

# SARIMAX 24h Forecast Report – 西条

Prefecture code	38
Station code	38206050
Station name	西条
Target item	Ox(ppm)
Model	SARIMAX
Order (p,d,q)	(2, 0, 0)
Seasonal order	(0, 0, 0, 24)
Forecast horizon	24
Training samples	2160
Test samples	720
Elapsed time	33 min 55 sec

## Features used for prediction

hour\_sin

hour\_cos

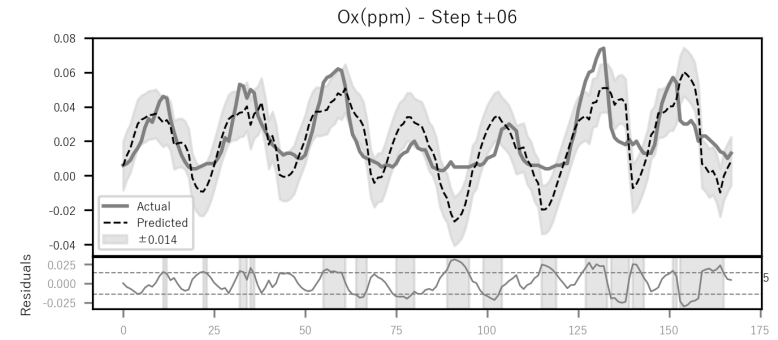
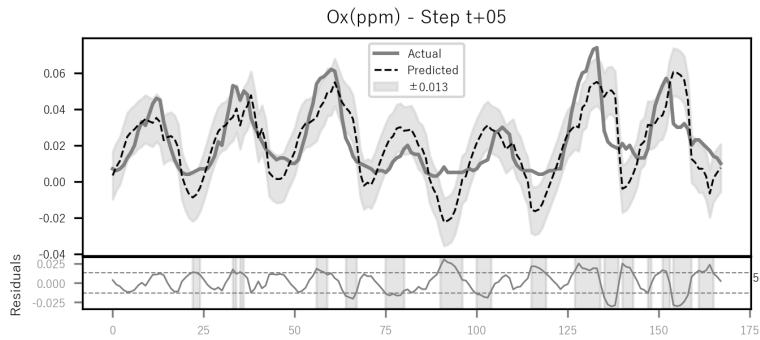
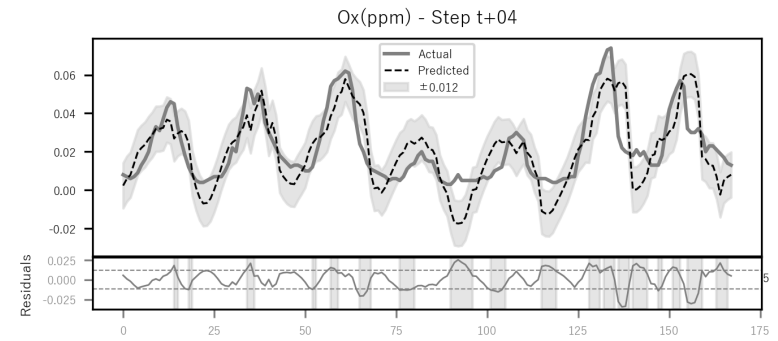
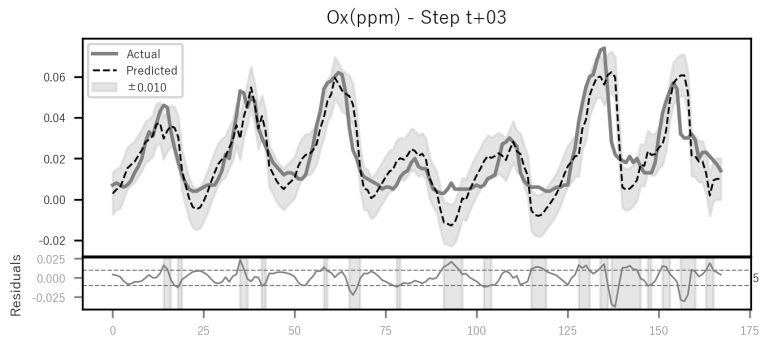
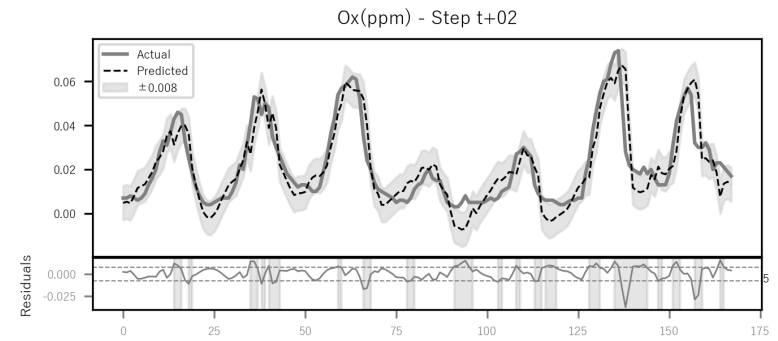
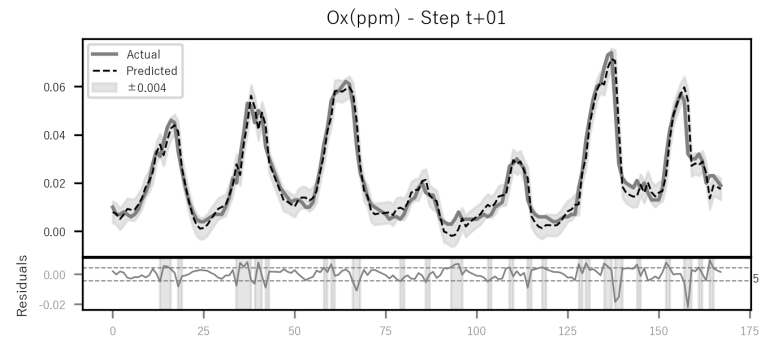
dayofweek

