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

Raw data from 1.0 and 2.0 micron
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
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

Particle monitor: 2.0 micron

- ec:domePos (averaged) (290)
- ws:tpPmPxChan2 (465)
- ws:tpPmPxChan5 (425)

GEA 3.1-3.e16.gemini
Thank you