March was a busy month for the Mesonet technicians. Lightning caused damage to the stations at Fairview and Eufaula. The T/RH and SRAD sensors were hardest hit at Fairview, while the damage at Eufaula was mainly confined to the soil moisture sensors.

Vandalism at the Tullahassee site caused even greater problems. All in all, some 10 instruments were damaged or stolen.

Other than that, a number of new T/RH sensors were replaced to correct minor problems.

The monthly averaged fields for March were quite smooth. However, biases were detected in the soil temperature data at Medicine Park, Wilburton, and A156. Those sensors will be investigated in the coming weeks.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Current</th>
<th>Resolved</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAIR</td>
<td></td>
<td>#1736 SALL Spikes in data found to be caused by logger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#1735 FAIR Sensor reporting -9999; possible lightning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>#1694 ALVA Cattle broke T/RH sensor housing in half</td>
</tr>
<tr>
<td>RELH</td>
<td>#1669 MADI RH sensor reporting -7999 on 3 occasions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1731 CLAY RH reports of -7999 on numerous occasions</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1754 NINN RH reports ranging from 108% to 4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1771 TULL Sensor stolen from station</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1745 STIG Sensor 8.5% high with respect to test probe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1717 FORA RH values exceeding 103%; sensor replaced</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1712 SEIL Sensor replaced to correct low RH bias</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1734 FAIR Sensor reporting -9999; possible lightning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1711 NINN RH reports of over 103%; sensor replaced</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1732 WYN0 RH reports of -7999 occurring; replaced</td>
<td></td>
</tr>
<tr>
<td>WDIR</td>
<td>#1770 TULL Sensor stolen from station</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1753 OKMU Wind direction suspect; sensor replaced</td>
<td></td>
</tr>
<tr>
<td>WSPD</td>
<td>#1769 TULL Sensor stolen from station</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1751 ALTU Pressure reading stuck at 954.80 mb</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1772 TULL Sensor stolen from station</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1713 BUTL Pressure port clogged by spider web &amp; eggs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1702 WEBB Comparison confirmed bias; sensor replaced</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1743 REDR Sensor stuck at 970.55 mb; sensor replaced</td>
<td></td>
</tr>
<tr>
<td>SRAD</td>
<td>#1761 TULL Cable cut when enclosure stolen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>#1765 OKMU Failed comparison test by &gt;10%</td>
<td></td>
</tr>
<tr>
<td>Sensor</td>
<td>Status</td>
<td>Notes</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>-------</td>
</tr>
<tr>
<td>FAIR</td>
<td>Resolved: #1733 Possible lightning damage</td>
<td></td>
</tr>
<tr>
<td>STIG</td>
<td>Resolved: #1747 Comparison test indicated 14% high; replaced</td>
<td></td>
</tr>
<tr>
<td>ALVA</td>
<td>Resolved: #1695 Cattle knocked over SRAD tripod</td>
<td></td>
</tr>
<tr>
<td>RAIN</td>
<td>Current: #1763 Removed from site when other sensors stolen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved: #1700 Under-reporting rainfall; Gauge found faulty</td>
<td></td>
</tr>
<tr>
<td>TA9M</td>
<td>Current: #1760 Cable cut when enclosure stolen</td>
<td></td>
</tr>
<tr>
<td>WS2M</td>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>TS10</td>
<td>Current: #1755 Cable cut when enclosure stolen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Current: #1777 Monthly QA shows 2-3 C warm bias</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>TB10</td>
<td>Current: #1756 Cable cut when enclosure stolen</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Current: #1779 Monthly QA indicates 2.5 C cool bias</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>TS05</td>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>TB05</td>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>TS30</td>
<td>Current: #1704 Sensor reporting -9999 due to lightning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
</tbody>
</table>

**ARS QA Report**

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Status</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAIR</td>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>RELH</td>
<td>Resolved: #1710 Unnatural RELH spikes observed; replaced</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved: #1709 A111 RELH reports of 0%; sensor replaced</td>
<td></td>
</tr>
<tr>
<td>SRAD</td>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved: #1606 A123 Tree causing shadow on site was trimmed</td>
<td></td>
</tr>
<tr>
<td>RAIN</td>
<td>Current: #1742 Mysterious rainfall events being observed; Gauge seems ok, datalogger is a suspect</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>TS05</td>
<td>Current:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Resolved:</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>TAIR</td>
<td>Air temperature measured at 1.5 meters</td>
<td></td>
</tr>
<tr>
<td>RELH</td>
<td>Relative humidity measured at 1.5 meters</td>
<td></td>
</tr>
<tr>
<td>WDIR</td>
<td>Wind direction measured at 10 meters</td>
<td></td>
</tr>
<tr>
<td>WSPD</td>
<td>Wind speed measured at 10 meters</td>
<td></td>
</tr>
<tr>
<td>PRES</td>
<td>Pressure</td>
<td></td>
</tr>
<tr>
<td>SRAD</td>
<td>Incident solar radiation</td>
<td></td>
</tr>
<tr>
<td>RAIN</td>
<td>Rainfall</td>
<td></td>
</tr>
<tr>
<td>TA9M</td>
<td>Air temperature measured at 9 meters</td>
<td></td>
</tr>
<tr>
<td>WS2M</td>
<td>Wind speed measured at 2 meters</td>
<td></td>
</tr>
<tr>
<td>TS10</td>
<td>Soil temperature measured at 10 cm under native sod</td>
<td></td>
</tr>
<tr>
<td>TB10</td>
<td>Soil temperature measured at 10 cm under bare soil</td>
<td></td>
</tr>
<tr>
<td>TS05</td>
<td>Soil temperature measured at 5 cm under native sod</td>
<td></td>
</tr>
<tr>
<td>TB05</td>
<td>Soil temperature measured at 5 cm under bare soil</td>
<td></td>
</tr>
<tr>
<td>TS15</td>
<td>Soil temperature measured at 15 cm under native sod</td>
<td></td>
</tr>
<tr>
<td>TS30</td>
<td>Soil temperature measured at 30 cm under native sod</td>
<td></td>
</tr>
</tbody>
</table>

“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.