

**OKLAHOMA MESONET / ARS
QUALITY ASSURANCE REPORT**

July 2017

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- Mesonet technicians completed scheduled rotations of 2 barometers (PRES), 6 rain gauges (RAIN), 9 batteries (BATV/BVAS), 12 dataloggers (LOGG), 13 humidity sensors (RELH), 5 pyranometers (SRAD), 19 wind directions (WDIR), 7 fasttherm/PRT (TAIR), 5 wind sentries (WS2M), and 12 wind monitor noses (WSPD).
- Well sensor failure at the Fittstown Mesonet site (FITT) caused loss of wind data from July 4-11.
- Lightning strike at the Idabel Mesonet site (IDAB) caused data loss from July 5-7.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR				
RELH	Resolved	SULP	32786	Wasp nest on sensor. Replaced.
	Current	PUTN	32873	Humidity 0; temperature NAN.
WSPD				
WDIR	Resolved	FITT	32881	Wind direction 0. Replaced cable.
PRES				
SRAD				
RAIN	Resolved	COOK	32661	Missed rain events. Replaced damaged cable.
	Resolved	COOK	32680	Missed rain events. Replaced damaged cable.
	Resolved	WAUR	32659	Missed rain events. Replaced cable.
	Resolved	ACME	32655	Missed portion of rain event. Fixed unlevel top.
	Resolved	NEWP	32752	Gauge has high bias. Replaced.
	Current	WEBR	32882	Gauge misses rain events.

	Current	HASK	32670	Gauge has low bias.
TA9M				
WS2M				
TB10	Resolved	PAWN	31716	Less diurnal variation than expected. Reburied.
	Current	HINT	32854	Temperature 300-400C.
TS05	Current	OKEM	32666	Temperature between -7999 and 500C.
	Current	PERK	32734	Temperature around 300C.
	Current	TULN	31702	Similar diurnal variation as 10cm.
TS10				
TS25				
TS60				
TR05	Resolved	WIST	32693	Errant spikes in soil moisture. Replaced.
	Current	BURB	31888	Reports -7999.
	Current	CARL	32019	Slow response to moisture.
	Current	NINN	31138	Sensor heats much more than expected.
TRB10	Resolved	HECT	31796	Small errant spikes in data. Replaced.
	Resolved	IDAB	32737	Lightning strike. Replaced.
	Resolved	TALI	31943	Reports -7999. Replaced.
	Current	BUFF	32003	No heating.
	Current	CAMA	32879	Reports 500-600C.
	Current	NEWK	31997	Reports -7999.
TRS10	Resolved	IDAB	32742	Lightning strike. Replaced.
	Current	IDAB	32866	Reports -7999 after replacement.
TR25	Resolved	FAIR	31734	Out of calibration. Replace.
	Resolved	IDAB	32743	Lightning strike. Replaced.

TR60	Current	ELRE	32835	Errant spikes in data.
	Current	STUA	32850	No heating.

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05	Resolved	A262	31987	Low bias. Rewired.
VW25				
VW45				
V05T				
V25T				
V45T				

ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN	Current	F110	31761	Gauge has low bias.
VW05				
VW25				
VW45	Current	F114	32735	Voltages near zero.

V05T	
V25T	
V45T	

Current tickets: unresolved tickets at time report generated.

Resolved tickets: sensor problems resolved during report 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