

A photograph of a field of wheat and daisies blowing in the wind. The wheat stalks are golden and their awns are long and thin, creating a sense of movement. The daisies are white with yellow centers. The background is a clear blue sky with some light clouds. The overall scene is bright and airy, suggesting a sunny day.

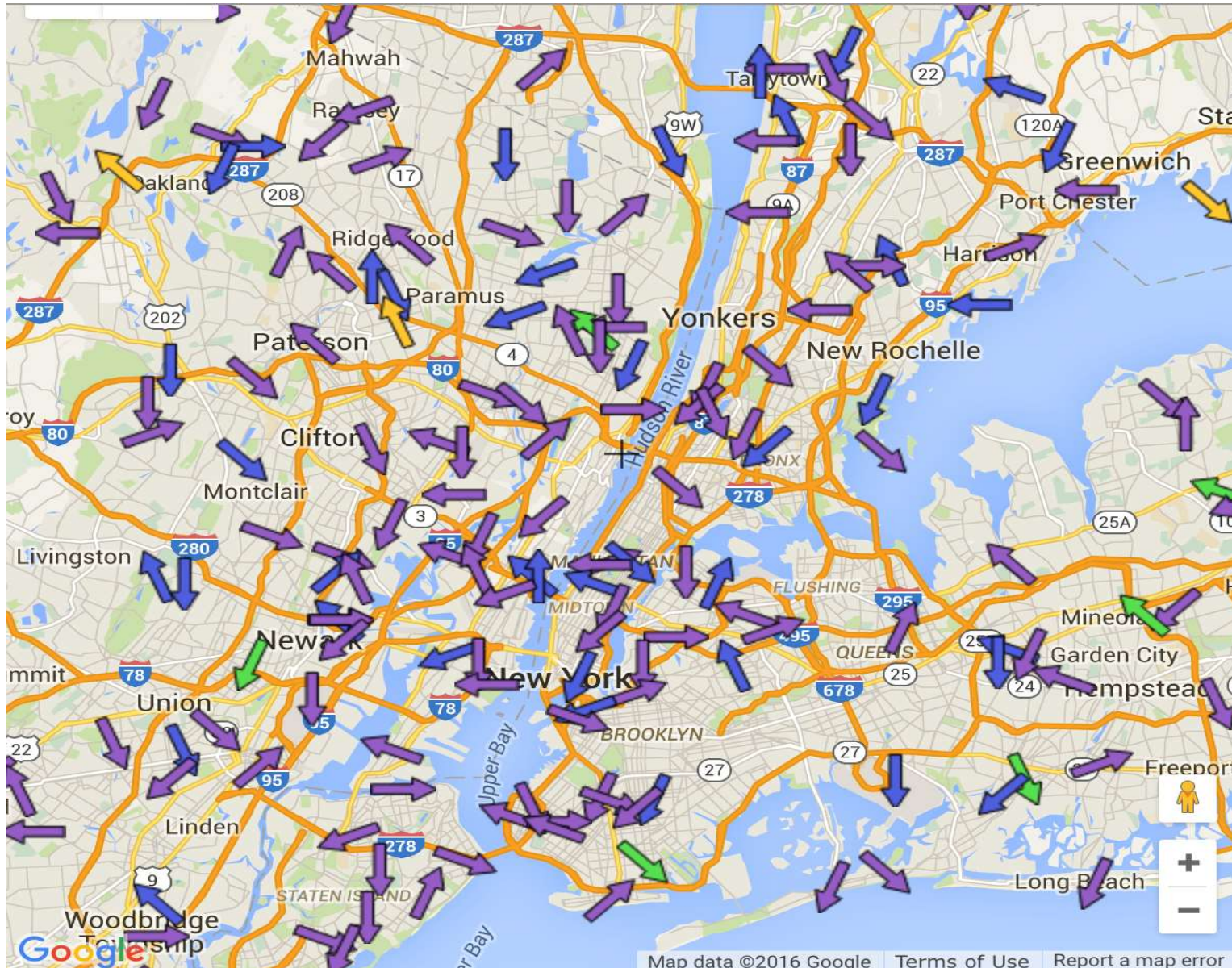
What is the Real Wind?

