WVIOP 2000 Status: Wednesday, 27 September

The first Dial profile was shown for 0530 UTC 9/27. The low level sensitivity was not real good on this profile, but that problem was solved later today. A significant aerosol gradient at 1.5 km caused local errors, but this is normal for DIAL in the presence of large absorption gradients. A Raman comparison between SRL and CARL showed reasonable agreement with the RS90 sonde for 0530 UTC 9/26, but the sonde showed numerous step changes that need investigation. The ETL CSR microwave observations for the LN2 tests showed the instrument to be unexpectedly unstable. The 23.8 GHz channel increased almost 1 K over 5 minutes (78.94 K mean) and 31.4 GHz was bad because of an unstable warm load. We plan to perform more LN2 tests tomorrow, including a warm blackbody (no LN2 added) with & without an aluminum plate to check for transparency.

Weather: Conditions remain dry with light southerly winds all day. Unexpected scattered cirrus clouds appeared in the morning, due to a thin moist layer near 400 mb.

INSTRUMENT	STATUS/COMMENTS
Microwave	
CART CF (23.80/31.4 GHz)	Operated Continuously
CART Spare (23.80/31.4 GHz)	Operated Continuously
NOAA-CSR (20.6/31.65 GHz)	Ran continuously, but stability was poor. Cause under investigation
NOAA-PSR (18/21, 10,37, 89 GHz with polarization)	Ran continuously
U of L'Aquila, Italy (23.8, 31.6, 53.5, 55.5, 58.0 GHz)	Down parts of the day.
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)	Performed pointing test at top of calibration facility near dust. Operated in automatic scanning mode until 2:00 AM CDT.
Max Planck Inst DIAL WV	First very good data, interrupted by power failure due to blown fuse. Got 6 hours of good data.
NASA HARLIE, cloud lidar	Performed realignment during the day yesterday, and operated until 2:00 AM CDT 9/28.
CART MPL, cloud lidar	Operational
BBSS (CART)	
Central Facility, Digi-CORA	Dual, 3-hourly mode. Interference problems interrupted 3 of 8 dual sondes.
#2, PC-CORA	Dual, 3-hourly mode. Interference problems

	interrupted 3 of 8 dual sondes.

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

AERI

CART (AERI-01)	Operational
Prototype (AERI-00)	Operated almost continuously.

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 October 1
NAST-M	Flights expected to start October 1
FIRSC	Not expected to fly

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