

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
July 2000

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The Mesonet Technicians have begun Summer Pass 2000. All sites will be visited between July 15 and September 30. In addition to the routine maintenance that will be performed at each site, many new site photos (including updated panoramic photos) will be taken.

Lightning, lightning, lightning...

"The July Victims":

- (1) Fairview
- (2) Seiling
- (3) Grandfield
- (4) Medford base
- (5) Blackwell base
- (6) Kiowa Repeater (twice)

Mesonet QA Report for Standard Variables	
TAIR	Current: Resolved: #5100 BEAV Replaced after found to be 0.59 C high during Spring Pass Resolved: #5102 KENT Sensor found to be dangling from mount Resolved: #5112 BOIS Replaced after found to be 0.7 C warm during Spring Pass Resolved: #5113 PUTN Replaced after found to be 0.8 C warm during Spring Pass Resolved: #5123 CLOU Replaced after found to be 0.6 C warm during Spring Pass Resolved: #5134 PAWN Replaced bad sensor
RELH	Current: #5084 WAUR Sensor found to be 7% high during Spring Pass 2000 comparison Current: #5140 MAYR Sensor reported to 108% Resolved: #5014 ALV2 Replaced after sensor rose to 108% RH Resolved: #5073 SLAP Replaced after sensor reported erratic dips to 5-10% RH Resolved: #5074 WIST Replaced after sensor rose to 112% RH Resolved: #5076 HOOK Replaced after sensor sporadically dipped to 0%. Resolved: #5082 ADAX Replaced after sensor found to be 6% high during Spring Pass Resolved: #5083 BBOW Replaced after sensor found to be 20% high during Spring Pass Resolved: #5085 KENT Repaired sensor found to be dangling from mount Resolved: #5116 BYAR Replaced after sensor found to be 5.5% high during Spring Pass Resolved: #5121 IDAB Replaced after sensor found to be 7.2% high during Spring Pass Resolved: #5122 MTHE Replaced after sensor found to be 8% high during Spring Pass Resolved: #5124 PERK Replaced after sensor found to be 5.1% high during Spring Pass Resolved: #5126 SULP Replaced after sensor found to be 7.9% high during Spring Pass
WDIR	Current: Resolved: #5167 SEIL Replaced lightning-damaged sensor
WSPD	Current:

	<p>Resolved: #4976 BYAR Replaced sensor with loose nut</p> <p>Resolved: #5117 BYAR Replaced sensor with loose nose cone prop</p> <p>Resolved: #5130 MINC Replaced nose cone due to bad bearings</p> <p>Resolved: #5151 CENT Replaced sensor due to noisy bearings</p> <p>Resolved: #5152 LANE Replaced sensor due to noisy bearings</p> <p>Resolved: #5153 WIST Replaced sensor due to noisy bearings</p> <p>Resolved: #5154 WILB Replaced sensor due to noisy bearings</p> <p>Resolved: #5155 TALI Replaced sensor due to noisy bearings</p> <p>Resolved: #5156 STUA Replaced sensor due to slightly noisy bearings</p>
PRES	<p>Current: #5086 RETR Sensor found to be .72 mb high during Spring Pass 2000 comparison</p> <p>Resolved: #5136 SALL Replaced barometer tube found to be plugged by critter</p>
SRAD	<p>Current: #5070 HOOK Sensor found to be 6.5% high during Spring Pass 2000 comparison</p> <p>Current: #5072 KETC Monthly QA indicates 5-10% high bias</p> <p>Current: #5079 WASH Sensor found to be 23% high during Spring Pass 2000 comparison</p> <p>Current: #5091 WIST Sensor found to be 5.5% low during Spring Pass 2000 comparison</p> <p>Current: #5097 BESS Sensor found to be 10% high during Spring Pass 2000 comparison</p> <p>Current: #5099 MEDF Sensor found to be 8% low during Spring Pass 2000 comparison</p> <p>Current: #5101 WALT Sensor found to be 10% low during Spring Pass 2000 comparison</p> <p>Current: #5111 GOOD Sensor found to be 6.7% high during Spring Pass 2000 comparison</p> <p>Current: #5115 FREE Sensor found to be 6% high during Spring Pass 2000 comparison</p> <p>Current: #5159 FAIR Sensor stuck at 0</p> <p>Resolved:</p>
RAIN	<p>Current: #5078 BURN Gauge recorded no rain during radar-indicated rain event</p> <p>Current: #5098 BESS Gauge found to be double-tipping on one side of bucket during Spring Pass 2000 test</p> <p>Current: #5114 CHEY Gauge found to over-report by 6.25% during Spring Pass drip test</p> <p>Current: #5185 TIPT Long term analysis indicates possible under-reporting</p> <p>Resolved: #5142 KING Replaced bad switch</p>
TA9M	<p>Current:</p> <p>Resolved:</p>
WS2M	<p>Current:</p> <p>Resolved:</p>
TS10	<p>Current: #5178 MADI Sensor sporadically reports +5 C offset</p> <p>Resolved: #5096 BOWL Replaced sensor with 10 C warm bias</p>
TB10	<p>Current: #5179 SALL TB10 is warmer than TB05 during all times of the day</p> <p>Resolved:</p>

TS05	Current: Resolved: #5127 ANTL Sensor found to be angled upward Resolved: #5128 BRIS Corrected wiring problem
TB05	Current: Resolved: #5129 KING 1-2 inches of grass clippings removed from bare plot
TS30	Current: Resolved: #5005 CHIC Replaced wiring problem

ARS QA Report	
TAIR	Current: #5180 A182 Sensor found to be 2.5 C warm during ARS pass Resolved:
RELH	Current: Resolved:
SRAD	Current: Resolved:
RAIN	Current: Resolved: #5092 A181 Replaced bad switch Resolved: #5104 A130 Replaced bad switch Resolved: #5105 A149 Replaced bad switch
TS05	Current: #5181 A132 Monthly QA indicates 4 C warm bias during all times of day Resolved: #5132 A136 Replaced gopher-damaged sensor Resolved: #5149 A161 Replaced gopher-damaged sensor
TS10	Current: #5182 A167 Monthly QA indicates 4 C warm bias during all times of day Resolved: #5131 A136 Replaced gopher-damaged sensor
TS15	Current: Resolved: #5071 A136 Replaced gopher-damaged sensor Resolved: #5139 A137 Replaced reporting frequent data spikes
TS30	Current: #5157 A165 Reporting erratic observations Resolved: #5137 A161 Cable chewed in half and sensor stolen

“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