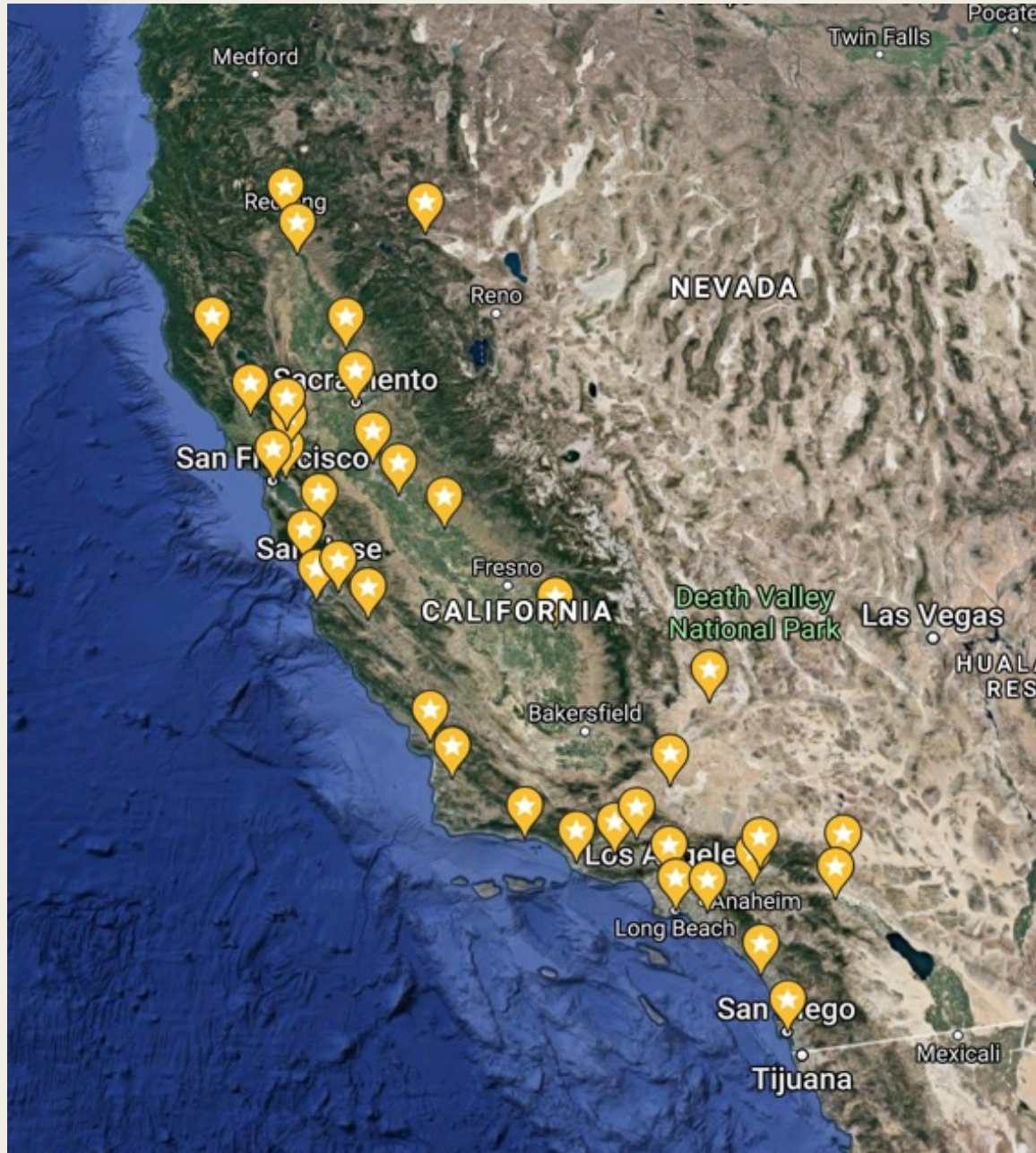




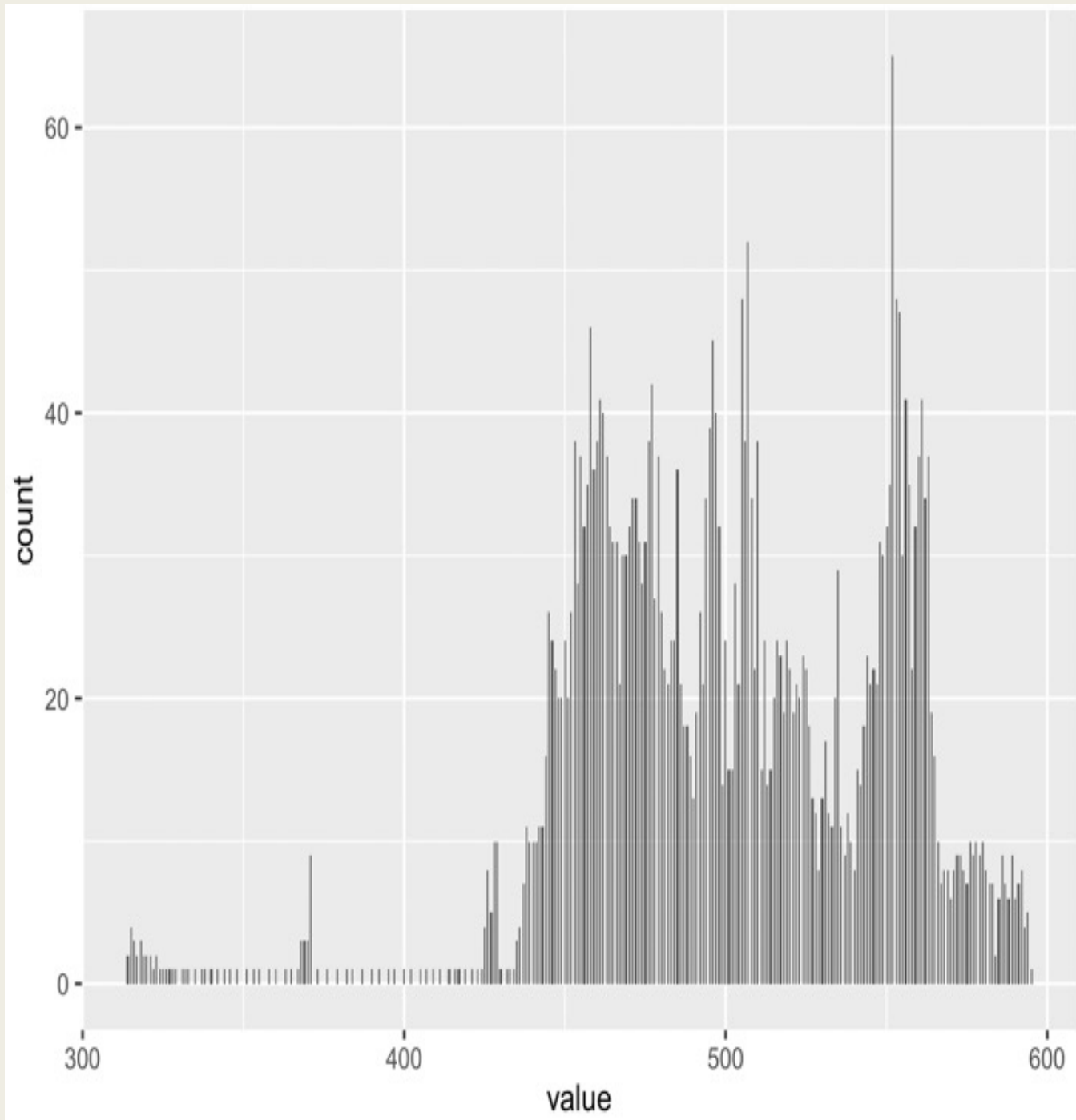
MODELING TEMPERATURE IN CALIFORNIA

Chloe Warren and Adith Arun

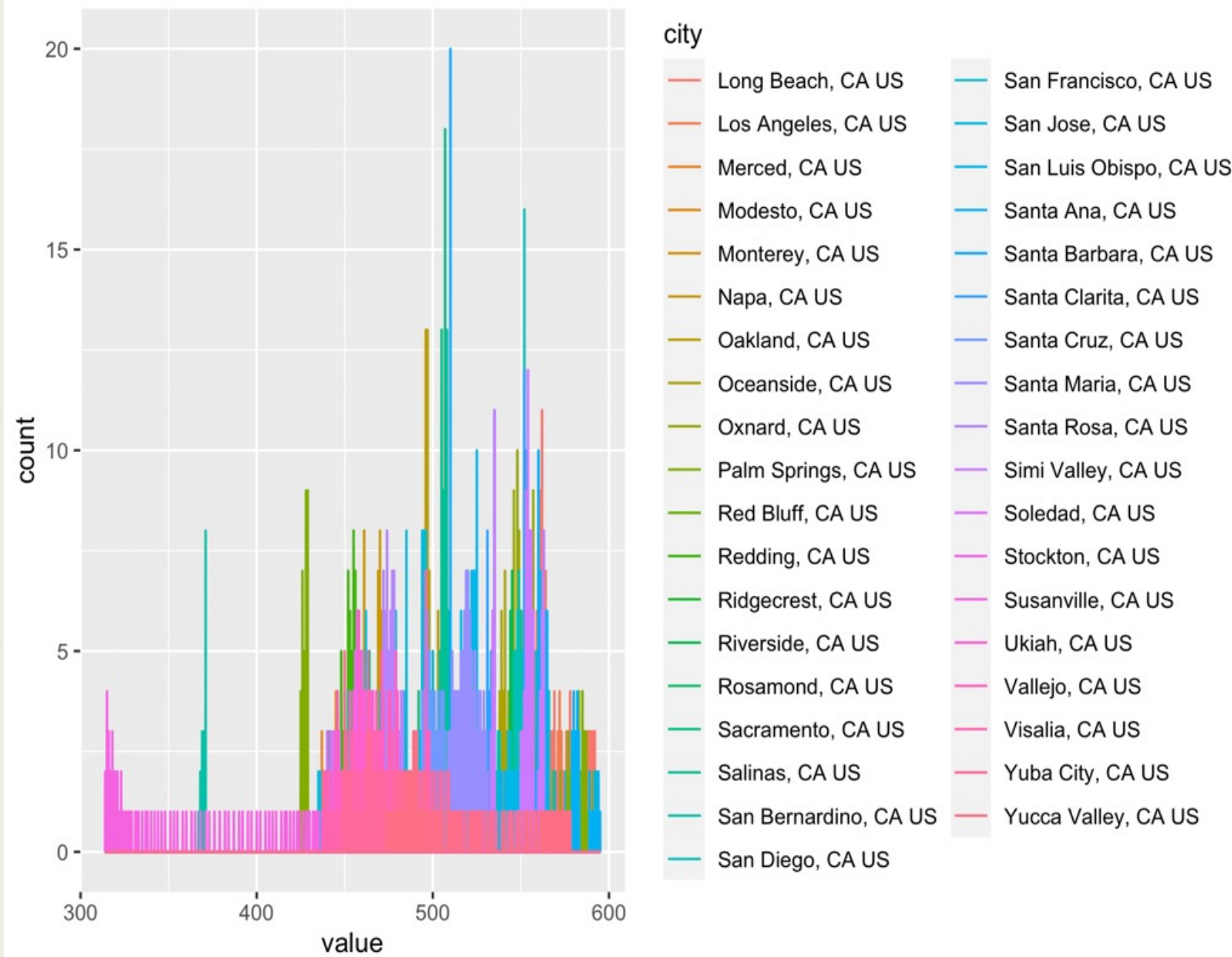




