

**OKLAHOMA MESONET / ARS  
QUALITY ASSURANCE REPORT**

September 2015

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- Mesonet technicians completed scheduled rotations of 8 batteries (BATV), 5 barometers (PRES), 4 rain gauges (RAIN), 5 humidity sensors (RELH), 1 pyranometer (SRAD), 3 wind monitor nose cones (WSPD), 9 wind directions (WDIR), and 4 wind sentries (WS2M).
- A loose power cable at the Tahlequah Mesonet Site (TAHL) caused errant air temperature (TAIR), 9m air temperature (TA9M), and soil moisture observations for all depths 25-28 September 2015. Data were flagged as needed.

**Mesonet QA Report for Standard Variables**

<b>Variable</b>	<b>Status</b>	<b>Site</b>	<b>Ticket</b>	<b>Remarks</b>
<b>TAIR</b>				
<b>RELH</b>	<b>Resolved</b>	<b>WAL2</b>	<b>28476</b>	<b>Humidity had high bias. Replaced.</b>
<b>WSPD</b>				
<b>WDIR</b>				
<b>PRES</b>				
<b>SRAD</b>	<b>Resolved</b>	<b>ACME</b>	<b>28502</b>	<b>Sensor had low bias and due for rotation. Replaced.</b>
	<b>Resolved</b>	<b>PUTN</b>	<b>28784</b>	<b>Reported negative values at night. Replaced.</b>

<b>RAIN</b>	<b>Current</b>	<b>OKEM</b>	<b>28841</b>	<b>Primary gauge clogged.</b>
	<b>Current</b>	<b>MRSH</b>	<b>28835</b>	<b>Secondary gauge clogged.</b>
<b>TA9M</b>				
<b>WS2M</b>	<b>Resolved</b>	<b>RING</b>	<b>28830</b>	<b>Starting threshold problem. Replaced.</b>
	<b>Resolved</b>	<b>WEBR</b>	<b>28837</b>	<b>Reports zero. Tightened loose wire.</b>
<b>TB10</b>	<b>Current</b>	<b>LANE</b>	<b>28802</b>	<b>Suspect sensor at incorrect depth.</b>
<b>TS05</b>	<b>Resolved</b>	<b>OKCN</b>	<b>28806</b>	<b>Sensor at incorrect depth. Reburied.</b>
	<b>Current</b>	<b>BURB</b>	<b>28361</b>	<b>Suspect sensor at incorrect depth.</b>
	<b>Current</b>	<b>ERIC</b>	<b>28807</b>	<b>Suspect sensor at incorrect depth.</b>
	<b>Current</b>	<b>VINI</b>	<b>28767</b>	<b>Suspect sensor at incorrect depth.</b>
<b>TS10</b>	<b>Resolved</b>	<b>FAIR</b>	<b>28804</b>	<b>Suspected sensor at incorrect depth, but found OK.</b>
	<b>Current</b>	<b>DURA</b>	<b>28805</b>	<b>Suspect sensor at incorrect depth.</b>
<b>TS25</b>	<b>Current</b>	<b>OILT</b>	<b>28762</b>	<b>Sometimes reports errant spikes.</b>
<b>TS60</b>				

<b>TR05</b>	<b>Resolved</b>	<b>GOOD</b>	<b>28719</b>	<b>Reports -7999. Replaced.</b>
	<b>Current</b>	<b>BIXB</b>	<b>28845</b>	<b>Sometimes does not heat.</b>
<b>TRB10</b>	<b>Resolved</b>	<b>PERK</b>	<b>28803</b>	<b>Sometimes stops heating. Replaced.</b>
	<b>Resolved</b>	<b>WAUR</b>	<b>28836</b>	<b>Wire severed. Replaced.</b>
<b>TRS10</b>	<b>Resolved</b>	<b>APAC</b>	<b>28801</b>	<b>Reports -7999. Replaced.</b>
	<b>Resolved</b>	<b>TAHL</b>	<b>28794</b>	<b>Errant values. Replaced.</b>
	<b>Current</b>	<b>OKEM</b>	<b>28788</b>	<b>Reports small, errant spikes.</b>
<b>TR25</b>				
<b>TR60</b>	<b>Current</b>	<b>NEWK</b>	<b>28843</b>	<b>Sensor stopped heating.</b>

**ARS Little Washita Watershed QA Report**

<b>Variable</b>	<b>Status</b>	<b>Site</b>	<b>Ticket</b>	<b>Remarks</b>
<b>RAIN</b>				
<b>VW05</b>				
<b>VW25</b>	<b>Resolved</b>	<b>A136</b>	<b>28808</b>	<b>Reports errant spikes. Replaced.</b>
<b>VW45</b>				

<b>V05T</b>	
<b>V25T</b>	
<b>V45T</b>	

**ARS Fort Cobb Watershed QA Report**

<b>Variable</b>	<b>Status</b>	<b>Site</b>	<b>Ticket</b>	<b>Remarks</b>
<b>RAIN</b>				
<b>VW05</b>	<b>Current</b>	<b>F110</b>	<b>28823</b>	<b>Reports errant spikes.</b>
<b>VW25</b>	<b>Resolved</b>	<b>F104</b>	<b>28798</b>	<b>Reports small, errant spikes. Replaced.</b>
<b>VW45</b>				
<b>V05T</b>				
<b>V25T</b>				
<b>V45T</b>				

“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