OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
April 2002

Prepared by Janet E. Martinez
gamgr@mesonet.org

The coming of Spring brought localized heavy storms and high winds to our state several times in April. Southeast Oklahoma received the largest cumulative amount of rain. Talihina was the winner, with 8.5 inches of rain during the month.

A lightning strike occurred at the Clayton site on April 7th. The raingauge, temp & relh sensor, pyranometer, datalogger and radio had to be replaced. This site has been struck by lightning 6 times in the past 6 years!

The Technicians were very busy in April resolving 87 trouble tickets. Their work included datalogger upgrades and replacement of 13 cup-type anemometers with starting threshold problems.

Spring Pass 2002 is well underway with approximately 50 sites visited.

Now that the sun angles are high, the NRAD and NCOM calibrations of pyranometers and net radiometers have begun again. In April, 3 pyranometers were changed out as part of the scheduled rotations that were begun last fall.

Wind direction (10 m) rotations are now complete for all 115 sites.

Janet

	Mesonet QA Report for Standard Variables
TAIR	**Current: #6516 ALV2 Replaced sensor broken by cattle** Resolved:
RELH	**Current: #6560 KING Values greater than 104%** **Resolved: #6515 ALV2 Replaced sensor broken by cattle** **Resolved: #6548 CALV Replaced reporting 20-40% low**
WDIR	Current: Resolved:
WSPD	Current: Resolved:
PRES	Current: **Resolved: #6510 BURB Bad port on wiring panel caused press to stick at zero**
SRAD	Current: Resolved:
RAIN	Current: **Resolved: #6508 HECT Replaced switch (reported no tips)** **Resolved: #6513 NINN Replaced switch (reported mulitple phantom tips)**

	Resolved: #6517 Replaced switch (reported no tips)
TA9M	Current: Resolved:
WS2M	Current: Resolved:
TS10	Current: **Resolved: #6567 ACME Replaced sensor damaged by gophers**
TB10	Current: **Resolved: #6561 PRYO Replaced sensor with high temp bias**
TS05	Current: Resolved:
TB05	**Current: #6514 HUGO Monthly QA indicates 5 degree C low bias** Resolved:
TS30	Current: **Resolved: #6562 ACME Replaced sensor damaged by gophers**

	ARS QA Report
TAIR	Current: Resolved:
RELH	Current: Resolved:
WDIR	Current: Resolved:
SRAD	Current: Resolved:
RAIN	Current: Resolved:
TS05	Current: **Resolved: #6490 A161 Replaced sensor that had reported temps less than -12°C**
TS10	Current: **Resolved: #6491 A161 Replaced sensor that had numerous drops in temp** **Resolved: #6587 A136 Replaced sensor damaged by gophers**

TS15	Current: **Resolved: #6588 A136 Replaced sensor damaged by gophers**
TS30	Current: **Resolved: #6549 A136 Replaced sensor damaged by gophers**

"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
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