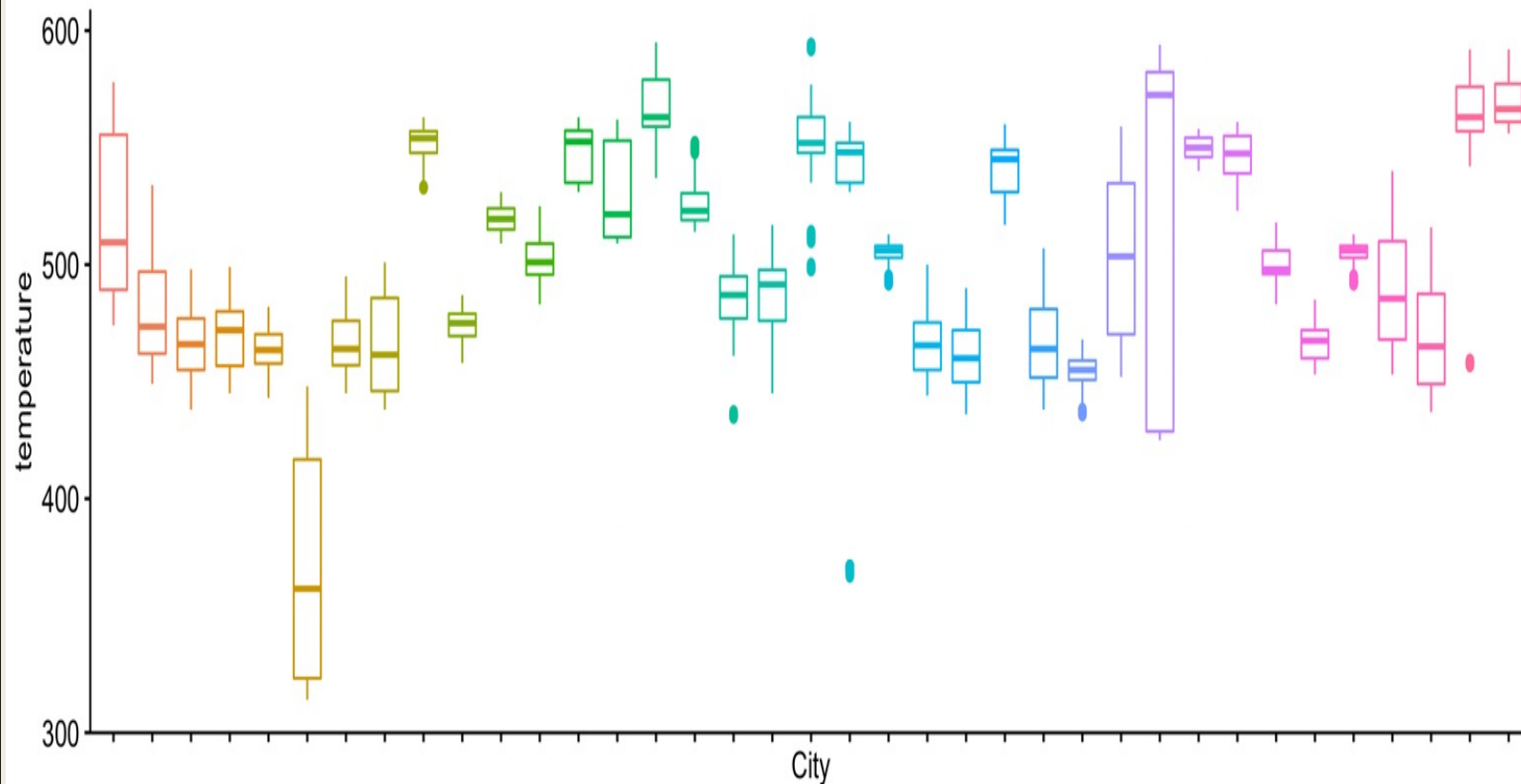
- Publicly available NOAA data through for temperature in 37 California cities from January to March 2010



- Histogram of gross temperature values recorded across all cities and months



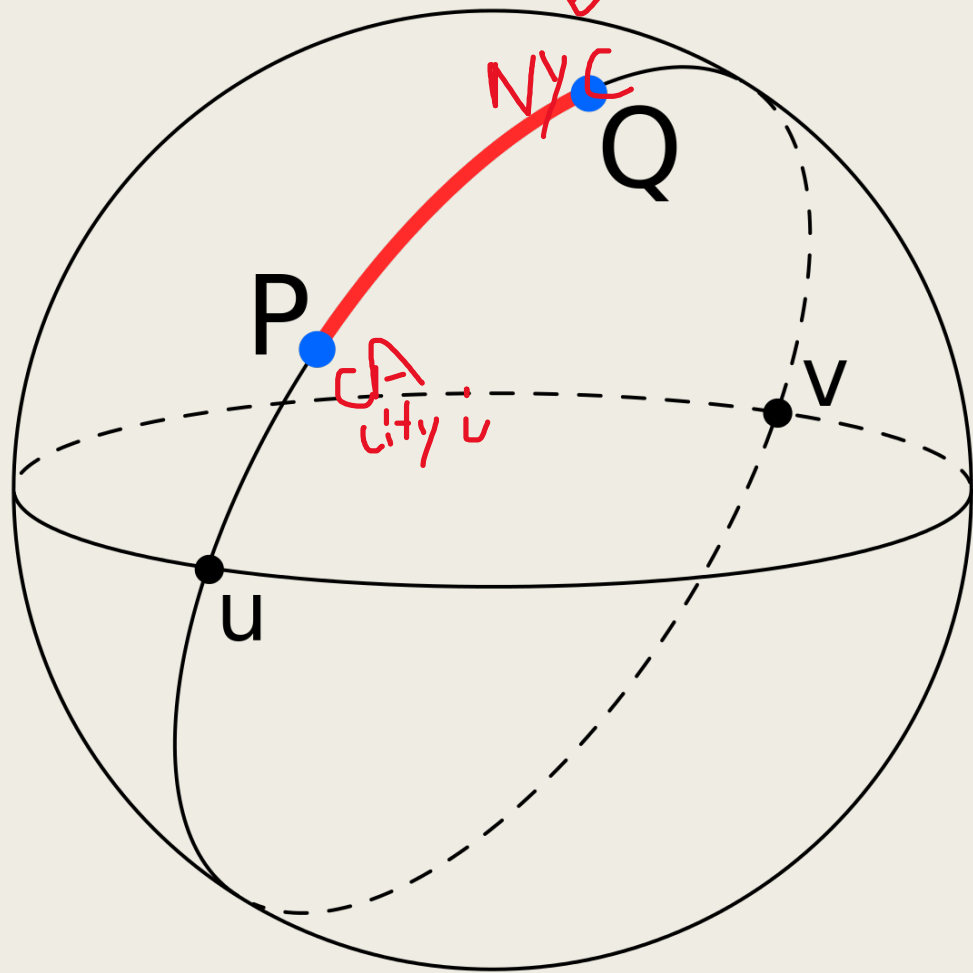
- A deeper look at the city-by-city temperature distribution across the three months (January to March)



