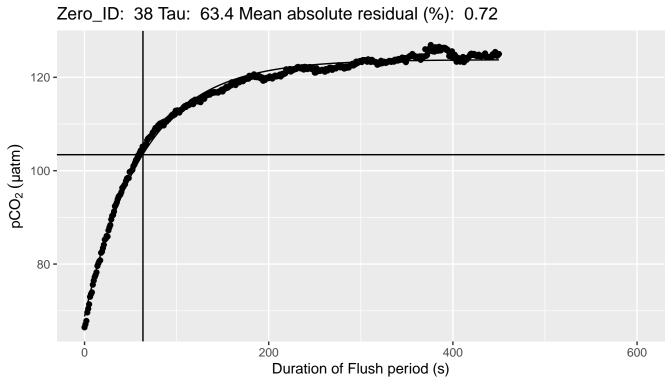


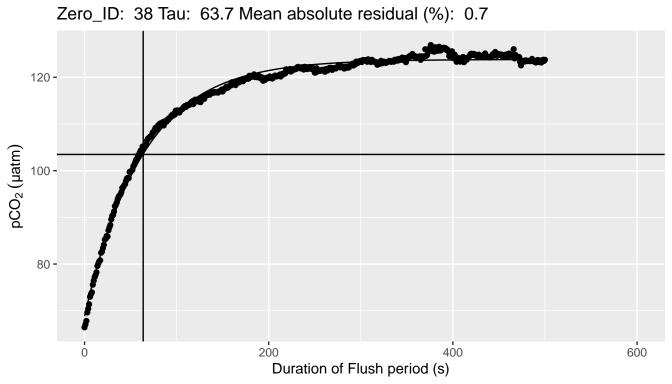


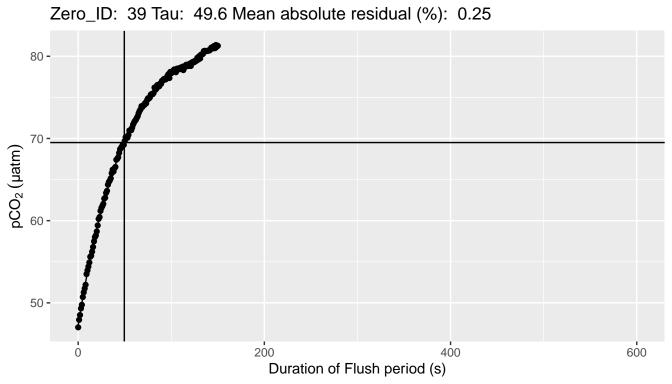


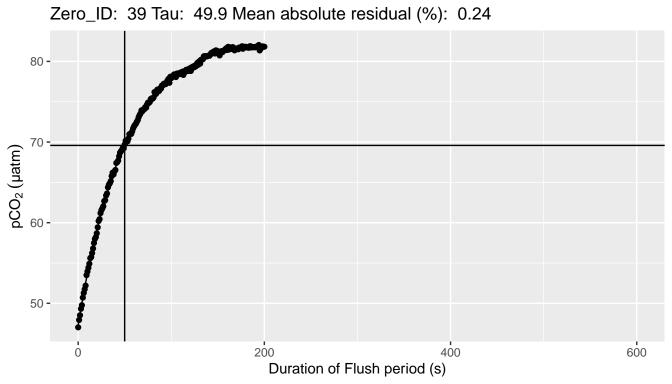


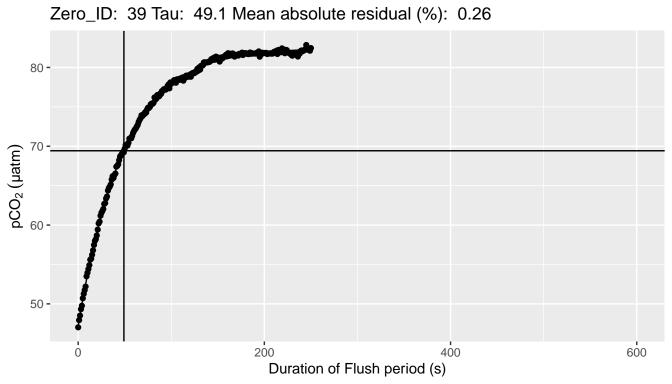


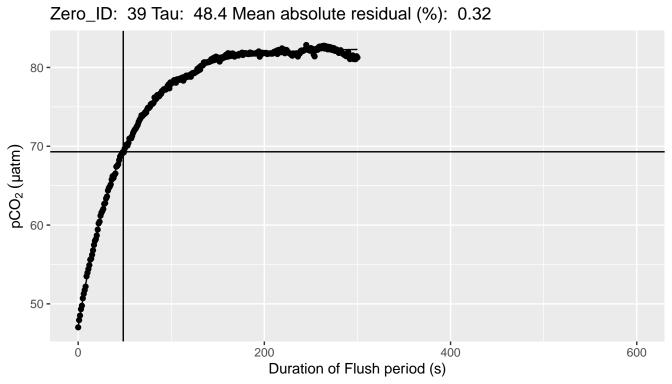


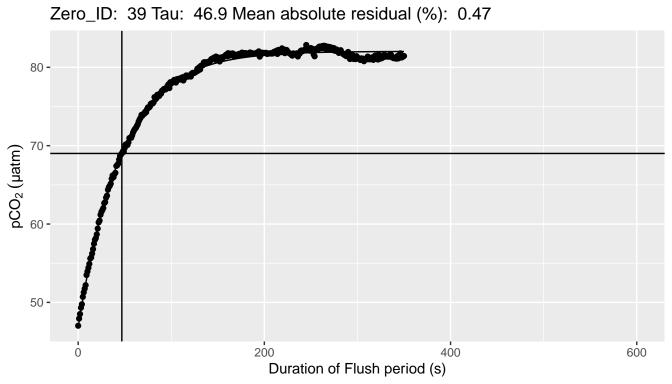


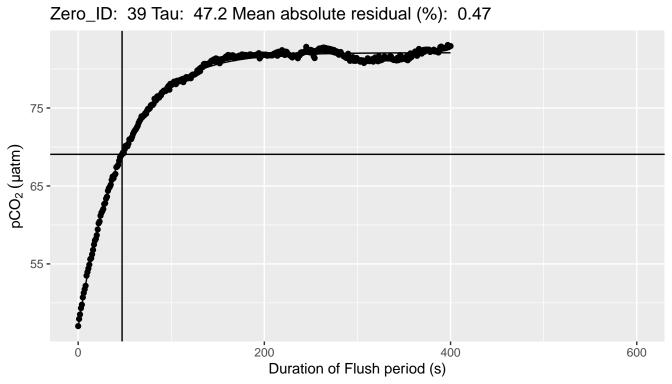


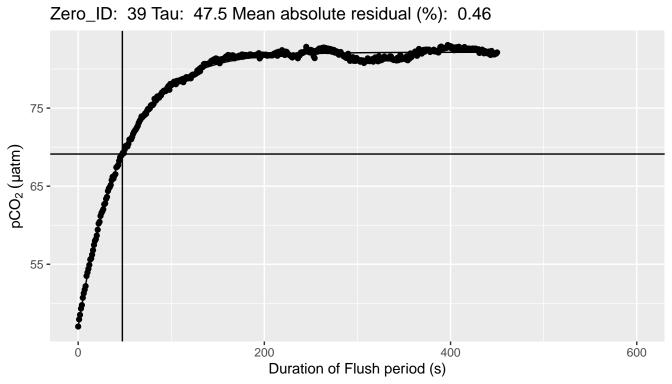


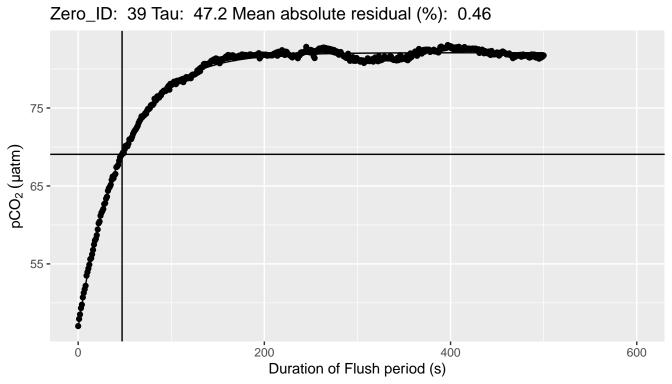


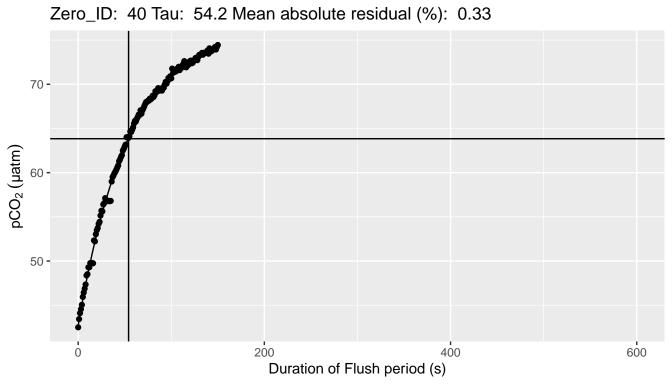


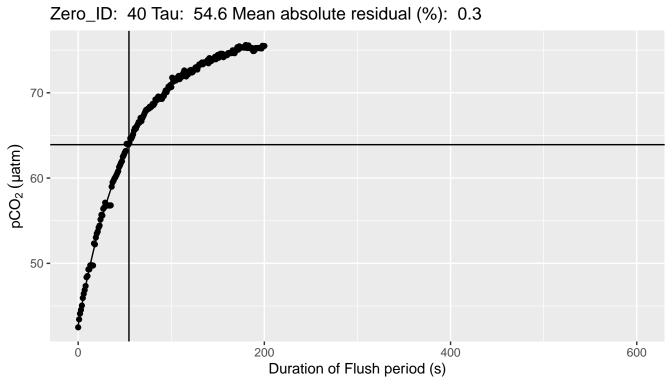


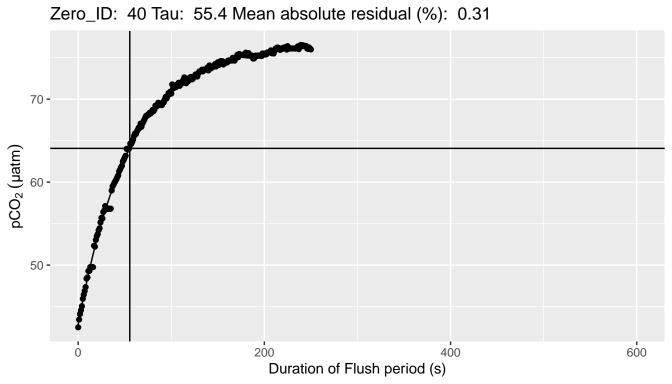


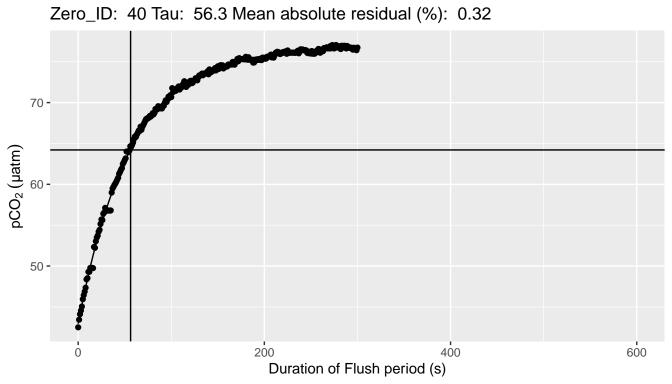


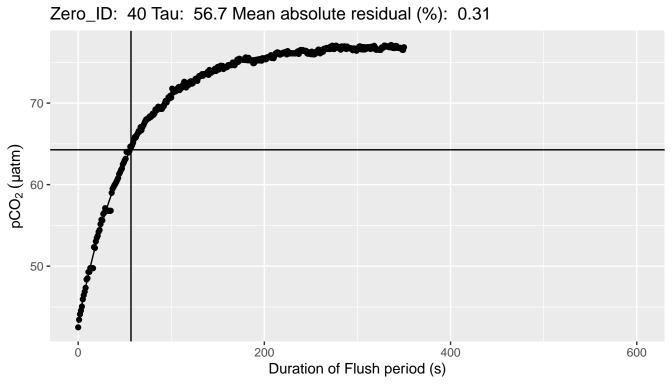


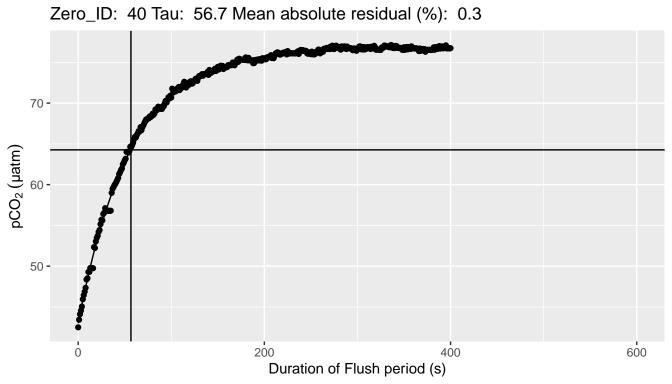


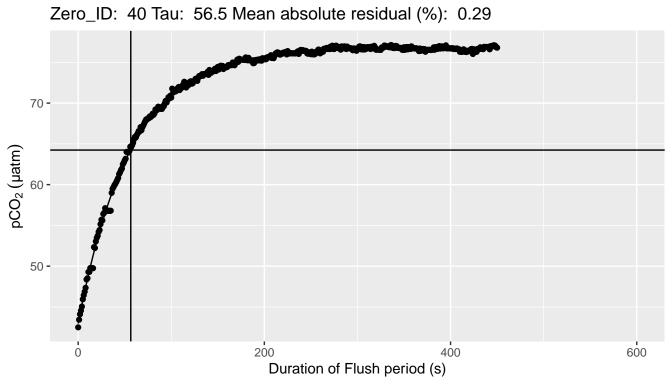


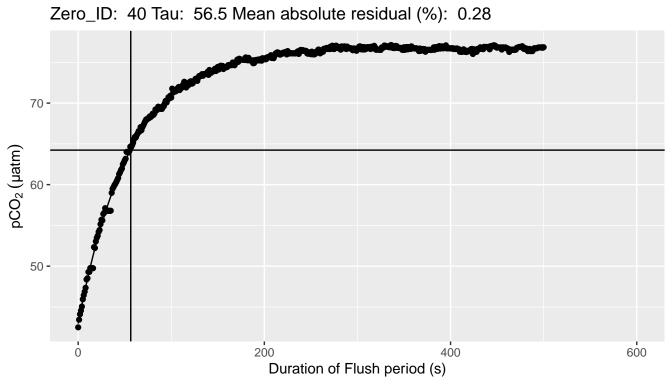


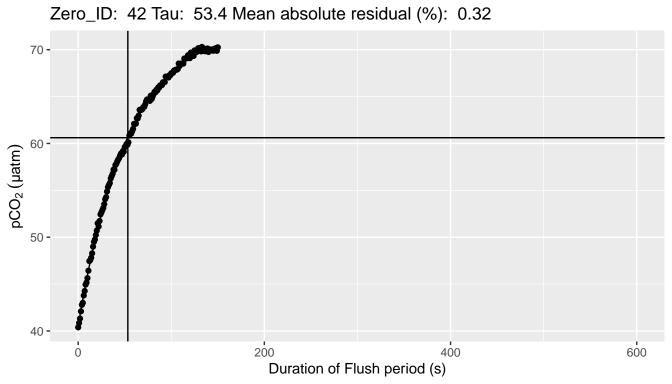


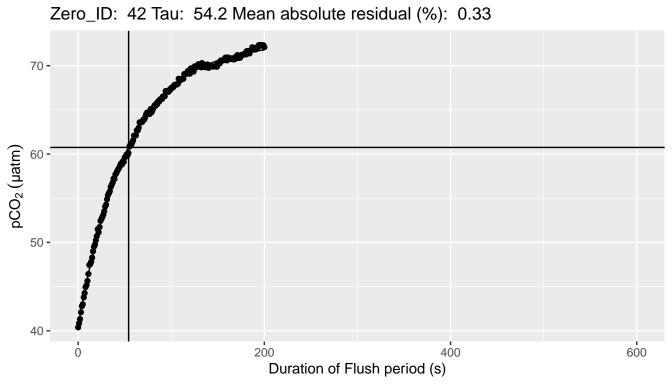


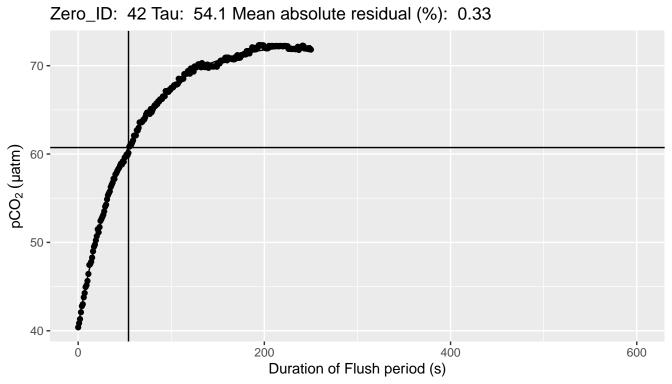


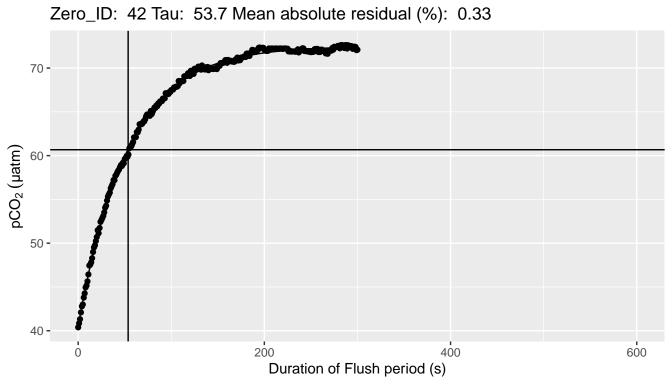


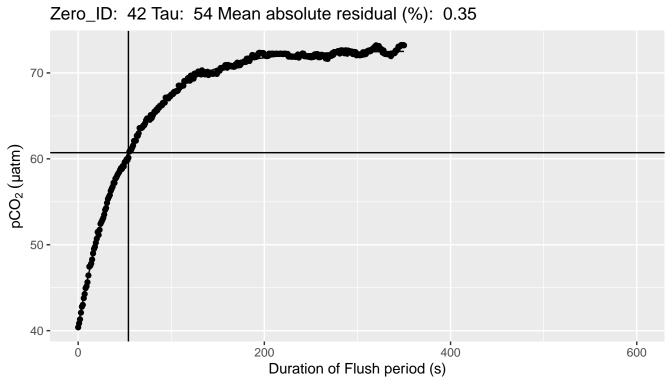


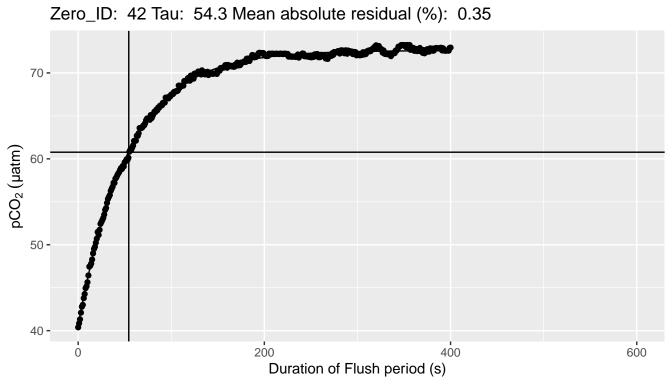


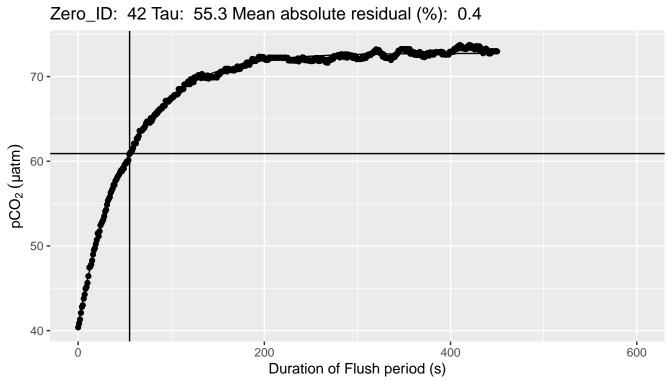


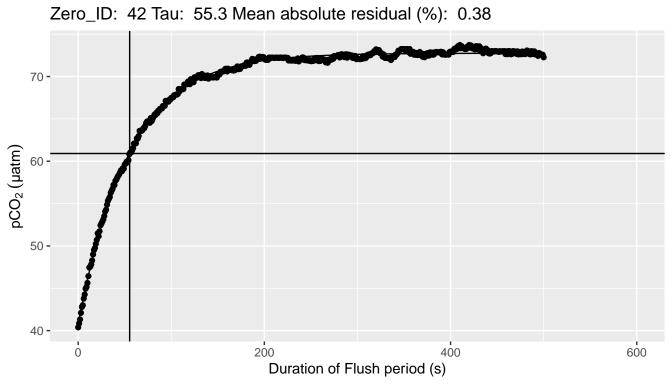


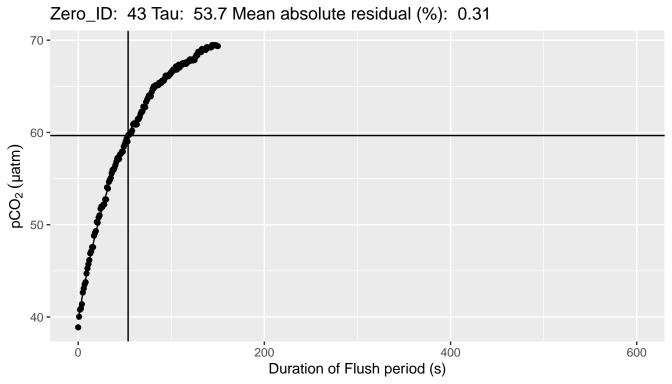


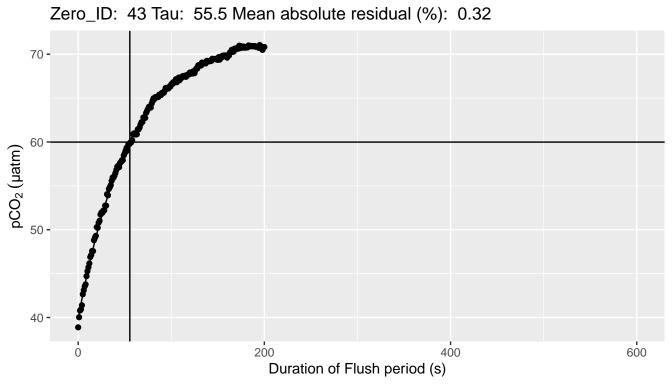


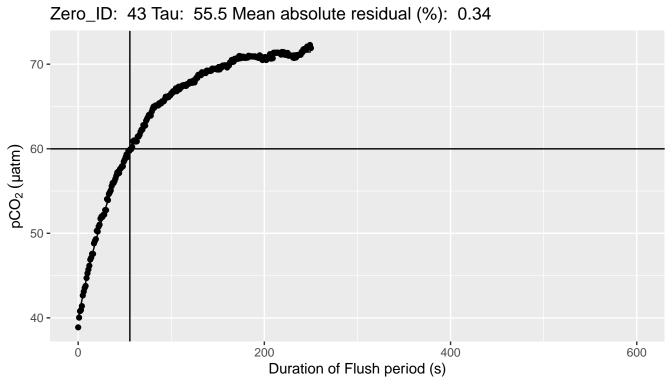


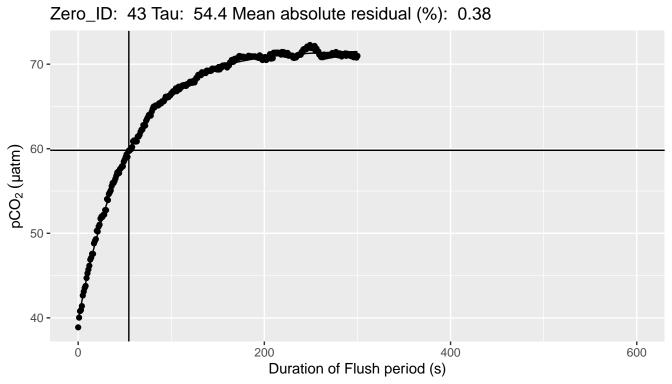


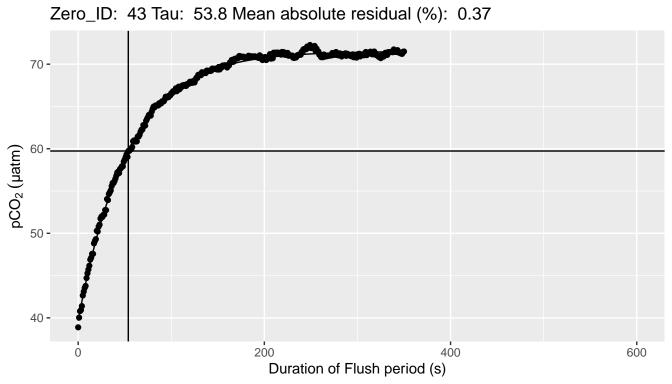


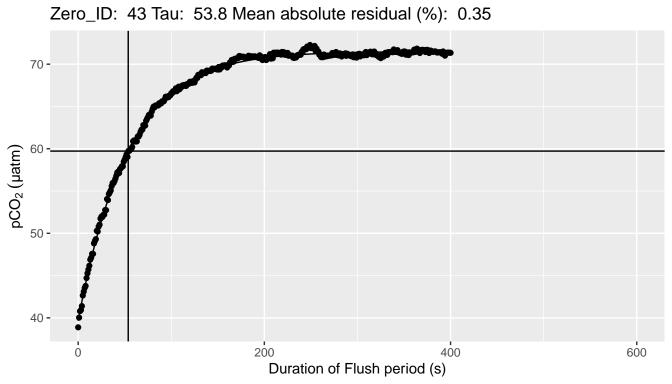


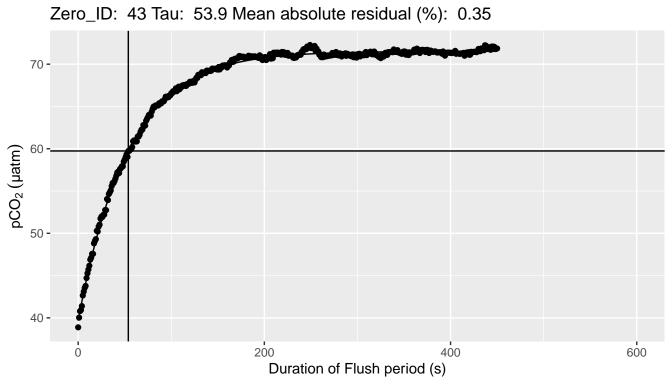


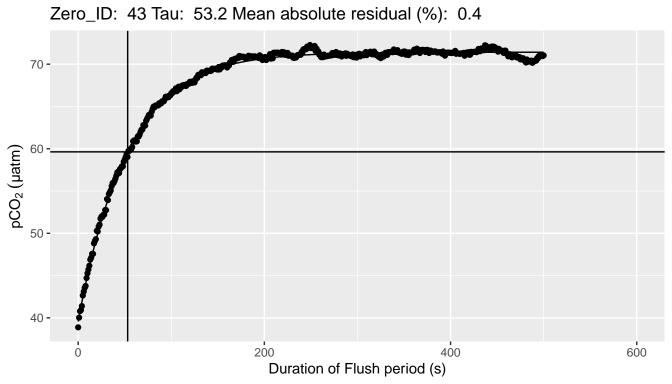


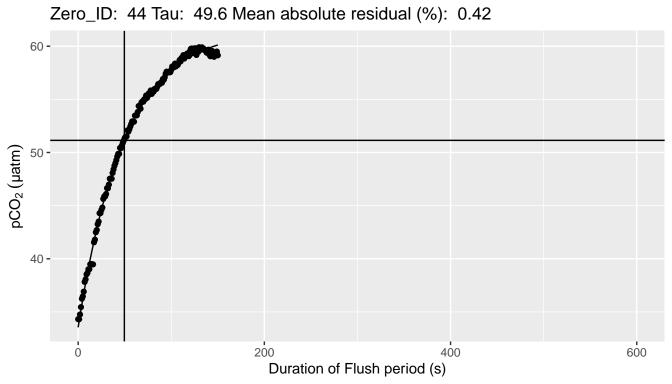


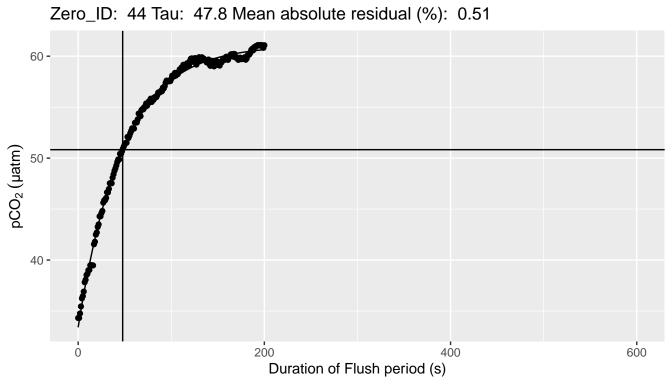


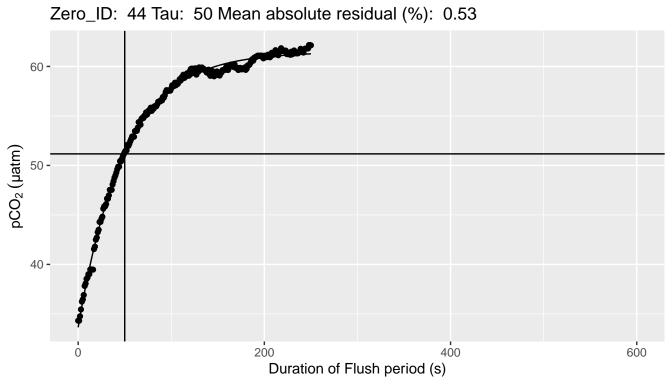


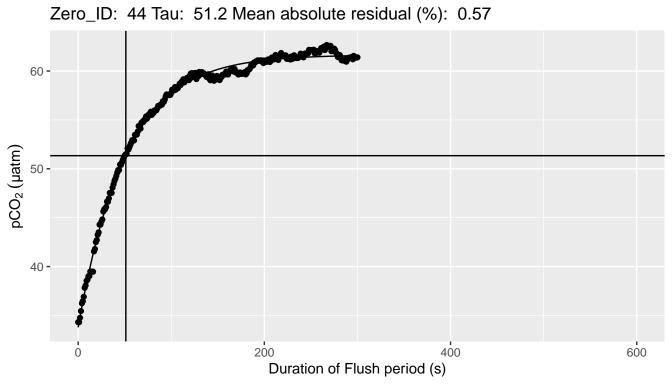


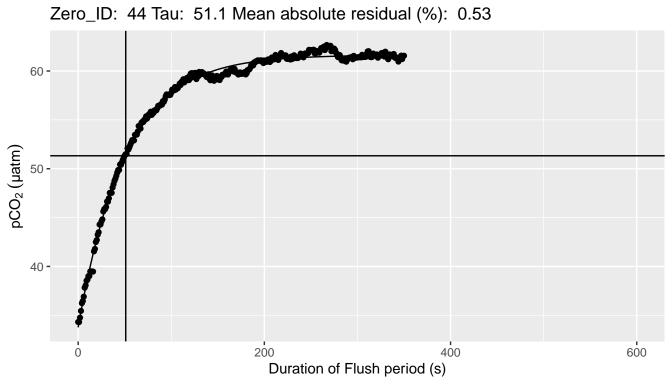


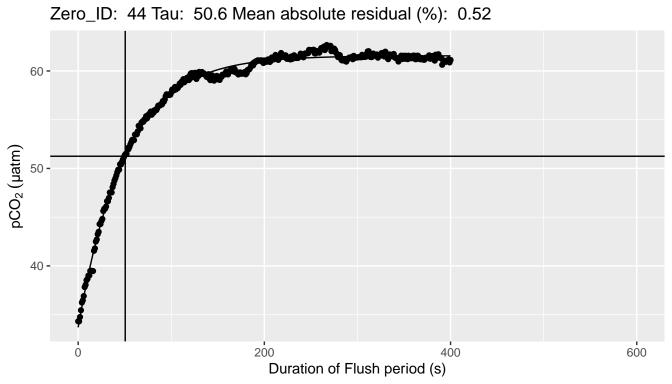


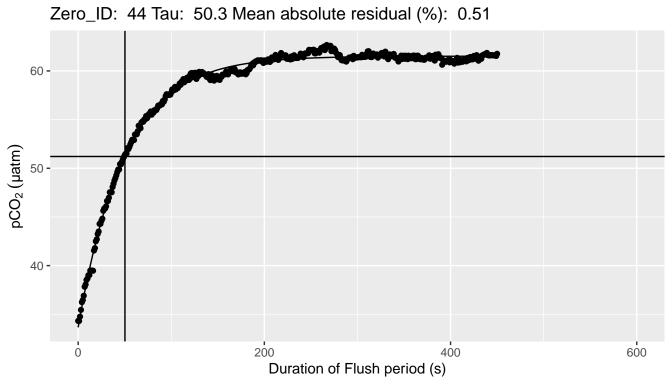


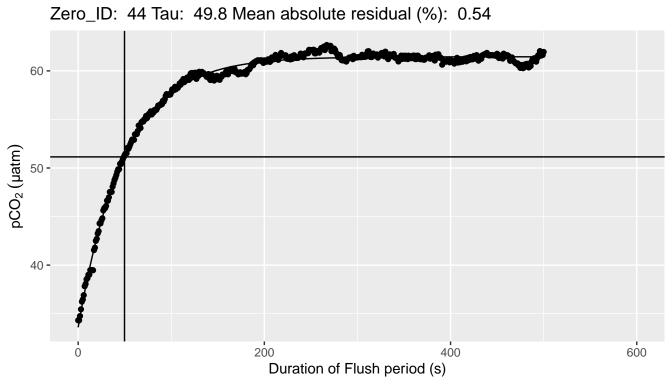


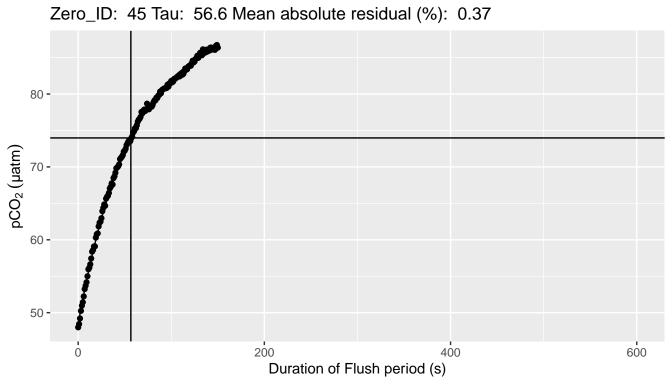


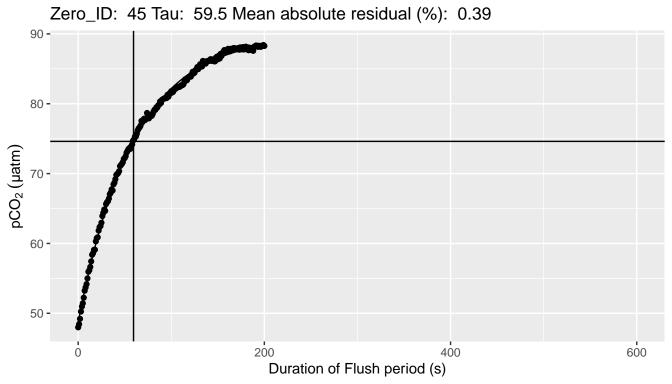


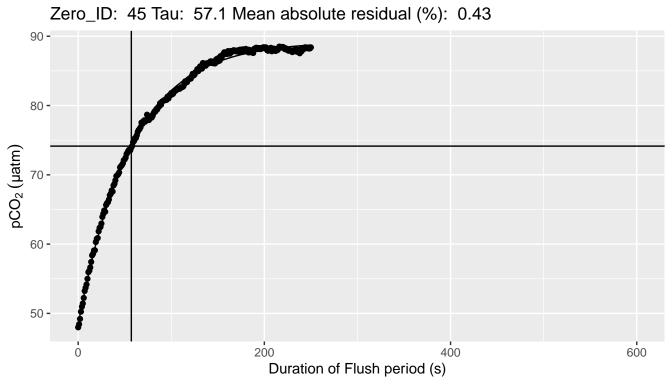


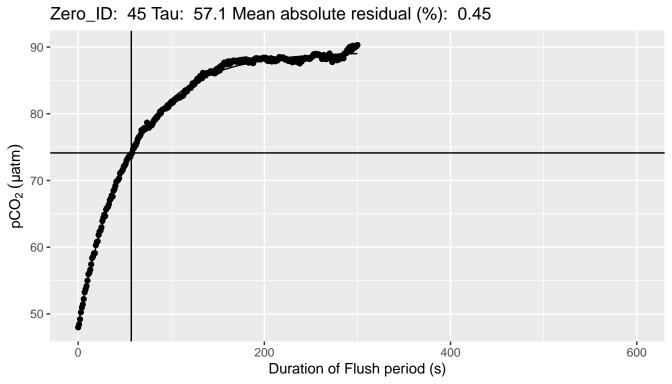


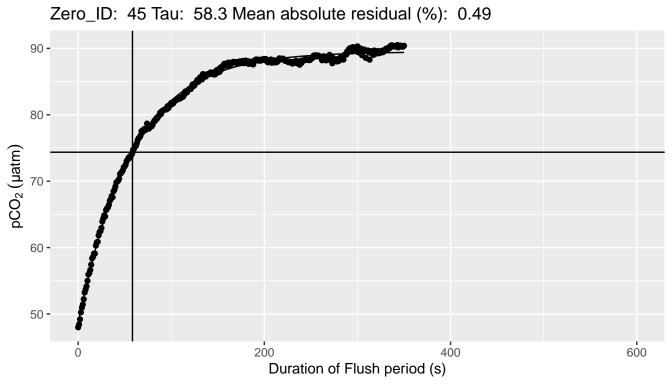


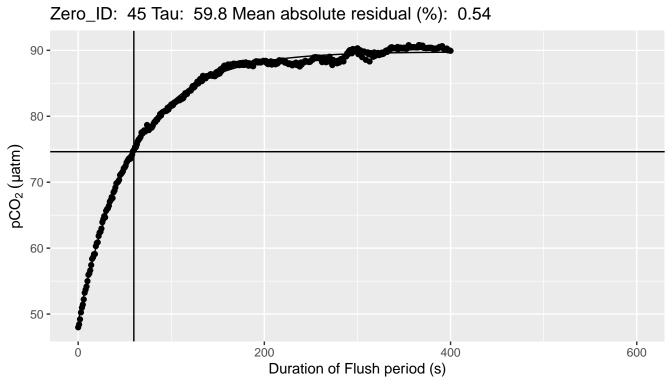


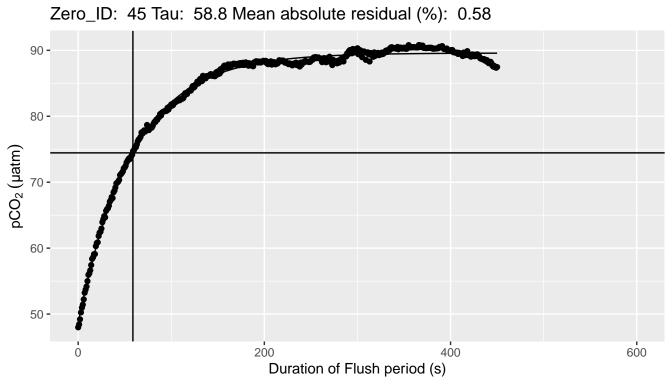


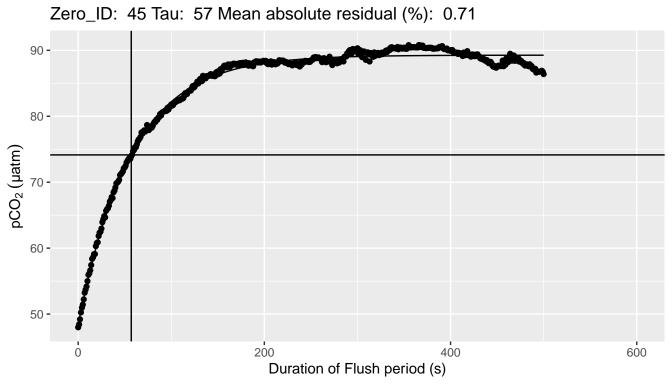


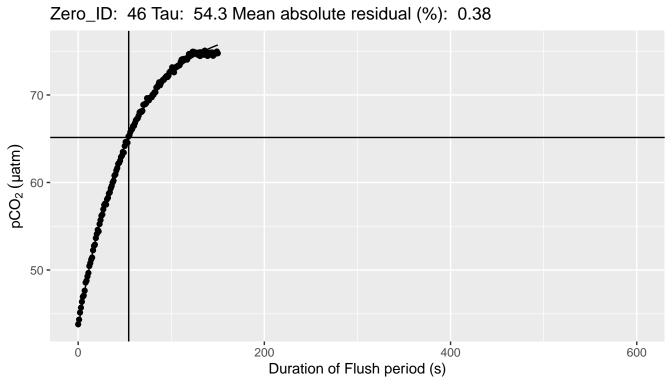


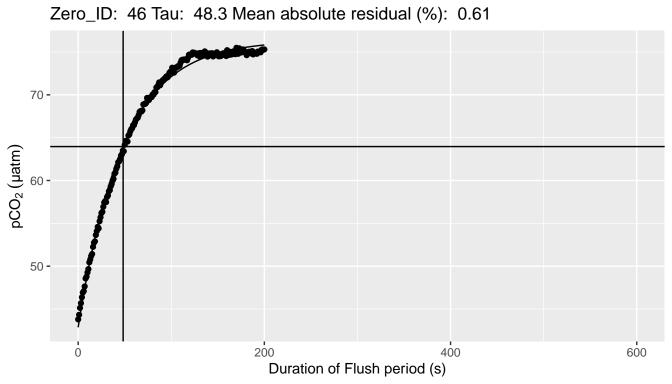


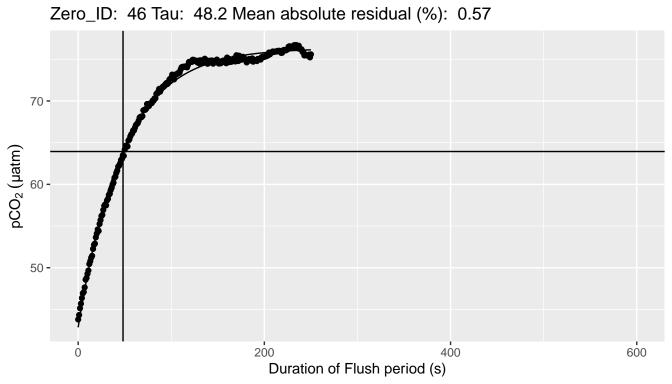


