

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
June 2006

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- Mesonet technicians conducted routine maintenance at sites, resolved over 140 trouble tickets, and completed other tasks, including:
 - Scheduled rotations of 2 thermometers, 2 wind sentries, 1 barometer, and 1 wind monitor nose cone
 - Logger upgrades were performed at Altus (ALTU), Madill (MADI), and Retrop (RETR)
 - Enclosure upgrades were performed at 8 Mesonet sites
 - SDM-SIO4s were installed at an additional 10 Mesonet sites
- The 75 cm soil moisture sensors at Eufaula (EUFA) and Lane (LANE) were decommissioned
- Lightning strikes occurred at Eufaula (EUFA; 22 June 2006) and Lane (LANE; 23 June 2006). The datalogger at EUFA was damaged, thus all data were lost from 22 to 26 June 2006. Other data affected at EUFA are listed below as trouble tickets. LANE also had logger damage, affecting data from 23 to 27 June 2006.
- The reference temperature sensor at Hinton (HINT) failed. This affected all soil moisture data from 30 May to 21 June 2006
- The door switch at A124 failed. This caused data to be flagged from 4 to 7 June 2006
- The Bear Mt. repeater (BEARrptr) was decommissioned 27 June 2006
- Spring Pass was completed in June; Summer Pass began in July

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	Resolved	13285	MIAM	Replaced sensor that had failed
WDIR	Resolved	13321	ACME	Replaced sensor that had a directional bias
WSPD	N/A			
PRES	Resolved	13284	PUTN	Replaced sensor that had failed
SRAD	Resolved	13394	EUFA	Replaced sensor that was damaged by lightning
	Resolved	13393	LANE	Replaced sensor that was damaged by lightning

RAIN	Resolved	13272	CHEY	Cleaned the gauge that had become plugged
	Resolved	13273	RETR	Replaced failed switch
	Resolved	13296	OKEM	Replaced failed switch
	Resolved	13294	TALI	Replaced failed switch
TA9M	N/A			
WS2M	N/A			
TS10	Resolved	13276	CLRM	No action taken, sensor tested well
	Resolved	13344	HOOK	Replaced sensor that had developed a bias
TB10	Current	13391	APAC	Sensor has failed
	Current	13476	CHEY	Sensor has developed a low bias
	Resolved	13307	BESS	Replaced sensor that had developed a high bias
TS05	Resolved	13343	HOOK	Replaced sensor that had developed a bias
TB05	Current	13212	GRA2	Sensor has developed a high bias
	Resolved	13065	GUTH	Replaced sensor that had developed a high bias
TS30	N/A			
TR05	Resolved	13407	EUFA	Replaced sensor that was damaged by lightning
	Resolved	13306	WEST	Replaced sensor that had failed
TR25	Resolved	13408	EUFA	Replaced sensor that was damaged by lightning
TR60	Resolved	13409	EUFA	Replaced sensor that was damaged by lightning
TR75	N/A			

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
SRAD	N/A			
RAIN	N/A			
TS05	Resolved	13291	A146	Replaced sensor that was reporting erratic data
TS10	N/A			
TS15	Resolved	13290	A146	Replaced sensor that was reporting erratic data
TS30	N/A			
VW05	Resolved	13240	A153	Corrected wiring problem
	Resolved	13241	A182	Corrected wiring problem
	Resolved	13286	A124	Corrected wiring problem (cross-wired with 45 cm sensor)
	Resolved	13315	A146	Corrected wiring problem
VW25	Resolved	13316	A146	Corrected wiring problem
	Resolved	13318	A153	Corrected wiring problem
VW45	Resolved	13239	A135	Replaced sensor that had failed
	Resolved	13317	A146	Corrected wiring problem
	Resolved	13287	A124	Corrected wiring problem (cross-wired with 45 cm sensor)
	Resolved	13289	A153	Corrected wiring problem

ARS Ft. Cobb 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	Resolved	13278	F102	Tightened wiring on sensor that was reporting out-of-range values
	Resolved	13279	F115	Replaced sensor that had failed
VW25	Resolved	13311	F106	Corrected wiring problem
	Resolved	13313	F107	Corrected wiring problem
	Resolved	13308	F112	Corrected wiring problem
VW45	Resolved	13312	F106	Corrected wiring problem
	Resolved	13314	F107	Corrected wiring problem
	Resolved	13310	F110	Corrected wiring problem

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