

**OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT**  
September 2003

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The Mesonet Summer Pass 2003 was completed in September.

Micronet site A144 took a lightning hit at the end of August. The datalogger, wiring panel, pyranometer and 15-cm soil temperature sensor were replaced in early September. Another lightning strike at the Bristow base took out the radio which was subsequently replaced.

In addition to the work detailed below, scheduled rotations of 8 pyranometers, 5 batteries, and 2 T&RH probes were performed.

Janet

<b>Mesonet QA Report for Standard Variables</b>	
<b>TAIR</b>	<b>Current: #8210 BROK TAIR reporting negative temperatures</b> <b>Resolved:</b>
<b>RELH</b>	<b>Current:</b> <b>Resolved: #8177 SALL replaced sensor that had developed a 10% low bias</b>
<b>WDIR</b>	<b>Current:</b> <b>Resolved:</b>
<b>WSPD</b>	<b>Current:</b> <b>Resolved:</b>
<b>PRES</b>	<b>Current: #8209 MAYR Pressure spiked 5 to 11mb several times in 3 hours</b> <b>Resolved: #8136 HUGO Replaced barometer that had reported constant pressure for hours at a time</b>
<b>SRAD</b>	<b>Current:</b> <b>Resolved:</b>
<b>RAIN</b>	<b>Current:</b> <b>Resolved: #8152 MIAM Replaced bad switch on gauge that had stopped reporting tips</b> <b>Resolved: #8153 PRYO Replaced bad switch on gauge that had under-reported tips</b>
<b>TA9M</b>	<b>Current:</b> <b>Resolved:</b>
<b>WS2M</b>	<b>Current:</b> <b>Resolved: #8190 CLOU Removed spider webs that had caused sentry to stop turning</b>
<b>TS10</b>	<b>Current: #8240 HOBA Monthly QA indicates TS10 sensor has a 6 to 8°C low bias</b> <b>Resolved: #8178 MADI Replaced sensor that had developed a 6 to 10° high bias</b>

<b>TB10</b>	<b>Current: #8243 SHAW Monthly QA indicates TB10 sensor has a 7°C low bias</b> Resolved:
<b>TS05</b>	Current: Resolved:
<b>TB05</b>	<b>Current:</b> <b>Resolved: #8179 OKEM Replaced sensor that had developed a 3 to 6°C low bias</b>
<b>TS30</b>	<b>Current: #8241 TIPT Monthly QA indicates TS30 sensor has a 5°C low bias</b> Resolved:
<b>TR05</b>	Current: Resolved:
<b>TR25</b>	<b>Current:</b> <b>Resolved: #8127 ARDM Replaced soil moisture probe that had reported out-of-range starting and ending temperatures</b>
<b>TR60</b>	Current: Resolved:
<b>TR75</b>	Current: Resolved:

	<b>ARS QA Report</b>
<b>TAIR</b>	Current: Resolved:
<b>RELH</b>	Current: Resolved:
<b>WDIR</b>	Current: Resolved:
<b>SRAD</b>	Current: Resolved:
<b>RAIN</b>	Current: Resolved:
<b>TS05</b>	<b>Current: #8253 A163 Monthly QA indicates TS05 sensor has a 6°C high bias</b> <b>Resolved: #8134 A135 Replaced sensor that had been damaged by gophers</b>

<b>TS10</b>	<b>Current: #8251 A150 Monthly QA indicates TS10 sensor has a 3°C high bias</b> Resolved:
<b>TS15</b>	<b>Current:</b> <b>Resolved: #8182 B123 Replaced sensor that had developed a 8°C high bias</b> <b>Resolved: #8174 A182 Replaced sensor that reported erratic data</b>
<b>TS30</b>	<b>Current: #8252 A158 TS30 data are erratic</b> Resolved:

“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