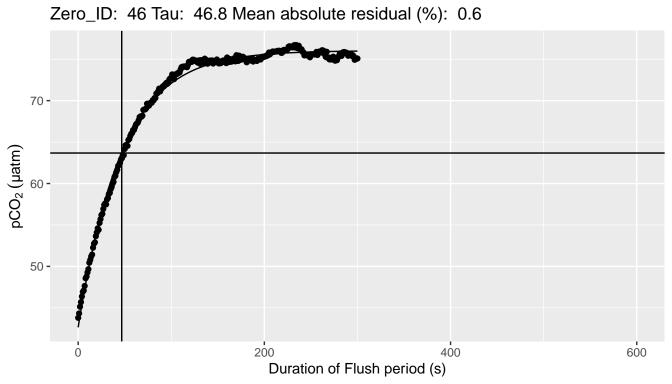


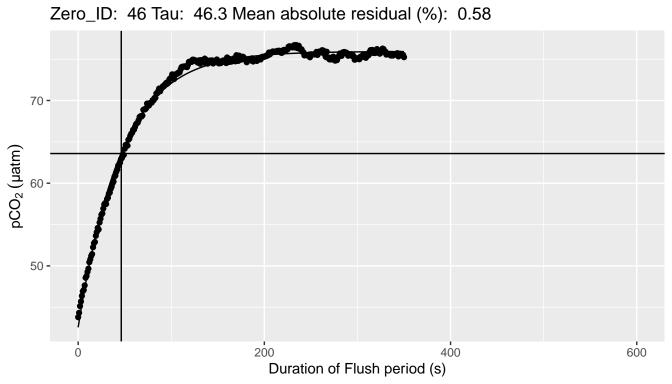


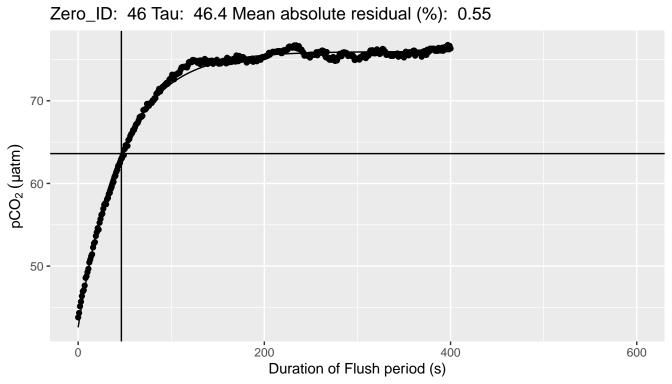


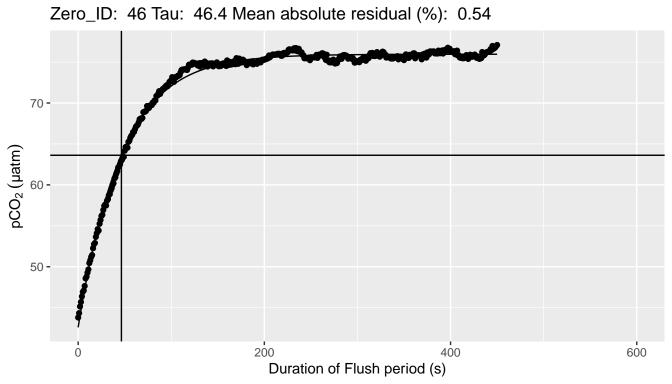


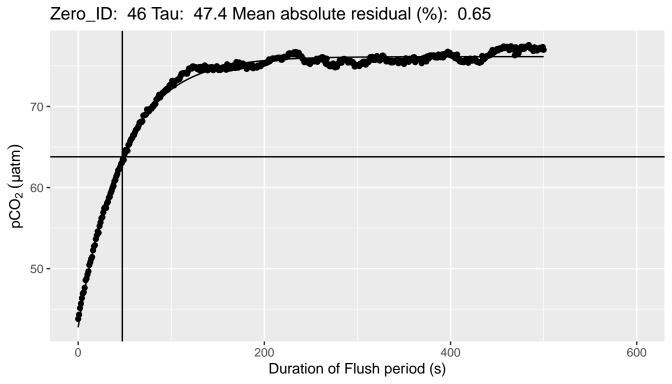


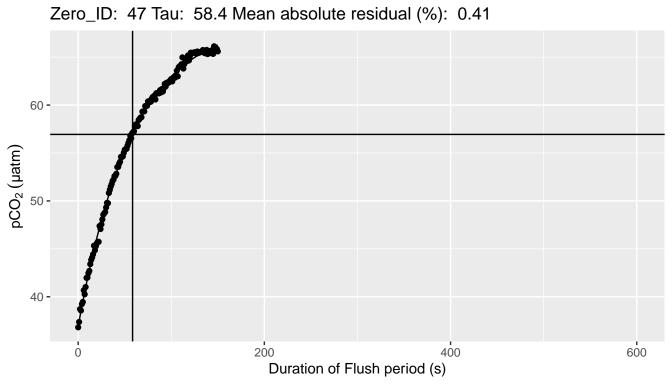


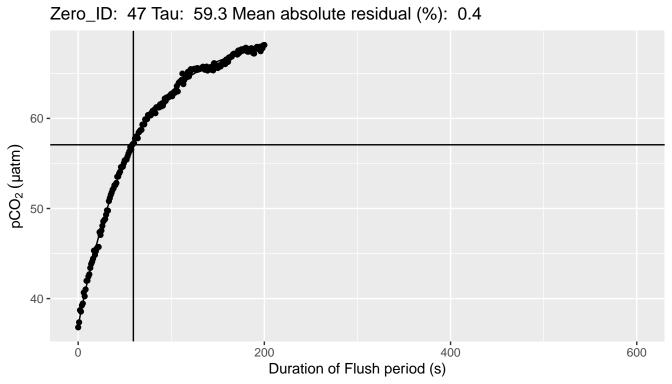


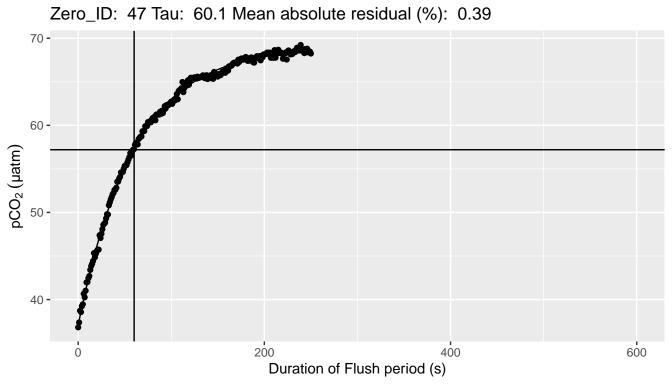


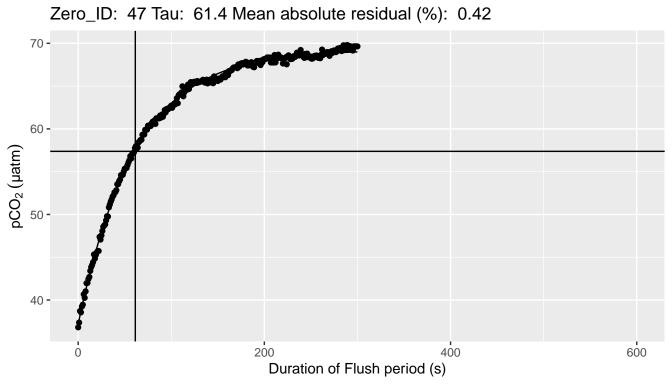


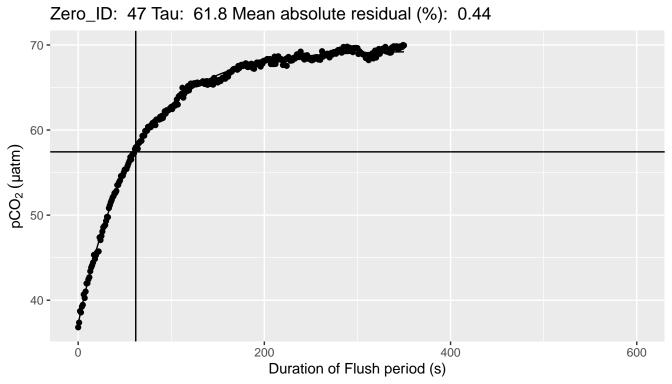


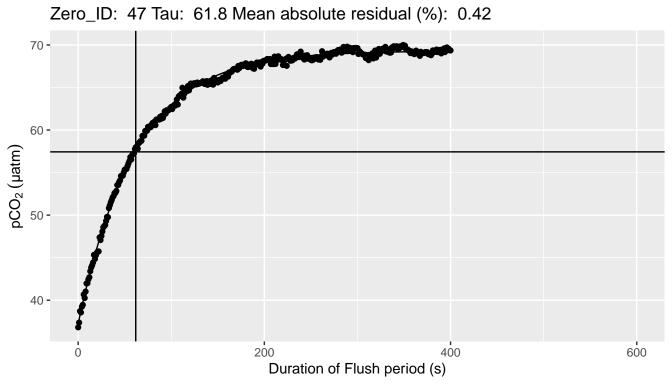


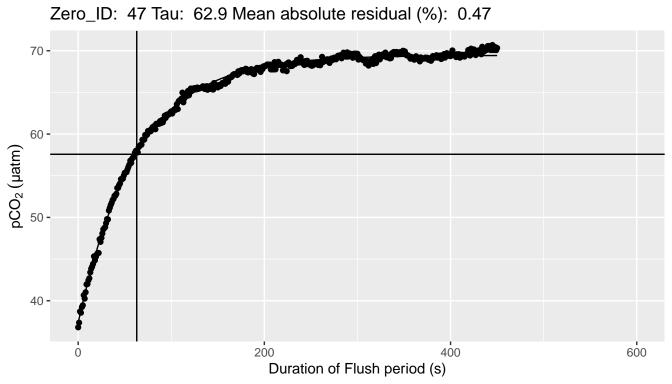


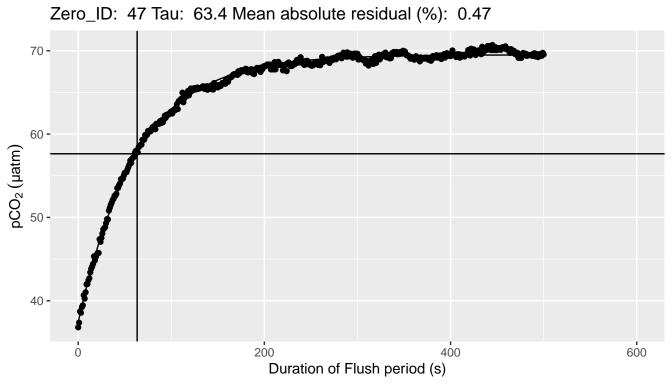


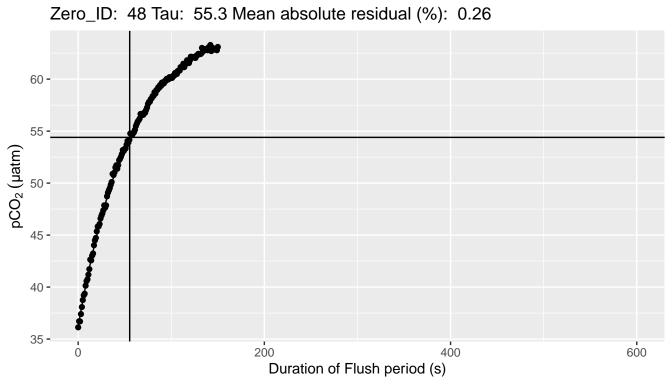


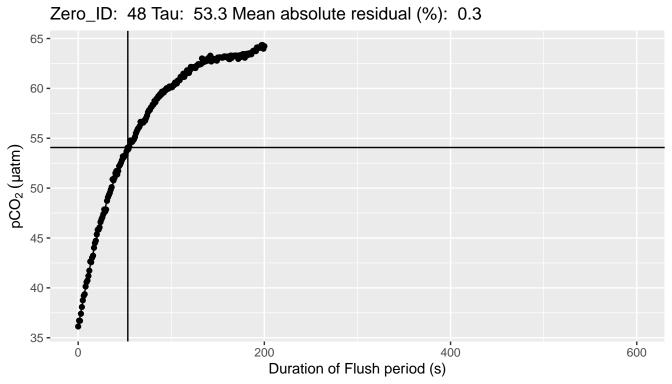


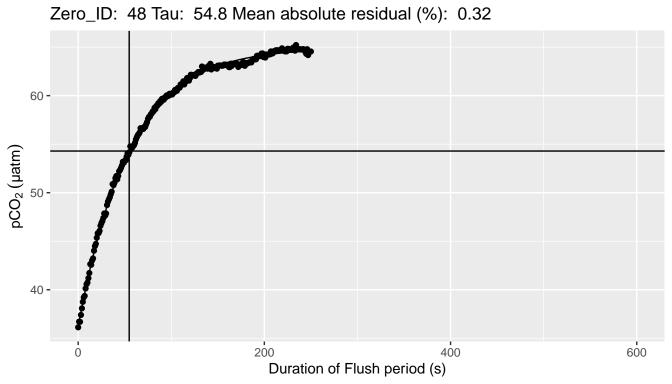


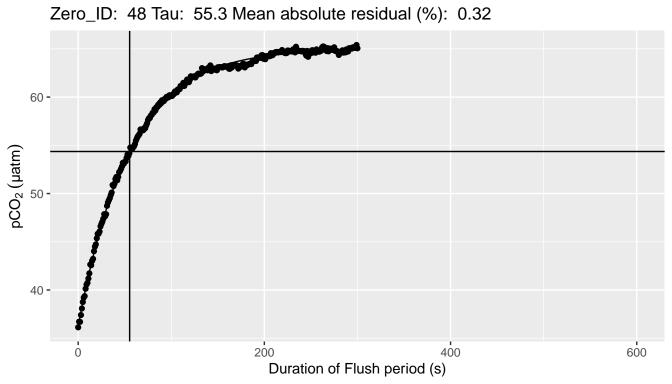


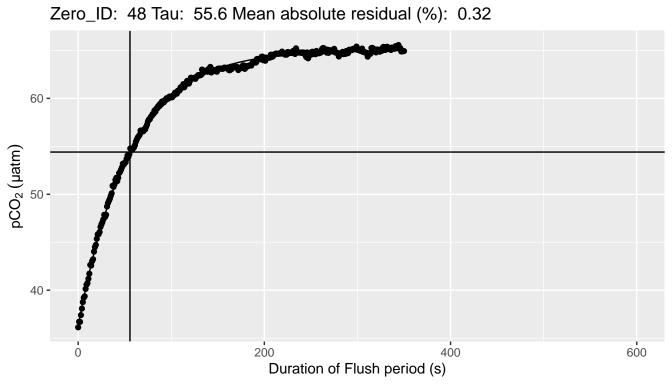


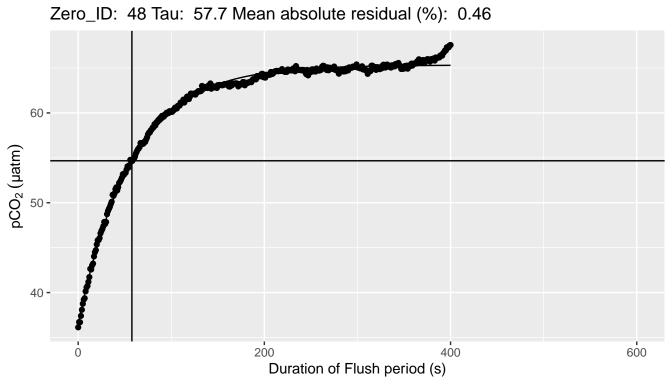


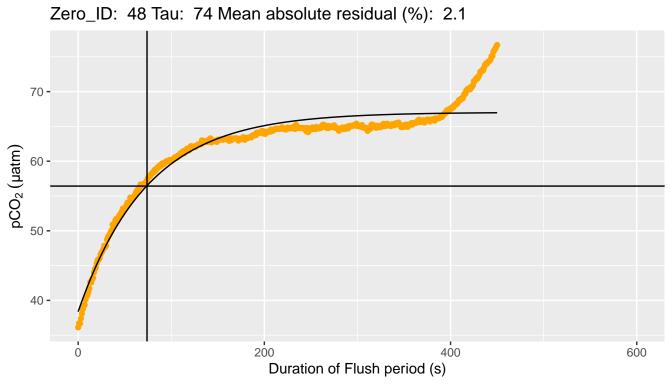


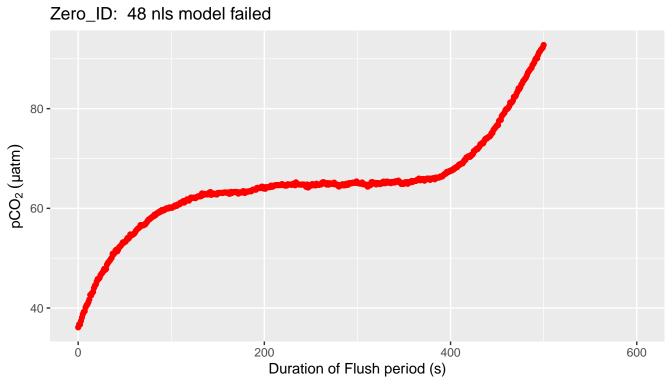




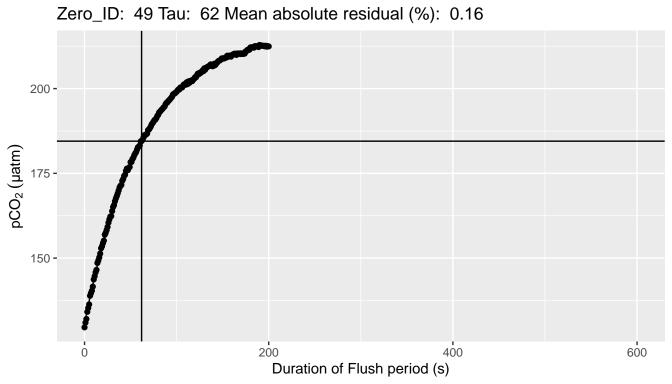


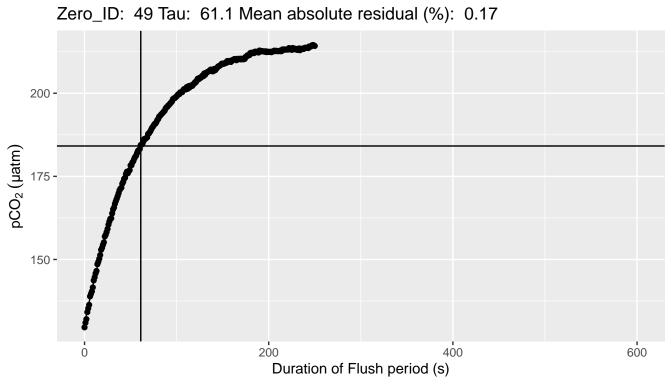


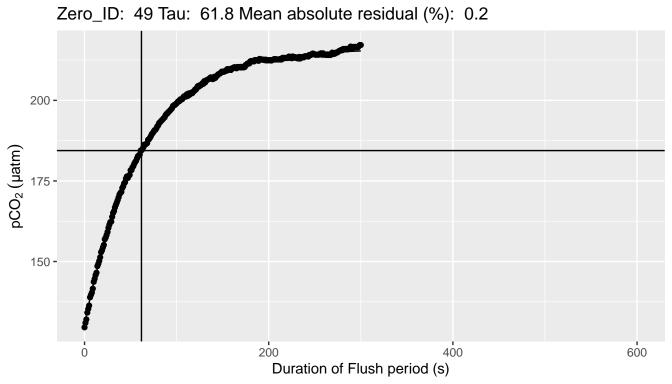




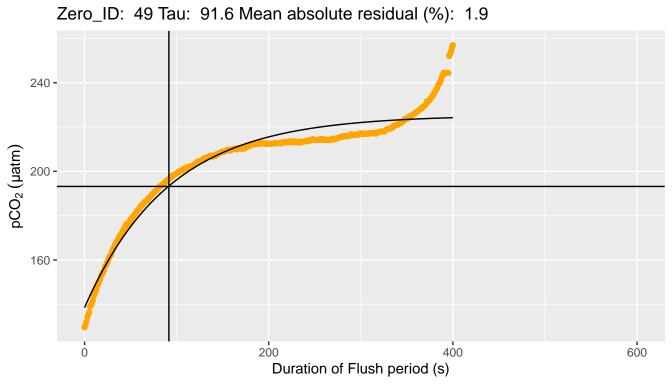
Zero\_ID: 49 Tau: 60.7 Mean absolute residual (%): 0.17 210 -190  $pCO_2 (\mu atm)$ 170 -150 -130 -200 400 600 Duration of Flush period (s)



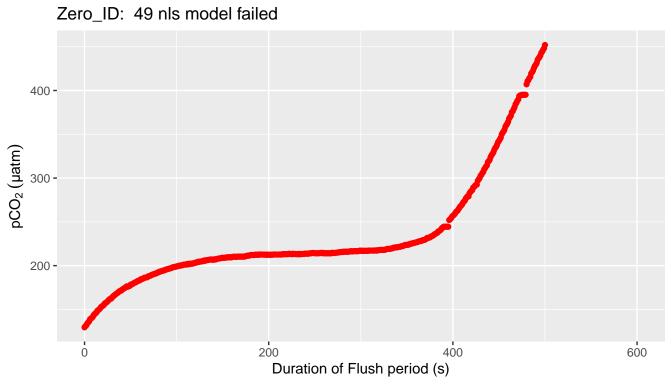


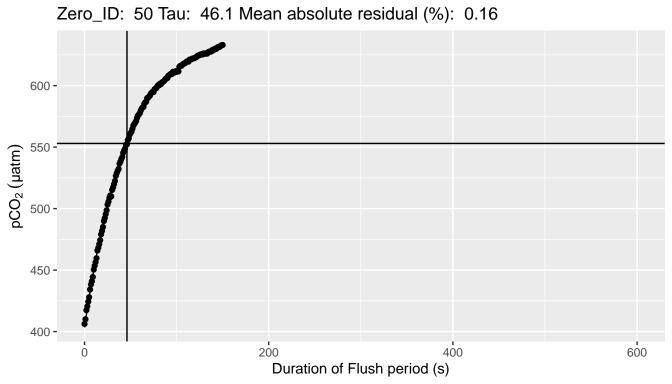


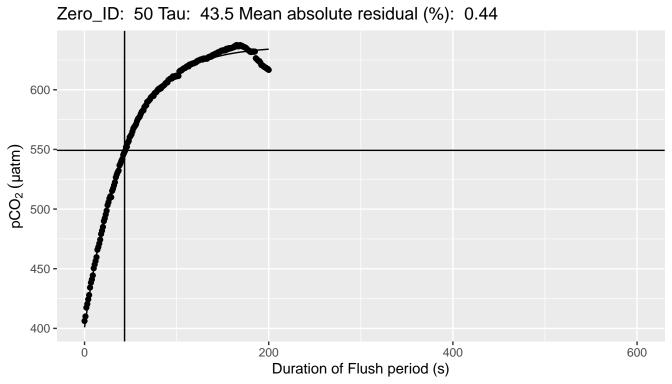
Zero\_ID: 49 Tau: 65.7 Mean absolute residual (%): 0.42 225 -200 pCO<sub>2</sub> (µatm) 150 **-**125 **-**200 400 600 Duration of Flush period (s)

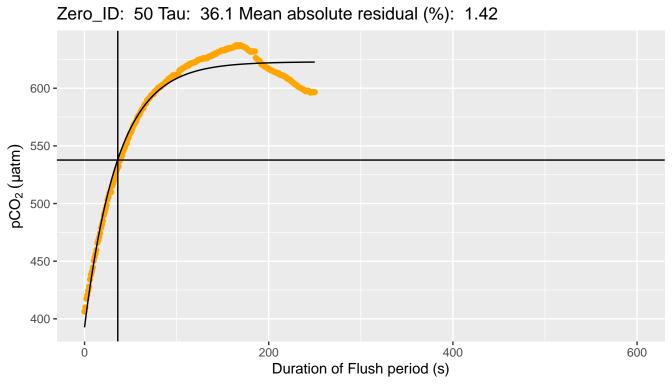


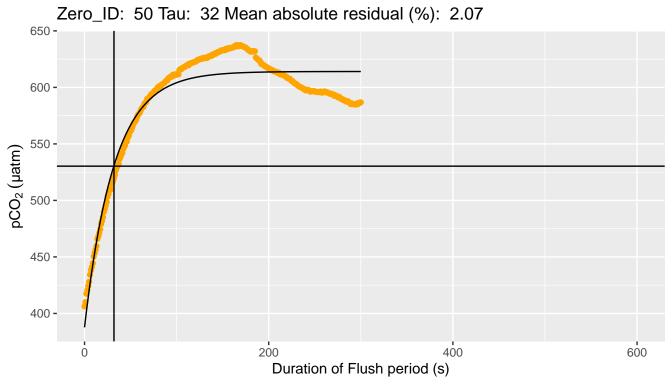
Zero\_ID: 49 nls model failed 350 **-**300 pCO<sub>2</sub> (µatm) 200 -150 -400 600 200 Duration of Flush period (s)

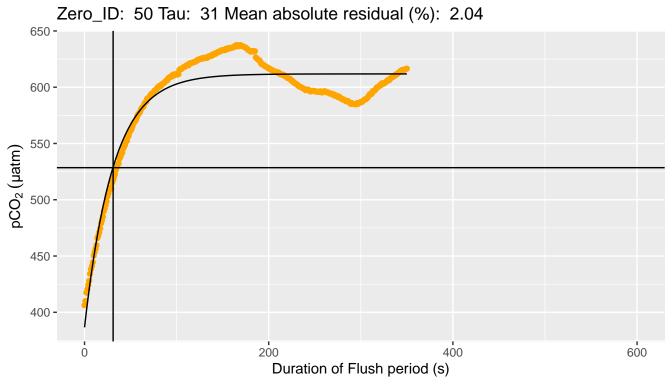


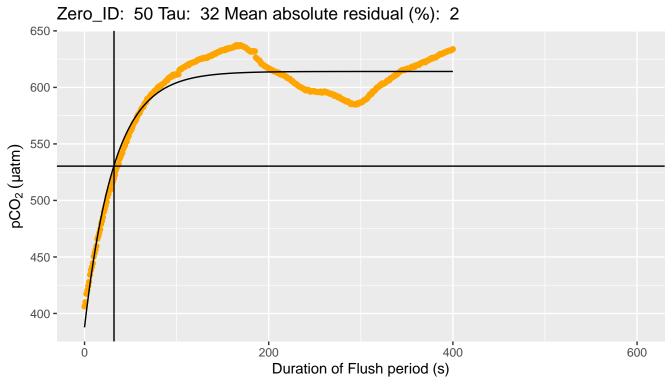


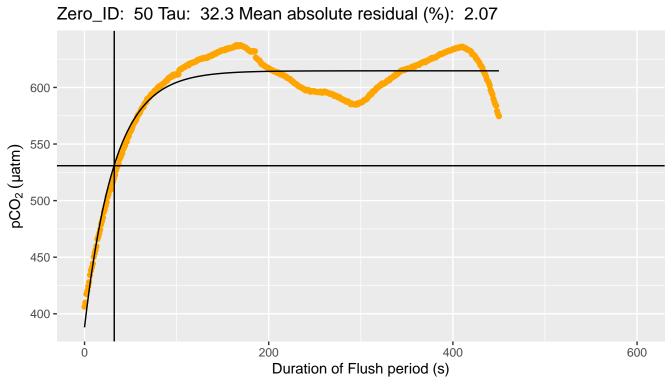


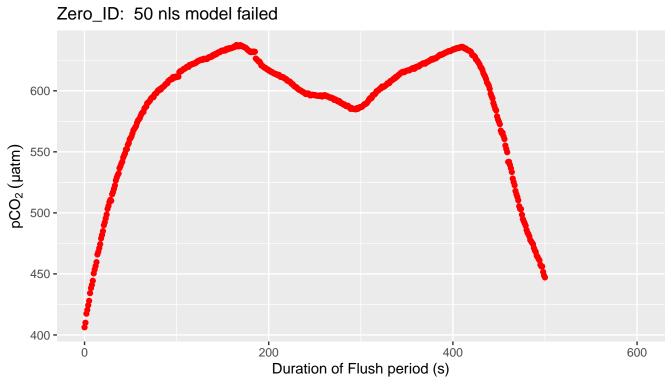


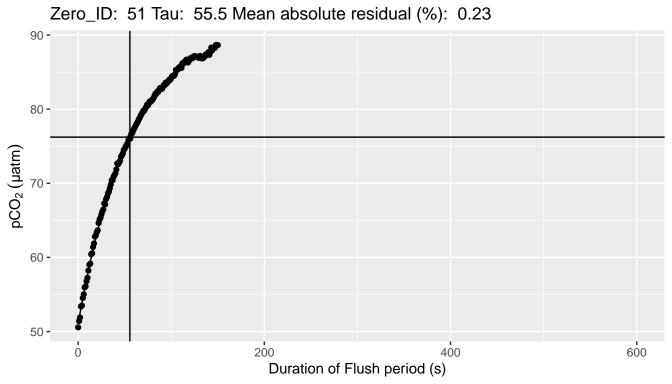


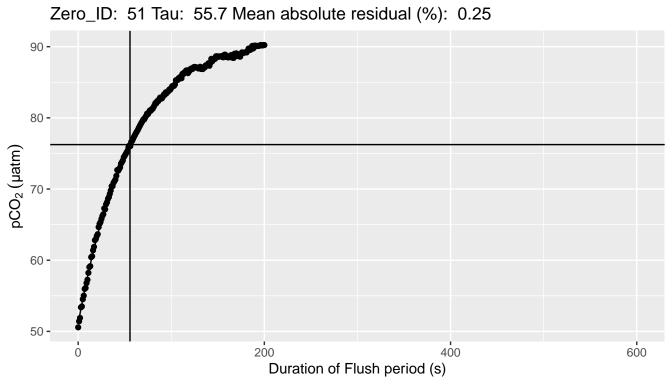


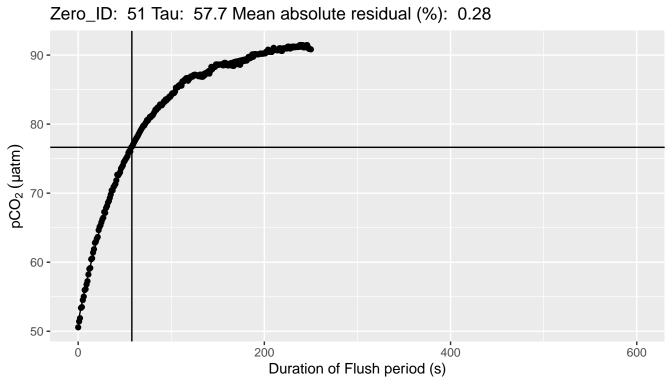




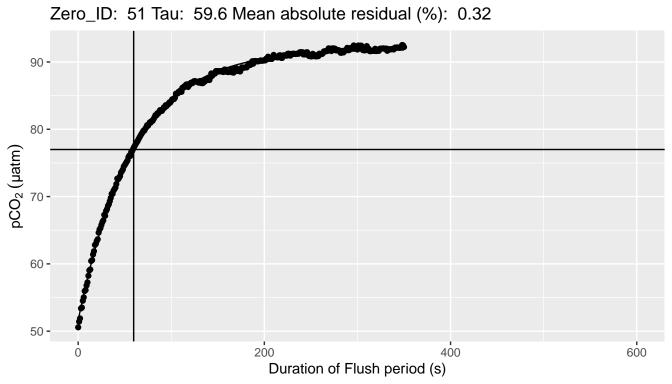


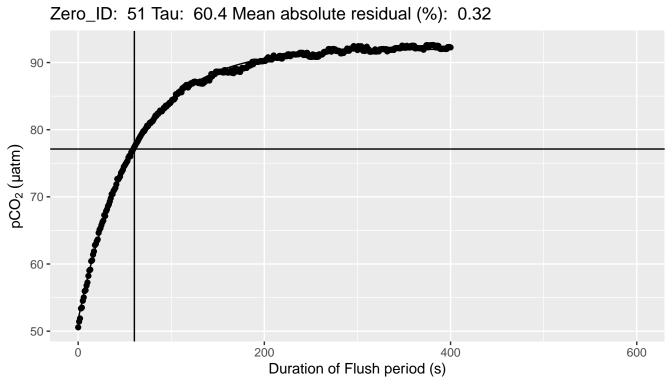




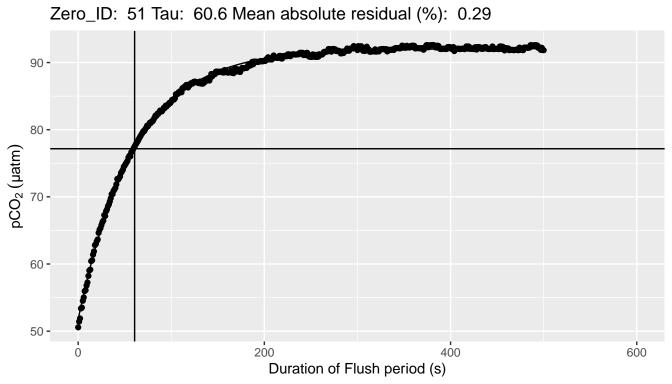


Zero\_ID: 51 Tau: 58.8 Mean absolute residual (%): 0.31 90 -80 pCO<sub>2</sub> (µatm) 60 -50 -200 600 400 Duration of Flush period (s)