Dr Brian Vant-Hull, Dr Mark Arend

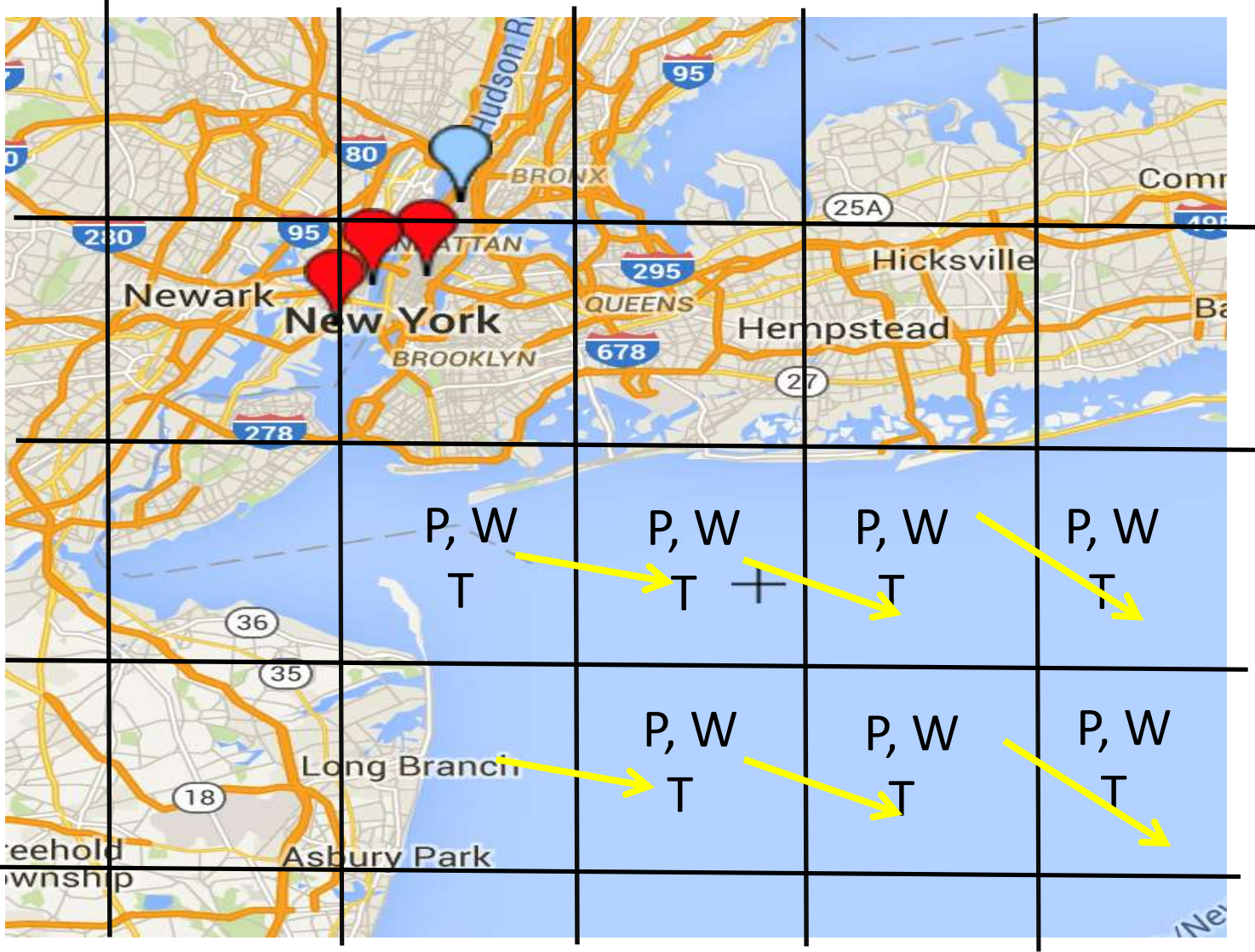
Jose Pillich

Surface Wind Observations

<http://nycmetnet.ccny.cuny.edu>

