

OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

June 2011

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- Mesonet technicians performed scheduled rotations of 1 Barometer (PRES), 7 Dataloggers (LOGG), 1 Pyranometer (SRAD), and 2 Temperature and Relative Humidity Sensors (RELH).
- Aspirator fan at Kingfisher (KIN2) site caused air temperature at 1.5m sensor to be exposed. This caused a high bias in Air Temperature at 1.5m (TAIR) from 23 May 2011 to 23 June 2011, appropriate data flagged as erroneous.
- Datalogger at Fort Cobb ARS site F106 causing all variables to report erroneous values on 9 June 2011, appropriate data flagged as erroneous.
- Results from Spring Pass 2011 are now available online at:
 - http://www.mesonet.org/index.php/site_passes

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Current	21627	FOR A	Sensor has a 10-15 degree C high bias
RELH	Resolved	21577	HECT	Reported 0% humidity for several days
	Resolved	21589	KENT	Sensor had a low bias during high humidity
	Resolved	21591	BURB	Sensor had a low bias during high humidity
	Resolved	21592	OKCW	Sensor had a low bias during high humidity
	Resolved	21597	SEIL	Sensor reporting erroneously low values
WSPD	Current	21625	ADAX	Sensor has a starting threshold problem
WDIR				
PRES	Resolved	21580	TIPT	Sensor reporting erroneous values
	Resolved	21598	BUTL	Erroneous spikes in data
SRAD				
RAIN	Resolved	21599	KENT	Rain gauge reported erroneously high rainfall

TA9M	Current	21657	WIST	Sensor has a high bias after rainfall
WS2M				
TS10	Current	21606	FTCB	Sensor has a low bias
TB10	Resolved	21581	BRIS	Sensor had a low bias
	Resolved	21618	INOL	Sensor was damaged
	Current	21593	WEAT	Bare plot has a large diurnal cycle
	Current	21594	KIN2	Bare plot has a large diurnal cycle
	Current	21595	HOBA	Sensor has a low bias
TS05	Resolved	21590	BRIS	Sensor was damaged
	Current	21620	ALV2	Sensor has a low bias
TB05	Current	21658	FREE	Sensor has a low bias
TS30	Resolved	21532	CLRM	Sensor had errant increases and decreases
	Current	21619	COPA	Sensor has a high bias
TR05				
TR25	Resolved	21562	ALTU	Lighting strike caused erroneous values in data
	Current	21626	CHER	Sensor never moistens
	Current	21659	ELRE	Sensor reporting errant values
TR60	Resolved	21563	ALTU	Lighting strike caused erroneous values in data
	Current	21578	SALL	Lightning strike caused erroneous values in data
	Current	21607	DURA	Sensor reporting errant values

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Resolved	21550	A262	Rain gauge missed rain event
VW05	Current	21656	A249	Errant variations in soil moisture data
VW25				
VW45				
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05				
VW25	Current	21660	F106	Erroneous spikes in volumetric water data
VW45	Resolved	21588	F109	Erroneous spikes in volumetric water data
	Current	21624	F105	Erroneous spikes in soil temperature data
	Current	21623	F102	Erroneous spikes in soil temperature data
	Current	21621	F114	Erroneous spikes in volumetric water data
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