OKLAHOMA MESONET/ARS QUALITY ASSURANCE REPORT
December 2006

Prepared by Peter K. Hall, Jr. & Cindy Morgan
qamgr@mesonet.org

- During the holiday shortened month, Mesonet Technicians resolved 62 trouble tickets. Along with trouble tickets, Technicians conducted routine maintenance at sites and completed other tasks, including:
  - Scheduled rotations of 3 temperature and relative humidity sensors and 1 wind speed sensor.
  - Enclosure upgrade at Stigler (STIG)
- Technicians successfully resolved all Mesonet trouble tickets by 15 December. The Oklahoma Mesonet went from 15 - 30 December 2006 without any unresolved trouble tickets!
- All soil moisture data at A159 were flagged from 15 - 21 December 2006 due to a wiring problem.

Mesonet QA Report for Standard Variables

Variable	Status	Ticket	Site	Remarks
TAIR	**Resolved**	**14515**	**SKIA**	**Replaced sensor that was reporting negative spikes in data.**
RELH	**Current**	**14588**	**ERIC**	**Sensor easily becomes wet during rain events.**
	Current	**14589**	**RETR**	**Sensor easily becomes wet during rain events.**
	Resolved	**14537**	**LANE**	**Replaced sensor that was collecting water.**
WDIR	**N/A**			
WSPD	**N/A**			
PRES	**Resolved**	**14514**	**COOK**	**Fixed wire connection problem.**
SRAD	**N/A**			
RAIN	**Current**	**14593**	**WEBB**	**Sensor does not report as much rain as neighbors.**
	Resolved	**14513**	**WEBB**	**Cleaned rain gauge that was not reporting as much rain as neighbors.**
TA9M	**Current**	**14595**	**GRA2**	**Sensor reports large negative spikes.**
WS2M	**N/A**			

TS10	**Resolved**	**14577**	**WALT**	**Replaced sensor that had developed a low bias.**
TB10	**Current**	**14597**	**HOBA**	**Sensor developed a low bias.**
	Resolved	**14496**	**HUGO**	**Replaced sensor that had developed a high bias.**
TS05	**Current**	**14598**	**OKEM**	**Sensor developed a low bias.**
	Resolved	**14578**	**WALT**	**Replaced sensor that had developed a low bias.**
TB05	**Current**	**14596**	**MEDF**	**Sensor developed a low bias.**
	Resolved	**14454**	**ADAX**	**Replaced sensor that reported large negative spikes in data.**
	Resolved	**14302**	**WOOD**	**Replaced sensor that had developed a low bias.**
TS30	**Current**	**14601**	**VINI**	**Sensor developed a low bias.**
	Resolved	**14308**	**WILB**	**Replaced sensor that had developed a low bias.**
TR05	**N/A**			
TR25	**N/A**			
TR60	**N/A**			
TR75	**Resolved**	**14288**	**VANO**	**Removed sensor that had stopped reporting.**

ARS Little Washita Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	**N/A**			
RELH	**N/A**			
SRAD	**N/A**			
RAIN	**N/A**			
TS05	**Resolved**	**14318**	**A153**	**Replaced sensor that had developed a low bias.**
	Resolved	**14540**	**A159**	**Replaced sensor that had developed a low bias.**
TS10	**N/A**			
TS15	**Resolved**	**14539**	**A150**	**Replaced sensor that had developed a high bias.**

TS30	**Resolved**	**14532**	**A153**	**Replaced sensor that had developed a low bias.**
VW05	**Current**	**14600**	**A134**	**Sensor malfunctioning.**
VW25	**N/A**			
VW45	**N/A**			

ARS Ft. Cobb Watershed QA Report

Variable	Status	Ticket	Site	Remarks
TAIR	**N/A**			
RELH	**N/A**			
SRAD	**N/A**			
RAIN	**Current**	**14590**	**F114**	**Sensor does not report as much rain as neighbors.**
	Resolved	**14526**	**F111**	**Removed spider web that was clogging rain gauge.**
	Resolved	**14527**	**F112**	**Removed spider web that was clogging rain gauge.**
TS05	**Current**	**14592**	**F101**	**Sensor has a low bias.**
	Current	**14594**	**F115**	**Sensor has a low bias.**
TS10	**N/A**			
TS15	**N/A**			
TS30	**N/A**			
VW05	**N/A**			
VW25	**Current**	**14591**	**F103**	**Sensor does not report.**
VW45	**Current**	**14599**	**F113**	**Sensor malfunctioning.**

“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
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