

KT's DATA 534 Project Notebook

January 15

- Searched for potential APIs for projects
- Found NASA API
- Ran through API in jupyter notebook, read metadata documentations, played with data

January 16

- Began working with API in R
- Successfully imported data into dataframe

January 22

- Successfully queried data based on each sol, and horizontal windspeed
- Created horizontal wind speed dial using plotly
- Converted dial to function (user enters sol and returns plot)

January 23

- Fixed formatting of dial plot
- Fixed function to notify when user picks an invalid sol
- Fixed function to plot a separate plot for the first sol that does not compare it to the previous sol (as there isn't one)
- Created two more dials for atmospheric temperature and pressure
 - temperature is converted from F to C

January 29

- Group meeting to discuss next steps

TO DO:

- ☐ more research on how measurements are taken and what they signify for a mars weather report
- ☐ a summary table output
- ☐ put into library
- ☐ write a readMe
- ☐ write a vignette - be sure to describe how to save plot as a variable first then call them
- ☐ testing and coverage

- Built library:
 - created folder called `maRs/` with DESCRIPTION file and r-code
 - in command line, ran R CMD `build maRs > R CMD INSTALL maRs_0.1.tar.gz`
 - in R successfully ran `library(maRs)`

- Separated dayplots into different .R files

January 30

- Corrected library DESCRIPTION files.

TO DO:

- ☒ [x] more research on how measurements are taken and what they signify for a mars weather report
- ☒ [x] a summary table output
- ☒ [x] put into library
- ☒ [x] write a readme
- ☐ [] write a vignette - be sure to describe how to save plot as a variable first then call them
- ☒ [x] testing and coverage

January 31

- Built readme file

February 1

- Completed readme file with additional background research on InSight Mars lander.

February 3

- Fixed vignette, uploaded image examples
- Fixed readme
- Created code of conduct file