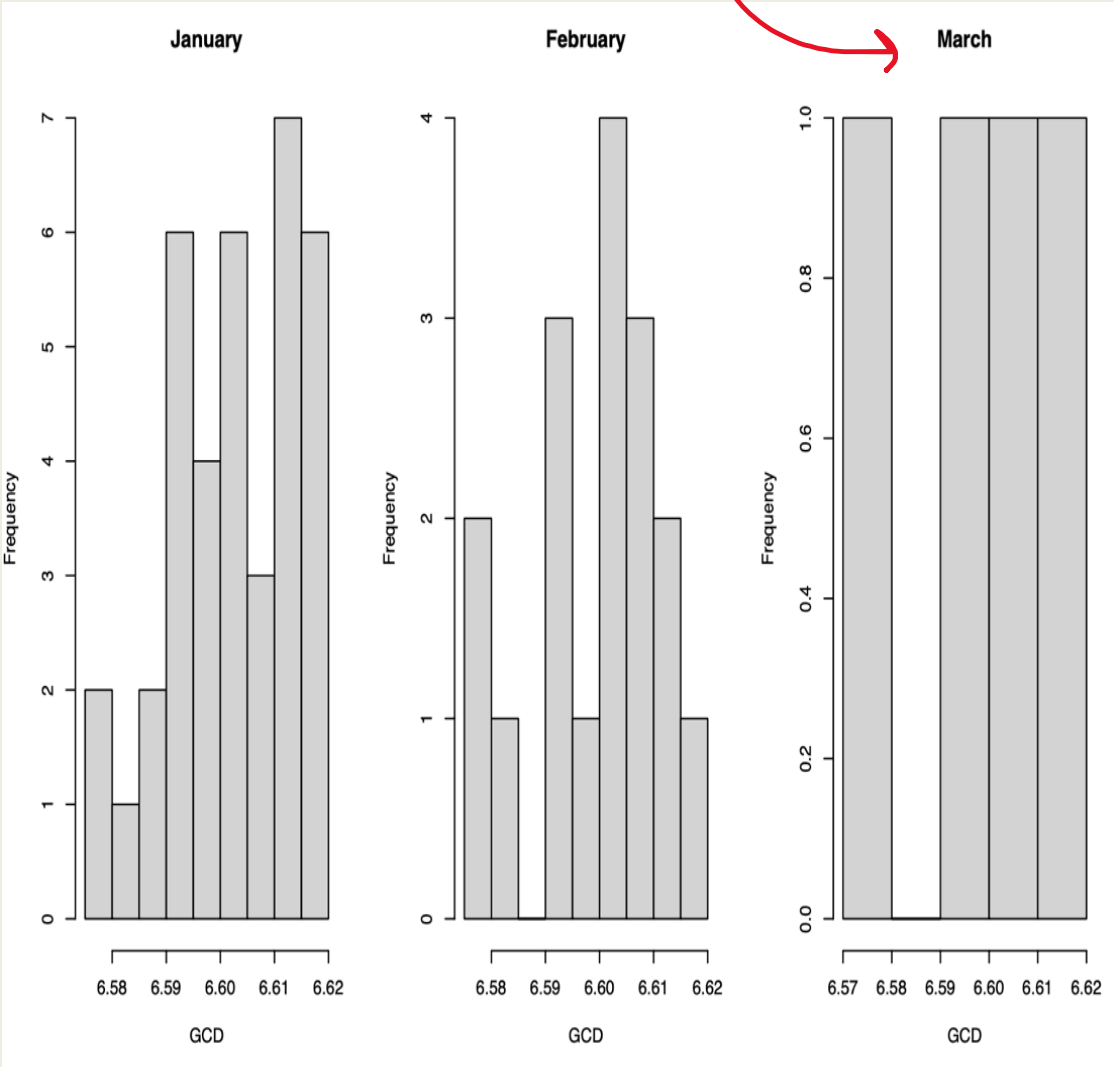
- Variability in the temperature within and across cities

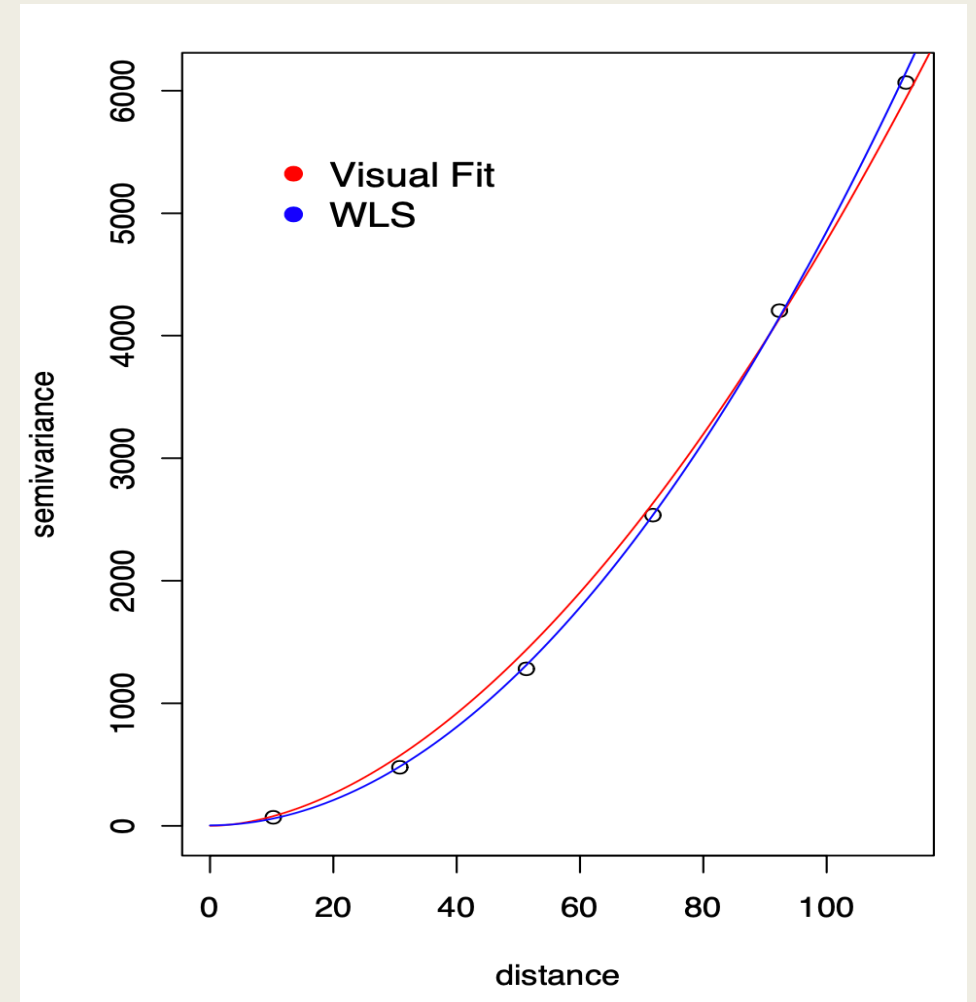
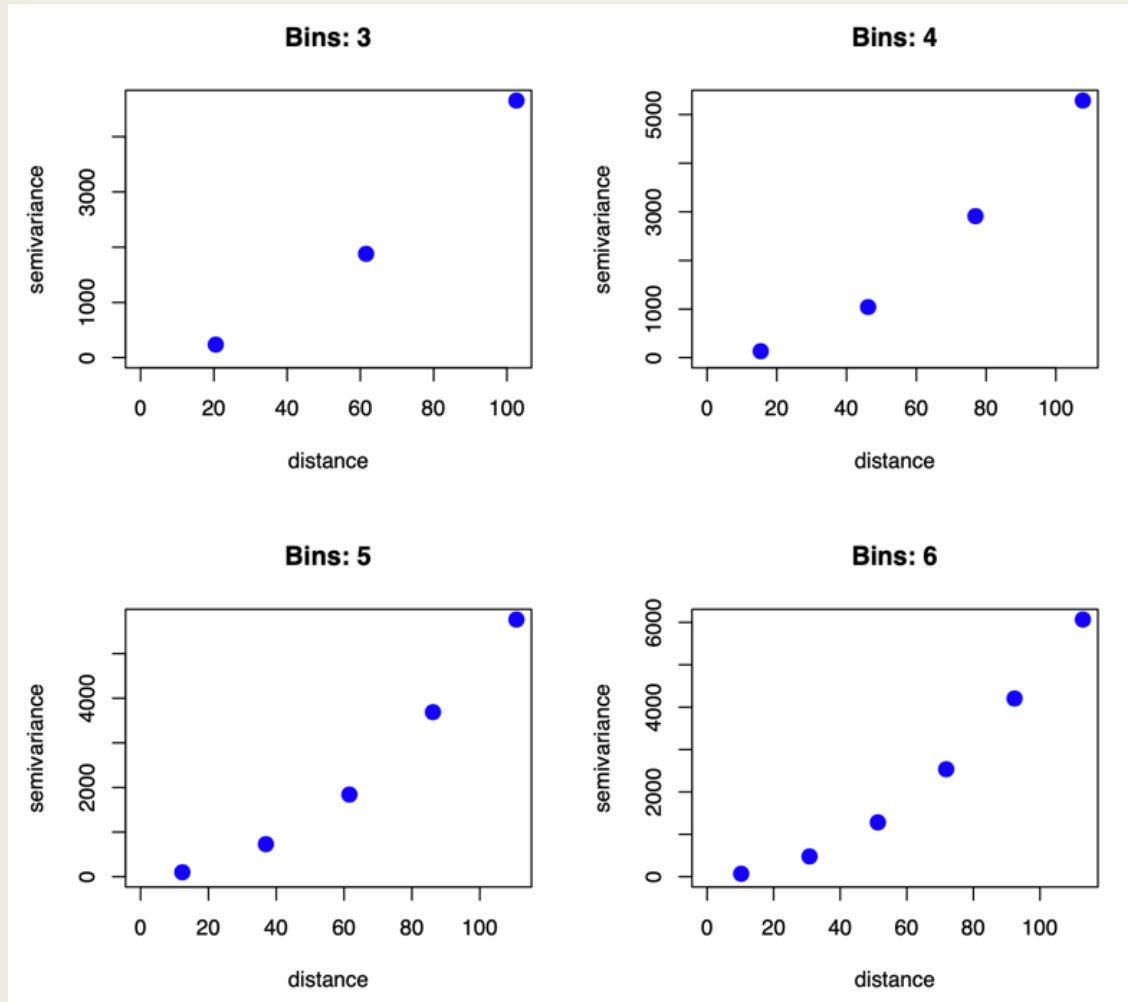
Greatest Circle Distance (GCD) to transform our coordinates

