**Moving Temperature Averages Over Time**

**Steps taken and key considerations**

* The following script was sued to pull average temperatures and the globe by year:
  + SELECT c.year, c.avg\_temp as avg\_denver\_temp, g.avg\_temp as global\_temp

FROM city\_data c

JOIN global\_data g

ON g.year = c.year

WHERE c.city = 'Denver';

* Once the data was downloaded to Excel, an average was calculated for the previous 10 years for both Denver and the global average temperature. In order to calculate a moving average, the function was copied down each cell for each year’s data provided.
* Key considerations made when visualizing the data were ensuring an appropriate temperature range that was able to show the correlation between the two moving averages, while scaled enough so that minor differences could be more easily observed. Time ranges were set to 6 years apart to best track changes over time while avoiding too many data points to reference.

**Observations**

* The average temperature globally and in Denver has slowly increased on average since 1829
* Aside form a short span between 1919 and 1931, Denver’s moving average temperature has been higher than the global moving average temperature.
* The highest recorded average temperatures globally and in Denver have both occurred in the 21st Century (2005 globally, 2013 in Denver).
* The biggest variance between Denver’s average temperature and the global average temperature was in 1934, when Denver averaged 2.29 degrees warmer than the global average