

The law of flowering plants is a theory created by the Belgian mathematician Adolphe Quetelet that purports the idea that after plants have been exposed to a certain amount of heat cumulatively over a period of time. In Quetelet's work he used the time period since the last frost, in this entry I will instead be using the cumulative temperatures since January 1st of each year to make my predictions for this year's upcoming bloom. I used publicly available data from NOAA dating back to January 1st 1990 for each locations daily averages. For the bloom dates I used the given bloom date data for Kyoto, Liestal, and D.C., and since there isn't data available for New York and Vancouver I used the D.C. data as a replacement. The prediction technique I decided to use was random forests, a machine learning algorithm that was trained on the bloom data given and used to find the dates for this year.