Distance on a sphere!

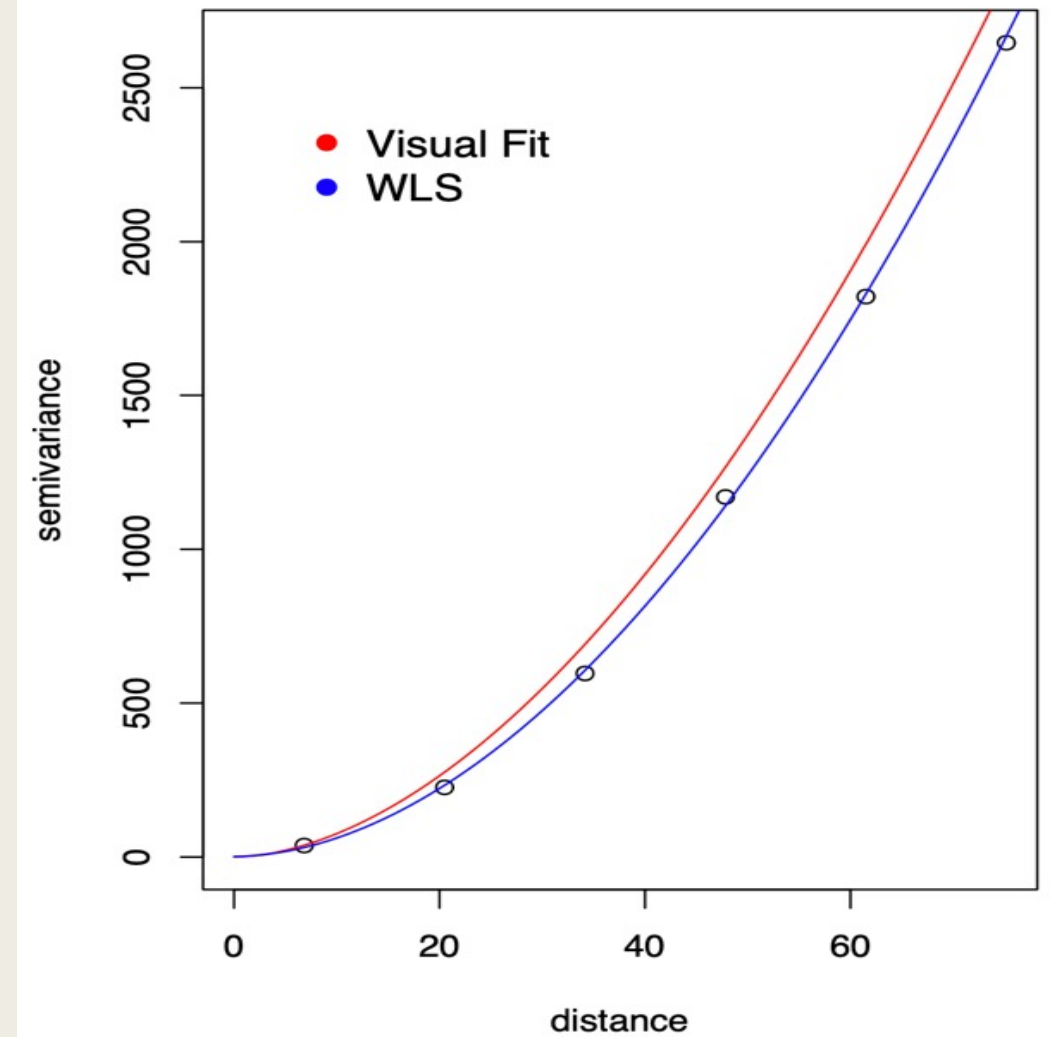
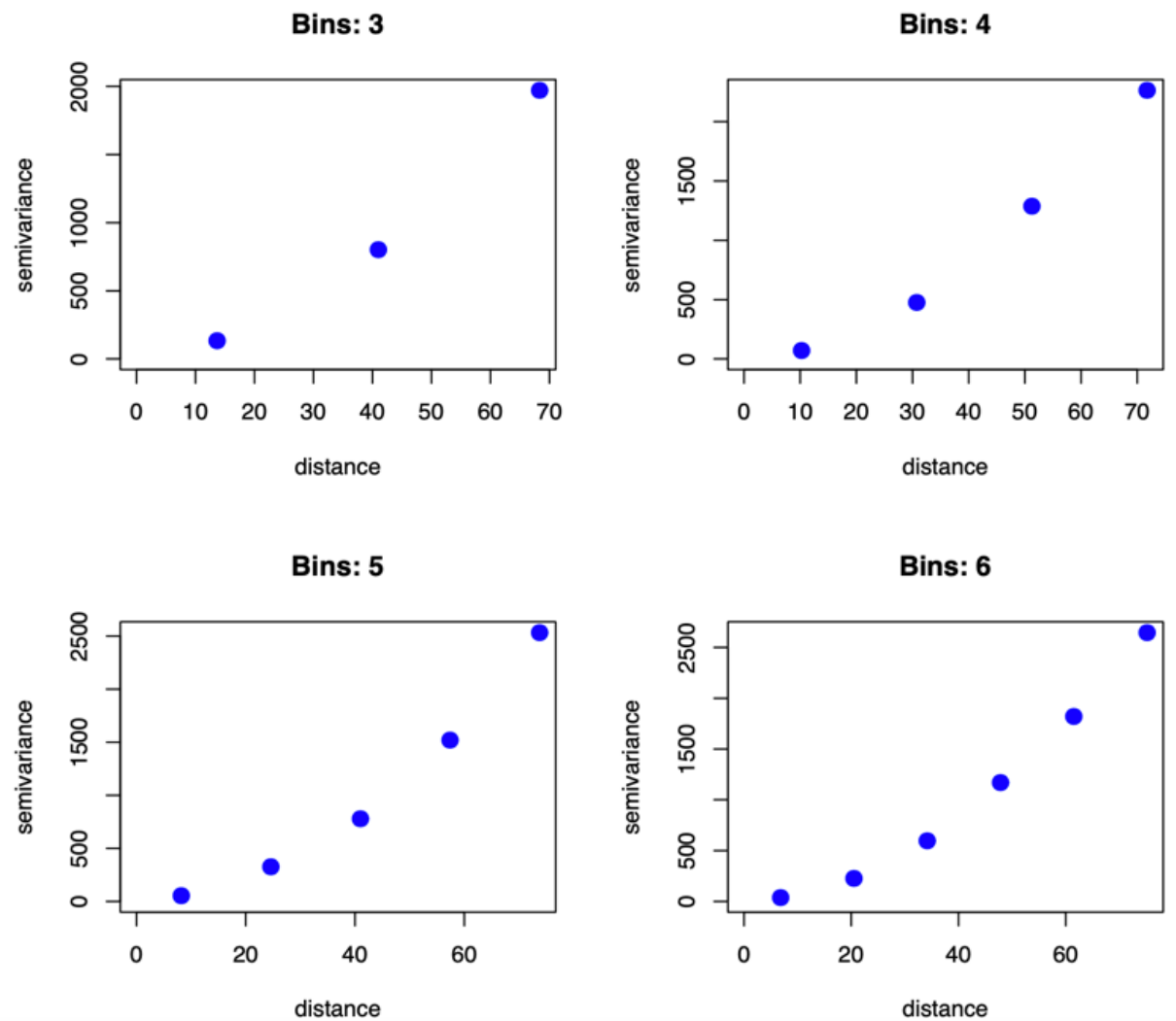


