

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

November 2012

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- Mesonet technicians performed scheduled rotations of 1 barometer (PRES), 1 batteries (BATV, BVAS), 3 fasttherms (TAIR), 3 pyranometers (SRAD), 1 raingauge (RAIN), 3 temperature and relative humidity sensors (RELH), 8 wind monitors (WDIR), 4 wind monitor nose cones (WSPD) and 5 windsentries (WS2M).
- Current excitation at Haskell (HASK) site malfunctioned causing 60cm soil moisture to report errant values from 13 November 2012 to 15 November 2012, appropriate data flagged as erroneous.
- The multiplexer at the Burneyville (BURN) site caused soil temperature data to report errant spikes in data from 13 September 2012 to 28 November 2012, appropriate data flagged as erroneous.
- The multiplexer at Altus (ALTU) site is causing spikes in all soil temperature data starting 11 November 2012, appropriate data flagged as erroneous.
- The Vanoss (VANO) site was decommissioned on 1 November 2012.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR				
RELH	Resolved	SPEN	23513	Sensor had a low bias during high humidity
WSPD				
WDIR				
PRES	Resolved	NRMN	23945	Pressure deviates from neighbors
	Resolved	OKMU	24206	Pressure deviates from neighbors
SRAD				
RAIN	Resolved	TISH	24195	Spider web caused gauge to miss rain event
TA9M	Resolved	NEWK	23935	Reported large negative values for temperature
WS2M				

TS10	Resolved	WYNO	24193	Sensor had a low bias
	Resolved	MADI	24205	Sensor had a low bias
	Resolved	CLRM	24220	Sensor had a bias
TB10	Resolved	MAYR	23787	Sensor at incorrect depth
	Current	WIST	24263	Sensor has a low bias
TS05	Resolved	SALL	23933	Sensor had a low bias
	Resolved	MADI	24192	Sensor had a low bias
	Resolved	CLRM	24213	Sensor had a low bias
	Current	WYNO	24219	Sensor has a low bias
	Current	PORT	24264	Sensor has a low bias
TB05	Resolved	WOOD	23912	Sensor had a low bias, sensor removed
	Resolved	FOR A	23913	Sensor had a low bias, sensor removed
	Resolved	ALTU	24215	Erroneous increases and decreases in data
	Resolved	SLAP	24222	Sensor had a low bias
	Resolved	MAYR	24227	Sensor was at incorrect depth
	Current	TALI	24189	Sensor has a low bias
	Current	TAHL	24191	Sensor has a low bias
	Current	GUTH	24269	Sensor has a low bias
TS30	Resolved	OKMU	23914	Sensor had a low bias
	Resolved	SALL	24209	Sensor damaged by lightning
TR05	Resolved	BRIS	24120	Sensor reported errant values
	Resolved	CENT	23941	Sensor reported errant values
TR25				
TR60				

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05	Resolved	A152	23902	Soil moisture decreased after rainfall
	Resolved	A253	23907	Spikes in soil temperature and moisture
VW25				
VW45	Resolved	A253	24194	Erroneous spikes in data
	Resolved	A256	24212	Erroneous spikes in data
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN	Resolved	F104	24196	Rain gauge missed rain event
VW05	Resolved	F111	24188	Erroneous spikes in soil moisture data
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