

**OKLAHOMA MESONET / ARS / OKCnet
QUALITY ASSURANCE REPORT**

January 2010

Prepared by **Cindy Morgan** & **Alex McCombs**
gamgr@mesonet.org

- Heater temperature at OKCnet site KSW105 reports a constant value of 6.80C beginning 21 January 2010
- Battery at Hobart (HOBA) failed causing periods of lost data from 7 January 2010 - 11 January 2010.
- Malfunctioning solar panel at Talihina (TALI) caused battery not to charge during daytime hours from 13 January 2010 - 22 January 2010.
- Wiring problem caused maximum wind speed at Freedom (FREE) to constantly report 5.9m/s during sunny days starting on 28 July 2009; appropriate data have been flagged as erroneous.
- ARS Watershed Site A153 remains down due to stolen solar panel.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH	Resolved	19527	BIXB	Sensor had a low bias during high humidity
WSPD				
WDIR				
PRES	Resolved	19553	CENT	Barometer stuck at a value; sensor replaced
SRAD				
RAIN	Current	19571	ACME	Site did not record melt following winter storm
	Resolved	19550	ERIC	Rain gauge under-reported rainfall
TA9M				

WS2M	Current	19576	GRA2	Sensor has a starting threshold problem
	Resolved	19514	NINN	Sensor had a starting threshold problem
	Resolved	19517	ARD2	Sensor had a starting threshold problem
	Resolved	19549	REDR	Sensor had a starting threshold problem
	Resolved	19519	VANO	Sensor had a starting threshold problem
	Resolved	19515	INOL	Sensor had a starting threshold problem
	Resolved	19475	MTHE	Sensor had a starting threshold problem
TS10				
Current	19565	ELRE	TS10 warmer than other levels on warm days	
Resolved	19554	ELRE	Gopher hole dug around sod plot	
TB10				
Current	19560	WILB	Sensors have low bias due to lightning strike	
Current	19579	GUTH	Sensor has a high bias	
Resolved	19510	HOLD	Sensor had a low bias	
Resolved	19564	OKEM	Sensor exposed to air	
Resolved	19562	RETR	Sensor had a low bias	
TS05				
Current	19528	BEAV	Sensor has a low bias	
Current	19566	WEBR	TS05 reports errant data spikes	
Resolved	19511	ELRE	Gopher hole near sod plot	
TB05				
Current	19460	OILT	Sensor developed a low bias	
Current	19530	CHER	TB05 reports large negative numbers	
Current	19561	WILB	TB05 and TB10 have a low bias due to lightning	
Current	19563	CLRM	TB05 has large diurnal variation	
Current	19578	ARNE	Sensor has a low bias	
Resolved	19558	INOL	Sensor heaved causing temperature to be high	
Resolved	19552	HOLD	Sensor had a high bias when ground was moist	
Resolved	19559	OKEM	Sensor heaved causing TB05 to be exposed	

TS30	Current	19516	BREC	TS30 reports errant spikes in data
	Current	19529	TAHL	Sensor has a high bias
	Resolved	19555	ELRE	Gopher hole dug around sod plot
TR05	Resolved	19518	VANO	Animal chewed sensor cable
TR25				
TR60				
TR75				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19140	A162	Rain gauge under reporting rainfall
VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Resolved	19572	F114	Rain gauge underreported rainfall
	Resolved	19542	F106	Site did not report rainfall during rain event
VW05				
VW25	Resolved	19551	F112	Reported errant soil moisture data
VW45				
V05T				
V25T				
V45T				

Oklahoma City Micronet QA Report

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH				
PRES				
RAIN	Current	19574	KSW105	Impact plate did not record precipitation
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