Missing Values!

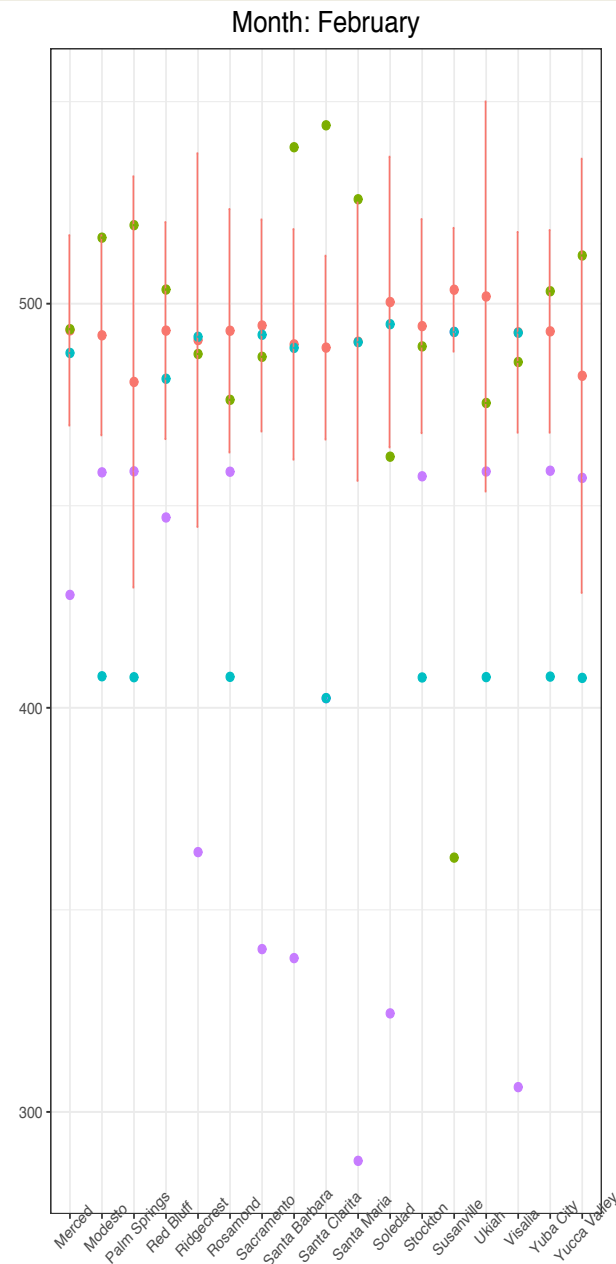
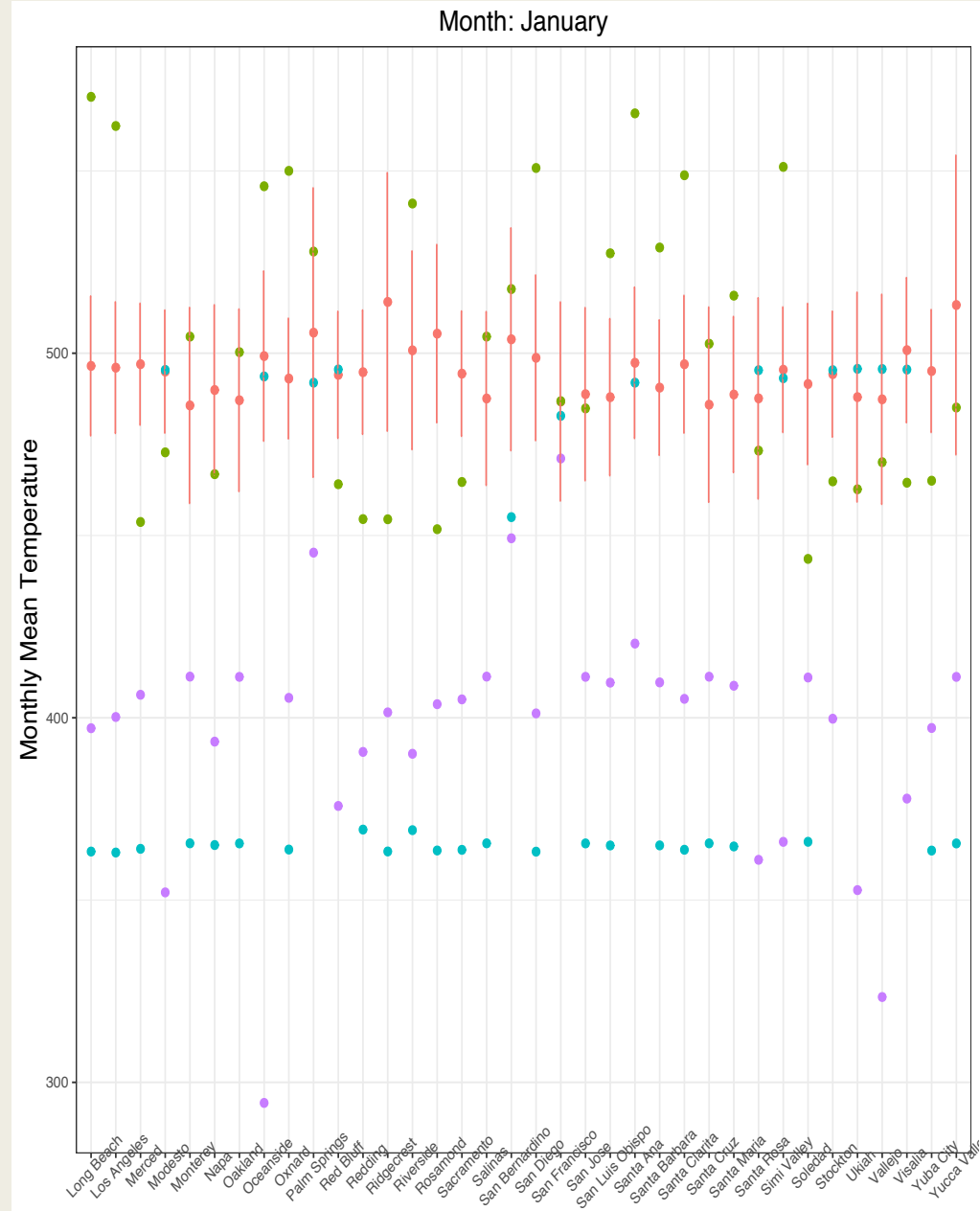




