

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

October 1999

Prepared by Chris Fiebrich
gamgr@mesonet.org

Over 375 trouble tickets were issued and reconciled during October--mainly due to OASIS upgrades. Here's a summary of the tickets that directly affected our data quality.

Mesonet QA Report for Standard Variables	
TAIR	Current: Resolved: #3386 BEAV Replaced bad thermistor
RELH	Current: Resolved: #3004 BREC Replaced bad sensor Resolved: #3012 CHER Replaced sensor stuck at 0% Resolved: #3385 BEAV Replaced bad sensor
WDIR	Current: Resolved: #2711 HOOK Replaced sensor with suspicious direction
WSPD	Current: #2736 BBOW Sensor suspected of under-reporting during strong winds/severe weather Resolved:
PRES	Current: Resolved:
SRAD	Current: #3361 ALTU Monthly QA indicates sensor is reporting ~50 W/m ² low Resolved: #3387 BEAV Replaced sensor stuck at -30 Resolved: #3680 EUFA Replaced sensor with low bias Resolved: #3838 FTCB Re-levelled pyranometer
RAIN	Current: #3840 COPA Sensor reported 0.0 during heavy rain Resolved: #2681 BURB Replaced bad switch Resolved: #3688 WILB Replaced bad switch
TA9M	Current: Resolved: #3360 BREC Replaced bad thermistor
WS2M	Current: #3670 MEDI Sensor at improper height Resolved: #3392 PAUL Sensor moved to proper height
TS10	Current: #3001 ADAX Stuck at less than -100.0 C Current: #3003 HOBA Sensor biased 20 C warm Current: #3019 FTCB Sensor reporting numerous observations below -100.0 C Resolved: #2260 BOWL Replaced sensor damaged by gophers Resolved: #2673 BURB Replaced lightning-damaged sensor

TB10	Current: Resolved: #2864 FREE Replaced sensor stuck at -73 C
TS05	Current: #2604 HOBA Sensor stuck at -273.1 C Resolved: #3359 WYNO Suspicious sensor tested ok by tech
TB05	Current: #2789 STIG Sensor reporting out of range (over 55 C) Resolved: #2734 SKIA Replaced suspicious sensor
TS30	Current: #2391 HOLL Reported 15 C warm bias for one month, now data seems to be ok Current: #3147 TIPT Sensor stuck at -273.1 C Resolved: #2674 BURB Replaced lightning damaged sensor Resolved: #3391 PAUL Re-positioned sensor found to be installed at 15 cm

ARS QA Report	
TAIR	Current: Resolved:
RELH	Current: #2539 A149 Monthly QA indicates 1.0 C low TDEW Bias Resolved: #2539 A149 Replaced sensor with low TDEW bias Resolved: #3025 A152 Replaced faulty sensor Resolved: #3026 A182 Replaced faulty sensor
SRAD	Current: #3836 A130 Mesocomp found sensor 7% low Current: #3837 A151 Mesocomp found sensor 7% low Resolved:
RAIN	Current: Resolved:
TS05	Current: Resolved:
TS10	Current: Resolved: #3835 A134 Replaced sensor with warm bias
TS15	Current: Resolved: #3024 A163 Replaced sensor with sporadic warm bias
TS30	Current: Resolved: #3018 A146 Replaced erratic sensor Resolved: #3685 A167 Replaced sensor damaged by rodents

“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