

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

June 2003

Prepared by Janet E. Martinez
gamgr@mesonet.org

Early summer in Oklahoma! Thunderstorms swept across portions of the state on several occasions. Definite or probable lightning strikes occurred at the following sites, bases, and repeaters: BOWL, ALVAbase, STRIrptr, SHARrptr, MARSbase, and ERIC. The Mesonet Operators and Technicians did an excellent job diagnosing and fixing the various problems that occurred due to the strikes.

Spring Pass 2003 was completed in June. All 116 Mesonet sites were visited during the Pass.

Many thanks to Neel Chowdhury for helping us develop additional Monthly QA tools for the Mesonet and ARS. I can hear Kris, Bill, Leslie, Ken, and Thomas saying "argh" right now!

Janet

Mesonet QA Report for Standard Variables	
TAIR	Current: #7921 BROK Monthly QA indicates that TAIR has 1 to 2 degree C high bias Resolved: #7888 WIST Replaced sensor that had developed a 3° C high bias
RELH	Current: Resolved: #7889 ARDM Replaced sensor that was reporting 15 to 30% data dips
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	Current: Resolved: #7768 MADl Replaced vent tube that was plugged with insects Resolved: #7850 WASH Replaced vent tube that was plugged with insect nests Resolved: #7885 KING Replaced barometer that had reported errors each day
SRAD	Current: Resolved: #7887 MADl Pyranometer had reported negative values at night - problem found to be bad T&RELH switch Resolved: #7897 BOWL Pyranometer had reported negative values at night – problem found to be bad T&RELH switch
RAIN	Current: Resolved: #7767 STIG Replaced reed switch on gauge that had reported phantom tips Resolved: #7882 PORT Replaced failed switch on gauge that had reported no tips during rain event Resolved: #7883 JAYX Replaced failed switch on gauge that had reported no tips during rain event

TA9M	Current: Resolved:
WS2M	Current: Resolved:
TS10	Current: Resolved:
TB10	Current: Resolved:
TS05	Current: Resolved: #7898 BIXB Replaced sensor that had reported 10°C data dips
TB05	Current: Resolved: #7852 BURN Replaced sensor that had developed 4 to 10°C low bias
TS30	Current: #7916 BRIS Monthly QA indicates TS30 sensor has developed a 3 to 6°C high bias Resolved:
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: #7915 A121 Monthly QA indicates that pyranometer has developed a 10% low bias Resolved:
RAIN	Current: Resolved:
TS05	Current: Resolved:
TS10	Current: Resolved:
TS15	Current: Resolved:
TS30	Current: #7917 A155 Monthly QA indicates that TS30 has developed a 4 to 12°C high 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
TR75	Soil moisture: Calibrated DeltaT measured at 75 cm under native sod