

**OKLAHOMA MESONET / ARS
QUALITY ASSURANCE REPORT**

August 2015

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- Mesonet technicians completed scheduled rotations of 16 batteries (BATV), 4 barometers (PRES), 11 rain gauges (RAIN), 15 humidity sensors (RELH), 6 pyranometers (SRAD), 4 fasttherms (TAIR), 9 wind monitor nose cones (WSPD), and 10 wind sentries (WS2M).
- Stigler Mesonet site's (STIG) 1.5-m air temperature radiation shield fan stopped working, causing air temperature to be warmer than expected on sunny days. Air temperature data were flagged 3-10 August 2015.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	Resolved	OKMU	28771	Moisture bias; replaced.
RELH	Current	WAL2	28476	Humidity sometimes higher than expected.
WSPD	Resolved	LANE	28764	Starting threshold problem; replaced.
WDIR				
PRES				
SRAD	Current	PUTN	28784	Reports negative values at night.

RAIN	Resolved	PRYO	28782	Missed rain events; rewired.
	Resolved	MANG	28531	Clogged with grass; cleaned and replaced.
	Resolved	SHAW	28783	Clogged by web; cleaned.
TA9M				
WS2M				
TB10	Resolved	MIAM	28757	Sensor too shallow; reburied.
	Current	LANE	28802	Suspect sensor too shallow.
TS05	Resolved	BIXB	28770	Sensor too deep; reburied.
	Resolved	PAWN	28768	Sensor reports -7999; replaced.
	Current	BURB	28361	Suspect sensor too deep.
	Current	VINI	28767	Suspect sensor too deep.
TS10				
TS25	Current	OILT	28762	Reports small, errant spikes.
TS60				
TR05	Resolved	ELKC	28760	Loose wire prevented heating. Rewired.

	Current	GOOD	28719	Sensor reports -7999.
TRB10				
TRS10	Current	APAC	28801	Sensor reports -7999.
	Current	OKEM	28788	Small, errant spikes in data.
	Current	TAHL	28794	Final temperature sometimes more than expected.
TR25	Resolved	CENT	28722	Sensor stopped heating; replaced.
	Resolved	FORA	28730	Sensor stopped heating; replaced.
	Resolved	STIG	28761	Sensor doesn't moisten as expected; replaced.
TR60				

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN	Resolved	A282	28774	Clogged by plant debris; cleaned.
VW05	Resolved	A132	28772	Wires damaged by insects/rodents; replaced.
VW25	Resolved	A148	28751	Sensor malfunctioned; replaced.
	Resolved	A159	28728	Errant spikes in data; replaced.

VW45	
V05T	
V25T	
V45T	

ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05				
VW25	Resolved	F114	28724	Errant spikes in data; replaced.
	Current	F104	28798	Errant spikes in data.
VW45	Resolved	F107	28793	Errant spikes in data; replaced.
	Resolved	F112	28734	Errantly low soil moisture; replaced.
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 soil
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