

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
June 2000

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The Mesonet Technicians completed Spring Pass 2000 on June 30. The point comparisons they performed on the TAIR, RELH, PRES, SRAD, and RAIN parameters were very useful for QA of Mesonet data. A number of sensors reporting slightly outside of the Mesonet's acceptable error ranges were identified.

Many site photos were taken during Spring Pass 2000 to document vegetation cover around the bare and sod soil temperature plots, the soil heat flux sensors, and the soil moisture plots at each station. Look for those pictures along with the site visitation forms indicating the technician's notes to be available on the web next month.

One more note... The monthly analysis for June identified the very heavy rains that fell over east Oklahoma during mid to late June. Westville took top honors with a June total of 17.04 inches!

Mesonet QA Report for Standard Variables	
TAIR	Current: Resolved: #5011 SLAP Replaced malfunctioning sensor
RELH	Current: #5014 ALV2 RELH to 108% Current: #5074 WIST RELH to 112% Current: #5082 ADAX Sensor found to be 6% high during Spring Pass 2000 comparison Current: #5083 BBOW Sensor found to be 20% high during Spring Pass 2000 comparison Current: #5084 WAUR Sensor found to be 7% high during Spring Pass 2000 comparison Current: #5102 KENT Sensor stuck at 0% for extended period Resolved: #4948 MAYR Replaced bad sensor Resolved: #5006 CAMA Replaced bad sensor Resolved: #5010 SLAP Replaced bad sensor Resolved: #5013 ARDM Replaced sensor that failed mesocomp Resolved: #5077 WEST Replaced sensor stuck at 0% Resolved: #5087 CENT Replaced sensor found to have 5.3% high bias during spring pass 2000 Resolved: #5094 MARE Replaced sensor found to have 5.9% high bias during spring pass 2000 Resolved: #5110 BUFF Replaced sensor found to have 6.0% high bias during spring pass 2000
WDIR	Current: Resolved:
WSPD	Current: #4976 BYAR Sensor sporadically 4-5 m/s slower than speed at 9 m Resolved: #5093 MARE Replaced sensor with noisy bearings Resolved: #5120 CLAR Replaced sensor with noisy bearings
PRES	Current: #5086 RETR Sensor found to be .72 mb high during Spring Pass 2000 comparison

	Resolved: #4980 RETR Found tube clogged with bug Resolved: #5046 WIST Replaced bad barometer
SRAD	Current: #5070 HOOK Sensor found to be 6.5% high during Spring Pass 2000 comparison Current: #5072 KETC Monthly QA indicates 5-10% high bias Current: #5079 WASH Sensor found to be 23% high during Spring Pass 2000 comparison Current: #5091 WIST Sensor found to be 5.5% low during Spring Pass 2000 comparison Current: #5097 BESS Sensor found to be 10% high during Spring Pass 2000 comparison Current: #5099 MEDF Sensor found to be 8% low during Spring Pass 2000 comparison Current: #5101 WALT Sensor found to be 10% low during Spring Pass 2000 comparison Resolved: #5009 SLAP Corrected SRAD problems by replacing bad RH switch
RAIN	Current: #5078 BURN Gauge recorded no rain during radar-indicated rain event Current: #5098 BESS Gauge found to be double-tipping on one side of bucket during Spring Pass 2000 test Resolved: #5075 PUTN Replaced bad switch
TA9M	Current: Resolved: #5008 SLAP Corrected TA9M problems by cleaning corroded negative ground
WS2M	Current: Resolved:
TS10	Current: Resolved: #5007 SLAP Corrected TS10 problems by cleaning corroded negative ground Resolved: #5056 SKIA Tightened down power ground port
TB10	Current: #5096 BOWL Sensor reports 10 C warm bias during and after rain events Resolved: #5057 SKIA Tightened down power ground port
TS05	Current: Resolved: #5058 SKIA Tightened down power ground port
TB05	Current: Resolved: #5059 SKIA Tightened down power ground port
TS30	Current: #5005 CHIC Sensor stuck at -273.1 Resolved: #5012 SALL Replaced sensor reporting unreasonable values Resolved: #5060 SKIA Tightened down power ground port

ARS QA Report	
TAIR	Current: Resolved:
RELH	Current: Resolved:
SRAD	Current: Resolved:
RAIN	Current: #5092 A181 Gauge recorded no rain during heavy rain event Resolved: #5055 A133 Repaired vandalized gauge
TS05	Current: Resolved:
TS10	Current: Resolved:
TS15	Current: #5071 A136 Monthly QA indicates 3-4 C warm bias Resolved:
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