**SUPPLEMENTARY MATERIAL TABLE 4**

**Supplemental Table 4a. Comparison of Model Quality and Performance in Meteorological Factors (MF) dataset when Maximum, Average Temperatures and Relative Humidity are excluded in the Model Development**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Modeling Approaches** | | All Meteorological Variables | Exclude Maximum Temperature | Exclude Average Temperature | Exclude Relative Humidity |
| GAM | AIC | 286.18 | 300.01 | 288.57 | 287.02 |
| RMSE | 0.33 | 0.33 | 0.37 | 0.34 |
| MAE | 0.27 | 0.27 | 0.27 | 0.28 |
| SARIMAX | AIC | -200.67 | -202.9 | -206.74 | -201.71 |
| RMSE | 0.42 | 0.46 | 0.67 | 0.60 |
| MAE | 0.39 | 0.42 | 0.54 | 0.48 |
| RF | RMSE | 0.29 | 0.30 | 0.31 | 0.29 |
| MAE | 0.23 | 0.24 | 0.25 | 0.23 |
| GB | RMSE | 0.30 | 0.30 | 0.31 | 0.31 |
| MAE | 0.24 | 0.25 | 0.25 | 0.25 |

**Supplemental Table 4b. Comparison of Model Quality and Performance in Lagged Meteorological Factors (LG) dataset when Maximum, Average Temperatures and Relative Humidity are excluded in the Model Development**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Modeling Approaches** | | All Lagged Meteorological Variables | Exclude Maximum Temperature | Exclude Average Temperature | Exclude Relative Humidity |
| GAM | AIC | 145.81 | 154.00 | 147.91 | 169.39 |
| RMSE | 0.22 | 0.23 | 0.23 | 0.24 |
| MAE | 0.17 | 0.17 | 0.17 | 0.18 |
| SARIMAX | AIC | -125.94 | -127.89 | -128.66 | -127.86 |
| RMSE | 0.31 | 0.31 | 0.35 | 0.31 |
| MAE | 0.27 | 0.27 | 0.30 | 0.28 |
| RF | RMSE | 0.21 | 0.21 | 0.21 | 0.24 |
| MAE | 0.15 | 0.15 | 0.15 | 0.17 |
| GB | RMSE | 0.23 | 0.23 | 0.23 | 0.28 |
| MAE | 0.17 | 0.18 | 0.17 | 0.21 |