

## WVIOP 2000 Status: Friday, 29 September

### Highlights

**DIAL:** Recently has been blowing 200 Amp fuses. Electrician has been out to repair. Dial was able to get a few hours of useful data.

**Data Plane:** Data plane flew last night (7 pm to dusk). Consensus is that focusing on last 8 hours of the day for operation is preferable to an early start. Plane will profile from top of tower to 1km.

**Proteus:** Slight delay, first flight expected Monday or Tuesday. Wayne Feltz to coordinate. Gradual climb and descent, "pseudo in-situ", expected to take 6 hours to complete. Will not fly directly over site.

### End of IOP, Central Facility Hours:

Sunday, October 8, 2000: 8:00 through 16:30 CST

Monday, October 9, 2000: 5:30am through 20:30 CST

### Science Discussions

Dave Whiteman gave a tutorial on RAMAN Lidar; Scott Richardson discussed findings of research into sonde problems; Chad Bahrmann outlined in-situ measurements on the tower (chilled mirror vs SMOS vs THWAPS); Hank Revercomb and Wayne Feltz presented preliminary results from LN2 and ambient blackbody calibration of MWRs and MWR brightness temperature comparisons

### Weather

Scattered cirrus, increasing throughout the day, winds gusty. Temperatures in the mid 80's, dewpoints in the mid-40's.

INSTRUMENT	STATUS/COMMENTS
<u>Microwave</u>	
CART CF (23.80/31.4 GHz)	OK
CART Spare (23.80/31.4 GHz)	OK
NOAA-CSR (20.6/31.65 GHz)	Went down overnight
NOAA-PSR (18/21, 10,37, 89 GHz with polarization)	OK
U of L'Aquila, Italy (23.8, 31.6, 53.5, 55.5, 58.0 GHz )	OK: trying to get continuous tip-cal mode operative
JPL J-Unit (20.7, 22.2, 31.4 GHz)	OK

### Lidar

CART Raman WV (CARL)	OK
NASA, Scanning Raman WV (SRL)	Minor issue continues. Good measurements overnight.
Max Planck Inst DIAL WV	Noise in low channel is excellent.
NASA HARLIE, cloud lidar	Operated for 8 hours overnight; continuing problems getting fast data throughflow for quicklooks
CART MPL, cloud lidar	OK

#### BBSS (CART)

Central Facility, Digi-CORA	Interference problem seem to have improved after receiver antenna connections were cleaned.
#2, PC-CORA	

#### BBSS Launch Site Refs.

THWAPS	
Chilled Mirror	

#### Tower In Situ Sensors

CART 60m HMP 35 South,10x	OK
CART 60m HMP 35 North	OK
CART 25m HMP 35 South,10x	OK
CART 25m HMP 35 North	OK
Chilled mirror 60m	OK
OK MESONET 60m	OK
Chilled mirror 25m	OK
OK MESONET 25m	OK
SMOS (CART)	OK

#### DataPlane

T, RH, P – tower to 1 km	Flew from 7pm to dusk
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#### AERI

CART (AERI-01)	OK; spectral calibration issue to work through
Prototype (AERI-00)	Down for remainder of IOP

#### GPS

Central Facility	Operational; antenna installed 18 September; takes 10 days to get a good position fix.
Lamont NOAA	

#### Sun Photometer/Spectrometer

MFRSR N1(CART)	
MFRSR/RSS (Albany)	

Cimel Sunphotometer	
NASA AATS-6 channel	Good 11 hours of data yesterday

Proteus Aircraft

<u>NAST-I</u>	
<u>NAST-M</u>	
<u>FIRSC</u>	Not expected to fly until Monday at earliest

Wayne Feltz and Brian Osborne, University of Wisconsin