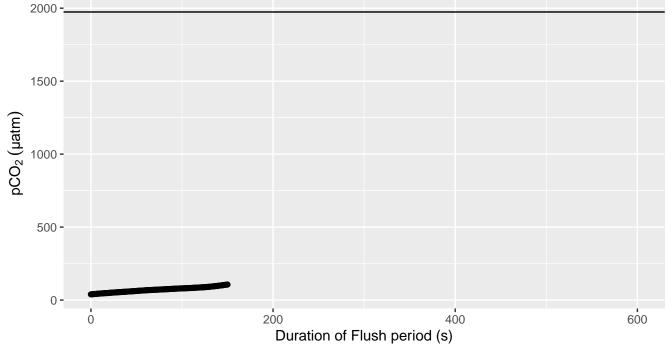


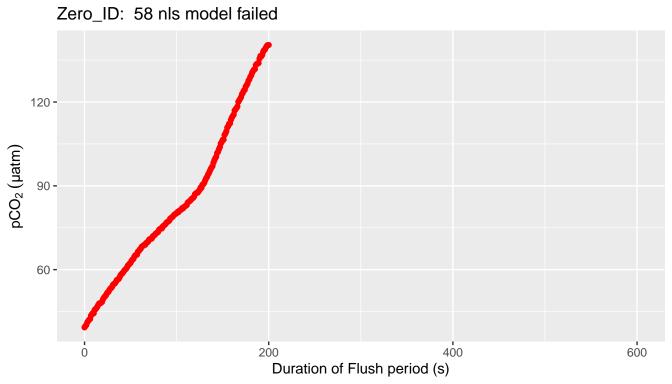


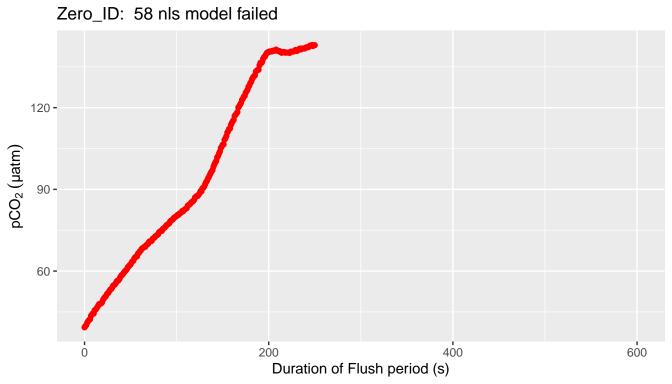
Zero\_ID: 51 Tau: 60.5 Mean absolute residual (%): 0.3 90 -80  $pCO_2$  (µatm) 60 **-**50 -200 600 400 Duration of Flush period (s)

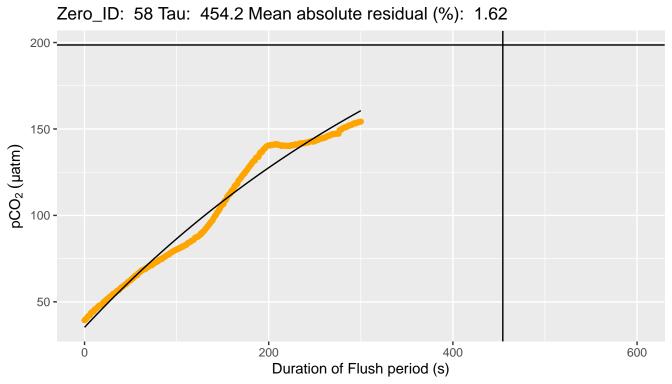


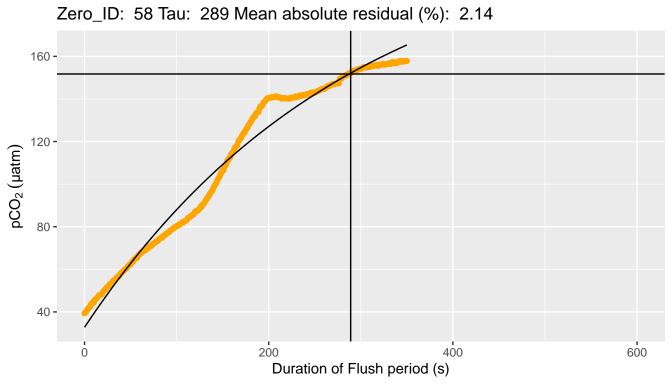
Zero\_ID: 58 Tau: 7676.1 Mean absolute residual (%): 0.04

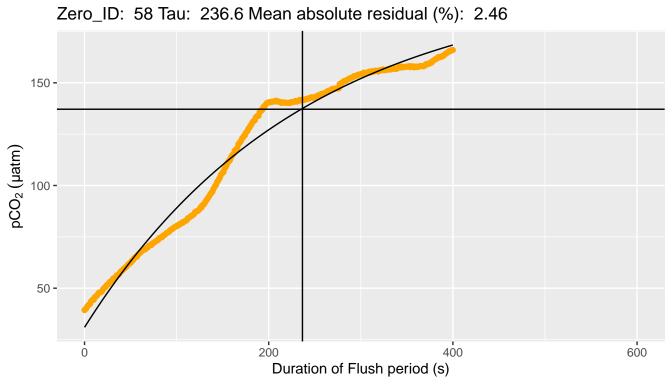


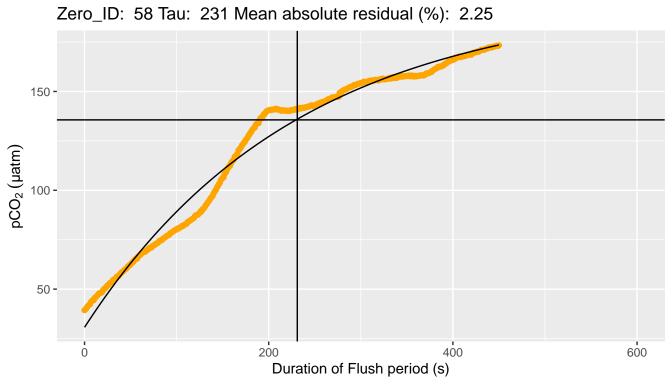


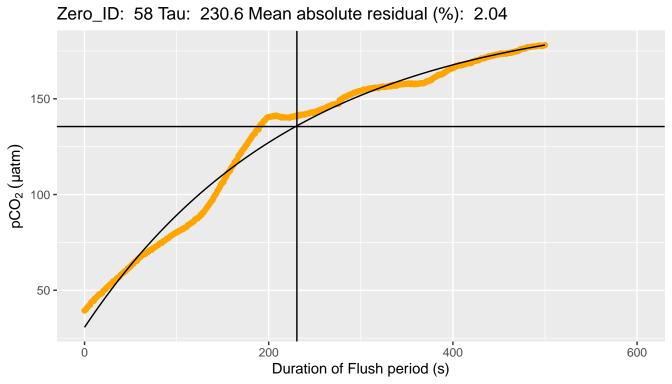


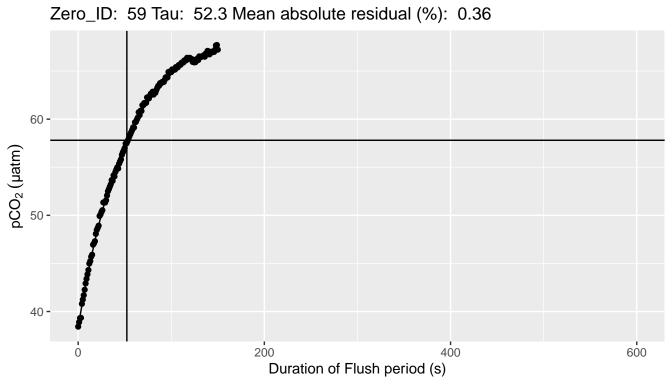


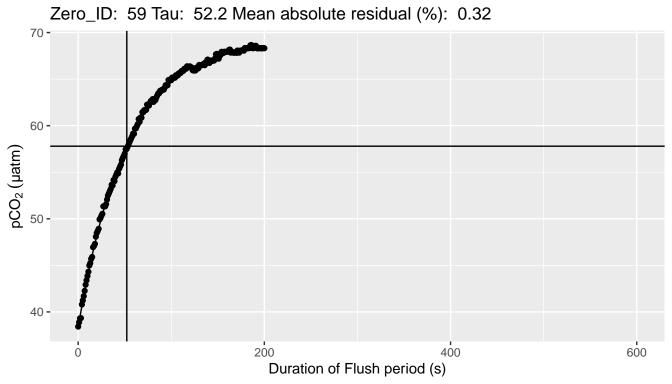


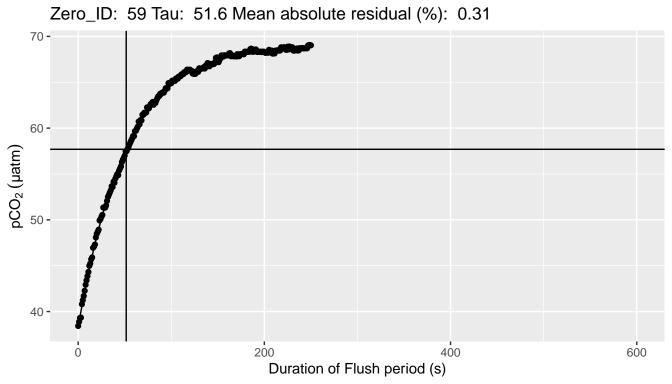


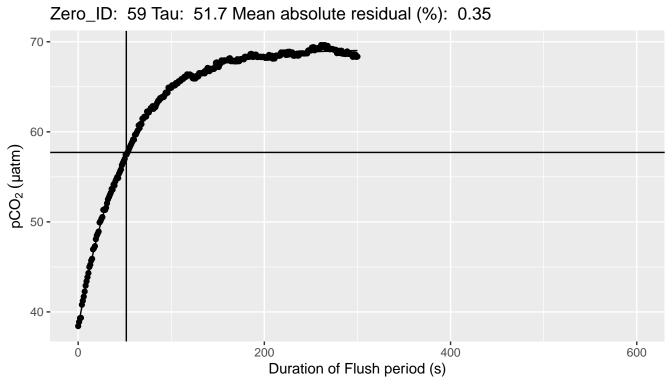


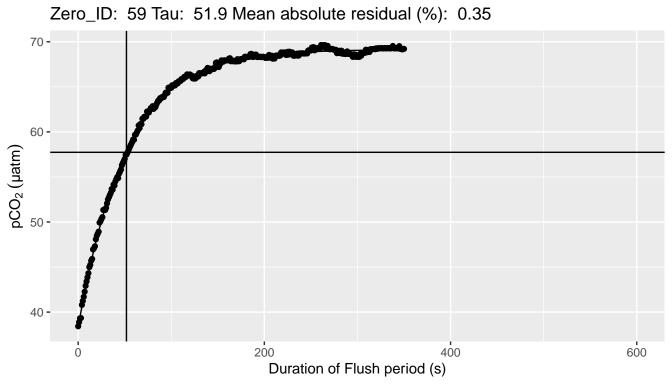


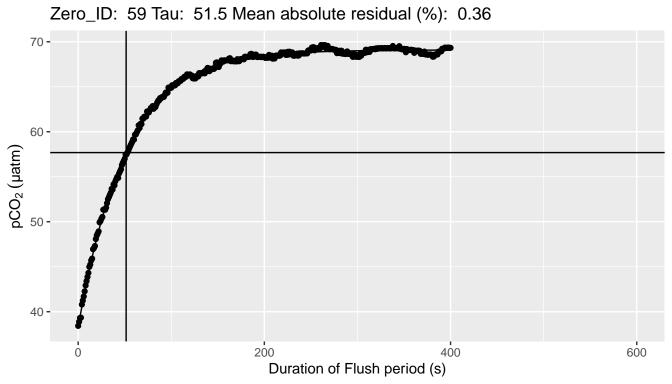


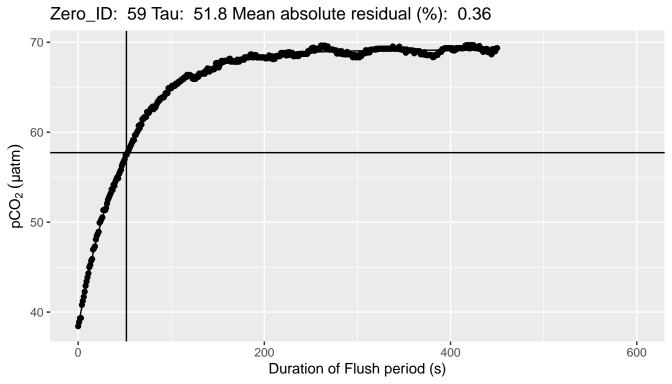


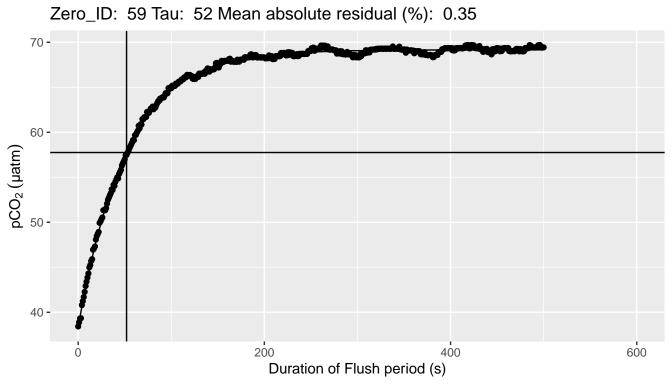


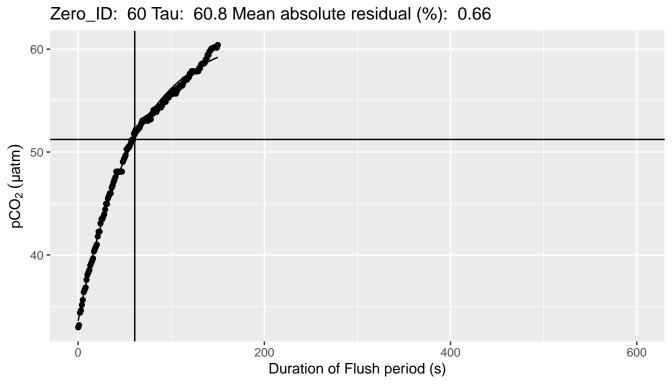


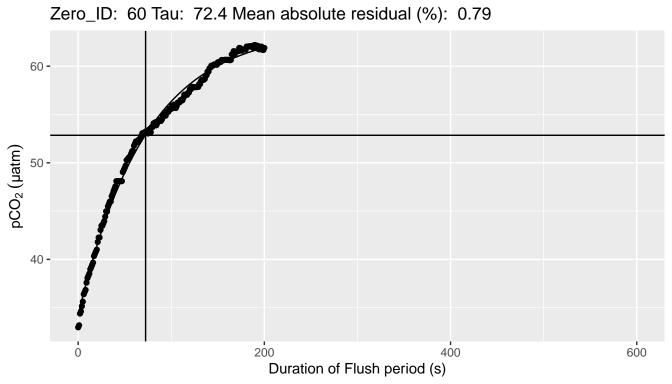


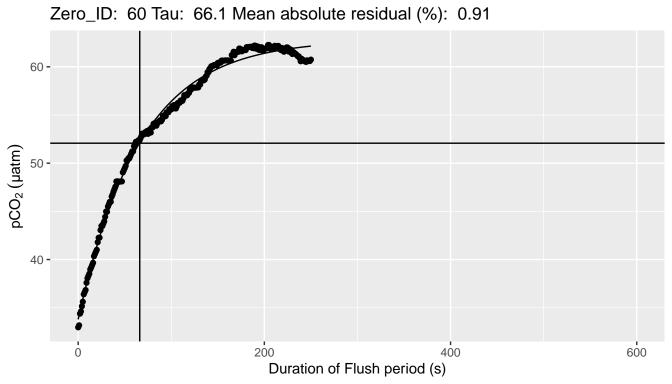


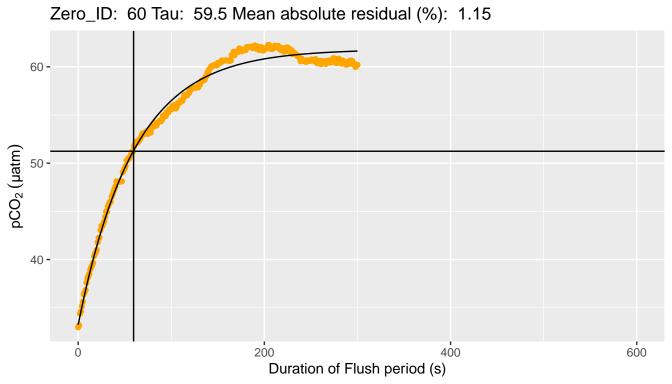


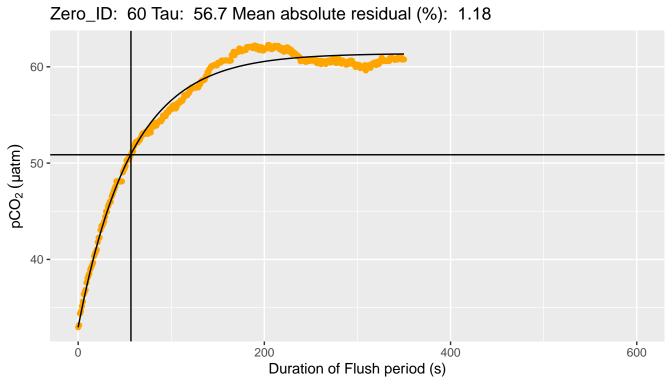


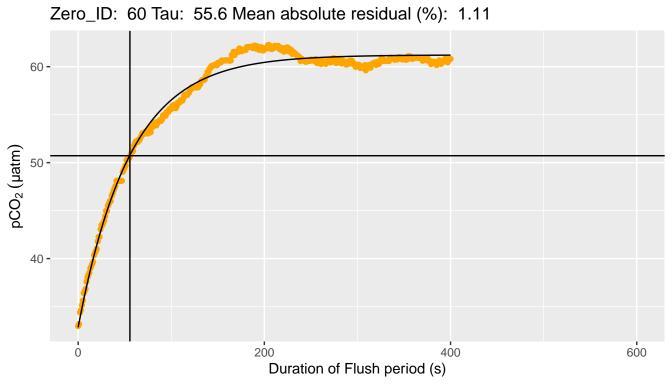


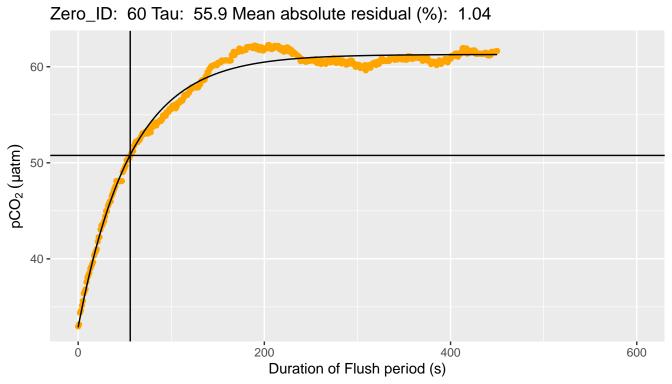


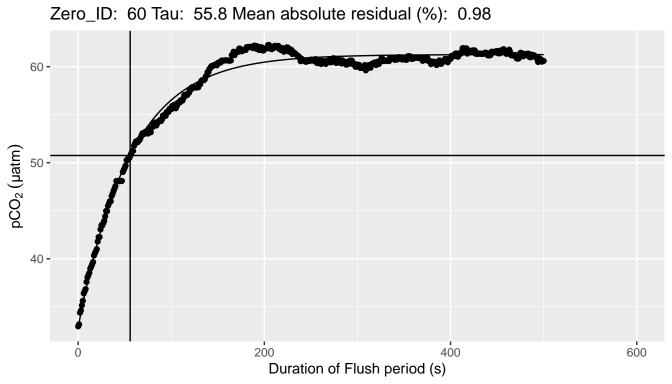


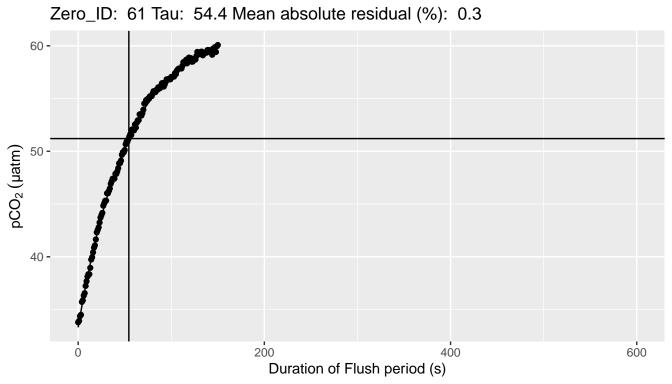


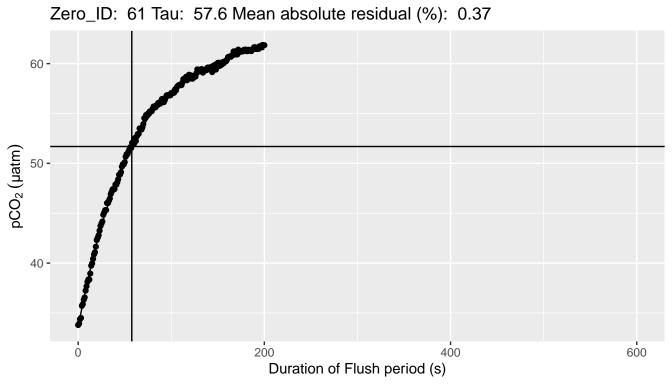


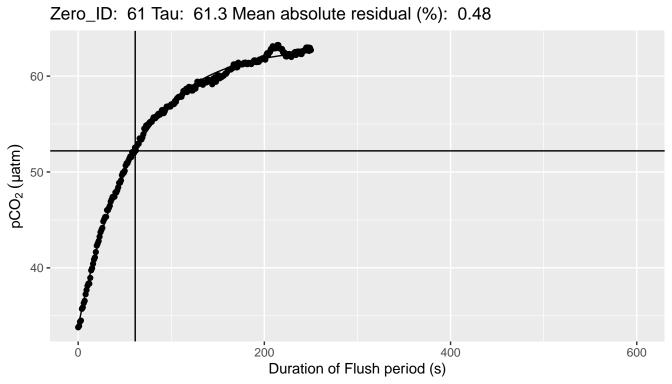


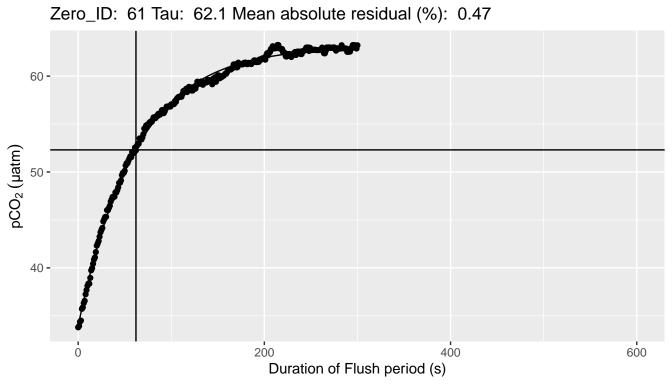


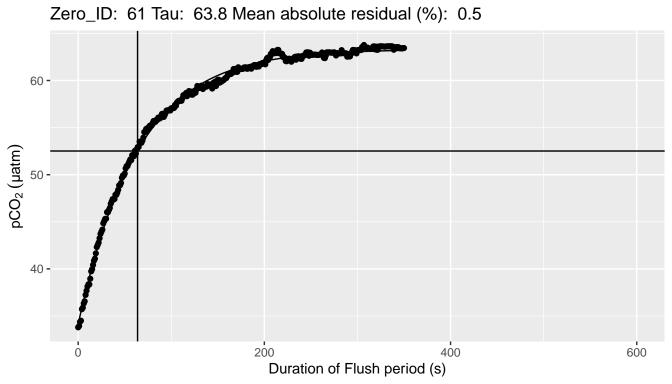


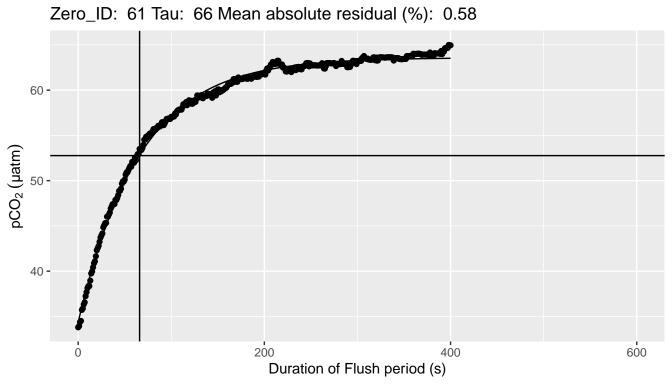




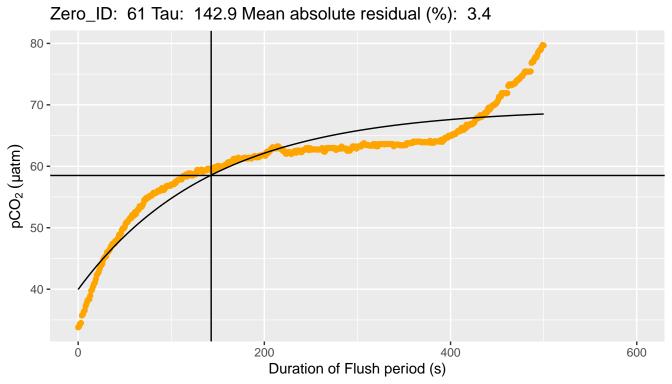


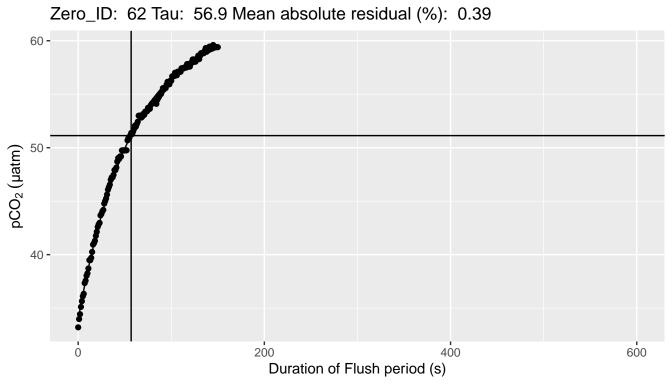


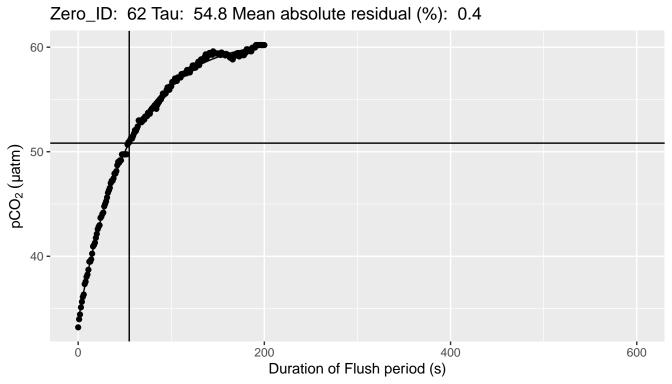


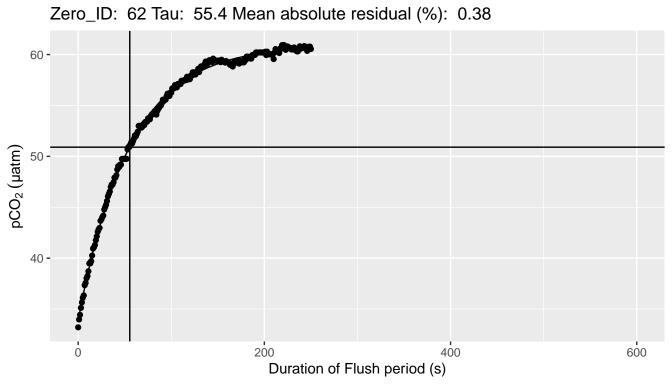


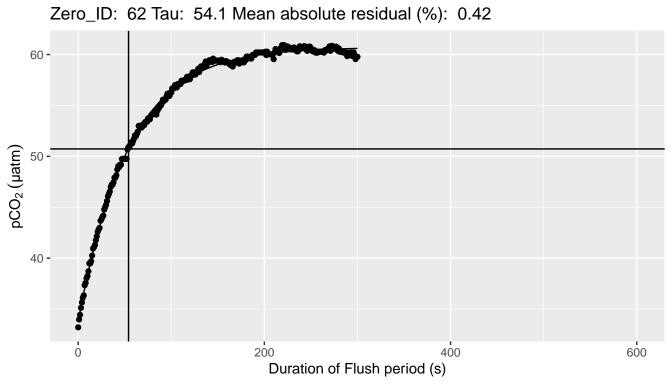
Zero\_ID: 61 Tau: 77.1 Mean absolute residual (%): 1.44 70 -60  $pCO_2 (\mu atm)$ 40 -200 400 600 Duration of Flush period (s)

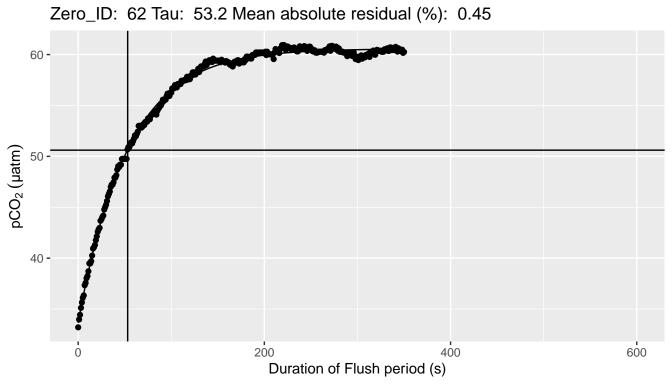


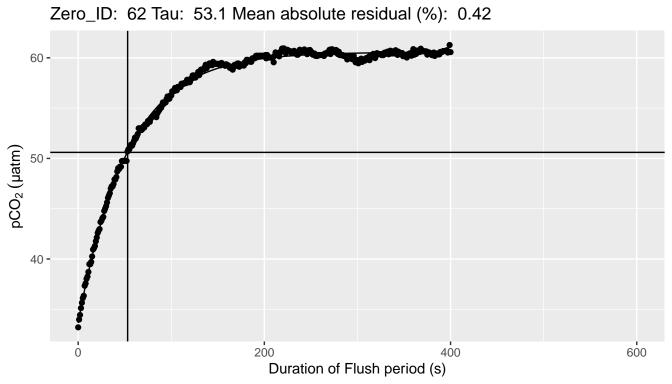


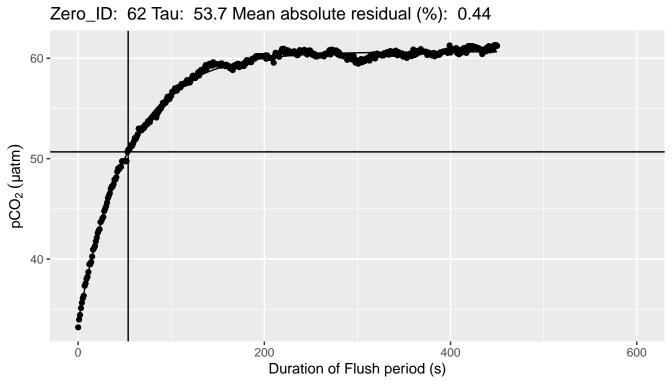


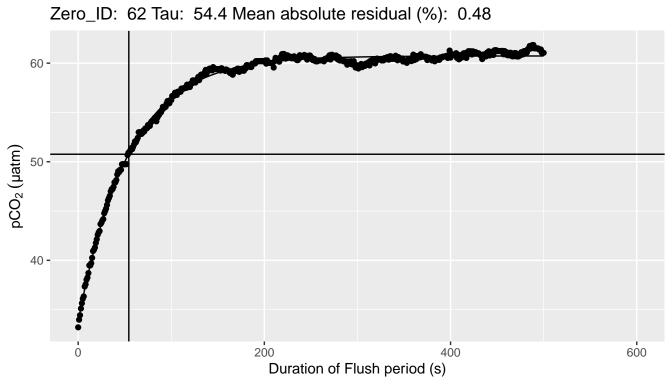




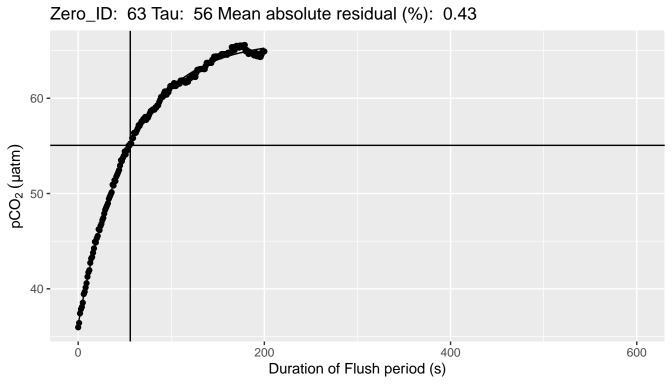


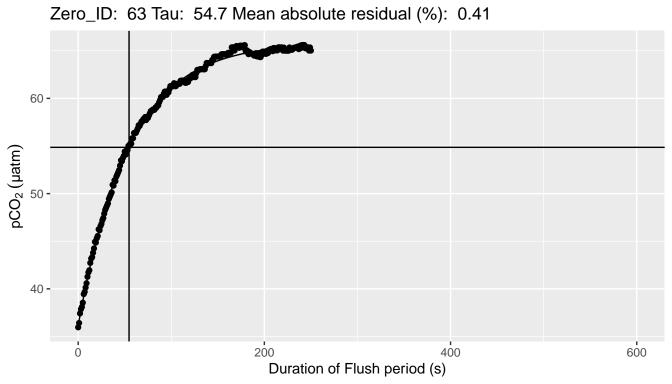


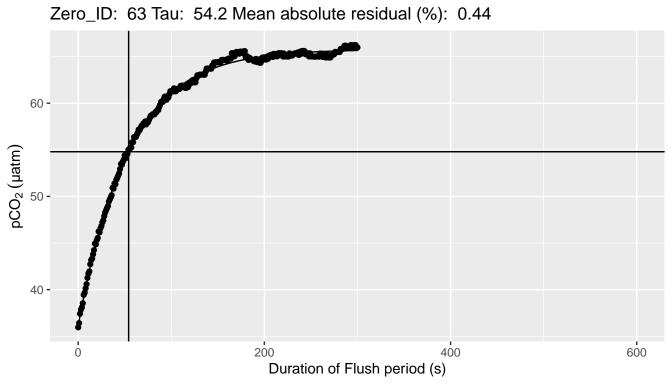


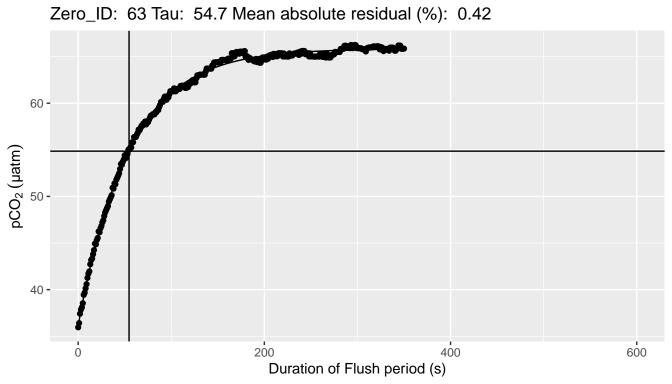


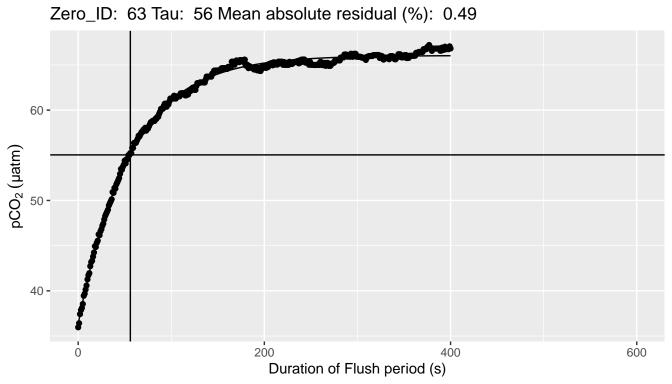
Zero\_ID: 63 Tau: 54.5 Mean absolute residual (%): 0.32 65 **-**60 -55 pCO<sub>2</sub> (µatm) 45 -40 -35 -200 600 400 Duration of Flush period (s)

