

OKLAHOMA MESONET / ARS / OKCnet QUALITY ASSURANCE REPORT

May 2009

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- Mesonet technicians performed scheduled rotations of 5 rain gauges (RAIN), 13 pyranometers (SRAD), 12 temperature and relative humidity sensors (RELH), 9 wind monitor (WSPD) and 1 soil temperature sensor (TS05).
- Aspirator fan at Weatherford (WEAT) Mesonet site affected air temperature data from 28 April 2009 – 28 May 2009.
- The Holdenville (HOLD) Mesonet Site was installed on 28 May 2009 in Hughes County.
- A power problem at Lahoma (LAHO) Mesonet Site affected data during the evening hours from 2 May 2009 – 26 May 2009.
- The voltage regulator at the Cookson (COOK) Mesonet site was causing the battery not to fully charge during the daytime hours.
- A power problem at the Weatherford (WEAT) Mesonet site affected data during the evening hours beginning 24 May 2009.
- The solar panel at ARS Watershed Site A153 was stolen causing power problems beginning 14 April 2009.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Current	18795	KETC	Sensor has developed a high bias
RELH	Current	18796	COPA	Sensor has a low bias during high humidity
	Resolved	18683	GUTH	Sensor had a low bias during high humidity
	Resolved	18702	VINI	Sensor had a low bias
WSPD	Resolved	18694	ADAX	Sensor had a starting threshold problem
WDIR	Current	18742	FAIR	WDIR gets stuck at 359 degrees
PRES				
SRAD	Resolved	18690	BROK	Sensor reported 0 W/m ² during daytime
RAIN	Current	18817	MTHE	Rain gauge missed last rain event

TA9M	Current	18701	EUFA	Sensor has a low bias
WS2M	Current	18722	ANTL	Sensor developed a starting threshold problem
TS10				
TB10	Resolved	18799	CLRM	Sensor had a low bias
TS05	Resolved	18688	FTCB	Sensor had a 10 deg C low bias
	Resolved	18803	RING	Sensor had a 2 deg C low bias
TB05	Current	18714	BOIS	Bare plot may not be at correct depth
	Resolved	18682	CLRM	Sensor had a low bias
	Resolved	18618	GRA2	Bare plot 3cm too shallow
TS30	Current	18706	WYNO	Sensor has a low bias
	Current	18726	BEAV	Sensor has a low bias
	Current	18804	CHAN	Sensor has a low bias
	Current	18696	NEWK	Sensor has a low bias
	Resolved	18713	FTCB	Sensor had a low bias
	Resolved	18695	CLOU	Sensor had a low bias
	Resolved	18703	MANG	Sensor had a low bias
TR05	Resolved	18704	FITT	Animal exposed sensor
TR25				
TR60				
TR75				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05	Resolved	18680	A133	Reports 0 volumetric water at all times
VW25				
VW45	Resolved	18681	A132	Sensor reporting spikes in volumetric water
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25	Resolved	18708	F109	Failing sensor caused out of range data
VW45	Resolved	18661	F101	Failing sensor caused spikes and variable data
V05T	Current	18725	F114	Sensor has developed a low bias
V25T				
V45T				

Oklahoma City Micronet QA Report

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH				
PRES				
RAIN	Current	18736	KSE101	Sensor has a low bias compared to neighbors
WSPD				
WDIR				

“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
TR75	Soil moisture: Calibrated DeltaT measured at 75 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