is\_weekend

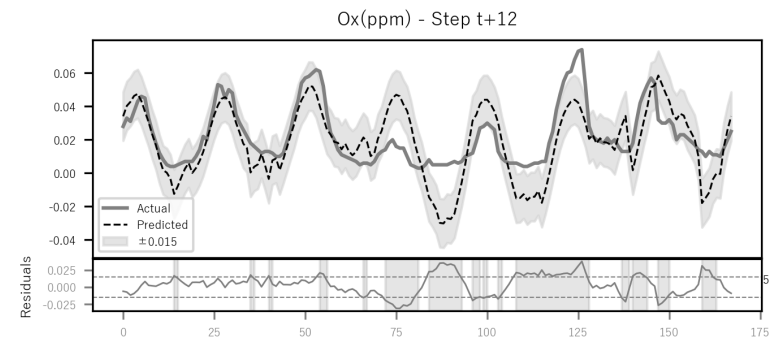
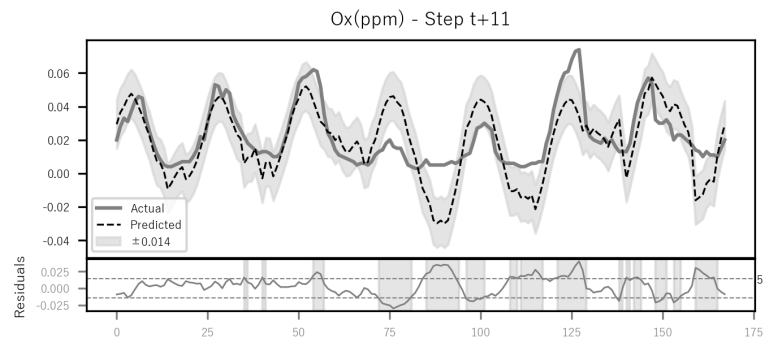
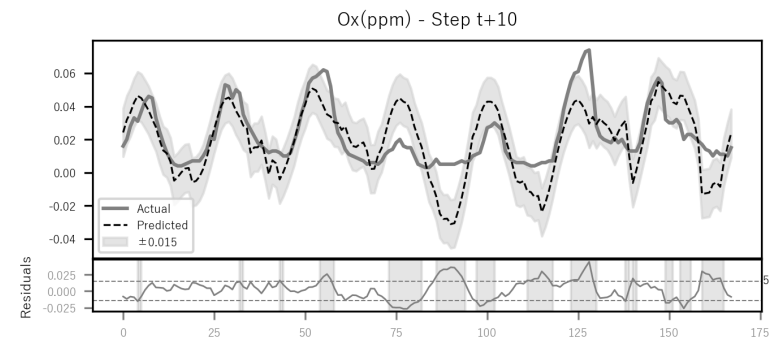
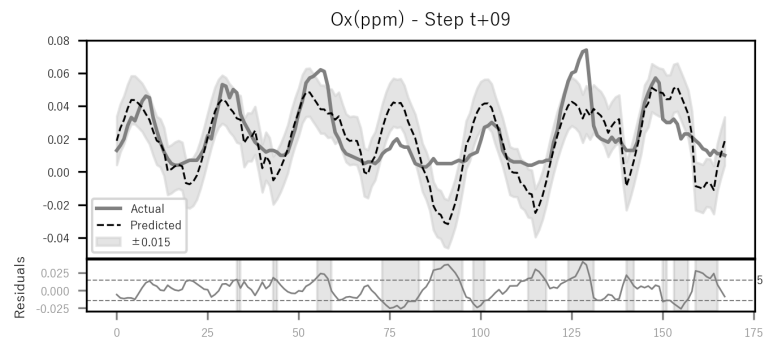
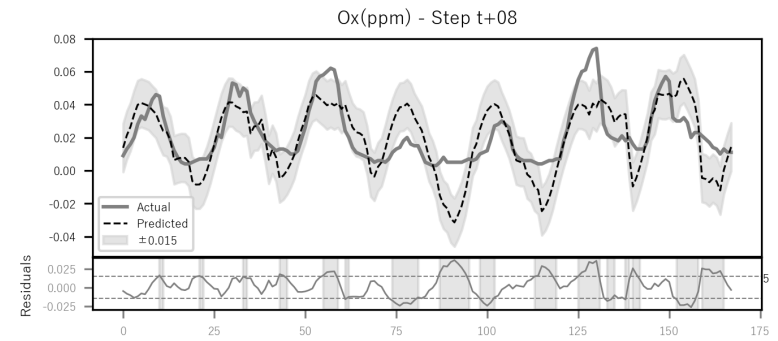
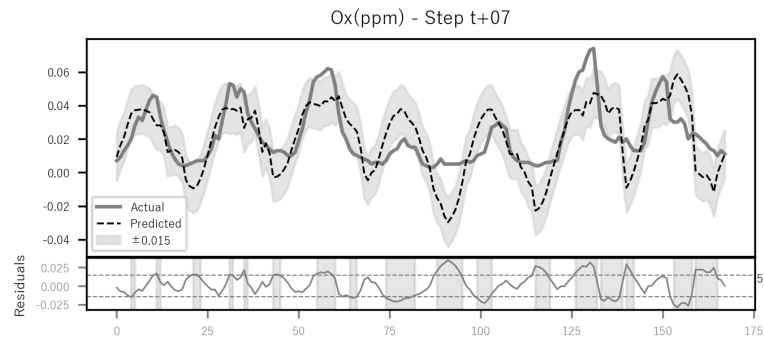
## Model accuracy

