

Regression results in SWWSP

The black line indicates data and black dots indicates training/validation boundary. The red line is periodic regression result/prediction. The blue line is ARIMA fit result/prediction. The green line is RNN fit result/prediction.

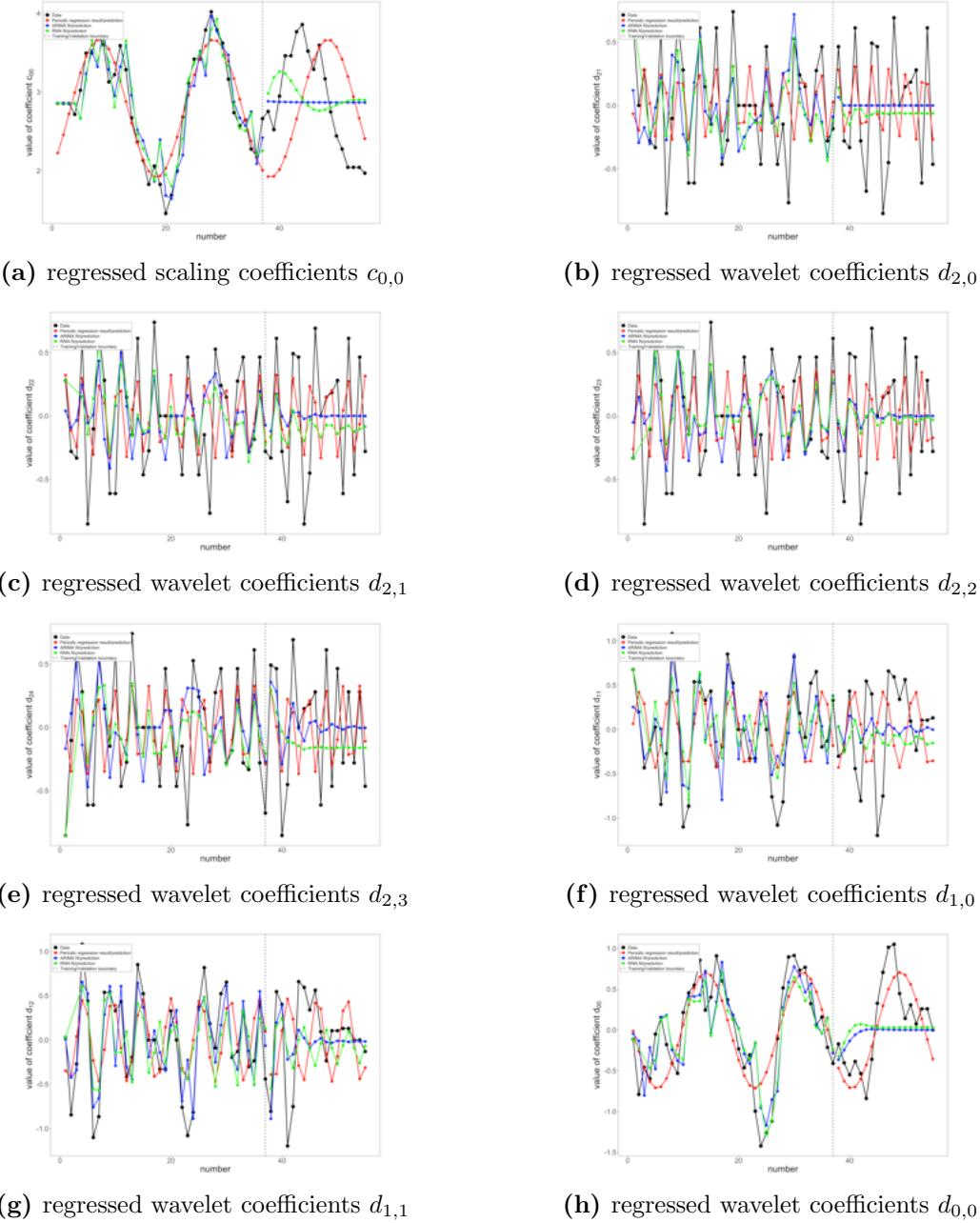


Fig .1: Regression result (dt, 70%, DS1)

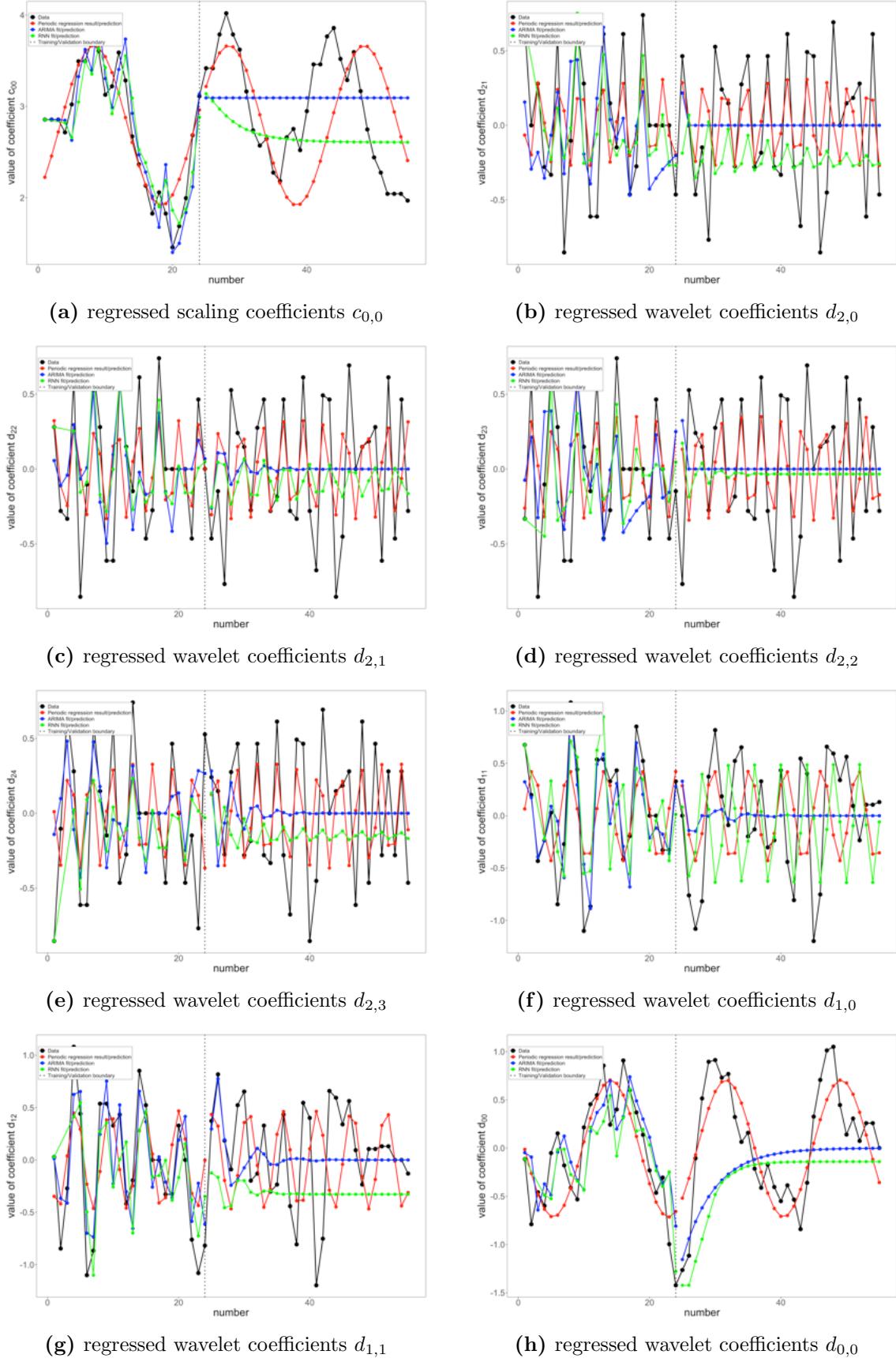


Fig .2: Regression result (dt, 50%, DS1)

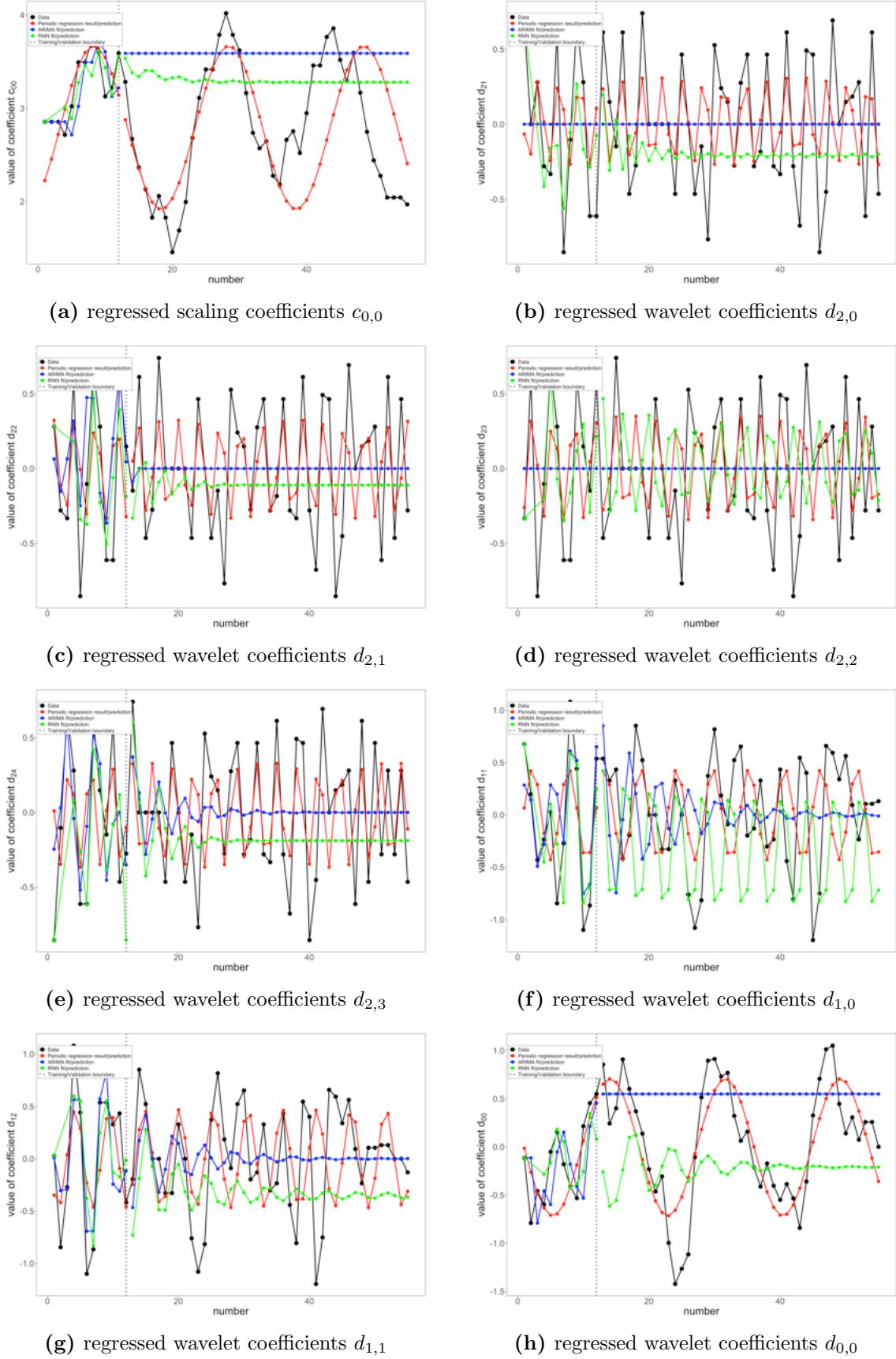


Fig .3: Regression result (dt, 30%, DS1)

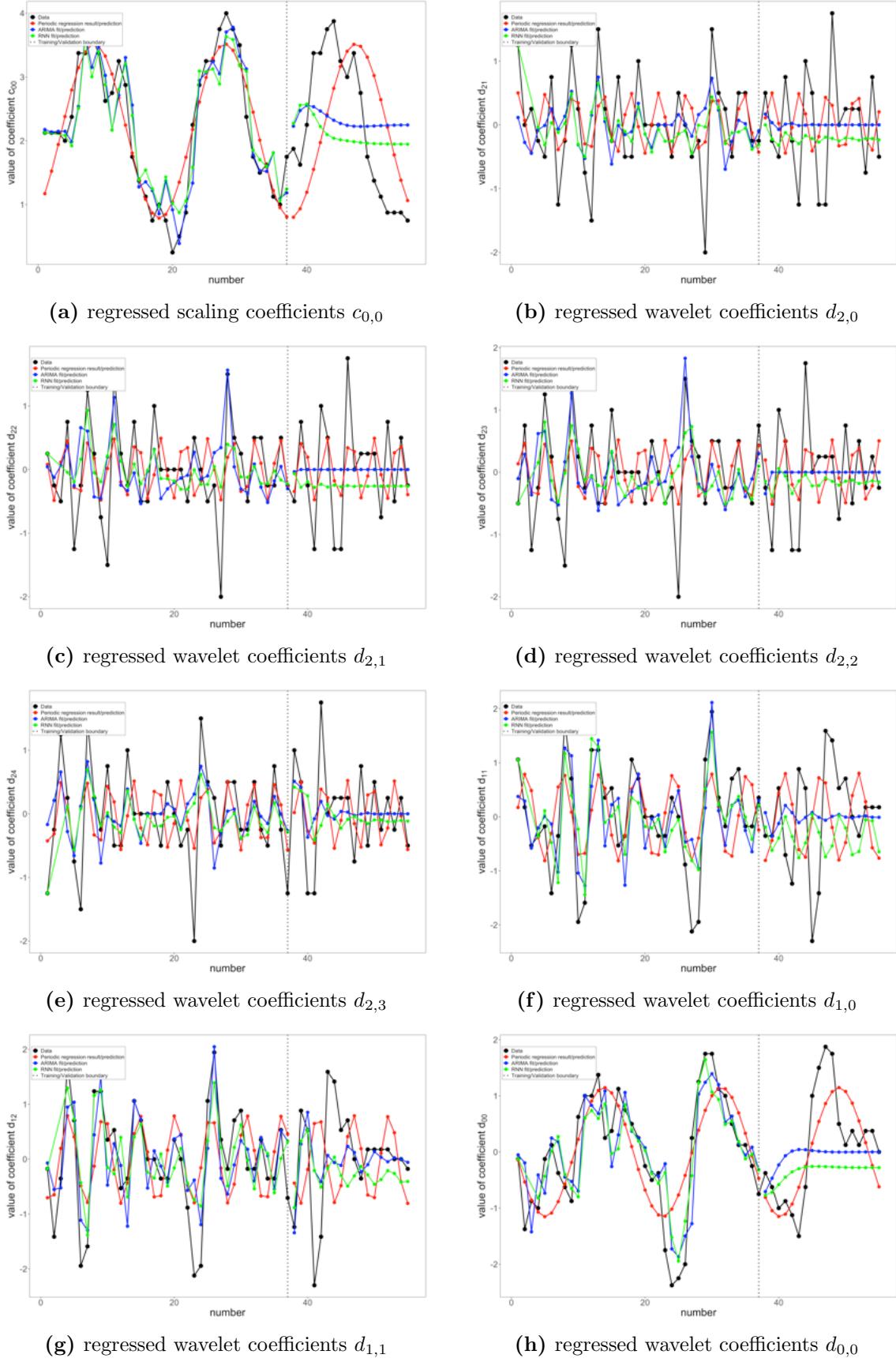
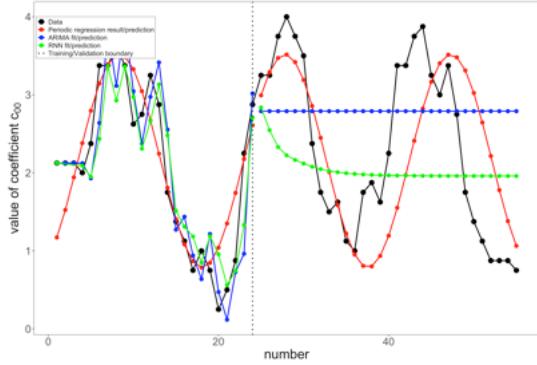
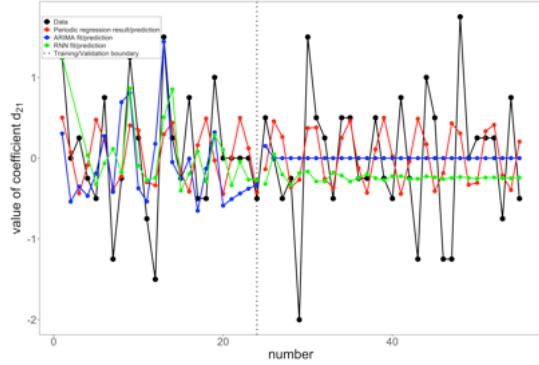


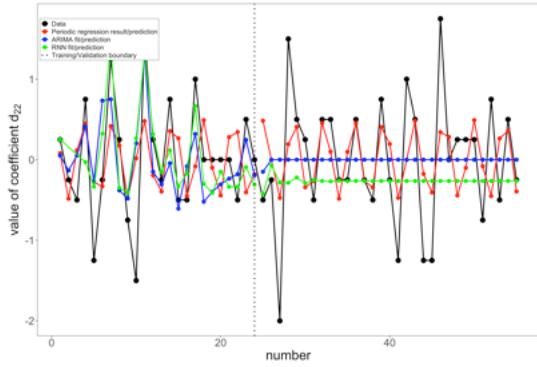
Fig .4: Regression result (ndt, 70%, DS1)



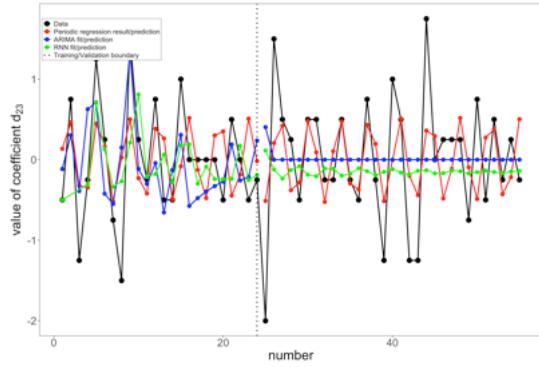
(a) regressed scaling coefficients $c_{0,0}$



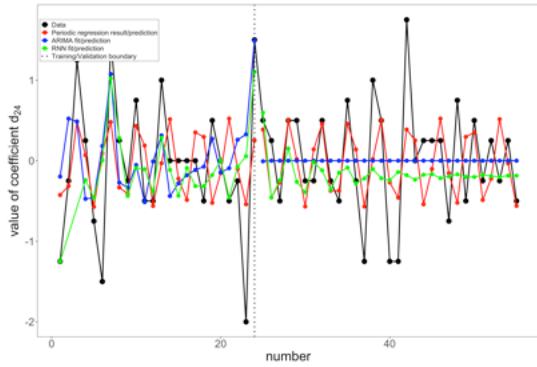
(b) regressed wavelet coefficients $d_{2,0}$



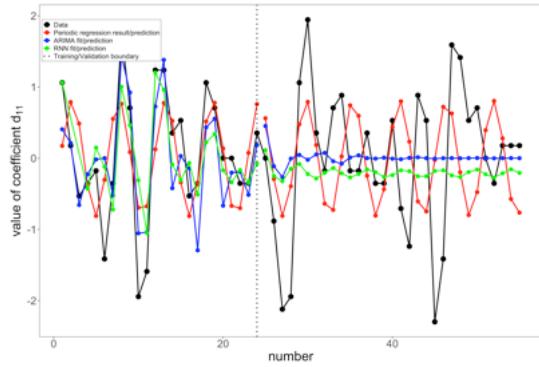
(c) regressed wavelet coefficients $d_{2,1}$



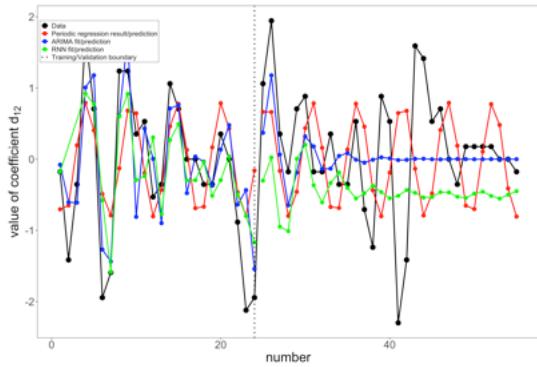
(d) regressed wavelet coefficients $d_{2,2}$



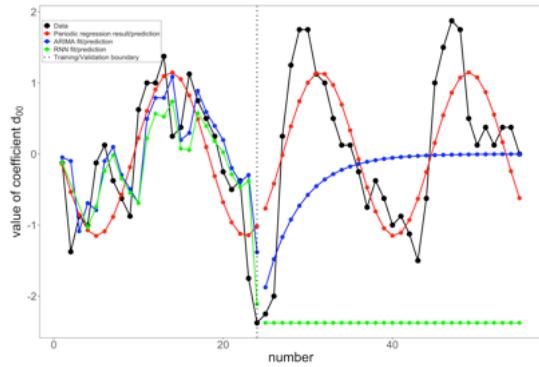
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$



(g) regressed wavelet coefficients $d_{1,1}$



(h) regressed wavelet coefficients $d_{0,0}$

Fig .5: Regression result (ndt, 50%, DS1)

