

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

March 2012

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- Mesonet technicians performed scheduled rotations of 18 Aspirator Fans (FANS), 2 Barometers (PRES), 11 Batteries (BATV), 2 Dataloggers (LOGG), 7 Fasttherms (TAIR), 8 Pyranometers (SRAD), 4 Rain gauges (RAIN), 8 Temperature and Relative Humidity Sensors (RELH) and 7 Windsentries (WS2M).
- The multiplexer at Cheyenne (CHEY) Mesonet Site caused errant spikes in soil temperature data from 15 February 2012 to 26 March 2012, appropriate data flagged as erroneous.
- The voltage regulator at the Idabel (IDAB) Mesonet Site caused station to stop collecting data temporarily from 2 November 2011 to 4 April 2012.
- The voltage regulator at Claremore (CLRM) Mesonet Site caused station to stop collecting 5 minute and 30 minute data from 24 March 2012 to 29 March 2012.
- The current excitation at Fittstown (FITT) Mesonet Site is causing soil moisture sensor to report errant spikes in data beginning 30 March 2012, appropriate data flagged as erroneous.
- The Walters (WALT) Mesonet was moved on 13 March 2012 to another location in Walters (WAL2).

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Resolved	23190	COOK	Sensor damaged by animal
	Resolved	23121	COOK	Ground wire disconnected, causing bias
RELH	Resolved	22989	WEBR	Sensor had a low bias during high humidity
	Resolved	22988	ANT2	Sensor had a low bias during high humidity
	Current	23207	BREC	Sensor has a low bias during high humidity
WSPD	Resolved	23087	ELRE	Sensor reports one value during light winds
	Current	23221	EUFA	Sensor reports 0m/s for several hours
WDIR				
PRES				
SRAD	Resolved	23131	HOOK	Tumbleweeds casting shadow on pyranometer
	Current	23214	CHER	Sensor has a low bias compared to neighbors

RAIN				
TA9M	Current	23084	HINT	Sensor has a low bias
	Current	23182	NEWK	Sensor reports large negative values
WS2M	Resolved	23132	HOOK	Tumbleweeds caused wind speed to be low
	Resolved	22976	MINC	Sensor stuck at 0m/s
	Current	23215	BREC	Sensor has a starting threshold problem
TS10	Current	23104	ERIC	Sensor has a low bias
TB10	Resolved	22981	ELRE	Sensor reporting errant spikes in data
	Resolved	22944	GRA2	Reported errant spikes in data
	Current	23092	WILB	Sensor has a low bias
TS05	Resolved	22462	CLOU	Sensor had a low bias
	Resolved	22924	MRSB	Sensor had a low bias
TB05	Resolved	23105	HOOK	Bare plot covered by tumbleweeds
	Resolved	22996	MRSB	Bare plot at incorrect depth
	Resolved	23075	KIN2	Bare plot reporting large negative values
	Resolved	22922	MAYR	Bare plot had a large diurnal cycle
	Resolved	22991	WEAT	Bare plot at incorrect depth
	Resolved	22923	BUTL	Bare plot at incorrect depth
	Resolved	22921	BLAC	Bare plot had large diurnal cycle
TS30	Resolved	22970	CHEY	Sensor had a low bias
	Resolved	22969	MARE	Sensor had a low bias
TR05	Resolved	22455	NOWA	Soil moisture reporting errant increases
TR25				
TR60				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25				
VW45	Current	23194	A256	Volumetric water reports errant spikes
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