

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

January 2012

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- Mesonet technicians performed scheduled rotations of 2 dataloggers (LOGG), 4 Fasttherms (TAIR), 3 pyranometers (SRAD), 1 raingauges (RAIN), 2 soil temperature thermistors, 5 temperature and relative humidity sensors (RELH), 1 wind monitor nose cone (WSPD) and 2 windsentries (WS2M).
- Battery and Current Excitation at Walters (WALT) Mesonet Site caused site to longer report 5 minute and 30 minute data from 1 February 2012 to 02 February 2012, all data was flagged as erroneous.
- Datalogger caused errant spikes in soil moisture data at the Hobart (HOBA) Mesonet site from 21 November 2012 to 9 January 2012, soil moisture data flagged as erroneous.
- Multiplexer at Altus (ALTU) Mesonet site caused errant spikes in soil temperature and soil moisture data from 12 October 2011 to 23 January 2012, appropriate data flagged as erroneous.
- The datalogger at Fort Cobb ARS station F102 caused errant spikes in soil moisture and soil temperature data from 21 December 2011 to 9 January 2012, data flagged as erroneous.
- Spring Pass 2012 began on 1 January 2012.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Current	22773	FAIR	Sensor has a low bias
RELH	Current	22916	GRA2	Sensor reporting large negative values
WSPD	Resolved	22889	CARL	Sensor does not report 0 during light winds
WDIR				
PRES				
SRAD				
RAIN				

TA9M	Resolved	22446	WAUR	Sensor has a low bias after rainfall
WS2M	Resolved	22894	FITT	Sensor broken by technician
	Resolved	22919	CLRM	Sensor had starting threshold problem
	Resolved	22451	DURA	Sensor had starting threshold problem
	Current	22890	HOOK	Sensor has a starting threshold problem
TS10	Resolved	22452	SKIA	Sensor reporting errant spikes in data
TB10	Resolved	22457	CAMA	Sensor had a low bias
	Resolved	22887	HOLL	Sensor had a low bias
	Resolved	22459	FITT	Sensor had a low bias
	Current	22920	HOOK	Bare plot is muted compared to neighbors
TS05	Resolved	22436	APAC	Sensor had a low bias
	Resolved	22460	ERIC	Sensor had a low bias
	Current	22924	MRSB	Sensor has a low bias
TB05	Resolved	22294	CAMA	Sensor had a low bias
	Resolved	22345	ELRE	Sensor had a low bias
	Resolved	22433	WILB	Sensor had a low bias
	Resolved	22441	HOLL	Sensor had a low bias
	Current	22921	BLAC	Bare plot has a large diurnal cycle
	Current	22922	MAYR	Bare plot has a large diurnal cycle
	Current	22923	BUTL	Bare plot has a large diurnal cycle
TS30	Current	22458	WIST	Sensor reports errant spikes in data
TR05	Resolved	22886	SLAP	Sensor reporting errant values
	Current	22925	GRA2	Sensor reporting errant values
	Current	22455	NOWA	Sensor records noisy data

TR25	Resolved	22447	ALTU	Lightning strike caused sensor to fail
	Resolved	22456	MRSH	Sensor stuck at one value, sensor rewired
	Current	22915	GRA2	Sensor reporting errant values
TR60				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Resolved	22454	A131	Rain gauge under reported rainfall
VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	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