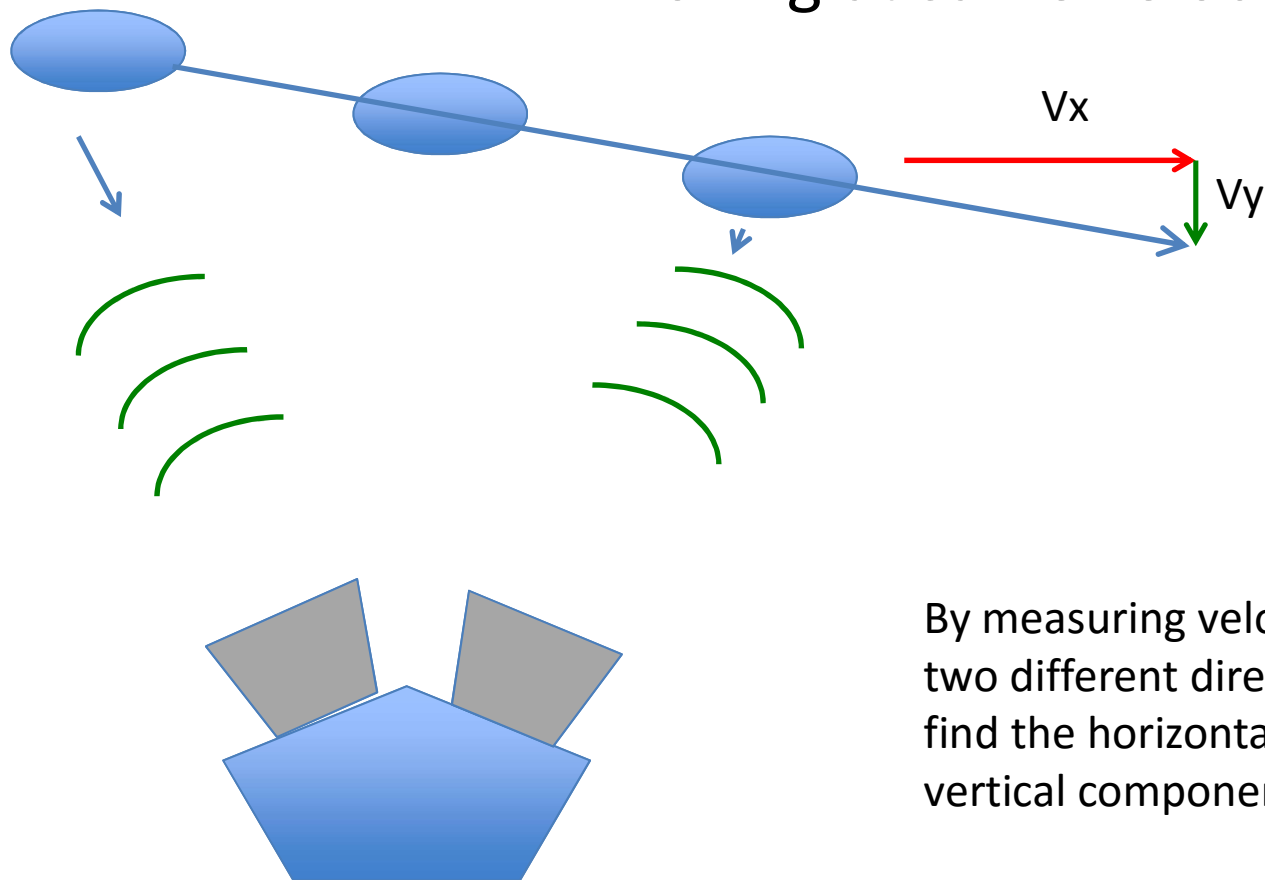


How a Weather Model Works



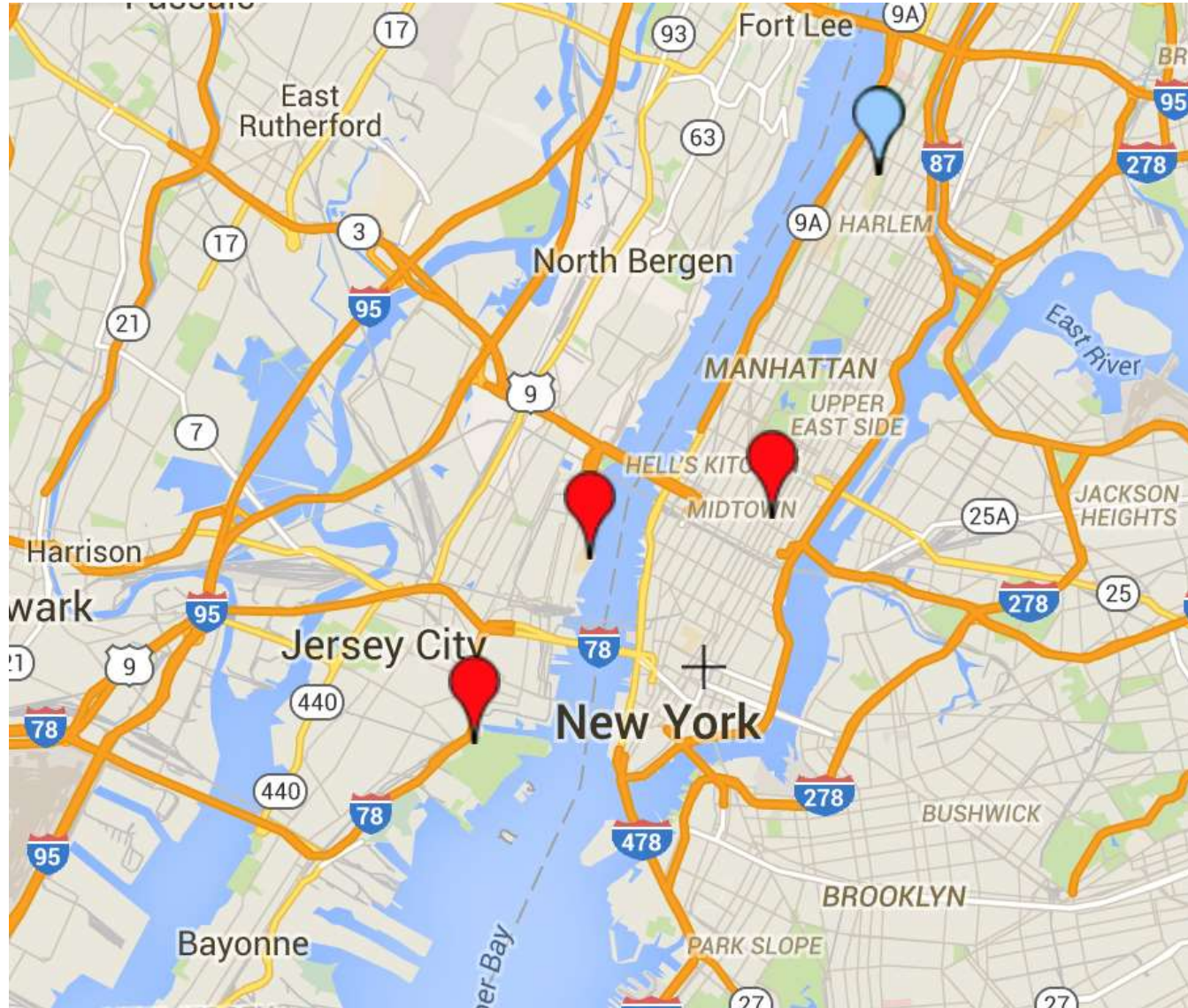
How a Wind Profiler Works

air parcels assumed
