

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
January 2006

Prepared by **Peter K. Hall, Jr.** and **Janet Martinez**
gamgr@mesonet.org

- The Mesonet Technicians started the year by resolving over 140 trouble tickets. Their tasks included:
 - Scheduled rotations of 5 FastTherm air temperature sensors and 2 wind sentries
 - PROM upgrades at 2 repeaters and bases
 - Datalogger enclosure upgrades at the Cloudy, Minco, and Vinita sites
 - Power upgrades at 11 Little Washita and 12 Fort Cobb Micronet sites
- The 60 and 75 cm soil moisture sensors were decommissioned at the Chandler site due to repeated problems with gophers damaging or digging up the sensors.
- At the Vanoss site, the soil moisture noise problems were resolved.
- Soil moisture sensors were installed at 8 Little Washita Micronet sites (A121, A134, A136, A144, A139, A154, A149, and A159). These sites now measure soil moisture at depths of 5, 25, and 45 cm. The data from these sensors will be available when the soil has healed and the soil sample analyses have been completed.
- Door switches (that indicate a technician is on-site) were installed in 10 ARS Little Washita and 13 ARS Fort Cobb Micronet sites.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
WDIR	Current	12580	HOOK	Sensor has a directional bias
	Current	12583	CAMA	Sensor has a directional bias
WSPD	Current	12740	BOIS	Sensor has developed a low bias
	Resolved	12749	OILT	Replaced sensor that had developed a starting threshold problem
PRES	Resolved	12674	NINN	Replaced failed barometer
	Resolved	12680	OKMU	Replaced failed barometer

SRAD	Resolved	12688	BIXB	Replaced sensor that had developed a low bias
	Resolved	12741	ADAX	Cleaned sensor that a dirty lens
RAIN	N/A			
TA9M	Resolved	12689	CLOU	Replaced sensor that reported erratic data
WS2M	Current	12777	TALI	Sensor reports erroneous wind gusts
	Current	12790	CLOU	Sensor reports erroneous wind gusts
	Current	12845	BRIS	Sensor reports erroneous wind gusts
	Resolved	12748	BLAC	Replaced sensor that had developed a starting threshold problem
TS10	Resolved	12707	PORT	Replaced sensor that was damaged by an animal
TB10	N/A			
TS05	Resolved	12672	MIAM	Replaced sensor that had developed a low bias
	Resolved	12638	PORT	Replaced sensor that was damaged by an animal
TB05	N/A			
TS30	Current	12771	CALV	Sensor reporting erroneous data
	Resolved	12686	PORT	Replaced sensor that was damaged by an animal
TR05	Resolved	12640	HECT	Reinstalled sensor that had been dug up by an animal
	Resolved	12681	MIAM	Fixed sensor that was reporting erratic data
TR25	Resolved	12682	KING	Replaced failed sensor
TR60	N/A			
TR75	Current	12673	HASK	Preferential flow, sensor will be decommissioned
	Current	12708	NOWA	Preferential flow, sensor will be decommissioned
	Current	12751	ERIC	Sensor has stopped heating, will be decommissioned

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
SRAD	N/A			
RAIN	N/A			
TS10	N/A			
TB10	N/A			
TS05	N/A			
TB05	N/A			
TS30	N/A			

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
SRAD	Resolved	12679	F105	Replaced sensor that had developed a low bias
RAIN	N/A			
TS05	N/A			
TS10	N/A			
TS15	N/A			

TS30	N/A
VW05	N/A
VW25	N/A
VW45	N/A

Current” tickets are the unresolved tickets as of the last day of the month OR those tickets added based on the Monthly QA analysis.

“Resolved” tickets are the sensor problems that were fixed during the entire month.

Variable	Description
TAIR	Air temperature measured at 1.5 meters
RELH	Relative humidity measured at 1.5 meters
WDIR	Wind direction measured at 10 meters
WSPD	Wind speed measured at 10 meters
PRES	Pressure
SRAD	Incident solar radiation
RAIN	Rainfall
TA9M	Air temperature measured at 9 meters
WS2M	Wind speed measured at 2 meters
TS10	Soil temperature measured at 10 cm under native sod
TB10	Soil temperature measured at 10 cm under bare soil
TS05	Soil temperature measured at 5 cm under native sod
TB05	Soil temperature measured at 5 cm under bare soil
TS15	Soil temperature measured at 15 cm under native sod
TS30	Soil temperature measured at 30 cm under native sod
TR05	Soil moisture: Calibrated DeltaT measured at 5 cm under native sod
TR25	Soil moisture: Calibrated DeltaT measured at 25 cm under native sod
TR60	Soil moisture: Calibrated DeltaT measured at 60 cm under native sod
TR75	Soil moisture: Calibrated DeltaT measured at 75 cm under native sod
VW05	Soil moisture: Volumetric water content measured at 5 cm under native sod
VW25	Soil moisture: Volumetric water content measured at 25 cm under native sod
VW45	Soil moisture: Volumetric water content measured at 45 cm under native sod