

# OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

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- Mesonet technicians performed scheduled rotations of 8 temperature and relative humidity sensors (RELH), 3 barometers (PRES), 3 aspirator fans (FANS), 8 fasttherms (TAIR), 2 rain gauges (RAIN), 9 pyranometers (SRAD), 2 soil temperature sensors, 2 wind monitor nose cones (WSPD) and 14 windsentries (WS2M).
- Multiplexer at Stillwater (STIL) site is causing errant spikes in soil temperature data from 8 September 2012 to 11 September 2012, appropriate data flagged as erroneous.
- Multiplexer at Burneyville (BURN) site is causing errant spikes in soil temperature data beginning 13 September 2012, appropriate data flagged as erroneous.

## Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
<b>TAIR</b>				
<b>RELH</b>	Current	BUTL	23905	Sensor has a low bias during high humidity
	Current	TALI	23908	Sensor has a low bias during high humidity
	Current	ERIC	23530	Sensor has a low bias during high humidity
<b>WSPD</b>				
<b>WDIR</b>	Current	APAC	23910	Wind direction stuck at 354.0 degrees
<b>PRES</b>	Resolved	WASH	23835	Sensor reports errant spikes in data
	Resolved	BURN	23901	Pressure report one value for extended period
<b>SRAD</b>	Resolved	ARD2	23865	Sensor had a 10% high bias
<b>RAIN</b>				
<b>TA9M</b>	Resolved	WAUR	23904	Sensor has a low bias after rainfall

<b>WS2M</b>				
<b>TS10</b>				
<b>TB10</b>	Resolved	RETR	23788	Sensor had a low bias
	Resolved	ARD2	23795	Sensors 1cm too deep
	Current	MAYR	23787	Bare plot data has large diurnal cycle
<b>TS05</b>	Current	SALL	23869	Sensor has a low bias
<b>TB05</b>	Current	WOOD	23912	Sensor has a low bias
	Current	FOR A	23913	Sensor has a low bias
<b>TS30</b>	Current	OKMU	23914	Sensor has a low bias
<b>TR05</b>				
<b>TR25</b>	Resolved	VINI	23833	Sensor stopped heating causing errant data
	Resolved	ALV2	23765	Crack in ground caused errant soil moisture
	Resolved	BYAR	23793	Sensor reporting errant spikes in data
<b>TR60</b>	Resolved	HOLL	23854	Sensor stopped heating causing errant data
	Resolved	VINI	23893	Sensor damaged during technician visit
	Current	BOIS	23752	Soil moisture reporting erroneous values

### ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
<b>RAIN</b>	Resolved	A256	23866	Rain gauge under reported rainfall
<b>VW05</b>	Current	A152	23902	Soil moisture reporting 0 after rainfall
	Current	A253	23907	Erroneous spikes in data
<b>VW25</b>				
<b>VW45</b>				
<b>V05T</b>				
<b>V25T</b>				
<b>V45T</b>				

### ARS Ft. Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
<b>RAIN</b>				
<b>VW05</b>	Current	F101	23867	Soil moisture reporting 0 after rainfall
	Current	F115	23720	Soil moisture reporting errant spikes in data
	Current	F112	23756	Errant spikes in data
<b>VW25</b>	Current	F107	23834	Reporting errant spikes in data
	Current	F108	23740	Reporting errant spikes in data
<b>VW45</b>				
<b>V05T</b>				
<b>V25T</b>				
<b>V45T</b>				

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.

<b>Variable</b>	<b>Description</b>
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 5 cm under native sod
V25T	Soil Temperature measured at 25cm under native sod
V45T	Soil Temperature measured at 45cm under native sod