

**OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT**  
 March 2006

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- The rain did not stop the Mesonet Technicians this month. Besides upgrading enclosures at 10 Mesonet sites, they continued to complete trouble tickets.
- Soil moisture sensors were installed at 7 ARS Little Washita sites (A131, A135, A146, A148, A150, A162, and A182). These sites now measure soil moisture at depths of 5, 25, and 45 cm (note: A131 only measures at 5 and 25 cm).
- A door switch was installed at A132; Power upgrades occurred at A132, A146, and A182
- The Copan Mesonet site (COPA) had some minor data logger issues. The affected data are flagged.
- Lightning strikes occurred at Marietta base (MARSbase) and Sallisaw base (SALSbase). Equipment was replaced and all data from sites under the bases were collected.

**Mesonet QA Report for Standard Variables**

Variable	Status	Ticket	Site	Remarks
<b>TAIR</b>	Resolved	12935	VINI	Replaced sensor that had failed
	Resolved	12959	ADAX	Sensor replaced because of suspected high bias. After testing, sensor (and TAIR data) fine.
<b>RELH</b>	Current	13045	VINI	Sensor has failed
	Resolved	12961	ACME	Replaced sensor that was not measuring RH above 95%
<b>WDIR</b>	N/A			
<b>WSPD</b>	N/A			
<b>PRES</b>	Resolved	13036	ARNE	Replaced sensor that was reporting occasional pressure dips and spikes
	Resolved	13018	IDAB	Replaced sensor that was stuck at 988 mb
<b>SRAD</b>	Resolved	13013	TAHL	Cleaned sensor that was reporting a low bias

<b>RAIN</b>	Current	13014	HOLL	Rain gauge missed the last few rain events
	Resolved	12980	ADAX	Fixed broken rain gauge
	Resolved	13015	MAYR	Fixed wiring on gauge
	Resolved	13024	WEBB	Replaced switch on gauge
<b>TA9M</b>	N/A			
<b>WS2M</b>	Current	13044	KETC	Sensor has developed a starting threshold problem
	Resolved	12790	CLOU	Replaced sensor that was reporting erroneous wind gusts
	Resolved	12845	BRIS	Replaced sensor that was reporting erroneous wind gusts
	Resolved	12777	TALI	Replaced sensor that was reporting erroneous wind gusts
<b>TS10</b>	N/A			
<b>TB10</b>	Current	13020	BOIS	Sensor is reporting erratic temperature data
	Current	13041	LAHO	Sensor is cross-wired with TS10
	Resolved	12946	OILT	No action taken, bias was with TB05 sensor
<b>TS05</b>	Resolved	13019	OKEM	Replaced sensor that had failed
<b>TB05</b>	Resolved	13021	OILT	Replaced sensor that had developed a high bias
	Resolved	12978	CAMA	Reinstalled sensor that was too shallow
<b>TS30</b>	Resolved	12916	WEST	Replaced sensor that was reporting erratic data
<b>TR05</b>	Current	13040	FITT	Sensor is not responding to rain, other levels are
	Resolved	12893	STUA	Replaced sensor that had stopped heating
	Resolved	12999	ADAX	Replaced sensor that was not properly responding to rainfall
<b>TR25</b>	Resolved	12895	SLAP	Replaced sensor that had stopped heating

<b>TR60</b>	<b>Resolved</b>	<b>12979</b>	<b>BREC</b>	<b>Repaired broken wire on sensor</b>
<b>TR75</b>	<b>Current</b>	<b>12673</b>	<b>HASK</b>	<b>Preferential flow, sensor will be decommissioned</b>
	<b>Current</b>	<b>12708</b>	<b>NOWA</b>	<b>Preferential flow, sensor will be decommissioned</b>

### ARS Little Washita Watershed QA Report

<b>Variable</b>	<b>Status</b>	<b>Ticket</b>	<b>Site</b>	<b>Remarks</b>
<b>TAIR</b>	<b>N/A</b>			
<b>RELH</b>	<b>N/A</b>			
<b>SRAD</b>	<b>N/A</b>			
<b>RAIN</b>	<b>N/A</b>			
<b>TS10</b>	<b>N/A</b>			
<b>TB10</b>	<b>N/A</b>			
<b>TS05</b>	<b>Current</b>	<b>13057</b>	<b>A150</b>	<b>Sensor has developed low bias</b>
<b>TB05</b>	<b>N/A</b>			
<b>TS30</b>	<b>N/A</b>			

### ARS Ft. Cobb Watershed QA Report

<b>Variable</b>	<b>Status</b>	<b>Ticket</b>	<b>Site</b>	<b>Remarks</b>
<b>TAIR</b>	<b>Resolved</b>	<b>13030</b>	<b>F108</b>	<b>Replaced damaged sensor</b>
<b>RELH</b>	<b>N/A</b>			
<b>SRAD</b>	<b>N/A</b>			

<b>RAIN</b>	<b>Resolved</b>	<b>13016</b>	<b>F108</b>	<b>Cleaned spider web clog from bucket</b>
	<b>Resolved</b>	<b>13017</b>	<b>F106</b>	<b>Cleaned spider web clog from bucket</b>
<b>TS05</b>	<b>N/A</b>			
<b>TS10</b>	<b>N/A</b>			
<b>TS15</b>	<b>N/A</b>			
<b>TS30</b>	<b>N/A</b>			
<b>VW05</b>	<b>Resolved</b>	<b>13055</b>	<b>F109</b>	<b>Reinstalled sensor that was too shallow</b>
<b>VW25</b>	<b>N/A</b>			
<b>VW45</b>	<b>N/A</b>			

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.

<b>Variable</b>	<b>Description</b>
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