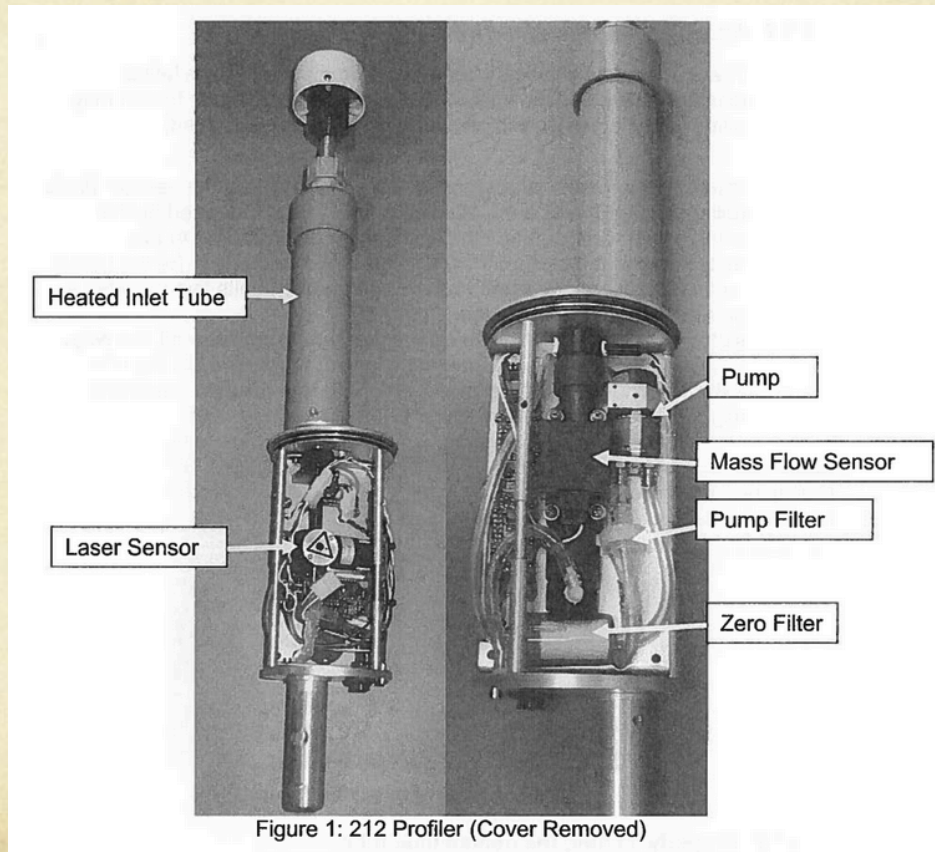


Dust in the dome

It isn't just particle count

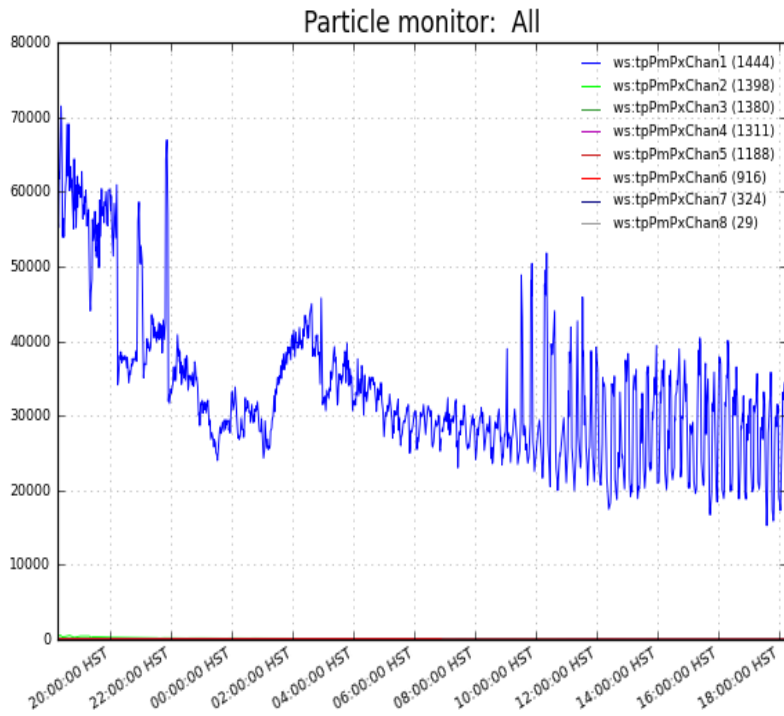
Dust sensor

MetOne 212 profiler dust sensor



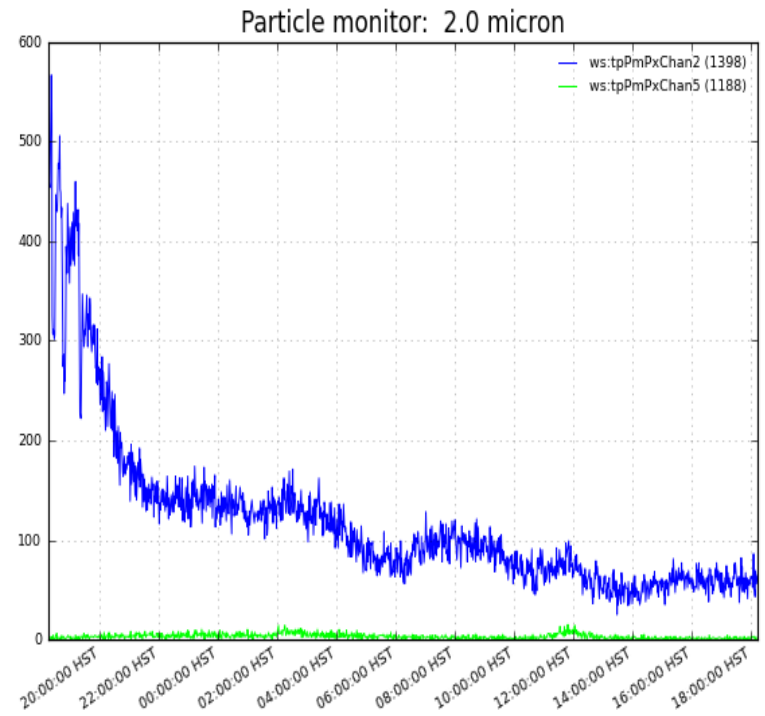
Dust data

Raw data from .3 to 10 micron



GEA 3.1-3.el6.gemini

Raw data from 1.0 and 2.0 micron



GEA 3.1-3.el6.gemini

