

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
 March 2003

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Our Mesonet technicians (Kris, Bill, Ken, Leslie and Thomas) have been very busy this early spring, in part due to our Mesonet gophers. Several ground heat flux plates, soil moisture instruments and soil temperature sensors had to be replaced in March due to hungry subsurface varmints. In addition to the work detailed below, they (the technicians, not the gophers) also performed scheduled rotations of 18 barometers during the month.

Janet

Mesonet QA Report for Standard Variables	
TAIR	Current: Resolved:
RELH	Current: #7615 PUTN Reporting humidity values of 0% intermittently since rain Current: #7616 BEAV Reporting humidity values of 0% intermittently since rain Resolved:
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	Current: #7597 CHIC Pressure data sticks at same value for 1 to 2 hours at a time Resolved: #7606 SULP Replaced barometer and station battery to eliminate station dips in pressure data
SRAD	Current: Resolved:
RAIN	Current: #7630 TAHL Gauge under-reported last 2 rain events in March by 1 inch Resolved: #7526 MARE Removed spider webs blocking funnel on gauge that had been reporting no tips Resolved: #7527 KING Tightened terminal screws on gauge that had under-reported tips Resolved: #7594 ALV2 Removed spider webs blocking bucket on gauge that had not reported tips
TA9M	Current: Resolved:
WS2M	Current: Resolved:

TS10	Current: #7632 BLAC Monthly QA indicates sensor has 4 to 8 degree C low bias Current: #7633 TIPT Monthly QA indicates sensor has 5 to 7 degree C low bias Resolved: #7603 TAHL Tightened wires to eliminate erratic soil temperature data
TB10	Current: Resolved:
TS05	Current: Resolved:
TB05	Current: Resolved:
TS30	Current: #7620 VINI Temperature data is erratic Resolved:
TR05	Current: Resolved: #7473 PUTN Replaced sensor that had been damaged by Mesonet gopher
TR25	Current: Resolved:
TR60	Current: #7596 PUTN Soil Moisture data are erratic Resolved:
TR75	Current: Resolved:

ARS QA Report	
TAIR	Current: Resolved:
RELH	Current: Resolved: #7617 A124 Replaced sensor that had a 5% low bias at upper end of humidity range Resolved: #7618 A137 Replaced sensor that had a 5% low bias at upper end of humidity range
WDIR	Current: Resolved:
SRAD	Current: Resolved: #7602 A181 Replaced sensor that had 10 to 12% low bias in afternoons

RAIN	Current: Resolved: #7600 A121 Cleaned and checked gauge that had reported no tips Resolved: #7595 A111 Replaced switch on gauge that had reported phantom tips Resolved: #7601 A158 Cleaned spider webs on gauge that had not reported tips
TS05	Current: Resolved:
TS10	Current: Resolved: #7604 A110 Replaced sensor that had a 5 degree C low bias
TS15	Current: Resolved: #7529 A181 Replaced Sensor damaged by ARS gopher
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