OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
September 1999

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The Mesonet technicians were busy in September resolving over 37 trouble tickets. Lightning at OKEM and BRIS, along with the hot summer of 1999 really made the problems pile up. In addition to this, 9 sites were upgraded for the OASIS project, and one site (BOIS) was upgraded to a Super Site.

	Mesonet QA Report for Standard Variables
TAIR	Current: Resolved:
RELH	**Current: #3004 BREC Sensor dropping to near 0% RELH on several occasions** **Current: #3012 CHER Sensor stuck at 0% RELH** **Resolved: #3000 NEWK Replaced sensor stuck at 0% RELH** **Resolved: #3016 OKEM Replaced lightning-damaged sensor** **Resolved: #3030 BRIS Replaced lightning-damaged sensor**
WDIR	**Current: #2711 HOOK Sensor reporting E-NE'ly during southerly flow** **Resolved: #3076 OKEM Replaced lightning-damaged sensor**
WSPD	**Current: #2736 BBOW Sensor suspected of under-reporting during strong winds/severe weather** **Resolved: #3075 OKEM Replaced lightning-damaged sensor** **Resolved: #3010 TISH Replaced bad bearings** **Resolved: #3011 KING Replaced sensor stuck at 0 m/s** **Resolved: #3014 ARDM Replaced noisy bearings**
PRES	Current: **Resolved: #3150 OILT Repaired sensor stuck at 978.49 mb**
SRAD	**Current: #3361 ALTU Monthly QA indicates sensor is reporting ~50 W/m^2 low** **Resolved:**
RAIN	**Current: #2681 BURB Switch found to be sticking** **Resolved: #2640 ANTL Replaced double-tipping gauge** **Resolved: #2797 CHER Replaced faulty switch** **Resolved: #2998 WEBB Replaced faulty switch** **Resolved: #2999 VINI Replaced faulty switch**
TA9M	**Current: #3360 BREC Roughly half of observations each day are below 0.** **Resolved:**
WS2M	Current: **Resolved: #2946 STIG Replaced sensor stuck at 0.0 m/s** **Resolved: #2997 PAUL Replaced noisy bearings** **Resolved: #3017 WEBB Removed tall johnson grass that was impeding cup rotation**

TS10	**Current: #2260 BOWL Sensor reporting data spikes and 5 C warm bias** **Current: #2673 BURB Sensor appears to be biased 5 C warm since lightning strike** **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: #2831 IDAB Corrected wiring problem** **Resolved: #2839 PAWN Corrected wiring problem** **Resolved: #2840 TIPT Corrected wiring problem** **Resolved: #3077 OKEM Replaced lightning-damaged sensor**
TB10	**Current: #2864 FREE Sensor stuck at -73 C** **Resolved: #2799 MIAM Replaced faulty sensor** **Resolved: #2833 IDAB Corrected wiring problem** **Resolved: #2837 PAWN Corrected wiring problem**
TS05	**Current: #2604 HOBA Sensor stuck at -273.1 C** **Current: #3359 WYNO Monthly QA indicates 5 C warm bias** **Resolved: #2832 IDAB Corrected wiring problem** **Resolved: #2838 PAWN Corrected wiring problem** **Resolved: #2841 TIPT Corrected wiring problem** **Resolved: #2993 PRYO Repaired faulty sensor**
TB05	**Current: #2538 CATO Sensor biased 5-10 C warm** **Current: #2734 SKIA Reporting data spikes in the afternoon and as much as a 10 C warm bias** **Current: #2789 STIG Sensor reporting out of range (over 55 C)** **Resolved: #2719 LAHO Replaced warm-biased sensor** **Resolved: #2834 IDAB Corrected wiring problem** **Resolved: #2994 PRYO Replaced faulty sensor**
TS30	**Current: #2391 HOLL Reported 15 C warm bias for one month, now data seems to be ok** **Current: #2674 BURB Sensor biased 12 C cool since lightning strike** **Resolved: #2274 SALL Replaced lightning-damaged sensor** **Resolved: #2836 PAWN Corrected wiring problem** **Resolved: #3078 OKEM Replaced lightning-damaged sensor** **Resolved: #3147 TIPT Sensor stuck at -273.1 C**

	ARS QA Report
TAIR	Current: Resolved:
RELH	**Current: #2539 A149 Monthly QA indicates 1.0 C low TDEW bias** **Current: #3025 A152 Sensor observing many -7999.0 obs** **Current: #3026 A182 Sensor observing many -7999.0 obs** Resolved:
SRAD	Current: Resolved:

RAIN	Current: Resolved:
TS05	Current: Resolved:
TS10	Current: Resolved:
TS15	**Current: #3024 A163 Sensor biased 8 C warm** Resolved:
TS30	**Current: #3018 Sensor failing step test with frequent erratic observations and 5 C warm 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