

# OKLAHOMA MESONET / ARS QUALITY ASSURANCE REPORT

September 2010

Prepared by **Alex McCombs**  
[gamgr@mesonet.org](mailto:gamgr@mesonet.org)

- Mesonet technicians performed scheduled rotations of 8 Aspirator Fans, 4 temperature and relative humidity sensors (RELH), 6 Dataloggers and 2 Windsentries (WS2M).
- The Aspirator fan at Stuart (STUA) site causing a high bias in Air Temperature at 1.5m (TAIR) beginning 22 September 2010, Air Temperature at 1.5m flagged as erroneous.
- The Aspirator fan at Talihina (TALI) site causing a high bias in Air Temperature at 1.5m (TAIR) beginning 26 September 2010, Air Temperature at 1.5m flagged as erroneous.
- The Aspirator fan at Acme (ACME) site caused a high bias in Air Temperature at 1.5m (TAIR) from 2 September – 7 September 2010, appropriate data flagged as erroneous.
- The Aspirator fan at Acme (ACME) site caused a high bias in Air Temperature at 1.5m (TAIR) from 2 September – 7 September 2010, appropriate data flagged as erroneous.
- The Aspirator fan at Bixby (BIXB) site caused a high bias in Air Temperature at 1.5m (TAIR) from 26 August – 9 September 2010, appropriate data flagged as erroneous.
- The Aspirator fan at Red Rock (REDR) site caused a high bias in Air Temperature at 1.5m (TAIR) from 11 September - 14 September 2010, appropriate data flagged as erroneous.
- The Aspirator fan at Oklahoma City North (OKCN) site caused a high bias in Air Temperature at 1.5m (TAIR) on 17 September 2010, appropriate data flagged as erroneous.
- ARS Watershed Site A153 remains down due to stolen solar panel.
- Summer Pass was completed in September.
- Results from Spring Pass 2010 are now available online at:
  - [http://www.mesonet.org/index.php/site\\_passes](http://www.mesonet.org/index.php/site_passes)

## Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR				
RELH				
WSPD	Current	20112	WOOD	Sensor had a starting threshold problem
WDIR				
PRES				
SRAD				
RAIN				

<b>TA9M</b>	Current	20114	COPA	Sensor has a high bias
<b>WS2M</b>	Current	20106	HUGO	Sensor has a starting threshold problem
	Current	20118	BOWL	Sensor has a starting threshold problem
	Current	20179	EUFA	Sensor has a starting threshold problem
<b>TS10</b>	Current	20186	ARNE	Sensor has a low bias
	Resolved	20090	BYAR	Sensor had a high bias
	Resolved	19939	CAMA	Sensor had a low bias
<b>TB10</b>	Current	20096	MTHE	Sensor has a high bias after rainfall
	Current	20110	ARD2	Sensor has a 3 deg C high bias after rainfall
	Current	20119	EUFA	Bare plot's diurnal cycle is muted
	Current	20128	ELRE	Sensor reporting large negative values
	Current	20184	FTCB	Bare plot's diurnal cycle is muted
	Current	20185	LAHO	Bare plot's diurnal cycle is muted
	Resolved	20022	BROK	Bare plot covered in vegetation
	Resolved	19935	BREC	Sensor had a bias
	Resolved	20021	ERIC	Bare plot was 100% covered in vegetation
	Resolved	20107	ACME	Sensor had a low bias
<b>TS05</b>	Current	19976	CHEY	Sensor has a low bias
	Current	20109	FOR A	Sensor has a low bias
	Resolved	19938	BYAR	Sensor had a 1.55 deg C low bias
	Resolved	20111	HASK	Sensor had a low bias
	Resolved	20151	CAMA	Sensor had a low bias
<b>TB05</b>	Current	20113	SHAW	Sensor has a 2 deg C low bias
	Resolved	20188	BREC	Sensor had a bias
	Resolved	20087	NRMN	Sensor had a high bias after rainfall
	Resolved	20069	SKIA	Sensor had a 1.4 deg C high bias after rainfall

<b>TS30</b>	Current	20024	HOLL	Sensor has a low bias
	Current	20115	HOLD	Sensor has a high bias after rainfall
	Current	20120	GRA2	Sensor has a high bias after rainfall
	Resolved	20068	BYAR	Sensor had a 1 deg C low bias
<b>TR05</b>				
<b>TR25</b>	Current	20171	BESS	Sensor reporting errant values
	Resolved	20061	JAYX	Sensor no longer reacted to rainfall
<b>TR60</b>				
<b>TR75</b>				

### ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
<b>RAIN</b>	Current	19140	A162	Rain gauge missed rain event
<b>VW05</b>	Current	20078	A182	Voltages reporting large negative values
<b>VW25</b>				
<b>VW45</b>	Current	20089	A144	Reporting errant spikes in soil moisture
	Current	20134	A159	Reporting errant spikes in soil moisture
<b>V05T</b>				
<b>V25T</b>				
<b>V45T</b>				

## ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
RAIN				
VW05	Current	20116	F112	Errant spikes in V05T and VW05 data
VW25				
VW45				
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
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