Moving at same velocity

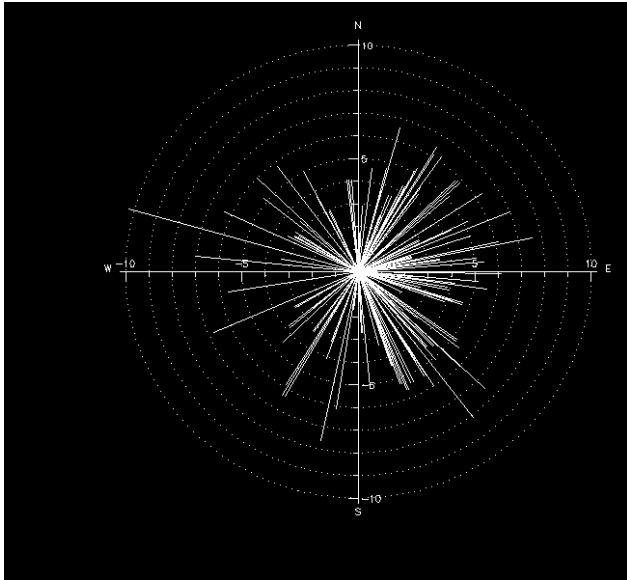


By measuring velocity from
two different directions, can
find the horizontal and
vertical components.

