

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

November 2010

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- Mesonet technicians performed scheduled rotations of 15 aspirator fans, 7 barometers (PRES), 11 dataloggers (LOGG), 11 fasttherms (TA9M), 1 pyranometer (SRAD), 10 temperature and relative humidity sensors (RELH), 6 wind monitors (WSPD), and 20 windsentries (WS2M).
- The multiplexer at the Fort Cobb (FTCB) Mesonet Site caused errant spikes in soil moisture and soil temperature data from 10 October 2010 – 3 November 2010, appropriate data was flagged as erroneous.
- The datalogger at ARS Watershed Site F102 caused errant spikes in soil moisture and soil temperature data from 28 October 2010 – 19 November 2010, appropriate data was flagged as erroneous.
- ARS Watershed Sites A135, A153 and A162 were decommissioned during November 2010.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH	Resolved	20320	BRIS	Sensor had a low bias
	Resolved	20349	JAYX	Sensor had a low bias during high humidity
	Current	20533	COPA	Sensor has a low bias during high humidity
	Current	20534	GRA2	Sensor has a low bias during high humidity
WSPD	Resolved	20389	FOR A	Sensor had a starting threshold problem
WDIR				
PRES				
SRAD				
RAIN				
TA9M				

WS2M				
TS10	Resolved	20131	WEAT	Sensor had a low bias
TB10				
TS05	Resolved	20367	OKMU	No problem found with sensor, flags removed
	Resolved	19976	CHEY	Sensor had a low bias
	Resolved	20306	HOLL	Sensor had a high bias after rainfall
	Current	20366	MIAM	Sensor has a low bias
	Current	20391	BUTL	Sensor has a low bias
	Current	20535	BEAV	Sensor has a low bias
TB05	Resolved	20113	SHAW	Sensor had a 2 deg C low bias
TS30	Resolved	20115	HOLD	Sensor had a high bias after rainfall
	Resolved	20348	EUFA	Sensor had a low bias
	Current	20479	SEIL	Sensor has a low bias
	Current	20480	HINT	Sensor has a low bias
	Current	20536	ARNE	Sensor reports errant spikes in data
TR05				
TR25	Resolved	20171	BESS	Sensor reported errant values for soil moisture
TR60				
TR75				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19140	A162	Rain gauge missed rain event
VW05	Resolved	20078	A182	Voltages reported large negative values
VW25	Resolved	20347	A133	Sensor reporting errant spike in soil moisture
VW45	Resolved	20089	A144	Sensor reported errant spikes in soil moisture
	Resolved	20134	A159	Reported errant fluctuations in soil moisture
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05	Resolved	20116	F112	Errant spikes in voltages for soil moisture and temperature
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
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