OKLAHOMA MESONET / ARS
QUALITY ASSURANCE REPORT

December 2015

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- Mesonet technicians completed scheduled rotations of 1 datalogger (LOGG), 3 humidity sensors (RELH), 1 battery (BATV), 2 pyranometers (SRAD), 1 rain gauge (RAIN), 1 wind sentry (WS2M), and 1 wind monitor nose cone (WSPD).
- Current excitation problem at the Bowlegs Mesonet site (BOWL) caused 10cm soil moisture under bare to not moistened as expected. Replaced current excitation. Data were flagged.
- Fall pass ended December 31st, 2015.

Mesonet QA Report for Standard Variables

Variable	Status	Site	Ticket	Remarks
TAIR	**Resolved**	**ALTU**	**29047**	**Sensor reported -250; replaced.**
	Resolved	**ALTU**	**29062**	**Sensor reported -216; replaced**
	Current	**MINC**	**29195**	**Low bias during high humidity.**
RELH				
WSPD	**Current**	**FITT**	**29285**	**Errantly high wind gusts during precipitation.**
WDIR				
PRES	**Resolved**	**CARL**	**29282**	**Low bias after precipitation; replaced external tubing.**
	Resolved	**NRMN**	**29277**	**Low bias after precipitation; replaced external tubing.**

	Resolved	STIL	29278	Low bias after precipitation; replaced external tubing.
	Current	ALTU	29280	Low bias after precipitation.
	Current	COOK	29279	Low bias after precipitation.
	Current	OKMU	29283	Low bias after precipitation.
SRAD				
RAIN	Current	TISH	29276	Primary gauge reports more than expected.
	Current	IDAB	29045	Secondary gauge missed precipitation event.
	Current	JAYX	29205	Suspect secondary gauge clogged.
TA9M	Resolved	IDAB	28937	High bias; replaced.
	Current	IDAB	29046	High bias returned.
WS2M	Resolved	CHER	28979	Starting threshold problem; replaced.
	Resolved	HOLD	28990	Starting threshold problem; replaced.
TB10	Resolved	LANE	28802	Sensor at 5cm; reburied at 10cm.
	Current	TULN	29270	Suspect sensor is at incorrect depth.
TS05	Resolved	VINI	28767	Sensor a 10cm; reburied at 5cm.
	Current	CHEY	29272	Suspect sensor is at incorrect depth.
	Current	WEST	29274	Suspect sensor is at incorrect depth.
TS10	Current	CHEY	29273	Suspect sensor is at incorrect depth.

TS25				
TS60				
TR05	**Current**	**ALV2**	**28901**	**Sensor does not moisten as expected.**
	Current	**APAC**	**28948**	**Poor response to saturated soil.**
	Current	**CHIC**	**28949**	**Poor response to saturated soil.**
TRB10	**Current**	**NOWA**	**29286**	**Sensor moistens over an extended period of time.**
TRS10				
TR25	**Resolved**	**CHAN**	**29030**	**Sensor not heating; replaced.**
TR60	**Current**	**NEWK**	**29271**	**Sensor is not heating.**

ARS Little Washita Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN	Resolved	A131	28984	Reported less than neighbors; replaced.
VW05				
VW25	Resolved	A282	28983	Errant spikes in data; replaced.
VW45				
V05T				
V25T				
V45T				

ARS Fort Cobb Watershed QA Report

Variable	Status	Site	Ticket	Remarks
RAIN				
VW05				
VW25				

VW45				
V05T				
V25T				
V45T				

"Current" tickets are unresolved tickets as of the last day of the month OR tickets added after Monthly QA analysis.
"Resolved" tickets are the sensor problems 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
TB10	Soil temperature measured at 10 cm under bare sod
TS05	Soil temperature measured at 5 cm under native soil
TS10	Soil temperature measured at 10 cm under native sod
TS25	Soil temperature measured at 25 cm under native soil
TS60	Soil temperature measured at 60 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 5cm under native sod
V25T	Soil Temperature measured at 25cm under native sod
V45T	Soil Temperature measured at 45cm under native sod