

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
 May 2002

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Severe winds were recorded often in May, with gusts of 55 to 65 mph common. The state experienced near record high temps on May 1st, while a 'cold' front brought cooler temps in the middle of the month.

Lightning strikes occurred at the Nowata and Retrop sites in May. In addition to the subsurface sensors detailed below, the datalogger and radios had to be replaced at both sites.

A subsurface oil flowline broke near ARS site A131 on May 1, leaving the tower, instruments and ground covered with a light coating of oil. The data from all sensors will remain flagged until the site is moved.

During the month of May, the Technicians resolved 78 trouble tickets. This work included scheduled rotations of pyranometers, barometers and soil temperature probes. The upgrades of dataloggers and wiring panels also continued.

Another 45 sites were visited in May by the Technicians for Spring Pass 2002.

Janet

Mesonet QA Report for Standard Variables	
TAIR	Current: Resolved:
RELH	Current: Resolved: #6560 KING Replaced sensor reporting values greater than 104% Resolved: #6590 DURA Replaced sensor with sporadic dips to 50% below nearby sites
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	Current: Resolved: #6604 INOL Reset barometer that was stuck at 989 mb Resolved: #6606 BURB Reset barometer that was stuck at 976 mb Resolved: #6607 CENT Cleaned barometer tube plugged with mud and insects
SRAD	Current: #6672 NINN Monthly QA indicates 200 W m2 low bias in afternoons Resolved:
RAIN	Current: #6676 CAMA Monthly QA indicates gauge is half tipping Current: #6610 CLAY Under-reported by 3/4 inch during two May rain events Resolved: #6508 CLAR Removed spider web from funnel that under-reported during May

TA9M	Current: Resolved:
WS2M	Current: Resolved:
TS10	Current: #6671 DURA Monthly QA indicates 4 deg C low bias Current: #6648 Medford Soil temp 10 to 15 deg C higher than nearby sites Resolved: #6589 BUFF Dry conditions caused crack in ground; re-installed sensor to correct 10 deg high bias Resolved: #6627 NOWA Replaced after lightning strike
TB10	Current: Resolved: #6619 RETR Replaced after lightning strike Resolved: #6628 NOWA Replaced after lightning strike
TS05	Current: Resolved: #6629 NOWA Replaced after lightning strike
TB05	Current: Resolved: #6514 HUGO Replaced sensor to correct 5 deg C low bias Resolved: #6603 CENT Replaced sensor damaged by rodent
TS30	Current: Resolved:

ARS QA Report	
TAIR	Current: Resolved: #6608 A152 Corrected problems of sensor pulled slightly apart; possible vandalism
RELH	Current: Resolved:
WDIR	Current: Resolved:
SRAD	Current: Resolved:
RAIN	Current: Resolved: #6576 A149 Replaced switch on gauge reporting multiple tips for each actual tip Resolved: #6642 A151 Removed spider web in gauge causing under-reporting of tips Resolved: #6643 A125 Cleaned obstruction in black funnel

	Resolved: #6605 A134 Removed spider webs in gauge causing under-reporting of tips
TS05	Current: Resolved:
TS10	Current: Resolved: #6668 A158 Monthly QA indicates 2 deg C high bias
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