

ATMS 406 Tropical Meteorology

HW#1: Plotting NCEP Reanalysis Maps using Python

Due: Wednesday September 17, 2014

Data server: <http://apdrc.soest.hawaii.edu/thredds/catalog/las/catalog.html>

iPython notebook template: <https://github.com/swnesbitt/atms406>

Python site: <http://wakari.io>

- (1) Use iPython notebook to plot the 500 hPa Omega and winds for January and July.
- (2) Use iPython notebook to plot the 850 hPa Relative Humidity and winds for January and July.
- (3) Use iPython notebook to plot the surface sensible heat flux for January and July.
- (4) Use iPython notebook to plot the surface latent heat flux for January and July.
- (5) Is there a connection between 500 hPa winds and 850 hPa relative humidity? Why?
- (6) How are the sensible and latent heat fluxes related to 500 hPa omega and 850 hPa relative humidity? Why?