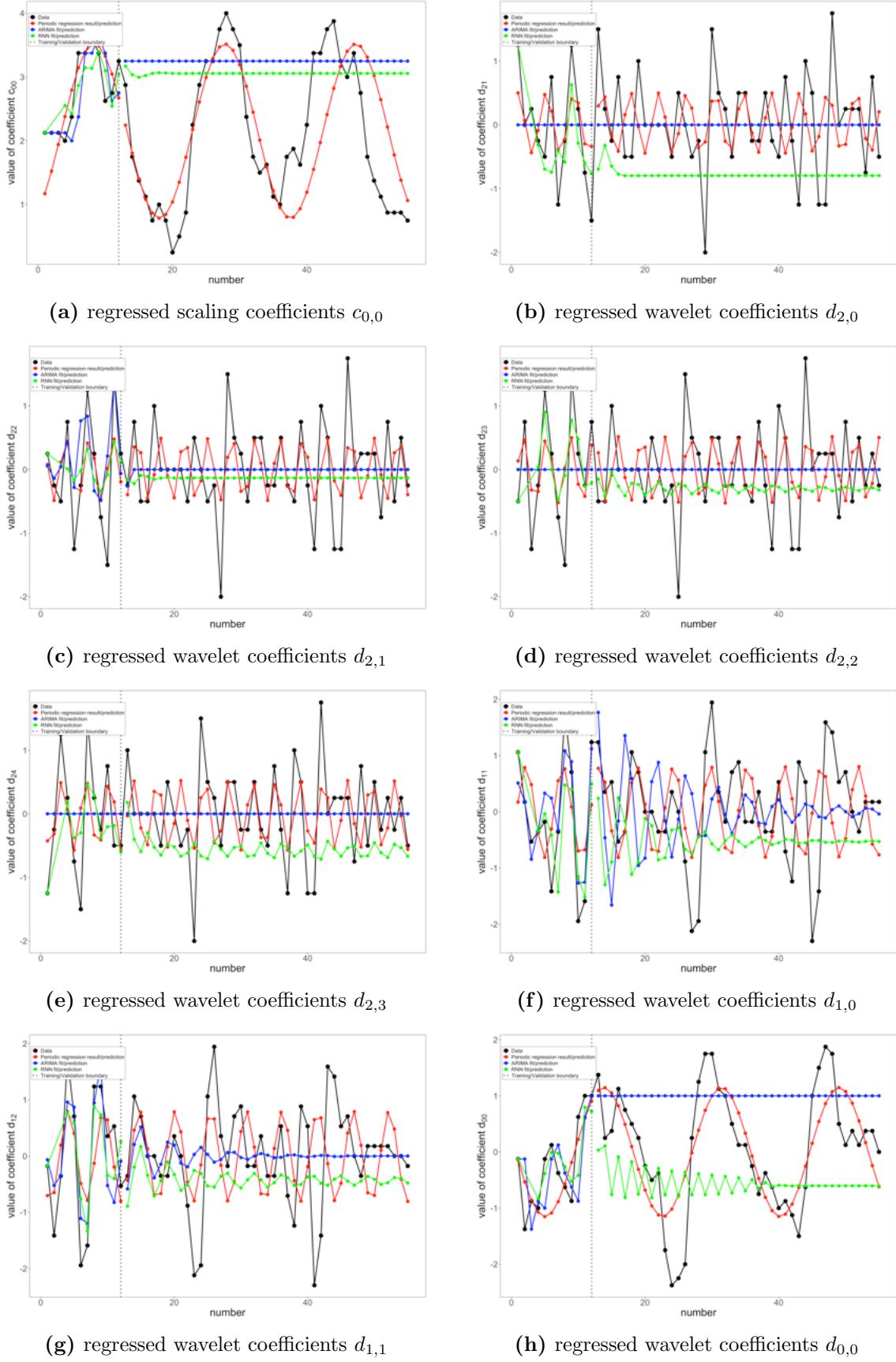


Fig .6: Regression result (ndt, 30%, DS1)

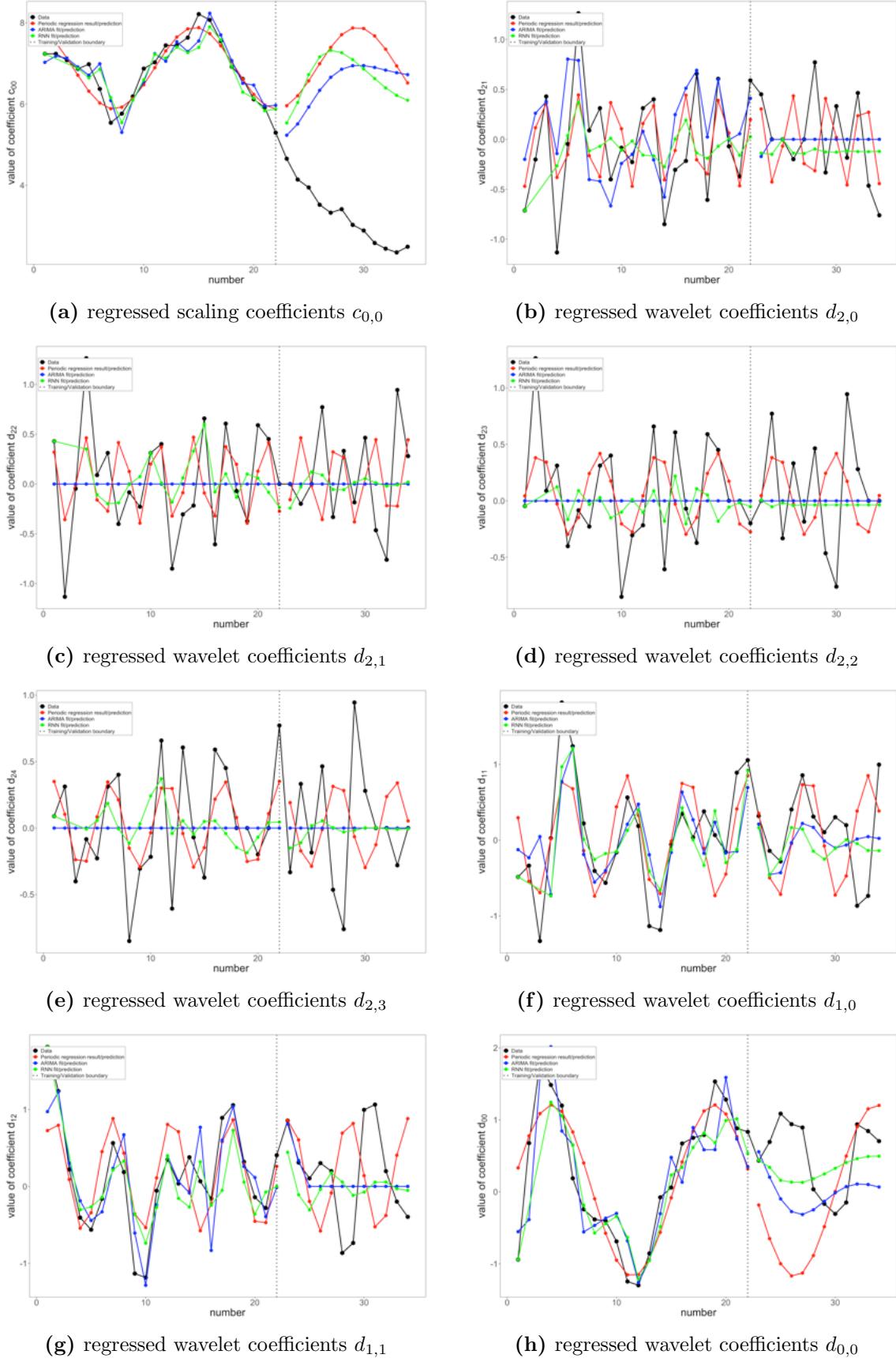


Fig .7: Regression result (dt, 70%, DS2)

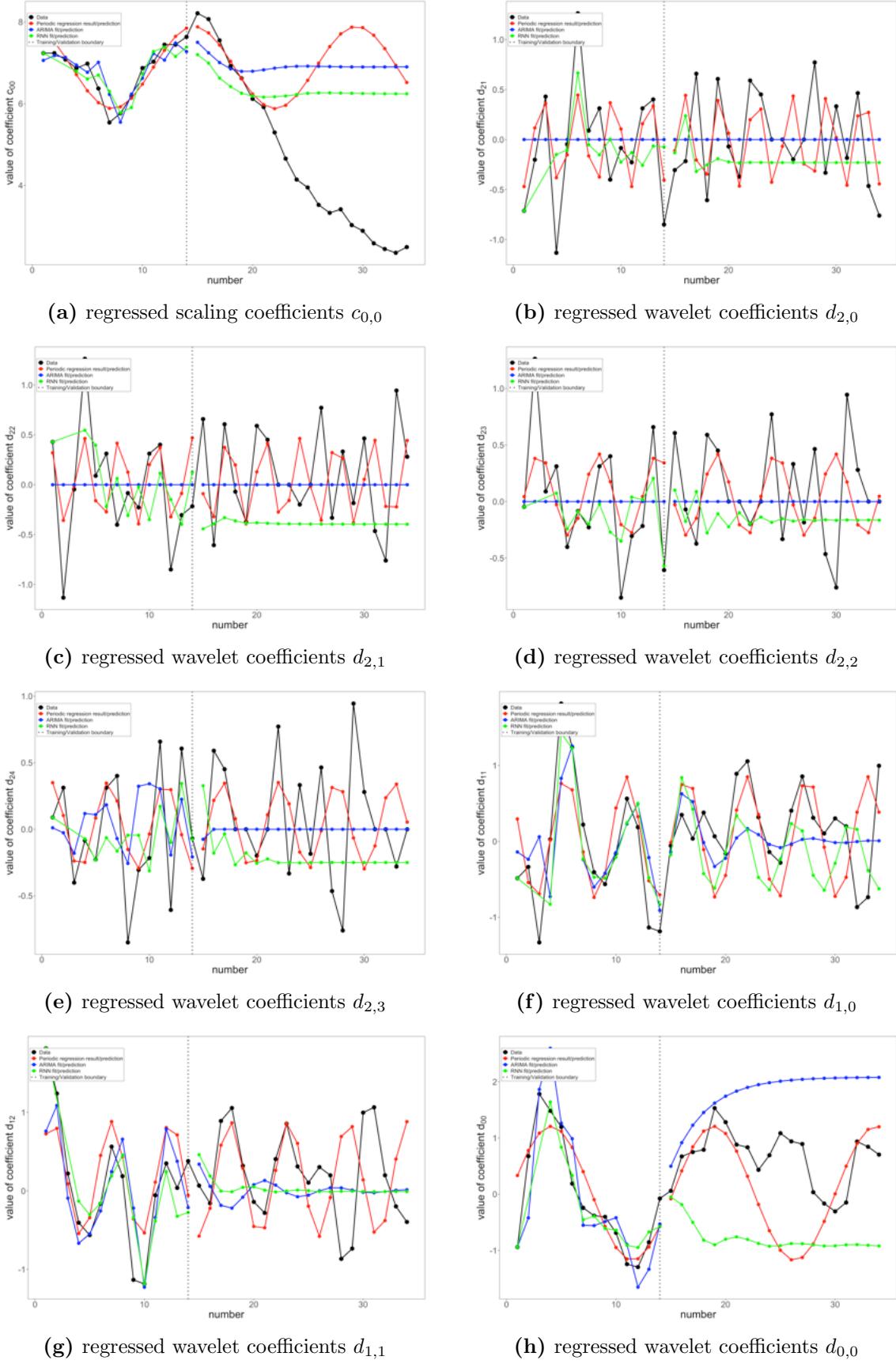
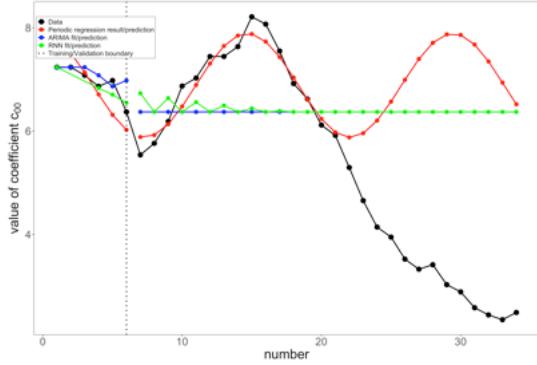
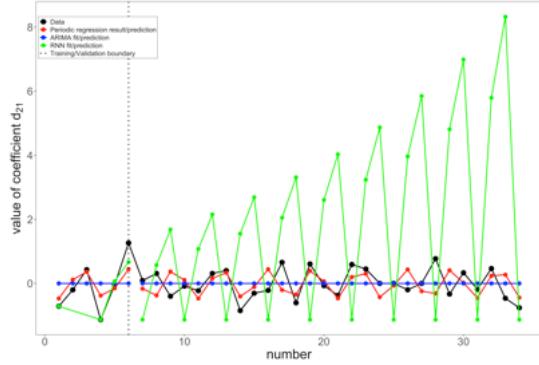


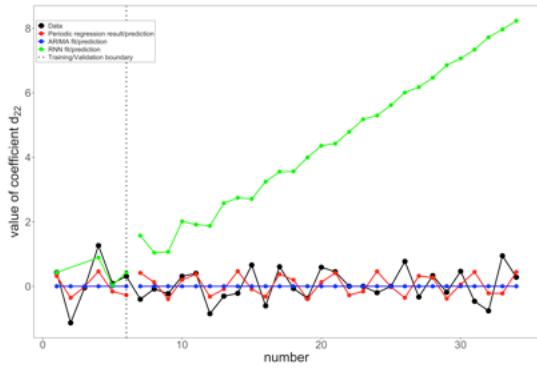
Fig .8: Regression result (dt, 50%, DS2)



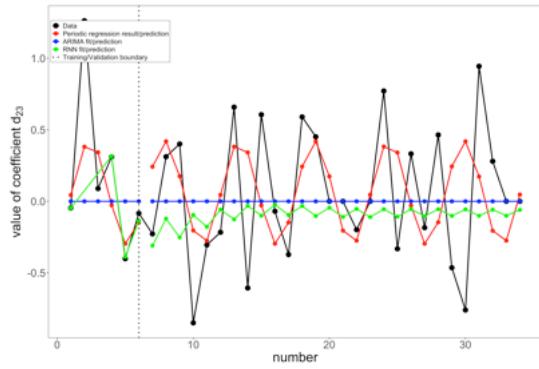
(a) regressed scaling coefficients $c_{0,0}$



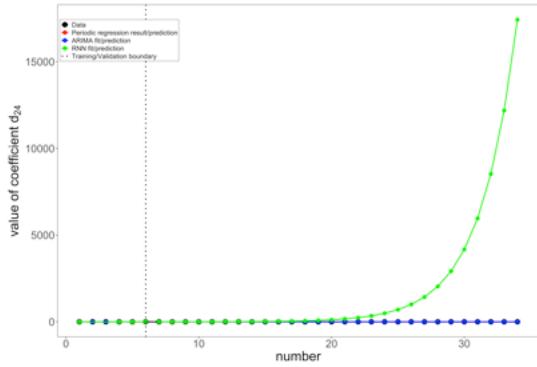
(b) regressed wavelet coefficients $d_{2,0}$



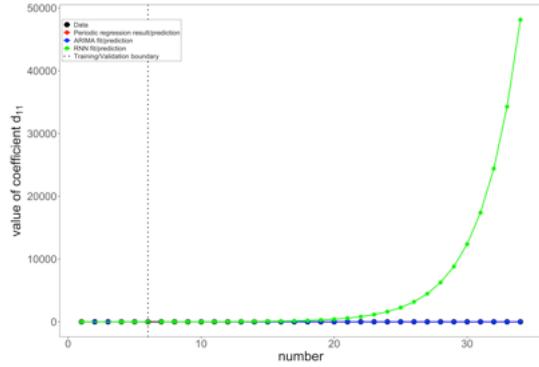
(c) regressed wavelet coefficients $d_{2,1}$



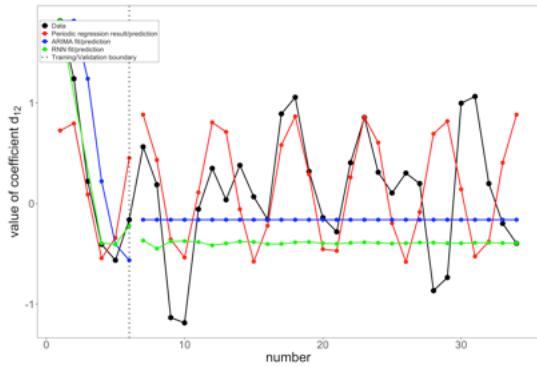
(d) regressed wavelet coefficients $d_{2,2}$



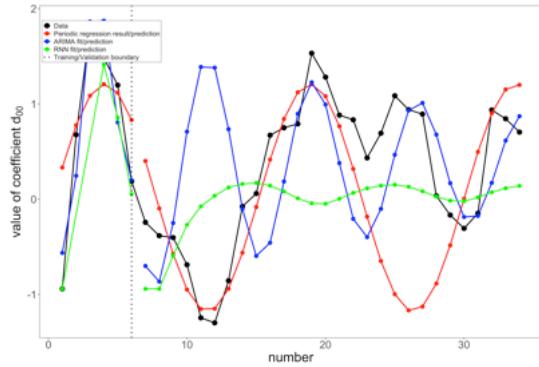
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

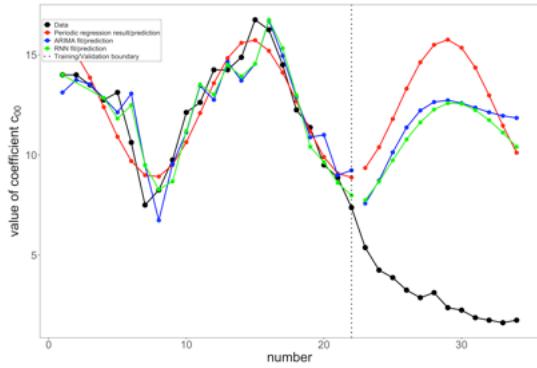


(g) regressed wavelet coefficients $d_{1,1}$

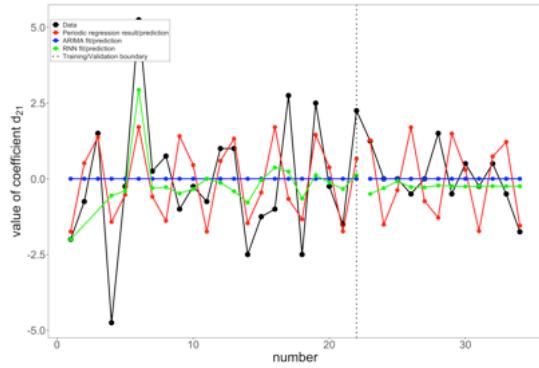


(h) regressed wavelet coefficients $d_{0,0}$

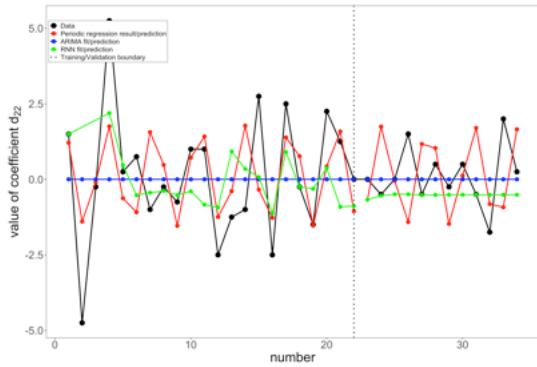
Fig .9: Regression result (dt, 30%, DS2)



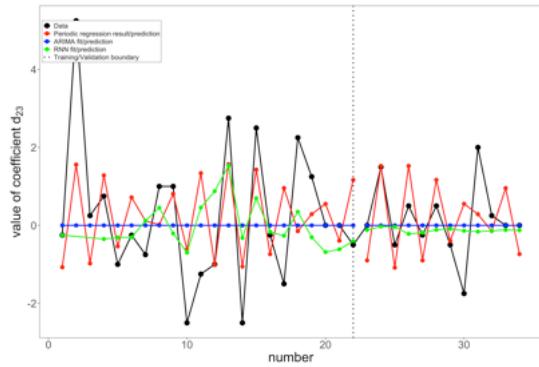
(a) regressed scaling coefficients $c_{0,0}$



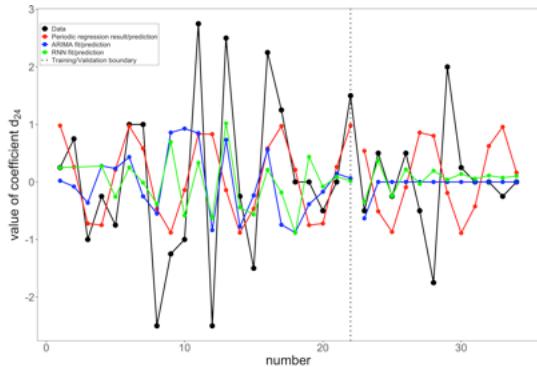
(b) regressed wavelet coefficients $d_{2,0}$



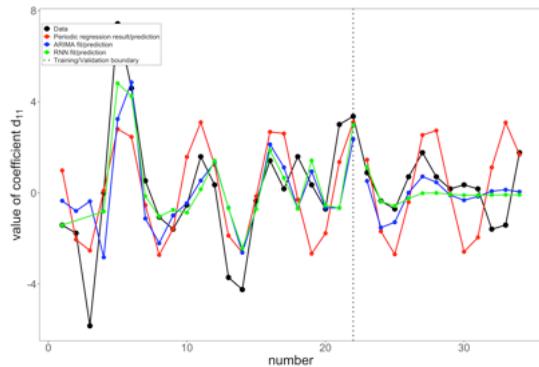
(c) regressed wavelet coefficients $d_{2,1}$



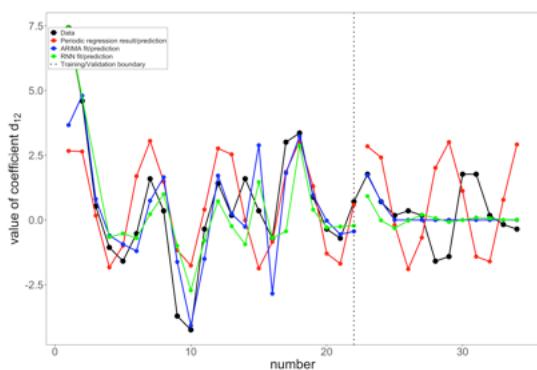
(d) regressed wavelet coefficients $d_{2,2}$



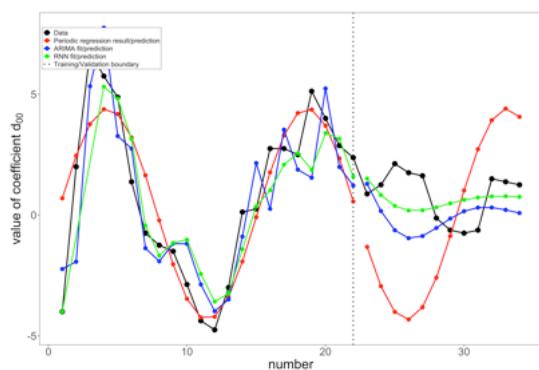
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

