

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

September 2016

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- Mesonet technicians completed scheduled rotations of 4 dataloggers (LOGG), 1 barometer (PRES), 3 rain gauges (RAIN), 7 batteries (BATV), 6 humidity sensors (RELH), 1 pyranometer (SRAD), 3 thermometers (TAIR), 1 wind sentry (WS2M), and 5 wind monitor noses (WSPD).
- Battery problem at the Chickasha Mesonet Site (CHIC) caused the battery to drop below 12V at night.
- Battery problem at the Shawnee Mesonet Site (SHAW) caused the battery to drop below 12V at night.
- Current excitation problem at the Talihina Mesonet Site (TALI) caused soil moisture to have erroneous spikes in data. Data were flagged.
- Current excitation problem at the Fittstown Mesonet Site (FITT) caused soil moisture to have erroneous spikes in data. Data were flagged.
- Logger problem at the Haskell Mesonet Site (HASK) caused soil moisture and soil temperature to have erroneous spikes in data. Data were flagged.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	Resolved	PAWN	30929	Air temperature had a 4C high bias after the earthquake.
	Resolved	WASH	30944	Air temperature has a 0.6-1.0 high bias. Replaced.
	Resolved	WASH	30967	Air temperature has a high bias due to aspirator fan problem.
	Current	HOBA	31003	Air temperature stepped down to large negative values.
RELH				
WSPD				

WDIR				
PRES				
SRAD				
RAIN	Resolved	BYAR	30923	Primary gauge reports less than secondary gauge.
	Resolved	JAYX	30946	Primary gauge reports less than secondary gauge.
	Resolved	BIXB	30927	Secondary gauge sometimes does not report tips during light rain events.
	Resolved	BRIS	30926	Secondary gauge reports less than primary gauge.
	Resolved	MIAM	30947	Primary gauge reports less than secondary gauge.
	Resolved	PRYO	30964	Primary gauge reports less than secondary gauge.
	Resolved	STIL	30948	Primary gauge reports less than secondary gauge.
	Resolved	KIN2	30957	Secondary gauge reports less than primary gauge.
	Current	CARL	31013	Primary gauge reports less than secondary gauge.
	Current	ELRE	31006	Primary gauge reports less than secondary gauge.
	Current	REDR	31007	Secondary gauge reports less than primary gauge.
TA9M	Resolved	IDAB	30945	Air temperature at 9m has a 0.7C high bias.
WS2M				
TB10				
TS05	Resolved	HUGO	30852	Suspect sensor is at incorrect depth.
	Current	BIXB	30999	Suspect sensor is at incorrect depth.

TS10				
TS25				
TS60				
TR05	Current	ARD2	30969	Sensor is not moistening to rainfall.
	Current	WATO	30984	Sensor stopped heating.
TRB10	Resolved	ANT2	30866	Sensor stopped heating. Replaced.
	Resolved	VALL	30922	Sensor stopped heating. Replaced.
TRS10	Resolved	BIXB	30949	Sensor stopped heating. Replaced.
	Current	BURN	30968	Sensor's saturated values are drifting.
TR25	Resolved	APAC	30873	Sensor stopped heating. Replaced.
	Resolved	IDAB	30930	Sensor having a 6C high bias. Replaced.
	Resolved	WASH	30938	Sensor having a 20C high bias.
	Current	OKCE	30982	Sensor struck by lightning.
TR60	Resolved	GRA2	30970	Sensor's saturated values are drifting. Replaced.
	Current	BLAC	30990	Sensor stopped heating.

ARS Little Washita Watershed QA Report

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

ARS Fort Cobb Watershed QA Report

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

“Current” tickets are unresolved tickets as of the last day of the month OR tickets added after Monthly QA analysis.
 “Resolved” tickets are the sensor problems 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
TB10	Soil temperature measured at 10 cm under bare sod
TS05	Soil temperature measured at 5 cm under native soil
TS10	Soil temperature measured at 10 cm under native sod
TS25	Soil temperature measured at 25 cm under native soil
TS60	Soil temperature measured at 60 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 5cm under native sod
V25T	Soil Temperature measured at 25cm under native sod
V45T	Soil Temperature measured at 45cm under native sod