

**OKLAHOMA MESONET / ARS
QUALITY ASSURANCE REPORT**

March 2014

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- Mesonet technicians completed scheduled rotations of 8 batteries (BATV), 1 barometer (PRES), 5 rain gauges (RAIN), 10 relative humidity sensors (RELH), 6 pyranometers (SRAD), 2 fasttherms (TAIR), and 5 wind monitor nose cones (WSPD)
- A malfunctioning current excitation sensor was replaced at the Tipton Mesonet site (TIPT). The problem caused errant spikes in soil moisture. Data were flagged as needed.
- A malfunctioning multiplexer at the Goodwell Mesonet site (GOOD) causes errant spikes in soil temperature. Data are flagged as needed.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	Resolved	FAIR	26054	Replaced sensor that had high bias.
	Resolved	PAUL	26200	Corrected wiring problem that caused low bias.
RELH				
WSPD				
WDIR				
PRES				
SRAD				
RAIN				

TA9M				
WS2M				
TB10	Current	BIXB	26358	Sensor sometimes reports small errant spikes.
	Current	HOOK	26251	Sensor has less diurnal variation than sod plot.
TS05	Resolved	BRIS	26202	Reburied sensor that was at incorrect depth.
	Resolved	OKCW	26252	Reburied sensor that was at incorrect depth.
	Resolved	PERK	26259	Replaced sensor that was at incorrect depth.
	Resolved	WATO	26034	Reburied sensor that was at incorrect depth.
	Resolved	WAUR	26033	Replaced sensor that was at incorrect depth.
	Current	BURN	26201	Sensor has similar diurnal variation as 10cm.
	Current	CENT	26203	Sensor has similar diurnal variation as 10cm.
	Current	DURA	26204	Sensor has similar diurnal variation as 10cm.
	Current	PORT	26359	Sensor has similar diurnal variation as 10cm.
	Current	STUA	26360	Sensor has similar diurnal variation as 10cm.
	Current	VINI	26361	Sensor has similar diurnal variation as 10cm.
	Current	WEAT	26205	Sensor has similar diurnal variation as 10cm.
TS10				
TS25				
TS60				
TR05				

TR25				
TR60				

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05				
VW25				
VW45	Current	A253	26401	Sensor reports errant spikes.
V05T				
V25T				
V45T				

ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				

VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

“Current” tickets are unresolved tickets as of the last day of the month OR tickets added after Monthly QA analysis.
“Resolved” tickets are the sensor problems 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
TB10	Soil temperature measured at 10 cm under bare sod
TS05	Soil temperature measured at 5 cm under native soil
TS10	Soil temperature measured at 10 cm under native sod
TS25	Soil temperature measured at 25 cm under native soil
TS60	Soil temperature measured at 60 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