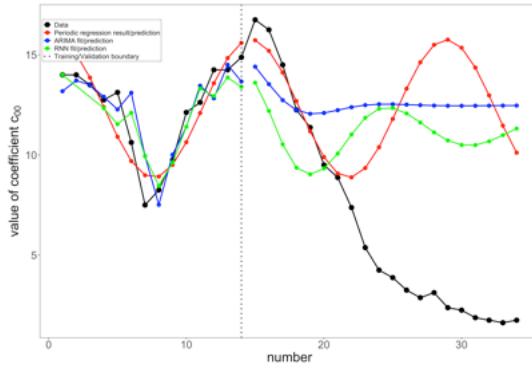


(g) regressed wavelet coefficients $d_{1,1}$

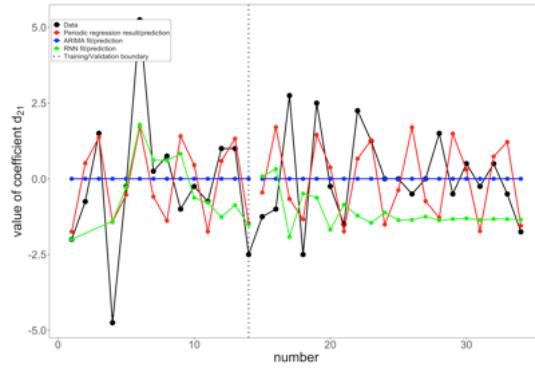


(h) regressed wavelet coefficients $d_{0,0}$

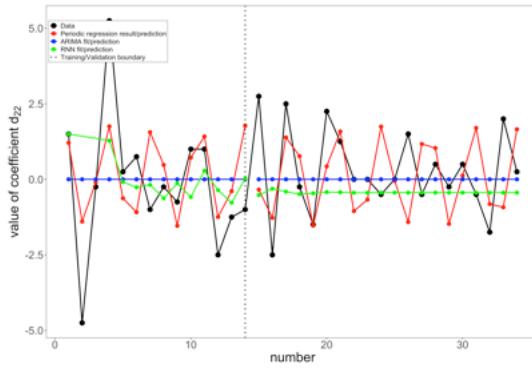
Fig .10: Regression result (ndt, 70%, DS2)



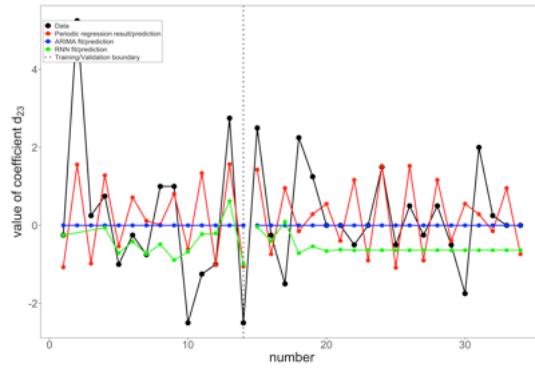
(a) regressed scaling coefficients $c_{0,0}$



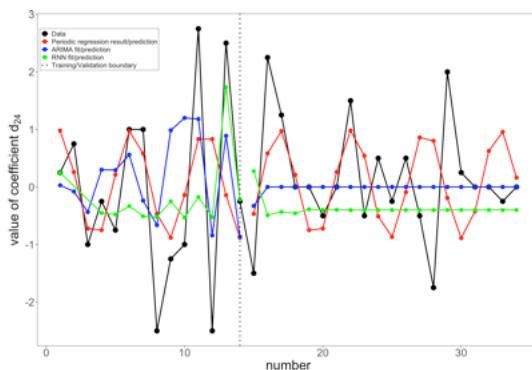
(b) regressed wavelet coefficients $d_{2,0}$



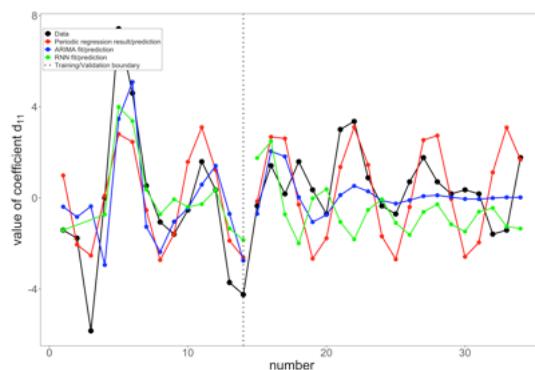
(c) regressed wavelet coefficients $d_{2,1}$



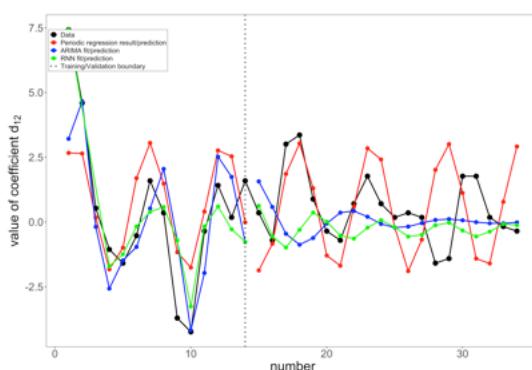
(d) regressed wavelet coefficients $d_{2,2}$



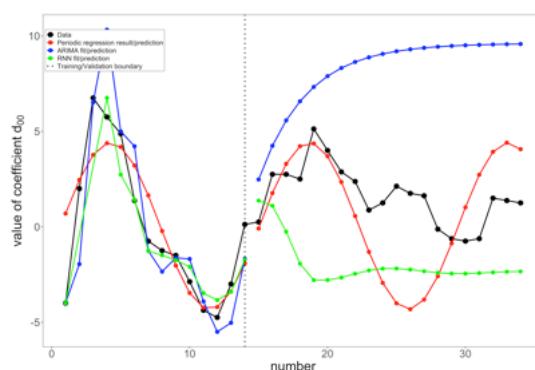
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

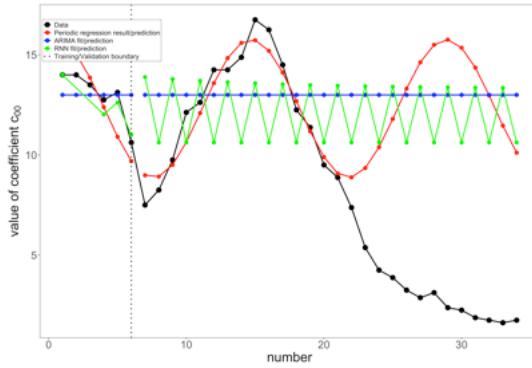


(g) regressed wavelet coefficients $d_{1,1}$

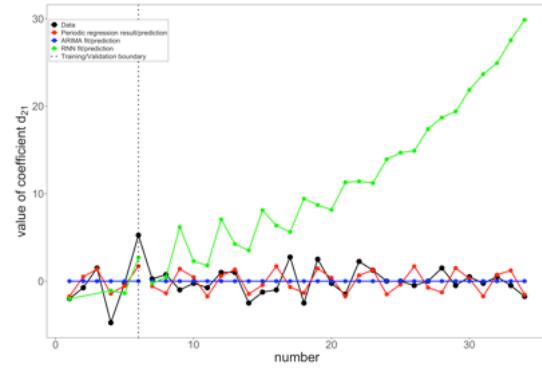


(h) regressed wavelet coefficients $d_{0,0}$

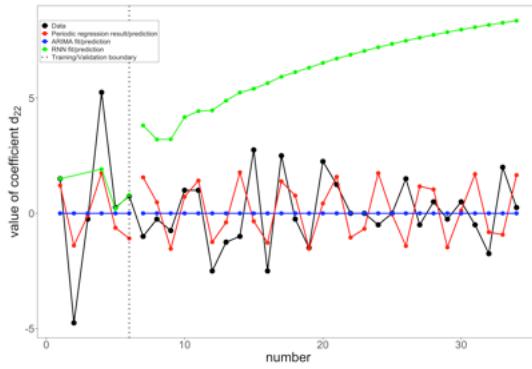
Fig .11: Regression result (ndt, 50%, DS2)



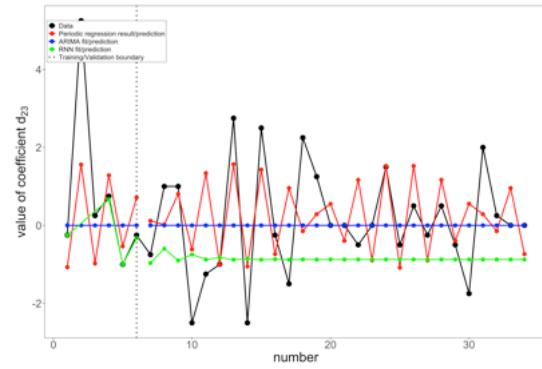
(a) regressed scaling coefficients $c_{0,0}$



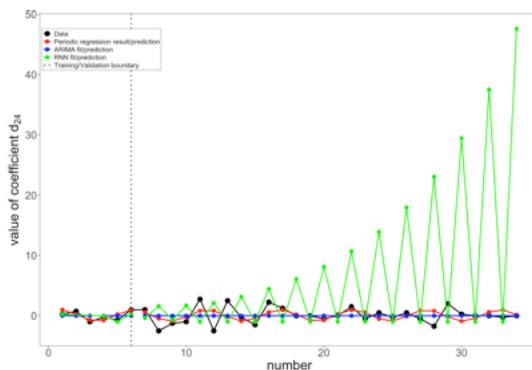
(b) regressed wavelet coefficients $d_{2,0}$



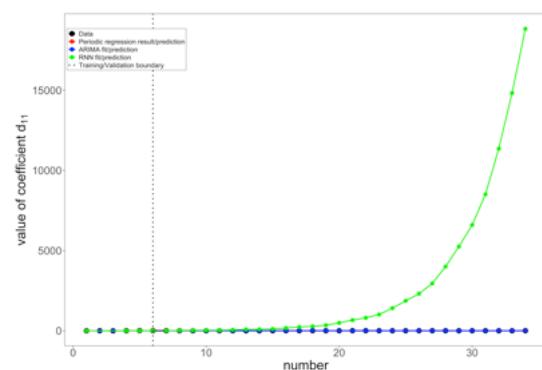
(c) regressed wavelet coefficients $d_{2,1}$



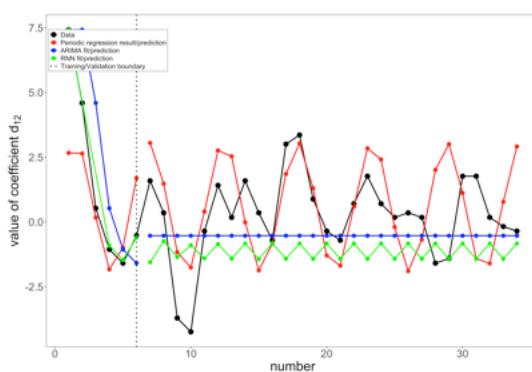
(d) regressed wavelet coefficients $d_{2,2}$



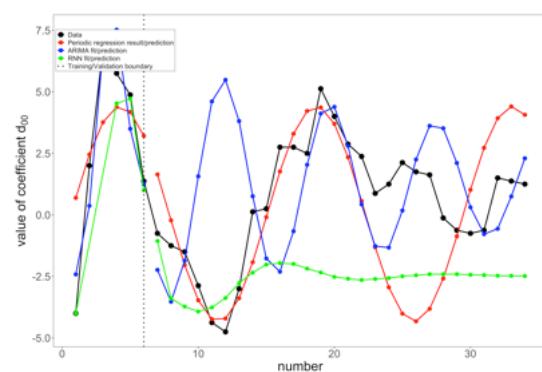
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$



(g) regressed wavelet coefficients $d_{1,1}$



(h) regressed wavelet coefficients $d_{0,0}$

Fig .12: Regression result (ndt, 30%, DS2)

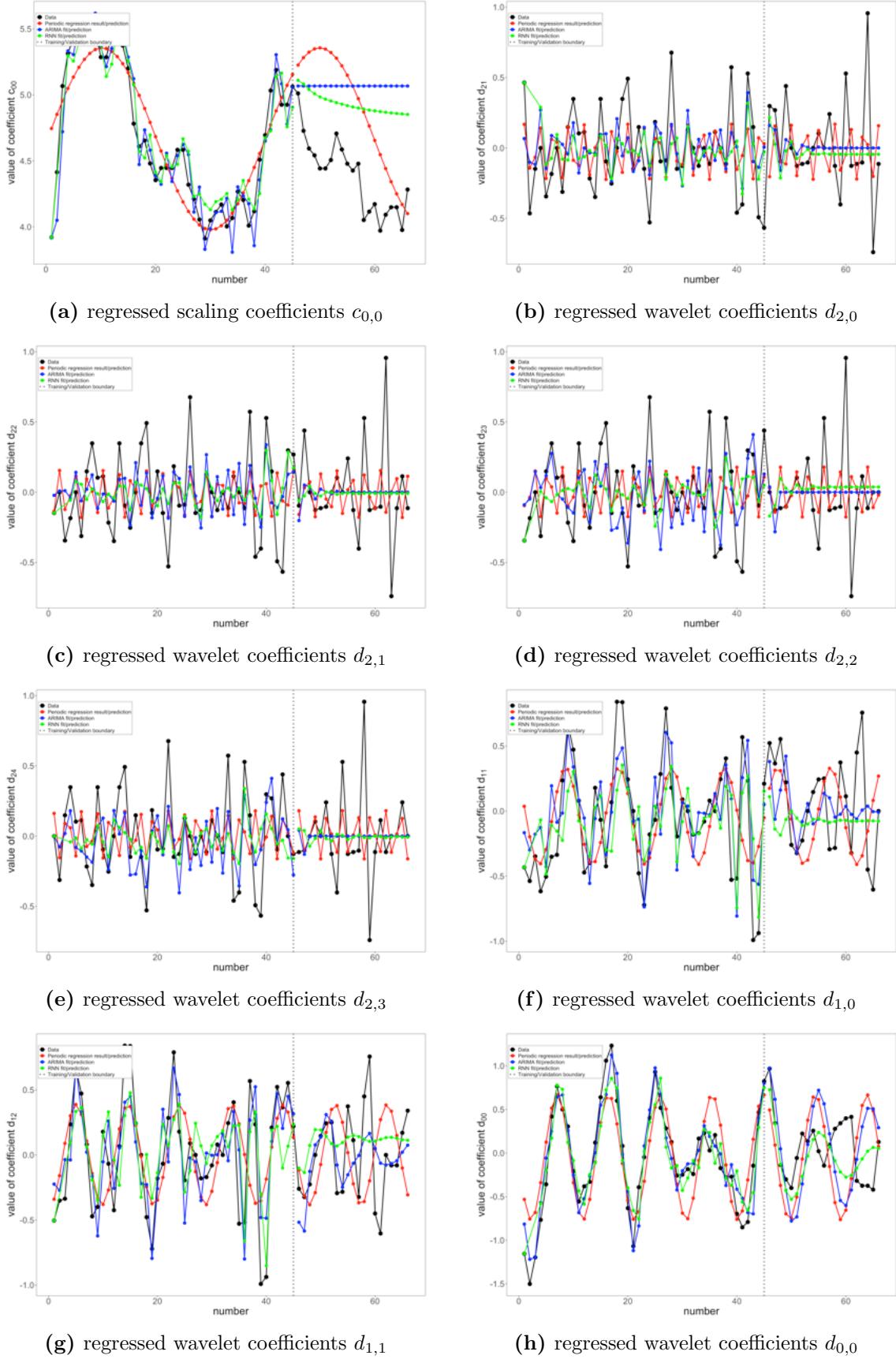
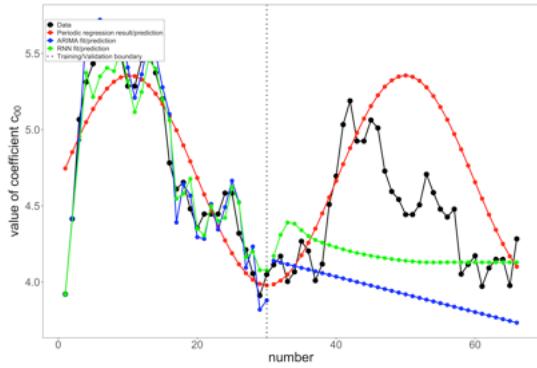
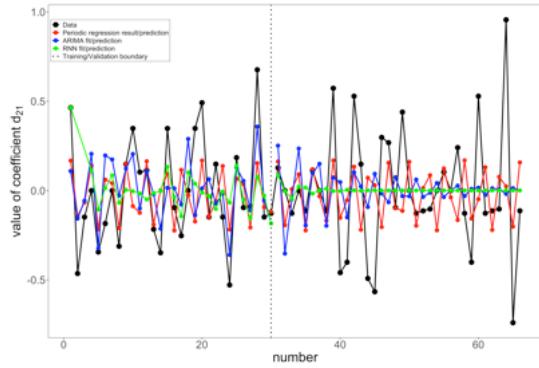


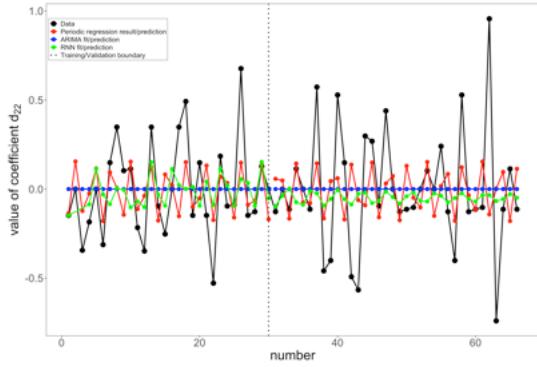
Fig .13: Regression result (dt, 70%, DS3)



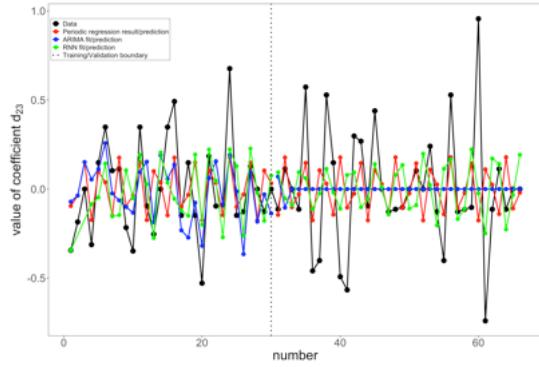
(a) regressed scaling coefficients $c_{0,0}$



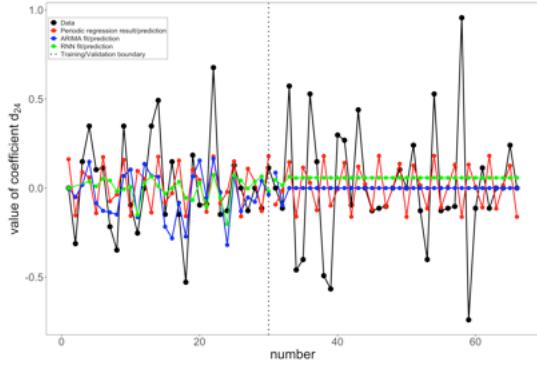
(b) regressed wavelet coefficients $d_{2,0}$



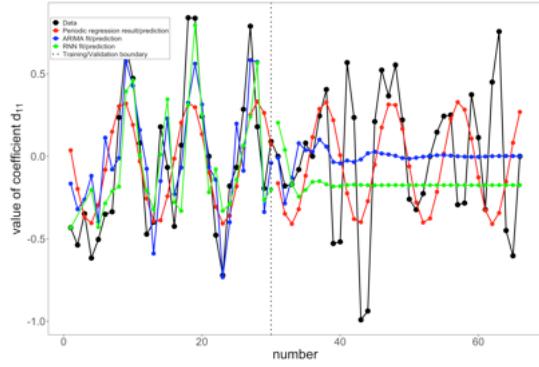
(c) regressed wavelet coefficients $d_{2,1}$



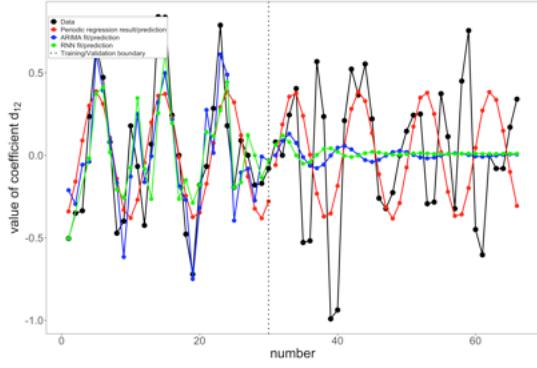
(d) regressed wavelet coefficients $d_{2,2}$



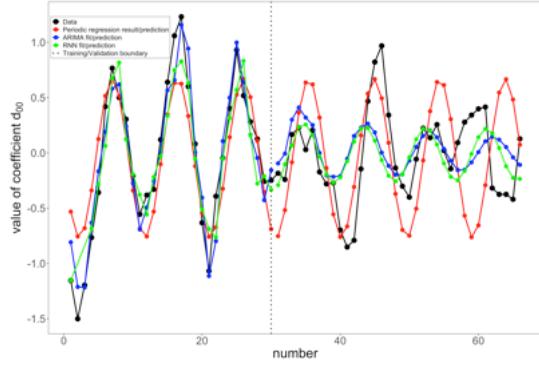
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

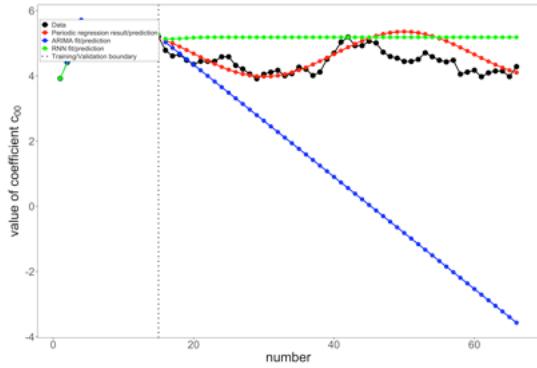


(g) regressed wavelet coefficients $d_{1,1}$

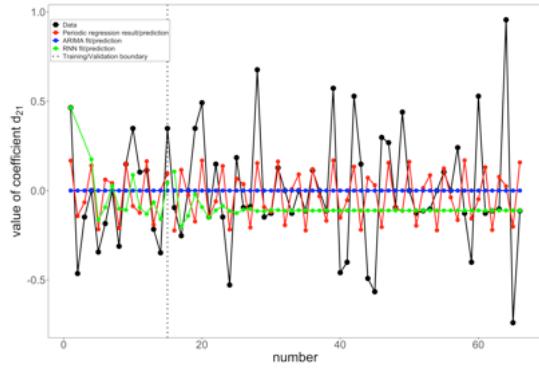


(h) regressed wavelet coefficients $d_{0,0}$

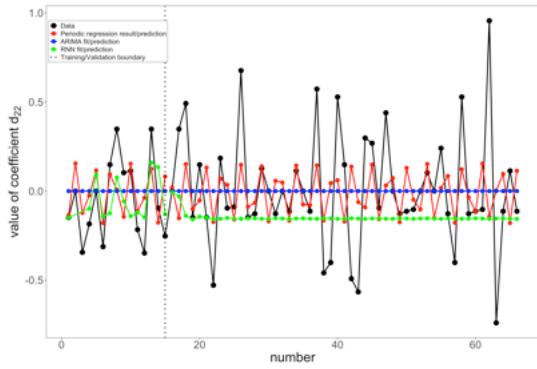
Fig .14: Regression result (dt, 50%, DS3)



