WVIOP 2000 Status: Tuesday, 19 September

The major event of the day was the arrival of the Bosenberg Lidar (Max Planck Institute, DIAL) in the morning. Procedures for performing calibration with LN₂ references on the microwave instruments were discussed and refined. The DataPlane RS80 sensor was calibrated on site to prepare for the tentative start of flights on Wednesday. At the 2:00 meeting, Sasha described the family of Polarimetric Scanning Radiometers under development at NOAA ETL. Scanning Raman Lidar reported high sensitivity to near the ground in their new configuration. Early microwave/sonde/GPS comparisons showed reasonable agreement between sondes and GPS, with sondes 10-15% dryer than microwave under the current low water vapor conditions. The Web site already has a lot to offer and data availability on the ARM r1 computer is very good.

<u>Weather</u>: Still dry and clear in the morning. Very hot all day. Thin clouds overhead at noon, dissipating by late afternoon. High winds all day, (steady 30 mph, with 40 mph gusts). The total column water vapor increased somewhat. Frontal passage expected tomorrow. Major afternoon/evening fires to the south brought smoke to the site.

INSTRUMENT STATUS/COMMENTS

Microwave	
CART CF (23.80/31.4 GHz)	Operating continuously in normal mode
CART Spare (23.80/31.4 GHz)	Operating continuously in normal mode
NOAA-CSR (20.6/31.65 GHz)	Operated during IOP prime hours
NOAA-PSR (18/21, 10,37, 89	Operated during IOP prime hours— ADC problem
GHz with polarization)	still prevented acquiring ambient calibration data
U of L'Aquila, Italy (23.8, 31.6,	Operated during IOP prime hours
53.5, 55.5, 58.0 GHz)	
JPL J-Unit (20.7, 22.2, 31.4	Operating continuously in Tip Calibration mode
GHz)	

Lidar

CART Raman WV	Operating continuously
NASA, Scanning Raman WV	Operated during IOP prime hours. Worked out
	scanning mode alignment problem
Max Planck Inst DIAL WV	Instrument arrived as expected and was lifted into
	place by crane in the morning. Installation proceeding
	successfully
NASA HARLIE, cloud lidar	Operated during IOP prime hours
CART MPL, cloud lidar	Operational

BBSS (CART)

Cental Facility, Digi- CORA	Dual, 3-hourly mode. Winds made launches challenging
#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—discovered that 60m and 25m North
	sensors are interchanged in the data stream
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
<u>SMOS</u> (CART)	Operational

<u>DataPlane</u>

T, RH, P – tower to 1 km	Too windy for operations. Performed sensor
	calibration in RH chamber

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

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

Hank Revercomb, University of Wisconsin, IOP Chief Scientist.