

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

April 2012

Prepared by [Alexandria McCombs](#)
gamgr@mesonet.org

- Mesonet technicians performed scheduled rotations of 12 Aspirator Fans (FANS), 1 Barometer (PRES), 9 Batteries (BATV), 4 Fasttherms (TAIR), 7 Pyranometers (SRAD), 4 Raingauges (RAIN), 6 Temperature and Relative Humidity Sensors (RELH), 7 Wind Monitors (WDIR), 3 Wind Monitor Nose Cones (WSPD) and 2 Windsentries (WS2M).
- The current excitation at Fittstown (FITT) Mesonet site causing errant spikes in all soil moisture data from 30 March 2012 to 11 April 2012, appropriate data flagged as erroneous.
- The voltage regulator causing the Idabel (IDAB) Mesonet site to stop collecting data 20 November 2011 to 4 April 2012.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Resolved	23190	COOK	Sensor reported large negative values
RELH	Resolved	23207	BREC	Sensor had a low bias during high humidity
	Current	23278	VINI	Sensor has a low bias during high humidity
WSPD	Resolved	23221	EUFA	Sensor reports 0m/s when winds are > 0m/s
WDIR				
PRES				
SRAD	Resolved	23131	HOOK	Station buried by tumbleweeds causing shadow
	Resolved	23214	CHER	Sensor had a low bias compared to neighbors
	Resolved	23239	BOWL	Sensor dropped to near zero values during day
RAIN				
TA9M	Resolved	23084	HINT	Sensor has a low bias
	Resolved	23182	NEWK	Sensor reporting large negative values
	Resolved	23275	FTCB	Sensor reports negative temperature values

WS2M	Resolved	23132	HOOK	Tumbleweeds caused slow wind speeds
	Resolved	23215	BREC	Sensor has a starting threshold problem
TS10	Resolved	23104	ERIC	Sensor had a low bias
	Resolved	23227	TISH	Sensor had a low bias
	Current	23289	SLAP	Sensor reports errant spikes in data
TB10	Resolved	23092	WILB	Sensor had a low bias
	Current	23288	SLAP	Sensor reports errant spikes in data
	Current	23282	CHAN	Sensor has a low bias
TS05	Resolved	22462	CLOU	Sensor had a low bias
TB05	Resolved	23105	HOOK	Tumbleweeds buried bare plot
	Current	23281	FREE	Bare plot has a muted diurnal cycle
TS30	Resolved	23256	PAWN	Sensor had a low bias
TR05				
TR25				
TR60				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25				
VW45	Resolved	23194	A256	Volumetric water reported erroneous spikes
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05	Current	23271	F106	Volumetric water stuck at 0 after errant spike
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