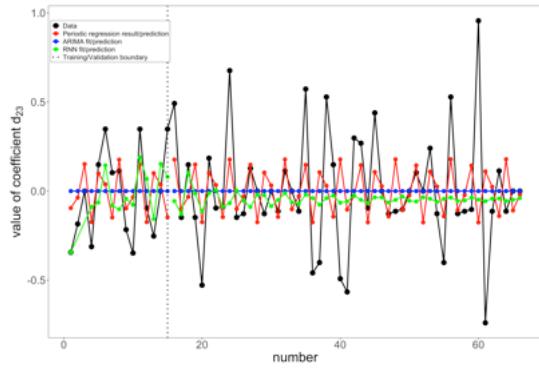
(a) regressed scaling coefficients $c_{0,0}$



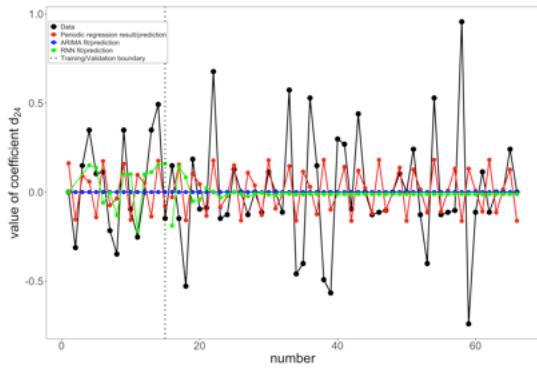
(b) regressed wavelet coefficients $d_{2,0}$



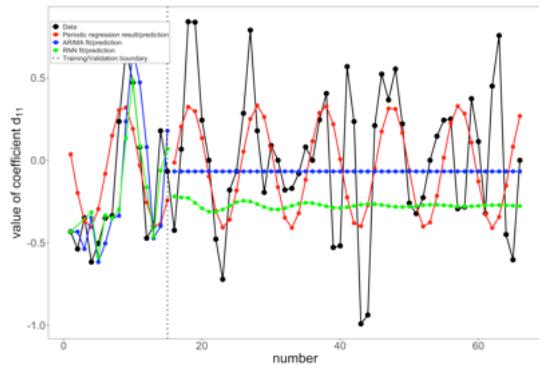
(c) regressed wavelet coefficients $d_{2,1}$



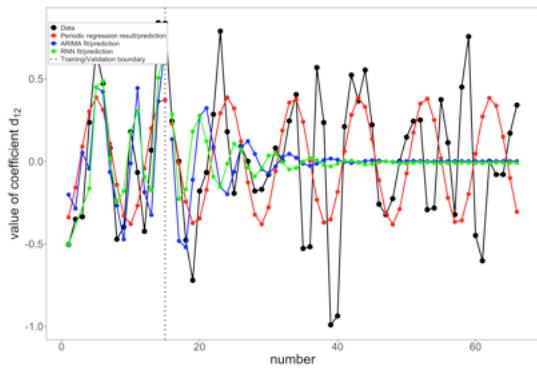
(d) regressed wavelet coefficients $d_{2,2}$



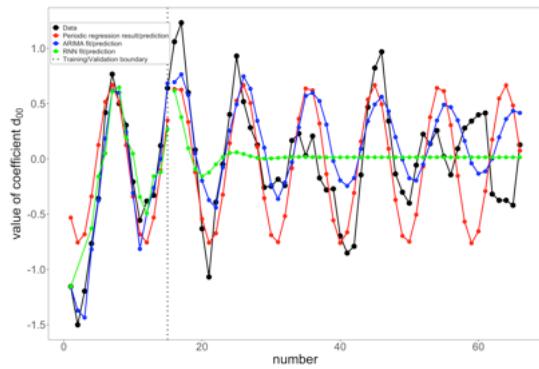
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

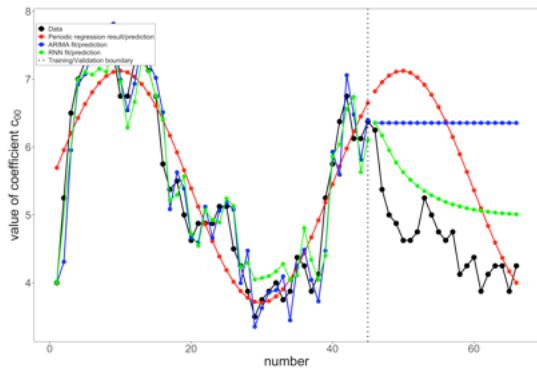


(g) regressed wavelet coefficients $d_{1,1}$

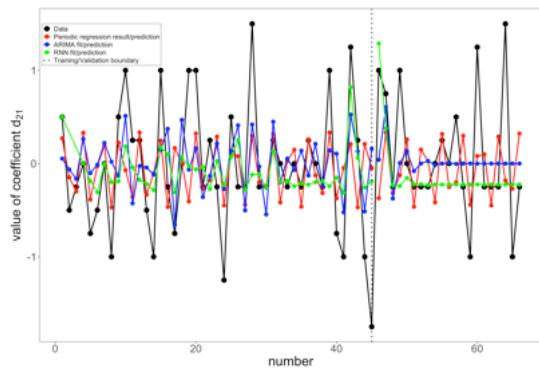


(h) regressed wavelet coefficients $d_{0,0}$

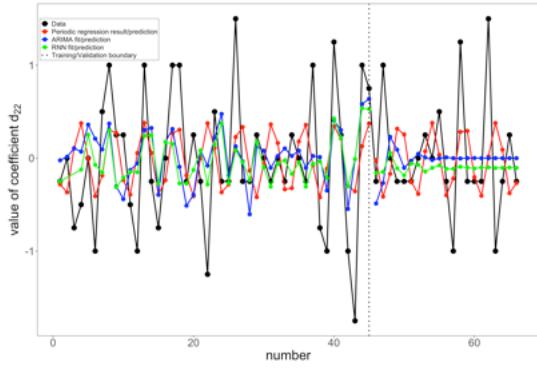
Fig .15: Regression result (dt, 30% DS3)



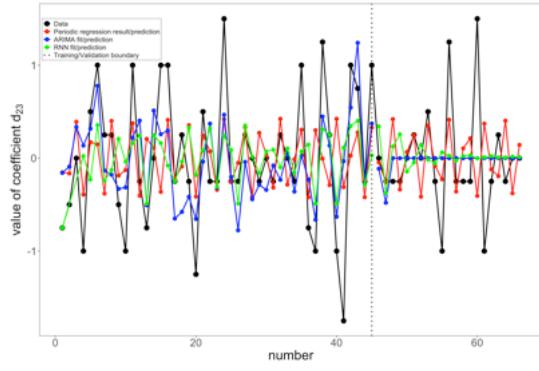
(a) regressed scaling coefficients $c_{0,0}$



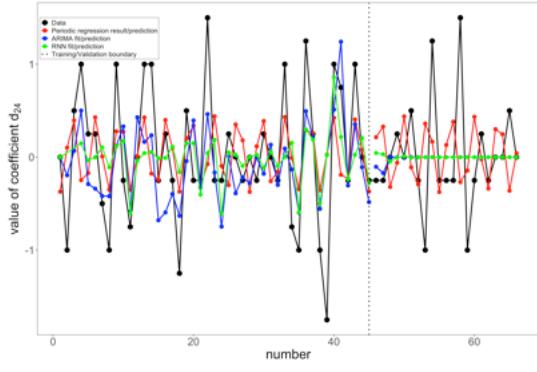
(b) regressed wavelet coefficients $d_{2,0}$



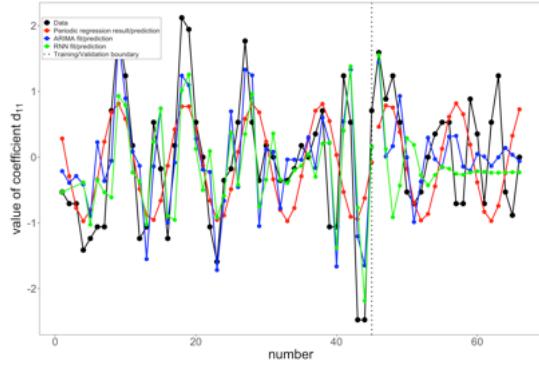
(c) regressed wavelet coefficients $d_{2,1}$



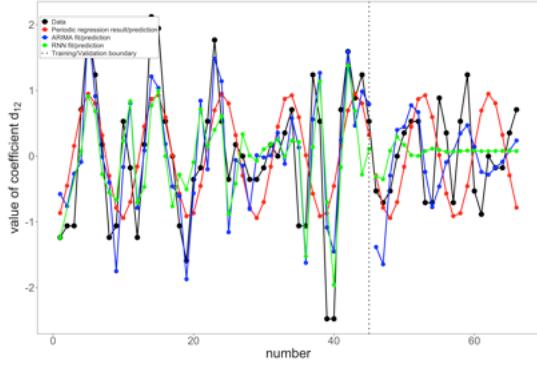
(d) regressed wavelet coefficients $d_{2,2}$



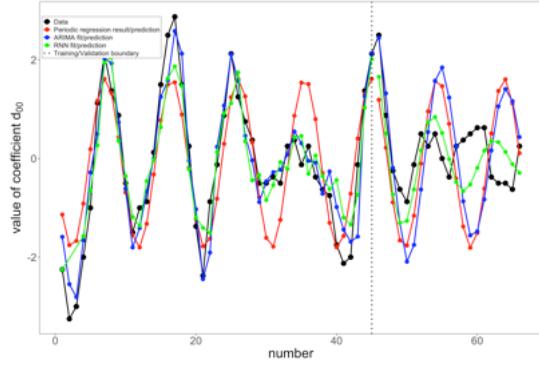
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

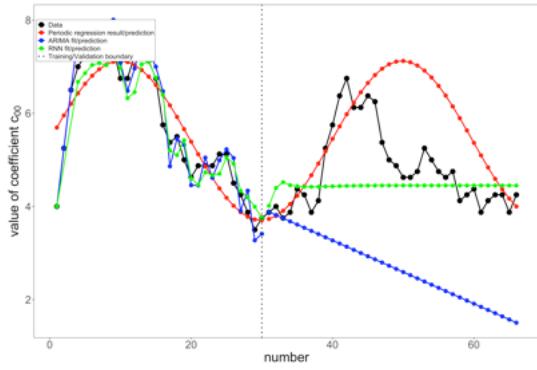


(g) regressed wavelet coefficients $d_{1,1}$

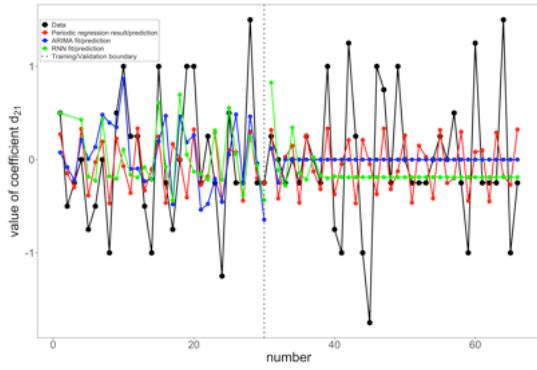


(h) regressed wavelet coefficients $d_{0,0}$

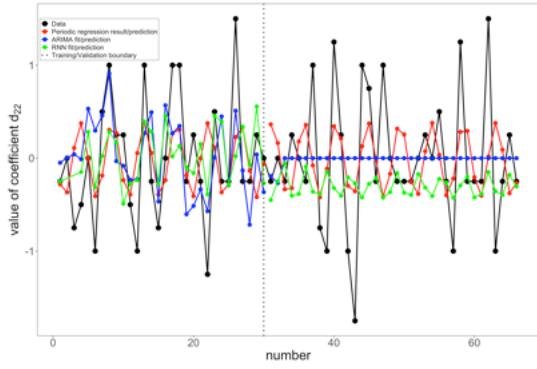
Fig .16: Regression result (ndt, 70%, DS3)



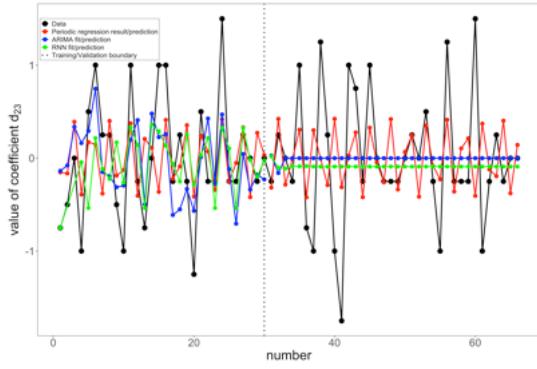
(a) regressed scaling coefficients $c_{0,0}$



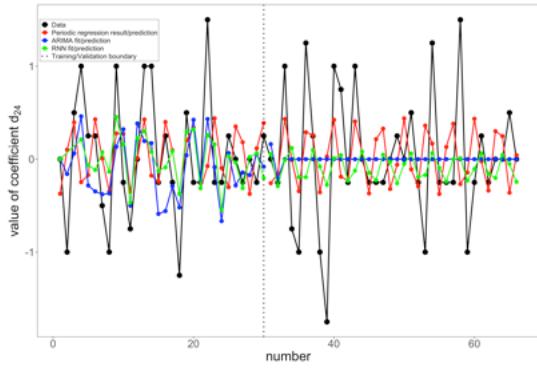
(b) regressed wavelet coefficients $d_{2,0}$



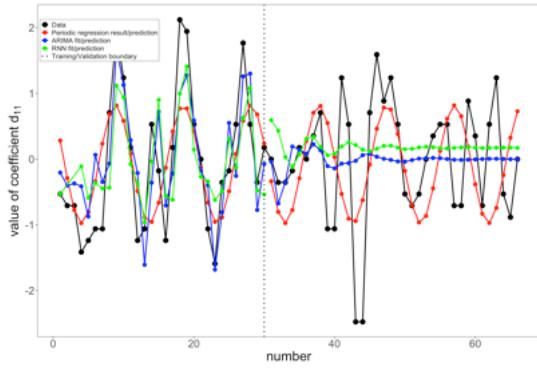
(c) regressed wavelet coefficients $d_{2,1}$



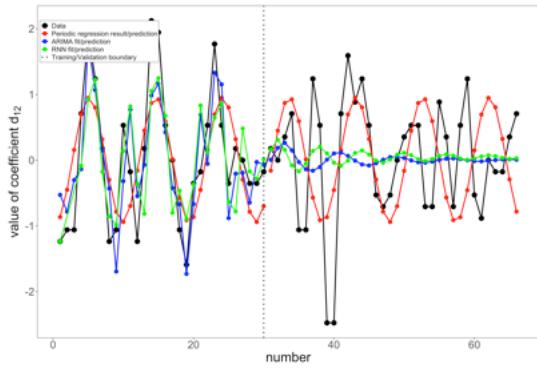
(d) regressed wavelet coefficients $d_{2,2}$



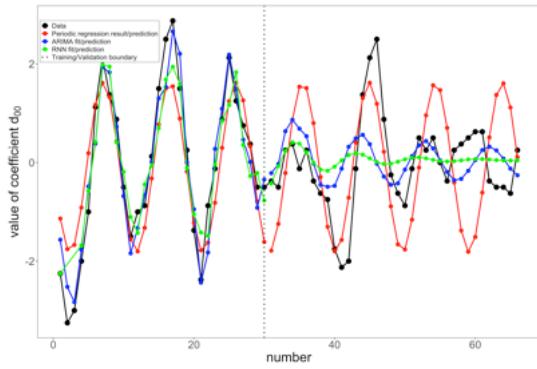
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

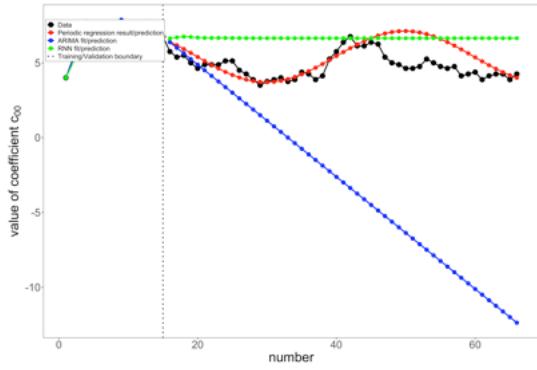


(g) regressed wavelet coefficients $d_{1,1}$

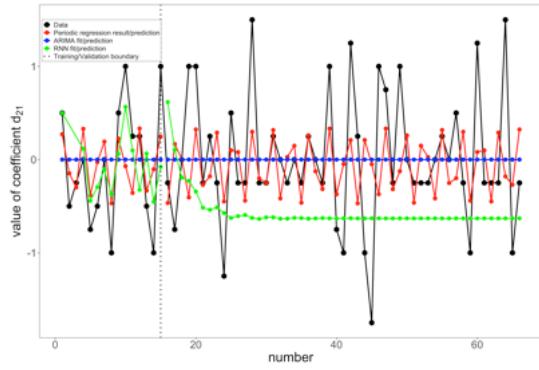


(h) regressed wavelet coefficients $d_{0,0}$

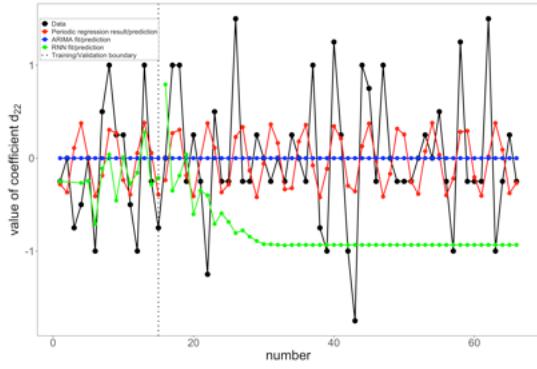
Fig .17: Regression result (ndt, 50%, DS3)



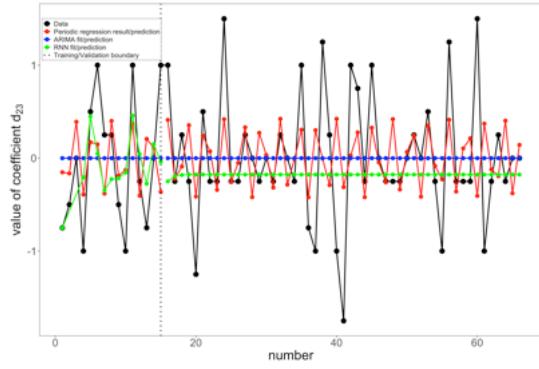
(a) regressed scaling coefficients $c_{0,0}$



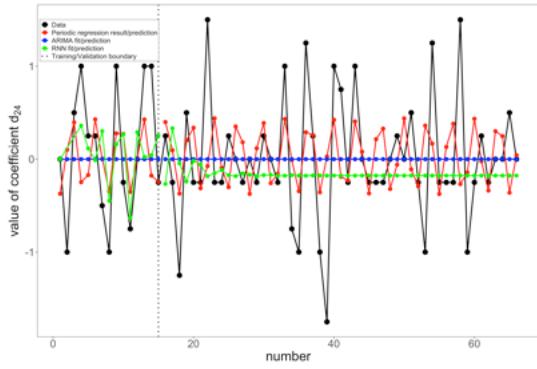
(b) regressed wavelet coefficients $d_{2,0}$



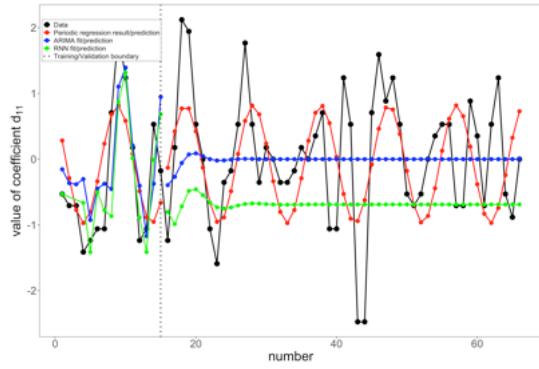
(c) regressed wavelet coefficients $d_{2,1}$



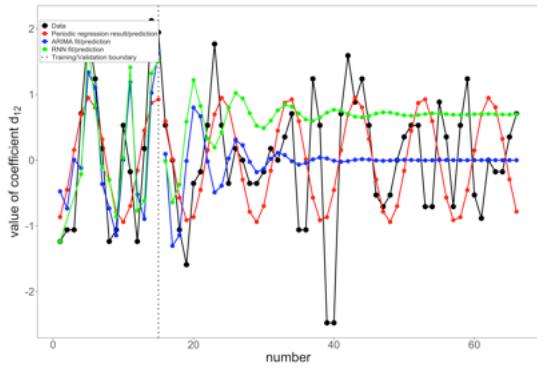
(d) regressed wavelet coefficients $d_{2,2}$



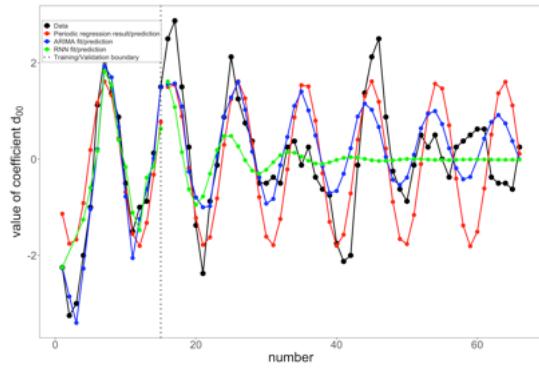
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

