

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

February 2017

Prepared by Cindy Luttrell and Amanda Ilk
qamgr@mesonet.org

- Mesonet technicians completed scheduled rotations of 10 batteries (BATV), 15 dataloggers (LOGG), 15 humidity sensors (RELH), 5 pyranometers (SRAD), 6 thermometers (TAIR), 3 rain gauges (RAIN), 2 wind sentries (WS2M), and 4 wind noses (WSPD).
- Soil temperature at 5cm under sod at A154 Micronet Site has more diurnal variation than neighbors. Sensor has been reburied.
- Battery problem at the Porter Mesonet Site (PORT) caused the logger to stop taking 5 and 30 minute observations. Battery was replaced.
- Logger problem at the El Reno Mesonet Site (ELRE) caused the wind data to frequently report the wind speed as NAN at 10m and 2m along with 0 for wind direction. Data were flagged.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR				
RELH				
WSPD				
WDIR				
PRES				
SRAD	Current	BROK	31456	Solar radiation reports around a 9% low bias.
	Current	IDAB	31457	Solar radiation reports around a 7% low bias.

RAIN	Resolved	NINN	31428	Rain gauges stops reporting during storms.
	Current	ADAX	31427	Secondary gauge stopped reporting.
	Current	BRIS	31395	Secondary gauge reports less than primary gauge.
TA9M				
WS2M	Resolved	BESS	31472	2m reports 0 when 10m reports 4 m/s. Replaced.
	Resolved	FAIR	31411	2m reports 0 when 10m reports 4 m/s. Replaced.
TB10				
TS05				
TS10				
TS25				
TS60				
TR05	Current	NINN	31138	Final temperature increased from 15C to 28C.
TRB10	Current	ERIC	31421	Sensor reports -7999.
TRS10	Resolved	CENT	31376	Sensor reports -7999. Replaced.
	Current	CLAY	31417	10cm sod sensor wired into 25cm ports.
TR25				

TR60	Resolved	BEAV	31388	60cm reports -7999. Replaced.

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05	Resolved	A121	31402	Sensor does not react well to heavy rain events. Replaced.
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 soil
TS25	Soil temperature measured at 25 cm under native soil
TS60	Soil temperature measured at 60 cm under native soil
TR05	Soil moisture: Calibrated DeltaT measured at 5 cm under native soil
TR25	Soil moisture: Calibrated DeltaT measured at 25 cm under native soil
TR60	Soil moisture: Calibrated DeltaT measured at 60 cm under native soil
VW05	Soil moisture: Volumetric water content measured at 5 cm under native soil
VW25	Soil moisture: Volumetric water content measured at 25 cm under native soil
VW45	Soil moisture: Volumetric water content measured at 45 cm under native soil
V05T	Soil Temperature measured at 5cm under native soil
V25T	Soil Temperature measured at 25cm under native soil
V45T	Soil Temperature measured at 45cm under native soil