

**OKLAHOMA MESONET / ARS  
QUALITY ASSURANCE REPORT**

December 2014

Prepared by Cindy Luttrell and Amanda Ilk  
qamgr@mesonet.org

- Mesonet technicians completed scheduled rotations of 2 batteries (BATV), 4 barometers (PRES), 2 rain gauges (RAIN), 1 humidity sensor (RELH), 2 pyranometers (SRAD), 6 fasttherms (TAIR/TA9M), and 4 wind monitor directions (WDIR)
- A power problem at the Sulphur Mesonet Site (SULP) caused loss of data from 20-22 December 2014.
- A datalogger problem at Little Washita ARS Site A133 sometimes causes errant spikes in soil temperature data. Affected data are 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>Resolved</b>	<b>ARD2</b>	<b>27447</b>	<b>Replaced high biased sensor.</b>
	<b>Resolved</b>	<b>BYAR</b>	<b>27476</b>	<b>Replaced high biased sensor.</b>
	<b>Resolved</b>	<b>OKEM</b>	<b>27456</b>	<b>Replaced high biased sensor.</b>
	<b>Current</b>	<b>PORT</b>	<b>27754</b>	<b>High bias during high humidity.</b>
<b>RELH</b>	<b>Current</b>	<b>WOOD</b>	<b>27452</b>	<b>Reports -7999 (missing).</b>
<b>WSPD</b>				
<b>WDIR</b>	<b>Current</b>	<b>SKIA</b>	<b>27758</b>	<b>Sometimes reports errant gusts during rain.</b>

<b>PRES</b>				
<b>SRAD</b>				
<b>RAIN</b>	<b>Resolved</b>	<b>OKCN</b>	<b>27478</b>	<b>Replaced damaged gauge.</b>
	<b>Current</b>	<b>TALI</b>	<b>27751</b>	<b>Does not report rain during precip events.</b>
<b>TA9M</b>	<b>Current</b>	<b>BESS</b>	<b>27453</b>	<b>Low bias during high humidity.</b>
	<b>Current</b>	<b>BRIS</b>	<b>27383</b>	<b>Low bias during high humidity.</b>
<b>WS2M</b>				
<b>TB10</b>				
<b>TS05</b>	<b>Current</b>	<b>ALV2</b>	<b>27757</b>	<b>Suspect sensor at incorrect depth.</b>
	<b>Current</b>	<b>FORA</b>	<b>27761</b>	<b>Suspect sensor at incorrect depth.</b>
	<b>Current</b>	<b>WEST</b>	<b>27386</b>	<b>Suspect sensor at incorrect depth.</b>
<b>TS10</b>	<b>Current</b>	<b>PORT</b>	<b>27384</b>	<b>Suspect sensor at incorrect depth.</b>
<b>TS25</b>				
<b>TS60</b>				

TR05	Resolved	APAC	27752	Sensor stopped heating.
	Current	MANG	27441	Sensor stopped heating.
TRB10	Current	MANG	27756	Sensor stopped heating.
TRS10				
TR25				
TR60	Current	FORA	27376	Sensor stopped heating.

**ARS Little Washita Watershed QA Report**

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05				
VW25				
VW45				

<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>Current</b>	<b>F115</b>	<b>27457</b>	<b>Did not report rain during precip events.</b>
<b>VW05</b>				
<b>VW25</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