## Lab week 4 - Dates, aggregates and aesthetics

- Study
  - a. Download the sample notebook or R program "Week 4 Wrangling and Plots POTUS" into your R directory.
  - b. Create a subfolder in your R directory called data.
  - c. Download POTUS approval.csv into this folder.
  - d. Load, run and understand the R notebook / program
- Expand the polls dataframe
  - a. Look up the inauguration date (the first will do, if they were inaugurated twice) for each of the presidents in the dataset.
  - b. Add an attribute 'Inaugurated' with the date of that president's first inauguration.
  - c. Add a new attribute Days, that is the number of days between the start of each poll (Date) and the inauguration date.
  - d. Using the Days attribute, plot the rolling average approval rating for Barack Obama.
- Make it look nice. Find out how and implement:
  - a. Get rid of the grey grid in the back of your plot
  - b. Make the axes titles more appropriate
  - c. Put a title on your graph
  - d. Change the 'ticks' on the axes
- Next step: for each president:
  - a. Map their approval rating against their days in office, highlighting approval rates that either continuously ascend or continuously descend.

Ideally, you should end up with something like this:

