

# OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

May 2013

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- Mesonet technicians performed scheduled rotations of 2 barometers (PRES), 4 Batteries (BVAS), 9 Current Excitation (XXXX), 6 Fasttherms (TAIR), 2 Pyranometers (SRAD), 3 Rain Gauges (RAIN), 4 temperature and relative humidity sensors (RELH), 13 Wind Monitors (WDIR), 3 Wind Monitor Nose Cones (WSPD), and 2 Windsentries (WS2M).
- Solar Panel at Haskell (HASK) site was stolen causing battery not to charge from 25-April-2013 to 6-May-2013, no data was impacted.
- Multiplexer at Ada (ADAX) site caused errant spikes in bare temperature at 10cm (TB10) after rainfall from 01-May-2013 to 30-May-2013, appropriate data flagged as erroneous.
- Multiplexer at Marshall (MRSH) caused errant spikes in soil temperature data from 14-March-2013 to 30-May-2013, appropriate data flagged as erroneous.
- Multiplexer at Breckinridge (BREC) causing errant spikes in soil temperature data beginning 21-April-2013, appropriate data flagged as erroneous.
- Multiplexer at Wister (WIST) causing errant spikes in soil temperature data beginning 26-May-2013, appropriate data flagged as erroneous.

## Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	Resolved	HOLL	24699	Hail damaged radiation shield caused high bias
	Resolved	OKCE	24760	Sensor reported errant spikes in data
RELH	Resolved	HOLL	24702	Sensor had low bias during high humidity
	Resolved	TAHL	24705	Sensor had low bias during high humidity
WSPD				
WDIR				
PRES				
SRAD				

<b>RAIN</b>	Resolved	BROK	24741	Rain Gauge under reported rainfall
	Resolved	ELRE	24713	Rain gauge knocked out by large hail
	Resolved	TISH	24755	Spider web caused gauge to miss rain event
	Resolved	WATO	24714	Rain gauge missed rain event
<b>TA9M</b>	Resolved	EUFA	24700	Sensor had a high bias during daytime
<b>WS2M</b>				
<b>TS10</b>	Resolved	CAMA	24709	Sensor had a low bias
	Current	CHAN	24750	Sensor has a low bias
	Current	WEST	24770	Sensor reports errant spikes in data
<b>TB10</b>	Resolved	ADAX	24715	Sensor reported errant spikes in data
	Resolved	CLRM	24551	Sensor had a low bias
	Resolved	EUFA	24717	Sensor had a low bias
	Resolved	GUTH	24638	Sensor reported large negative values
	Resolved	IDAB	24706	Bare plot sensors 2cm too shallow
	Resolved	PAWN	24575	Bare plot had large diurnal cycle
	Current	BLAC	24716	Bare plot has large diurnal cycle
	Current	WIST	24747	Sensor reports errant spikes in data
	Current	FORA	24772	Sensor has a low bias
	Current	PRYO	24773	Sensor has a low bias
	Current	NEWK	24775	Sensor has high bias
<b>TS05</b>				
<b>TB05</b>	Resolved	CLRM	24696	Sensor had low bias
	Resolved	PAWN	24707	Sensor removed
	Current	NEWK	24658	Sensor reports erroneous decreases in data
	Current	GOOD	24718	Sensor has a low bias

<b>TS30</b>	Resolved	KETC	24593	Sensor reported errant spikes in data
	Resolved	STUA	24652	Errant spikes in data after rainfall
	Current	MAYR	24577	Sensor has a low bias
	Current	ALV2	24659	Sensor has a low bias
<b>TR05</b>	Current	MCAL	24749	Sensor reports erroneous decreases in data
<b>TR25</b>	Resolved	DURA	24746	Sensor reported errant spikes in data
<b>TR60</b>				

### ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
<b>RAIN</b>				
<b>VW05</b>				
<b>VW25</b>				
<b>VW45</b>				
<b>V05T</b>				
<b>V25T</b>				
<b>V45T</b>				

## ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	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