

## WVIOP 2000 Status: Monday, 25 September

The Scanning Raman is working successfully in automated scanning mode. A refined alignment is being investigated. The DIAL got its first data of the IOP, but unexpected noise limited the data quality. The first PWV comparison of the JPL J-unit with the CART MWR shows it to be dryer by about 7-8 % at 2-2.5 cm. Different models are currently being used to go from brightness temperature to total column water. We are working to get the spare MWR data to investigate this situation. Model calculations are also being done to allow the comparisons of brightness temperatures from difference spectral channels.

Weather: Light southerly winds and dry all day. Scattered small clouds in the morning, followed by severe clear the rest of the day.

INSTRUMENT	STATUS/COMMENTS
<u>Microwave</u>	
CART CF (23.80/31.4 GHz)	Stopped running again today (00:30 UTC) and needed a boot. It only ran for 2 hours and was out until morning. Frequent shutdowns have become a problem.
CART Spare (23.80/31.4 GHz)	Stopped at 1442 UTC. Discovered after the unit was moved to a lower stand to allow LN2 calibration verification (1830-1842). Operated normally thereafter. First access to ascii data (NetCDF being worked on)
NOAA-CSR (20.6/31.65 GHz)	Stopped operating for about 5 hours (09-14 UTC). Processing is being hindered by a problem relating scan angle and data sampling times
NOAA-PSR (18/21, 10,37, 89 GHz with polarization)	Stopped operating for about 5 hours (09-14 UTC)
U of L'Aquila, Italy (23.8, 31.6, 53.5, 55.5, 58.0 GHz )	Operated normally, but adequate temperature stability is questionable. Frequent Tip Calibrations have not been performed and may be needed
JPL J-Unit (20.7, 22.2, 31.4 GHz)	Operating continuously in Tip Calibration mode

### Lidar

CART Raman WV (CARL)	Operating Continuously
NASA, Scanning Raman WV (SRL)	Operated in automatic scanning mode, with alignment optimized for the vertical.
Max Planck Inst DIAL WV	Operated for first time in the IOP. Problems with EMI and poor performance of the low level system were encountered
NASA HARLIE, cloud lidar	Operated. Reviewed potential minor problem with high altitude observations

CART MPL, cloud lidar	Operational
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BBSS (CART)

Central 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	Operational
CART 60m HMP 35 North	Operational
CART 25m HMP 35 South,10x	Operational
CART 25m HMP 35 North	Operational
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	Progress, but control problems not yet fixed
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AERI

CART (AERI-01)	Operational
Prototype (AERI-00)	Operated several hours day and night.

GPS

Central Facility	Operating normally, expect data this week
Lamont NOAA	Operational

Sun Photometer/Spectrometer

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

Proteus Aircraft

NAST-I	Flights expected to start early October
NAST-M	Flights expected to start early October
FIRSC	Not expected to fly

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