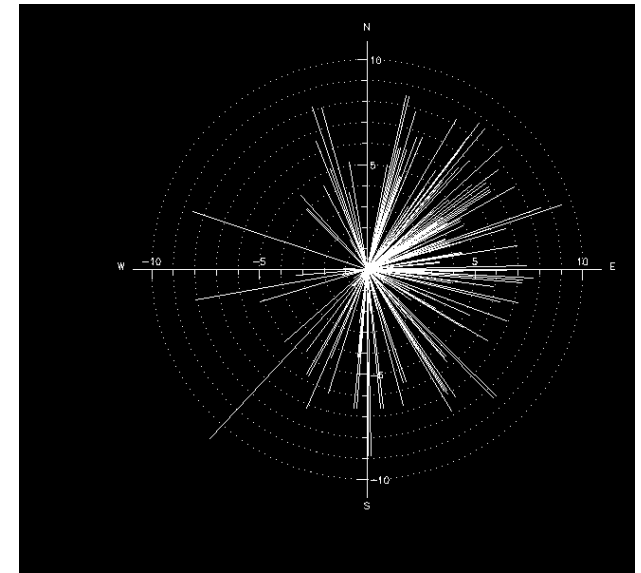
We have Wind Profilers!



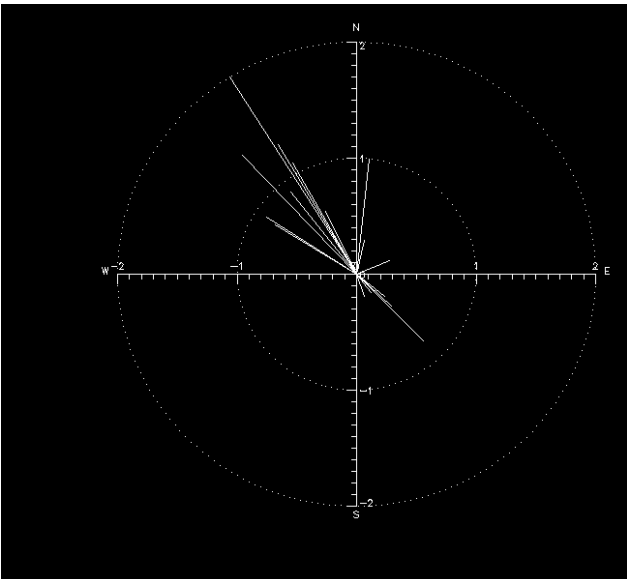
Quick Comparison of Model Winds to Profiler Winds