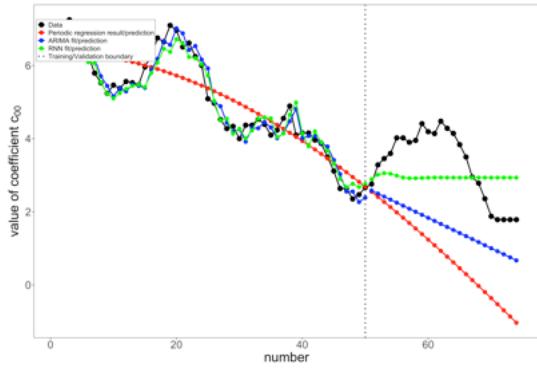


(g) regressed wavelet coefficients $d_{1,1}$

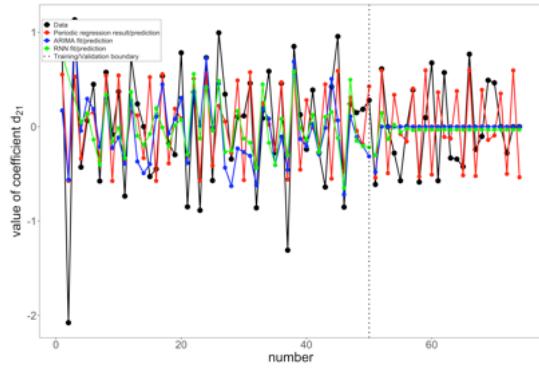


(h) regressed wavelet coefficients $d_{0,0}$

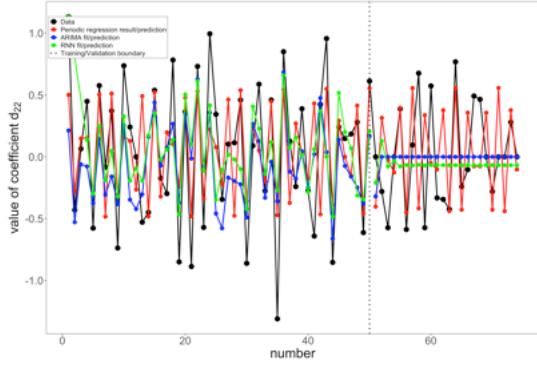
Fig .18: Regression result (ndt, 30%, DS3)



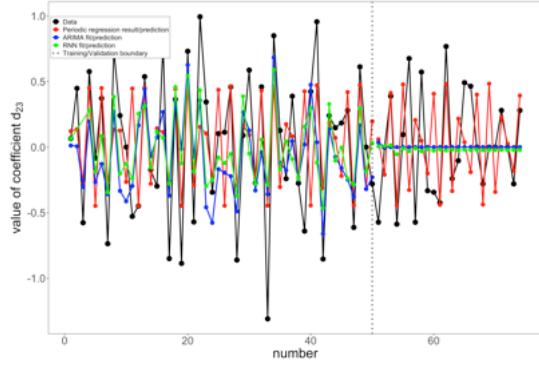
(a) regressed scaling coefficients $c_{0,0}$



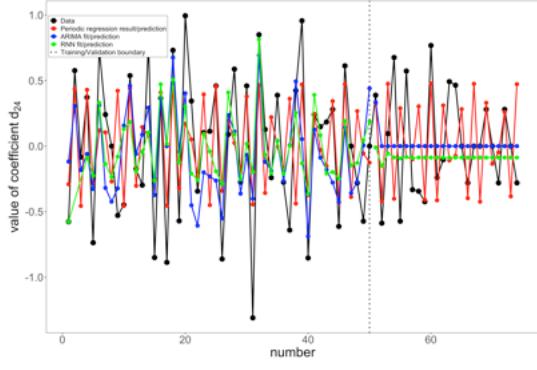
(b) regressed wavelet coefficients $d_{2,0}$



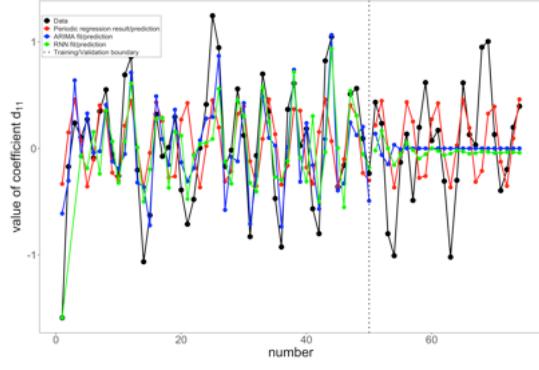
(c) regressed wavelet coefficients $d_{2,1}$



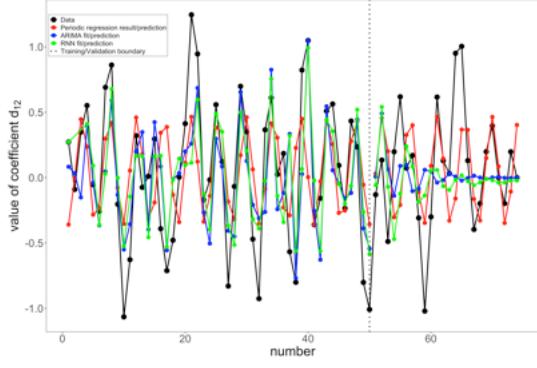
(d) regressed wavelet coefficients $d_{2,2}$



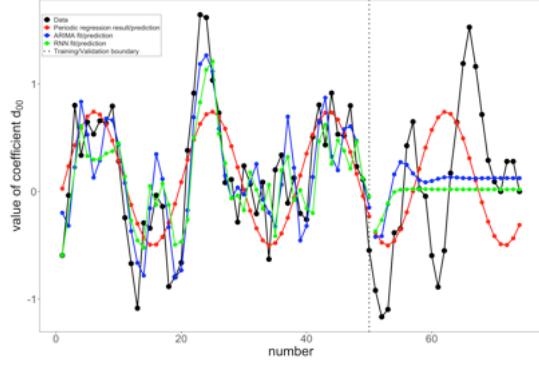
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$



(g) regressed wavelet coefficients $d_{1,1}$



(h) regressed wavelet coefficients $d_{0,0}$

Fig .19: Regression result (dt, 70%, DS4)

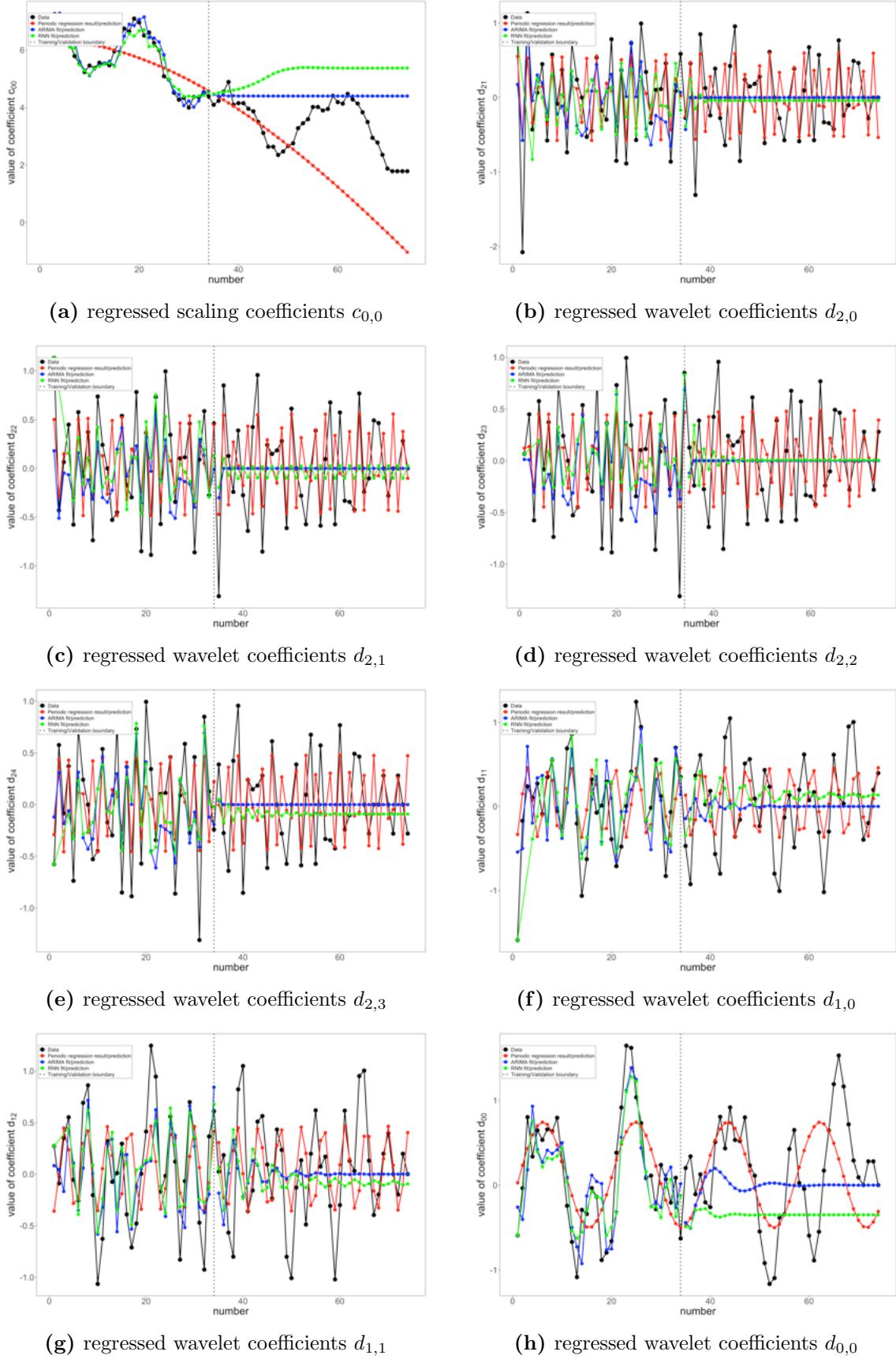


Fig .20: Regression result (dt, 50%, DS4)

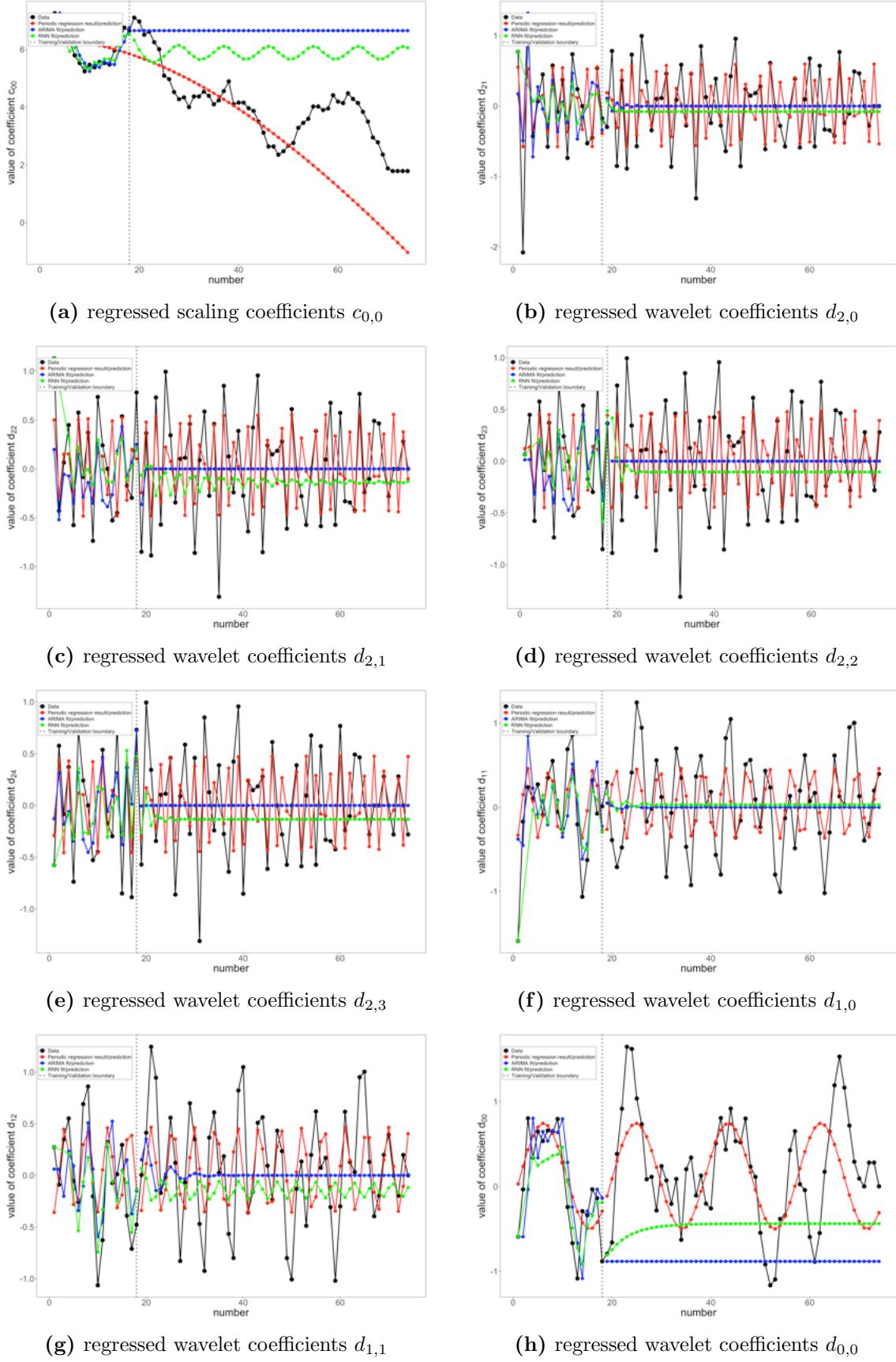
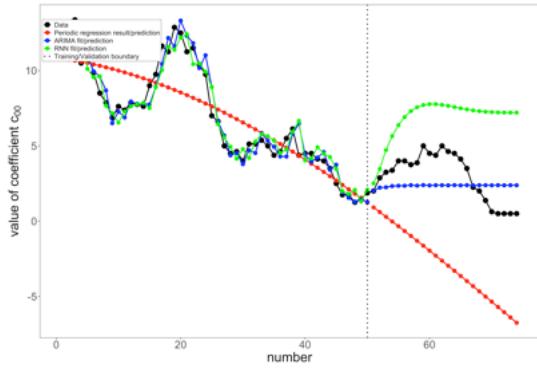
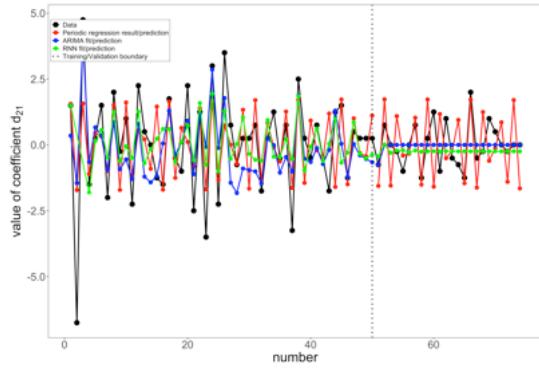


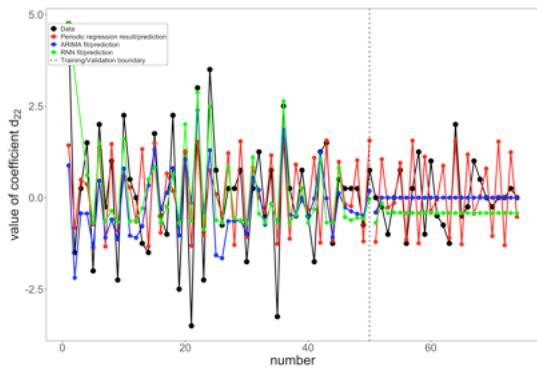
Fig .21: Regression result (dt, 30%, DS4)



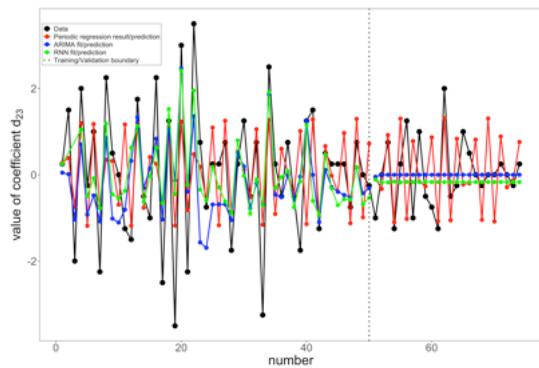
(a) regressed scaling coefficients $c_{0,0}$



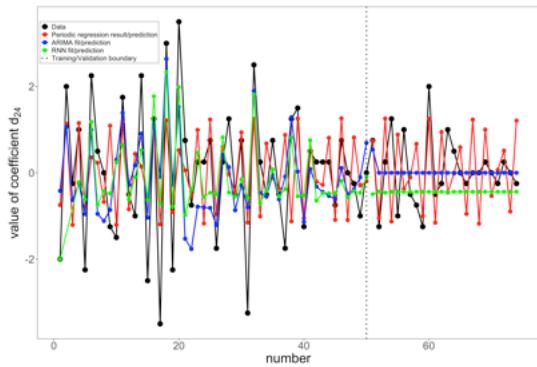
(b) regressed wavelet coefficients $d_{2,0}$



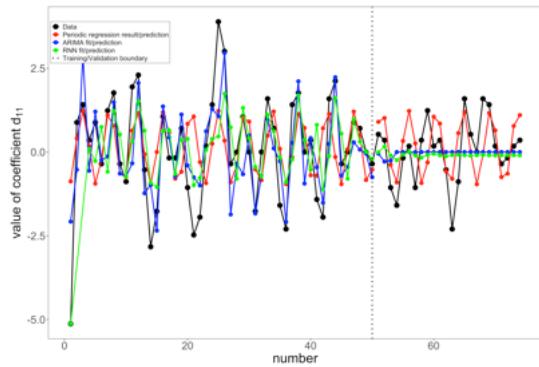
(c) regressed wavelet coefficients $d_{2,1}$



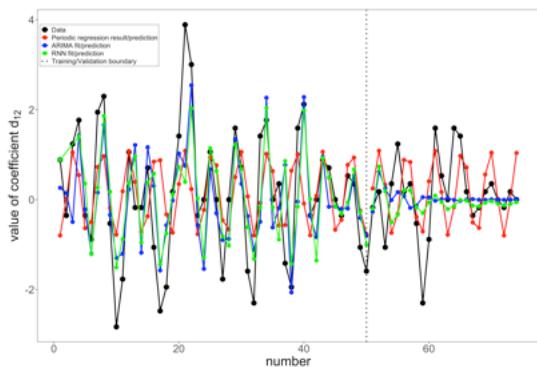
(d) regressed wavelet coefficients $d_{2,2}$



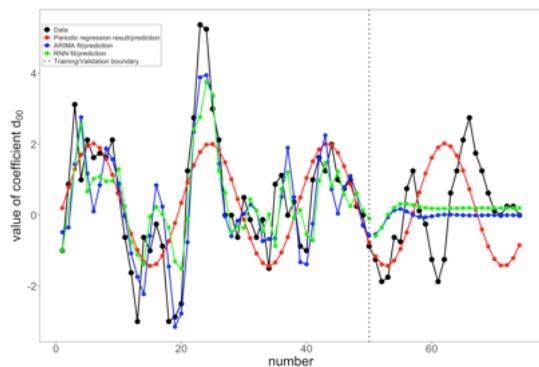
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

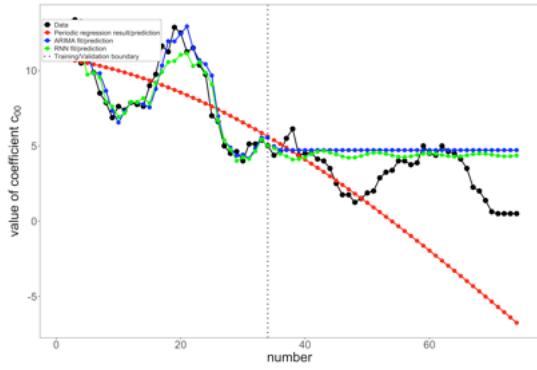


(g) regressed wavelet coefficients $d_{1,1}$

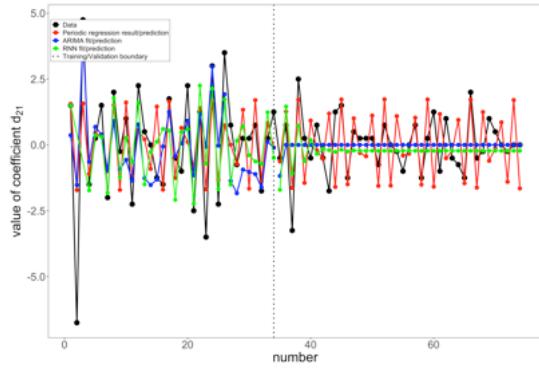


(h) regressed wavelet coefficients $d_{0,0}$

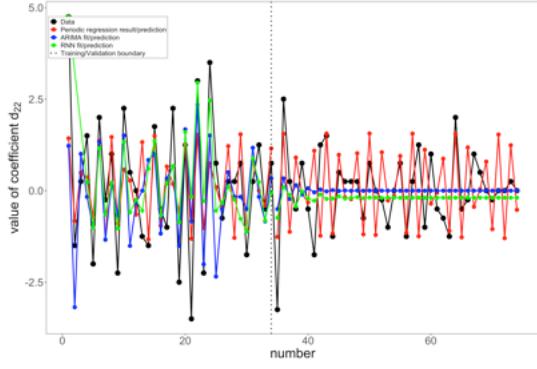
Fig .22: Regression result (ndt, 70%, DS4)



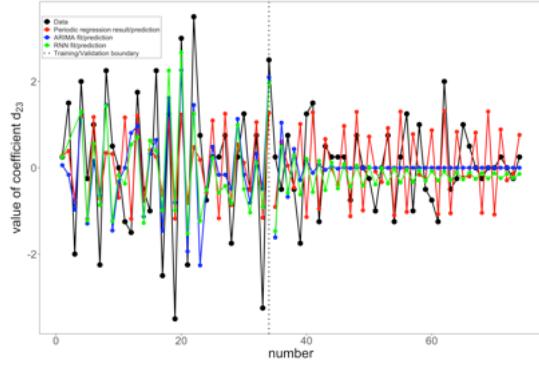
(a) regressed scaling coefficients $c_{0,0}$