Binned Variogram for January across 36 cities

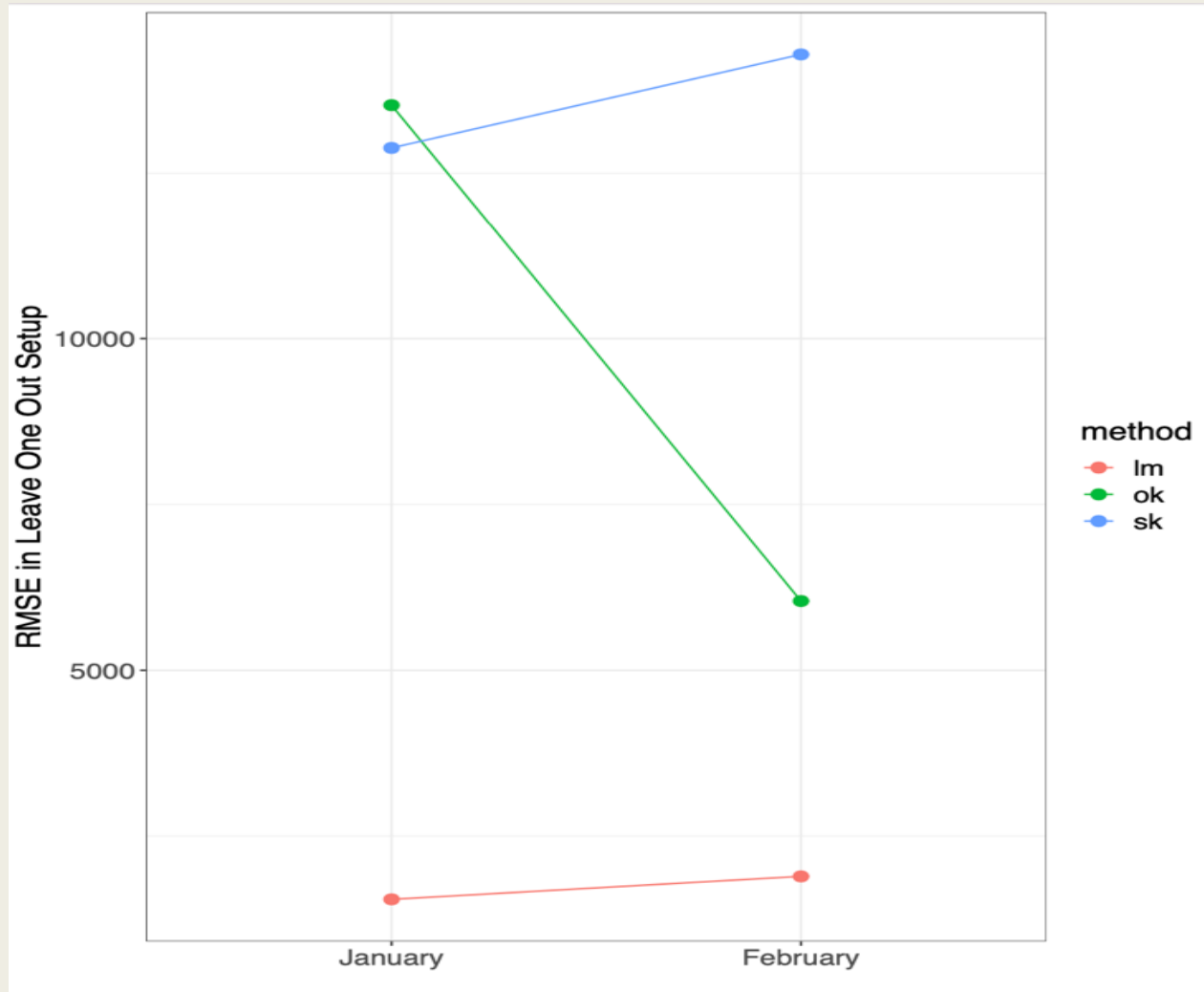


Binned Variogram for February across 17 cities



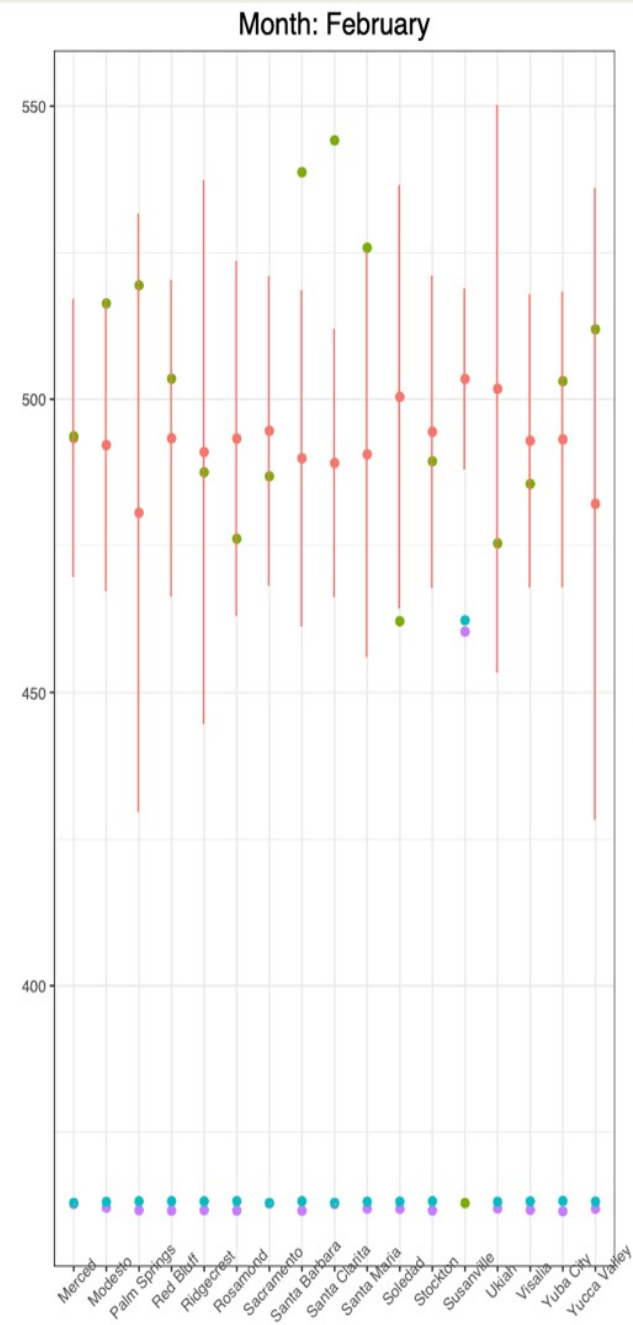
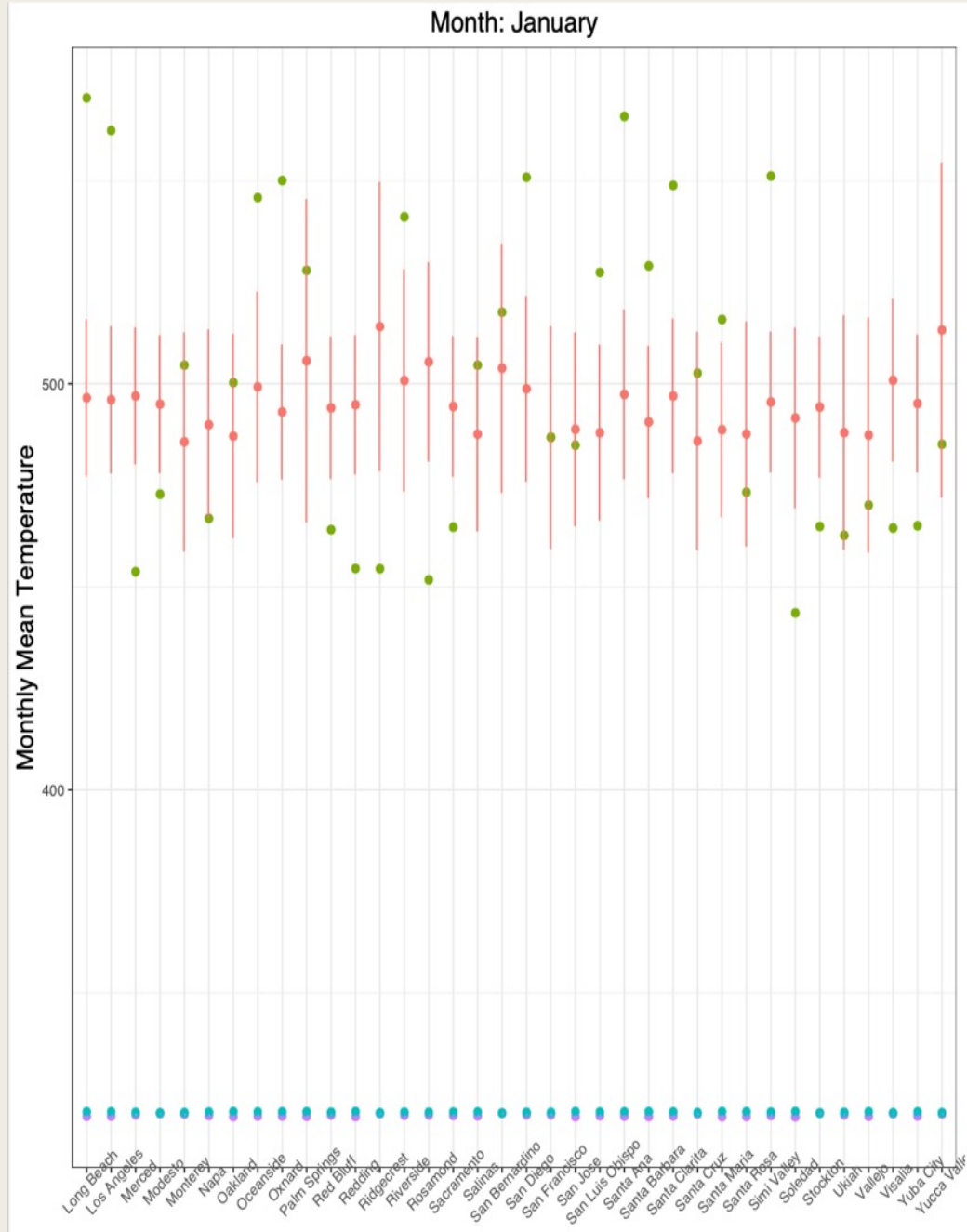
■ Cross-Validated RMSE to judge our estimation models

■ Variogram Model: Power



- Summary CV RMSE across months and models
- Variogram Model: Power

LM	OK	SK	MONTH
1546.837	13527.123	12883.07	JAN
1892.616	6044.117	14292.68	FEB



- Cross-Validated RMSE to judge our estimation models
- Variogram Model: Exponential