

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

July 2013

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- Mesonet technicians performed scheduled rotations of 2 barometers (PRES) and 6 wind vanes (WDIR)
- Lightning strike at the Newkirk, OK Mesonet Site damaged the datalogger and all soil moisture sensors. Datalogger damage resulted in loss of data from 21 July 2013 0840 – 22 July 2013 1835.
- A problem with the multiplexer installed at the Erick, OK Mesonet Site (ERIC) results in errant spikes in all soil temperature data. Appropriate data are flagged.
- The datalogger installed at ARS Fort Cobb Watershed Site F103 introduced errant spikes in soil moisture and soil temperature data. Datalogger was replaced and appropriate data were flagged.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	Resolved	MEDF	25159	Replaced sensor that had high bias.
RELH	Resolved	TISH	25154	Replaced sensor that had low bias during high humidity.
WSPD	Resolved	TISH	24810	Replaced sensor that reported errant spikes.
	Current	TULN	25463	Sensor reports errant spikes.
WDIR				

PRES	Resolved	ALTU	25440	Replaced sensor that reported errant spikes.
SRAD	Current	CHER	25493	Sensor has low bias.
RAIN				
TA9M				
WS2M	Resolved	NOWA	24811	Replaced sensor that had starting threshold problem.
	Current	BIXB	25485	Sensor has starting threshold problem.
	Current	IDAB	25015	Sensor has starting threshold problem.
TB10	Resolved	TISH	24806	Filled hole causing errant sensor exposure.
	Current	BIXB	24808	Sensor reports errantly large diurnal range.
	Current	BLAC	25494	Sensor reports errantly large diurnal range.
	Current	FORA	24772	Sensor has a low bias.
	Current	FREE	25158	Sensor has a low bias.
	Current	KIN2	25160	Sensor has a low bias.
	Current	PRYO	24773	Sensor has a low bias.
TS10	Current	COOK	25438	Sensor has a low bias.

	Current	WEST	24770	Sensor reports errant spikes in data.
TB05	Resolved	GOOD	24718	Removed sensor that had a low bias.
	Current	LANE	25128	Sensor reports errantly low values.
TS05	Current	CHAN	24789	Sensor has a low bias.
	Current	COOK	25157	Sensor has a low bias.
	Current	DURA	25492	Sensor has a low bias.
	Current	LANE	25148	Sensor reports errant spikes in data.
TS30	Resolved	BEAV	24807	Replaced sensor that reported errant spikes in data.
	Current	HASK	24797	Sensor has a low bias.
TR05	Resolved	WIST	25156	Replaced sensor that reported errant spikes in data.
TR25				
TR60	Current	SHAW	25490	Sensor reports errant spikes in data.

ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN	Current	F110	25462	Sensor reports lower than expected rainfall.
VW05				
VW25	Current	F101	25496	Sensor reports errant spikes in data
VW45				
V05T				
V25T				
V45T				

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05	Resolved	A159	25439	Replaced sensor that was reporting errant spikes in data

VW25
VW45
V05T
V25T
V45T

“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
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
V05T	Soil Temperature measured at 5cm under native sod
V25T	Soil Temperature measured at 25cm under native sod
V45T	Soil Temperature measured at 45cm under native sod