

WVIOP 2000 Status: Friday, 22 September

The CART Raman Lidar had its laser rods successfully replaced by Continuum and it is back in operation. An anomaly in the tower/CARL comparison identified yesterday was explained by a software glitch (related to sonde data that terminated at a low altitude). The cause of the scanning problem with the SRL was identified as a misalignment induced by movement of the large scanning flat in its mount during transit. This movement created a misalignment between the outgoing and incoming beam mirrors. Improvements that may be adequate for the IOP were accomplished. The recent bad data from the primary CART tower sensors were identified as a data logger problem and fixed. It became clear that the spare MWR is running consistently dryer than the CF unit. We plan to investigate this issue as soon as possible. The first report on the LN2 Blackbody verification tests was given for the MWR. More details will be offered soon, but initial differences between the two types of blackbodies raise questions about the expected brightness temperature for the ETL BB and about possible transparency of the Radiometrics BB. After the 3:30 PM CDT sonde, a new T & RH sensor was installed in the BBSS prelaunch "mailbox" used for ventilation and solar shielding. First results from the Globe 2-channel solar photometer were reported. Finally, communications were problematic because the Internet and long distance phone lines were out most of the day (to complicate matters, my computer also decided to die).

Weather: Cloudy AM. Warm and much moister (>4 cm). Cleared PM

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, substantially dryer than CF MWR (order 10%)--should do LN2 comparison with both and changeout window on CF
NOAA-CSR (20.6/31.65 GHz)	Crashed 9:00 PM CDT--out about 12 hours
NOAA-PSR (18/21, 10,37, 89 GHz with polarization)	Crashed 9:00 PM CDT--out about 12 hours
U of L'Aquila, Italy (23.8, 31.6, 53.5, 55.5, 58.0 GHz)	Operated normally
JPL J-Unit (20.7, 22.2, 31.4 GHz)	Operating continuously in Tip Calibration mode—first processed data file provided from JPL-- more expected Monday
<u>Lidar</u>	
CART Raman WV (CARL)	Laser vendor, Continuum, changed rods. Chiller failed to restart after repairs, but site personnel accomplished a repair. Operation resumed 3:30 PM CDT
NASA, Scanning Raman WV (SRL)	Cause of scanning problems identified. Improvements made and performance under evaluation

Max Planck Inst DIAL WV	Down awaiting power supply replacement.
NASA HARLIE, cloud lidar	Operated normally
CART MPL, cloud lidar	Operational

BBSS (CART)

Cental Facility, Digi-CORA	Dual, 3-hourly mode
#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	Returned to normal operations--data logger problem identified and fixed
CART 60m HMP 35 North	Operational
CART 25m HMP 35 South,10x	Returned to normal operations--data logger problem identified and fixed
CART 25m HMP 35 North	Operational
Chilled mirror 60m	Operational, except data link
OK MESONET 60m	Operational, except data link
Chilled mirror 25m	Operational, except data link
OK MESONET 25m	Operational, except data link
SMOS (CART)	Operational

DataPlane

T, RH, P – tower to 1 km	Still diagnosing control signal problems
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AERI

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

GPS

Central Facility	Operating, data access issue still unresolved
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>	Scrubbed from WVIOP2000 due to A/C safety issue

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