|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NH3 | <Q1 | Q1-Q2 | Q2-Q3 | Q3-Q4 | NH3 | <Q1 | Q1-Q2 | Q2-Q3 | Q3-Q4 |
| **1\_RB** | Dir | 1% | 1% | 1% | 6% | **6\_UB** | Dir | -3% | 1% | 0% | 0% |
| Prec | -3% | -3% | -2% | -2% | Prec | -2% | -1% | -2% | -2% |
| Rad | 3% | 10% | 5% | -9% | Rad | 9% | 0% | -4% | -9% |
| Temp | 26% | 8% | -4% | -5% | Temp | 19% | 1% | -5% | -9% |
| RH | -11% | -8% | 2% | 15% | RH | 3% | -1% | 6% | 7% |
| Vel | -14% | -2% | -2% | -13% | Vel | -10% | -2% | -3% | -9% |
| **2\_SU** | Dir | 8% | 1% | 1% | 3% | **7\_RB** | Dir | 0% | -1% | 1% | 6% |
| Prec | -1% | 0% | 1% | -3% | Prec | 0% | 4% | -2% | -3% |
| Rad | 8% | -4% | -1% | 1% | Rad | 0% | -2% | 4% | 6% |
| Temp | 0% | -3% | -4% | -11% | Temp | 0% | 3% | 4% | 10% |
| RH | -15% | 3% | -1% | -6% | RH | 0% | 0% | -4% | -1% |
| Vel | 18% | -6% | -2% | -7% | Vel | 0% | 6% | 2% | 6% |
| **3\_RB** | Dir | -6% | 0% | 3% | 3% | **8\_UB** | Dir | 2% | -1% | -3% | -15% |
| Prec | -2% | -1% | -1% | -3% | Prec | 0% | -2% | -4% | -2% |
| Rad | 7% | 7% | 4% | -18% | Rad | 1% | 7% | 12% | 19% |
| Temp | 21% | 9% | 2% | -7% | Temp | -9% | 11% | 12% | 12% |
| RH | -9% | -6% | 1% | 19% | RH | -6% | -11% | -9% | -8% |
| Vel | -5% | -4% | -7% | -17% | Vel | 5% | 1% | 2% | 9% |
| **4\_UB** | Dir | -6% | -3% | 0% | 7% | **9\_UI**  | Dir | 4% | -4% | 0% | 2% |
| Prec | 5% | -1% | -1% | -3% | Prec | 5% | -3% | -1% | 1% |
| Rad | 12% | 9% | 3% | -7% | Rad | -8% | -5% | 1% | 10% |
| Temp | 8% | 12% | 4% | -13% | Temp | -29% | -2% | 5% | 13% |
| RH | -10% | -7% | -3% | 13% | RH | 16% | 5% | -2% | -7% |
| Vel | 12% | 3% | -3% | -16% | Vel | -14% | 4% | 1% | -4% |
| **5\_RB** | Dir | -3% | -4% | 2% | 3% | **10\_RB** | Dir | 6% | 3% | 2% | 13% |
| Prec | -3% | -1% | 0% | -2% | Prec | 2% | -1% | -1% | -1% |
| Rad | 10% | 6% | 5% | -4% | Rad | -4% | 1% | 5% | 19% |
| Temp | 13% | 9% | 3% | -4% | Temp | -11% | 3% | 3% | 6% |
| RH | -15% | -6% | -2% | 8% | RH | 0% | 0% | 0% | -6% |
| Vel | -7% | 0% | 0% | -8% | Vel | -1% | -2% | -3% | -5% |

Table S1: for each reference site, the correlation matrix in percentage between meteorological turbulence variables and ammonia concentration divided into quartiles.