

# OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

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A new base (POTEbase) was installed at the Poteau Police Department office to establish a new radio link to the to-be-installed new Talihina repeater.

The OASIS sensors were decommissioned at the Apache site.

Initial installations of soil moisture sensors were performed at the Inola site.

New HMP-45C Temp/RelH sensors have been installed at 8 Mesonet sites.

At the Micronet, scheduled rotations of 6 soil temperature sensors were performed.

<b>Mesonet QA Report for Standard Variables</b>	
<b>TAIR</b>	Current: #10497 WAUR Temperature data still erratic after replacement on 10/14 Resolved:
<b>RELH</b>	Current: #10369 Sulp Maximum humidity values are topping out at 95% Current: #10400 CLOU Humidity values max out over 103% Current: #10518 NINN Sensor reporting erratic data down to 0% Resolved: #10489 INOL Replaced sensor that had reported values down to 0%
<b>WDIR</b>	Current: #10476 SALL Disconnected WDIR from logger; is causing problems with solar radiation data at night Resolved:
<b>WSPD</b>	Current: Resolved:
<b>PRES</b>	Current: Resolved:
<b>SRAD</b>	Current: Resolved: #10439 SALL Problem being caused by wind direction monitor, disconnected WDIR
<b>RAIN</b>	Current: Resolved: #10463 BYAR Replaced failed switch that caused rain to not be reported Resolved: #10482 SKIA Replaced failed switch that caused rain to not be reported
<b>TA9M</b>	Current: Resolved:

<b>WS2M</b>	Current: Resolved:
<b>TS10</b>	Current: Resolved:
<b>TB10</b>	Current: #10500 MANG Sensor is reporting temps down to -68 °C Current: #10519 BYAR Developed a 3 °C low bias compared to neighbors and TB05 Current: #10520 MARE Developed a 3 °C low bias compared to neighbors and TB05 Resolved: #10474 ACME Replaced after water bath test confirmed 2°C low bias
<b>TS05</b>	Current: #10366 MINC Sod temperatures sensors seem to be cross-wired Resolved: #10475 REDR Replaced after water bath test confirmed 2 °C low bias
<b>TB05</b>	Current: Resolved:
<b>TS30</b>	Current: #10473 TISH TS30 data is spiking and dipping each day Resolved:
<b>TR05</b>	Current: #9742 GRA2 Reported 7999 at 5 and 10 cm for four hours Current: #10160 ARNE Since experimental rain gauge installed on 7/22 soil moisture data at all 4 depths has been erratic Current: #10438 SLAP Soil moisture sensor at 5 cm reporting -7999 Current: #10485 BLAC Sensor at 5cm is not responding normally to large amounts of rain. Please check 5 and 25 cm wiring. Current: #10486 ADAX Sensor at 5cm is not responding normally to large amounts of rain. Please check 5 and 25 cm wiring. Resolved: #10440 ELRE Replaced multiplexer to solve problems with soil moisture data
<b>TR25</b>	Current: #10498 BIXB Sensor not heating 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: Resolved:
<b>RAIN</b>	<b>Current: #10509 A162 During 10-22 and 10-26 rain events, the gauge under-reported by 0.2 inches compared to surrounding sites</b> Resolved:
<b>TS05</b>	<b>Current: #10480 A152 No heat flow between TS05 and TS10</b> <b>Current: #10575 A154 Sensor has developed a 3 °C low bias</b> <b>Resolved: #10481 A151 Replaced sensor that had developed a 10 °C high bias</b>
<b>TS10</b>	Current: Resolved:
<b>TS15</b>	Current: Resolved:
<b>TS30</b>	Current: <b>Resolved: #10477 A162 Replaced sensor that reported data lots of noise</b>

“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