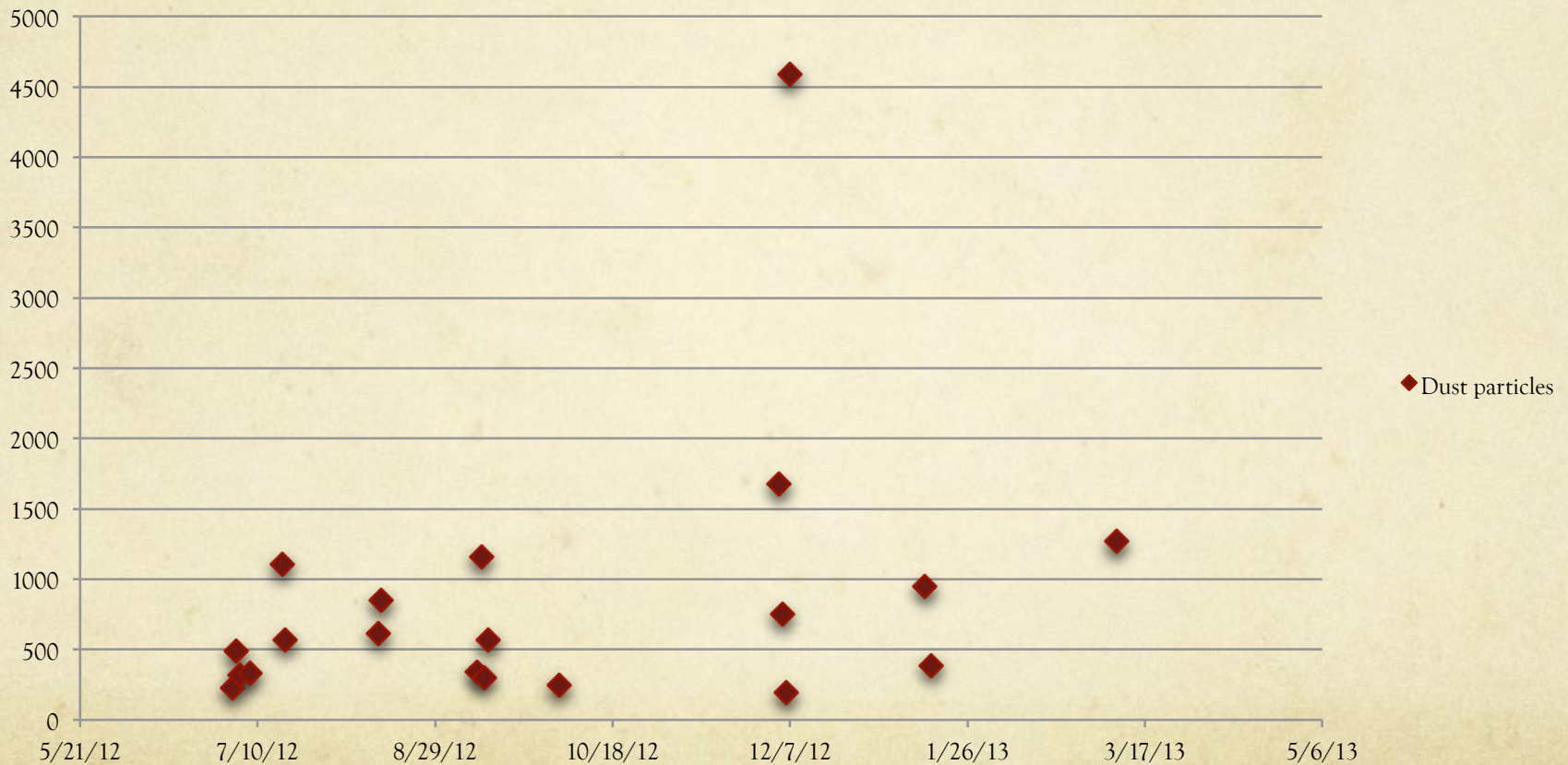
Looking for dust

- SOS group maintained a log of mirror condition at the end of many nights.
- Looked back over the mirror log and recorded the maximum level of dust on each night an entry was made.
- Correlated observations of dust on the primary mirror with measurements from the dust sensor