Target	R <sup>2</sup>	MAE	RMSE
t+01	0.9016	0.0035	0.0050
t+02	0.7459	0.0062	0.0081
t+03	0.5757	0.0083	0.0104
t+04	0.4152	0.0099	0.0122
t+05	0.2785	0.0110	0.0136
t+06	0.1726	0.0118	0.0145
t+07	0.1126	0.0121	0.0150
t+08	0.0922	0.0121	0.0152
t+09	0.1128	0.0119	0.0150
t+10	0.1540	0.0115	0.0146
t+11	0.1908	0.0112	0.0143
t+12	0.2086	0.0112	0.0142
t+13	0.1951	0.0114	0.0143
t+14	0.1486	0.0118	0.0148
t+15	0.0963	0.0124	0.0153
t+16	0.0453	0.0131	0.0158
t+17	0.0030	0.0134	0.0162
t+18	-0.0198	0.0136	0.0164
t+19	-0.0078	0.0133	0.0163
t+20	0.0166	0.0130	0.0161
t+21	0.0481	0.0127	0.0158
t+22	0.0826	0.0123	0.0155
t+23	0.1094	0.0120	0.0153
t+24	0.1131	0.0121	0.0152

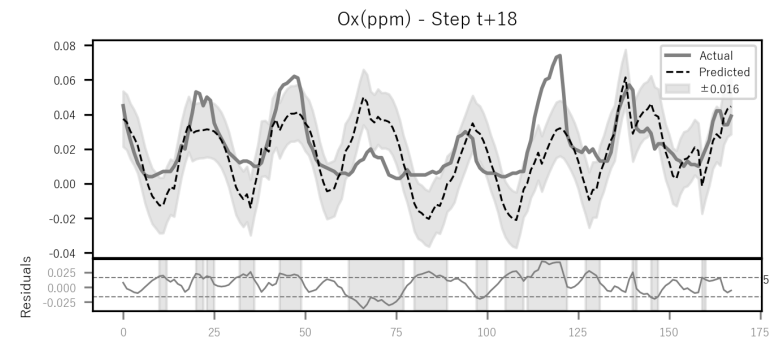
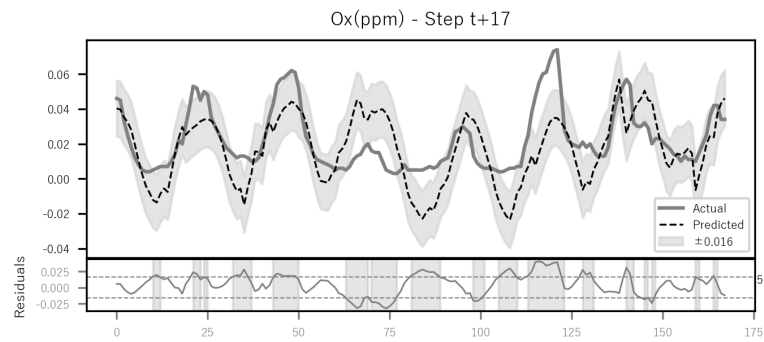
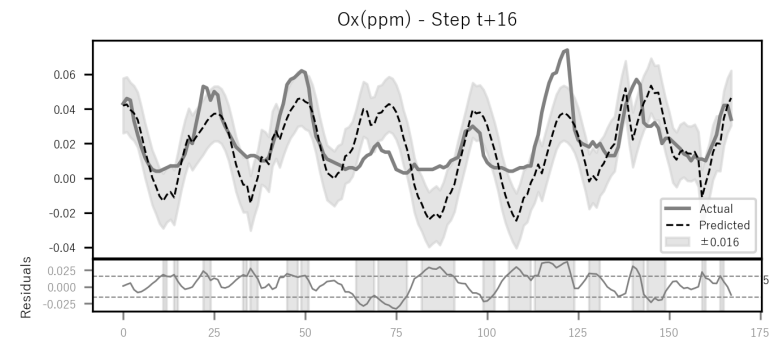
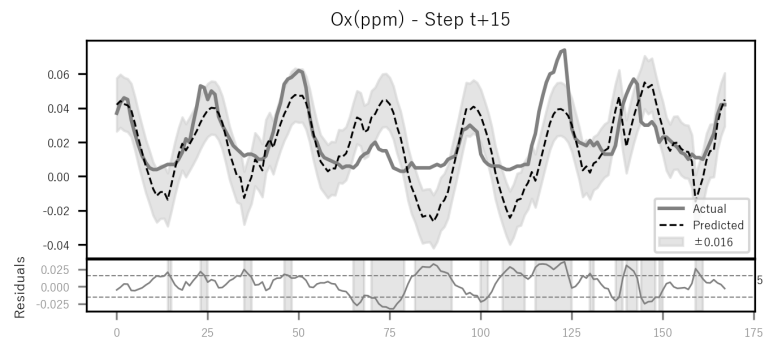
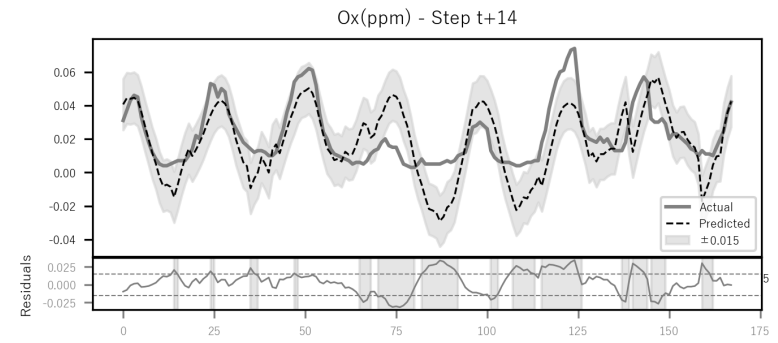
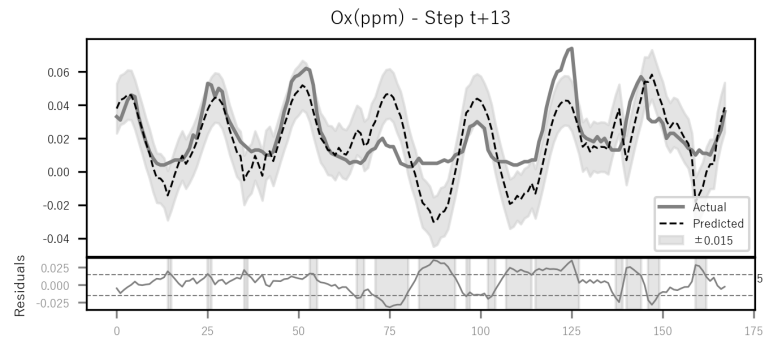
Comparison between actual and predicted values  
with  $\pm$  Standard Deviation Bands



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with  $\pm$  Standard Deviation Bands



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