

**OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT**  
December 2002

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

Wintry precipitation occurred 3 times during the month of December, mainly in the northwestern half of the state. Wind observations at 45 Mesonet sites were manually flagged due to ice and snow coating the anemometers during the December 3rd event. The nose cone shaft on the prop-vane anemometer at Medicine Park had to be replaced after breaking into two pieces during the icing.

Scheduled replacements of dataloggers and wiring panels were performed at 13 of the ARS Micronet sites.

<b>Mesonet QA Report for Standard Variables</b>	
<b>TAIR</b>	Current: Resolved:
<b>RELH</b>	<b>Current: #7456 EUFA Monthly QA indicates 5 to 10% low bias at humidities above 70%</b> <b>Resolved: #7393 BOIS Replaced sensor reporting humidity values over 115%</b>
<b>WDIR</b>	Current: <b>Resolved: #7392 KENT Replaced sensor that had 45 degree bias compared to other panhandle sites</b>
<b>WSPD</b>	Current: <b>Resolved: #7394 MEDI Nose cone shaft broken into two pieces from frozen precipitation on December 3rd</b>
<b>PRES</b>	Current: <b>Resolved: #7385 CLAY Rewired barometer that was stuck at 992 mb</b>
<b>SRAD</b>	Current: Resolved:
<b>RAIN</b>	Current: <b>Resolved: #7387 HOLL Removed spider webs that prevented buckets from tipping after December 3<sup>rd</sup> snow</b> <b>Resolved: #7388 MANG Replaced reed switch on gauge that reported no melt after December 3<sup>rd</sup> snow</b> <b>Resolved: #7409 STUA Removed spider webs that prevented buckets from tipping</b>
<b>TA9M</b>	Current: Resolved:
<b>WS2M</b>	Current: Resolved:

<b>TS10</b>	Current: Resolved:
<b>TB10</b>	Current: Resolved: <b>#7384 GUTH Tightened loose analog ground wire that caused erratic soil temperature data</b>
<b>TS05</b>	Current: <b>#7399 NINN Sensor reporting out of range temperatures</b> Resolved:
<b>TB05</b>	Current: <b>#7400 EUFA Monthly QA indicates a 5 degree C high bias compared to nearby sites</b> Resolved:
<b>TS30</b>	Current: Resolved:
<b>TR05</b>	Current: 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>	Current: <b>#7401 A161 Sensor reporting less than 1 Wm<sup>-2</sup> continually throughout the day</b> Current: <b>#7402 A124 Sensor reporting out of range shortwave down values</b> Resolved:

<b>RAIN</b>	Current: <b>Resolved: #7355 A166 Repaired gauge that had been vandalized</b> <b>Resolved: #7389 A121 Replaced reed switch on gauge that reported no melt after December 3<sup>rd</sup> snow</b> <b>Resolved: #7390 A158 Removed spider webs that prevented gauge from tipping after December 3<sup>rd</sup> snow</b> <b>Resolved: #7391 A156 Removed debris in funnels that prevented gauge from tipping after December 3<sup>rd</sup> snow</b>
<b>TS05</b>	Current: Resolved:
<b>TS10</b>	Current: Resolved:
<b>TS15</b>	Current: 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