

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

June 2013

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- Mesonet technicians performed scheduled rotations of 2 barometers (PRES), 4 batteries (BVAS), 10 current excitations (XXXX), 3 fasttherms (TAIR), 4 pyranometers (SRAD), 4 rain gauges (RAIN), 6 temperature and relative humidity sensors (RELH), 4 windmonitors (WDIR), 5 windmonitor nose cones (WSPD) and 1 windsentry (WS2M).
- The new Tulsa (TULN) site was installed on 25 June 2013.
- Radiation shield at May Ranch (MAYR) site was damaged by hail; radiation shield was replaced on 20 June 2013. Appropriate data flagged as erroneous.
- Current excitation at Durant (DURA) caused all soil moisture sensors to report erroneous values from 22 May 2013 to 3 June 2013, appropriate data flagged as erroneous.
- Current excitation at Marena (MARE) caused erroneous spikes in soil moisture values from 7 June 2013 to 18 June 2013, appropriate data flagged as erroneous.
- Multiplexer at Breckinridge (BREC) site caused erroneous spikes in all soil temperature data from 21 April 2013 to 12 June 2013, appropriate data flagged as erroneous.
- Multiplexer at Wister (WIST) caused erroneous spikes in soil temperature data from 26 May 2013 to 19 June 2013, appropriate data flagged as erroneous.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	Resolved	OKCE	24760	Sensor reported errant spikes in air temperature
	Resolved	BLAC	24801	Mice chewed through sensor cable
RELH	Resolved	ANT2	24756	Sensor has low bias during high humidity
	Current	TISH	25154	Sensor has a low bias during high humidity
WSPD	Resolved	MAYR	24796	Sensor damaged during hail storm
	Resolved	TISH	24810	Sensor reporting erroneous spikes during rain
WDIR	Resolved	TISH	25153	Wind monitor causing spikes in wind speed

PRES				
SRAD	Resolved	CHER	24771	Sensor reported 0 during clear sunny skies
RAIN	Resolved	BROK	24741	Rain gauge under reported rainfall
TA9M				
WS2M	Resolved	MAYR	24795	Sensor was damaged during hail storm
	Resolved	BLAC	24809	Cables damaged by mice
	Resolved	NOWA	24811	Sensor had a starting threshold problem
	Current	IDAB	25015	Sensor has a starting threshold problem
TS10	Resolved	CHAN	24750	Sensor had a low bias
	Current	WEST	24770	Sensor reporting errant spikes in data
TB10	Resolved	BLAC	24716	Bare plot had sink hold over sensors
	Resolved	WIST	24747	Sensor reported erroneous spikes in data
	Resolved	TISH	24806	Data had large diurnal cycle due to sink hole
	Current	FREE	25158	Sensor has a low bias
	Current	KIN2	25160	Sensor has a low bias
	Current	FOR A	24772	Sensor has a low bias
	Current	PYRO	24773	Sensor has a low bias
	Current	BIXB	24808	Bare plot has large diurnal cycle
TS05	Current	LANE	25148	Sensor has a low bias
	Current	COOK	25157	Sensor has a low bias
	Current	CHAN	24789	Sensor has a low bias
TB05	Resolved	NEWK	24658	Sensor reported erroneous decreases in data
	Current	LANE	25128	Sensor reporting is -273
	Current	GOOD	24718	Sensor has a low bias

TS30	Resolved	MAYR	24577	Sensor had a low bias
	Resolved	ALV2	24659	Sensor had a low bias
	Resolved	MEDI	24802	Sensor had a low bias
	Resolved	WASH	24803	Sensor had a low bias
	Current	HASK	24797	Sensor has a low bias
	Current	BEAV	24807	Sensor reporting errant spikes in data
TR05	Resolved	MCAL	24749	Sensor reported erroneous decreases in data
	Resolved	DURA	24762	Sensor damaged by rodents
	Resolved	ADAX	24779	Sensor reported erroneous spikes in data
TR25	Resolved	DURA	24746	Erroneous spikes in data
TR60	Resolved	HOLL	24747	Sensor no longer heating

ARS Fort Cobb Watershed QA Report

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

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