

**OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT**  
October 1998

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It's been a busy month for the Mesonet technicians. During October, 74 "fix tickets" were completed. That includes replacements, repairs and rotations of sensors in the network.

After the abuse the thirsty Oklahoma soil took over the summer, we were able to replace 20 soil sensors in October. Gophers were the culprit for soil temperature problems at BRIS, SALL, and PERK, while erosion caused biases in the data at IDAB and BOIS.

Now that the Oklahoma skies have remembered how to rain again, we've been able to pinpoint a number of rain gauge problems and get them repaired. The gauges at HOLL, PERK, TISH, ADAX, and COPA were repaired during October.

And now, on to the report...

<b>Mesonet QA Report for Standard Variables</b>	
<b>TAIR</b>	Current: #2146 ELRE Monthly QA indicates 1.0 C cool bias Resolved:
<b>RELH</b>	Current: #2144 MANG Monthly QA indicates max observed RH too low Current: #2145 BLAC Monthly QA indicates max observed RH too low Resolved: #2082 RETR Sensor reporting as high as 107% during periods of high humidity; replaced Resolved: #2086 PAWN Sensor suspected of reporting low bias of ~40%; replaced Resolved: #2116 BBOW Intercomparison indicated 7% high bias; replaced Resolved: #2126 NEWK Replaced sensor damaged by lightning
<b>WDIR</b>	Current: Resolved:
<b>WSPD</b>	Current: Resolved: #2109 ADAX Replaced mechanically noisy bearings Resolved: #2118 HUGO Replaced mechanically noisy bearings
<b>PRES</b>	Current: Resolved: #2114 LANE Intercomparison indicated .4 mb high bias; sensor replaced Resolved: #2048 FTCB Replaced sensor with history of sticking Resolved: #2016 KENT Replaced sensor with history of sticking
<b>SRAD</b>	Current: Resolved: #2132 NEWK Replaced lightning-damaged sensor
<b>RAIN</b>	Current: #2139 FREE Gauge reported 0.00 inches during heavy rain Resolved: #2079 HOLL Gauge found to have intermittent problem; gauge replaced Resolved: #2085 PERK Under-reporting caused by switch failure Resolved: #1955 TISH Bad switch caused over-reporting rainfall Resolved: #2110 ADAX Removed spider and web clogging gauge

	<b>Resolved: #2108 COPA Replaced dead switch to fix under-reporting</b>
<b>TA9M</b>	Current: <b>Resolved: #1989 HUGO Replaced wiring panel to correct cool bias</b>
<b>WS2M</b>	Current: Resolved:
<b>TS10</b>	Current: <b>Resolved: #2092 WOOD Replaced lightning-damaged sensor</b> <b>Resolved: #2021 SEIL Replaced sensor reporting erroneous dips</b> <b>Resolved: #2119 NEWK 5 C cool bias confirmed; sensor replaced</b>
<b>TB10</b>	Current: <b>Resolved: #2003 WOOD Replaced lightning-damaged sensor</b> <b>Resolved: #2020 SEIL Replaced sensor reporting erroneous dips</b> <b>Resolved: #2060 BRIS Replaced gopher-damaged sensor</b> <b>Resolved: #1779 WILB 2.5 C bias confirmed; replaced</b> <b>Resolved: #2066 PERK 6.5 C bias confirmed; replaced</b> <b>Resolved: #2136 BOIS Soil found eroded around sensor; re-installed at proper depth</b>
<b>TS05</b>	Current: <b>Resolved: #2093 WOOD Replaced lightning-damaged sensor</b>
<b>TB05</b>	Current: <b>#2015 ELRE Sensor reporting 8 C warmer than neighbors</b> <b>Resolved: #1808 WOOD Replaced lightning-damaged sensor</b> <b>Resolved: #1988 EUFA 3 C high bias confirmed; sensor replaced</b> <b>Resolved: #1899 IDAB Soil erosion caused sensor to be only 1 cm below the surface; sensor re-installed</b> <b>Resolved: #2036 BOIS Sensor found laying on top of ground; sensor re-installed</b>
<b>TS30</b>	Current: <b>Resolved: #2091 WOOD Replaced lightning-damaged sensor</b>

<b>ARS QA Report</b>	
<b>TAIR</b>	Current: Resolved:
<b>RELH</b>	<b>Current: #2143 A130 Sensor reporting sporadic values above 100%</b> Resolved:
<b>SRAD</b>	Current: Resolved:
<b>RAIN</b>	Current: Resolved:
<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