

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

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- The Buffalo repeater was decommissioned and the new Talihina repeater (TALlrptr) was commissioned. With the new repeater, the McAlester subnet was divided up and now 3 stations report under Poteau base.
- Initial installations of 60 cm soil moisture sensors were performed at the Spencer and Grandfield sites.
- HMP-45C Temp/RelH sensors were installed at an additional 8 Mesonet sites.
- At the ARS Micronet, the following sites were decommissioned in January in preparation for the move to the Ft. Cobb Watershed: A110, A111, A125 and B123.

Mesonet QA Report for Standard Variables	
TAIR	Current: Resolved: #10720 TAHL Replaced sensor that had developed a low bias
RELH	Current: Resolved: #10698 LAHO Replaced sensor that had been reporting 103% for long periods of time Resolved: #10710 OKMU Replaced sensor that had been reporting out-of-range data Resolved: #10721 MRSH Replaced sensor that had been reporting 0% for long periods of time
WDIR	Current: Resolved:
WSPD	Current: Resolved: #10713 CLAY Replaced sensor that had starting threshold problems
PRES	Current: Resolved: #10737 KETC Replaced sensor that had reported 40 mb dips in pressure
SRAD	Current: #10835 MTHE Sensor has developed a 40 Wm ⁻² low bias Resolved:
RAIN	Current: Resolved: #10712 ERIC Cleaned and leveled gauge that had missed precipitation event in early January Resolved: #10711 RETR Evicted spider that had prevented buckets from tipping Resolved: #10719 CAMA Replaced failed switch on gauge that had missed precipitation event in early January

TA9M	Current: Resolved: #10644 NOWA Replaced sensor that had reported erratic data Resolved: #10717 ERIC Replaced sensor that had developed a low bias
WS2M	Current: Resolved: #10654 HOOK Replaced sensor that had developed a starting threshold problem Resolved: #10718 WEST Replaced sensor that had developed a starting threshold problem
TS10	Current: Resolved:
TB10	Current: #10730 VINI Sensor appears to be exposed Resolved: #10581 FAIR Replaced sensor that had developed a 3 to 5 °C low bias Resolved: #10729 MEDI Reinstalled exposed sensor
TS05	Current: Resolved: #10685 SPEN Replaced sensor that had developed a 3 °C high bias
TB05	Current: #10731 VINI Sensor appears to be exposed Current: #10732 MARE Sensor appears to be exposed Current: #10735 REDR Sensor appears to be exposed Current: #10736 MIAM Sensor appears to be exposed Current: #10746 COPA Sensor appears to be exposed Current: #10747 HOBA Sensor appears to be exposed Current: #10812 WYNO Sensor appears to be exposed Resolved: #10723 HOOK Reinstalled exposed sensor Resolved: #10728 MEDI Reinstalled exposed sensor
TS30	Current: Resolved: #10473 TISH Sensor replaced
TR05	Current: #10744 ARNE Noise in data at all 4 depths Resolved: #10725 KING Replaced multiplexer that had caused several sensors to spike and dip erratically
TR25	Current: Resolved: #10660 GRA2 Replaced sensor that had stopped heating
TR60	Current: Resolved: #10686 MANG Replaced sensor that had stopped heating
TR75	Current: Resolved:

ARS QA Report	
TAIR	Current: Resolved:
RELH	Current: #10871 A149 Maximum humidity values topping out at 95% Resolved:
WDIR	Current: Resolved:
SRAD	Current: #10872 A163 Sensor has developed a 50 to 100 Wm⁻² low bias Resolved:
RAIN	Current: Resolved:
TS05	Current: Resolved:
TS10	Current: Resolved:
TS15	Current: Resolved: #10714 A133 Wiring tightened, solved problem of data being out-of-range
TS30	Current: #10587 A161 Sensor reporting temperatures down to -80 °C 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.

Variable	Description
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
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