

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

April 2013

Prepared by [Alexandria McCombs](#)
gamgr@mesonet.org

- Mesonet technicians performed scheduled rotations of 2 barometers (PRES), 8 batteries (BATV), 5 current excitation (XXXX), 7 fasttherms (TAIR), 4 pyranometers (SRAD), 3 rain gauges (RAIN), 2 soil temperature sensors, 5 temperature and relative humidity sensors (RELH), 5 wind monitor nose cones (WSPD) and 1 wind sentry (WS2M).
- Datalogger (LOGG) at Porter (PORT) site was replaced on 18 April 2013 due to lightning strike.
- Multiplexer at Marshall (MRSH) site caused errant spikes in soil temperature sensors from 14 March 2013 – 12 April 2013, appropriate data flagged as erroneous.
- Radio at Fort Cobb (FTCB) site caused communication problems during evening and overnight hours, equipment replaced on 22 April 2013.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Current	24699	HOLL	Sensor had high bias during daytime after hail
RELH	Resolved	24396	OKCW	Sensor had low bias during high humidity
	Resolved	24654	ARD2	Sensor had low bias during high humidity
	Current	24702	HOLL	Sensor has low bias during high humidity
	Current	24705	TAHL	Sensor has low bias during high humidity
WSPD	Resolved	24694	HOLL	Sensor damaged by hail
WDIR				
PRES				
SRAD	Resolved	24651	RING	Sensor reported negative values overnight
RAIN				
TA9M	Current	24700	EUFA	Sensor had high bias during daytime

WS2M	Resolved	24656	HOLL	Sensor had starting threshold problem after hail
TS10	Resolved	24682	PORT	Sensor had a low bias after lightning strike
	Current	24709	CAMA	Sensor has a low bias
TB10	Resolved	24595	WILB	Sensor reported errant spikes in temperature
	Resolved	24673	ADAX	Sinkhole cause large diurnal cycle
	Resolved	24681	PORT	Sensor had a low bias after lightning strike
	Resolved	24638	GUTH	Sensor reported large negative values
	Resolved	24551	CLRM	Sensor had a low bias
	Current	24706	IDAB	Bare plot has large diurnal cycle
TS05	Resolved	24683	PORT	Sensor had low bias after lightning strike
TB05	Resolved	24655	FTCB	Sensor reported errant spikes after rainfall
	Current	24658	NEWK	Sensor reported errant decreases in data
	Current	23189	TALI	Sensor has low bias
TS30	Resolved	24567	PERK	Sensor reported errant spikes in data
	Resolved	24652	STUA	Sensor reported errant spikes in data
	Current	24577	MAYR	Sensor has a low bias
	Current	24593	KETC	Sensor reports errant spikes in data
	Current	24659	ALV2	Sensor has a low bias
TR05				
TR25	Resolved	24675	PORT	Sensor damaged during lightning strike
TR60	Resolved	24676	PORT	Sensor damaged during lightning strike

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25				
VW45	Resolved	24632	A253	Sensor reported 0 volumetric water
	Resolved	24657	A262	Sensor stuck at 0.4 volumetric water
V05T				
V25T				
V45T				

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