

# OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

September 2011

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- Mesonet technicians performed scheduled rotations of 2 Barometers (PRES), 1 Battery (BATV), 7 Data Loggers (LOGG), 2 Soil temperature sensors, 4 Temperature and Relative Humidity Sensors (RELH), and 1 Windsentry (WS2M).
- Summer Pass 2011 ended on 30 September 2011, results are available online at:
  - [http://www.mesonet.org/index.php/site\\_passes](http://www.mesonet.org/index.php/site_passes)

## Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
<b>TAIR</b>				
<b>RELH</b>	Resolved	21772	MTHE	Sensor had a low bias during high humidity
	Resolved	21773	BUFF	Sensor had a low bias during high humidity
<b>WSPD</b>				
<b>WDIR</b>	Resolved	21766	PERK	Sensor reported incorrect wind direction
<b>PRES</b>	Resolved	21799	MEDI	Barometer stuck at one value
	Resolved	21768	MIAM	Reported erroneous spikes in data
<b>SRAD</b>	Resolved	21713	BOWL	Sensor had a low bias
<b>RAIN</b>				
<b>TA9M</b>	Current	22291	WIST	Sensor has a high bias

<b>WS2M</b>	Current	22287	HASK	Sensor has a starting threshold problem
	Current	22289	JAYX	Sensor has a starting threshold problem
<b>TS10</b>	Resolved	21783	BURN	Sensor had a bias
	Resolved	21742	RING	Sensor had a low bias
	Current	22293	GRA2	Sensor has a low bias
<b>TB10</b>	Resolved	21595	HOBA	Sensor had a low bias
	Resolved	21733	ELRE	Bare plot data had a large diurnal cycle
	Resolved	21743	RING	Sensor had a low bias
	Current	21785	BUTL	Sensor has a low bias
<b>TS05</b>	Resolved	21763	BLAC	Sensor had a low bias
	Resolved	21765	WILB	Sensor had a low bias
	Resolved	21735	RING	Sensor had a low bias
	Current	22292	BROK	Sensor has a low bias
	Current	22295	FREE	Sensor has a low bias
	Current	21808	GRA2	Sensor has a low bias
	Current	21620	ALV2	Sensor has a low bias
<b>TB05</b>	Resolved	21776	RING	Sensor had a bias
	Resolved	21704	CHAN	Bare plot sensors not at correct depth
	Current	21764	CHER	Sensor has a low bias
	Current	22290	OKCN	Bare plot sensors have large diurnal cycle
	Current	22294	CAMA	Sensor has a low bias
	Current	21806	COPA	Sensor has a low bias
<b>TS30</b>	Resolved	21777	RING	Sensor damaged
	Resolved	21780	ELRE	Sensor reported erroneous spikes
	Resolved	21784	BURN	Sensor had a bias
	Current	21809	GRA2	Sensor reports erroneous spikes in data

<b>TR05</b>	Resolved	21781	GOOD	Sensor not heating
	Resolved	21724	REDR	Sensor damaged by lightning
	Current	21770	BESS	Sensor reporting errant values
	Current	21782	SPEN	Sensor reporting errant spikes in data
	Current	21786	BLAC	Sensor does not react to rainfall
	Current	21906	HOLD	Sensor does not react to rainfall
	Current	21717	BEAV	Sensor reporting large diurnal cycle in data
<b>TR25</b>				
<b>TR60</b>	Current	21607	DURA	Sensor reporting errant values
	Current	21725	REDR	Sensor reporting errant values after lightning

### ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
<b>RAIN</b>				
<b>VW05</b>				
<b>VW25</b>	Resolved	21762	A152	Soil moisture moistens without rainfall
<b>VW45</b>				
<b>V05T</b>				
<b>V25T</b>				
<b>V45T</b>				

## ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
<b>RAIN</b>	Resolved	21801	F109	Sensor under reported rainfall
<b>VW05</b>				
<b>VW25</b>	Current	22286	F115	Sensor reporting errant spikes in data
	Resolved	21761	F105	Erroneous spikes in data
<b>VW45</b>	Resolved	21672	F114	Erroneous spikes in data
<b>V05T</b>				
<b>V25T</b>				
<b>V45T</b>				

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