

## OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT December 2007

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- Mesonet Technicians rotated 1 wind monitor nose cone and 1 temperature and relative humidity sensor.
- Several winter storms impacted the state throughout the month. Freezing rain affected many sites in the beginning of the month, while light freezing rain, snow, and sleet were the main culprits across northern and western sections of the state the remainder of the month. Data affected by winter precipitation were flagged until sensors recovered from the event. Here is a list of events that affected data throughout December:
  - Most of the state was affected by a major ice storm December 8-10. The freezing rain coated wind sensors, preventing them from working properly. Pressure data at Cookson (COOK), Eufaula (EUFA), and Norman (NRMN) were also affected by the ice.
  - Light freezing rain, sleet, and snow impacted wind sensors at several sites in western Oklahoma December 14-15. Pressure data at COOK and NRMN were flagged due to ice.
  - Light freezing rain and snow affected wind sensors in central Oklahoma December 22. Pressure data at Chickasha (CHIC) and NRMN were also affected by the ice.
  - Light freezing rain affected wind sensors at Kingfisher (KING) and Marshall (MRSH).
- Fall Pass ended December 21<sup>st</sup>. Results from Fall Pass 2007 are now available online:
  - <http://www.mesonet.org/sitepass>

### Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	Current	15523	MIAM	Sensor has bias during moist weather.
RELH	N/A			
WSPD	Resolved	15633	COOK	Replaced sensor with starting threshold problem
WDIR	N/A			
PRES	N/A			
SRAD	Current	15654	OKMU	Sensor has a low bias.
RAIN	Resolved	15638	CHEY	Replaced faulty switch.
	Resolved	15629	TAHL	Spider web clogging rain gauge removed.

<b>TA9M</b>	N/A			
<b>WS2M</b>	N/A			
<b>TS10</b>	Current	15661	CLRM	Sensor has larger diurnal variation than TB10.
<b>TB10</b>	N/A			
<b>TS05</b>	Current	15656	VANO	Sensor has a low bias.
	Current	15657	ELRE	Sensor has a low bias.
<b>TB05</b>	Current	15658	REDR	Sensor has a low bias.
<b>TS30</b>	Resolved	15529	GRA2	Replaced sensor damaged by rodents.
<b>TR05</b>	Resolved	15611	ADAX	Replaced failed sensor.
	Resolved	15636	SLAP	Replaced sensor with damaged cable.
<b>TR25</b>	Resolved	15605	WEAT	Replaced failed sensor.
<b>TR60</b>	N/A			
<b>TR75</b>	N/A			

### ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
<b>TAIR</b>	N/A			
<b>RELH</b>	N/A			
<b>SRAD</b>	N/A			
<b>RAIN</b>	N/A			
<b>TS05</b>	N/A			

<b>TS10</b>	<b>N/A</b>
<b>TS15</b>	<b>N/A</b>
<b>TS30</b>	<b>N/A</b>
<b>VW05</b>	<b>N/A</b>
<b>VW25</b>	<b>N/A</b>
<b>VW45</b>	<b>N/A</b>

### ARS Ft. Cobb Watershed QA Report

<b>Variable</b>	<b>Status</b>	<b>Ticket</b>	<b>Site</b>	<b>Remarks</b>
<b>TAIR</b>	<b>N/A</b>			
<b>RELH</b>	<b>N/A</b>			
<b>SRAD</b>	<b>N/A</b>			
<b>RAIN</b>	<b>Resolved</b>	<b>15651</b>	<b>F111</b>	<b>Spider web clogging rain gauge removed.</b>
	<b>Resolved</b>	<b>15634</b>	<b>F115</b>	<b>Replaced faulty switch.</b>
<b>TS05</b>	<b>N/A</b>			
<b>TS10</b>	<b>N/A</b>			
<b>TS15</b>	<b>N/A</b>			
<b>TS30</b>	<b>N/A</b>			
<b>VW05</b>	<b>N/A</b>			
<b>VW25</b>	<b>N/A</b>			
<b>VW45</b>	<b>N/A</b>			

“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.

<b>Variable</b>	<b>Description</b>
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
TR05	Soil moisture: Calibrated DeltaT measured at 5 cm under native sod
TR25	Soil moisture: Calibrated DeltaT measured at 25 cm under native sod
TR60	Soil moisture: Calibrated DeltaT measured at 60 cm under native sod
TR75	Soil moisture: Calibrated DeltaT measured at 75 cm under native sod
VW05	Soil moisture: Volumetric water content measured at 5 cm under native sod
VW25	Soil moisture: Volumetric water content measured at 25 cm under native sod
VW45	Soil moisture: Volumetric water content measured at 45 cm under native sod