

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

May 2011

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- Mesonet technicians performed scheduled rotations of 12 Barometers (PRES), 31 Batteries (BATV), 8 Data Loggers (LOGG), 2 Pyranometers (SRAD), 1 Soil Temperature Thermistor (TS05), 9 Temperature and Relative Humidity Sensors (RELH), and 3 Wind sentries (WS2M).
- The Aspirator Fan at the Tipton (TIPT) site affected air temperature data from 18 May 2011 – 27 May 2011; appropriate data were flagged as errant.
- The Aspirator Fan at El Reno (ELRE) site affected air temperature data from 24 May 2011 – 25 May 2011; appropriate data were flagged as errant.
- The Altus (ALTU) site was struck by lightning causing data to be missing from 20 May 2011 – 23 May 2011.
- The Sallisaw (SALL) site was struck by lightning causing data to be missing from 24 May 2011 – 25 May 2011.
- The data logger at Claremore (CLRM) stopped collecting observations causing data to be missing 23 May 2011 – 24 May 2011.
- Failing battery at ARS Fort Cobb Micronet Site F106 caused missing observations from 19 May 2011 – 25 May 2011.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH	Current	21589	KENT	Sensor has a low bias during high humidity
	Current	21591	BURB	Sensor has a low bias during high humidity
	Current	21592	OKCW	Sensor has a low bias during high humidity
WSPD				
WDIR				
PRES	Resolved	21545	SALL	Barometer was stuck at constant value
	Resolved	21580	TIPT	Barometer had a loose wire causing errant values
	Resolved	20850	ALTU	Barometer reporting errors 30% of the day

SRAD				
RAIN	Resolved	21544	HECT	Rain gauge missed rain event
TA9M				
WS2M				
TS10				
TB10	Current	21593	WEAT	Bare plot has a muted diurnal cycle
	Current	21594	KIN2	Bare plot has a large diurnal cycle
	Current	21595	HOBA	Sensor has a low bias
TS05	Current	21582	INOL	Sensor has a high bias
TB05				
TS30	Current	21584	BUTL	Sensor has a low bias
TR05				
TR25	Current	21562	ALTU	Lightning strike caused sensor to fail
TR60	Current	21563	ALTU	Lightning strike caused sensor to fail
	Current	21578	SALL	Lightning strike caused sensor to fail
TR75				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Resolved	21527	A124	Rain gauge clogged by spider web
	Resolved	21528	A282	Rain gauge clogged by spider web
	Resolved	21529	A253	Rain gauge clogged by spider web
	Resolved	21550	A262	Rain gauge clogged by spider web
VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25				
VW45	Current	21588	F109	Erroneous 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