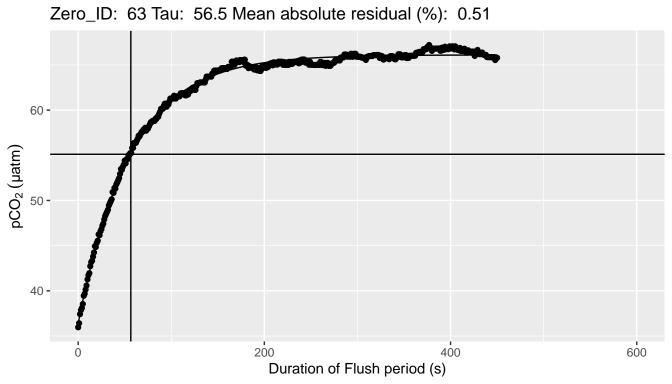


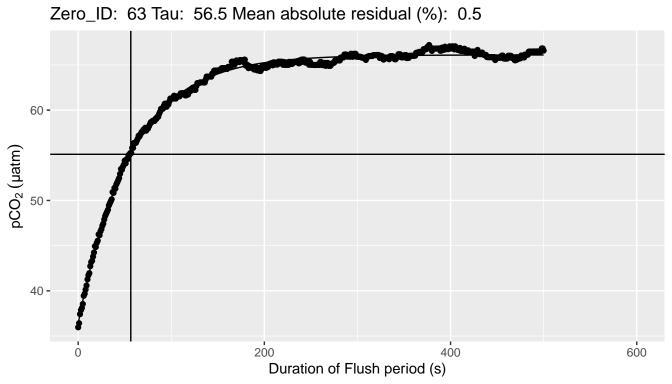


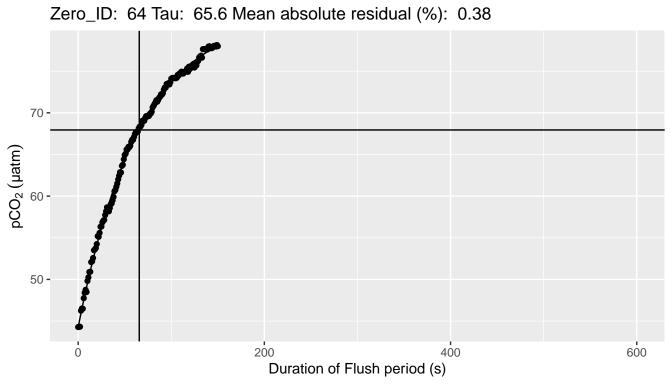


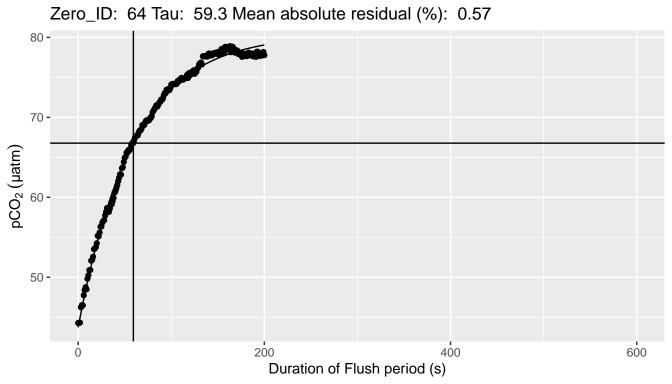


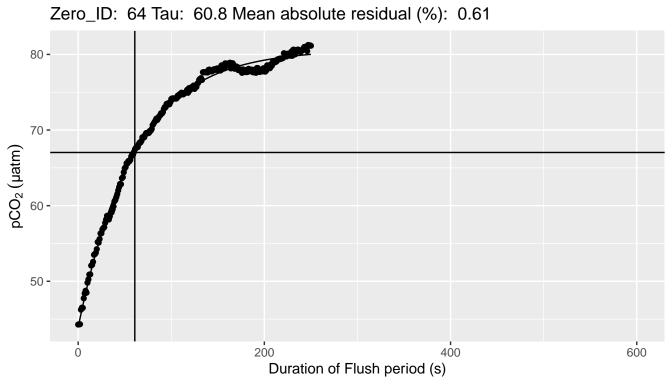




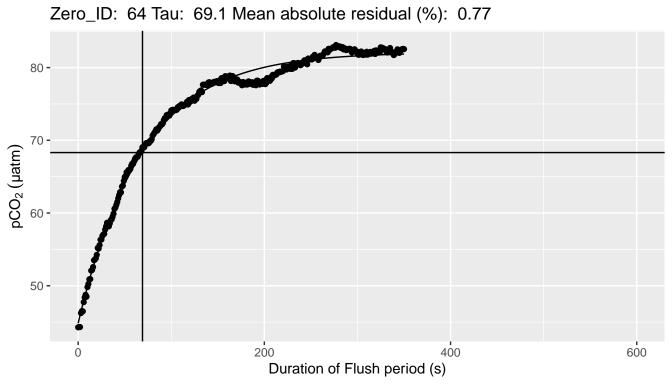


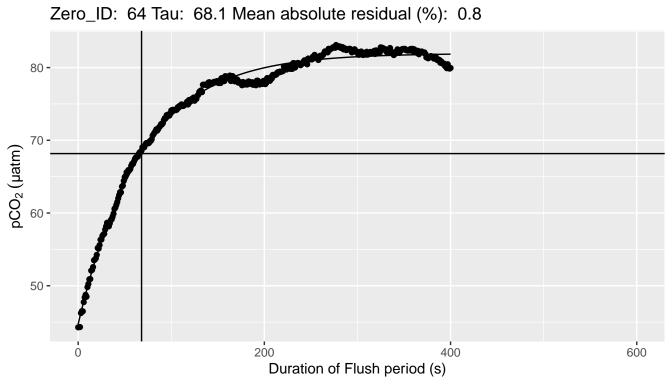


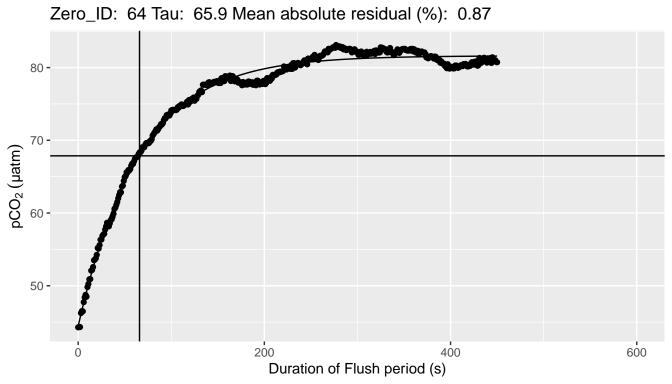


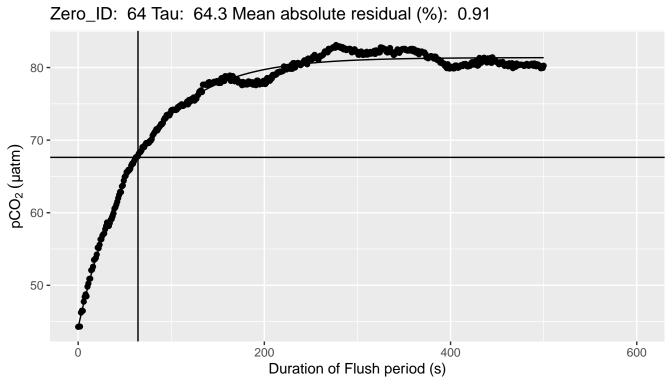


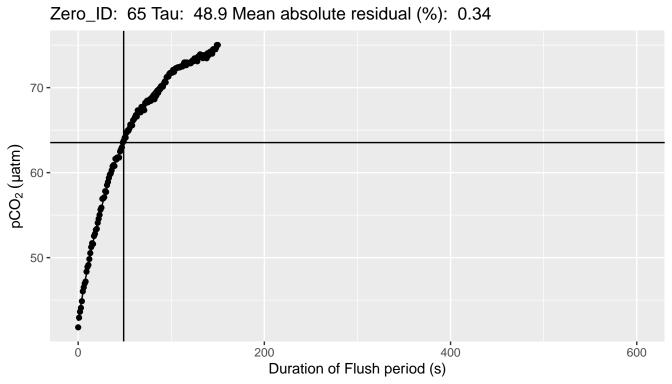
Zero\_ID: 64 Tau: 67.2 Mean absolute residual (%): 0.8 80 -70 pCO<sub>2</sub> (µatm) 50 -200 400 600 Duration of Flush period (s)

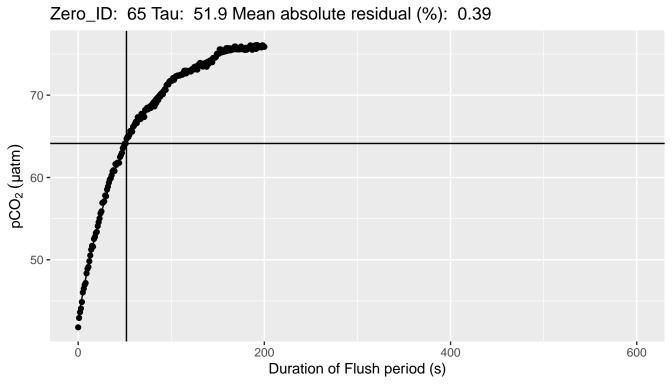


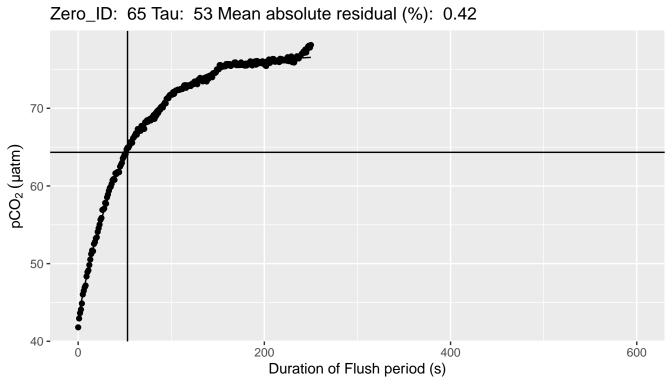


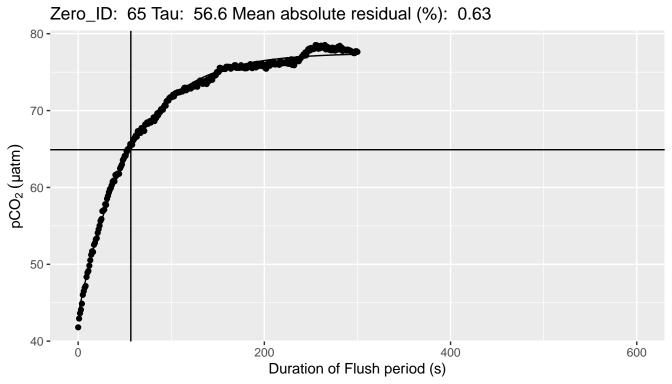


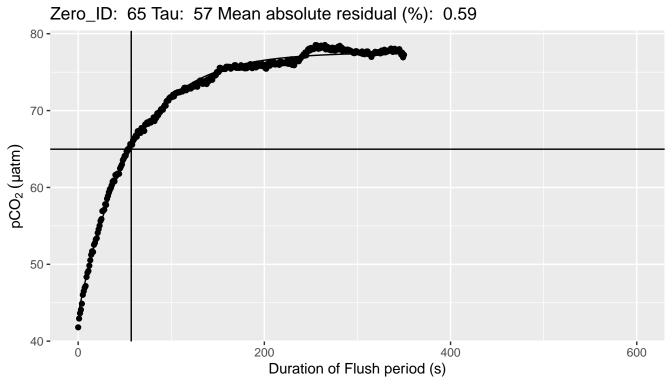


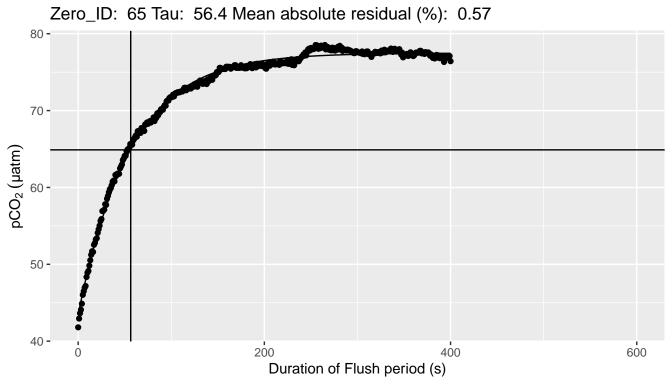


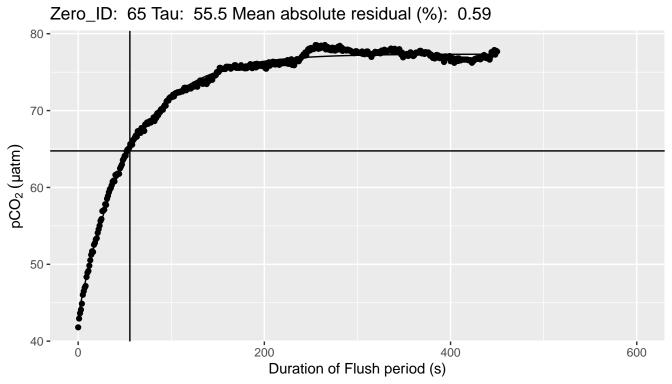


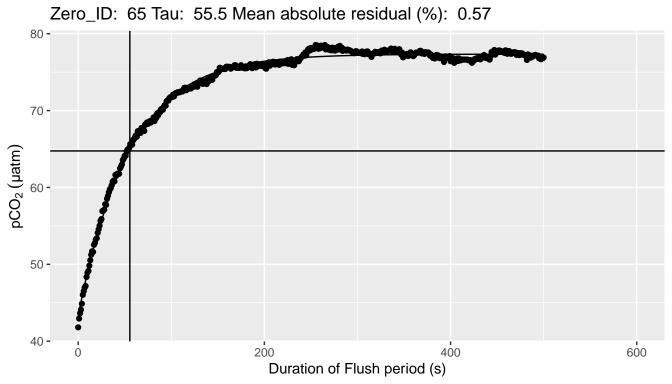




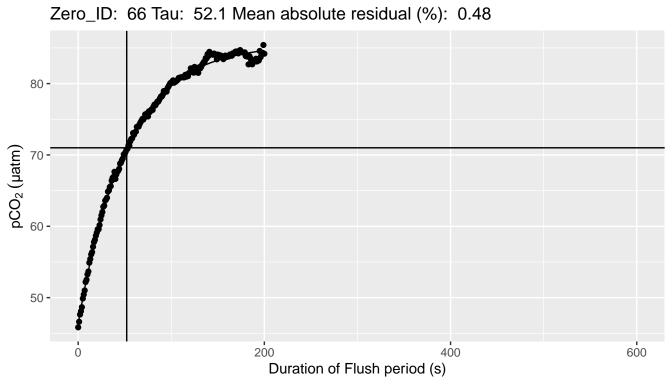


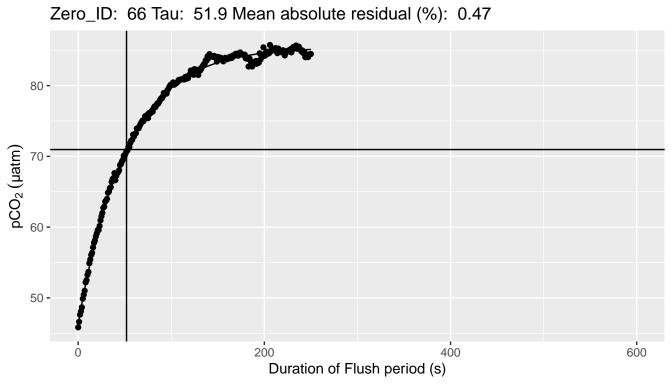


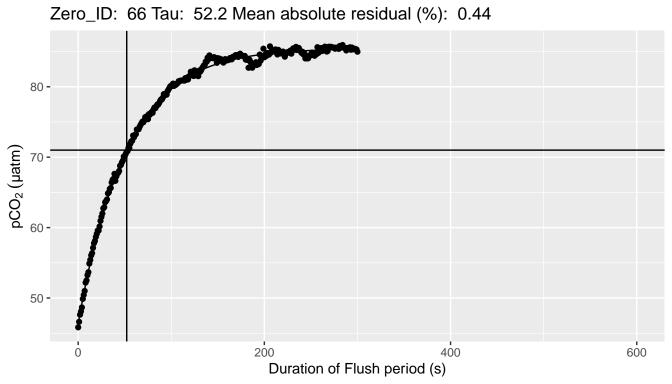


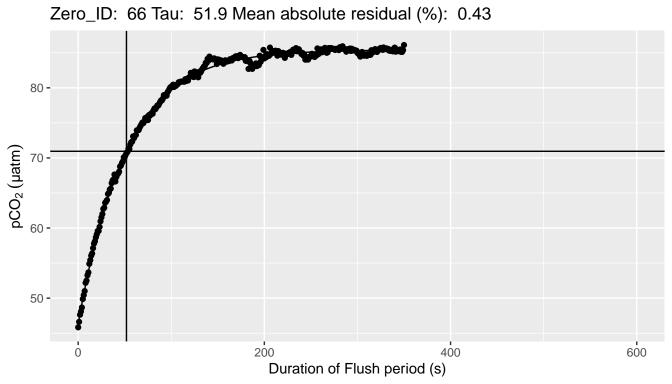


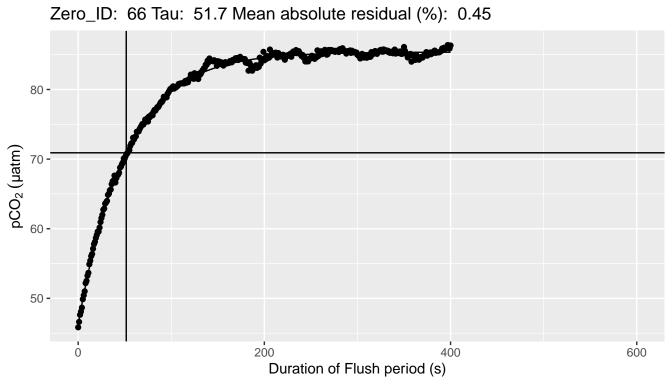
Zero\_ID: 66 Tau: 54.9 Mean absolute residual (%): 0.4 80 pCO<sub>2</sub> (µatm) 50 -200 400 600 Duration of Flush period (s)

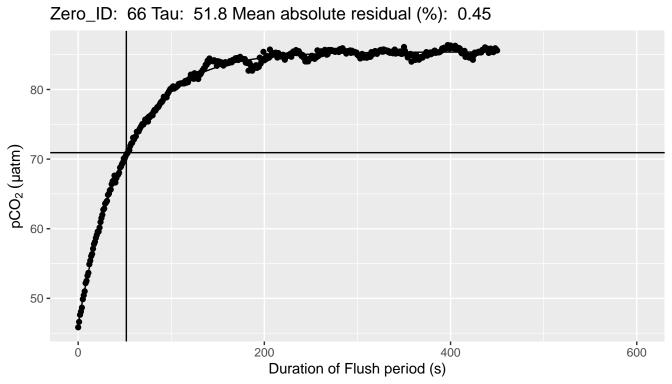


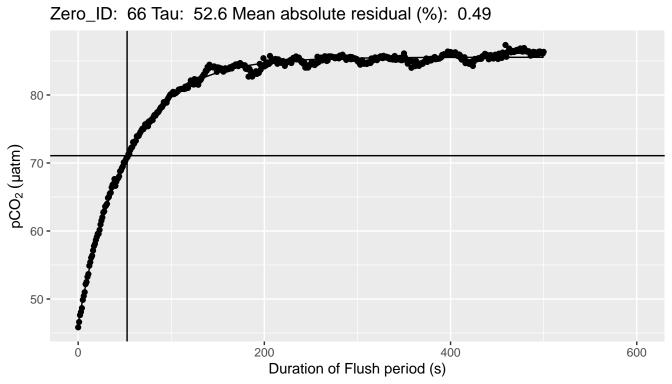






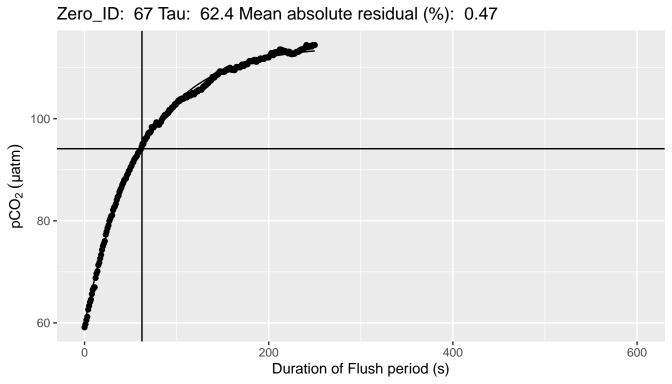


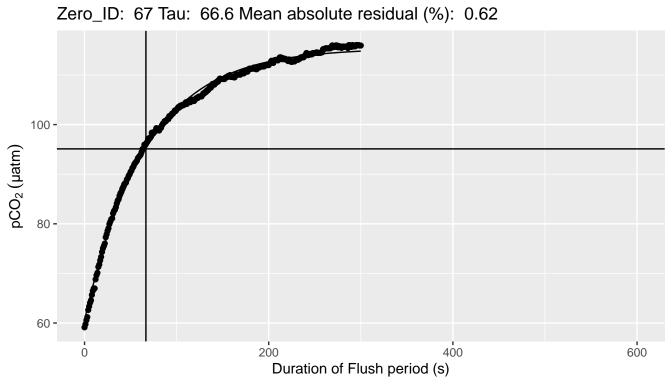


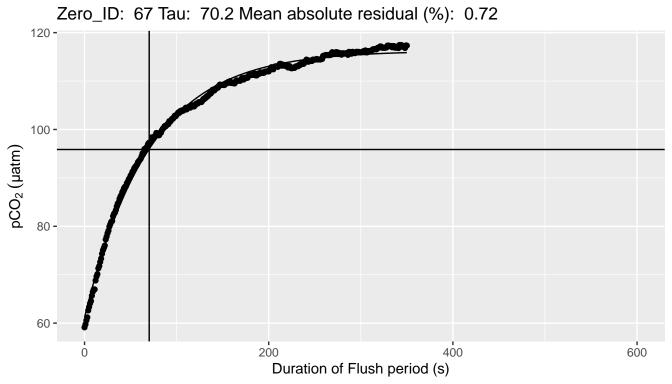


Zero\_ID: 67 Tau: 54.5 Mean absolute residual (%): 0.3 110 -100 pCO<sub>2</sub> (µatm) 90 -70 -60 -200 400 600 Duration of Flush period (s)

Zero\_ID: 67 Tau: 58.8 Mean absolute residual (%): 0.4 110 -100 pCO<sub>2</sub> (µatm) 90 -80 -70 -60 -200 400 600 Duration of Flush period (s)



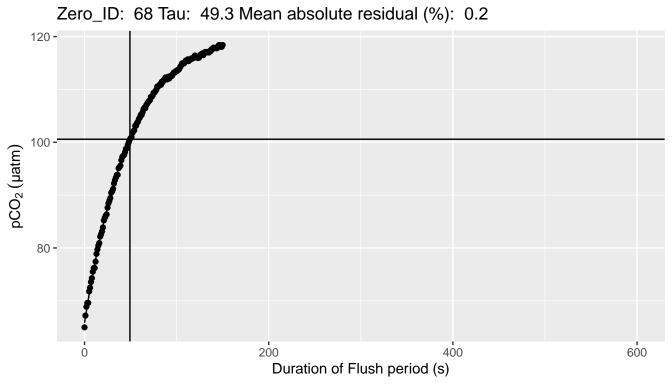


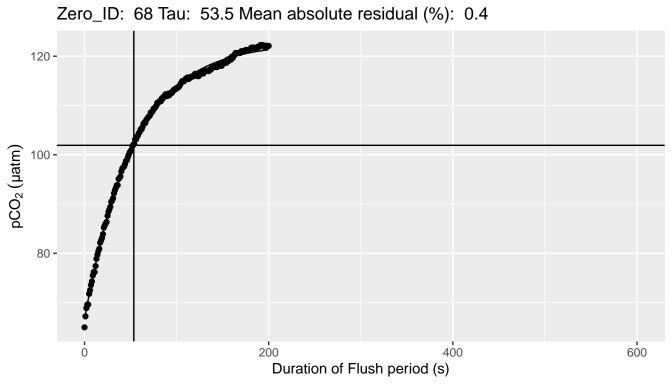


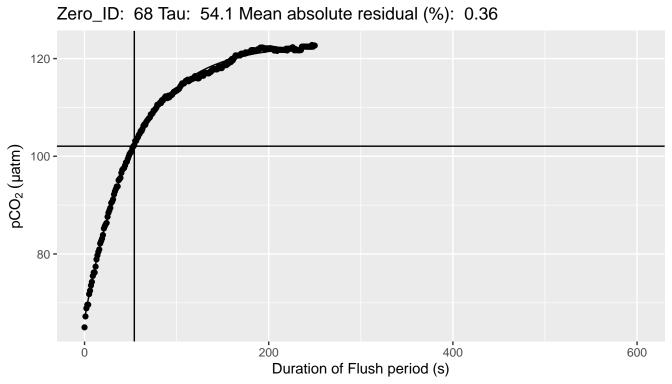
Zero\_ID: 67 Tau: 73.7 Mean absolute residual (%): 0.77 120 -100 pCO<sub>2</sub> (µatm) 80 -60 -200 400 600 Duration of Flush period (s)

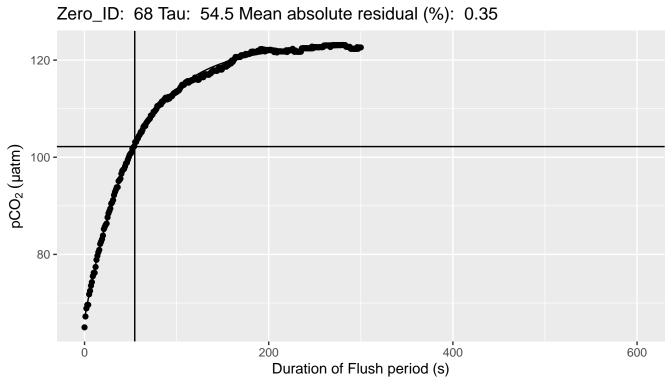
Zero\_ID: 67 Tau: 76.5 Mean absolute residual (%): 0.82 120 -100 pCO<sub>2</sub> (µatm) 80 -60 -200 400 600 Duration of Flush period (s)

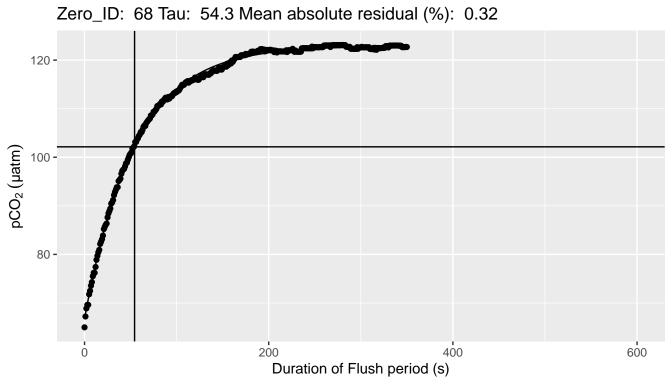
Zero\_ID: 67 Tau: 77.6 Mean absolute residual (%): 0.79 120 -100 pCO<sub>2</sub> (µatm) 80 -60 -200 400 600 Duration of Flush period (s)

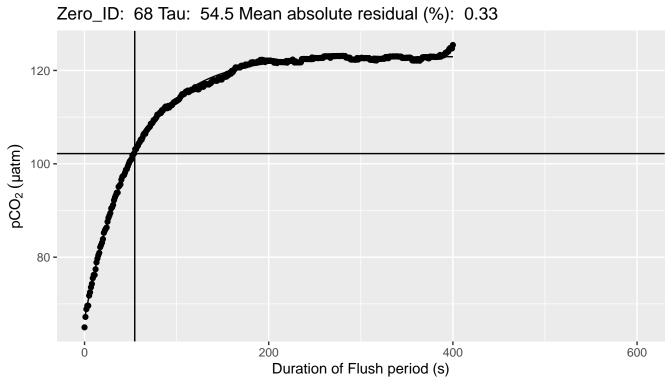


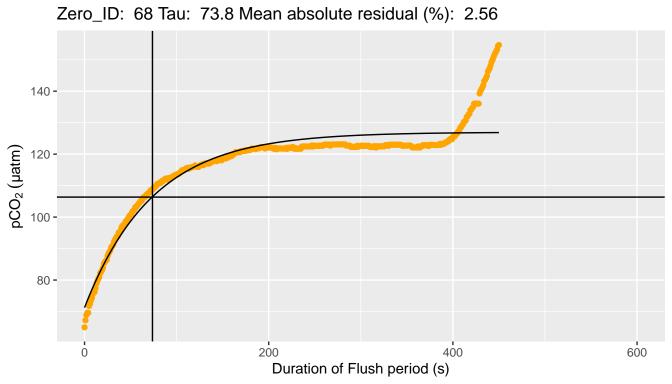






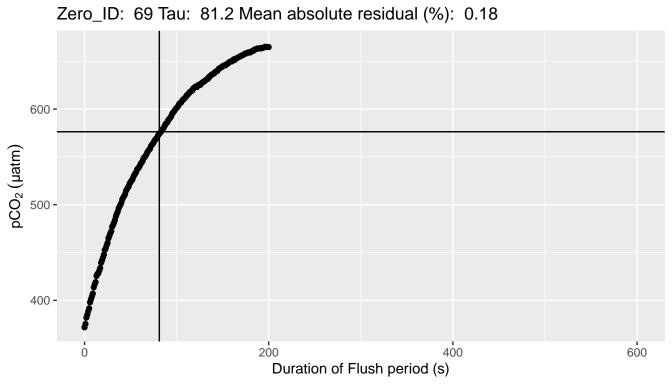


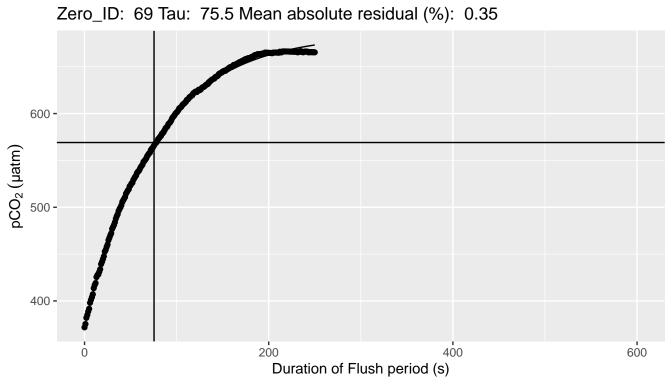


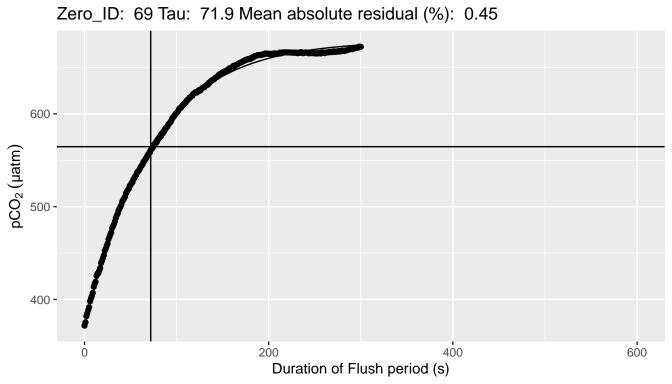


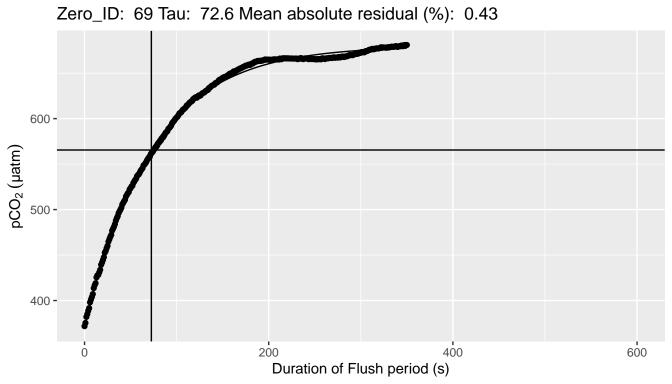
Zero\_ID: 68 nls model failed 180 **-**150 pCO<sub>2</sub> (µatm) 90 -60 -200 400 600 Duration of Flush period (s)

Zero\_ID: 69 Tau: 80.5 Mean absolute residual (%): 0.21 650 -600 pCO<sub>2</sub> (µatm) 550 **-**450 **-**400 -200 400 600 Duration of Flush period (s)



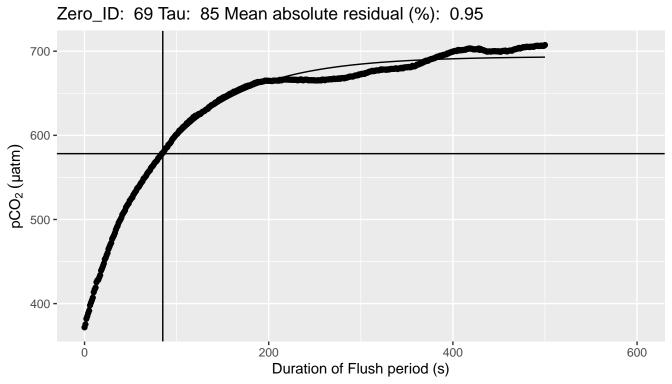


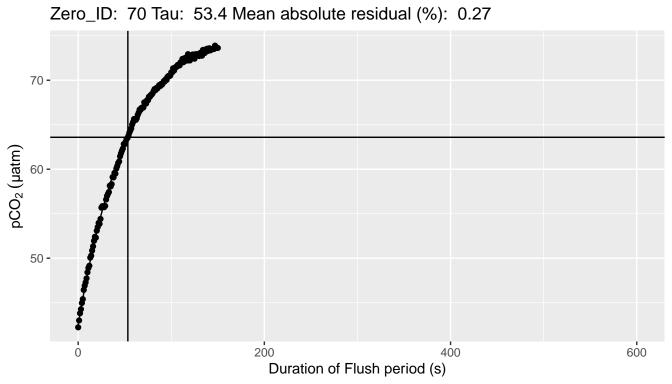


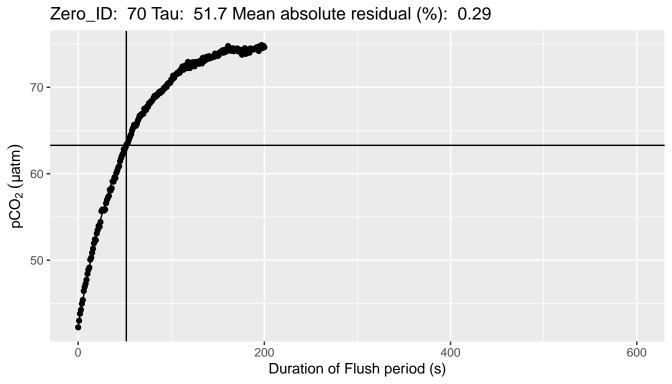


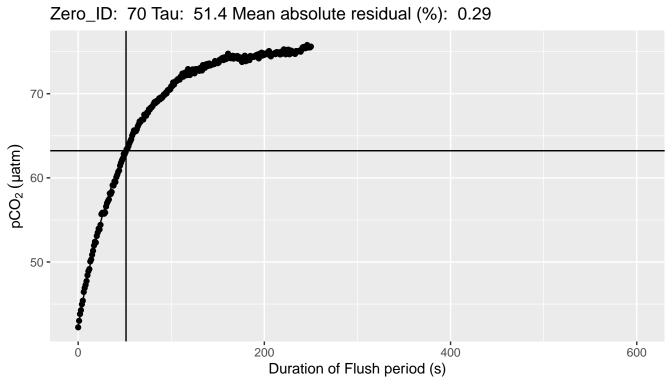
Zero\_ID: 69 Tau: 76 Mean absolute residual (%): 0.56 700 -600 pCO<sub>2</sub> (µatm) 400 -200 400 600 Duration of Flush period (s)

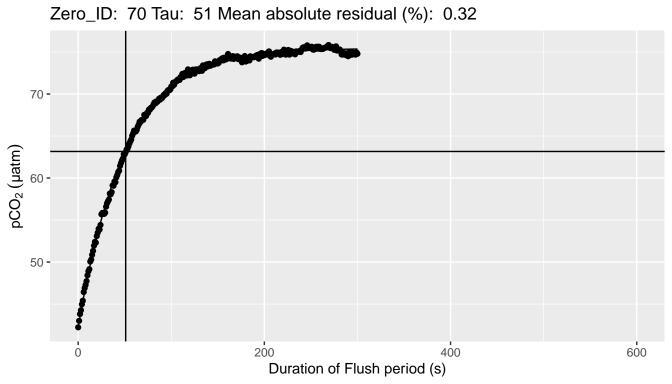
Zero\_ID: 69 Tau: 81 Mean absolute residual (%): 0.81 700 -600 pCO<sub>2</sub> (µatm) 400 -200 400 600 Duration of Flush period (s)

