

OKLAHOMA MESONET / ARS / OKCnet QUALITY ASSURANCE REPORT

October 2009

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- Mesonet technicians performed scheduled rotations of 3 dataloggers (LOGG), 5 barometers (PRES), 13 fasttherms (TA9M), 8 pyranometers (SRAD), 1 raingauge (RAIN), 3 temperature and relative humidity sensors (RELH), 6 wind monitors (WSPD), and 9 wind sentries (WS2M).
- Aspirator fan at Tishomingo Mesonet Site (TISH) caused fan speed reporting problem beginning 14 October 2009. Air temperature data not yet affected.
- Current Excitation at Nowata Mesonet Site (NOWA) caused DT60 to fail from 21 September - 16 October 2009; appropriate were data flagged for problem
- Wiring problem at Seiling Mesonet Site (SEIL) caused Air Temperature at 1.5m and 9m to have a 3 degree Celsius high bias from 28 September – 1 October 2009; appropriate data flagged for problem
- SDM at Newport Mesonet Site (NEWP) caused barometer to report errors from 20 September – 16 October 2009, affected data were flagged.
- ARS Watershed Site A153 remains down due to stolen solar panel.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Resolved	19177	SHAW	Sensor susceptible to moisture
	Current	19178	EUFA	Sensor has high bias during high humidity
RELH	Resolved	19221	CLOU	Sensor had low bias during high humidity
	Resolved	19220	RETR	Sensor had low bias during high humidity
	Resolved	19359	OKCW	Sensor had low bias during high humidity
WSPD				
WDIR				
PRES	Resolved	19358	ALTU	Pressure deviated from neighbors, tube replaced
SRAD	Resolved	19225	WEBR	Reported negative values overnight
RAIN	Resolved	19364	FITT	Missed rain event due to clogged funnel

	Current	19370	HOOK	Sensor missed rainfall event
	Current	19393	ERIC	Sensor underreports compared to neighbors
TA9M	Resolved	19366	OKCW	Sensor had high bias during high humidity
	Current	19300	ERIC	Sensor has high bias during high humidity
WS2M	Resolved	19360	GOOD	Sensor had a starting threshold problem
	Resolved	19327	WEAT	Sensor had a starting threshold problem
	Resolved	19208	SHAW	Sensor had a starting threshold problem
	Resolved	19222	PUTN	Sensor had a starting threshold problem
	Resolved	19352	FITT	Sensor had a starting threshold problem
TS10	Current	18985	HUGO	Sensor developed a low bias
	Current	19403	GUTH	Sensor developed a high bias
TB10	Current	19401	VINI	Suspect vegetation is covering bare plot
TS05	Resolved	19261	COPA	Sensor had a low bias
	Current	19402	ARNE	Sensor developed a low bias
	Current	19405	EUFA	Sensor developed a low bias
TB05				
TS30				
TR05				
TR25	Resolved	19126	HOLD	Sensor reported large negative numbers
TR60				
TR75	Resolved	19209	DURA	Sensor failed, decommissioned variable at site

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19140	A162	Raingauge underreports rainfall
VW05				
VW25	Resolved	19363	A121	Soil moisture dried out rapidly, sensor replaced
VW45	Resolved	19224	A124	Wiring issue caused VW45 to dry out during rain
	Current	19372	A124	VW45 continues to dry out during rainfall
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19365	F107	Raingauge under reports rainfall
VW05				
VW25				
VW45	Current	19371	F111	Reports errant data
V05T				
V25T				
V45T				

Oklahoma City Micronet QA Report

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH				
PRES				
RAIN				
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