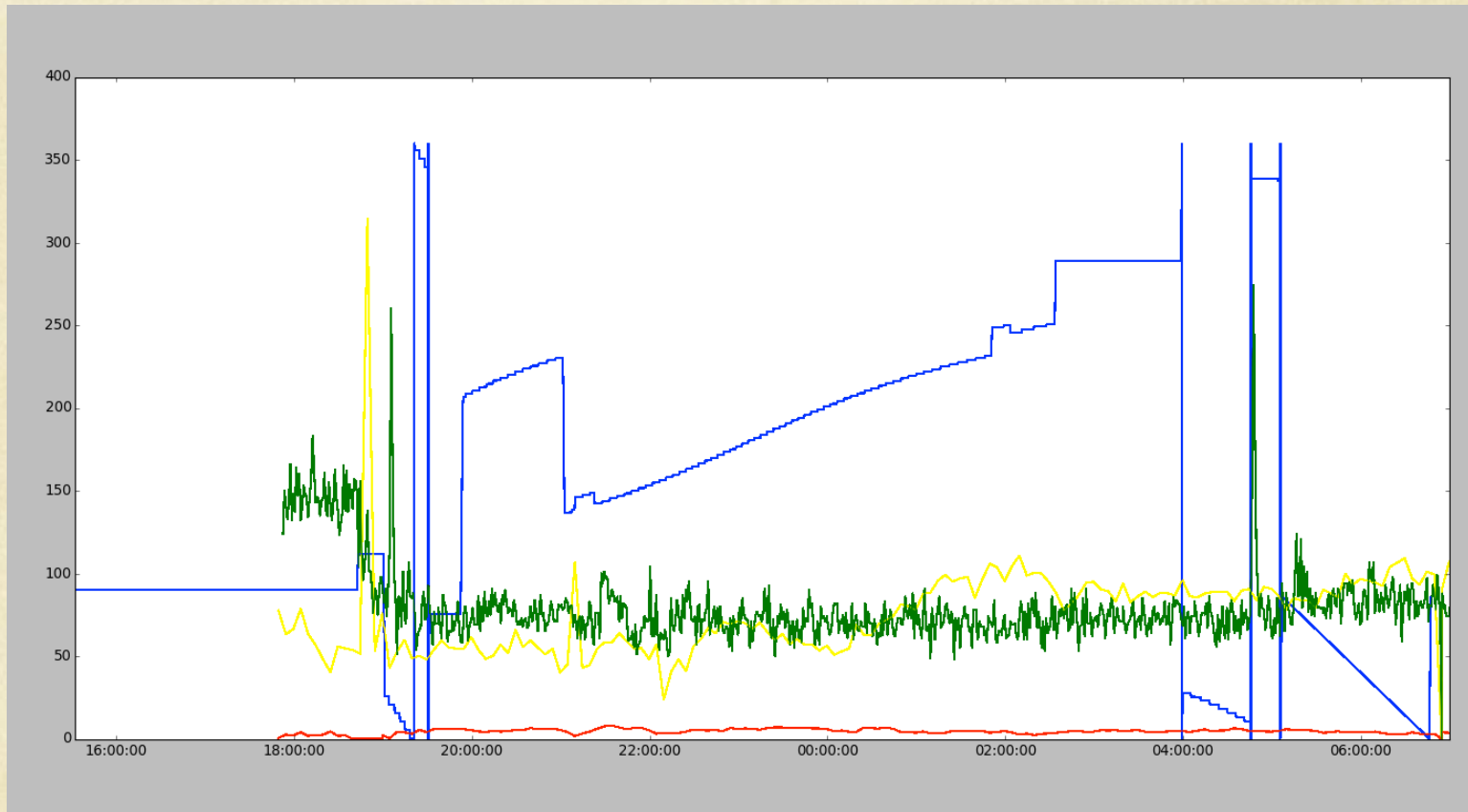
Measured dust, .3micron

○ SOS observed dust on July 4th and August 14th

Dust particles

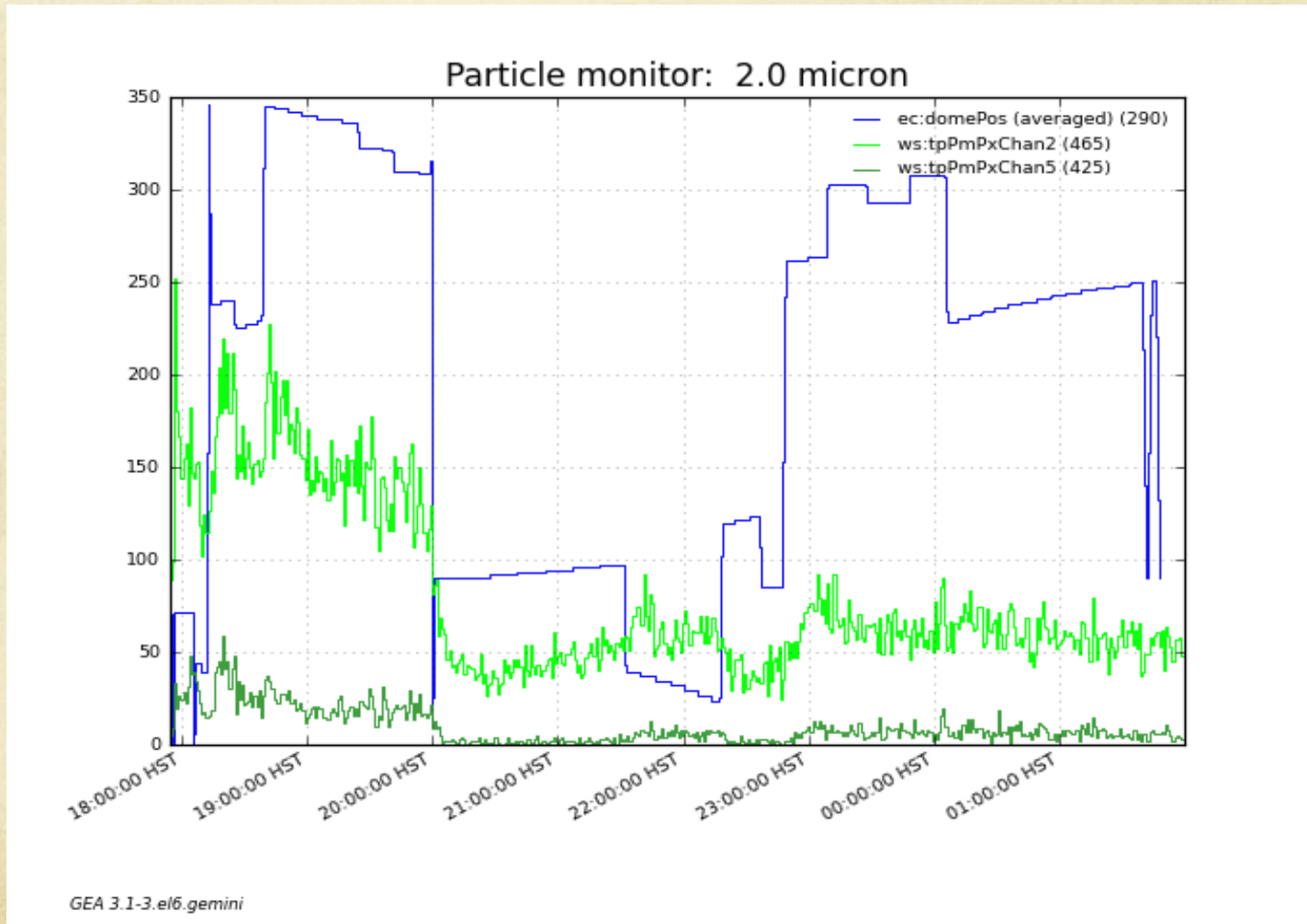


