OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

August 2002

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Mesonet Technicians resolved 90, count 'em 90, Trouble Tickets during August. Malfunctioning soil moisture sensors, ground heat flux plates, and subsurface PRTs were replaced as necessary. Scheduled rotations of pyranometers and multiplexers were also completed. Equipment repairs at a few of the bases were necessary after severe storms moved through the state on August 13 and 27.

Bessie (BESS) is no longer a supersite. The supersite instruments, including the sonic anemometer, krypton hygrometer, 4-way radiometer, and cup-type anemometers at 4 & 9 m, were removed from the station at the end of August. These instruments will be relocated to the Washington site in September.

Janet

	Mesonet QA Report for Standard Variables
TAIR	Current: Resolved:
RELH	Current: **Resolved: #6851 MTHE Replaced sensor that had reported values over 103% for extended periods**
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	**Current: #7036 MADI Pressure stuck at 991 mb** **Resolved: #6851 MTHE Rewired barometer that was stuck at 980 mb** **Resolved: #6862 BOWL Reset barometer that was stuck at 983 mb** **Resolved: #6874 TIPT Replaced vent tube filled with bugs to fix barometer with erratic dips in pressure** **Resolved: #6877 HECT Rewired barometer that was stuck at 990 mb** **Resolved: #6933 CHIC Rewired barometer that was stuck at 972 mb** **Resolved: #6962 RETR Rewired barometer that was stuck at 951 mb**
SRAD	Current: **Resolved: #6931 COOK Rewired pyranometer that was reporting minimum values at night of 2 W m-2**
RAIN	**Current: #7041 GOOD Gauge severely underreported during August 29th rain event** **Resolved: #6850 SHAW Removed spider webs that were preventing buckets from tipping**
TA9M	Current: Resolved:

WS2M	Current: Resolved:
TS10	Current: **Resolved: #6863 CALV Replaced multiplexer that caused soil temperatures to be erratic**
TB10	**Current: #7039 IDAB TB10 has 5 deg C warm bias** **Resolved: #6814 ARDM Replaced sensor reporting -190 deg C** **Resolved: #6857 ERIC Replaced sensor with 12 deg C bias**
TS05	Current: Resolved:
TB05	**Current: #6957 SEIL TB05 has 5 to 7 deg C cool bias** **Resolved: #6812 LANE Replaced sensor reporting erratic temperatures** **Resolved: #6852 LAHO Added soil cover above sensor found to be 4 cm too shallow**
TS30	**Current: #7064 WEST TS30 has 5 to 6 deg C cool bias** **Resolved: #6689 PERK Replaced sensor that had 12 deg C warm bias** **Resolved: #6864 BURN Replaced sensor with 5 deg C warm bias since lightning strike**

	ARS QA Report
TAIR	Current: Resolved:
RELH	Current: Resolved:
WDIR	Current: Resolved:
SRAD	Current: Resolved:
RAIN	**Current: #7037 A154 Gauge severely underreported during August 27 rain event** **Resolved: #6928 A136 Removed spider webs in black funnel that prevented water flow to buckets**
TS05	Current: Resolved:
TS10	Current: Resolved:
TS15	Current:

	Resolved:
TS30	Current: **Resolved: #6879 A145 Replaced sensor damged by gopher**

"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