

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

May 2010

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- Mesonet technicians performed scheduled rotations of 3 Barometers (PRES), 3 temperature and relative humidity sensors (RELH), and 2 windsentries (WS2M).
- The Aspirator Fan at the Vanoss (VANO) site affected air temperature data from 15 May - 18 May 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Marshall (MRSH) site affected air temperature data from 13 May - 18 May 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Madill (MADI) site affected air temperature data from 15 May - 18 May 2010, appropriate data were flagged as errant.
- The datalogger at Webbers Falls (WEBR) Mesonet Site is causing a 0.5 deg Celsius high bias in Air temperature at 1.5m (TAIR), Air Temperature at 9m (TA9M), and all soil temperature sensors (TB05, TB10, TS05, TS10, TS30) beginning 22 April - 11 May 2010, appropriate data has been flagged as erroneous.
- The Aspirator Fan at the Miami (MIAM) site affected air temperature data from 28 May - 1 June 2010, appropriate data were flagged as errant.
- The Aspirator Fan at the Wister (WIST) site affected air temperature data from 17 May - 2 June 2010, appropriate data were flagged as errant.
- A malfunctioning voltage regulator at Bessie (BESS) Mesonet Site caused 5min and 30 min data to not be collected from 19 May - 1 June 2010.
- OKCNET site KNW202 decommissioned on 27 May 2010 due to nearby high voltage power lines.
- ARS Watershed Site A153 remains down due to stolen solar panel.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH				

WSPD				
WDIR				
PRES				
SRAD				
RAIN	Current	19853	COOK	Rain gauge tests low during season passes
TA9M				
WS2M				
TS10	Resolved	19674	CLRM	Sensor developed a low bias
	Resolved	19753	ERIC	Sensor damaged by burrowing animal
	Resolved	19789	MEDI	Sensor developed a low bias
	Resolved	19843	WIST	Sensor has developed a high bias
	Resolved	19842	MCAL	Sensor has developed a high bias
TB10	Resolved	19759	GUTH	Sensor developed a low bias
	Resolved	19807	COOK	Sensor developed a low bias
	Resolved	19743	ANTL	Animal Damaged sensor cable
	Resolved	19785	KIN2	Bare plot sensors plotted at incorrect depth
	Resolved	19786	HOOK	Bare plot covered in tumbleweeds
	Resolved	19827	ADAX	Sensor developed a low bias
	Current	19862	EUFA	Data has a large diurnal cycle
TS05	Resolved	19775	CLRM	Sensor developed a low bias
	Resolved	19828	ERIC	Sensor damaged
	Resolved	19832	MEDI	Sensor developed a low bias
	Resolved	19804	CLRM	Sensor exposed due to burrowing animal
	Resolved	19788	HOLL	Sensor developed a low bias
	Resolved	19830	GRA2	Sensor reporting errant spikes in data

TB05	Resolved	19615	FREE	Sensor developed a low bias
	Resolved	19755	CLRM	Data had large diurnal cycle, shallow sensors
	Resolved	19787	CHEY	Sensor developed a low bias
	Resolved	19703	COOK	Sensor developed a low bias
	Resolved	19820	ANTL	Animal damage to sensor cable
	Resolved	19825	MARE	Sensors were at incorrect depth
	Resolved	19801	HECT	Data had large diurnal cycle, shallow sensors
	Current	19845	SLAP	Sensor has developed a high bias
	Current	19863	INOL	Sensor has developed a high bias
TS30	Resolved	19776	CLRM	Sensor developed a low bias
	Resolved	19700	HOLD	Sensor reports errant changes in temperature
	Resolved	19846	CHAN	Sensor has developed a high bias
	Resolved	19799	MCAL	Sensor developed a low bias
	Resolved	19811	GRA2	Sensor reports errant spikes in data
TR05				
TR25	Current	19852	WATO	Sensor reporting errant data
TR60				
TR75				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19140	A162	Rain gauge missed rain event
	Resolved	19826	A132	Rain gauge filled with debris
VW05				
VW25				
VW45	Current	19854	A146	VW45 and V45T reporting errant data
	Resolved	19737	A152	Errant spikes in data
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25				
VW45	Current	19850	F103	Soil moisture reporting errant spikes in data
V05T				
V25T				
V45T				

Oklahoma City Micronet QA Report

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH				
PRES				
RAIN				
WSPD	Resolved	19819	KNW103	Hail storm damaged sensor, sensor replaced
	Resolved	19813	KNE105	Hail storm damaged sensor, sensor replaced
	Resolved	19812	KNE103	Hail storm damaged sensor, sensor replaced
	Resolved	19818	KCB110	Hail storm damaged sensor
	Resolved	19814	KCB103	Hail storm damaged sensor
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