

AERONET Measurement protocols for Cimel Observations

On non IOP days the instruments will run their standard protocols, those that are capable will run the O'Neill mode at 3 minute triplet intervals. The remaining instruments will run at the AERONET standard 15 minute intervals.

On IOP days with the satellite center path overpass the following protocol will be the default:

- 1) **7 AM** to 30 minutes before overpass time: O'Neill/Standard mode
 - 2) 30 minutes before overpass:
 - a. Take out of AUTO mode
 - b. Activate one Principal Plane (PP) command in MANUAL mode
 - 3) Initiate BCLSun mode – *SUN measurements will occur every 30 secs*
 - 4) 15 min before overpass:
 - a. Turn BCLSun mode OFF
 - b. Activate one PP command
 - c. Resume BCLSun mode
 - 5) 5 minutes after overpass:
 - a. Turn BCLSun mode OFF
 - b. Activate one PP command
 - c. Resume BCLSun mode
 - 6) 15 minutes after overpass:
 - a. Turn BCLSun mode OFF
 - b. Activate one PP command
 - c. Resume BCLSun mode
 - 7) 30 minutes after overpass:
 - a. Turn BCLSun mode OFF
 - b. Activate one PP command
 - 8) Following this PP measurement until **5 PM**:
 - a. Place in AUTO mode (O'Neill/Standard)
- Take hourly notes on sky condition (See standard log form)
 - Take notes on sky condition at time of each PP
 - Take notes on sky condition at time of overpass
 - Enter log notes in excel spreadsheet at the end of the day and upload to website
 - Within the 30 minute interval of the satellite overpass take additional PP if sky conditions permit (no clouds apparent in the PP scanning path). This is most important if conditions are partly cloudy. Under cloud-free conditions this is less important