

OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT

June 2002

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On June 12th and 13th, strong convective storms moved across the state. Analysis of 5-minute pressure, wind, and rain data revealed the formation and dissipation of mesohighs and mesolows at several sites.

The new Norman site (NRMN) was installed in early June. The new site is located on an 11-acre plot of land between Max Westheimer airport and the National Severe Storms Lab. Like the old Norman site, NRMN is also a supersite. The old Norman site will continue to operate through July in order to obtain comparison data for the two sites.

ARS site A130 was vandalized on June 30. The battery and regulator were stolen and have since been replaced.

The Mesonet Technicians completed Spring Pass 2002 in June. At each of the 115 sites, photos were taken, vegetation was trimmed, sensors were cleaned, and rain gauge drip tests were performed.

In addition to Spring Pass site visits, the Technicians resolved 60 trouble tickets in June. Several dataloggers were upgraded and scheduled rotations of pyranometers and temperature/relative humidity sensors were performed.

Janet

Mesonet QA Report for Standard Variables	
TAIR	Current: Resolved:
RELH	Current: Resolved: #6666 BUTL Replaced sensor that had erratic 30% dips Resolved: #6674 CHER Replaced cover on adjusting screws that allowed sensor to become wet during rains Resolved: #6690 REDR Replaced sensor reporting 0% relative humidity
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	Current: #6678 BBOW Pressure stuck at 999 mb Current: #6715 WIST Several out-of-range observations in 48 hours Current: #6716 NINN Pressure stuck at 1019 mb Current: #6718 BURB Pressure stuck at 1015 mb Resolved: #6647 HASK Replaced sensor that was stuck at 993 mb
SRAD	Current: Resolved:

RAIN	<p>Current: #6711 ARDM No tips during widespread rain event</p> <p>Resolved: #6610 CLAY Removed obstruction from funnel on gauge that was under-reporting rain</p> <p>Resolved: #6667 ALV2 Removed spider web causing buckets to stick</p> <p>Resolved: #6675 SLAP Replaced switch on gauge that was under-reporting rain</p> <p>Resolved: #6677 BUFF Replaced switch that was not reporting rain</p> <p>Resolved: #6679 CENT Replaced switch that was not reporting rain</p>
TA9M	<p>Current:</p> <p>Resolved:</p>
WS2M	<p>Current:</p> <p>Resolved: #6712 MIAM Replaced sensor to correct starting threshold problems</p>
TS10	<p>Current: #6719 BEEX Temp is 20 deg C cooler than nearby sites</p> <p>Resolved: #6648 MEDF Replaced sensor to correct 15 deg high bias</p> <p>Resolved: #6671 DURA Replaced sensor to correct 4 deg low bias</p>
TB10	<p>Current: #6819 CLAY Monthly QA indicates TB10 is always hotter than TB05</p> <p>Current: #6920 PAUL Monthly QA indicates TB10 is always hotter than TB05</p> <p>Resolved:</p>
TS05	<p>Current:</p> <p>Resolved:</p>
TB05	<p>Current: #6665 BESS Temps spiking to 60 deg C</p> <p>Current: #6710 WATO Afternoon temps of 55 to 90 deg C</p> <p>Current: #6713 DURA Temps very erratic with large dips at night</p> <p>Current: #6818 BOIS Monthly QA indicates bare temperatures always cooler than sod temperatures</p> <p>Resolved:</p>
TS30	<p>Current: #6689 PERK High bias of 7 deg C after rapid spike in temp</p> <p>Resolved:</p>

ARS QA Report	
TAIR	<p>Current: #6827 A159 Monthly QA indicates 2 °C low bias compared to nearby sites</p> <p>Resolved:</p>
RELH	<p>Current:</p> <p>Resolved:</p>
WDIR	<p>Current:</p> <p>Resolved:</p>
SRAD	<p>Current:</p>

	Resolved:
RAIN	Current: Resolved:
TS05	Current: Resolved: #6680 A158 Replaced sensor
TS10	Current: Resolved: #6668 A158 Replaced sensor that had 2 deg C high bias
TS15	Current: Resolved: #6673 A148 Replaced sensor that had temperature spike Resolved: #6681 A158 Replaced sensor
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