

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
 October 2002

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Newport, a new standard Mesonet site, was installed October 3. NEWP is located just northwest of Ardmore and is sponsored by the Noble Foundation.

A lightning strike occurred at the Eufaula site on October 6. The datalogger, multiplexer, radio, power regulator, battery, T&RH sensor, and pyranometer had to be replaced.

Extended cloud cover during the last two weeks of October caused low voltage problems with batteries at a few of the sites. These batteries have been replaced.

Scheduled rotations of dataloggers and wiring panels were completed at 12 of the ARS Micronet sites.

On October 12, the ARS A125 site was vandalized. The battery box, power cable and voltage regulator were damaged and the battery was stolen. All of this equipment has since been replaced.

Please note that soil moisture has been added to this month's QA report. The variables are TR05, TR25, TR60, and TR75 which represent the calibrated DeltaT from the 229-L soil moisture sensors at each of the 4 depths.

The Summer Pass 2002 CD is ready for distribution. The CD contains the accomplishments, site photos, interesting findings, and site forms from the pass. Please e-mail me if you would like us to send you a copy. The Summer Pass info is also temporarily available on the web: <http://operations.ocs.ou.edu/pub/sitepass/SummerPass2002.html>

Mesonet QA Report for Standard Variables	
TAIR	Current: #7207 WOOD 5 to 6 degree C high bias compared to nearby sites Resolved: #7061 BEEX Replaced sensor that had 3 degree C high bias Resolved: #7203 NOWA Replaced sensor that had 8 degree C high bias
RELH	Current: #7204 HOLL Humidity stuck at 0% Resolved: #7193 BBOW Replaced sensor that reported humidity values near 103% Resolved: #7196 HASK Replaced sensor that had been stuck at 0% humidity for several hours
WDIR	Current: Resolved: #7180 COOK Corrected wiring that caused wind direction data to be stuck between 20 and 40 degrees
WSPD	Current: Resolved:
PRES	Current: Resolved: #7138 WALT Replaced plugged vent that had caused erratic data Resolved: #7197 BURB Rewired barometer that was stuck at 982 mb Resolved: #7199 STIL Rewired barometer that was stuck at 986 mb

SRAD	Current: Resolved: #7194 CLRM Replaced pyranometer that had 10% low bias
RAIN	Current: Resolved: #7139 FAIR Replaced switch on gauge that had reported phantom tips Resolved: #7200 CHEY Replaced broken switch on gauge that had underreported rain
TA9M	Current: Resolved: #7250 LAHO Replaced FastTherm sensor along with TA15 Resolved: #7184 COOK Replaced FASTTherm Sensor along with TA15
WS2M	Current: Resolved:
TS10	Current: #7205 MARS Sensor reporting temps in excess of 70 degrees C Resolved: #7137 WOOD Replaced sensor that had 5 to 8 degree low bias Resolved: #7287 EUFA Replaced sensor reporting temperatures of -85 degrees C
TB10	Current: Resolved: #7192 HECT Replaced sensor reporting erratic temperatures Resolved: #7244 EUFA Filled in holes where animals had burrowed and exposed soil temperature probes
TS05	Current: #7303 HINT Monthly QA reports low bias of 4 to 5 degrees C Resolved:
TB05	Current: Resolved: #7245 EUFA Filled in holes where animals had burrowed and exposed soil temperature probes
TS30	Current: #7302 CLAY Monthly QA reports 5 to 8 degree C high bias Resolved:
TR05	Current: Resolved: #7126 ADAX Replaced soil moisture sensor reporting out of range values
TR25	Current: #7186 KETC Soil moisture reporting out of range values Resolved: #7188 EUFA Replaced soil moisture sensor reporting out of range value
TR60	Current: #7167 STIG No heating at 60 cm Current: #7190 EUFA Soil moisture values at 60 cm out of range Resolved:
TR75	Current: #7191 EUFA Soil moisture values 75 cm out of range Resolved:

ARS QA Report	
TAIR	Current: Resolved:
RELH	Current: Resolved:
SRAD	Current: Resolved: Resolved:
RAIN	Current: Resolved:
TS05	Current: Resolved:
TS10	Current: Resolved:
TS15	Current: Resolved:
TS30	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.

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