

**OKLAHOMA MESONET / ARS  
QUALITY ASSURANCE REPORT**

June 2014

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

- Mesonet technicians completed scheduled rotations of 14 batteries (BATV), 2 rain gauges (RAIN), 6 humidity sensors (RELH), 1 pyranometer (SRAD), 3 fasttherms (TAIR/TA9M), 4 wind directions (WDIR), 3 wind sentries (WS2M), and 4 wind monitor nose cones (WSPD)
- Spring pass ended June 30th, 2014.

**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>Current</b>	<b>TISH</b>	<b>26783</b>	<b>Sensor has a high bias during high humidity.</b>
<b>WSPD</b>				
<b>WDIR</b>				
<b>PRES</b>	<b>Current</b>	<b>WIST</b>	<b>26921</b>	<b>Sensor has a bias following rain events.</b>
	<b>Current</b>	<b>WEST</b>	<b>27133</b>	<b>Sensor has a high bias.</b>
<b>RAIN</b>	<b>Resolved</b>	<b>CHEY</b>	<b>26745</b>	<b>Fixed clogged rain gauge.</b>
	<b>Resolved</b>	<b>GRA2</b>	<b>26788</b>	<b>Removed spider web from rain gauge.</b>
	<b>Resolved</b>	<b>HINT</b>	<b>26747</b>	<b>Replaced failed rain gauge.</b>
<b>TA9M</b>	<b>Resolved</b>	<b>CHIC</b>	<b>26741</b>	<b>Replaced sensor that had a low bias.</b>
	<b>Resolved</b>	<b>NEWK</b>	<b>26682</b>	<b>Replaced sensor that had a large low bias.</b>

<b>WS2M</b>	<b>Resolved</b>	<b>PRYO</b>	<b>26733</b>	<b>Removed plant debris wrapped around sensor.</b>
<b>TB10</b>				
<b>TS05</b>	<b>Resolved</b>	<b>PORT</b>	<b>26359</b>	<b>Replaced sensor that was at incorrect depth.</b>
	<b>Resolved</b>	<b>STUA</b>	<b>26360</b>	<b>Reburied sensor that was at incorrect depth.</b>
	<b>Resolved</b>	<b>VINI</b>	<b>26361</b>	<b>Reburied sensor that was at incorrect depth.</b>
	<b>Resolved</b>	<b>DURA</b>	<b>26689</b>	<b>Replaced sensor that was at incorrect depth.</b>
<b>TS10</b>	<b>Current</b>	<b>STUA</b>	<b>26782</b>	<b>Sensor has more diurnal variation than 5cm.</b>
<b>TS25</b>				
<b>TS60</b>				
<b>TR05</b>	<b>Resolved</b>	<b>GUTH</b>	<b>26744</b>	<b>Filled large hole next to sensor.</b>
<b>TR25</b>				
<b>TR60</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>Resolved</b>	<b>A132</b>	<b>26748</b>	<b>Fixed clogged rain gauge.</b>
	<b>Resolved</b>	<b>A152</b>	<b>26746</b>	<b>Replaced failed rain gauge and mowed.</b>
	<b>Resolved</b>	<b>A234</b>	<b>26680</b>	<b>Replaced damaged rain gauge cable.</b>
	<b>Current</b>	<b>A136</b>	<b>27124</b>	<b>Rain gauge under-reported rain.</b>
<b>VW05</b>				
<b>VW25</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>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.

<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
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 soil
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 5cm under native sod
V25T	Soil Temperature measured at 25cm under native sod
V45T	Soil Temperature measured at 45cm under native sod