

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

March 2010

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- Mesonet technicians performed scheduled rotations of 1 datalogger (LOGG), 1 soil temperature sensor (TS05), and 14 WXT PTU sensors for OKCnet (TAIR, PRES, RELH).
- Datalogger at Bessie (BESS) Mesonet site had a power problem resulting in loss of data from 0055-1510 UTC 11 March 2010.
- Heater temperature at OKCnet site KSW105 reported a constant value of 6.80C from 21 January 2010 - 4 March 2010, resulting in the loss of precipitation data and some wind data.
- Datalogger at OKCnet site KNW202 reported errant data due to induced voltage in traffic pole and equipment. Site no longer reports data beginning 4 March 2010. Equipment will be moved to a new location.
- 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	Current	19691	SLAP	Sensor has a low bias compared to neighbors
	Resolved	19670	MEDF	Data shifted compared to model, sensor was level
RAIN	Current	19690	OILT	Rain gauge missed rain event

TA9M	Resolved	19586	WAUR	Loose wire caused errant spikes in data
	Resolved	19608	WIST	Sensor reported large negative values
WS2M				
WS2M	Current	19665	LAHO	Sensor has a starting threshold problem
	Current	19696	MIAM	Sensor has a starting threshold problem
	Resolved	19585	CHIC	Sensor had a starting threshold problem
	Resolved	19611	ADAX	Sensor had a starting threshold problem
	Resolved	19576	GRA2	Sensor had a starting threshold problem
	Resolved	19664	BLAC	Sensor had a starting threshold problem
TS10				
TB10				
TB10	Current	19697	WASH	Bare plot sensors too shallow
	Resolved	19652	TISH	Tech found bare plot sensors too shallow
	Resolved	19658	TAHL	Tech found bare plot sensors 6cm too shallow
	Resolved	19659	JAYX	Tech found bare plot sensors 6cm too shallow
	Resolved	19614	DURA	Sensor had a low bias
	Resolved	19560	WILB	Sensor had a low bias due to lightning strike
TS05				
TS05	Resolved	19566	WEBR	Sensor reported errant increases and decreases
	Resolved	19528	BEAV	Sensor within specifications, no bias in data
TB05				
TB05	Current	19615	FREE	Sensor has a low bias
	Current	19671	MIAM	Warmer than neighbors, suspect shallow sensor
	Current	19698	OKEM	Diurnal cycle muted, suspect sensor too deep
	Current	19699	SKIA	Large diurnal variation, suspect shallow sensor
	Current	19703	COOK	Large diurnal variation, suspect shallow sensor
	Resolved	19530	CHER	Sensor reported errant data, replaced sensor
	Resolved	19612	PAUL	Bare plot sensors were 3cm too shallow
	Resolved	19606	PAWN	Bare plot sensors were 5cm too shallow
	Resolved	19598	TISH	Sensor was exposed
	Resolved	19597	JAYX	Large diurnal cycle, sensors too shallow

	Resolved	19578	ARNE	Sensor found to be within specifications, no bias
	Resolved	19561	WILB	Sensor had a low bias due to lightning strike
TS30	Current	19700	HOLD	Sensor reports errant increases and decreases
	Current	19701	SALL	Sensor reports errant increases and decreases
	Resolved	19516	BREC	Sensor reported errant increases and decreases
	Resolved	19529	TAHL	Sensor had a high bias
	Resolved	19581	KETC	Sensor reported errant increases and decreases
TR05	Current	19672	IDAB	Sensor outside allowed specifications
	Resolved	19584	VANO	Sensor cable damaged by rodent
	Resolved	19643	ELRE	Sensor cable damaged by rodent
TR25				
TR60				
TR75				

ARS Little Washita Watershed QA Report

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

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19702	F106	Rain gauge under reports rainfall
VW05				
VW25				
VW45				
V05T				
V25T				
V45T				

Oklahoma City Micronet QA Report

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH	Resolved	19695	KNW103	Sensor had a low bias during high humidity
PRES				
RAIN	Resolved	19574	KSW105	Impact plate did not record rainfall
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