

DISCOVER-AQ
HSRL Data Summary

FLIGHT: Morning science flight (1 of 2)

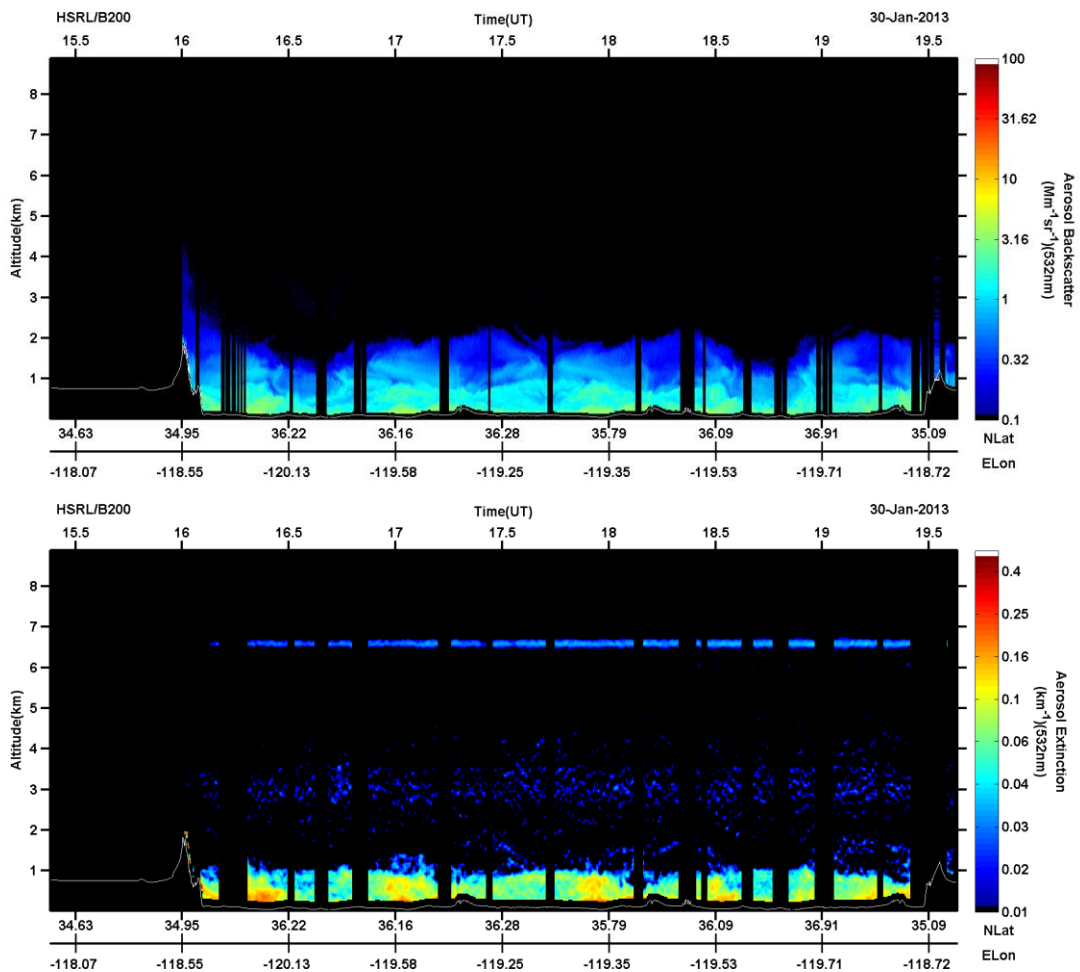
DATE: Jan 30 2013

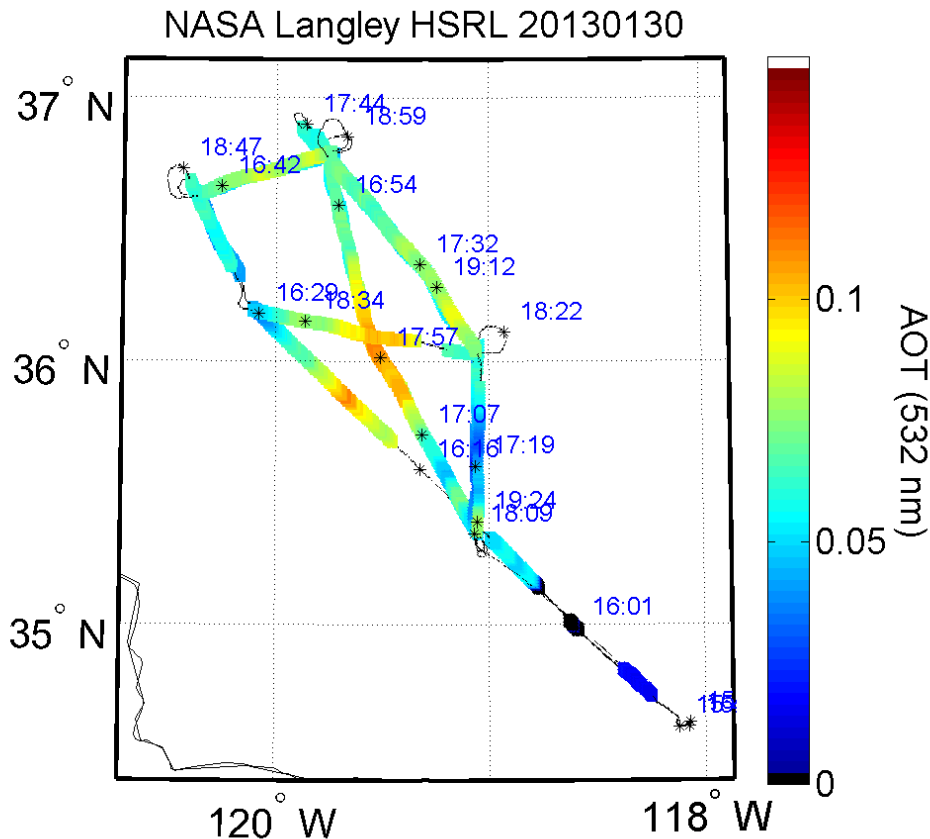
DURATION: 4.0 hours

SUMMARY:

Standard DAQ pattern over the SJV. Instrument operated mostly nominally: some issues reported with optimizing interferometer contrast ratio, but this will probably not affect quality of data products. Variability in aerosol scattering observed over the SJV with optical thickness highest in central part of the pattern near Hanford.

SUMMARY PLOTS:





HSRL2 Flight Notes

Date: 1/30/2013

Flight # 1

- INTF laptop is not connecting. The network connection icon indicators keeps changing status. Most likely is a bad ethernet cable or the laptop ethernet connection solder joints have come loose inside the laptop.
- Turned ACAM on at 11kft (should have turned on right after takeoff)
- Very thin cirrus above us at 16:11UTC.
- Performed 355nm OAC twice as the scan data has some assymetry even in the second OAC???
- Cals complete at 16:18UTC
- Haven't been able to tune INTF very well????? Still have low contrast at 16:30UTC
- INTF tuned at 16:35UTC
- 532nm Beam misalignment at 17:22UTC
- Optimizing INTF tilt and offset lock point at 17:28UTC
- Forgot to initialize UV Amp BFO Phase at beginning of flight. Initialized at 17:46pm
- INTF tilt optimize at 17:51UTC
- INTF tilt optimize at 18:52UTC
- Cals started at ~19:27UTC
- INTF in severe tilt for descent

FLIGHT: Morning science flight (2 of 2)