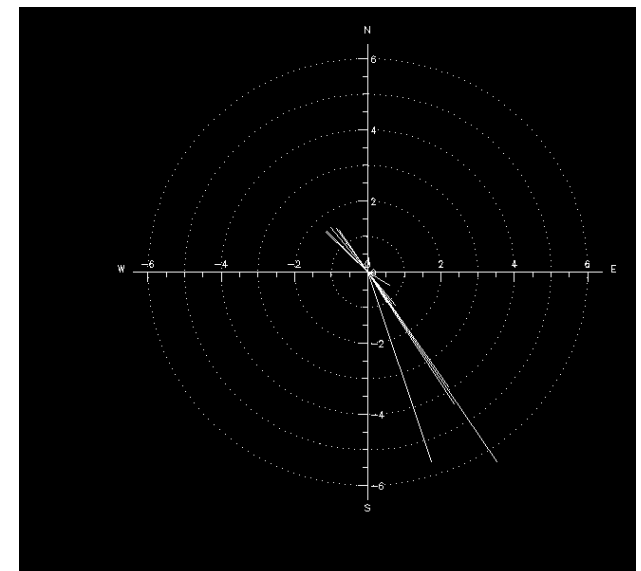
Day



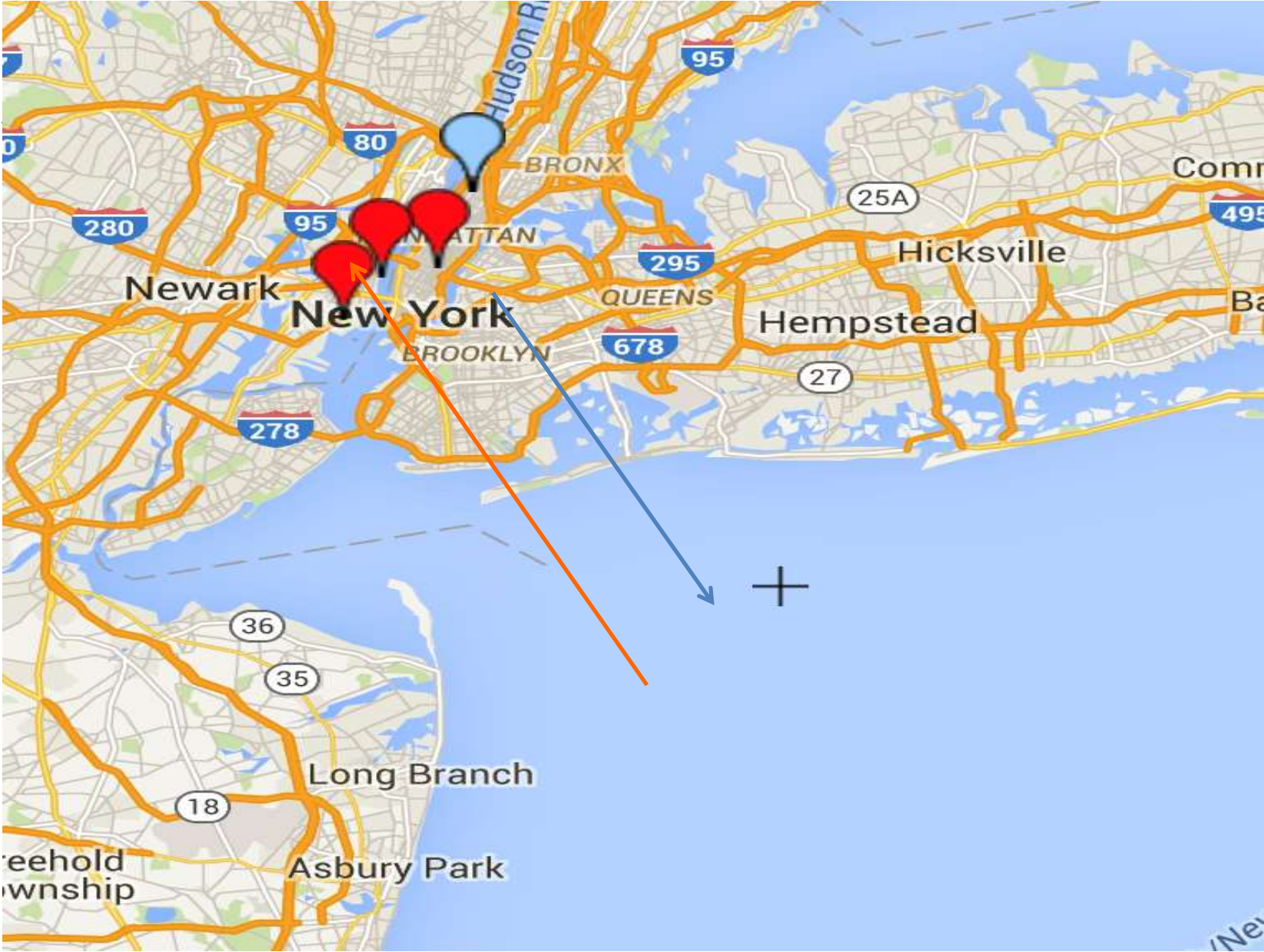
Night



Day



Night



Goals

- Compare Wind Profiler data to surface wind measurements
- Compare Wind Profiler data to high resolution weather model data
- Find how the comparisons change with weather

Tasks

- Match up data sets in time (more work than it sounds!)
- Perform vector subtraction of wind velocities, and display
- Classify by meteorology, compare

*Work would most likely be done in the
Steinman 424 Classroom*