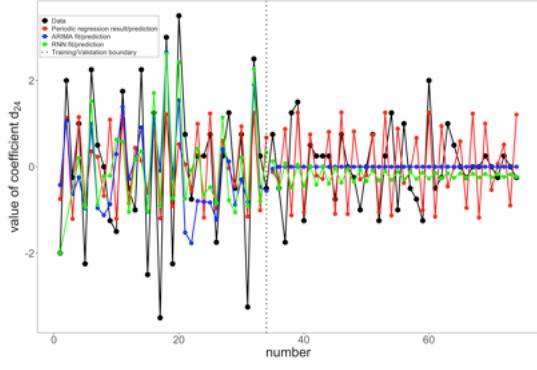
(b) regressed wavelet coefficients $d_{2,0}$



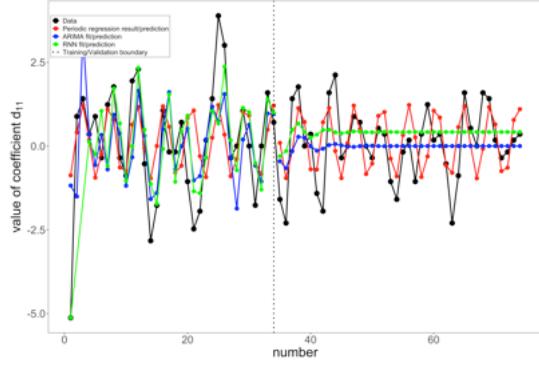
(c) regressed wavelet coefficients $d_{2,1}$



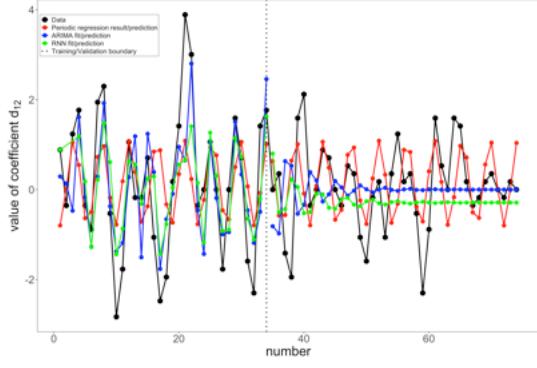
(d) regressed wavelet coefficients $d_{2,2}$



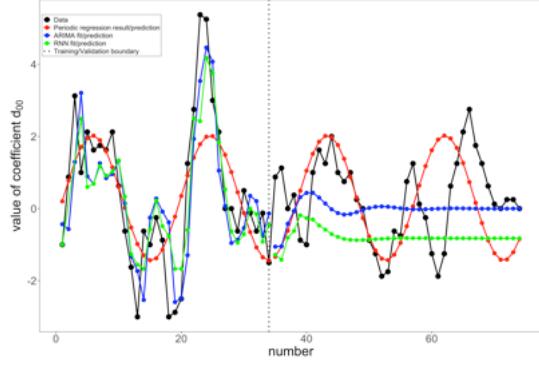
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$



(g) regressed wavelet coefficients $d_{1,1}$



(h) regressed wavelet coefficients $d_{0,0}$

Fig .23: Regression result (ndt, 50%, DS4)

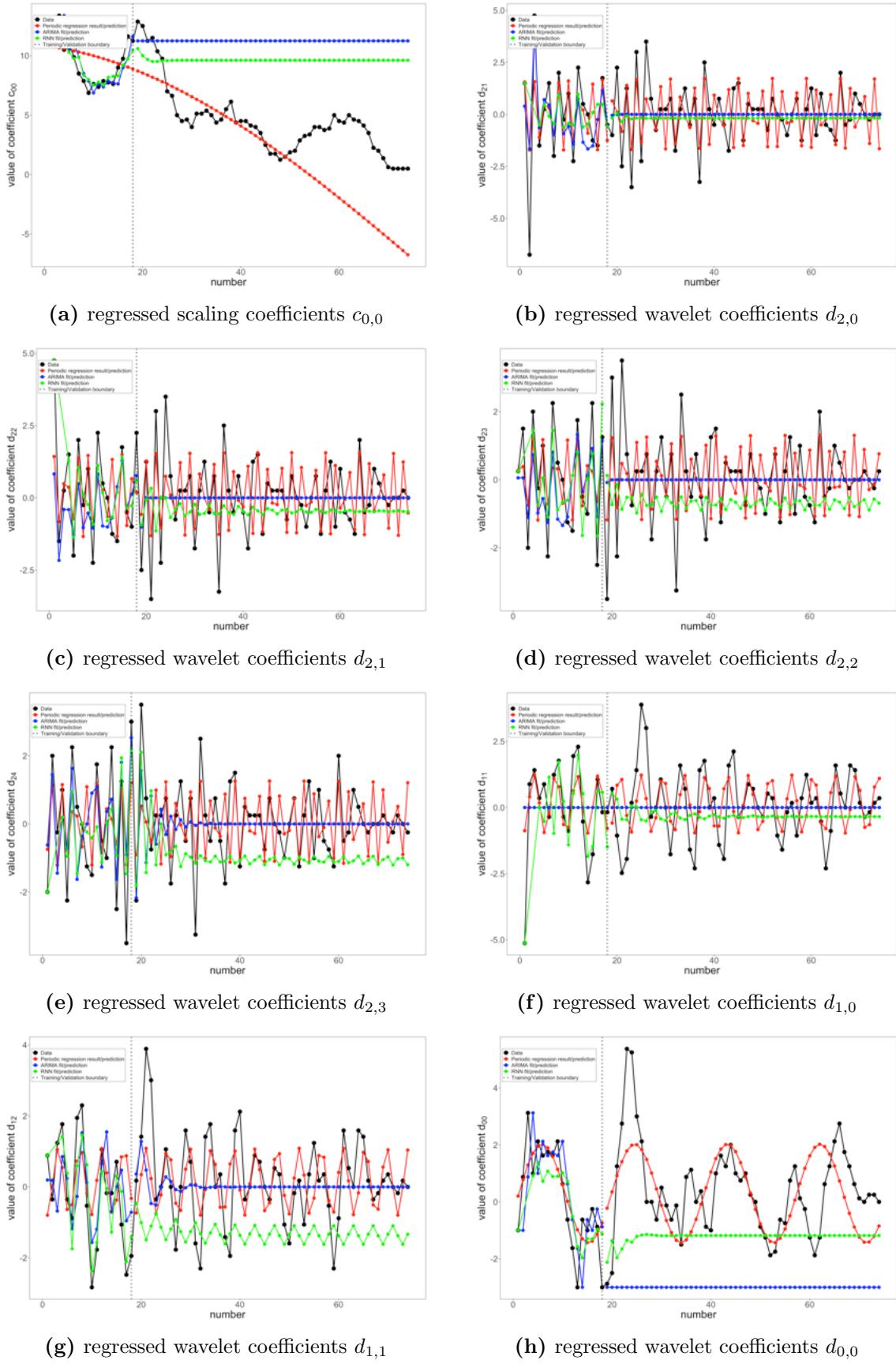
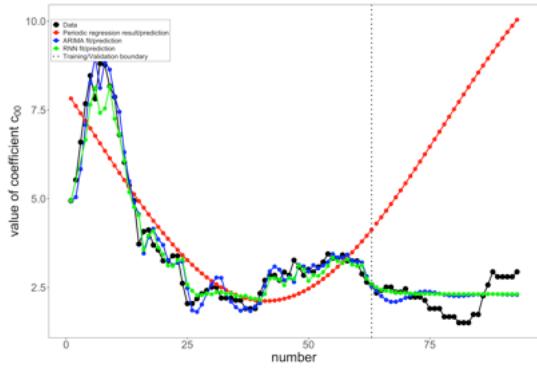
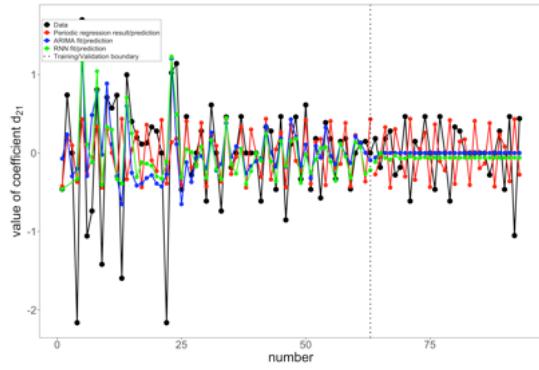


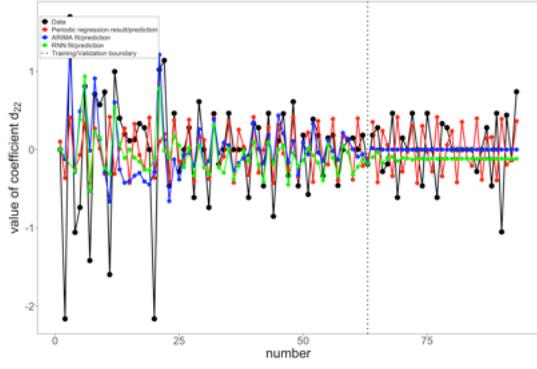
Fig .24: Regression result (ndt, 30%, DS4)



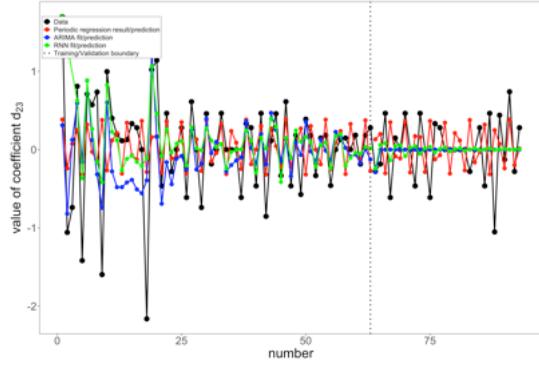
(a) regressed scaling coefficients $c_{0,0}$



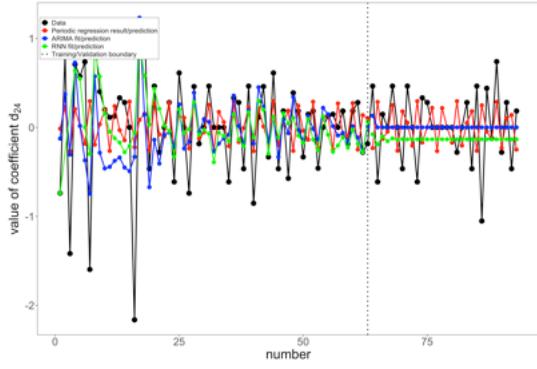
(b) regressed wavelet coefficients $d_{2,0}$



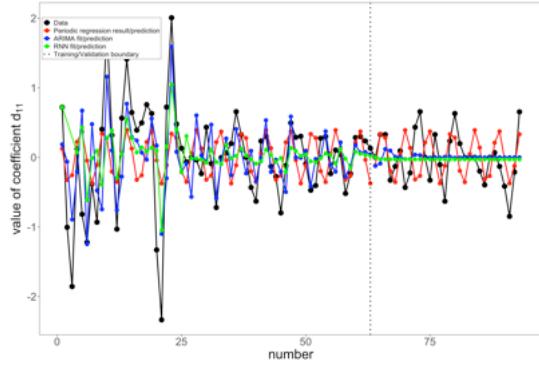
(c) regressed wavelet coefficients $d_{2,1}$



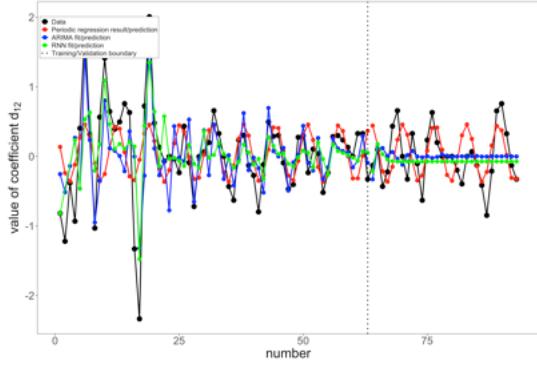
(d) regressed wavelet coefficients $d_{2,2}$



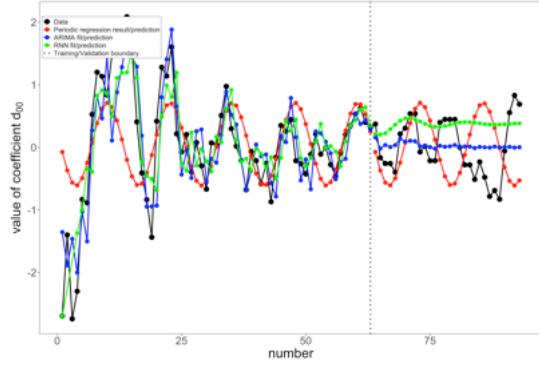
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

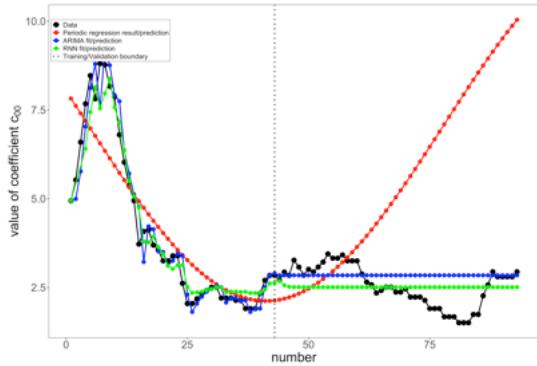


(g) regressed wavelet coefficients $d_{1,1}$

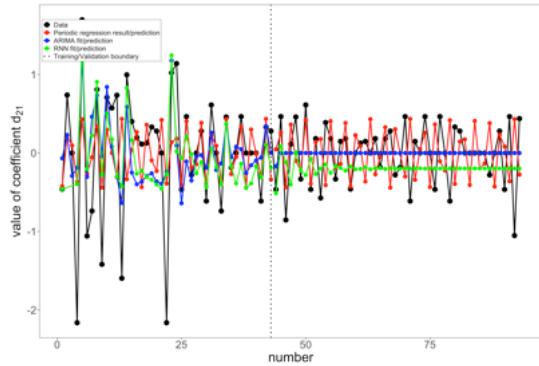


(h) regressed wavelet coefficients $d_{0,0}$

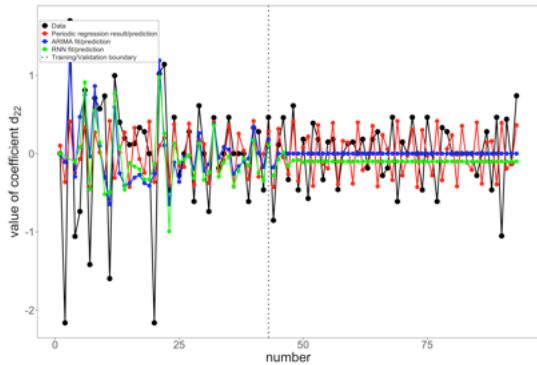
Fig .25: Regression result (dt, 70%, DS5)



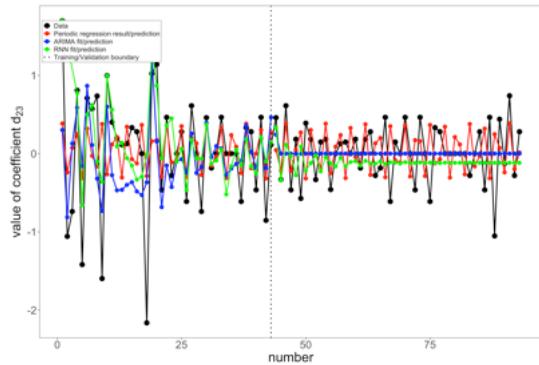
(a) regressed scaling coefficients $c_{0,0}$



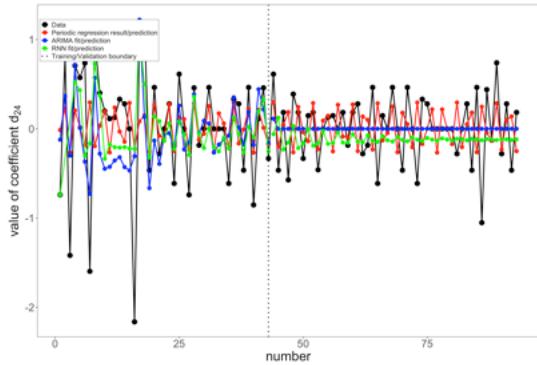
(b) regressed wavelet coefficients $d_{2,0}$



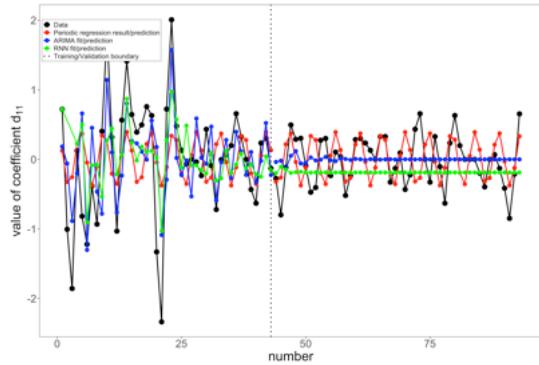
(c) regressed wavelet coefficients $d_{2,1}$



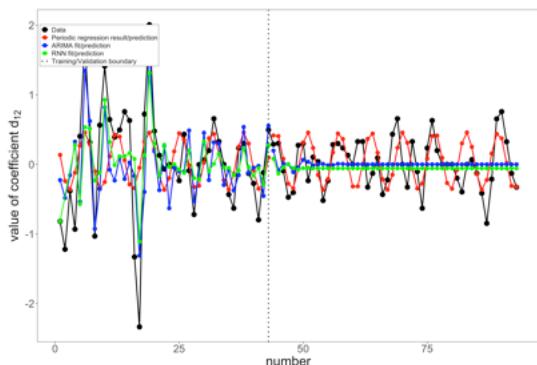
(d) regressed wavelet coefficients $d_{2,2}$



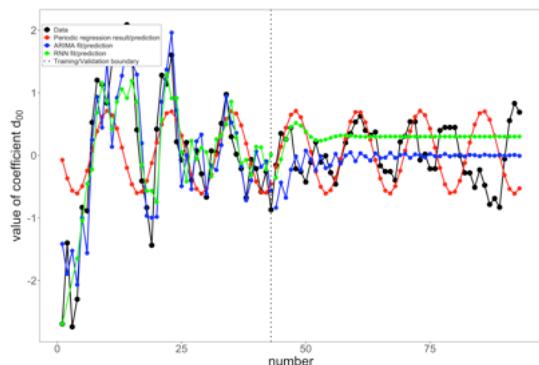
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

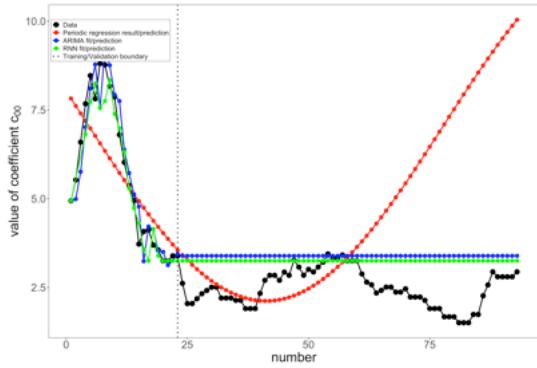


(g) regressed wavelet coefficients $d_{1,1}$

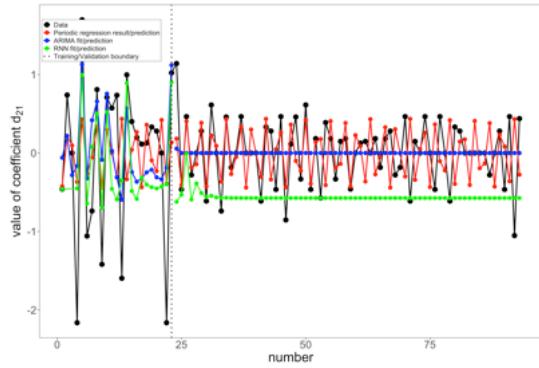


(h) regressed wavelet coefficients $d_{0,0}$

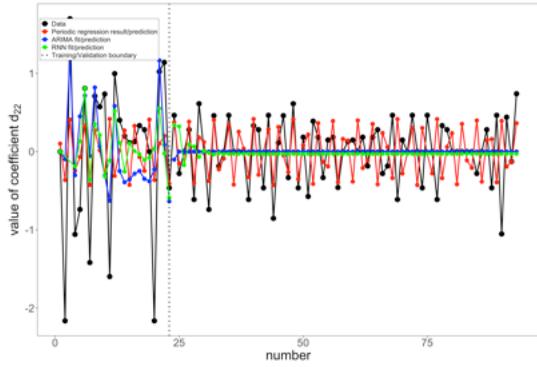
Fig .26: Regression result (dt, 50%, DS5)



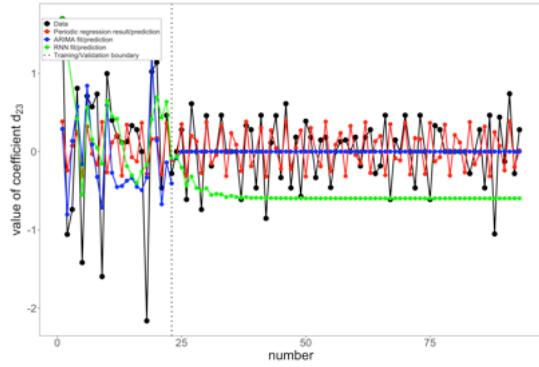
(a) regressed scaling coefficients $c_{0,0}$



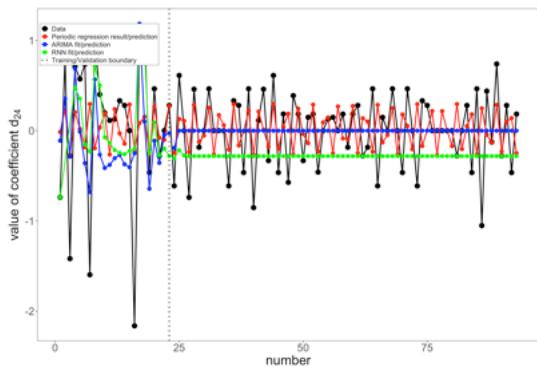
(b) regressed wavelet coefficients $d_{2,0}$



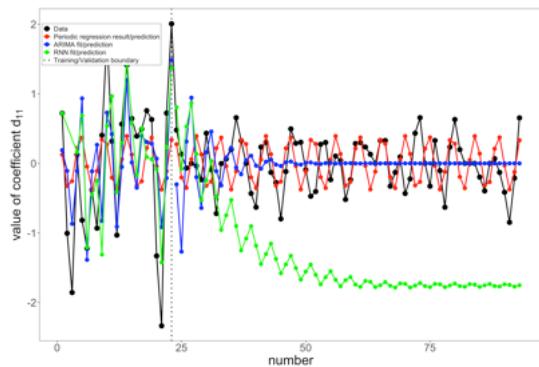
(c) regressed wavelet coefficients $d_{2,1}$



