

**OKLAHOMA MESONET / ARS  
QUALITY ASSURANCE REPORT**

September 2014

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

Mesonet technicians completed scheduled rotations of 10 batteries (BATV), 5 barometers (PRES), 6 relative humidity sensors (RELH), 3 pyranometers (SRAD), 4 fasttherms (TAIR/TA9M), 4 wind monitor directions (WDIR), 2 wind sentries (WS2M), and 2 wind monitor nose cones (WSPD)

**Mesonet QA Report for Standard Variables**

<b>Variable</b>	<b>Status</b>	<b>Site</b>	<b>Ticket</b>	<b>Remarks</b>
TAIR	Resolved	ARD2	27223	Replaced sensor that sometimes had low bias.
RELH	Resolved	BUFF	27320	Replaced sensor that had low bias.
WSPD	Current	WAUR	27327	Wind speed errantly reports values near zero.
WDIR				
PRES				
SRAD				
RAIN	Resolved	HECT	27242	Replaced rain guage that missed rain event.
	Resolved	OKEM	27317	Unclogged rain gauge.
	Current	NINN	27326	Rain gauge missed rain event.

<b>TA9M</b>				
<b>WS2M</b>				
<b>TB10</b>				
<b>TS05</b>	<b>Current</b>	<b>FAIR</b>	<b>27324</b>	<b>TS05 has less diurnal variation than TS10.</b>
<b>TS10</b>				
<b>TS25</b>				
<b>TS60</b>				
<b>TR05</b>				
<b>TRB10</b>	<b>Resolved</b>	<b>SPEN</b>	<b>27227</b>	<b>Replaced sensor that reported -7999.</b>
	<b>Current</b>	<b>MCAL</b>	<b>27323</b>	<b>Sensor reports errant spikes after rain events.</b>
<b>TRS10</b>	<b>Resolved</b>	<b>APAC</b>	<b>27213</b>	<b>Replaced sensor that stopped heating.</b>
<b>TR25</b>	<b>Resolved</b>	<b>SHAW</b>	<b>27240</b>	<b>Replaced sensor that stopped heating.</b>
<b>TR60</b>				

### ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN	Resolved	A136	27266	Cut tall vegetation that blocked rain gauge.
	Resolved	A235	27265	Unclogged rain gauge.
VW05	Resolved	A159	27241	Replaced sensor that reported errant decrease.
VW25				
VW45				
V05T				
V25T				
V45T				

### ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05				
VW25				
VW45				

<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
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