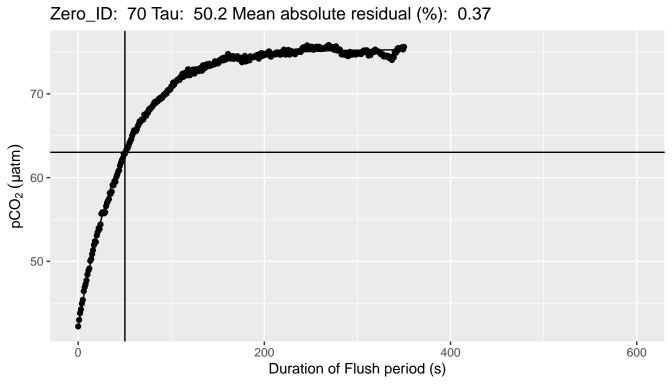


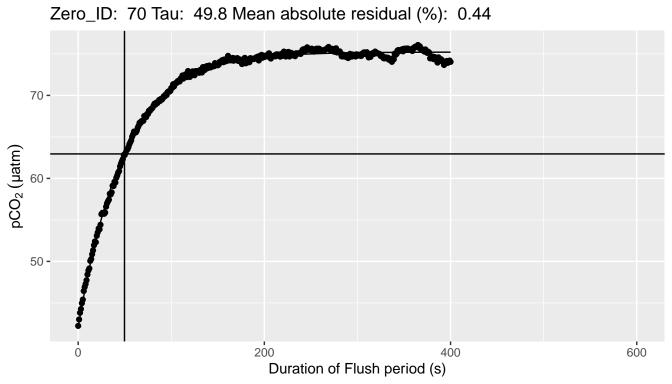


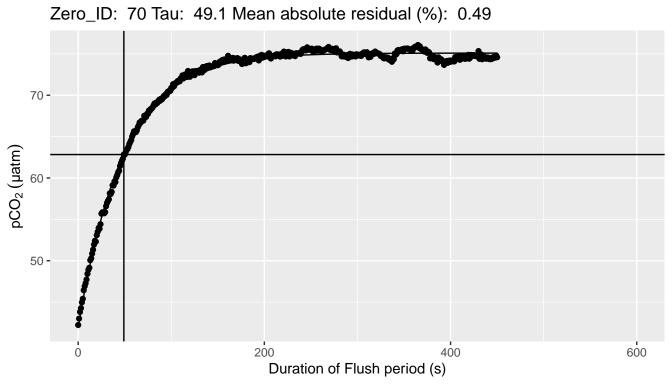


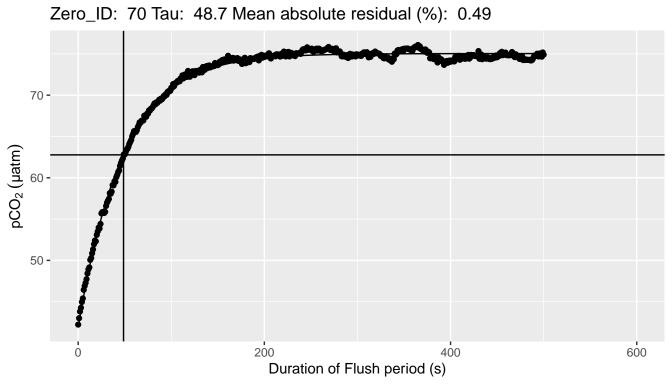


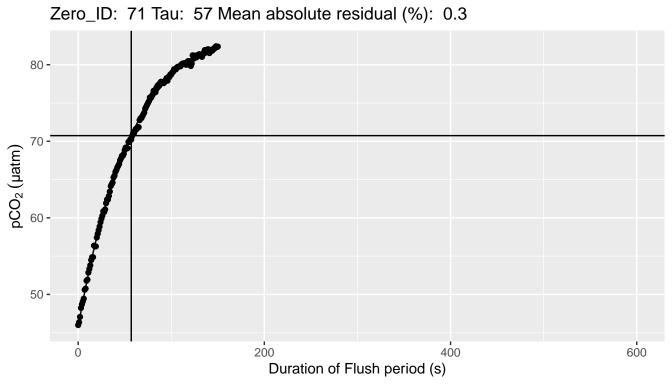




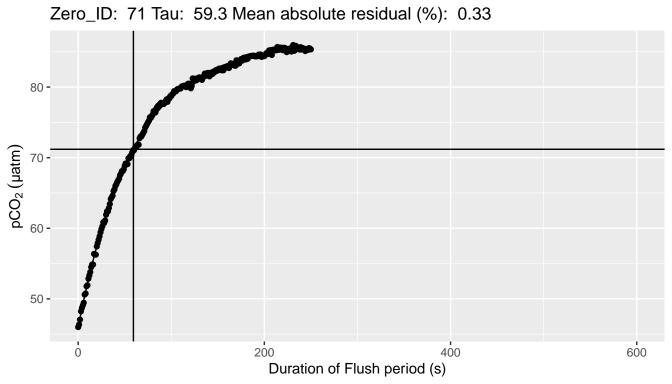


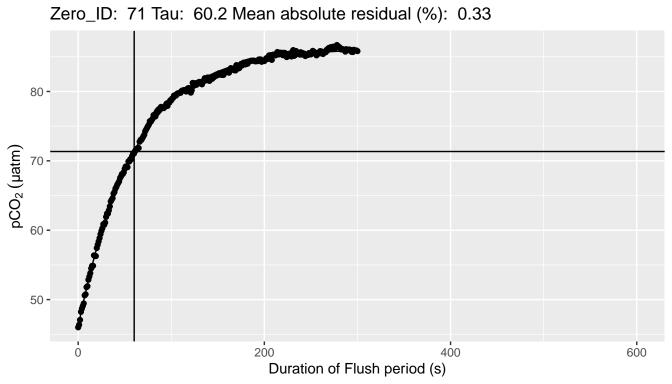


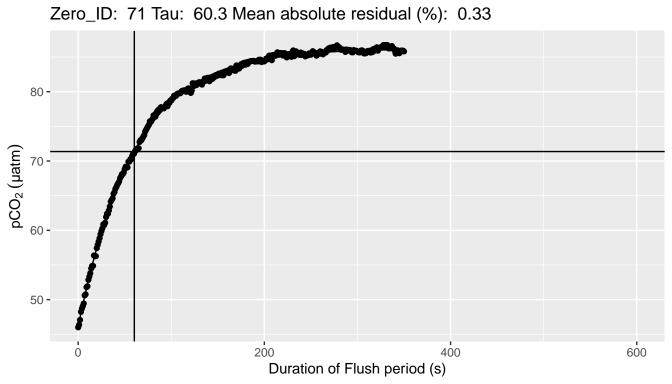


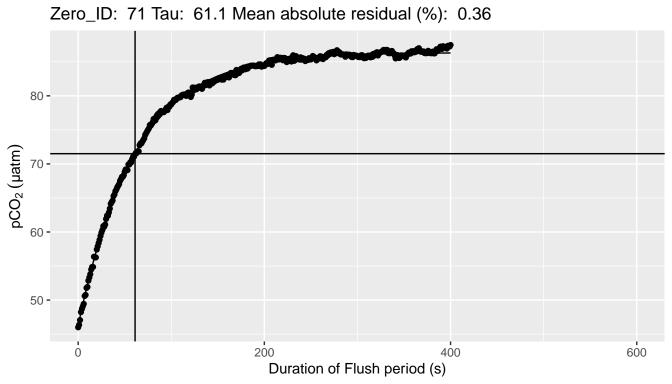


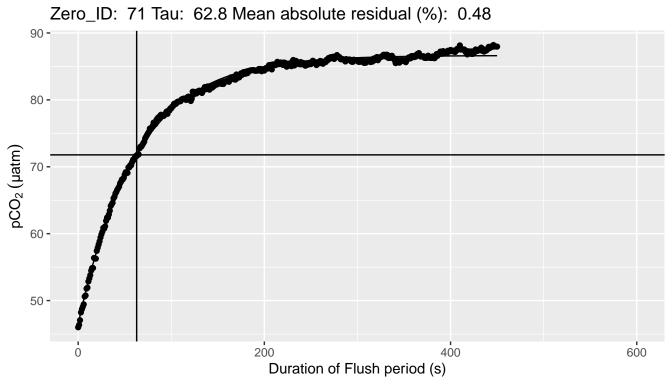
Zero\_ID: 71 Tau: 57.7 Mean absolute residual (%): 0.3 80 pCO<sub>2</sub> (µatm) 50 -200 400 600 Duration of Flush period (s)

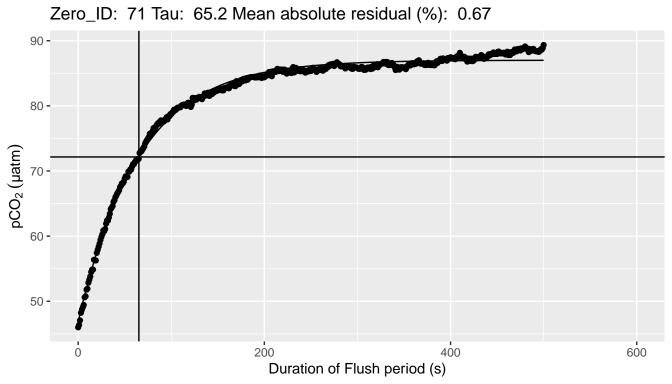


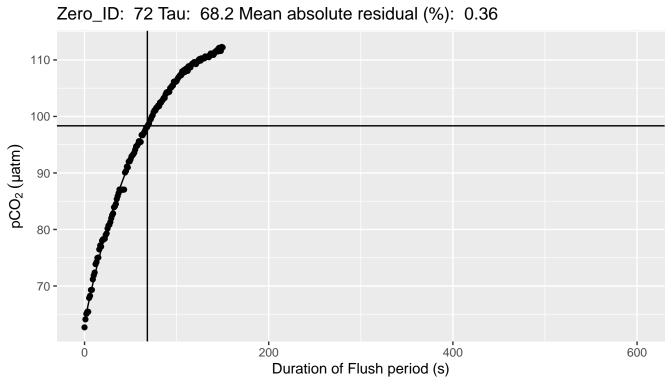


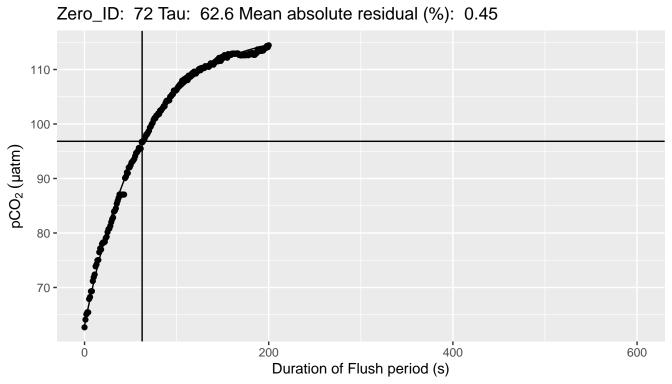


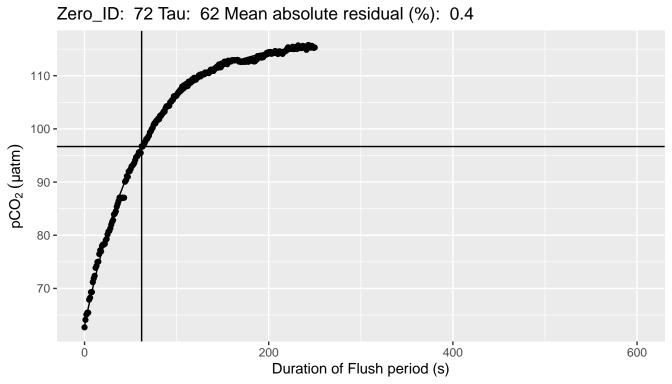


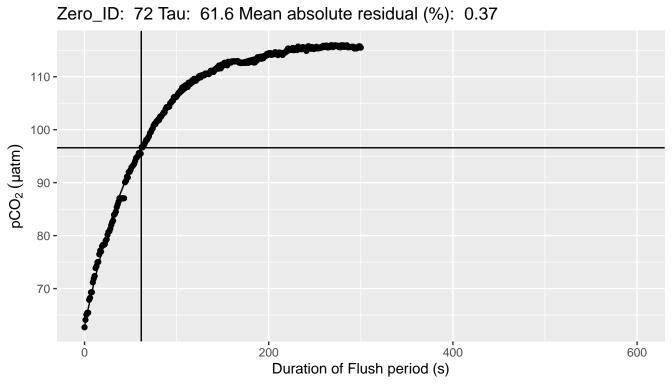


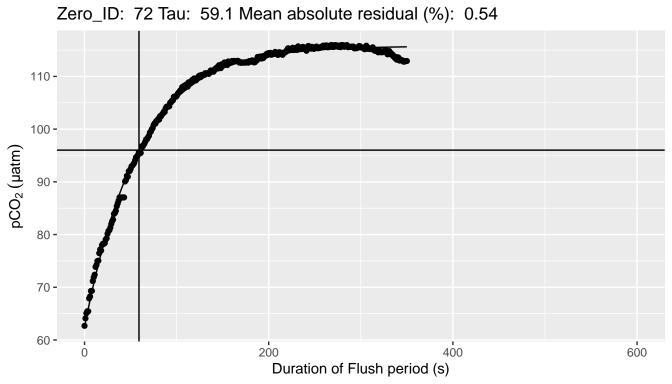


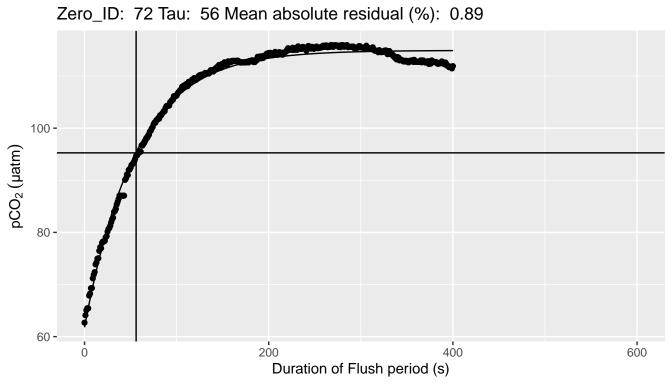


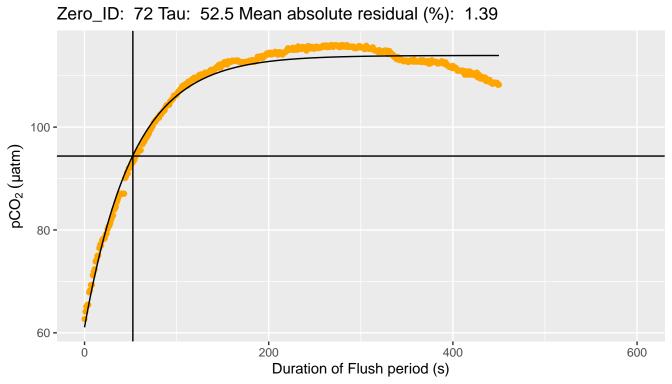


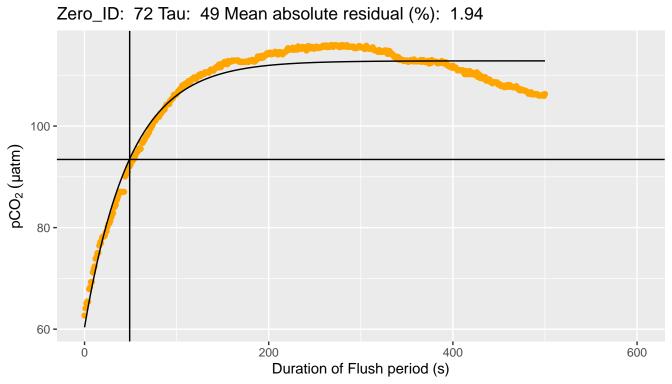


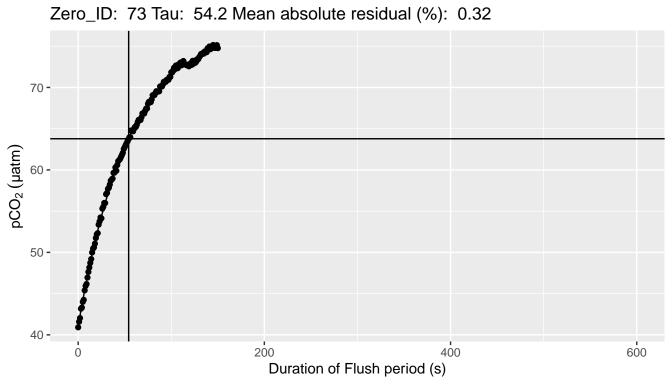






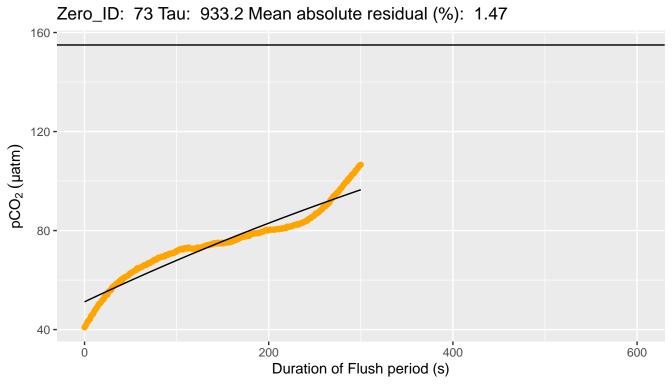


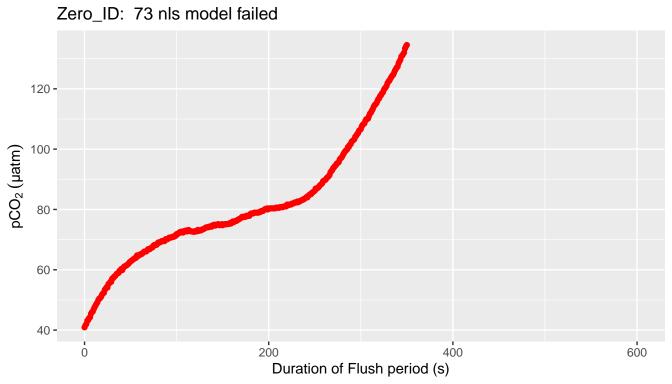


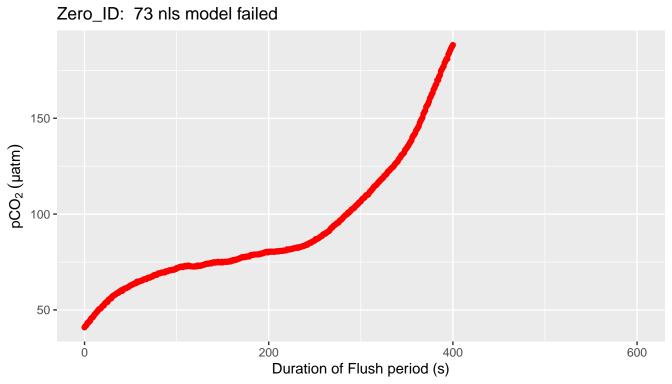


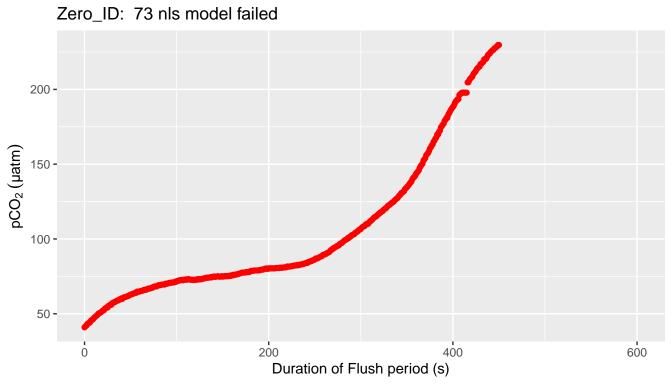
Zero\_ID: 73 Tau: 65.5 Mean absolute residual (%): 0.8 80 -70 pCO<sub>2</sub> (µatm) 50 -40 -200 600 400 Duration of Flush period (s)

Zero\_ID: 73 Tau: 87.6 Mean absolute residual (%): 1.27 80 pCO<sub>2</sub> (µatm) 70 -50 -40 -200 600 400 Duration of Flush period (s)

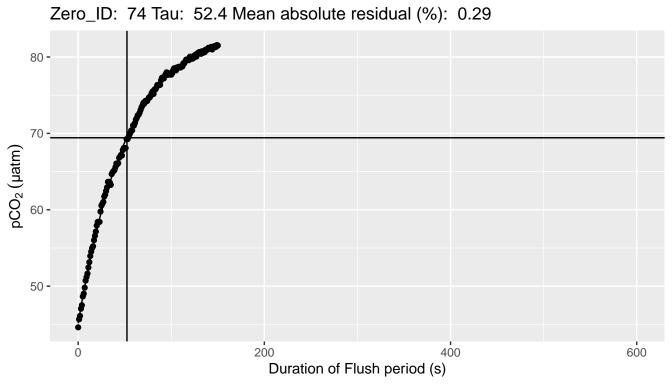


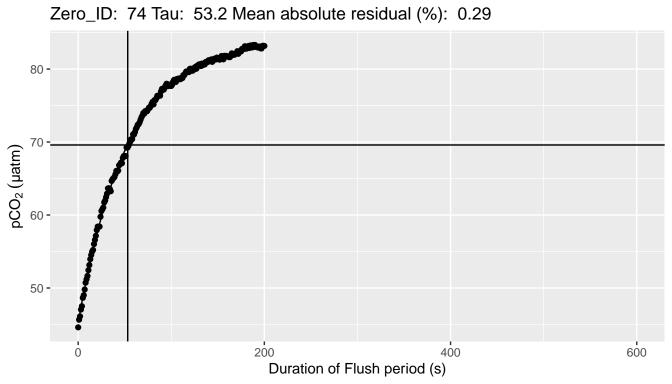


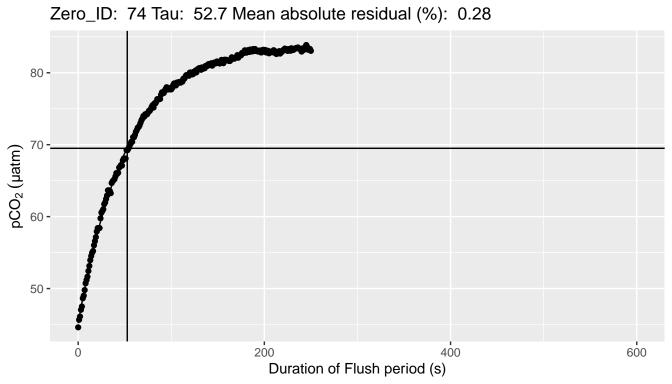


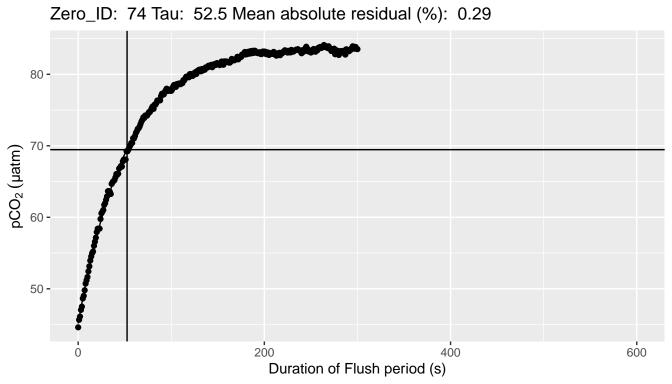


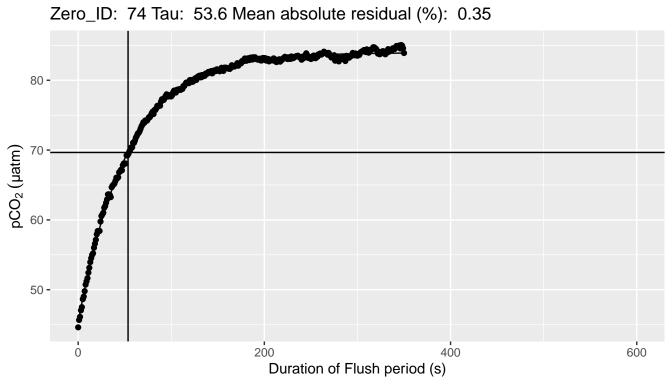
Zero\_ID: 73 nls model failed 250 **-**200  $pCO_2$  (µatm) 150 **-**100 -50 -200 400 600 Duration of Flush period (s)

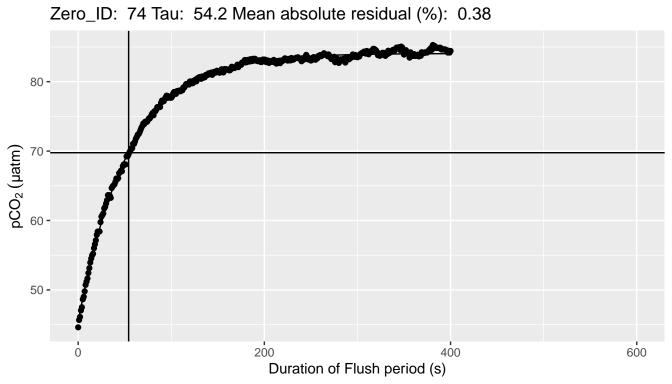


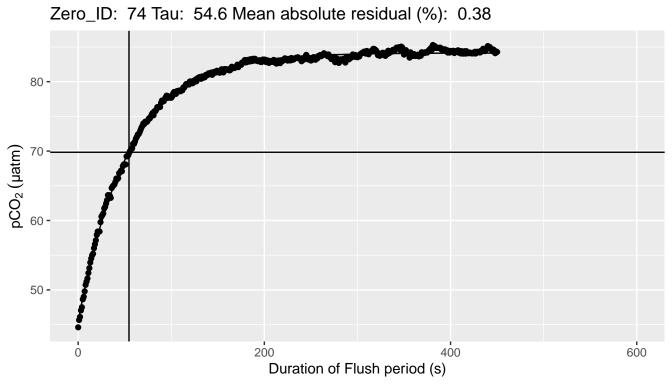


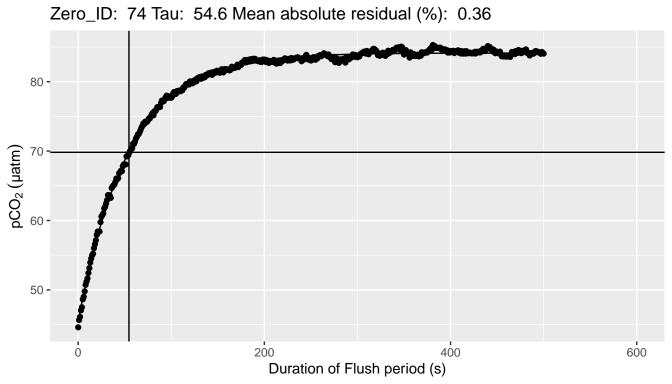


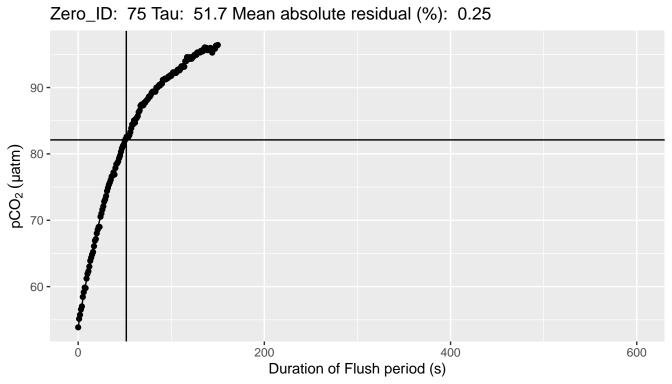


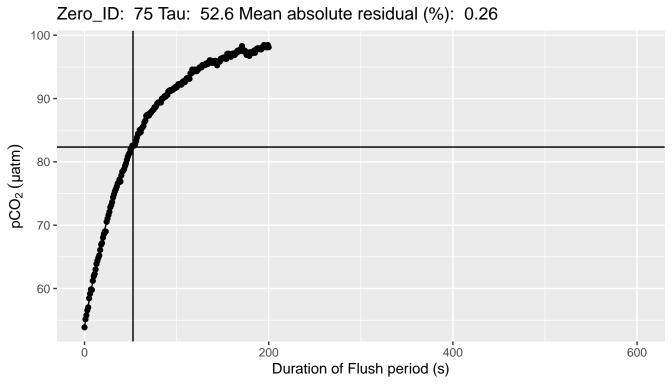






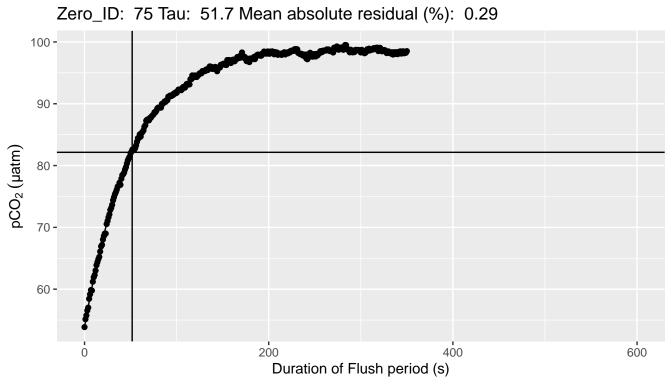


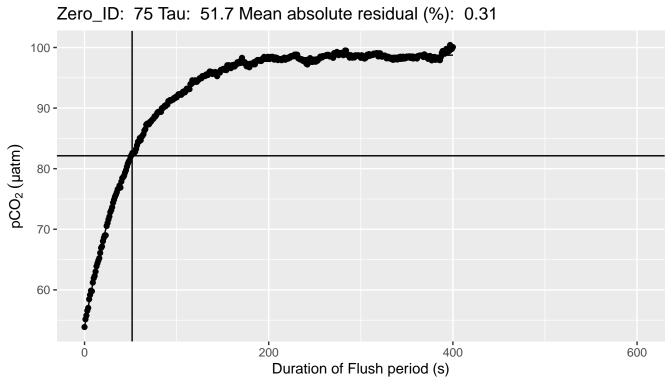


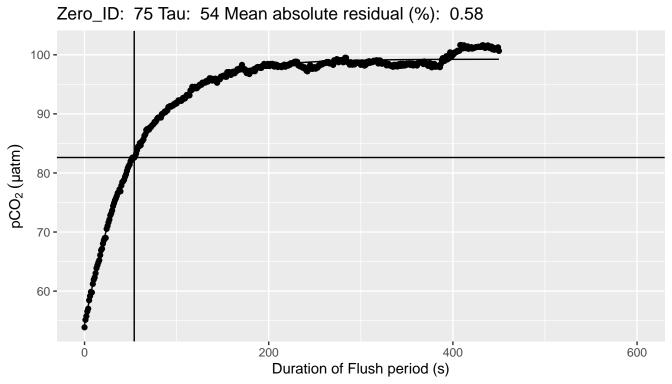


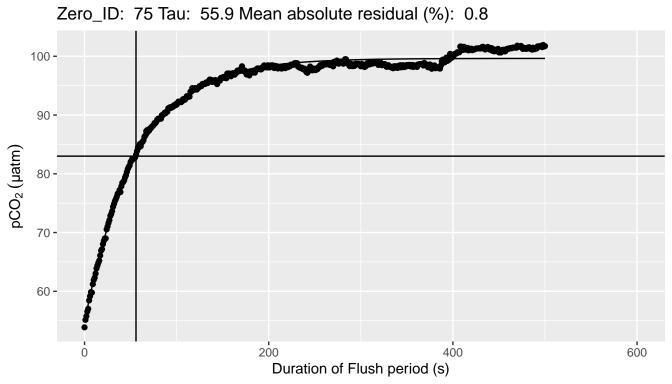
Zero\_ID: 75 Tau: 52 Mean absolute residual (%): 0.29 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

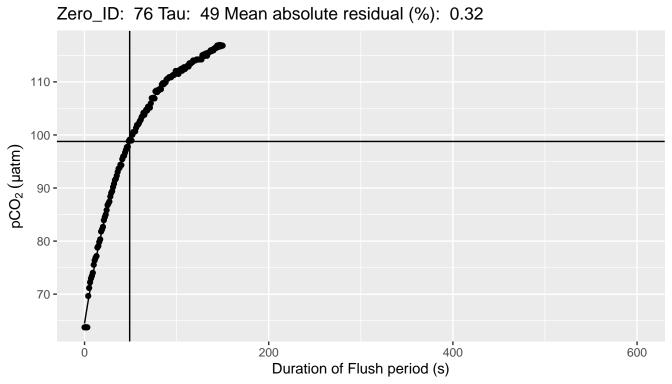
Zero\_ID: 75 Tau: 52.1 Mean absolute residual (%): 0.28 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

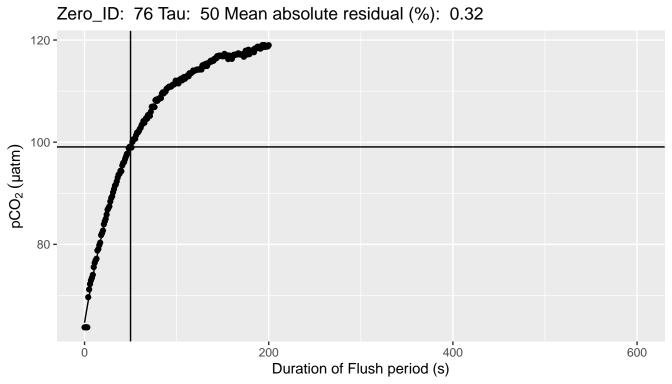


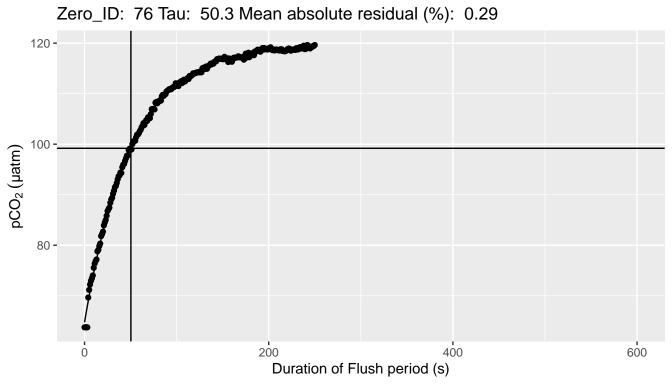


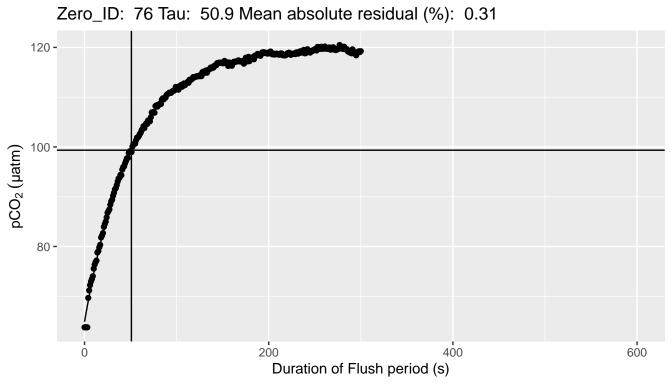


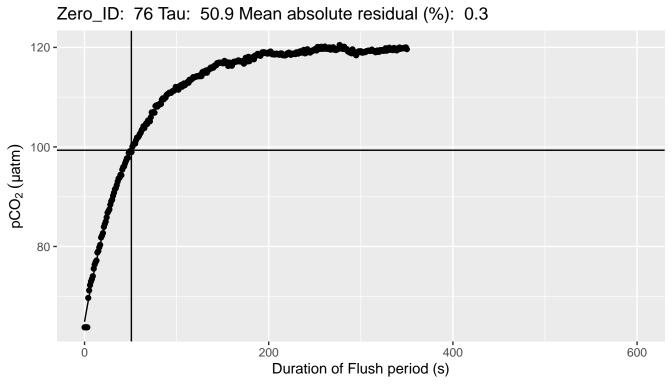


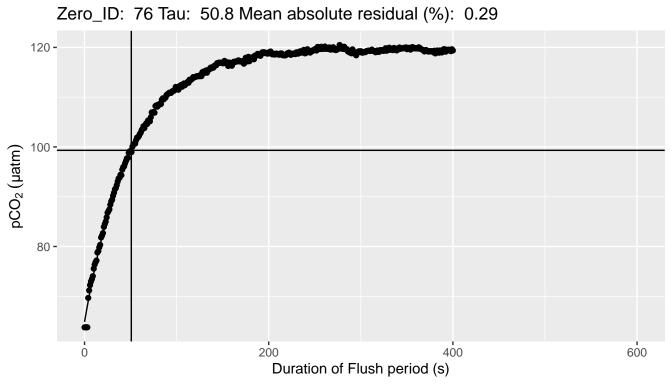


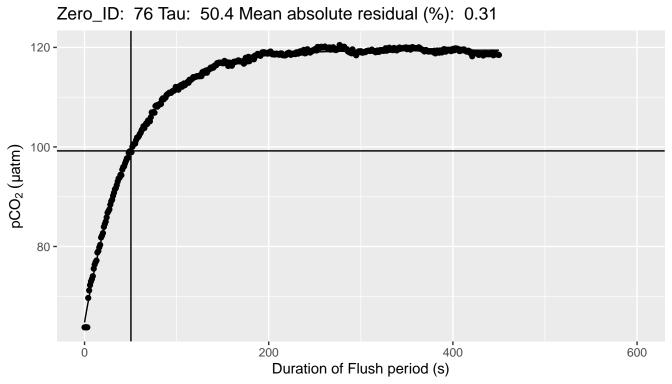


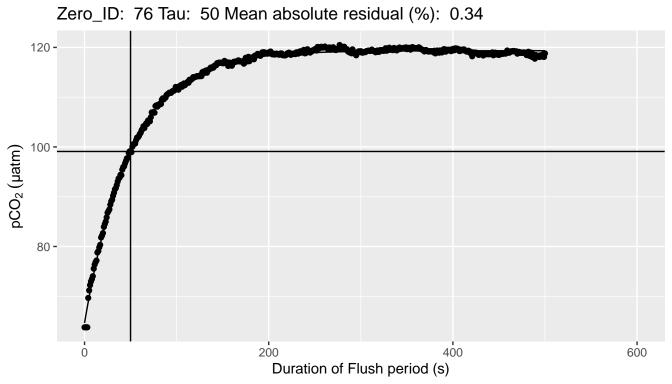


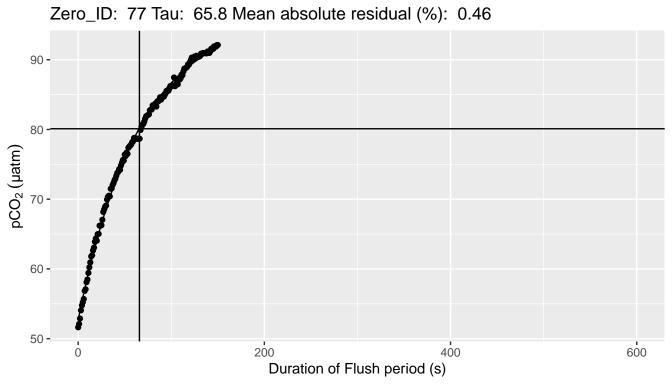




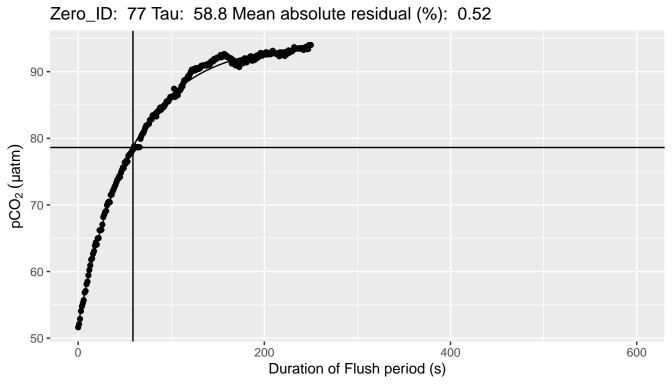


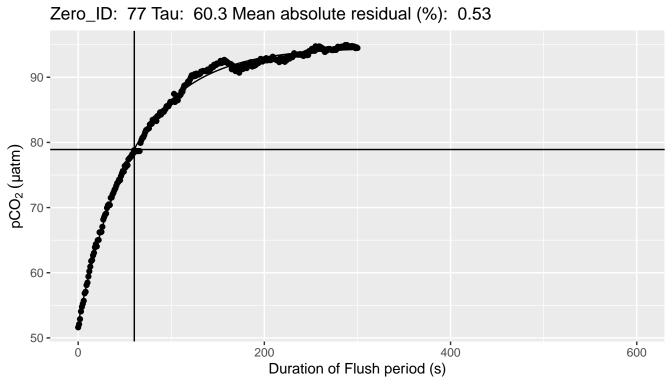


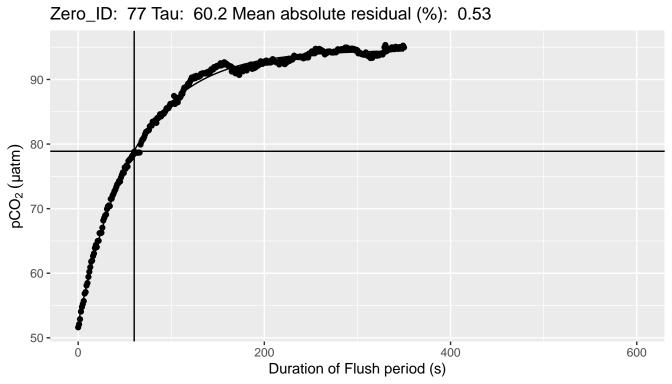


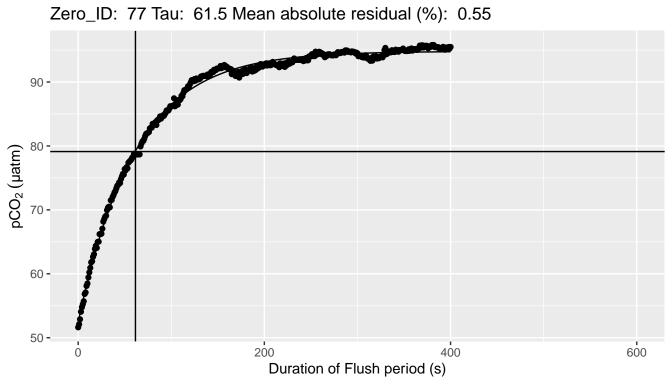


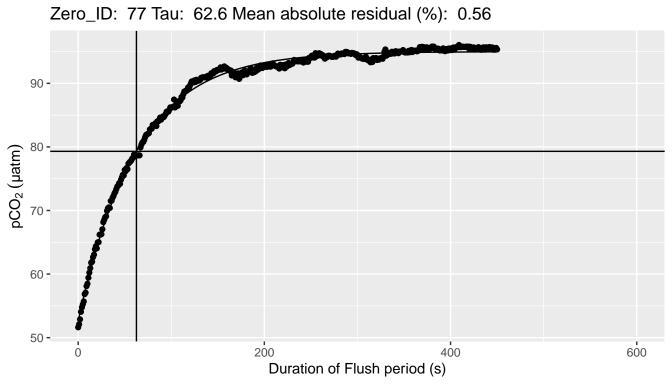
Zero\_ID: 77 Tau: 60.1 Mean absolute residual (%): 0.59 90 -80 pCO<sub>2</sub> (µatm) 60 -50 -200 600 400 Duration of Flush period (s)