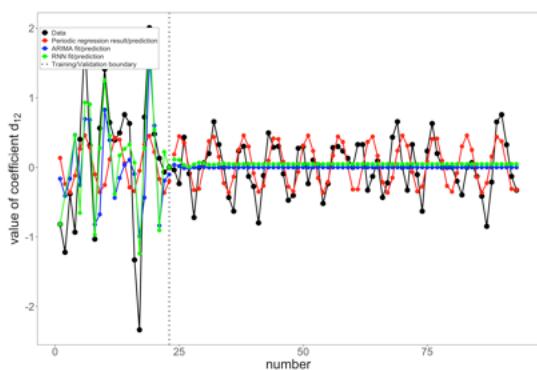
(d) regressed wavelet coefficients $d_{2,2}$



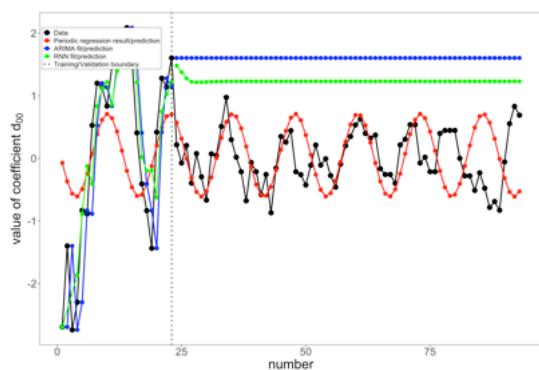
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

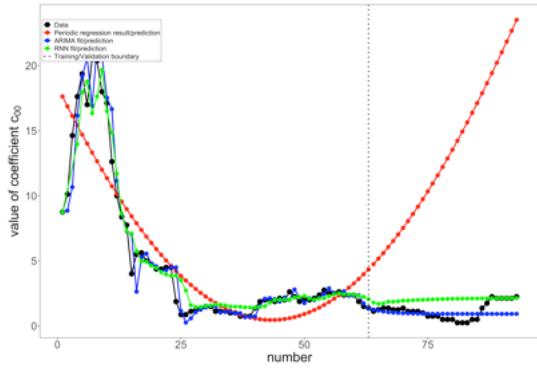


(g) regressed wavelet coefficients $d_{1,1}$

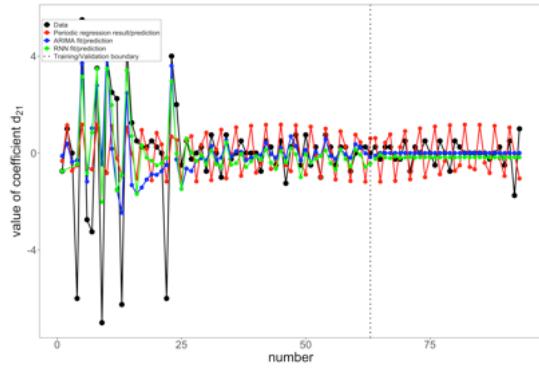


(h) regressed wavelet coefficients $d_{0,0}$

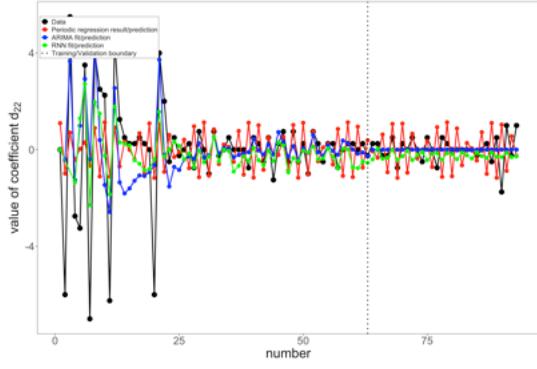
Fig .27: Regression result (dt, 30%, DS5)



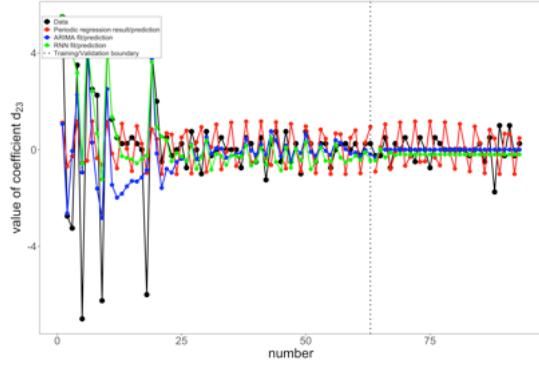
(a) regressed scaling coefficients $c_{0,0}$



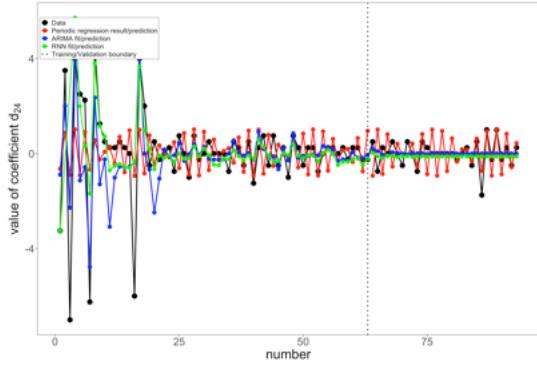
(b) regressed wavelet coefficients $d_{2,0}$



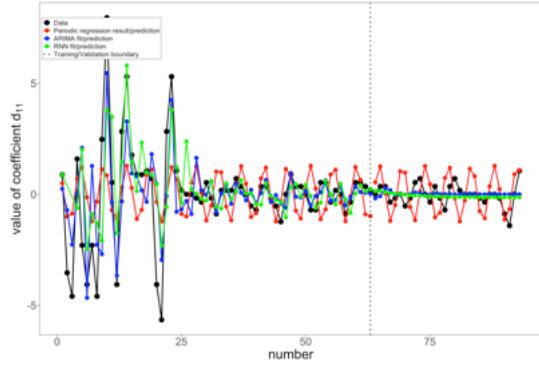
(c) regressed wavelet coefficients $d_{2,1}$



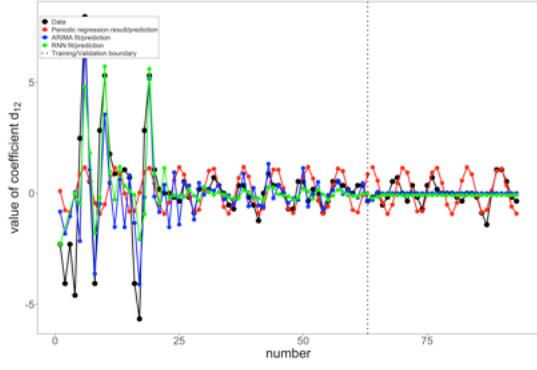
(d) regressed wavelet coefficients $d_{2,2}$



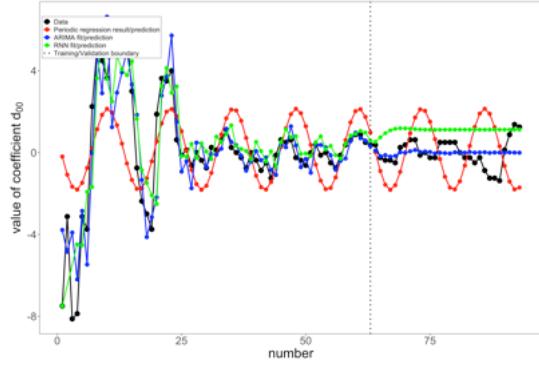
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

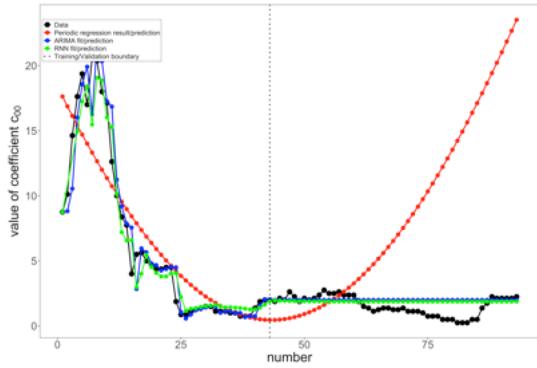


(g) regressed wavelet coefficients $d_{1,1}$

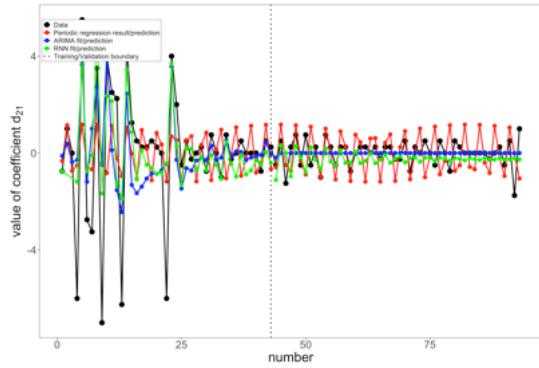


(h) regressed wavelet coefficients $d_{0,0}$

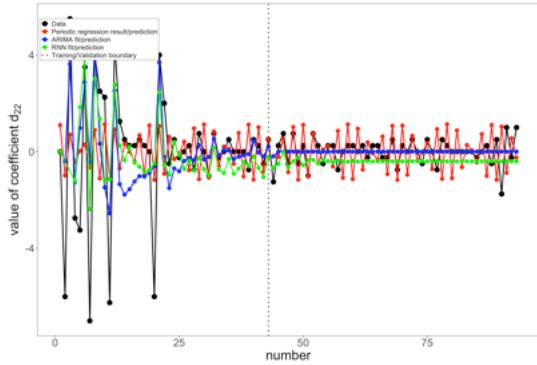
Fig .28: Regression result (ndt, 70%, DS5)



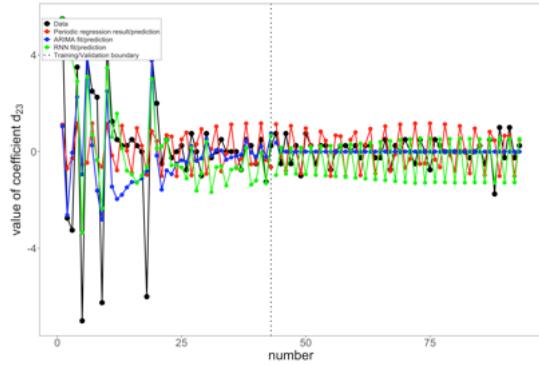
(a) regressed scaling coefficients $c_{0,0}$



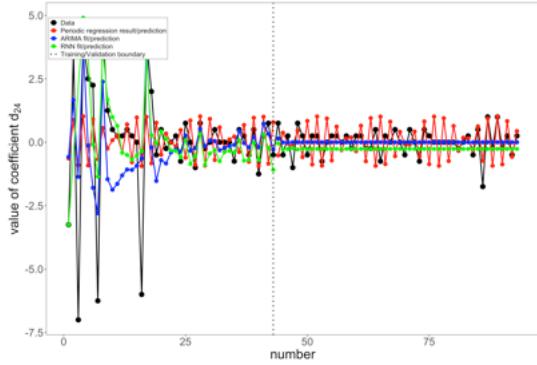
(b) regressed wavelet coefficients $d_{2,0}$



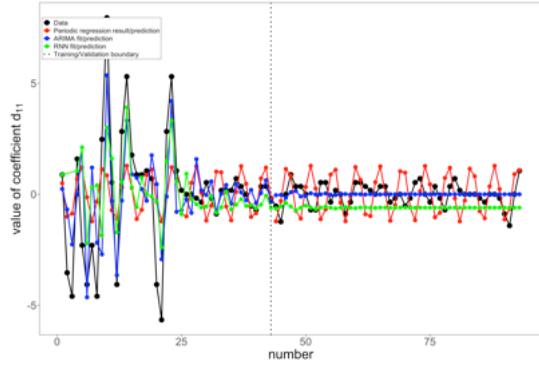
(c) regressed wavelet coefficients $d_{2,1}$



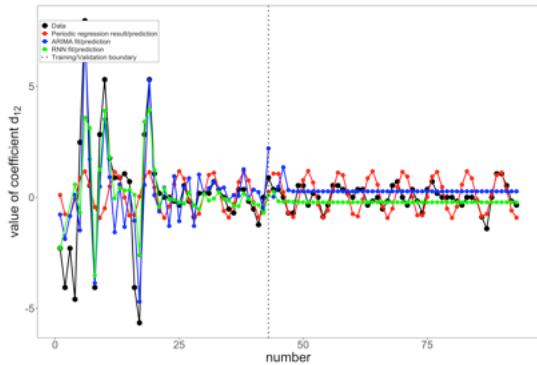
(d) regressed wavelet coefficients $d_{2,2}$



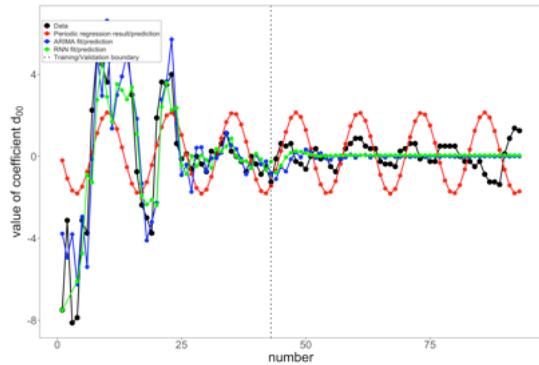
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$



(g) regressed wavelet coefficients $d_{1,1}$



(h) regressed wavelet coefficients $d_{0,0}$

Fig .29: Regression result (ndt, 50%, DS5)

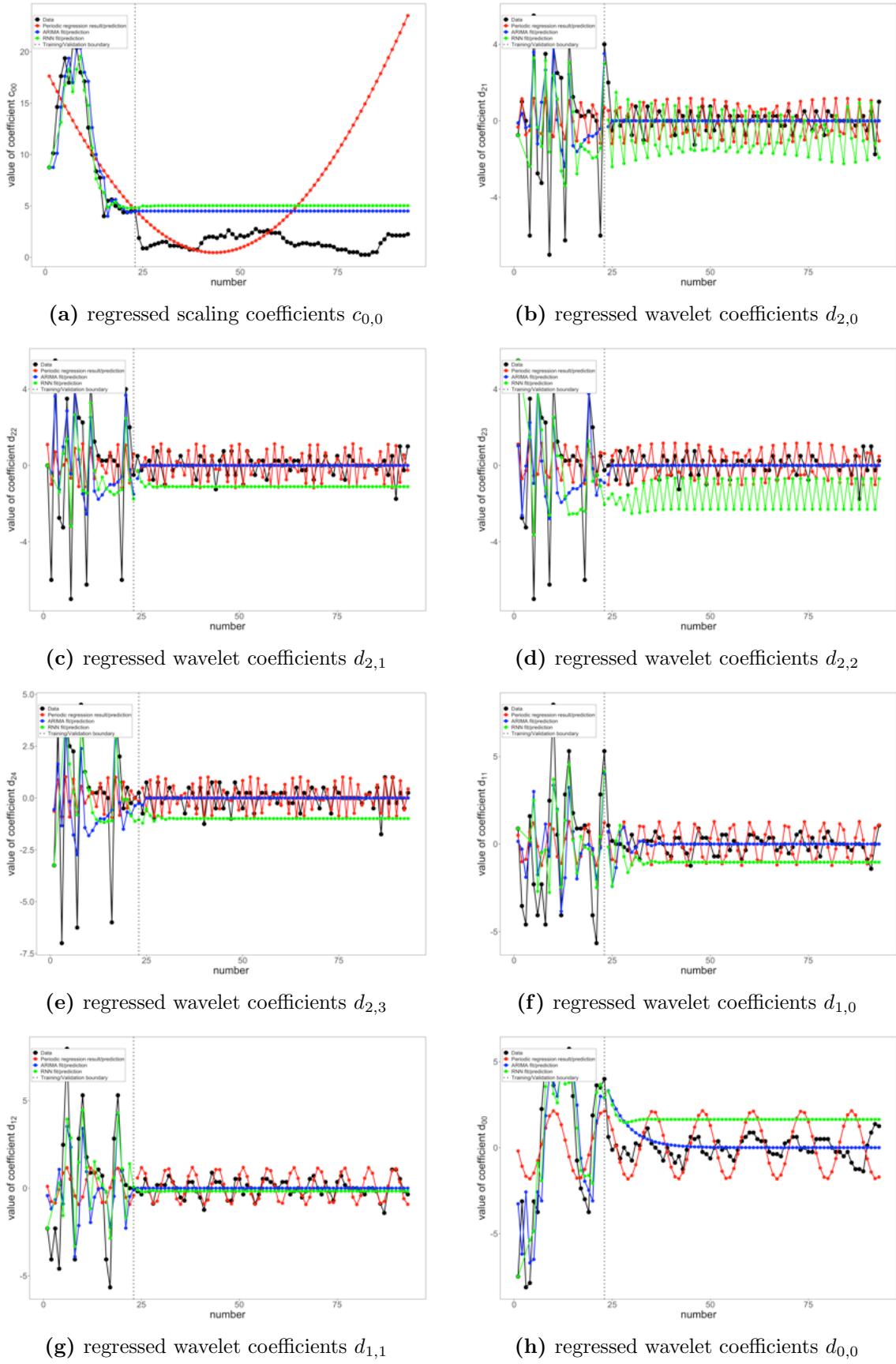


Fig .30: Regression result (ndt, 30%, DS5)

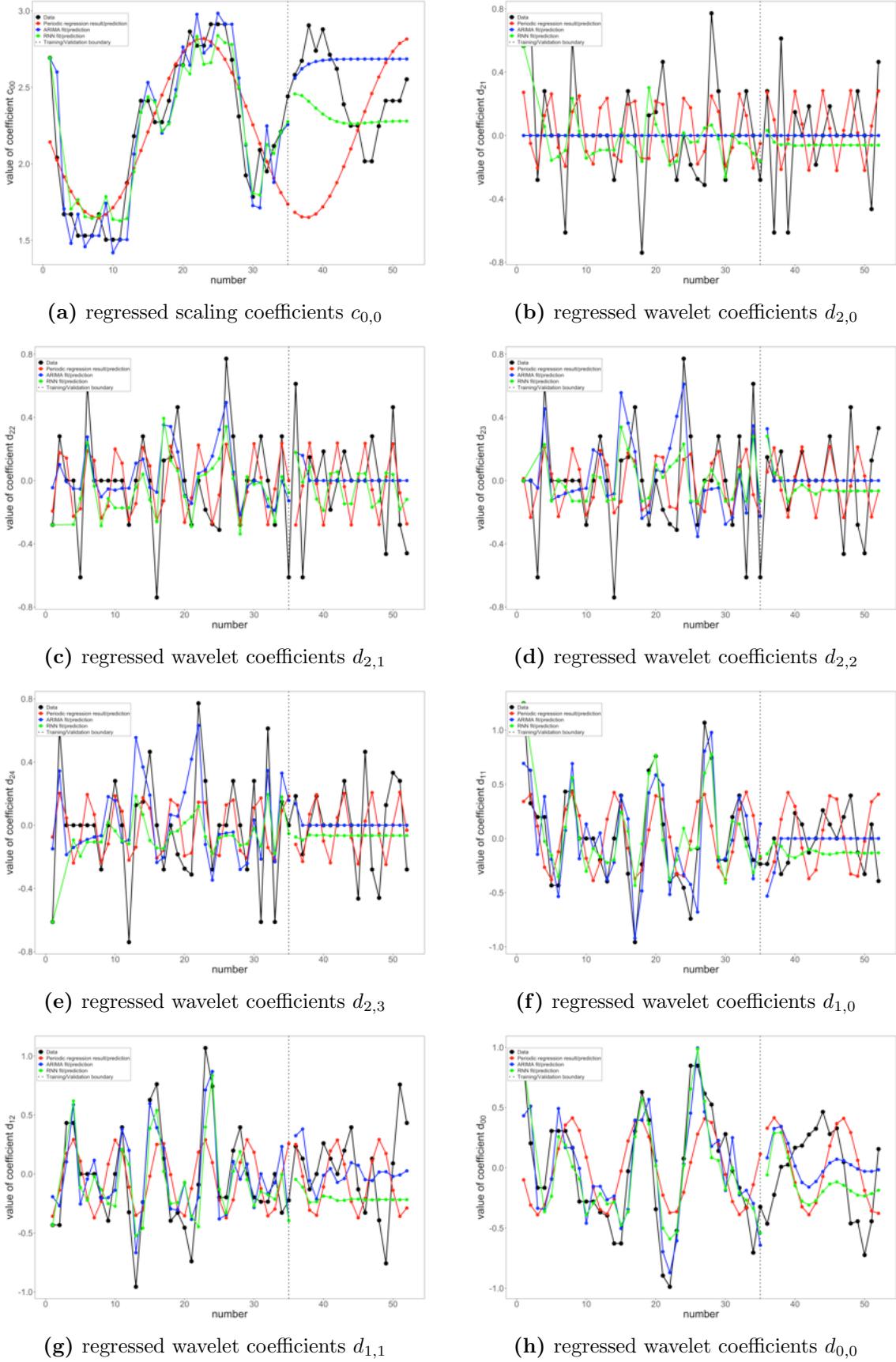


Fig .31: Regression result (dt, 70%, DS6)

