

# OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

March 2013

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- Mesonet technicians performed scheduled rotations of 6 Barometers (PRES), 12 Batteries (BVAS), 13 Current Excitations (XXXX), 7 Fasttherms (TAIR), 5 Pyranometers (SRAD), 4 Rain Gauges (RAIN), 6 Temperature and Relative Humidity sensors (RELH), 2 Wind Monitor Nose Cones (WSPD) and 7 Windsentries (WS2M).
- Multiplexer at Altus (ALTU) site caused errant spikes in soil moisture from 7 February 2013 to 18 March 2013, appropriate data flagged as erroneous.
- Data logger at Little Washita ARS site A250 was causing errant spikes in soil temperature data from 21 November 2011 to 7 March 2013, appropriate data flagged as erroneous.
- Multiplexer at Marshall (MRSH) site causing errant spikes in soil temperature data beginning 14 March 2013, appropriate data flagged as erroneous.

## Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
<b>TAIR</b>				
<b>RELH</b>	Current	24396	OKCW	Sensor has a low bias during high humidity
	Current	24654	ARD2	Sensor has a low bias during high humidity
<b>WSPD</b>	Resolved	24592	MEDI	Errant spikes maximum wind speed
<b>WDIR</b>				
<b>PRES</b>	Resolved	24607	COOK	Pressure had a low bias
<b>SRAD</b>	Resolved	24645	ADAX	Pyranometer reported errant values
	Resolved	24648	BRIS	Sensor had a low bias due to bird droppings
	Current	24651	RING	Sensor reports slightly negative values overnight

<b>RAIN</b>				
<b>TA9M</b>				
<b>WS2M</b>	Current	24656	HOLL	Sensor has a starting threshold problem
<b>TS10</b>	Resolved	24275	FTCB	Sensor reported errant spikes in data
<b>TB10</b>	Resolved	24599	BLAC	Bare plot was too shallow, plot corrected
	Resolved	24616	HOOK	Bare plot covered by tumbleweeds
	Resolved	24617	MANG	Bare plot sensors were too shallow
	Resolved	24550	INOL	Sensor reported errant spikes in temperature
	Resolved	24552	NOWA	Sensor had a low bias
	Resolved	24568	ADAX	Sensor reported errant spikes in data
	Resolved	24570	WEBR	Sensor had a low bias
	Current	24576	STIG	Bare plot has large diurnal cycle
	Current	24595	WILB	Sensor reports errant spikes in temperature
	Current	24638	GUTH	Sensor reports large negative values
	Current	24551	CLRM	Sensor has a low bias
	Current	24575	PAWN	Bare plot has large diurnal cycle
<b>TS05</b>	Resolved	24264	PORT	Sensor had a low bias
	Resolved	24554	SALL	Sensor reported large negative values
	Current	24579	GRA2	Sensor has a low bias
<b>TB05</b>	Resolved	24601	BURB	Sensor had a low bias
	Resolved	24630	MANG	Sensor was 2cm too shallow
	Resolved	24191	TAHL	Sensor had a low bias
	Resolved	24562	MINC	Sensor reported errant spikes in temperature
	Resolved	24569	PAUL	Sensor reported errant spikes in temperature
	Current	24655	FTCB	Sensor reports errant spikes in temperature
	Current	24658	NEWK	Sensor reports errant decreases in temperature
	Current	24189	TALI	Sensor has a low bias

<b>TS30</b>	Resolved	24578	PORT	Sensor had a low bias
	Resolved	24596	KIN2	Sensor reported errant spikes in data
	Current	24577	MAYR	Sensor has a low bias
	Current	24593	KETC	Sensor reports errant spikes in data
	Current	24652	STUA	Sensor reports errant spikes in data after rainfall
	Current	24659	ALV2	Sensor has a low bias
	Current	24567	PERK	Sensor reports errant spikes in temperature
<b>TR05</b>	Resolved	24618	BYAR	Sensor reported errant values
<b>TR25</b>				
<b>TR60</b>				

### ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
<b>RAIN</b>				
<b>VW05</b>				
<b>VW25</b>				
<b>VW45</b>	Current	24632	A253	Volumetric water stepped down to 0
	Current	24657	A262	Volumetric water stuck at 0.4
<b>V05T</b>	Resolved	24572	A136	Errant spikes in soil temperature data
<b>V25T</b>	Resolved	24598	A154	Sensor had a low bias
<b>V45T</b>				

## ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

“Current” tickets are the unresolved tickets as of the last day of the month OR those tickets added based on the Monthly QA analysis.

“Resolved” tickets are the sensor problems that were 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
TS10	Soil temperature measured at 10 cm under native sod
TB10	Soil temperature measured at 10 cm under bare soil
TS05	Soil temperature measured at 5 cm under native sod
TB05	Soil temperature measured at 5 cm under bare soil
TS15	Soil temperature measured at 15 cm under native sod
TS30	Soil temperature measured at 30 cm under native sod
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 5 cm under native sod
V25T	Soil Temperature measured at 25cm under native sod
V45T	Soil Temperature measured at 45cm under native sod