

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
October 2003

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The flu bug has hit early this year at the Mesonet - my excuse for this October report being late!

The Mesonet Fall Pass 2003 began in October and over 70 trouble tickets were resolved during the month.

Scheduled rotations of 13 pyranometers, 11 wind sentries, and 4 T&RelH probes were performed. Four batteries were replaced due to bad cells. Five FastTherms that measure air temperature at 1.5 m and 9 m also were replaced to solve data problems.

Soil heat flux plates were replaced at 6 sites. At rodent-ridden sites, we have begun to decommission one of the two sensors. The remaining sensor will be maintained and kept operational as long as replacements are available.

Janet

Mesonet QA Report for Standard Variables	
TAIR	Current: #8210 BROK TAIR reporting negative temperatures Resolved:
RELH	Current: Resolved:
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	Current: Resolved: #8209 MAYR Found web in vent tube that caused pressure to spike Resolved: #8214 MINC Replaced battery that caused periods of missing data and large spikes in pressure
SRAD	Current: #8369 VANO Sensor has developed a 100 W m ⁻² high bias compared to surrounding sites Current: #8371 PUTN Sensor has developed a 75 W m ⁻² low bias compared to surrounding sites Resolved:
RAIN	Current: Resolved: #8180 KETC Replaced bad switch on gauge that had reported phantom tips Resolved: #8256 MADJ Replaced bad switch on gauge that had reported tips after rain ended

	Resolved: #8332 ERIC Cleaned spider webs out of funnel
TA9M	Current: Resolved:
WS2M	Current: Resolved:
TS10	Current: #8372 ALTU Sensor has developed a 5°C high bias compared to other sod and bare plot sensors Resolved: #8240 HOBA Replaced sensor that had developed a 6 to 8° C low bias
TB10	Current: Resolved: #8243 SHAW Replaced sensor that had developed a 7°C low bias
TS05	Current: Resolved:
TB05	Current: Resolved:
TS30	Current: Resolved: #8241 TIPT Replaced sensor that had developed a 5°C low bias
TR05	Current: Resolved:
TR25	Current: Resolved:
TR60	Current: Resolved:
TR75	Current: Resolved:

	ARS QA Report
TAIR	Current: Resolved:
RELH	Current: Resolved:
WDIR	Current: Resolved:

SRAD	Current: Resolved:
RAIN	Current: Resolved: #8212 A137 Gauge that had reported phantom tips found vandalized
TS05	Current: Resolved:
TS10	Current: Resolved: #8251 A150 Replaced all 4 sod temperature sensors after confirming high bias
TS15	Current: Resolved:
TS30	Current: Resolved: #8252 A158 Replaced sensor after confirming high bias with water bath test

“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