

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

Prepared by Janet E. Martinez  
[gamgr@mesonet.org](mailto:gamgr@mesonet.org)

The Mesonet technicians resolved 80 trouble tickets during the month of February. In addition to the work detailed below, scheduled rotations of 22 barometers and 4 cup-type anemometers were performed.

Great progress has been made in testing new communications equipment across the Mesonet. Currently, the Clinton Base network (consisting of 5 stations, 2 repeaters and 1 base) is running successfully on new narrow-banded VHF radios. In addition, our local network (including 8 sites, 2 repeaters and 1 base) is now operating on spread spectrum 900-MHz radios. Future tests include narrow-banded VHF radios at the Wilburton network and 900-MHz radios at the Hobart network.

The datalogger and wiring panel replacements are complete at the ARS Micronet.

Janet

<b>Mesonet QA Report for Standard Variables</b>	
<b>TAIR</b>	Current: Resolved:
<b>RELH</b>	Current: <b>Resolved: #7522 BYAR Replaced sensor reporting out-of-range humidity values</b> <b>Resolved: #7456 EUFA Replaced sensor that was reporting 5 to 10% low bias at humidities above 70%</b>
<b>WDIR</b>	Current: Resolved:
<b>WSPD</b>	Current: Resolved:
<b>PRES</b>	<b>Current: #7588 SULP Rewired barometer that was stuck at 938 mb</b> <b>Resolved: #7457 WEBB Replaced barometer that had intermittent data problems</b>
<b>SRAD</b>	Current: <b>Resolved: #7525 PAWN Replaced pyranometer that had a 10% high bias in afternoons</b>
<b>RAIN</b>	<b>Current: #7526 MARE Monthly QA shows no tips recorded in January</b> <b>Current: #7527 KING Monthly QA indicates gauge under-reported during last 4 precipitation events</b> Resolved:
<b>TA9M</b>	Current: Resolved:

<b>WS2M</b>	Current: Resolved:
<b>TS10</b>	<b>Current: #7603 TAHL TS10 data erratic and out-of-range</b> Resolved:
<b>TB10</b>	Current: Resolved:
<b>TS05</b>	Current: Resolved:
<b>TB05</b>	<b>Current:</b> <b>Resolved: #7466 PORT Replaced sensor that had reported out-of-range temperature data</b>
<b>TS30</b>	Current: Resolved:
<b>TR05</b>	<b>Current: #7473 PUTN No heating at 5cm</b> Resolved:
<b>TR25</b>	Current: Resolved:
<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>	<b>Current: #7602 A181 Monthly QA indicates a 10 to 12% low bias in afternoons compared to nearby sites</b> Resolved:

<b>RAIN</b>	<b>Current: #7600 A121 Gauge missed last two precipitation events in Feb.</b> <b>Current: #7601 A158 Gauge missed last two precipitation events in Feb.</b> Resolved:
<b>TS05</b>	Current: Resolved:
<b>TS10</b>	<b>Current: #7604 A110 Monthly QA indicates TS10 has a 5 degree C low bias</b> Resolved:
<b>TS15</b>	<b>Current: #7527 A181 Sensor is stuck at -293 degrees C</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