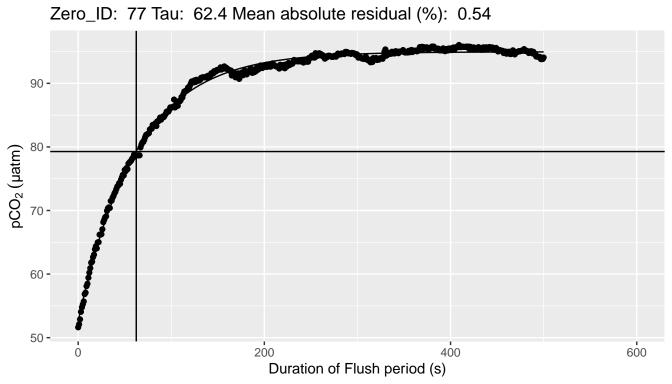


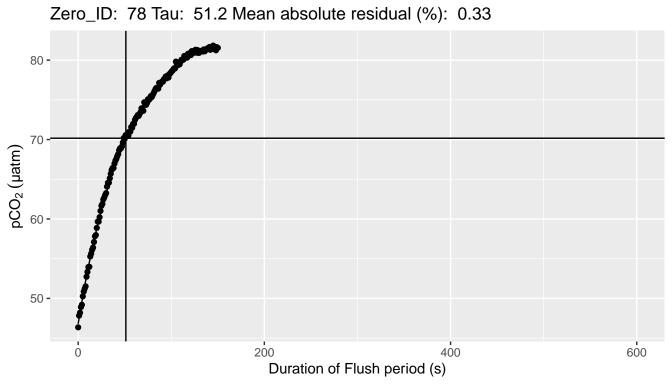


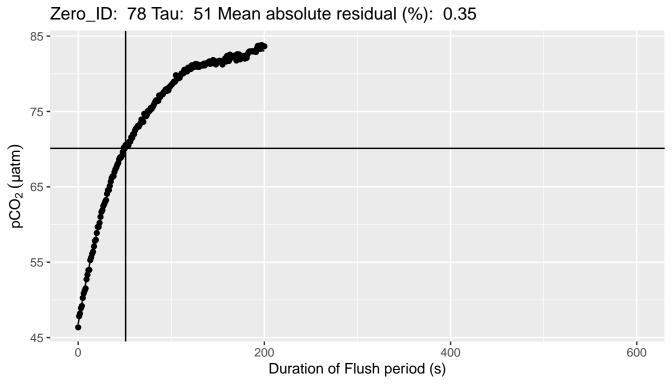


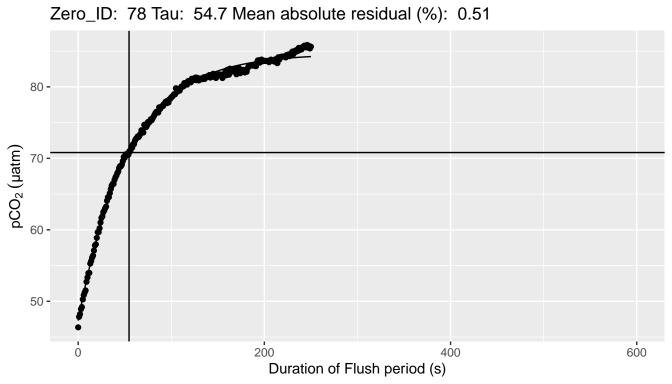


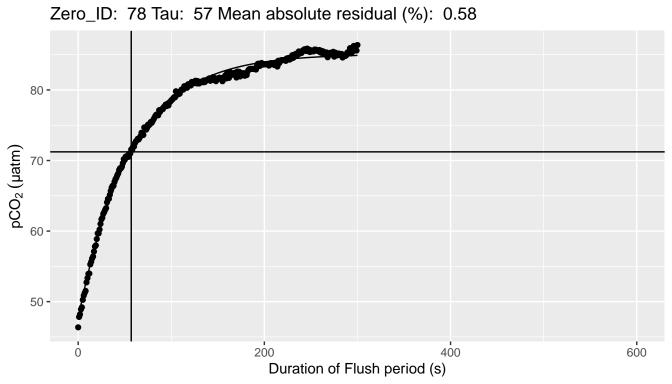


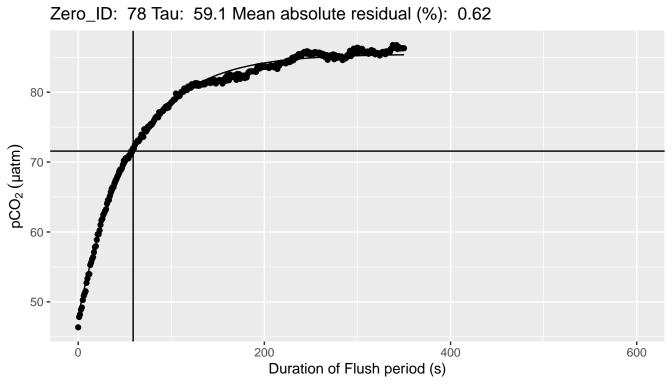


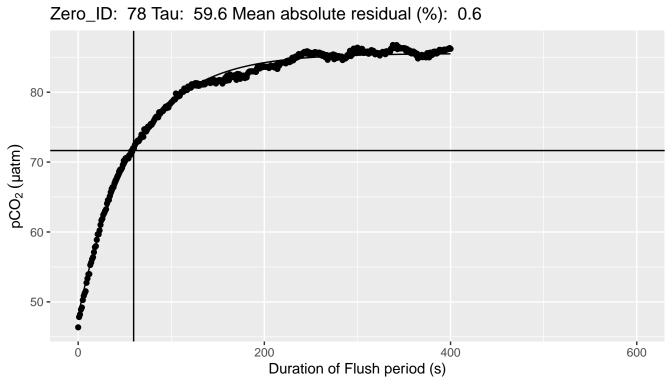


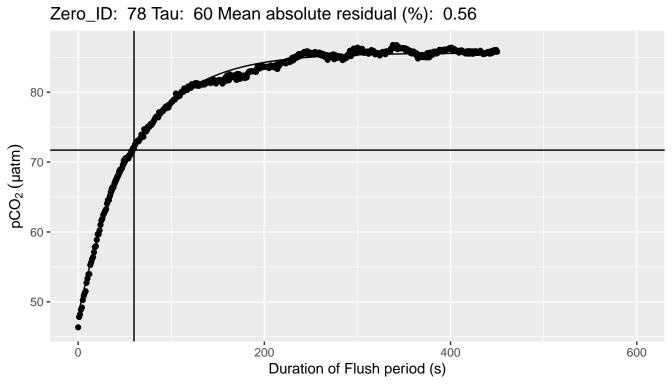


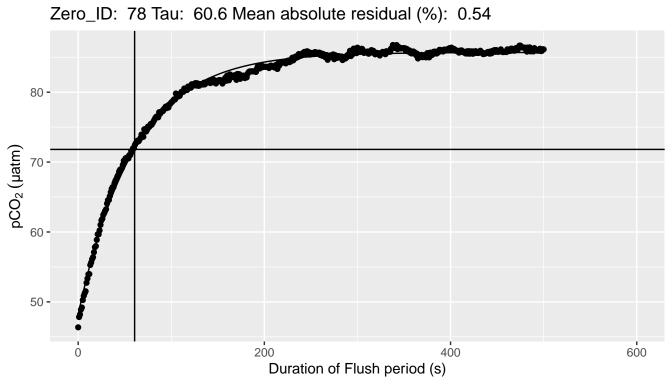


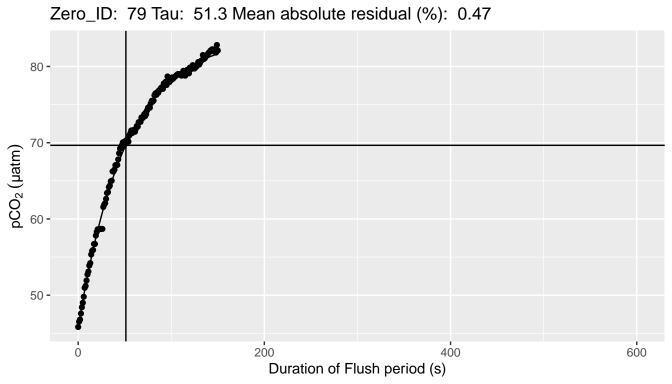


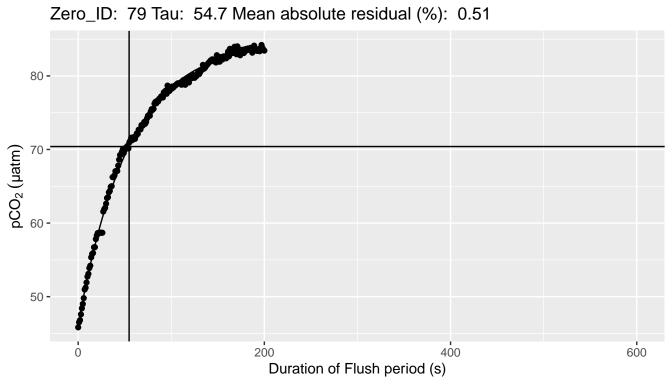


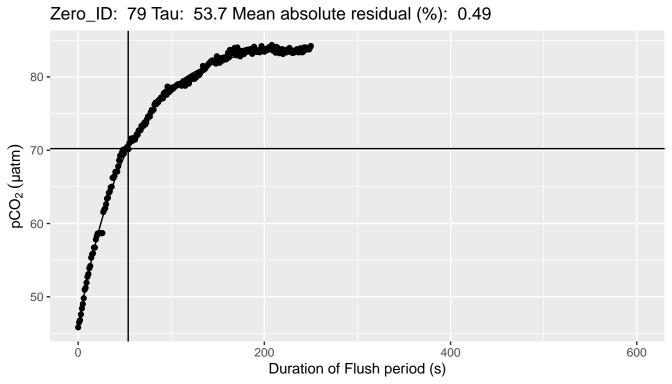


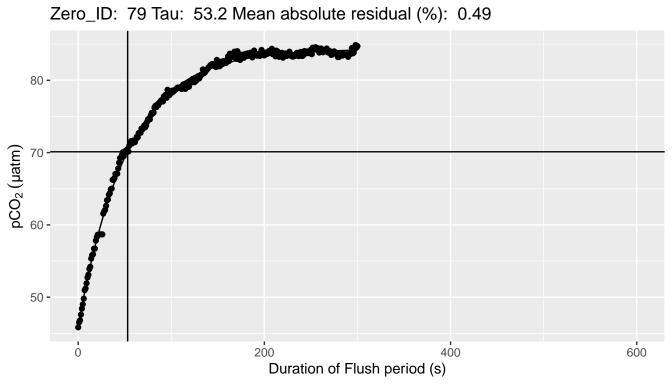


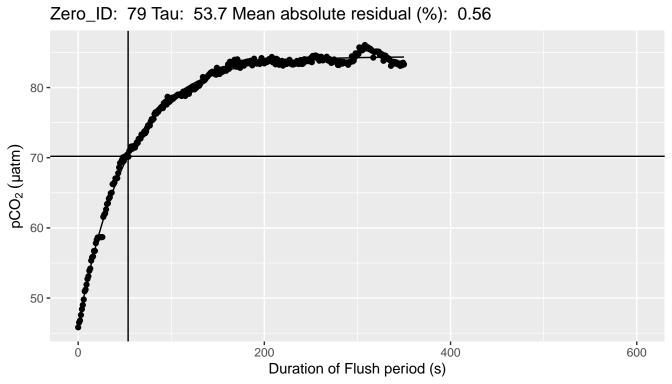


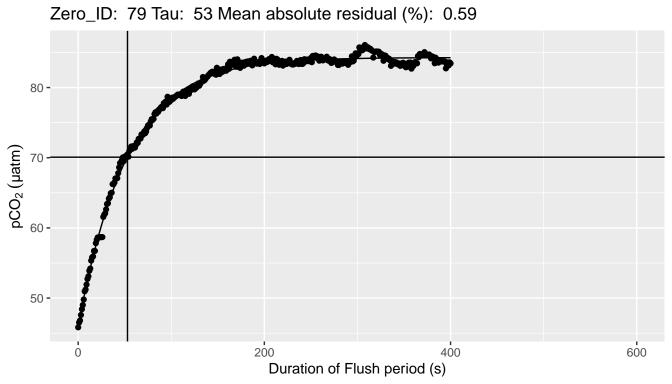


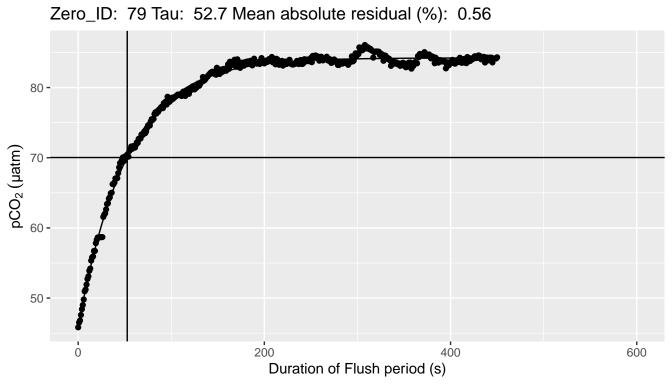


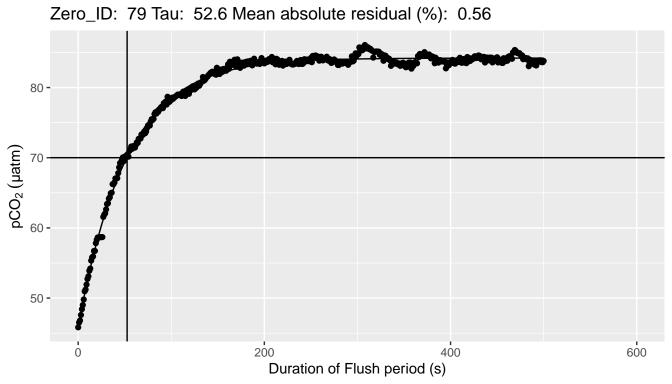


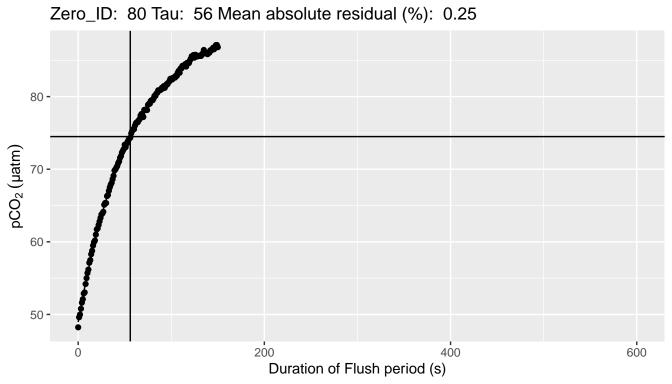


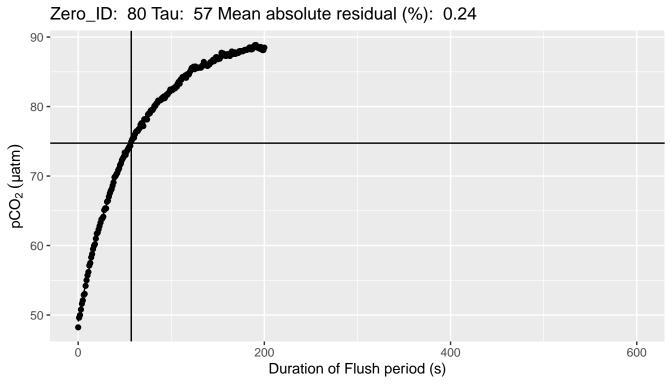


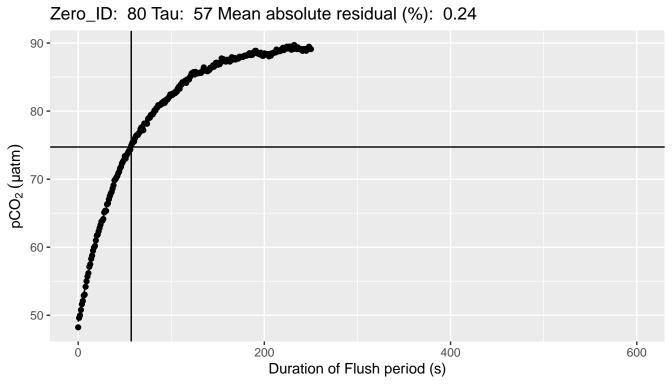


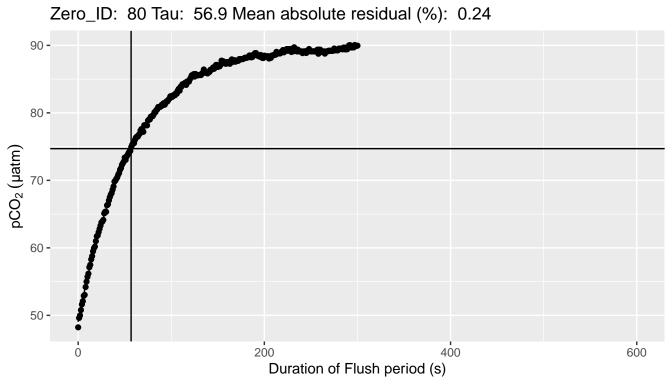


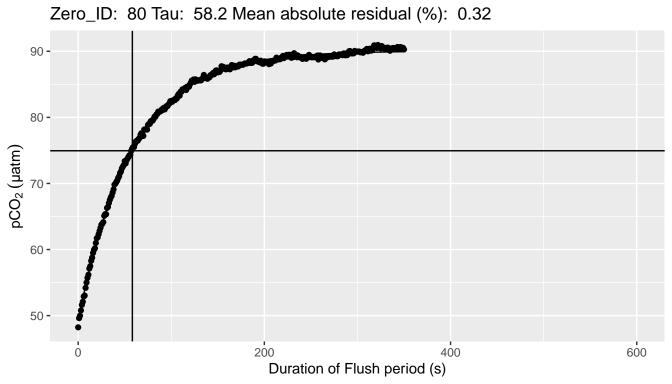


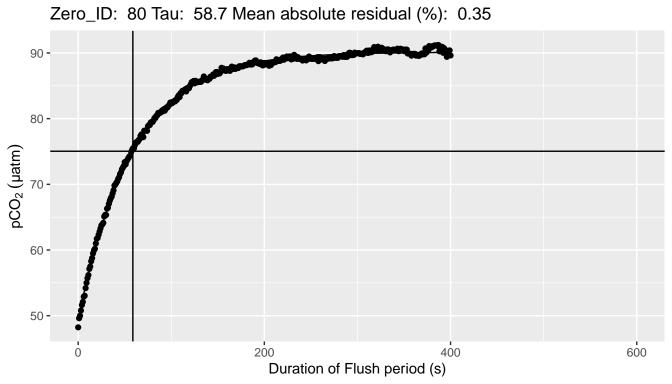


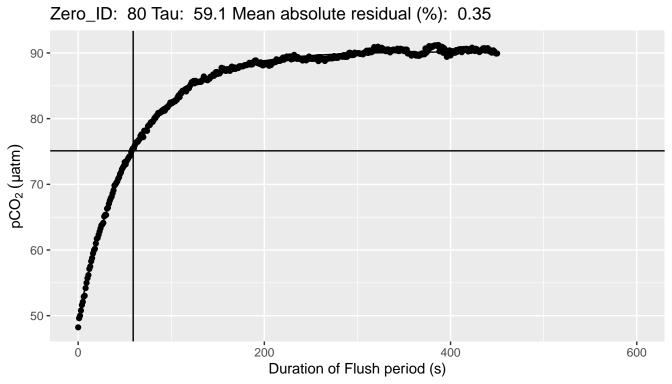


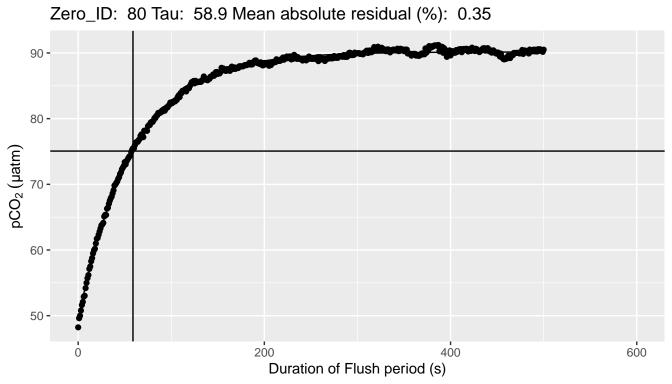


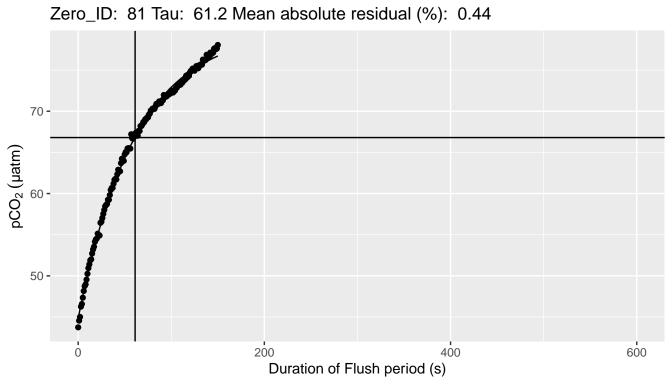


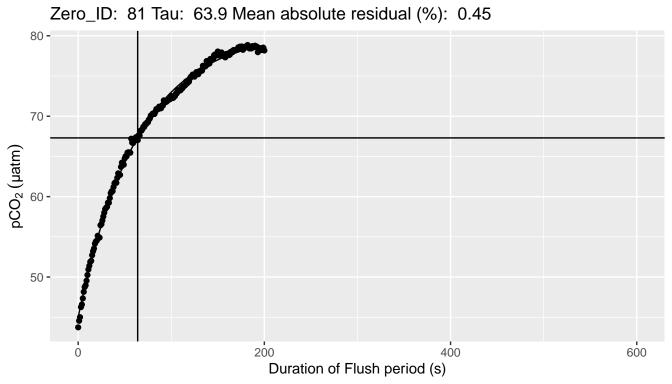


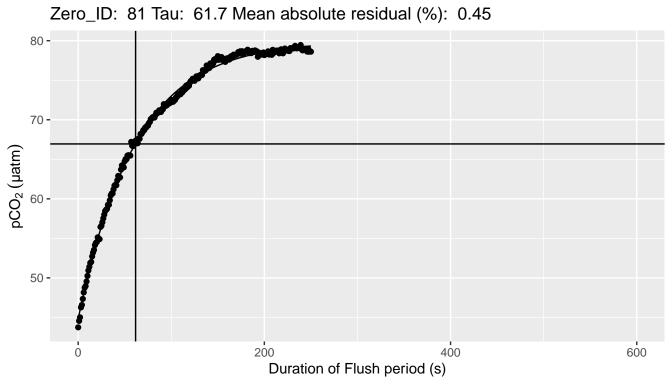


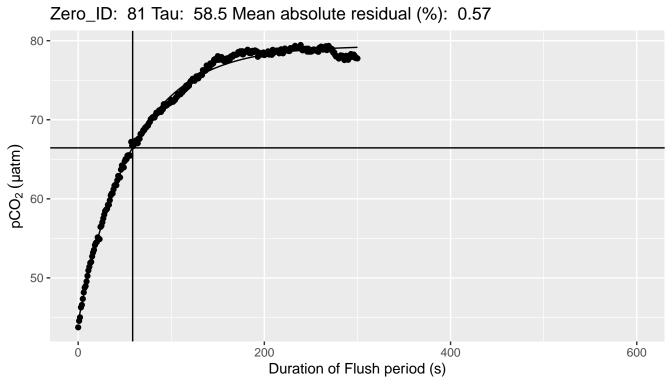


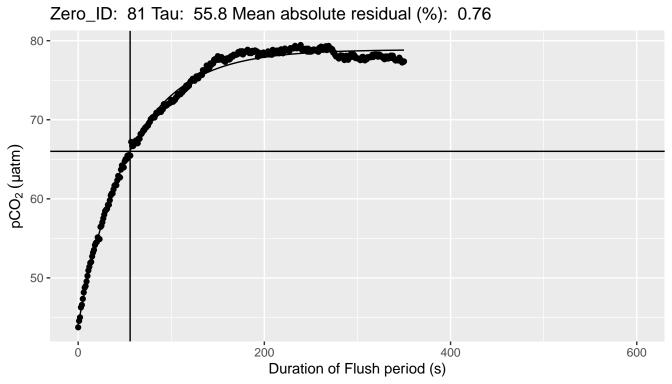


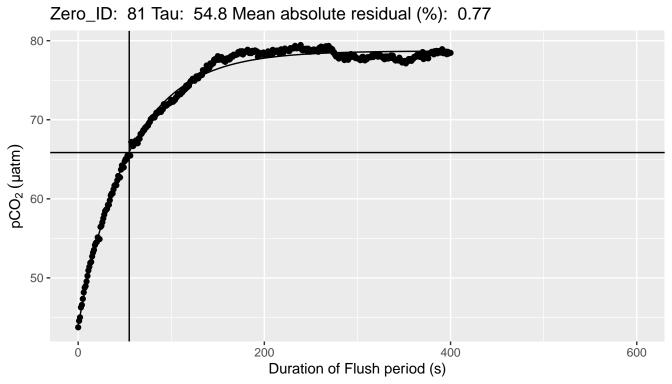


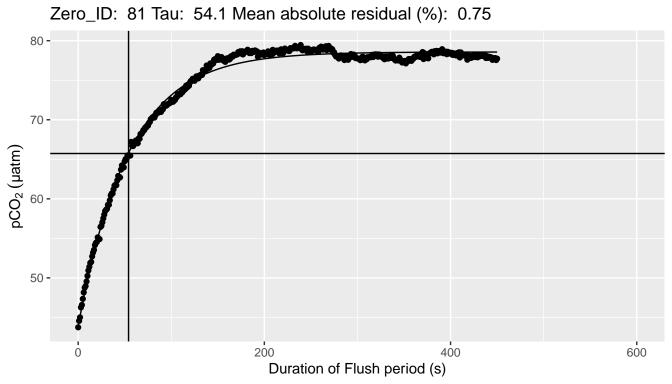


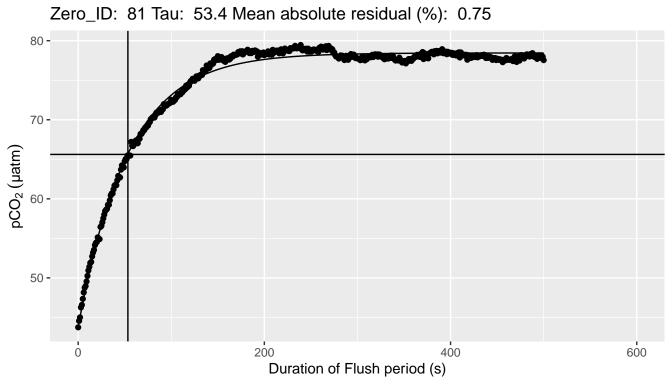


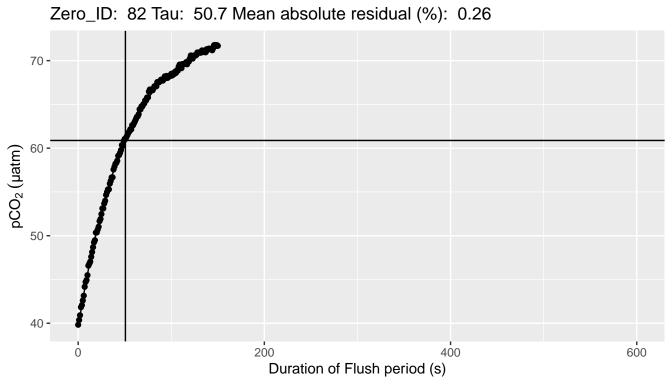


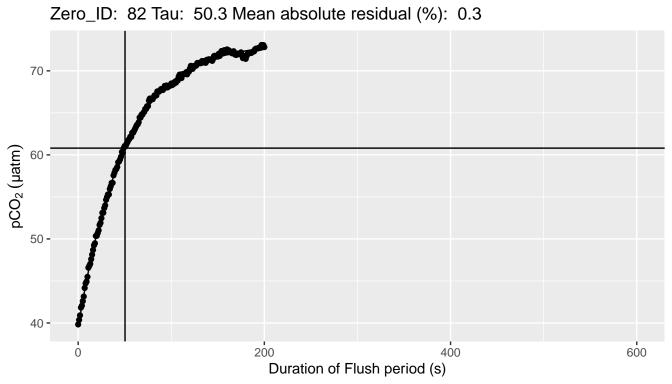


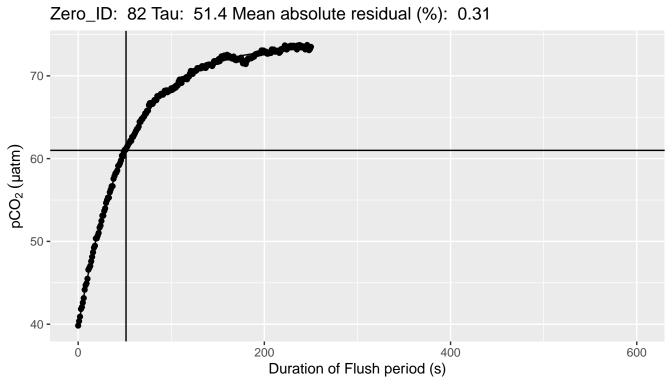


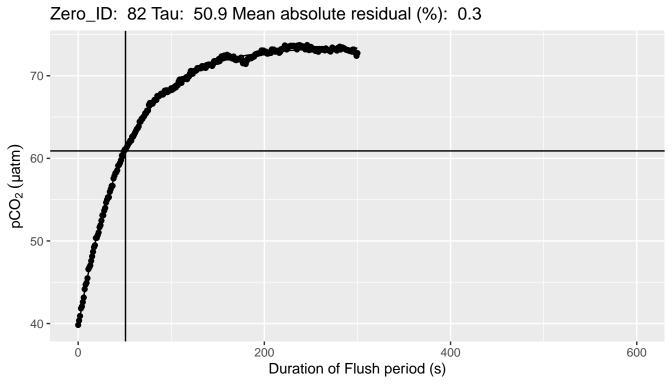


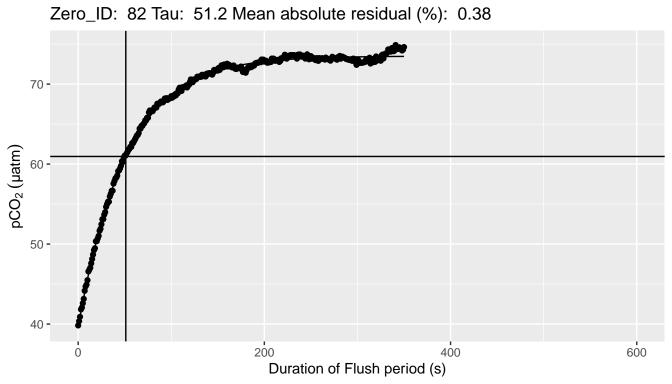


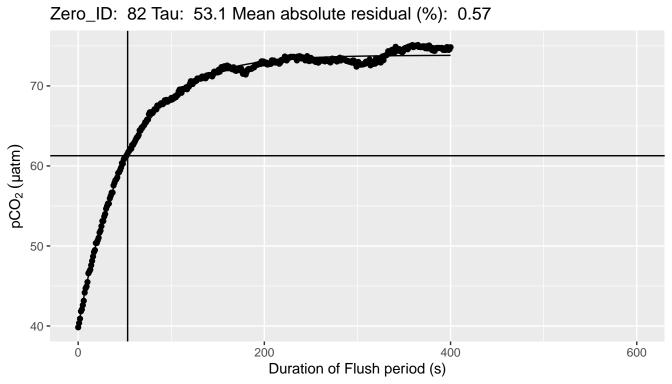


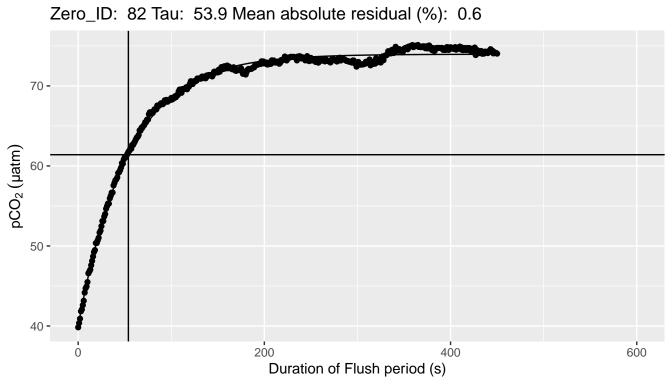


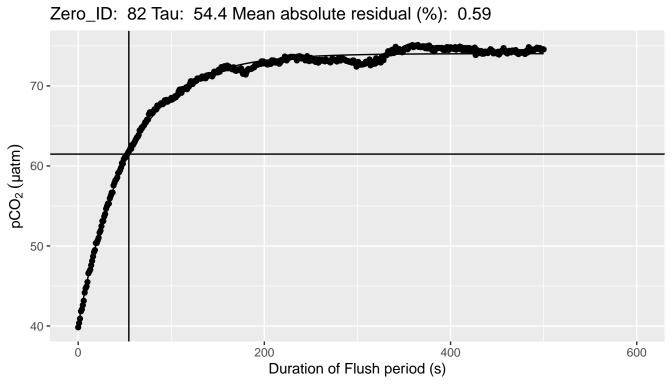


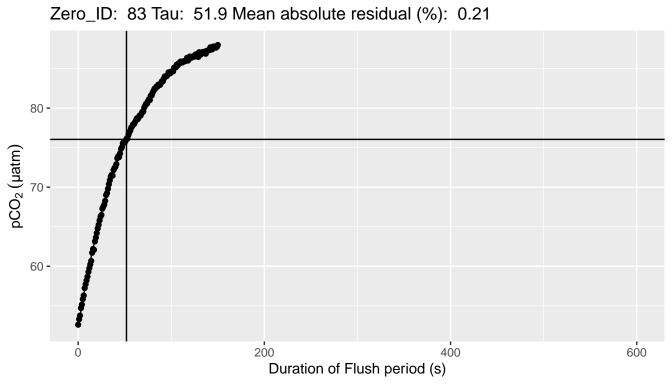


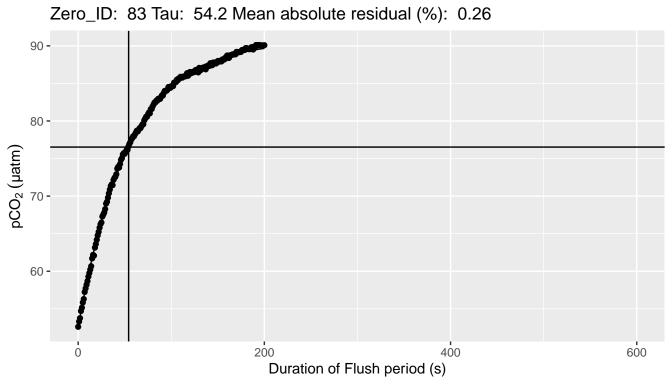


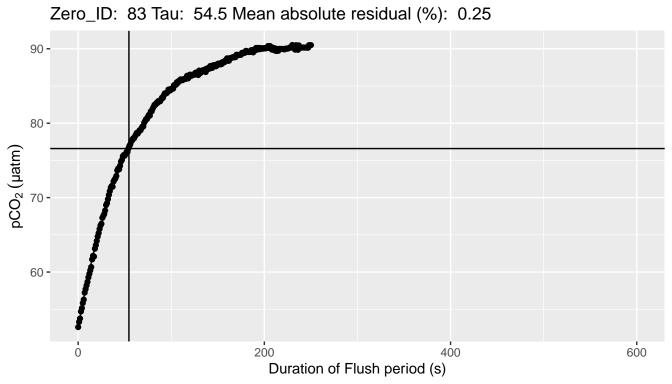


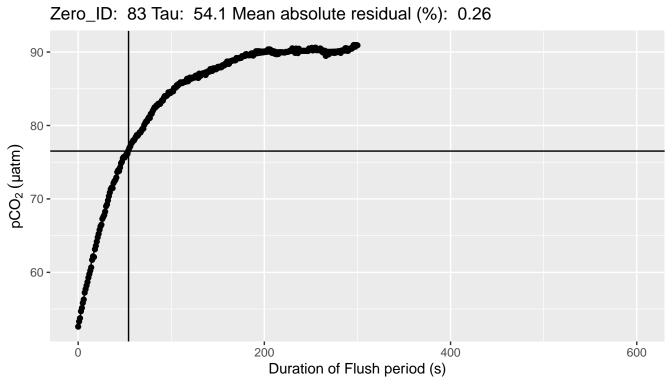


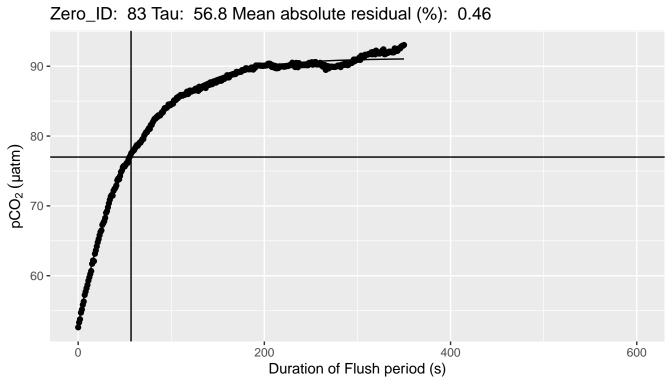


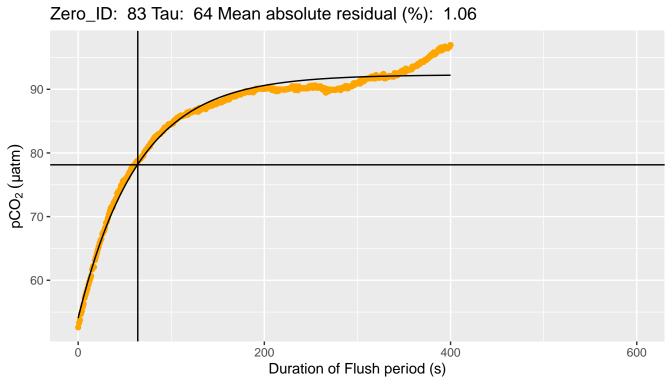






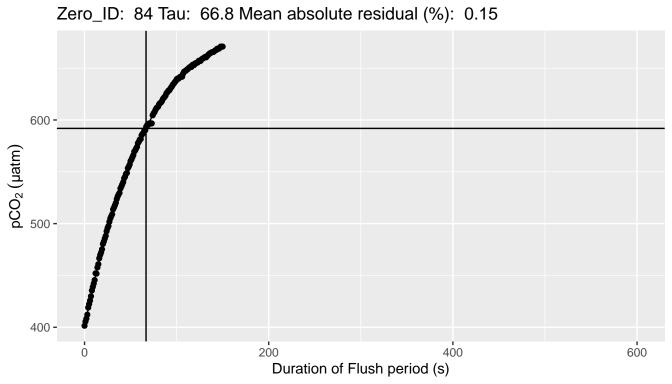


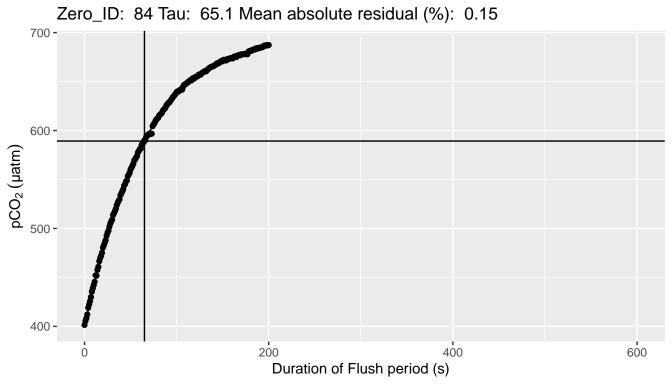




Zero\_ID: 83 Tau: 84.3 Mean absolute residual (%): 2.15 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

