

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

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The Mesonet Technicians stayed very busy in August by resolving 108 tickets! Their work included scheduled rotations of 50 pyranometers, 9 wind sentries and 9 T&RELH sensors. Subsurface heat flux plates and PRTs were also replaced as dictated by the Oklahoma gophers. Low voltage problems at several sites resulted in the replacement of station batteries.

At the Micronet, scheduled rotations of 5 batteries were performed.

Janet

<b>Mesonet QA Report for Standard Variables</b>	
<b>TAIR</b>	Current: Resolved:
<b>RELH</b>	<b>Current: #8177 SALL Monthly QA indicates humidity values are consistently 10% lower than nearby sites</b> Resolved:
<b>WDIR</b>	Current: <b>Resolved: #8081 COPA Replaced failed sensor that had reported northerly winds while nearby sites reported winds from south</b>
<b>WSPD</b>	Current: Resolved:
<b>PRES</b>	Current: Resolved:
<b>SRAD</b>	Current: Resolved:
<b>RAIN</b>	Current: <b>Resolved: #8040 ERIC Landowner verified that irrigation and westerly winds caused phantom tips</b>
<b>TA9M</b>	Current: Resolved:
<b>WS2M</b>	Current: Resolved:
<b>TS10</b>	<b>Current: #8178 MADI Monthly QA indicates TS10 sensor has a 6 to 10°C low bias</b> <b>Resolved: #8008 CHER Replaced sensor that had developed a 2 to 3°C high bias</b>

<b>TB10</b>	Current: Resolved:
<b>TS05</b>	Current: Resolved:
<b>TB05</b>	<b>Current: #8179 OKEM Monthly QA indicates TB05 has a 3 to 6° C low bias Resolved: #8013 DURA Replaced sensor that had reported erratic data</b>
<b>TS30</b>	Current: <b>Resolved: #7916 BRIS Replaced TS30 sensor that had a 3 to 6° high bias Resolved: #8001 ACME Replaced failed sensor Resolved: #8082 HOBA Replaced sensor with a 10°C low bias</b>
<b>TR05</b>	Current: <b>Resolved: #8083 EUFA Replaced sensor that had reported erratic data</b>
<b>TR25</b>	<b>Current: #8084 HOLL Starting and final temperature are out-of-range Resolved:</b>
<b>TR60</b>	Current: Resolved:
<b>TR75</b>	<b>Current: #8127 ARDM Starting and final temperatures are out-of-range Resolved: #8029 EUFA Repaired cable that had been chewed by rodent</b>

<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: <b>Resolved: #8052 A166 Cleaned spider and web out of bucket that had prevented tips</b>
<b>TS05</b>	Current: Resolved:

<b>TS10</b>	Current: Resolved:
<b>TS15</b>	<b>Current: #8182 B123 Monthly QA indicates TS15 has developed a 8°C high bias</b> Resolved:
<b>TS30</b>	Current: 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