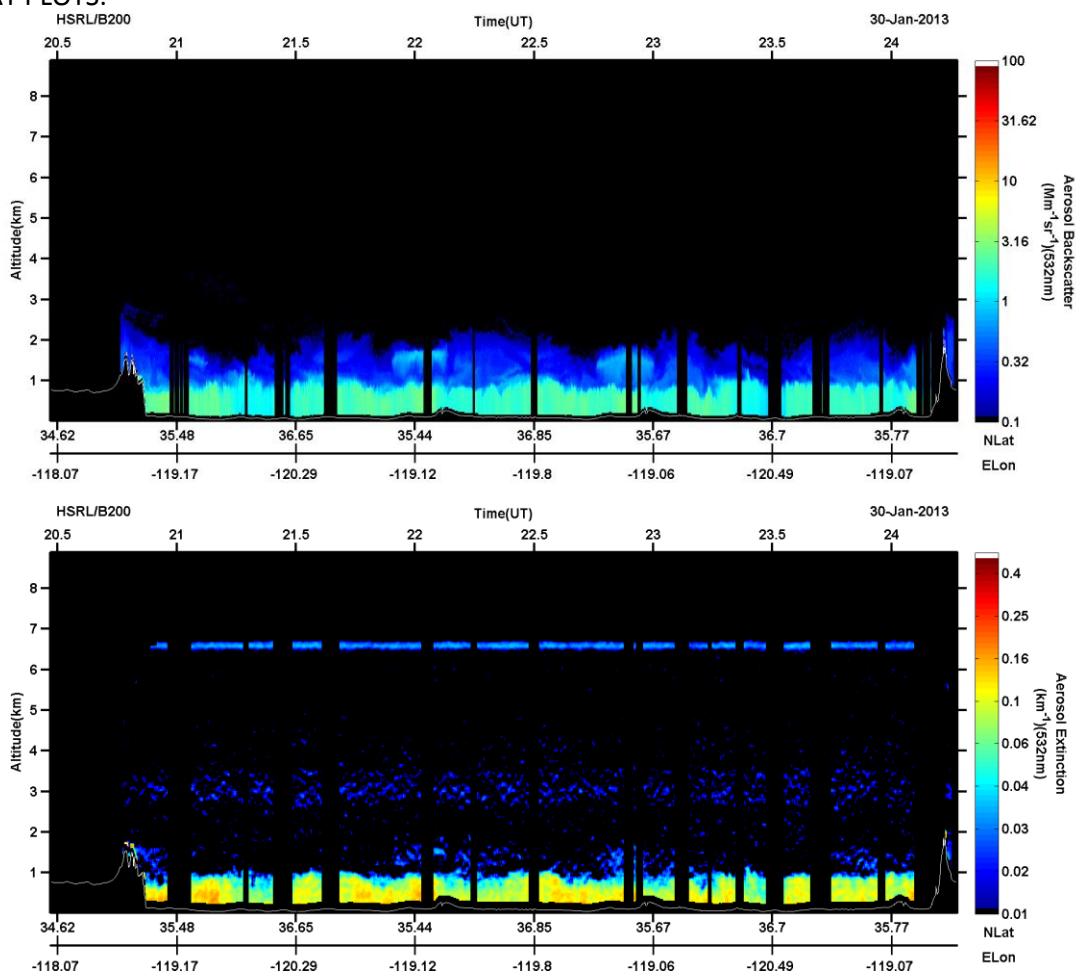
DATE: Jan 30 2013

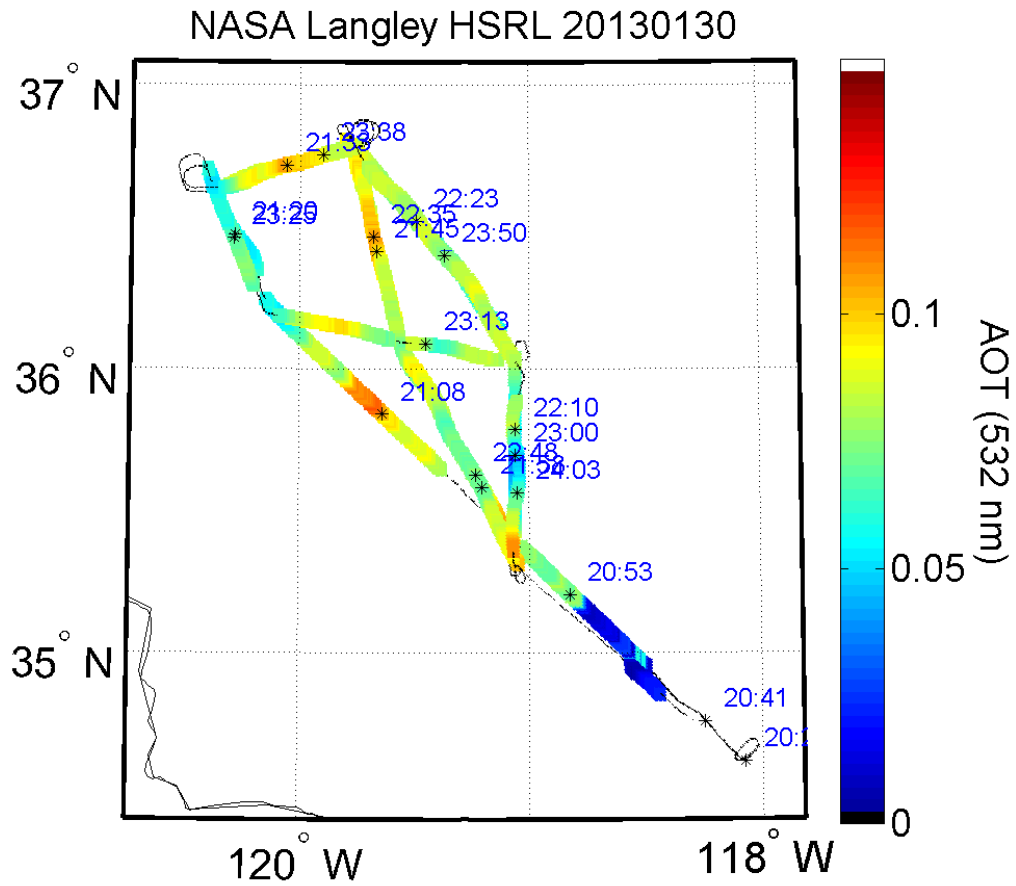
DURATION: 3.8 hours

SUMMARY:

Standard DAQ pattern over the SJV. Instrument operated mostly nominally. Optical depths are generally higher than the morning flight and distribution across valley has changed: Fresno and Bakersfield have higher AOD than Hanford.

SUMMARY PLOTS:



