OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

August 2004

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Summer Pass 2004 continued in August with 52 sites visited.

Scheduled rotations were performed at the Mesonet for 7 prop anemometers and 2 wind sentries. At the Micronet, 7 pyranometers, 2 wind sentries, 2 Temp/RelH sensors and 3 soil temperature sensors were rotated.

Power upgrades were completed at 37 Mesonet sites.

A site upgrade was performed at the Pawhuska repeater.

	Mesonet QA Report for Standard Variables
TAIR	Current: **Resolved: #10077 JAYX Replaced after showing a 2 °C high bias** **Resolved: #10336 MARE Removed mud dauber nest that caused low bias** **Resolved: #10335 FORA Removed mud dauber nest that caused low bias** **Resolved: #10189 ARD2 Cleaned off mud dauber nests that caused low bias** **Resolved: #10236 BOWL Cleaned and removed yellow jacket nest**
RELH	**Current: #10369 SULP Values do not ever exceed 95%** Resolved:
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	Current: **Resolved: #10315 KETC Replaced after being stuck at 1263 mb**
SRAD	**Current: #10337 WASH Values consistently lower than nearby sites** **Current: #10367 SEIL Showing 200 W/m^2 low bias** **Current: #10370 GOOD Shows 50 to 100 W/m^2 low bias on clear days** Resolved:
RAIN	Current: **Resolved: #10191 BEAV Replaced damaged switch** **Resolved: #10237 ELRE Reed switch replaced** **Resolved: #10271 KING Removed mud that had plugged funnel**
TA9M	Current: Resolved:
WS2M	Current: Resolved:

TS10	**Current: #9836 DURA Sensor has developed a 4 to 5 °C low bias** Resolved:
TB10	**Current: #10362 MEDF Reporting negative values** **Resolved: #10241 PERK Replaced after showing a 3-4 °C low bias** **Resolved: #10303 WASH Replaced to match TB05** **Replaced: #10328 VANO Replaced after showing a 5 °C low bias** **Replaced: #10154 BOIS Re-insulated portion of chewed wire**
TS05	**Current: #10366 MINC Maximum daily temps are not reasonable** Resolved:
TB05	**Current: #10365 CHER Temps are 10 to 12 °C higher than TB10** **Resolved: #10248 MIAM Sensor replaced after showing 4 to 5 °C low bias** **Resolved: #10075 VANO Replaced after showing 5 °C low bias** **Resolved: #10118 VINI Tightened loose connections after reporting negative values** **Resolved: #10076 WASH Replaced sensor that had developed a large high bias** **Resolved: #10159 LAHO Re-installed after sensor found to be too shallow**
TS30	Current: Resolved:
TR05	**Current: #9742 GRA2 Reporting out-of-range data** **Current: #10160 ARNE Data has been erratic since 7/22** **Current: #10361 TAHL Sensor not responding to rainfall** **Resolved: #10127 BRIS Replaced sensor that had reported out-of-range data**
TR25	Current: Resolved:
TR60	Current: Resolved:
TR75	**Current: #9064 ELRE Decommissioned sensor due to no heating** Resolved:

	ARS QA Report
TAIR	Current: **Resolved: #10155 A158 Replaced after reporting out-of-range data**
RELH	Current: Resolved:
SRAD	Current: Resolved:

RAIN	Current: **Resolved: #10190 A121 Replaced switch on gauge that had under-reported 2 events**
TS05	**Current: #10358 A150 Sensor reporting out-of-range data** **Current: #10368 A166 Reporting down to -55 °C** Resolved:
TS10	Current: **Resolved: #10240 A161 Replaced after showing 2 °C low bias**
TS15	Current: **Resolved: #10238 A130 Replaced after showing 2-3 °C high bias** **Resolved: #10308 A132 Replaced after showing a 2 °C high bias**
TS30	**Current: #10372 A147 Has developed a 3-4 °C low bias** 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