

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

May 2007

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- Mesonet technicians resolved trouble tickets, conducted routine maintenance at sites, and performed scheduled rotations of 9 barometers, 15 relative humidity sensors, and 8 wind sentries.
- A lightning strike at ARS Little Washita Site A146 damaged the datalogger and several soil temperature and soil moisture sensors. Data were lost from 7 to 9 May 2007 due to the damaged datalogger.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	Resolved	15017	WEBB	Replaced faulty sensor.
	Resolved	15065	PORT	Replaced faulty sensor.
	Resolved	15169	MARE	Fixed wiring problem.
	Resolved	15168	MAYR	Replaced faulty sensor.
	Resolved	15166	STIG	Replaced faulty sensor.
WSPD	N/A			
WDIR	N/A			
PRES	N/A			
SRAD	Current	15167	GOOD	Sensor reports errant data.
RAIN	Current	15134	HINT	Sensor stopped working.
	Resolved	15066	BUFF	Fixed sensor that reported errant data.
	Resolved	15128	MRSB	Fixed sensor that stopped reporting.
TA9M	Current	15103	STIL	Sensor has a low bias.

WS2M	N/A			
TS10	Current	15179	NEWK	Sensor has a low bias.
	Resolved	14996	BOWL	Replaced sensor that had rodent damage.
TB10	Resolved	15055	SHAW	Replaced sensor that had a low bias.
	Resolved	15105	SLAP	Replaced sensor that had a high bias.
	Resolved	15173	BRIS	Replaced damaged sensor.
	Resolved	15127	HOBA	Replaced sensor that had a low bias.
	Resolved	15104	OKCW	Fixed wiring problem.
TS05	N/A			
TB05	Current	15172	PUTN	Sensor reports errant data.
	Current	15173	COOK	Sensor has a low bias.
	Resolved	15054	BRIS	Replaced sensor that had a high bias.
	Resolved	15170	KENT	Reburied sensor that was too shallow.
	Resolved	15177	HOBA	Replaced sensor that had a low bias.
TS30	Resolved	15027	OKMU	Replaced sensor that had a low bias.
TR05	Current	14841	ANTL	Sensor reports errant data.
	Resolved	14900	FREE	Replaced sensor that stopped working.
TR25	N/A			
TR60	Resolved	14846	WEST	Removed sensor that reported errant data.
TR75	Current	15067	PUTN	Sensor reports errant data.
	Resolved	15000	WATO	Fixed wiring problem.

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
SRAD	N/A			
RAIN	N/A			
TS05	Current	15183	A136	Sensor has a low bias.
	Current	15184	A159	Sensor has a high bias.
	Resolved	15097	A146	Replaced sensor damaged by lightning.
TS10	N/A			
TS15	Resolved	15099	A146	Replaced sensor damaged by lightning.
TS30	Current	15185	A156	Sensor has a low bias.
	Current	15186	A121	Sensor has a low bias.
	Resolved	15098	A146	Replaced sensor damaged by lightning.
VW05	Resolved	15100	A146	Replaced sensor damaged by lightning.
VW25	Resolved	15101	A146	Replaced sensor damaged by lightning.
VW45	Resolved	15102	A146	Removed sensor damaged by lightning.

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	N/A			
RELH	N/A			
SRAD	Resolved	14962	F106	Replaced sensor that had 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