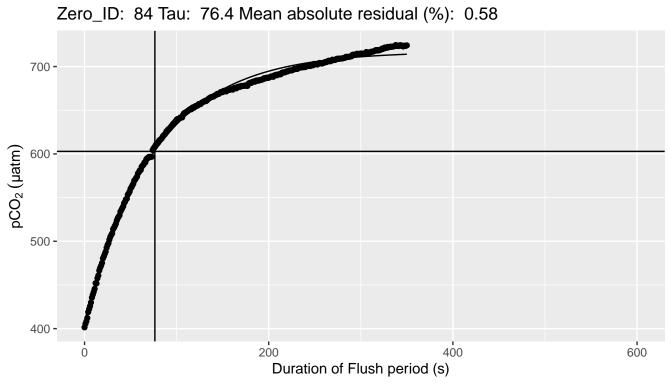
Zero\_ID: 83 Tau: 200 Mean absolute residual (%): 3.36 110 -100 -90  $pCO_2$  (µatm) 80 -70 -60 -50 -400 600 200 Duration of Flush period (s)

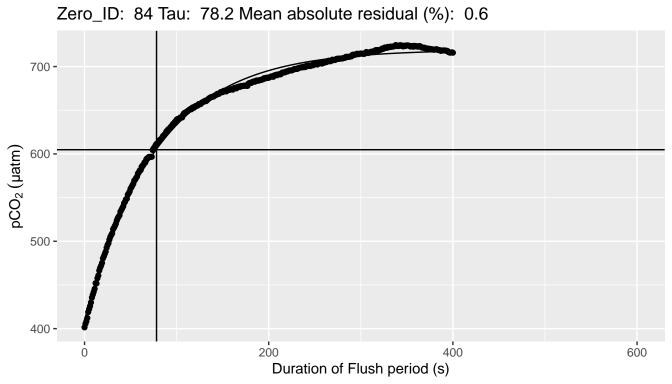


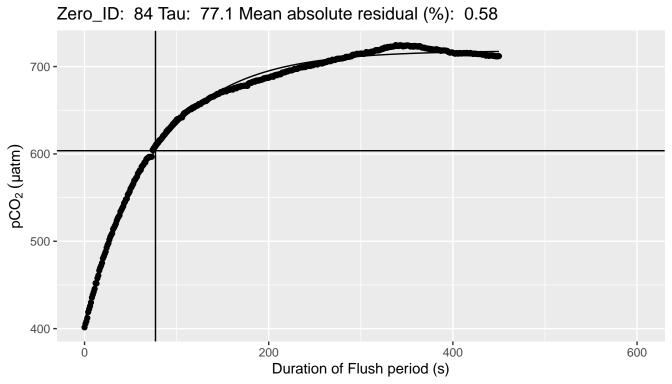


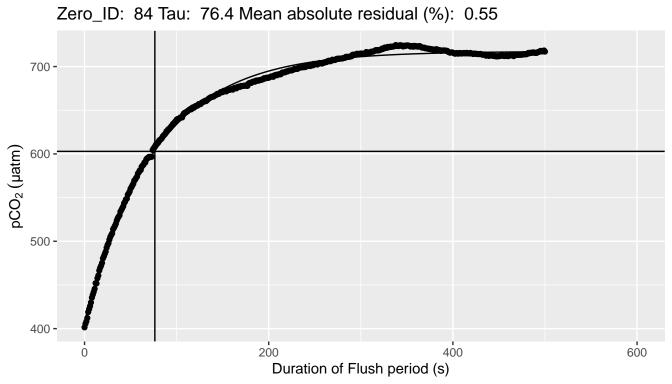
Zero\_ID: 84 Tau: 67.5 Mean absolute residual (%): 0.23 700 -600 pCO<sub>2</sub> (µatm) 500 -400 -200 400 600 Duration of Flush period (s)

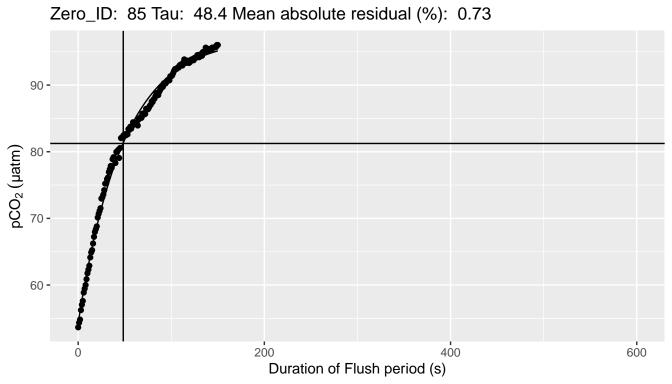
Zero\_ID: 84 Tau: 71.4 Mean absolute residual (%): 0.38 700 pCO<sub>2</sub> (µatm) 600 **-**500 -400 -200 400 600 Duration of Flush period (s)

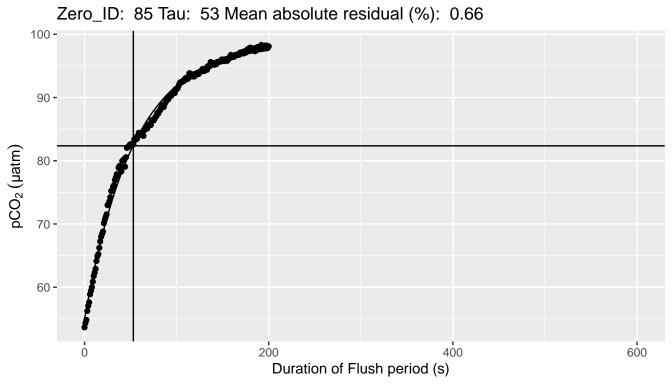


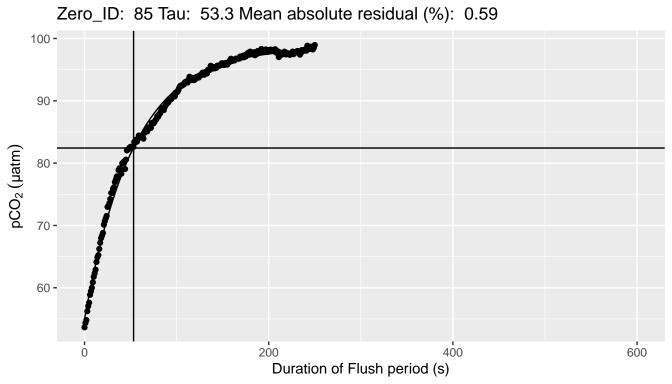


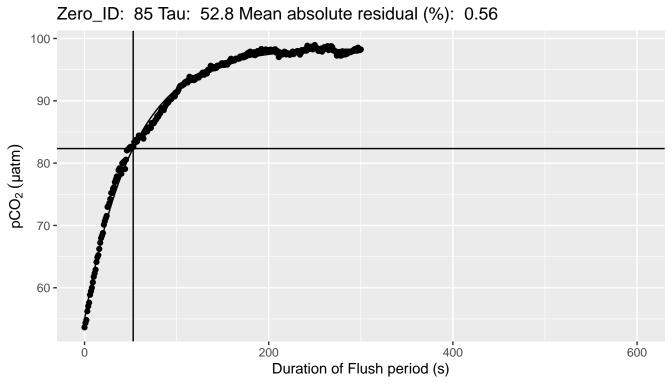


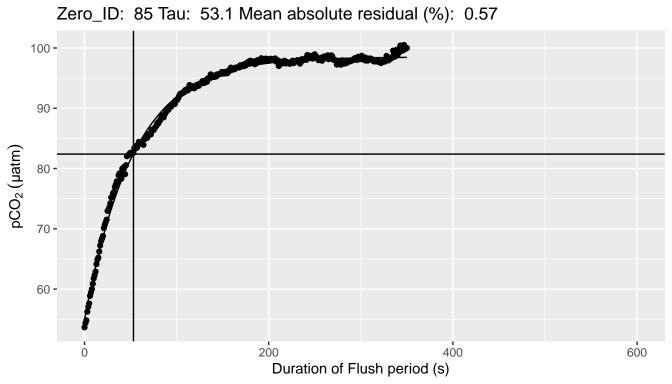








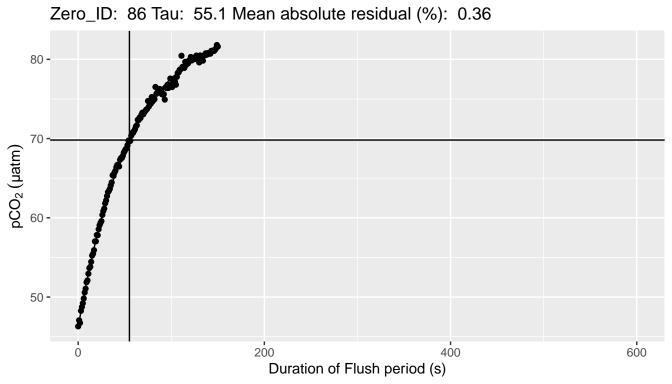


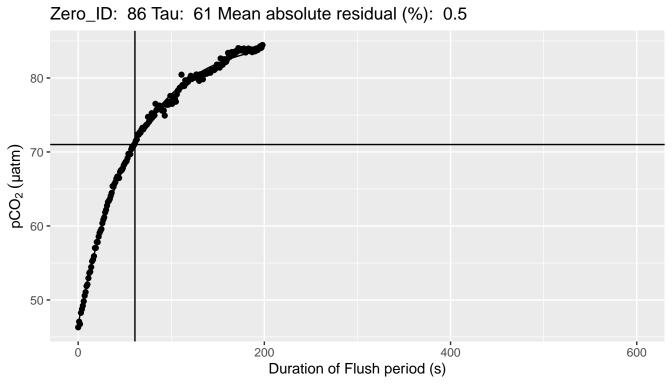


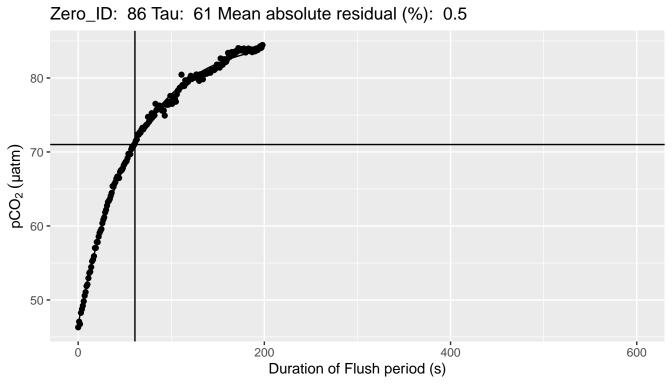
Zero\_ID: 85 Tau: 54 Mean absolute residual (%): 0.69 100 -90  $pCO_2$  (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

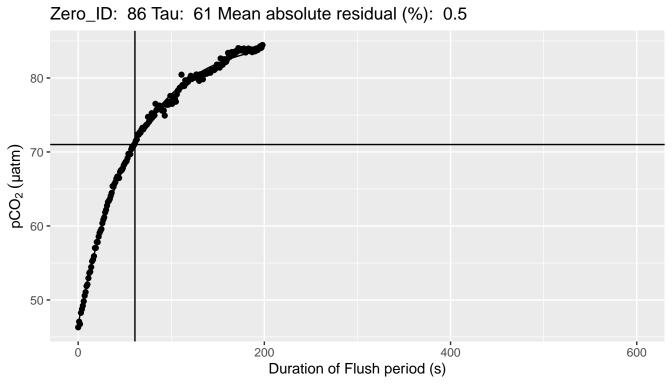
Zero\_ID: 85 Tau: 52.7 Mean absolute residual (%): 0.71 100 -90 pCO<sub>2</sub> (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

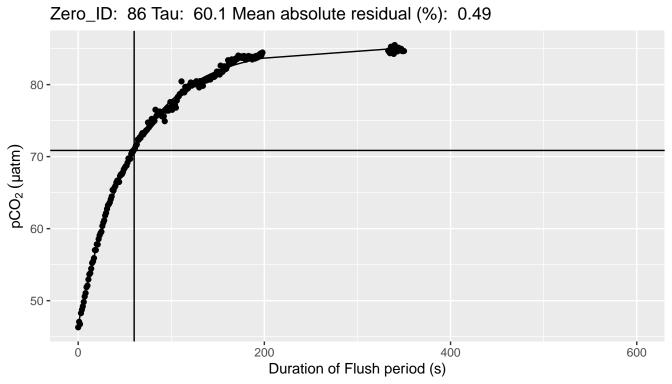
Zero\_ID: 85 Tau: 52.3 Mean absolute residual (%): 0.68 100 -90  $pCO_2$  (µatm) 80 -70 -60 -200 400 600 Duration of Flush period (s)

