

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

June 2010

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- Mesonet technicians performed scheduled rotations of 3 Barometers (PRES), 2 temperature and relative humidity sensors (RELH), 1 pyranometer (SRAD) and 3 windsentries (WS2M).
- The Aspirator Fan at the Miami (MIAM) site affected air temperature data from 28 May - 1 June 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Wister (WIST) site affected air temperature data from 17 May - 2 June 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Burbank (BURB) site affected air temperature data from 11 June - 17 June 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the El Reno (ELRE) site affected air temperature data beginning 20 June 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Skiatook (SKIA) site affected air temperature data beginning 4 July 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Weatherford (WEAT) site affected air temperature data beginning 5 July 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Medford (MEDF) site affected air temperature data beginning 7 July 2010, appropriate data were flagged as errant.
- Blackwell (BLAC) Mesonet Site Tower fell over causing errant data for all variables measured at site except RAIN, Soil temperature and Soil Moisture from 25 June - 28 June 2010, appropriate data was flagged.
- A malfunctioning voltage regulator at Bessie (BESS) Mesonet Site caused 5min and 30 min data to not be collected from 19 May - 1 June 2010.
- ARS Watershed Site A153 remains down due to stolen solar panel.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH	Current	19928	EUFA	Sensor has a low bias during high humidity
WSPD	Current	19931	HOOK	Sensor developed a starting threshold problem

WDIR				
PRES	Current	19929	MTHE	Sensor has a high bias
SRAD	Resolved	19914	BLAC	Fallen Tower caused shift in data
RAIN	Current	19853	COOK	Rain gauge drip test low during season pass
TA9M				
WS2M	Resolved	19916	BLAC	Sensor underground after tower fell over
	Current	19932	CLRM	Sensor developed a starting threshold problem
TS10	Resolved	19843	WIST	Sensor develops a high bias after rainfall
	Resolved	19856	HOLL	Sensor had a low bias
	Resolved	19675	PUTN	Sensor had a low bias
	Resolved	19842	MCAL	Sensor had a high bias after rainfall
	Resolved	19904	HASK	Sensor had a high bias
TB10	Resolved	19862	EUFA	Bare plot 2cm too shallow
	Current	19913	PUTN	Sensor has developed a low bias
TS05	Resolved	19804	CLRM	Sensor was dug up by rodent
	Resolved	19788	HOLL	Sensor had a low bias
	Resolved	19736	PUTN	Sensor developed a high bias
	Resolved	19830	GRA2	Sensor reporting errant spikes in data
	Current	19893	TISH	Sensor has developed a low bias
	Current	19934	SHAW	Sensor has developed a high bias
TB05	Resolved	19801	HECT	Sensor was not at correct depth
	Resolved	19863	INOL	Sensor had high bias after rainfall
	Current	19845	SLAP	Sensor develops a high bias after rainfall

TS30	Resolved	19846	CHAN	Sensor developed a high bias
	Resolved	19799	MCAL	Sensor had a low bias
	Resolved	19811	GRA2	Sensor reports errant spikes in data
	Current	19918	KETC	Sensor reporting errant spikes in data
	Current	19925	ALV2	Sensor has a high bias after rainfall
TR05	Current	19902	TIPT	Reporting errant values
TR25	Current	19852	WATO	Reporting errant values
TR60	Current	19905	NRMN	Sensor stopped heating
TR75				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19140	A162	Rain gauge missed rain event
VW05				
VW25	Current	19917	A152	Reporting errant increases in soil moisture
VW45	Current	19854	A146	VW45 and V45T reporting errant data
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19924	F109	Rain gauge stopped recording rainfall
VW05				
VW25				
VW45	Current	19850	F103	Soil moisture reporting errant spikes in data
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
TR75	Soil moisture: Calibrated DeltaT measured at 75 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

