

OKLAHOMA MESONET / ARS / OKCnet QUALITY ASSURANCE REPORT

November 2009

Prepared by [Cindy Morgan](#) & [Alex McCombs](#)
gamgr@mesonet.org

- Mesonet technicians performed scheduled rotations of 5 barometers (PRES), 18 FastTherms (TA9M), 5 pyranometers (SRAD), 1 rain gauge (RAIN), 3 temperature and relative humidity sensors (RELH), and 6 wind sentries (WS2M).
- Battery Charger at Washington Mesonet Site (WASH) caused Maximum Wind Speed (WMAX) to report 5.9 m/s for extended periods of time from 27 October 2009 - 18 November 2009; appropriate data were flagged.
- Aspirator fan at Tishomingo Mesonet Site (TISH) periodically reported 0 rpm from 30 October 2009 - 3 November 2009. Air temperature at 1.5m data not affected by problem.
- Aspirator fan at Lane Mesonet Site (LANE) had failing motor, fan replaced. No problems with 1.5 m air temperature data.
- Aspirator fan at Pauls Valley (PAUL) reports higher than normal values beginning 22 November 2009; 1.5 m air temperature data not affected.
- ARS Watershed Site A153 remains down due to stolen solar panel.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Current	19178	EUFA	Sensor has a high bias during high humidity.
RELH				
WSPD				
WDIR				
PRES				
SRAD				

RAIN	Resolved	19393	ERIC	Rain gauge under reported rainfall.
	Resolved	19370	HOOK	Rain gauge missed rain event.
	Resolved	19432	CARL	Rain gauge under reported rainfall.
	Resolved	19431	CLOU	Rain gauge missed rain event.
TA9M	Current	19300	ERIC	Sensor has low bias during high humidity.
	Resolved	19452	GRA2	Sensor damaged during tech visit.
WS2M	Current	19456	KIN2	Sensor has starting threshold problem.
	Current	19459	WAUR	Sensor has starting threshold problem.
	Resolved	19443	IDAB	Sensor had noisy bearings during pass visit.
TS10	Resolved	19362	RING	Sensor had high bias.
	Resolved	19267	INOL	Bath Test revealed no problem with sensor.
	Resolved	18985	HUGO	Sensor had low bias.
	Resolved	19403	GUTH	Sensor had high bias.
TB10	Resolved	19401	VINI	No problem found with bare plot.
TS05	Current	19402	ARNE	Sensor has low bias.
	Current	19405	EUFA	Sensor has low bias.
	Current	19457	WIST	Sensor has low bias.
TB05	Current	19460	OILT	Sensor has low bias.
TS30				
TR05				
TR25				
TR60				
TR75				

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Current	19140	A162	Rain gauge under reporting rainfall.
VW05				
VW25				
VW45	Resolved	19372	A124	Soil moisture decreased during rainfall.
V05T				
V25T				
V45T				

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN	Resolved	19365	F107	Rain gauge under reported rainfall.
VW05				
VW25				
VW45	Resolved	19371	F111	Failing sensor replaced.
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