A night with dust



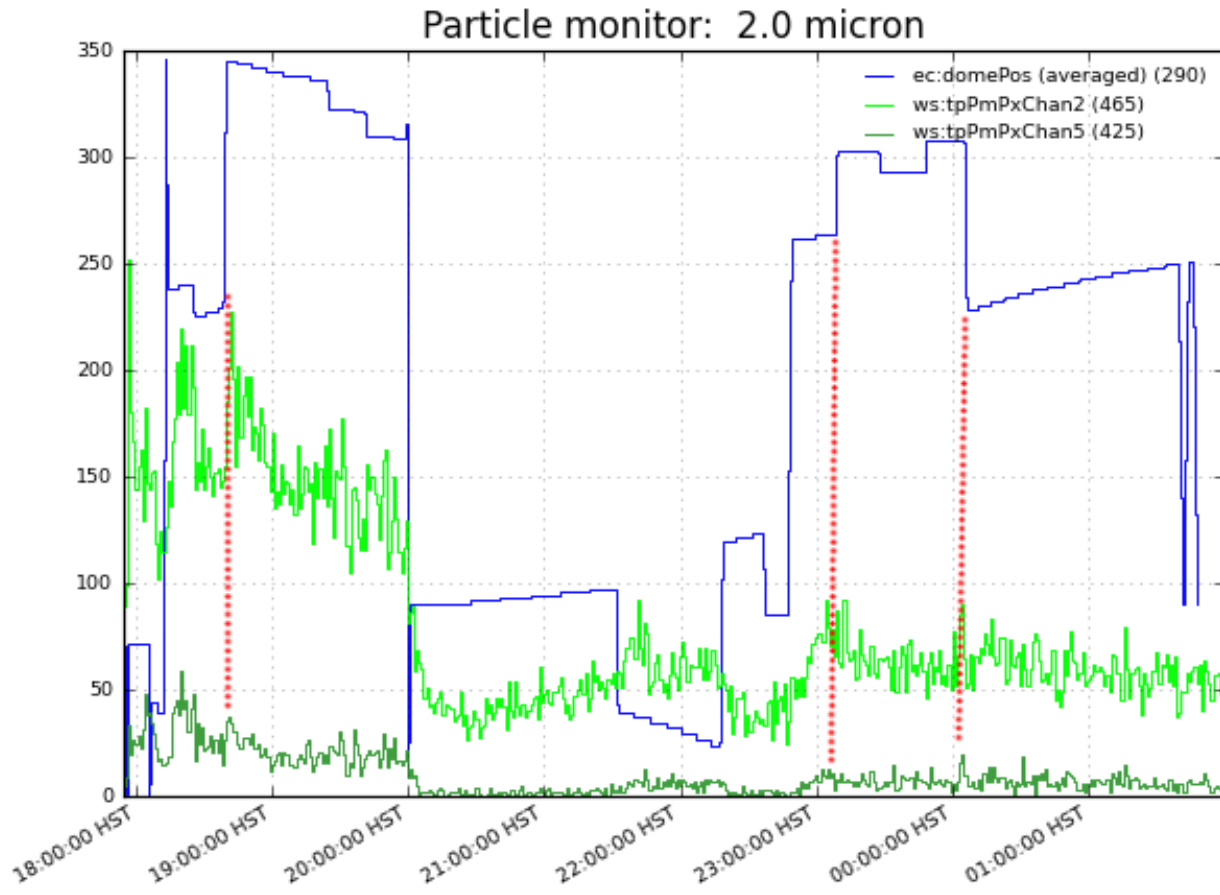
Red is the wind speed, yellow is the wind direction, green is the dust particle count, and blue is the dome direction from July 4, 2012

October 20, 2015



Dome position (blue), 0.3 micron dust (Light green), and 2.0 micron dust (dark green)

October 20, 2015



Thank you