

## WVIOP 2000 Status: Wednesday, 20 September

Platforms were installed on the JPL J-Unit and the MWR in preparation for the first microwave LN2 calibration verification tomorrow. At the science meeting, it was reported that prelaunch Sonde samples (recorded in the first point of sonde data files) do not correlate with microwave scaling data well enough to be useful for removing sonde-to-sonde differences. We need to use more prelaunch data, carefully selected from the time period when the sondes are in the “mailbox” being ventilated. Tom Wilkerson described the Harlie method of getting winds from cloud motions. Also, observations from Harlie, CRL, AERI, SRL of the frontal passage were reviewed. CARL observed interesting prefrontal wave structure. An intercomparison of the AERI prototype and AERI-01 showed excellent radiometric agreement for 16 September, but revealed a spectral calibration error for the CF AERI (probably dating to an earlier laser change--some relatively simple reprocessing is needed). There was a Cessina aerosol overflight of the site around 15:30 CDT.

Weather: Frontal passage very early in the morning (about 4:00 AM) resulted in much cooler temperatures and partly cloudy skies (cirrus morning, mixed with low scattered cumulus in the afternoon, clearing to evening). The winds shifted to northerly and were quite strong and gusty.

INSTRUMENT	STATUS/COMMENTS
<u>Microwave</u>	
CART CF (23.80/31.4 GHz)	Operating continuously in normal mode.
CART Spare (23.80/31.4 GHz)	Operating continuously in normal mode, improved calibration from last night's tip-cal data
NOAA-CSR (20.6/31.65 GHz)	Operated 16 hours during IOP prime hours
NOAA-PSR (18/21, 10,37, 89 GHz with polarization)	Operated normally— ADC arrived solving ambient calibration data problem
U of L'Aquila, Italy (23.8, 31.6, 53.5, 55.5, 58.0 GHz )	Operated normally-Adequate tip cal data not yet available
JPL J-Unit (20.7, 22.2, 31.4 GHz)	Operating continuously in Tip Calibration mode— daily processed data file to be provided from JPL
<u>Lidar</u>	
CART Raman WV (CARL)	Changed flash lamps—observed burns on amplifier rods—Laser vendor to be on-site Friday
NASA, Scanning Raman WV (SRL)	Operated until early morning to observe frontal passage. Successfully got scanning data. Still refining scanning procedure
Max Planck Inst DIAL WV	Hopeful for operations soon. Fixed high voltage problem. Long path absorption facility damaged in transit (>1-2 days for fix)
NASA HARLIE, cloud lidar	Operated until early morning to observe frontal

	passage
CART MPL, cloud lidar	Operational

### BBSS (CART)

Central Facility, Digi-CORA	Dual, 3-hourly mode. Problems with handling RS 90s—only 2 successes out of 9
#2, PC-CORA	Dual, 3-hourly mode

### BBSS Launch Site Refs.

THWAPS	Operational.
Chilled Mirror	Operational

### Tower In Situ Sensors

CART 60m HMP 35 South, 10x	Data recently went bad—looking for cause
CART 60m HMP 35 North	Operational (interchange of data with 25m corrected)
CART 25m HMP 35 South, 10x	Data recently went bad—looking for cause
CART 25m HMP 35 North	Operational (interchange of data with 25m corrected)
Chilled mirror 60m	Operational, except data link
OK MESONET 60m	Operational, except data link
Chilled mirror 25m	Newly installed and Operational, except data link
OK MESONET 25m	Newly installed and Operational, except data link
SMOS (CART)	Operational

### DataPlane

T, RH, P – tower to 1 km	Winds too strong and gusty for operations
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### AERI

CART (AERI-01)	Operational
Prototype (AERI-00)	Operated during IOP prime hours.

### GPS

Central Facility	Operating, data access issue
Lamont NOAA	Operational

### Sun Photometer/Spectrometer

MFRSR N1(CART)	Operational
MFRSR/RSS (Albany)	Operational
Cimel Sunphotometer	Operational
NASA AATS-6 channel	Operated normally

### Proteus Aircraft

<u>NAST-I</u>	Flights expected to start early October
<u>NAST-M</u>	Flights expected to start early October

<u>FIRSC</u>	Flights expected to start early October
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