

**OKLAHOMA MESONET / ARS  
QUALITY ASSURANCE REPORT**

May 2014

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- Mesonet technicians completed scheduled rotations of 2 batteries (BATV), 2 barometers (PRES), 2 relative humidity sensors (RELH), 3 pyranometers (SRAD), 6 fasttherms (TAIR), 1 windsentry (WS2M), and 1 wind monitor nose cone (WSPD)
- Datalogger clock at the Idabel Mesonet Site (IDAB) errantly drifted slow. Frequent clock-sets kept the clock within an acceptable range. Datalogger replacement resolved the problem.
- A disconnected ground wire at the Wister Mesonet Site (WIST) caused the soil moisture sensors to malfunction. The wiring problem was fixed and affected data were flagged as errant.

**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>WEAT</b>	<b>26673</b>	<b>Replaced sensor that reported errantly low values.</b>
<b>WSPD</b>				
<b>WDIR</b>				
<b>PRES</b>	<b>Resolved</b>	<b>HUGO</b>	<b>26510</b>	<b>Replaced sensor that reported errant obs.</b>
	<b>Resolved</b>	<b>OKCE</b>	<b>26634</b>	<b>Tightened wire that caused errant obs.</b>
	<b>Resolved</b>	<b>OKMU</b>	<b>26576</b>	<b>Replaced damaged barometer tubing that caused moisture bias.</b>
<b>SRAD</b>	<b>Resolved</b>	<b>BEAV</b>	<b>26676</b>	<b>Replaced dirty sensor.</b>
	<b>Current</b>	<b>GOOD</b>	<b>26742</b>	<b>Suspect dirty sensor.</b>

<b>RAIN</b>				
<b>TA9M</b>	<b>Current</b>	<b>NEWK</b>	<b>26682</b>	<b>Sensor errantly reports large negative values.</b>
	<b>Current</b>	<b>CHIC</b>	<b>26741</b>	<b>A bias is forming and is 3-5 degrees cooler than TAIR during afternoon and early evening hours.</b>
<b>WS2M</b>				
<b>TB10</b>				
<b>TS05</b>	<b>Resolved</b>	<b>DURA</b>	<b>26204</b>	<b>Ticket errantly closed. Reissued as #26689.</b>
	<b>Resolved</b>	<b>WEAT</b>	<b>26205</b>	<b>Replaced sensor that was at incorrect depth.</b>
	<b>Current</b>	<b>PORT</b>	<b>26359</b>	<b>Suspect sensor at incorrect depth.</b>
	<b>Current</b>	<b>STUA</b>	<b>26360</b>	<b>Suspect sensor at incorrect depth.</b>
	<b>Current</b>	<b>VINI</b>	<b>26361</b>	<b>Suspect sensor at incorrect depth.</b>
	<b>Current</b>	<b>DURA</b>	<b>26689</b>	<b>Suspect sensor at incorrect depth.</b>
<b>TS10</b>				
<b>TS25</b>				
<b>TS60</b>				
<b>TR05</b>				
<b>TR25</b>				

TR60				
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**ARS Little Washita Watershed QA Report**

Variable	Status	Site	Ticket	Remarks
RAIN	Resolved	A234	26573	Replaced rain gauge that under reported.
	Current	A234	26680	Gauge missed precipitation event.
VW05				
VW25	Resolved	A234	26520	Replaced sensor that reported errant spikes.
VW45				
V05T				
V25T				
V45T				

**ARS Fort Cobb Watershed QA Report**

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05	Resolved	F108	26679	Replaced sensor that reported errant spikes.

<b>VW25</b>	<b>Resolved</b>	<b>F109</b>	<b>26681</b>	<b>Replaced sensor that reported errant spikes.</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