

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

May 2006

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- Mesonet technicians conducted routine maintenance at sites, resolved trouble tickets, and conducted other tasks, including:
 - Scheduled rotations of 15 thermometers, 7 wind sentries, 6 barometers, and 4 pyranometers
 - Logger upgrades were performed at Fairview (FAIR) and Marshall (MRSH)
 - Enclosure upgrades were performed at Fairview (FAIR), Marshall (MRSH), Waurika (WAUR), and Weatherford (WEAT)
 - SDM-SIO4s were installed at an additional 6 Mesonet sites
- Lightning strikes occurred at the Boise City base, Idabel repeater, Miami (MIAM) Mesonet site, and Bixby (BIXB) Mesonet site. The strikes mainly affected the communications unless noted below by a sensor trouble ticket.
- The 75 cm soil moisture sensors at the Haskell (HASK) and Hinton (HINT) Mesonet sites were decommissioned.
- The current excitation device at Stillwater (STIL) had minor problems. Data were affected 18 through 24 May 2006.
- There was a problem with the soil temperature reference thermometer at Centrahoma (CENT). Soil moisture data were affected 2 through 23 May 2006.
- There were two door switch problems in the Little Washita Micronet. Some data were inadvertently flagged and will not be available. Sites affected were A124 from 16 to 18 May 2006 and A148 from 16 to 24 May 2006. Overrides were activated, but large data losses did occur.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
WDIR	N/A			
WSPD	N/A			
PRES	N/A			

SRAD	N/A			
RAIN	Current	13272	CHEY	Rain gauge under-reporting rain events
	Current	13273	RETR	Gauge has completely missed last events
	Resolved	13210	MINC	Repaired sensor that was missing rain events
TA9M	Resolved	13195	BIXB	Replaced sensor that had failed
WS2M	Resolved	13197	STUA	Replaced sensor that had developed a low bias
TS10	Current	13276	CLRM	Sensor has developed a high bias
	Resolved	13223	HECT	Fixed wiring issue
TB10	Resolved	13192	BIXB	Replaced sensor damaged by lightning
TS05	Resolved	13271	HOLL	Replaced sensor that had developed a low bias
TB05	Current	13065	GUTH	Sensor has developed a low bias
	Current	13212	GRA2	Sensor has developed a high bias
TS30	Resolved	13148	NRMN	Replaced sensor that had developed a high bias
	Resolved	13191	MIAM	Replaced sensor that had developed a high bias
TR05	Resolved	13150	TISH	Replaced sensor that had failed
TR25	Resolved	13193	BIXB	Replaced sensor that had failed
TR60	N/A			
TR75	Resolved	12673	HASK	Decommissioned sensor with preferential flow
	Resolved	13122	HINT	Decommissioned sensor with preferential flow

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
SRAD	N/A			
RAIN	N/A			
TS05	N/A			
TS10	N/A			
TS15	N/A			
TS30	N/A			
VW05	Current	13240	A153	Sensors at all depths reporting inverted values
	Current	13241	A182	No levels are responding to precipitation
VW25	N/A			
VW45	Current	13239	A135	Sensor reporting out-of-range values

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
SRAD	N/A			
RAIN	Resolved	13209	F112	Cleaned clogged funnel
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