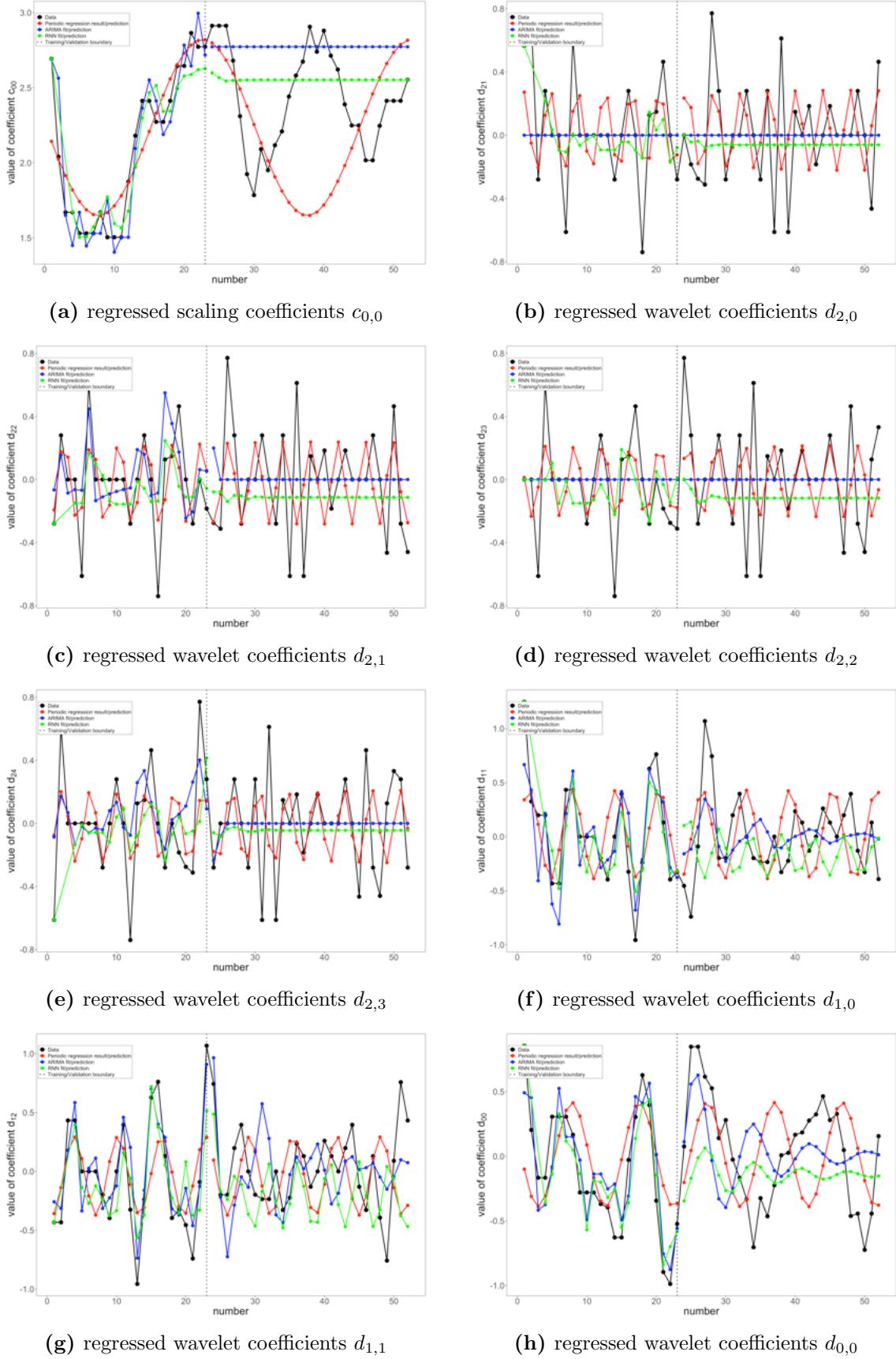
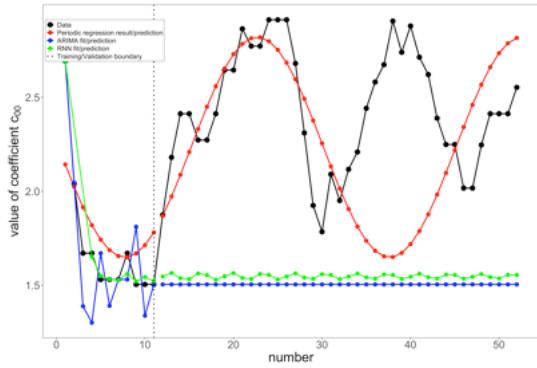
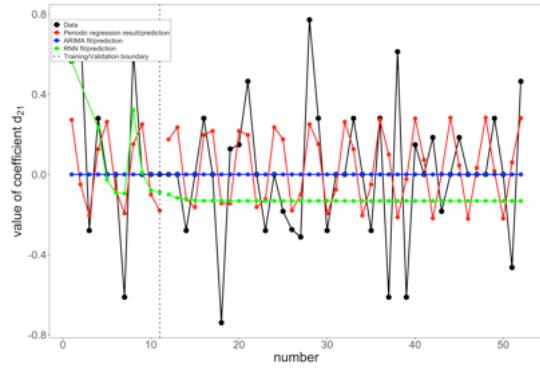


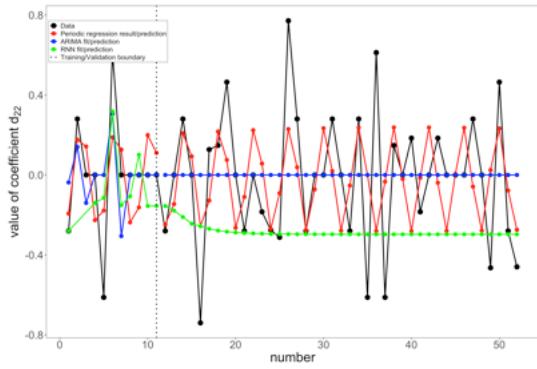
Fig .32: Regression result (dt, 50%, DS6)



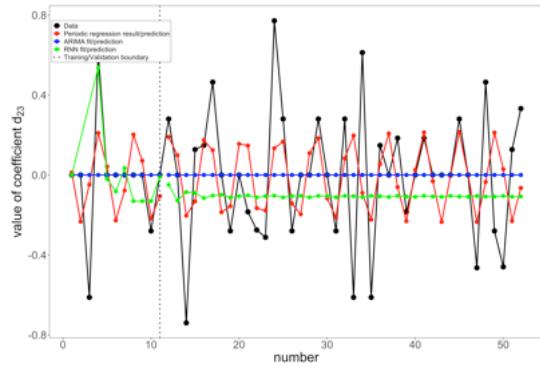
(a) regressed scaling coefficients $c_{0,0}$



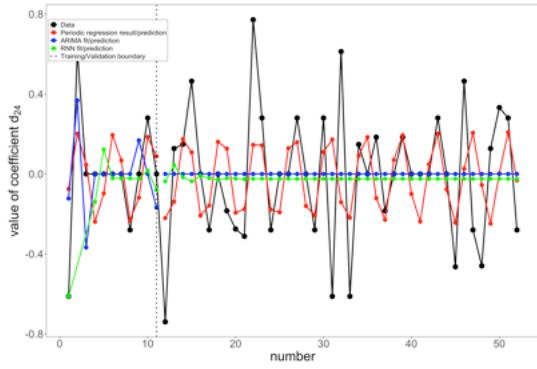
(b) regressed wavelet coefficients $d_{2,0}$



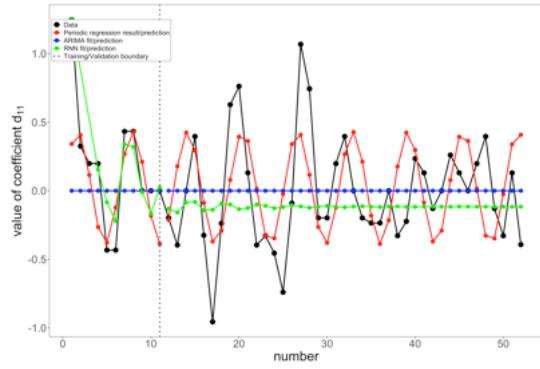
(c) regressed wavelet coefficients $d_{2,1}$



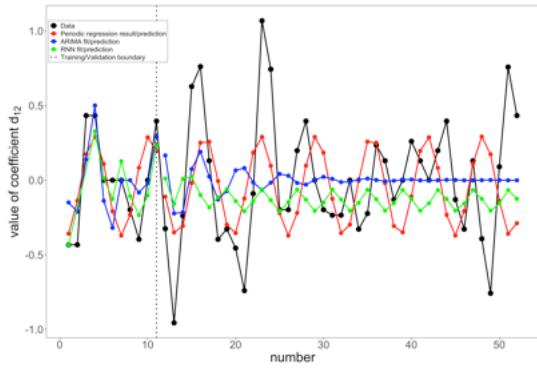
(d) regressed wavelet coefficients $d_{2,2}$



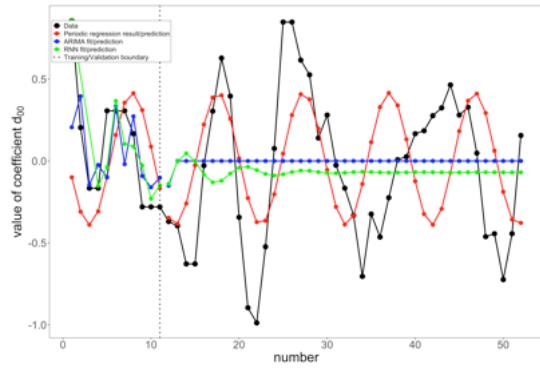
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$

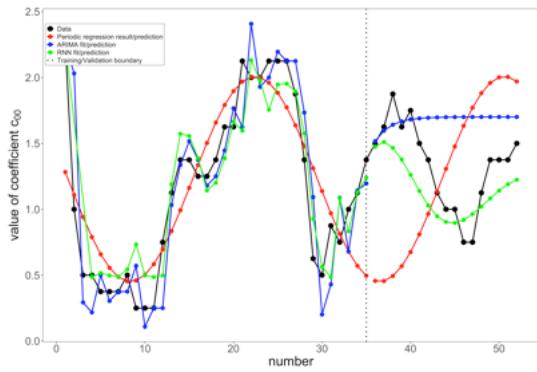


(g) regressed wavelet coefficients $d_{1,1}$

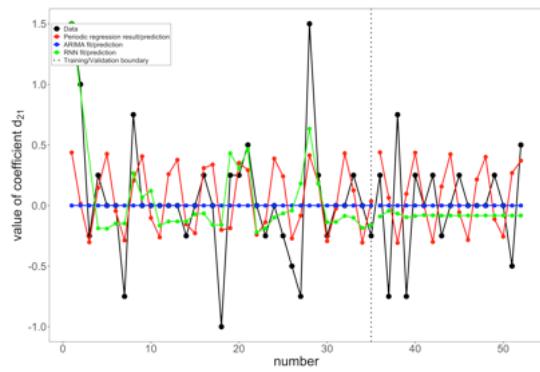


(h) regressed wavelet coefficients $d_{0,0}$

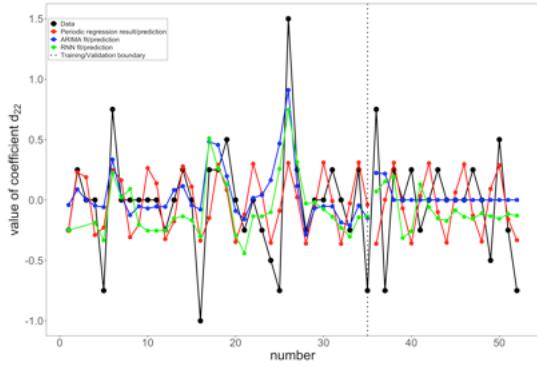
Fig .33: Regression result (dt, 30%, DS6)



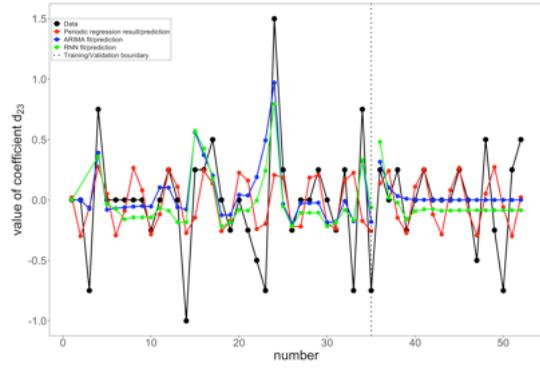
(a) regressed scaling coefficients $c_{0,0}$



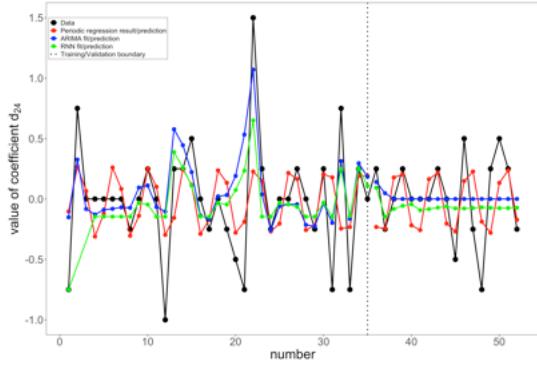
(b) regressed wavelet coefficients $d_{2,0}$



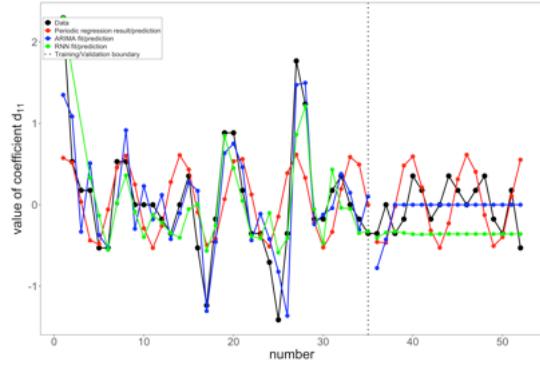
(c) regressed wavelet coefficients $d_{2,1}$



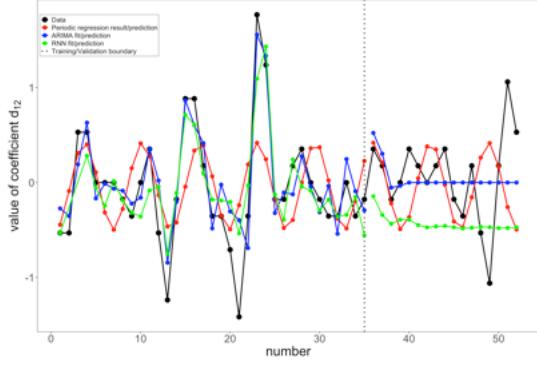
(d) regressed wavelet coefficients $d_{2,2}$



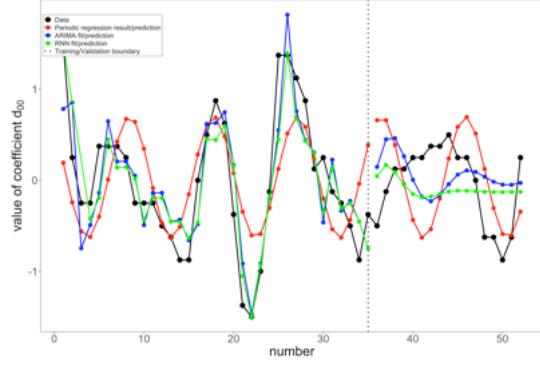
(e) regressed wavelet coefficients $d_{2,3}$



(f) regressed wavelet coefficients $d_{1,0}$



(g) regressed wavelet coefficients $d_{1,1}$



(h) regressed wavelet coefficients $d_{0,0}$

Fig .34: Regression result (ndt, 70%, DS6)

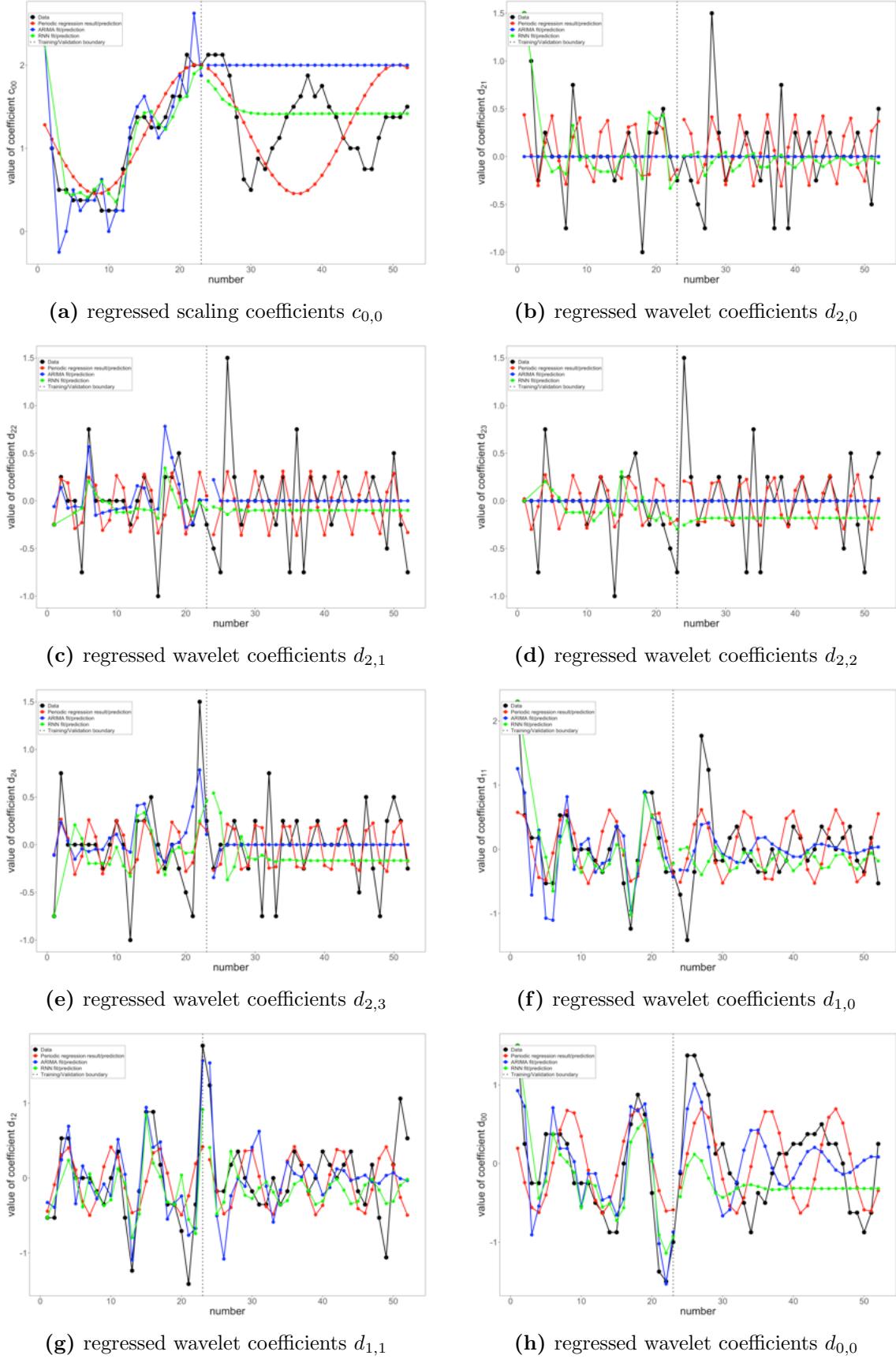


Fig .35: Regression result (ndt, 50%, DS6)

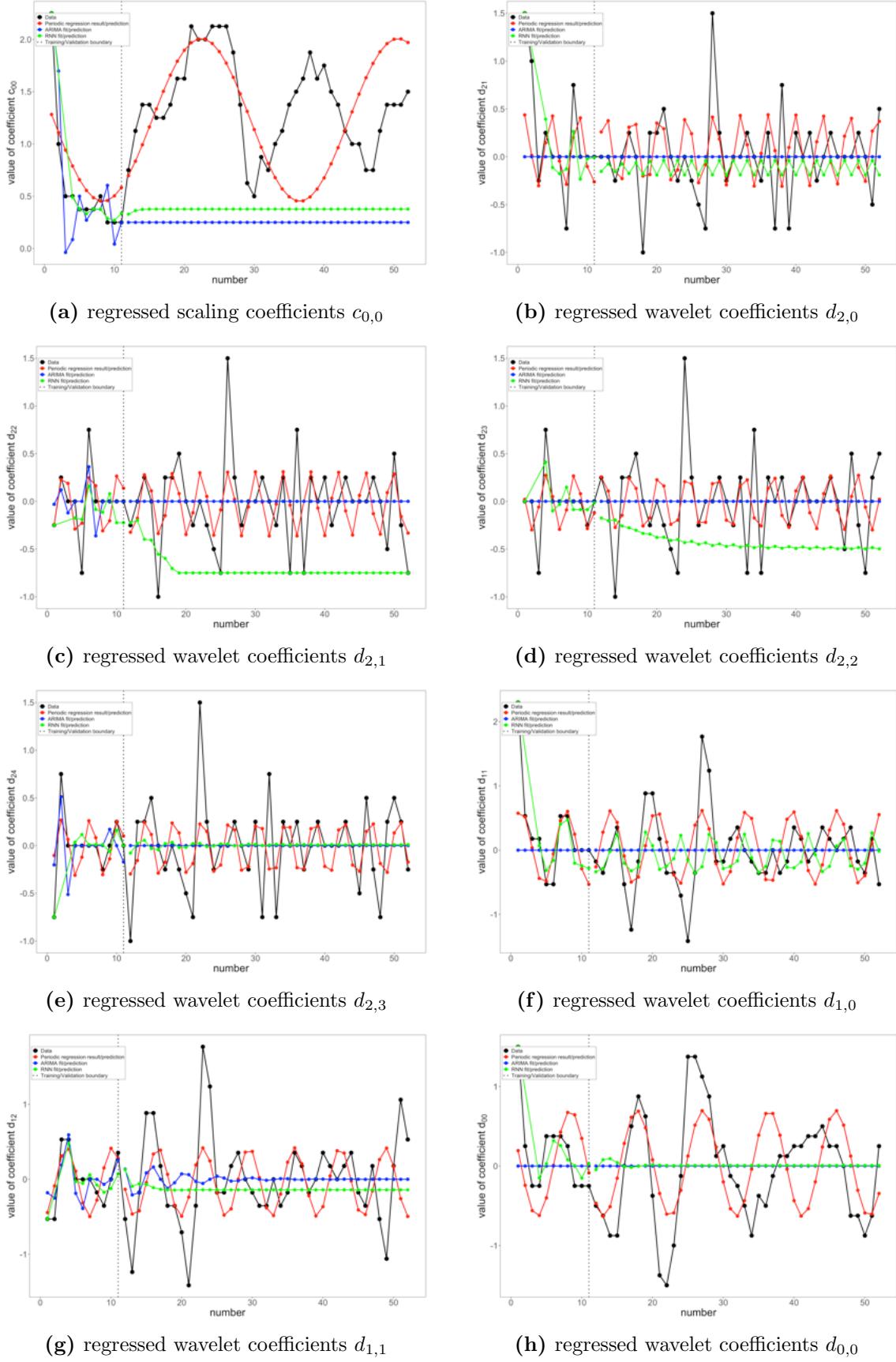


Fig .36: Regression result (ndt, 30%, DS6)