

OKLAHOMA MESONETWORK QUALITY ASSURANCE REPORT
for the two-month period of September and October, 1995

Based upon observations taken at 0600 and 1800 GMT each day

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Notes:

The Norman pyranometer somehow did not observe the deep, dark cloud that has lingered over the campus since the Oklahoma State game.

A major lightning strike once again hit one of Gary's sites (yawn. What else is new?) He basically put an entirely new site at HUGO after it was knocked out in early October.

Leaf wetness sensors are being rotated under Ken's watchful eye. So far, new sensors have gone in at: BLAC, MARS, TIPT, HUGO, IDAB, FTCB, BESS, LAHO, MANG, and ALTU.

Ken is currently completing a sweep through the ARS, taking advantage of the cooperation by the Mesonet instruments, so that he can get some T&RH sensors replaced down there.

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TAIR (Air Temperature at 1.5 meters):

This field looks very good. Cooler to the north, warmer to the south. Cool spot at midnight for the two-month period: BOIS. The warm spot at midnight: ARDM. At noon, the hot and cold were BURN and CHEY, respectively. Kinda apropos that the hot spot be named BURN, huh? (Your tax dollars at work here.)

Current t-tkts: None.
Added: None.

TDEW/RELH (RH is measured at 1.5 meters):

This field also looks like it should. Some interesting little anomalies show up, though. MTHE tends to be a little drier, on average, than its neighbors. I think this is due to its elevated location. MEDI shows up drier in the overnight hours, but I know that this is due to the occasional inversion-surfing in the Wichita Mountains (MEDI has been known to "poke" through nighttime inversions, yielding very warm and dry observations).

Some low-priority problems were solved at BREC, ACME, and FORA, and the T&RH sensor was routinely replaced at ALVA and HUGO.

SHAW began to act strangely at the very end of the month. We'll find out what caused it.

All stations passed the minimum-maximum RELH test, by recording maximum RH's of greater than 97%, and less than 103%.

Current t-tkts: BOWL #685 Expedite rotation.
SHAW #687 T&RH stray from reality.

Added: None.

Resolved: FORA #628 Replaced
 BREC #663 Replaced
 ACME #681 Replaced
 HUGO #645 Replaced

WDIR (Wind Direction at 10 meters):

Again, this field looks very good. This field rarely has problems.

Current t-tkts: None.

Added: None.

WSPD (Wind Speed at 10 meters):

Again, this field looks very good. This field rarely has problems.

Current t-tkts: None.

Added: None.

PRES/PALT (Sea level Pressure):

A very busy period, as technicians replaced barometers left and right throughout the state for rotation and re-calibration purposes. A word of note: the barometers coming in from the field are performing very well in the lab, so this should take some pressure (boy, I'm on a roll tonight!) off of our technicians.

Barometers were routinely replaced at (drum roll, please): BRIS, CALV, OILT, WYNO, RETR, WATO, PUTN, IDAB, BBOW, MTHE, KENT, and BESS.

Overall, the field still looks pretty good.

Current t-tkts: WASH #662 Slight bias detected.

Added: None.

Resolved: HUGO #646 Replaced.

SRAD (Incident Solar Radiation):

Pretty busy time for this complement of instruments, as well. Most replacements were for rotation/recalibration purposes, some were for glitches in the data, some were for catastrophic failures (see HUGO).

Pyranometers were routinely replaced at: GRAN, PUTN, RETR, WATO, TIPT, MANG, and SEIL.

The field now looks very clean, with the exception of a probable bird present recently at STIL (probably a "disgruntled" Sooner fan).

Current t-tkts: STIL #665 Biased to lower values

Added: None.

Resolved: CALV #606 Replaced

 HUGO #643 Replaced

RAIN:

It's been pretty dry lately... but the folks near CALV picked up about 294mm of precipitation over the period (tops in the state). MANG recorded very little rain this month, so it appears to have clogged, just like its

neighbor RETR did about a month ago.

Current t-tkts: None.

Added: MANG Appears to have clogged.

Resolved: RETR #630 On-Site Repair
ALVA #629 Replaced
HUGO #644 Replaced

TA9M (Air Temperature at 9 meters):

As usual, this field looks great.

Current t-tkts: None.

Added: None.

Resolved: HUGO #657 Replaced

WS2M (Wind Run at 2 meters):

This field looks very good, too. The sensor at HOLL somehow wiggled its wires free, but didn't get away.

Current t-tkts: SHAW #688 Reports near zero persistently.

Added: None.

Resolved: HOLL #666 On-Site Repair

TS10 (Soil temperature at 10 cm under native sod):

Pretty busy month for soil probes, as late summer biases show, and wind and rain take their toll on the soils above the probe.

Current t-tkts: KETC #668 Slight cool bias.

Added: None.

Resolved: PAWN #563 Replaced
KING #592 Replaced
NORM #590 Replaced
HOLL #677 Replaced
HUGO #648 Replaced
ACME #592 Replaced

TB10 (Soil temperature at 10 cm under bare soil):

Current t-tkts: FORA #626 Large warm bias.
BLAC #670 Possible growth over bare plot.

Added: None.

Resolved: PAWN #564 Replaced
HUGO #650 Replaced
BREC #696 On-Site Repair

TS05 (Soil temperature at 5 cm under native sod):

Current t-tkts: PERK #673 Slight warm bias.

Added: None.

Resolved: KETC #582 Replaced
HUGO #649 Replaced
HOLL #620 Replaced

TB05 (Soil temperature at 5 cm under bare soil):

Current t-tkts: BLAC #674 Possible growth over bare plot.

Added: None.

Resolved: KETC #552 Replaced
HUGO #652 Replaced
BREC #627 On-Site Repair

TS30 (Soil temperature at 30 cm under native sod):

Current t-tkts: None.

Added: None.

Resolved: HUGO #647 Replaced
FTCB #624 Replaced
HOLL #631 Replaced
KING #676 Replaced

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