

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

February 2012

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- Mesonet technicians performed scheduled rotations of 9 fasttherms (TAIR), 1 Barometer (PRES), 9 pyranometers (SRAD), 2 rain gauges (RAIN), 2 soil temperature sensors, 6 temperature and relative humidity sensors (RELH), 3 wind monitors(WDIR), 1 wind monitor nose cone (WSPD) and 2 wind sentries (WS2M).
- Low battery voltages at Walters (WALT) Mesonet site caused site to no longer report 5 minute and 30 minute observations from 1 Feb 2012 to 2 Feb 2012.
- The multiplexer at Grandfield (GRA2) Mesonet site caused errant spikes in soil temperature data from 4 September 2011 to 9 February 2012, appropriate data flagged as erroneous.
- The multiplexer at Cheyenne (CHEY) Mesonet site is causing errant spikes in soil temperature data beginning 15 February 2012, appropriate data flagged as erroneous.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Resolved	22773	FAIR	Sensor had a low bias
RELH	Resolved	22916	GRA2	Sensor damaged by bovine
	Resolved	22988	ANT2	Sensor has a low bias during high humidity
	Current	22989	WEBR	Sensor has a low bias during high humidity
WSPD	Resolved	22889	CARL	Sensor never reported 0 m/s during calm wind
WDIR				
PRES				
SRAD	Resolved	22936	GRA2	Bovine chewed wires of sensor
RAIN				
TA9M				

WS2M	Resolved	22890	HOOK	Sensor had a starting threshold problem
	Resolved	22919	CLRM	Sensor had a starting threshold problem
TS10	Resolved	22938	GRA2	Sensor damaged by bovine
TB10	Resolved	22920	HOOK	Bare plot is muted due to tumble weeds
	Resolved	22944	GRA2	Loose wire caused errant values
	Current	22981	ELRE	Sensor reporting errant spikes in data
TS05	Resolved	22924	MRSB	Sensor had a low bias
	Resolved	22937	GRA2	Sensor reporting errant spikes in data
TB05	Resolved	22921	BLAC	Bare plot had large diurnal cycle
	Resolved	22923	BUTL	Bare plot has large diurnal cycle
	Resolved	22974	OILT	Sensor had a high bias
	Current	22922	MAYR	Bare plot has large diurnal cycle
	Current	22991	WEAT	Bare plot has large diurnal cycle
TS30	Resolved	22939	GRA2	Sensor reporting errant spikes in data
	Resolved	22458	WIST	Sensor reporting errant spikes in data
	Current	22969	MARE	Sensor has a low bias
	Current	22970	CHEY	Sensor has a low bias
TR05	Resolved	22925	GRA2	Sensor damaged by bovine
	Resolved	22455	NOWA	Sensor reported noisy soil moisture data
TR25	Resolved	22915	GRA2	Sensor damaged by bovine
TR60	Resolved	22940	GRA2	Sensor damaged by bovine

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25				
VW45				
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