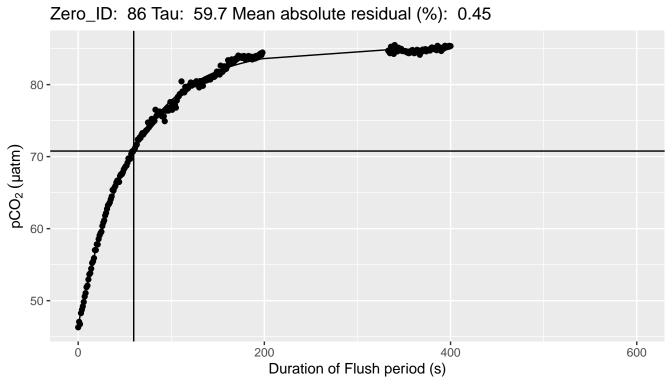


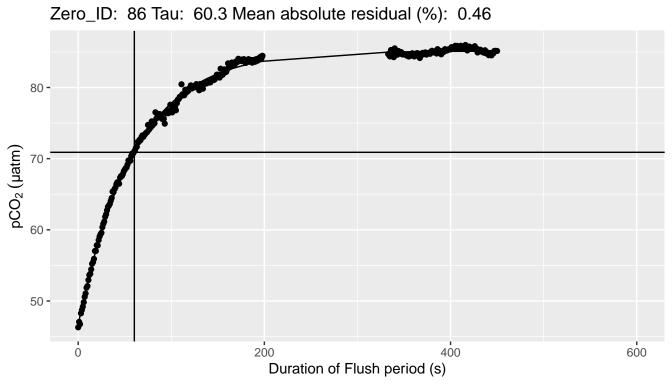


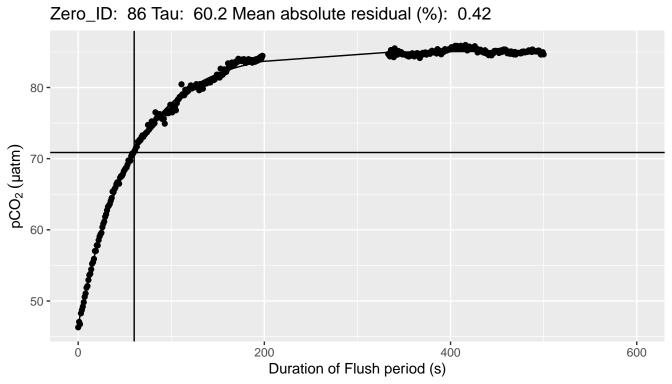


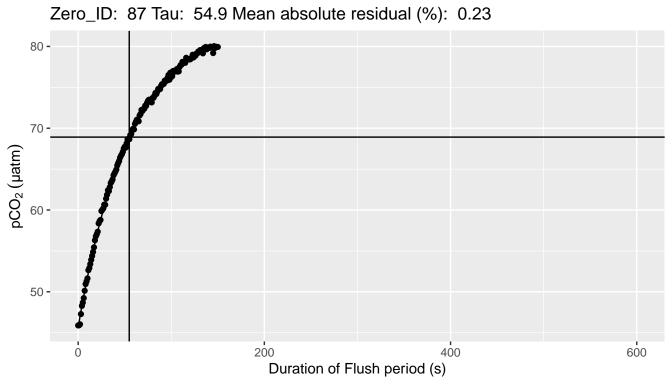


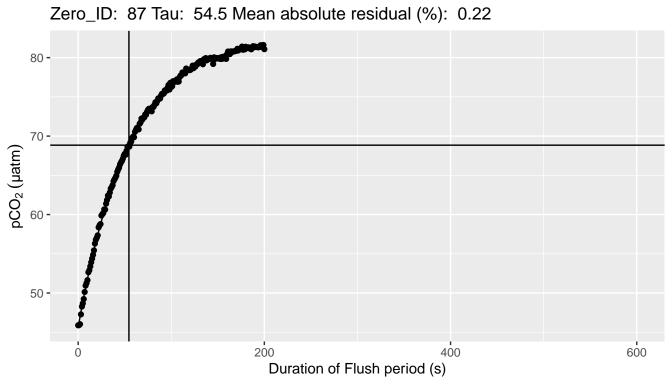


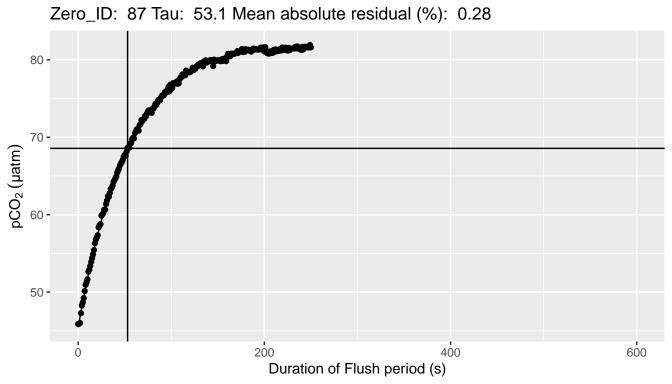


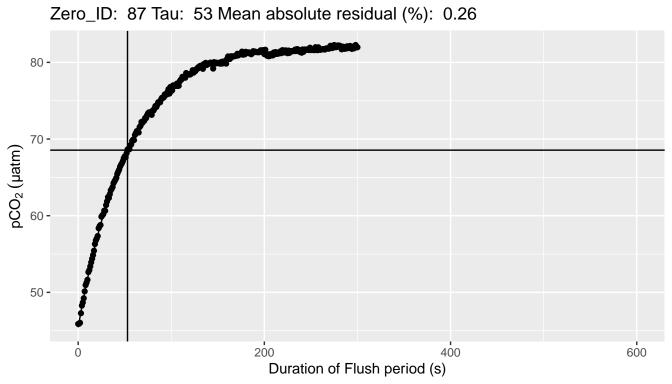


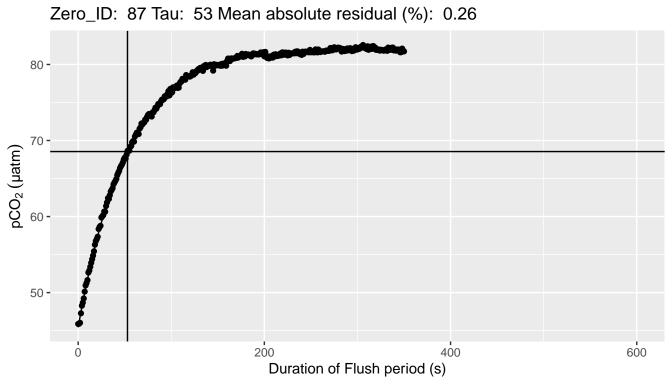


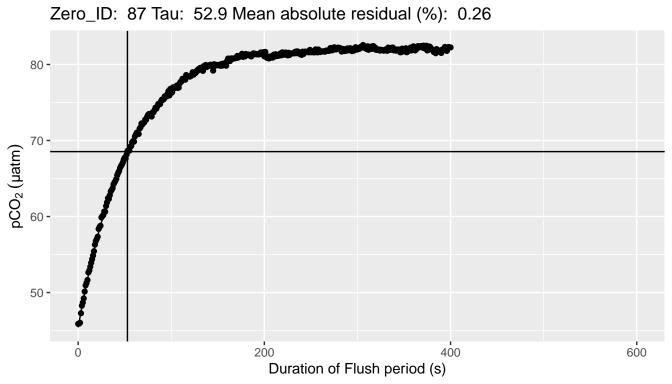


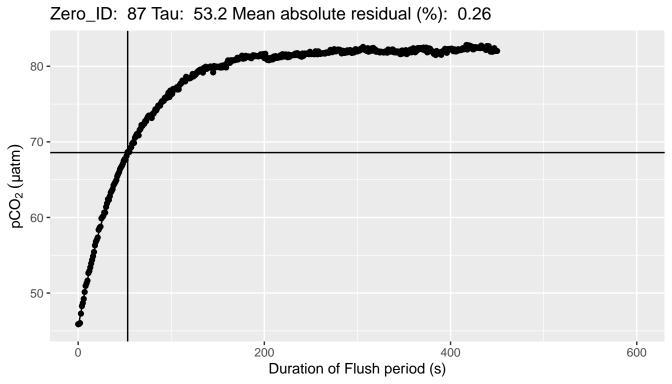


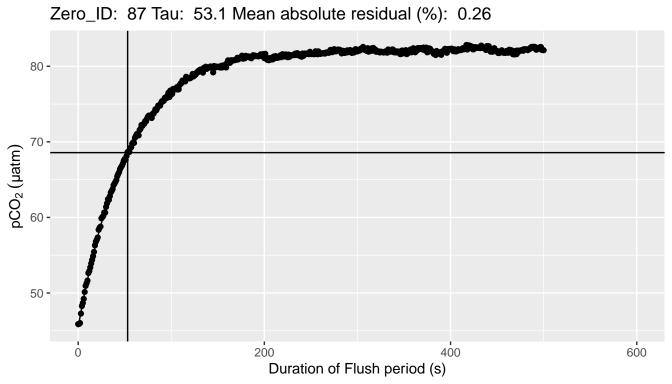


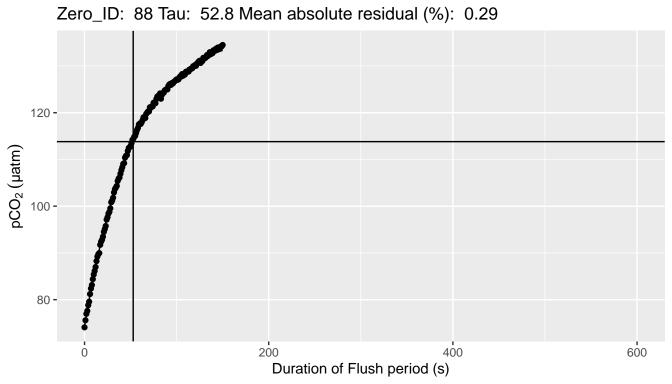


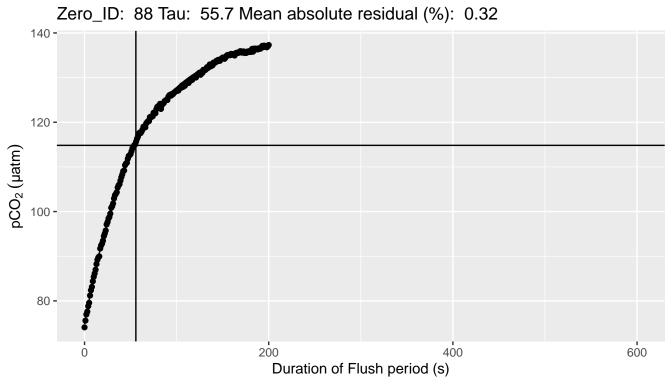


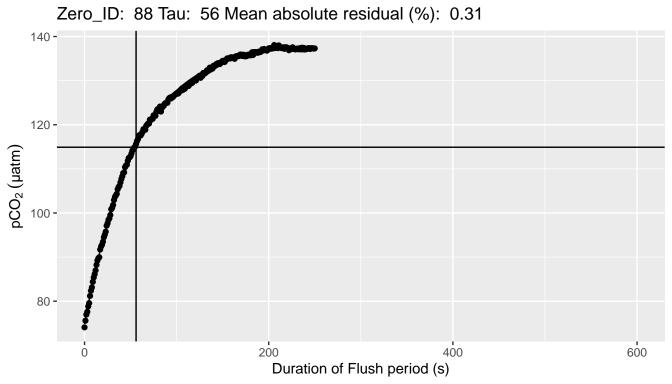


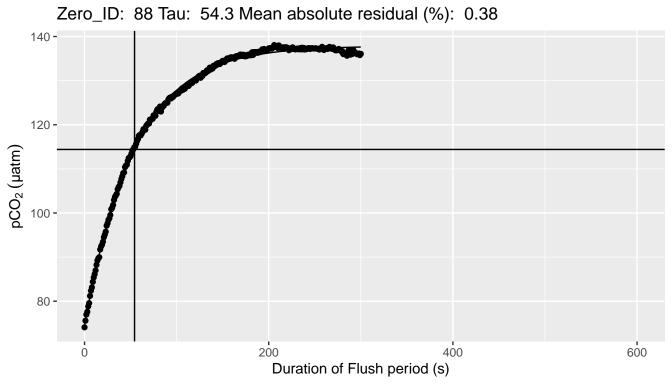


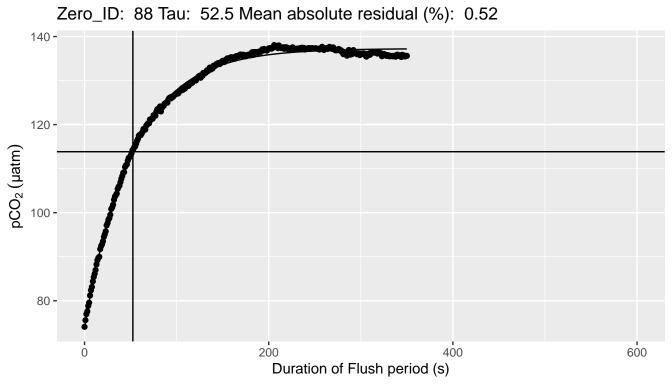


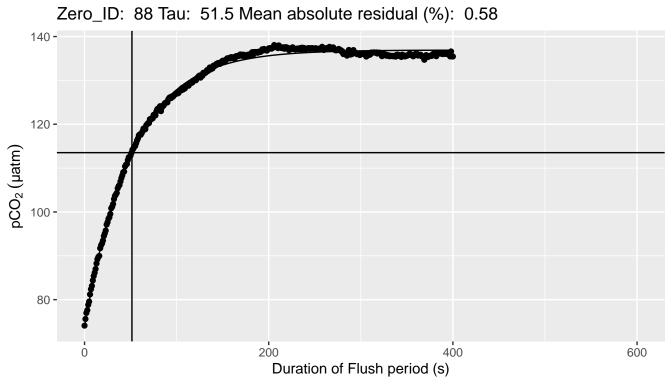


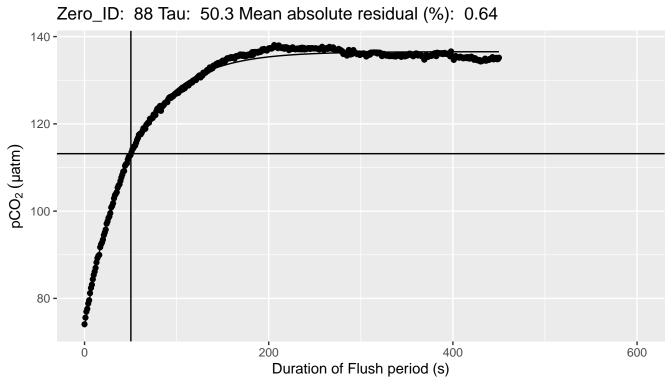


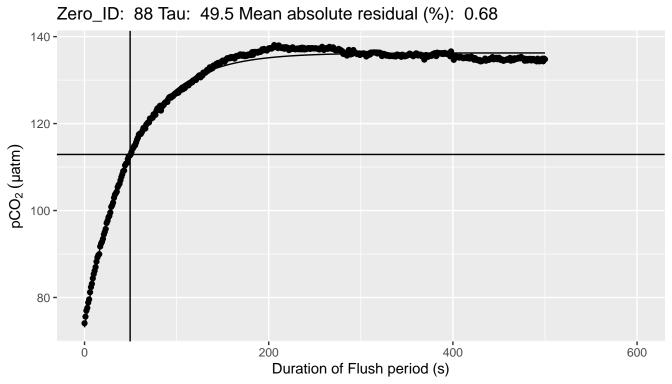


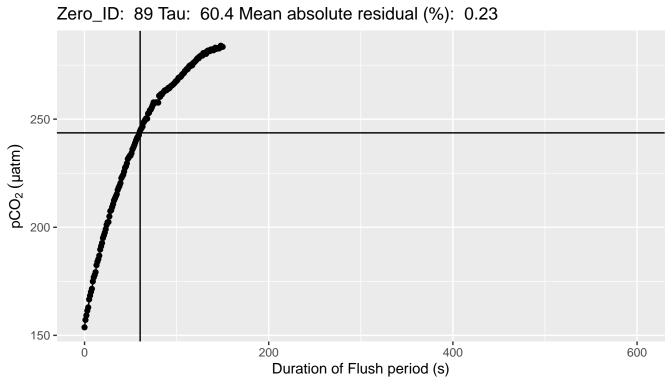


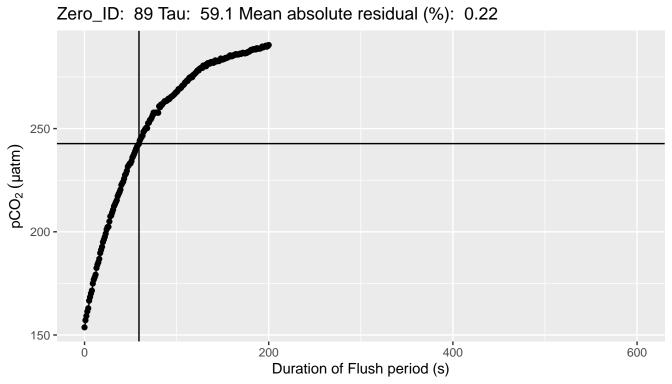


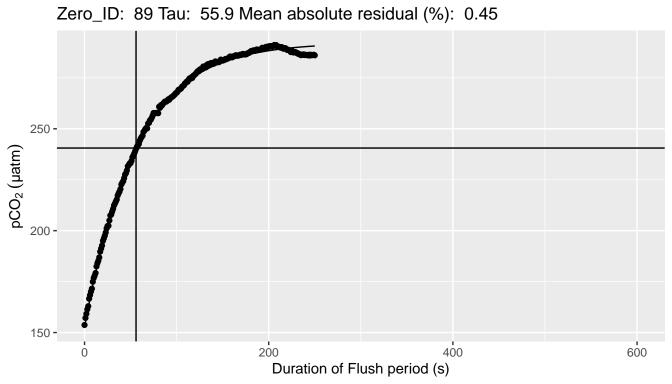


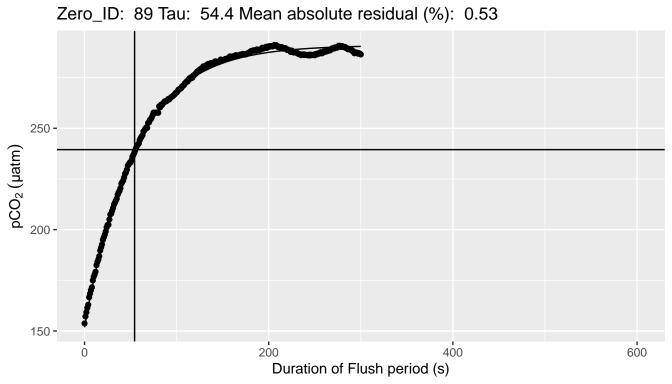


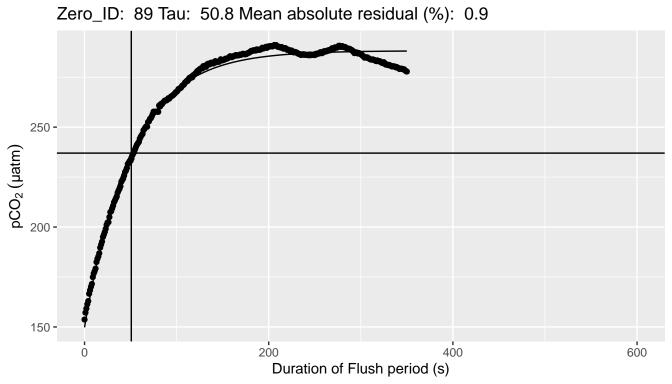


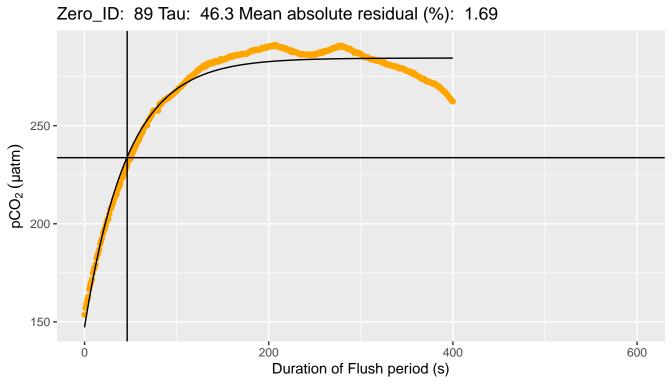


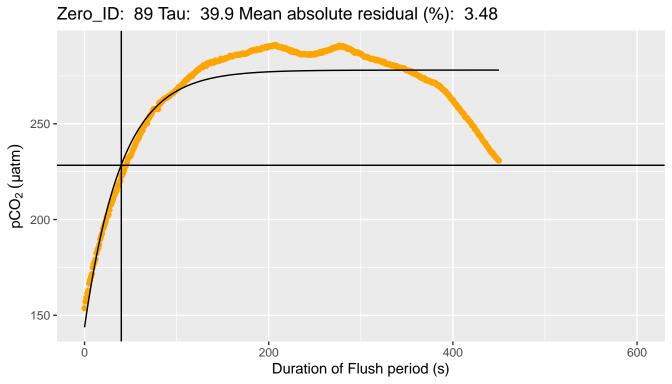


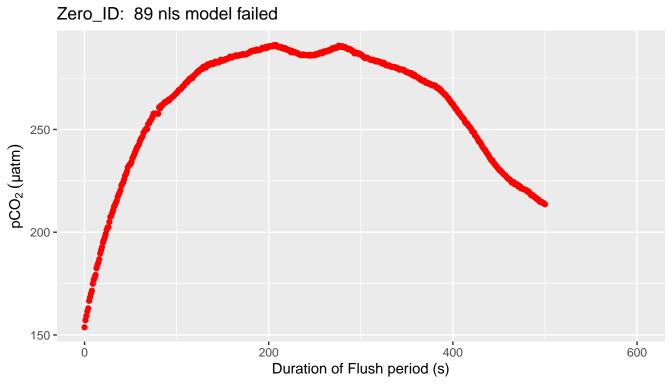


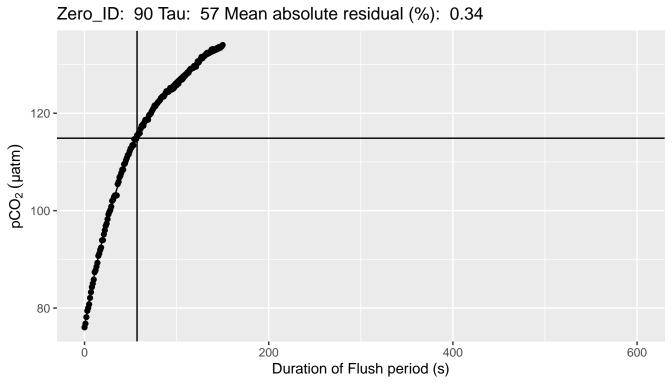


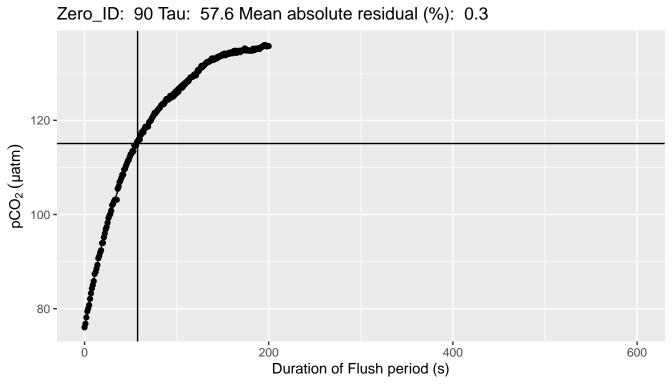


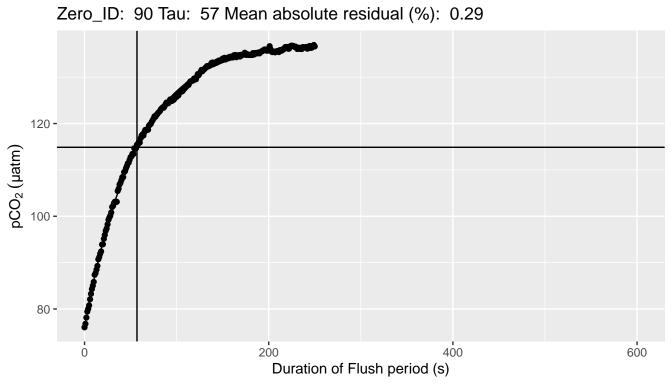


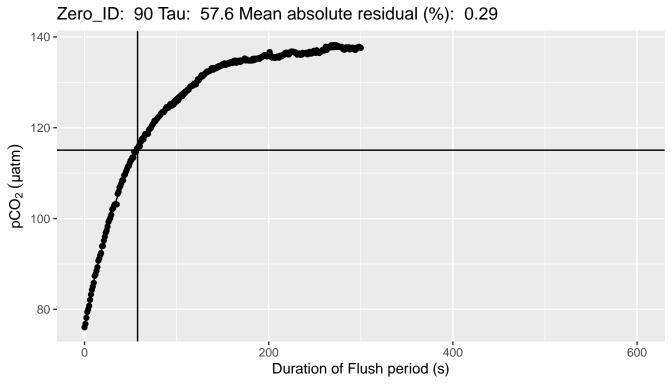


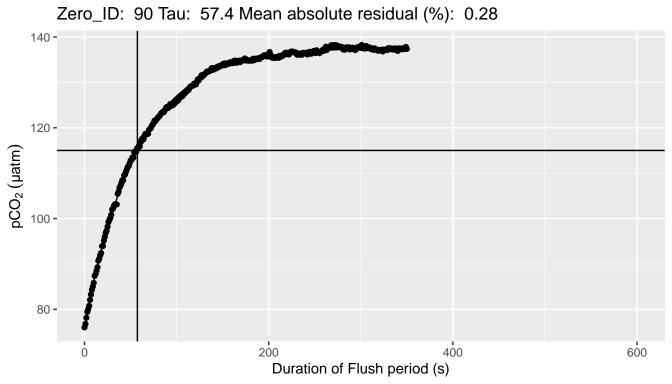


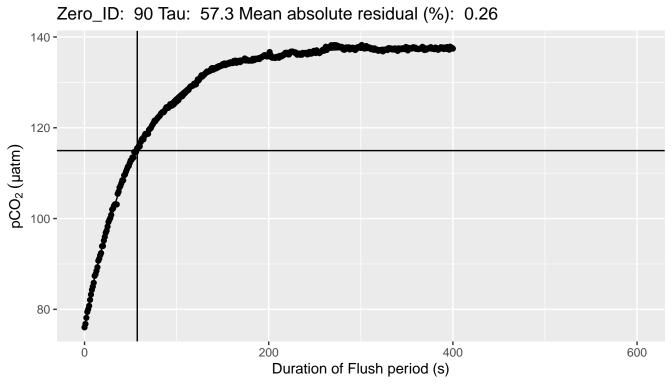


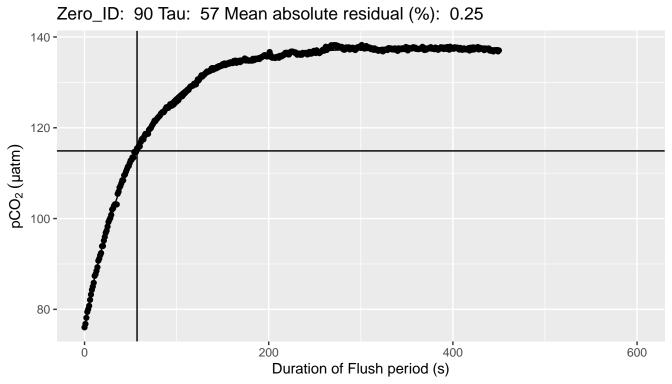


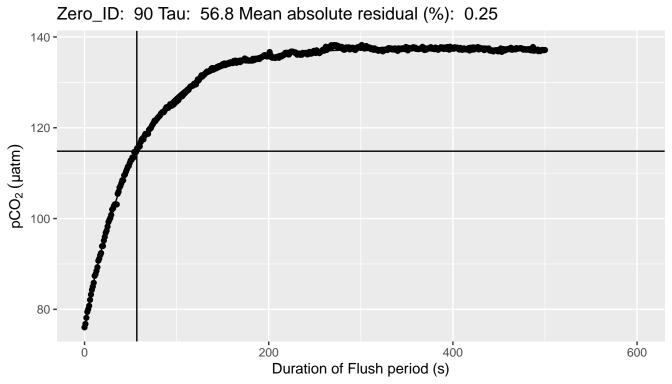


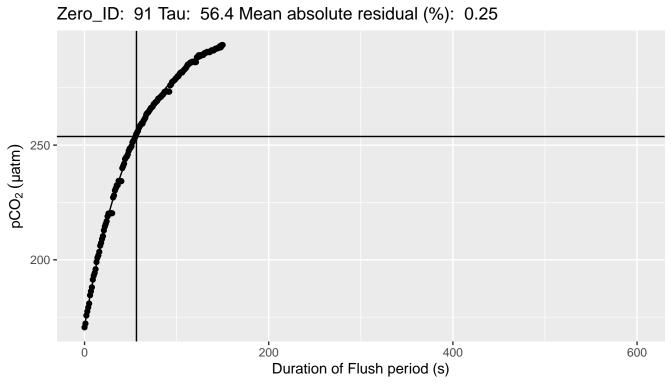


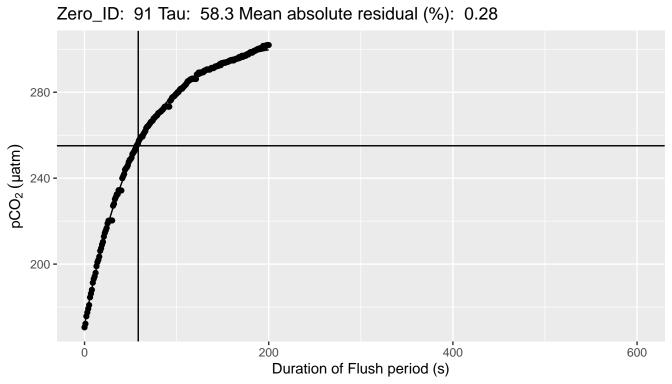


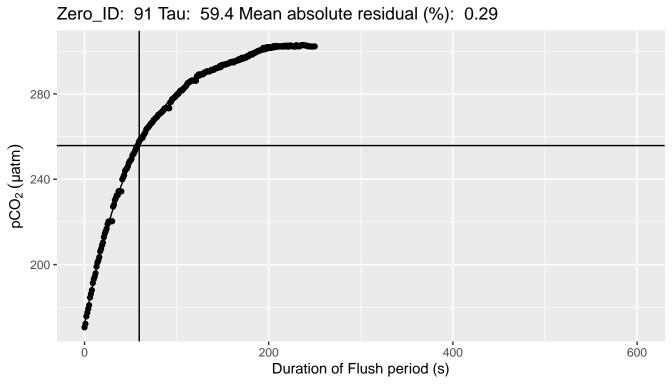


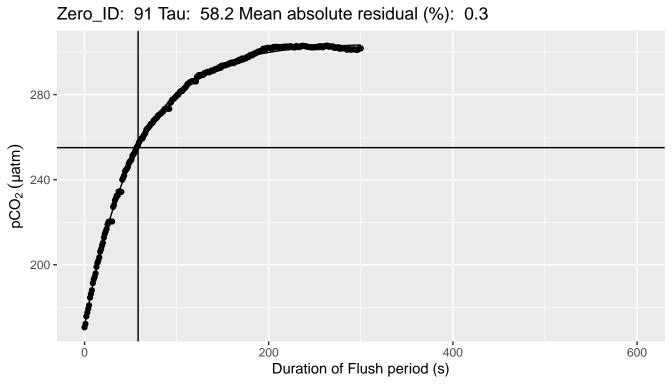


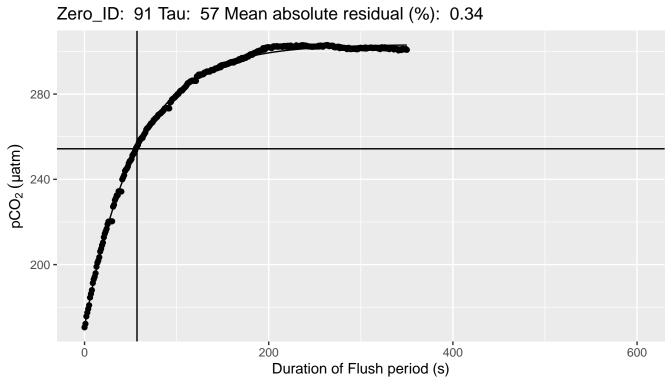


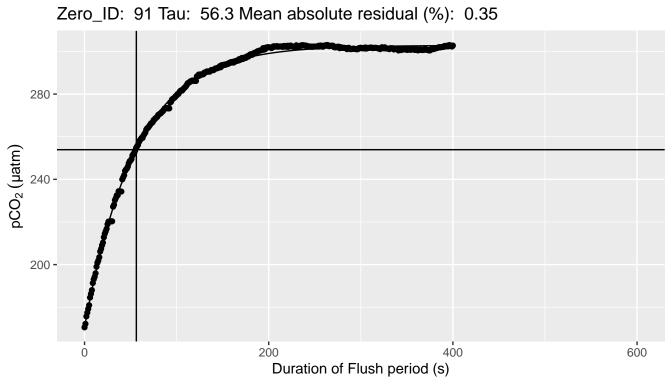


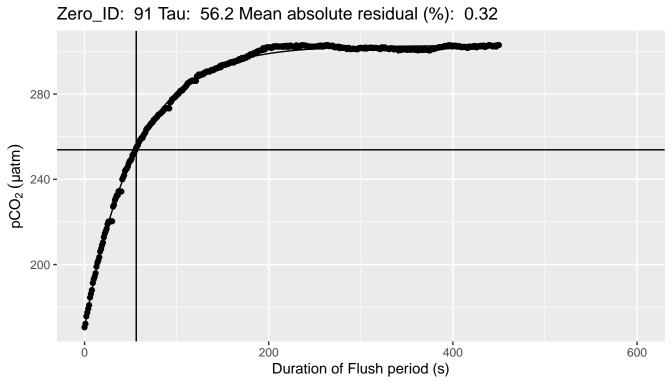


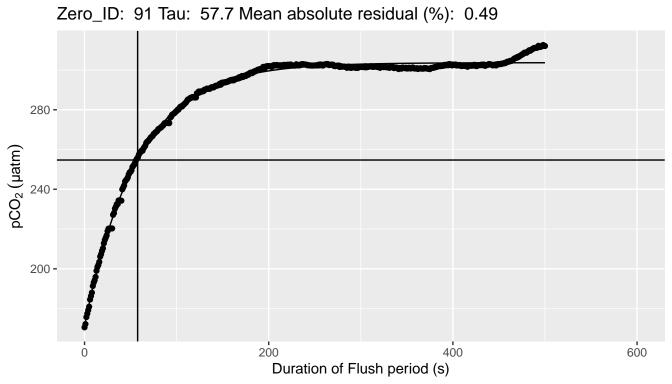










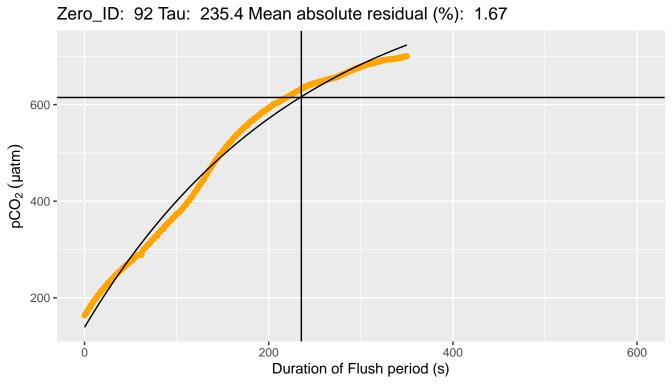


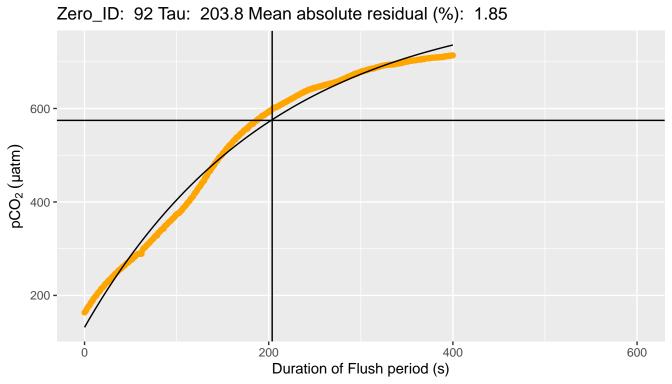
Zero\_ID: 92 nls model failed 500 -400 pCO<sub>2</sub> (µatm) 200 -200 400 600 Duration of Flush period (s)

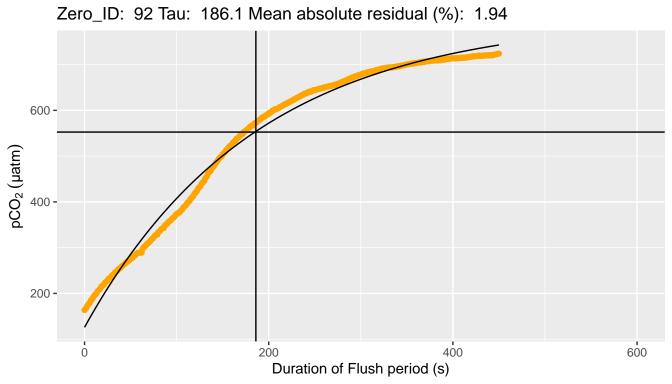
Zero\_ID: 92 nls model failed 600 -500 pCO<sub>2</sub> (µatm) 300 -200 -600 200 400 Duration of Flush period (s)

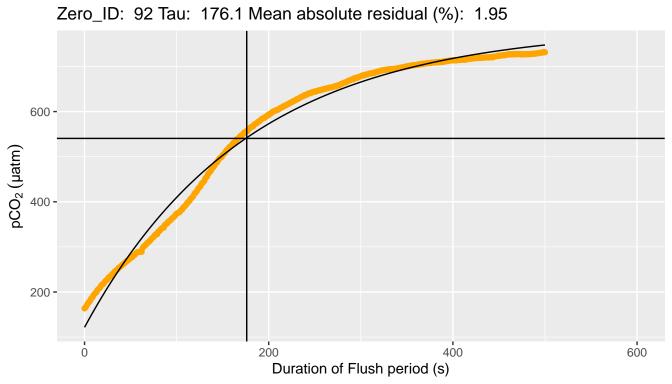
Zero\_ID: 92 Tau: 643 Mean absolute residual (%): 0.62 1200 -900 pCO<sub>2</sub> (µatm) 600 -300 -200 400 600 Duration of Flush period (s)

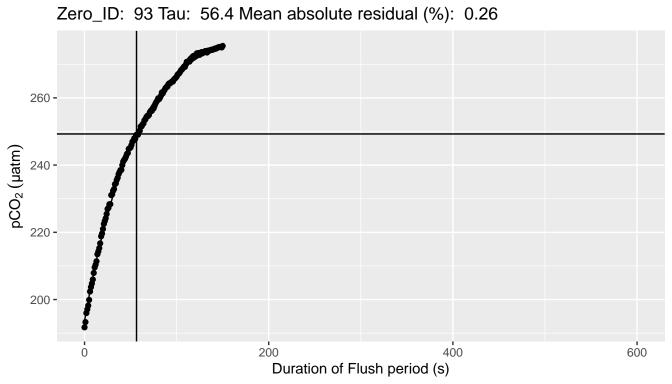
Zero\_ID: 92 Tau: 302.6 Mean absolute residual (%): 1.39 700 600 pCO<sub>2</sub> (µatm) 300 -200 -200 400 600 Duration of Flush period (s)









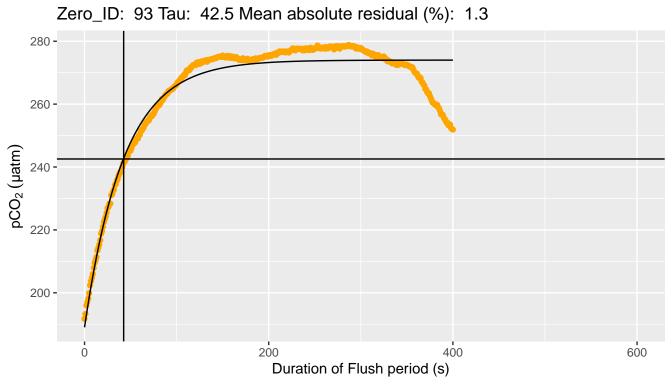


Zero\_ID: 93 Tau: 50.8 Mean absolute residual (%): 0.38 280 -260 pCO<sub>2</sub> (µatm) 220 -200 -200 400 600 Duration of Flush period (s)

Zero\_ID: 93 Tau: 50.4 Mean absolute residual (%): 0.33 280 -260 pCO<sub>2</sub> (µatm) 220 -200 -200 400 600 Duration of Flush period (s)

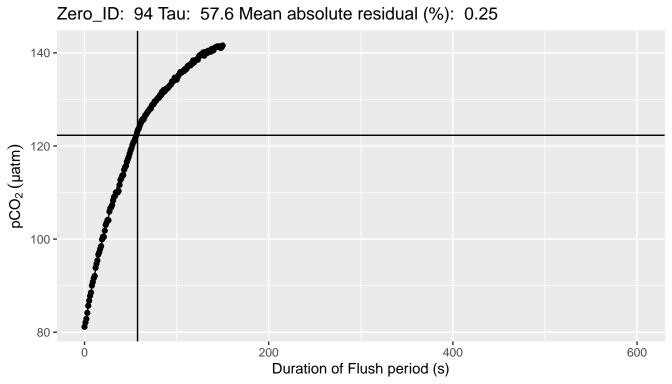
Zero\_ID: 93 Tau: 50.7 Mean absolute residual (%): 0.3 280 -260 pCO<sub>2</sub> (µatm) 220 -200 -200 400 600 Duration of Flush period (s)

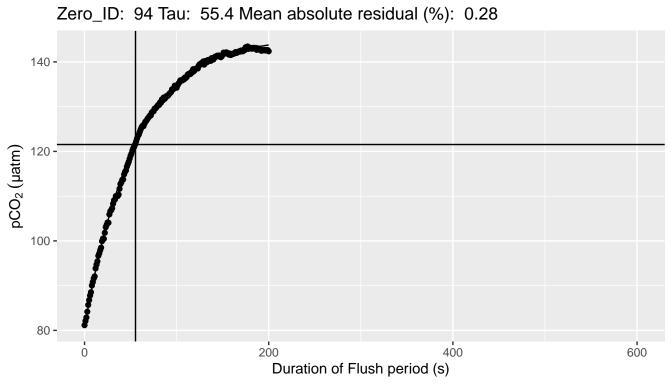
Zero\_ID: 93 Tau: 48.4 Mean absolute residual (%): 0.46 280 -260 pCO<sub>2</sub> (µatm) 220 -200 -200 400 600 Duration of Flush period (s)

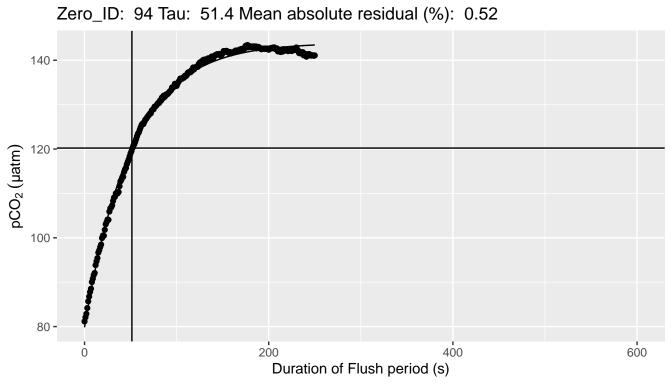


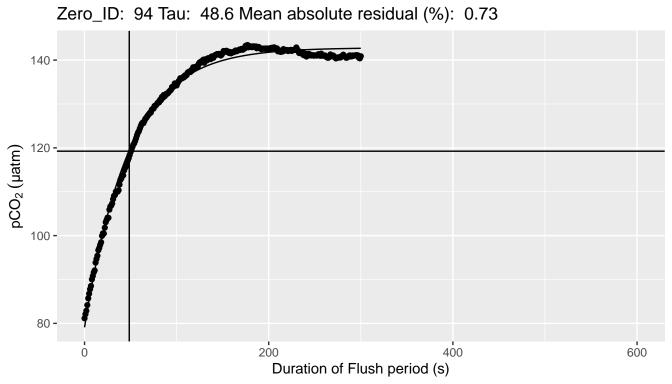
Zero\_ID: 93 nls model failed 280 -260 pCO<sub>2</sub> (µatm) 220 -200 -200 400 600 Duration of Flush period (s)

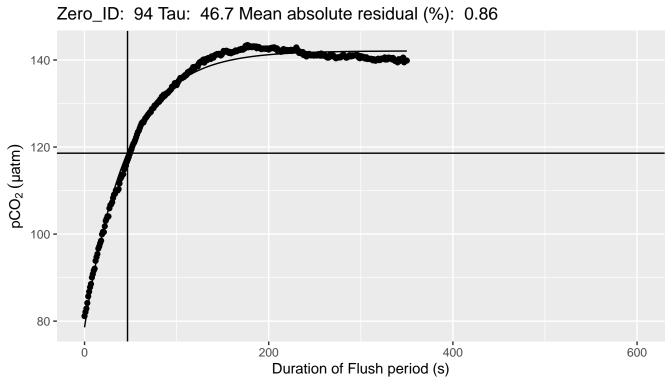
Zero\_ID: 93 nls model failed 280 -260 pCO<sub>2</sub> (µatm) 220 -200 -200 400 600 Duration of Flush period (s)

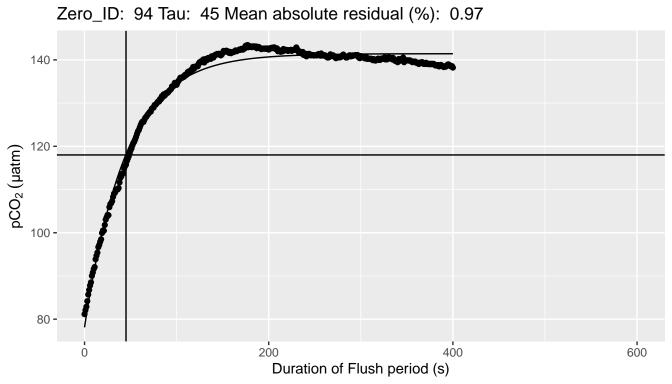


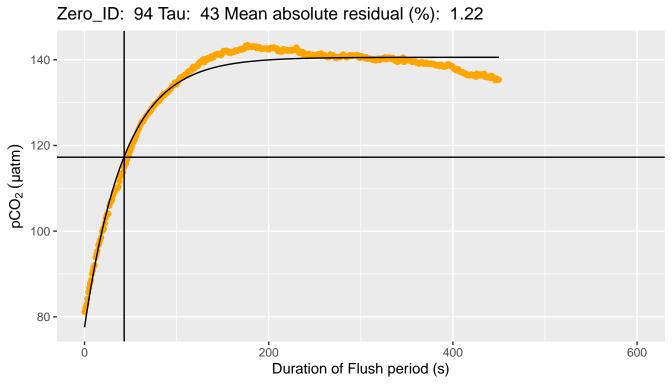


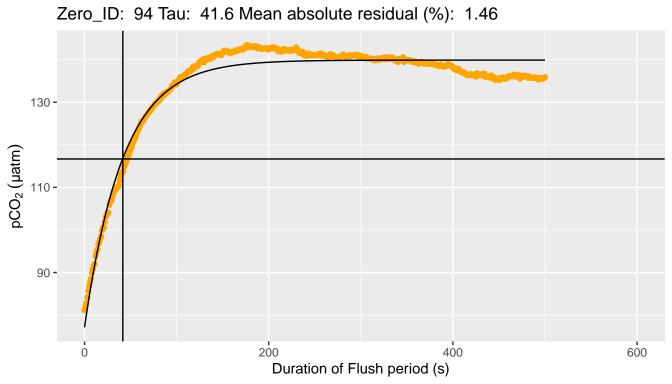


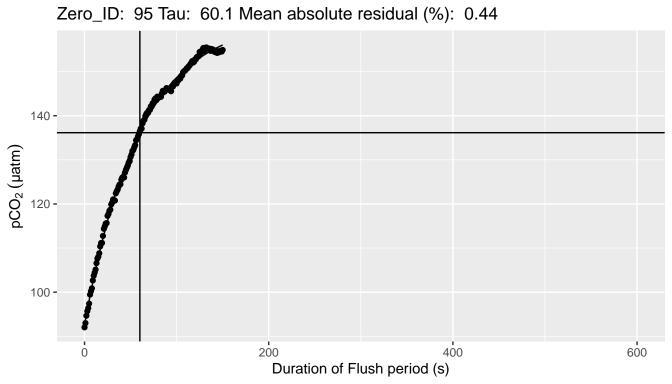


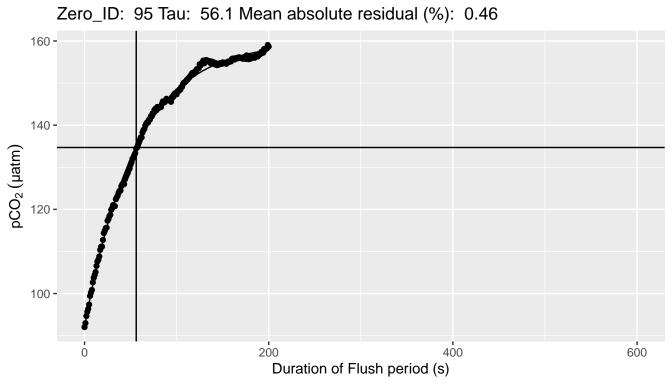


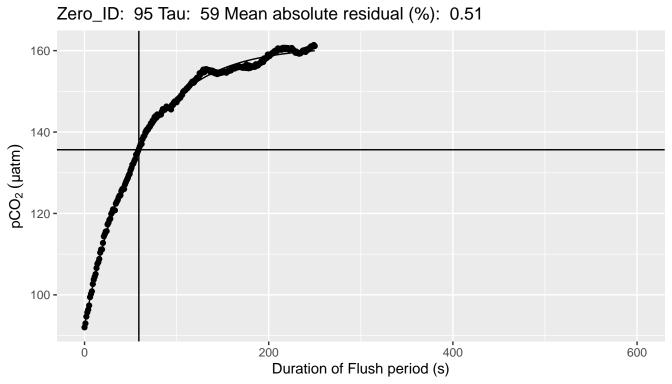






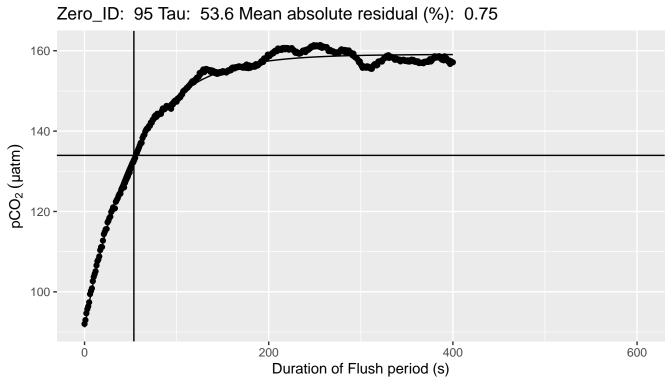






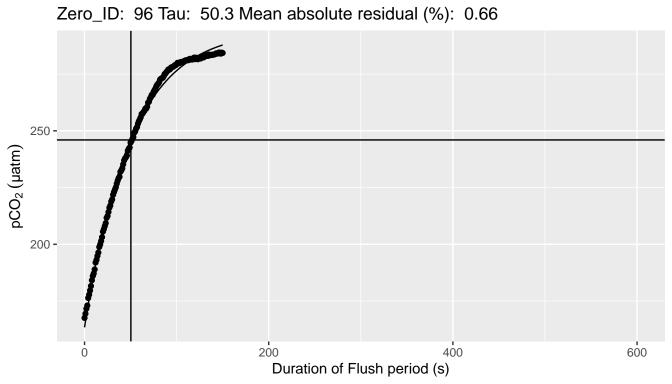
Zero\_ID: 95 Tau: 58.1 Mean absolute residual (%): 0.53 160 -140 pCO<sub>2</sub> (µatm) 100 -200 600 400 Duration of Flush period (s)

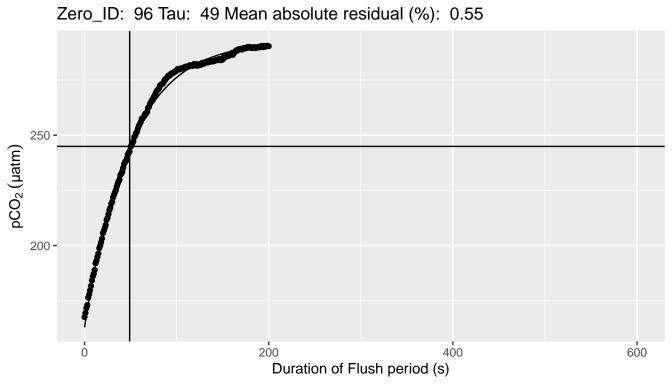
Zero\_ID: 95 Tau: 55 Mean absolute residual (%): 0.72 160 -140 pCO<sub>2</sub> (µatm) 100 -200 400 600 Duration of Flush period (s)

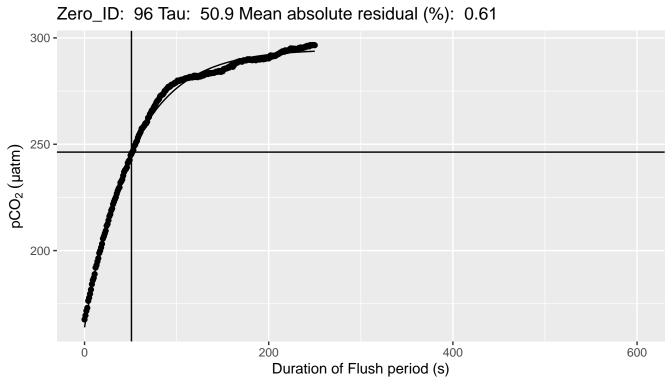


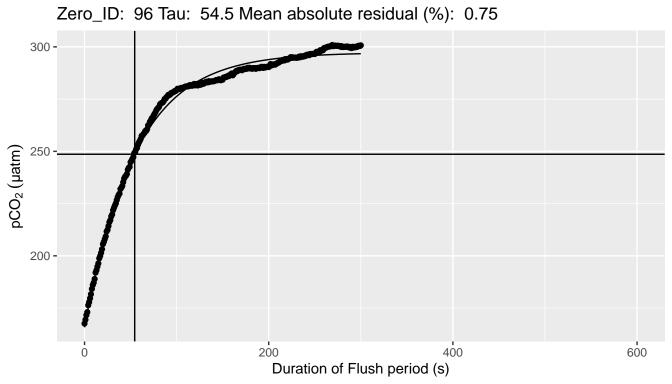
Zero\_ID: 95 Tau: 52.4 Mean absolute residual (%): 0.78 160 -140 pCO<sub>2</sub> (µatm) 120 -100 -200 400 600 Duration of Flush period (s)

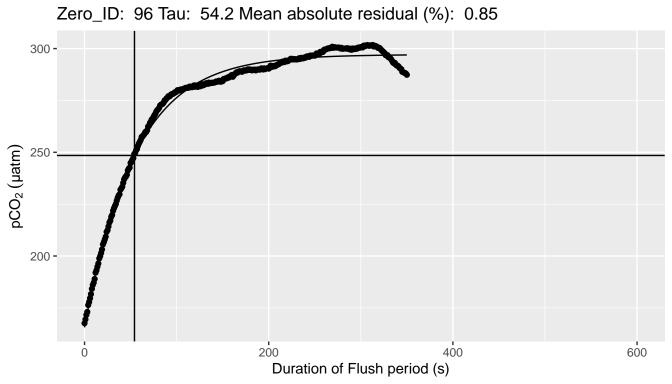
Zero\_ID: 95 Tau: 51.5 Mean absolute residual (%): 0.79 160 -140 pCO<sub>2</sub> (µatm) 120 **-**100 -200 400 600 Duration of Flush period (s)

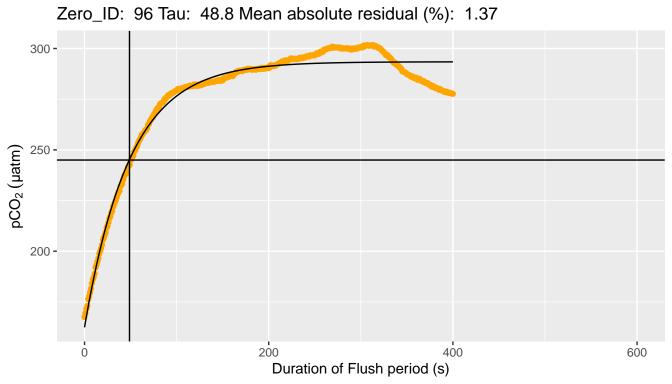


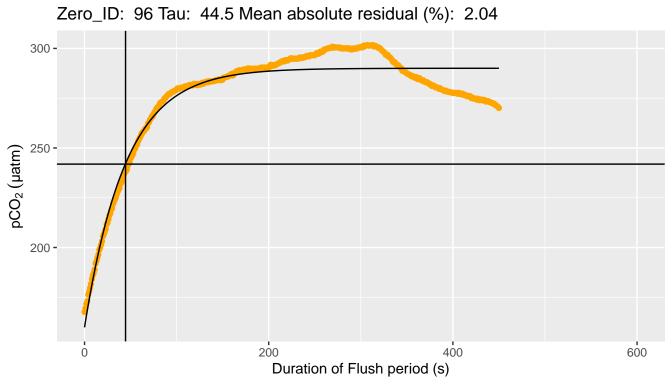


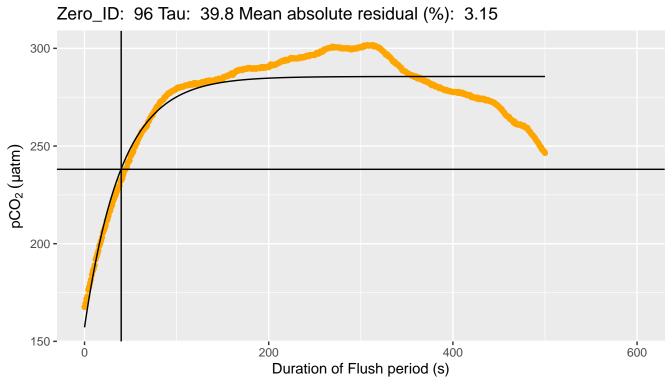


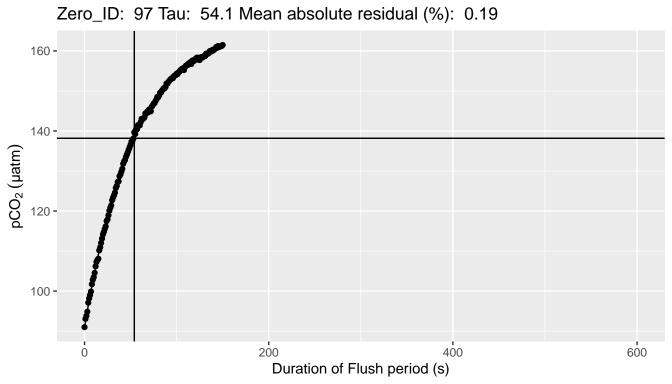


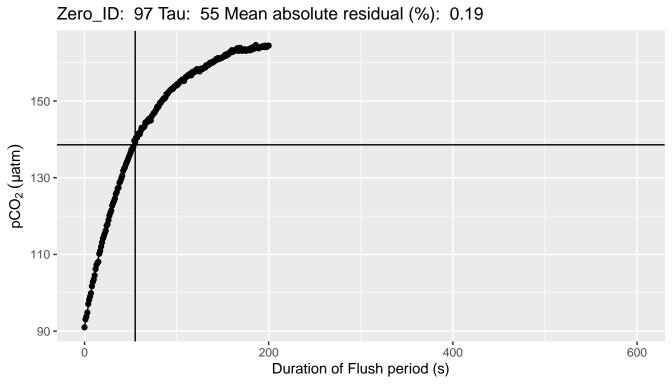












Zero\_ID: 97 Tau: 56.5 Mean absolute residual (%): 0.25 170 -150  $pCO_2$  (µatm) 130 -110 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 97 Tau: 56.7 Mean absolute residual (%): 0.25 170 -150 pCO<sub>2</sub> (µatm) 130 -110 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 97 Tau: 57.7 Mean absolute residual (%): 0.27 170 -150  $pCO_2$  (µatm) 130 -110 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 97 Tau: 58.2 Mean absolute residual (%): 0.27 170 -150  $pCO_2$  (µatm) 130 -110 -90 -200 400 600 Duration of Flush period (s)

Zero\_ID: 97 Tau: 58.7 Mean absolute residual (%): 0.28 170 -150  $pCO_2$  (µatm) 110 -90 -200 400 600 Duration of Flush period (s)

