

**OKLAHOMA MESONET / ARS
QUALITY ASSURANCE REPORT**

January 2015

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- Mesonet technicians completed scheduled rotations of 6 batteries (BATV), 6 barometers (PRES), 3 rain gauges (RAIN), 6 humidity sensor (RELH), 5 pyranometers (SRAD), 4 windsentries (WS2M), and 4 wind monitor nose cones (WSPD)
- Auxilliary battery (BVAS) problem at the Shawnee Mesonet Site (SHAW) caused the 1.5m air temperature (TAIR) aspirator fan to stop working. Affected data were flagged.
- A new program that adds the secondary rain gauge data to the 1-minute table was sent to all Mesonet stations.
- Air temperature at 9m (TA9M) is transitioning from the bare-bead thermistor (fasttherm) to a platinum resistance thermometer (PRT). Approximately half of all Mesonet stations will receive the new sensor during spring pass.
- The datalogger at A133 sometimes causes small errant spikes in soil temperature data. Affected data are flagged.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	Resolved	BYAR	27476	Replaced sensor that had high bias.
	Resolved	PORT	27754	Replaced sensor that had high bias.
RELH	Resolved	WOOD	27452	Replaced sensor that sometimes stopped working.
WSPD				

WDIR	Resolved	SKIA	27758	Replaced sensor that caused errant gusts.
PRES				
SRAD	Current	SEIL	27629	Sensor has large low bias.
RAIN	Current	TALI	27751	Secondary gauge not reporting precipitation.
TA9M	Resolved	BESS	27453	Replaced sensor that had low bias.
	Resolved	BRIS	27383	Replaced sensor that had low bias.
WS2M				
TB10				
TS05	Resolved	BUTL	27764	Reburied sensor at correct depth.
	Current	ALV2	27757	Suspect sensor at incorrect depth.
	Current	EUFA	27765	Suspect sensor at incorrect depth.
	Current	FORA	27761	Suspect sensor at incorrect depth.
	Current	WEST	27386	Suspect sensor at incorrect depth.
TS10	Resolved	PORT	27384	No problem. Sensor was at correct depth.

TS25				
TS60				
TR05	Resolved	APAC	27752	Replaced broken sensor.
	Current	MANG	27441	Sensor does not react to soil wetting/drying.
TRB10	Resolved	MANG	27756	No problem. Ticket canceled.
TRS10				
TR25				
TR60	Current	FORA	27376	Sensor stopped heating.

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
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RAIN				
VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN	Resolved	F115	27457	Replaced vandalized rain gauge.
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
TRB10	Soil moisture: Calibrated DeltaT measured at 10 cm under bare soil
TRS10	Soil moisture: Calibrated DeltaT measured at 10 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