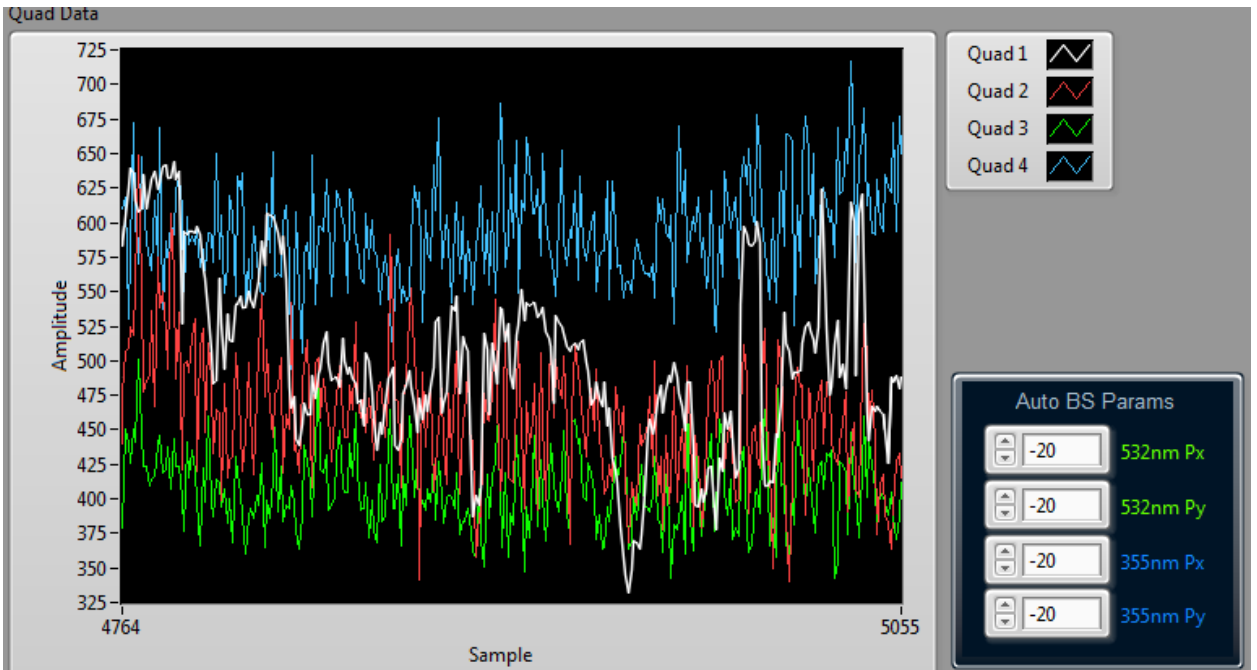


HSRL2 Flight Notes

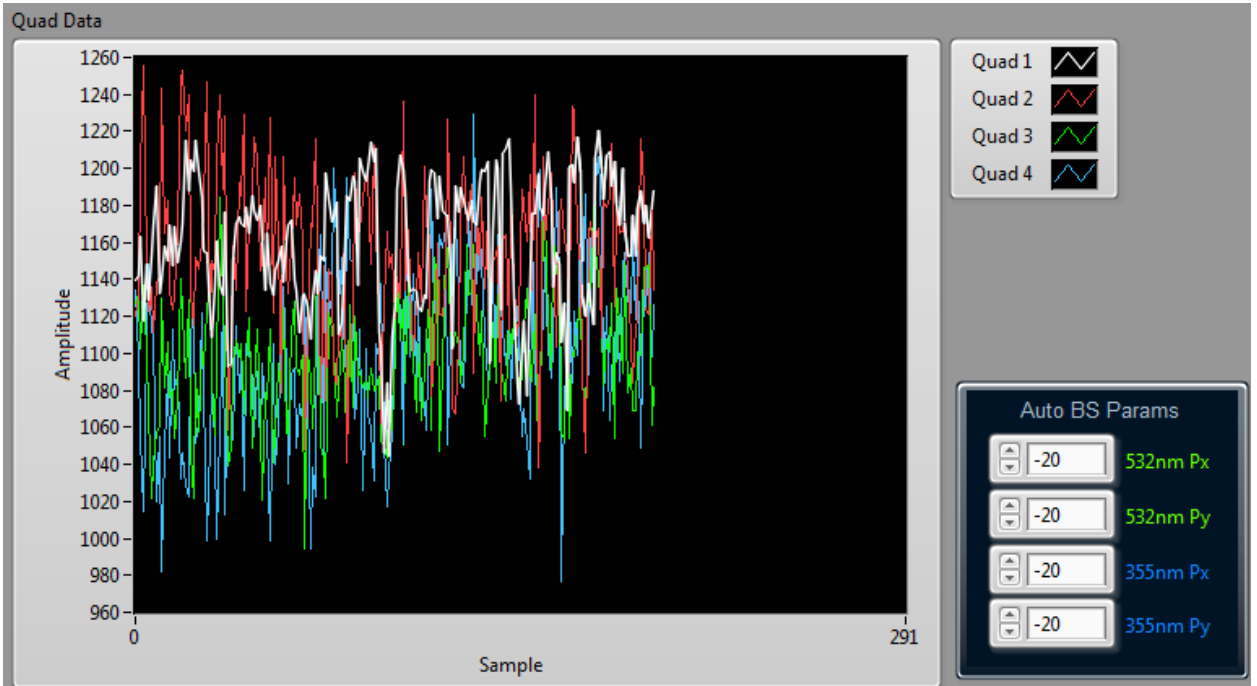
Date: 1/30/2013

Flight # 2

- Takeoff at 20:30UTC
- The 355nm boresight signals are lower than normal (~ factor of 2 to 3). Signals are usually ~1000 to 1500cnts



- 355nm boresight signals near normal counts again. 23:12UTC



- INTF in severe tilt after calcs complete for descent. 00:13UTC