

`weather_correlation_matrix.csv` is a matrix of pairwise correlation coefficients between all the weather variables in your dataset.

Quick interpretation guide:

- Values close to 1: Strong positive correlation (e.g., AWBT and TMAX: 0.945 show high linear association).
- Values close to -1: Strong negative correlation.
- Values near 0: No or weak linear relationship.
- Diagonal: Always 1, as each variable perfectly correlates with itself.

Some highlights from your matrix:

- AWBT (Wet Bulb Temp) & TMAX/TMIN/TAVG: High positive correlations (0.94+, typical weather interplay).
- RHAV, RHMN, RHMX (Humidity measures): Strong inter-correlations (>0.7), logical for related humidity measures.
- PRCP (Precipitation): Low to moderate correlation with humidity, weakly positive (0.31).

Indicators that your output is correct:

- All columns and rows are present and labeled by variable.
- Diagonal is 1 for self-correlation.
- Values match expected relationships, e.g., temperature columns (TMAX, TMIN, TAVG) correlate highly with each other.
- No obviously missing or out-of-range values.

Recommendation:

This file is ready for Tableau and accurately represents the structure needed for further heatmap visualization or analysis by your data visualization team.