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Troubleshooting T/RH Probe (Vaisala HMI-31)

I. Purpose:

This procedure outlines how to troubleshoot a malfunctioning Vaisala HMI31 probe and suggests possible solutions.

II. Cautions and Hazards:

- Handle the humidity sensor by **EDGES ONLY**.
- Do not touch the sensor surface.

III. Requirements:

- KimWipe
- Distilled water
- Vinegar

IV. Procedure:

A. Steps:

- 1. Check all connections and replace the batteries.
- 2. If this does not solve the problem, unscrew the top filter holder exposing the temperature sensor (a metal plate soldered in place and not removable) and the humidity sensor (a white square surrounded with black plastic and removable). Note the orientation of the humidity sensor and where it is connected.
- 3. Try removing and reseating the humidity sensor if loose.
- 4. If the problem still exists, get a half-cup of distilled water mixed with a teaspoon of vinegar.
- 5. Damp a corner of a sheet of KimWipe and lightly dab (DO NOT wipe) the surface of the sensors and connectors.
- 6. With a dry corner of the same KimWipe, blot up the excess liquid.
- 7. Let all the surfaces dry for an hour with sensor outside the airconditioned trailers but away from rain and dust.
- 8. If the probe still does not function properly, send it back to the ARM Southern Great Plain Site for repair or replacement.

V. References:

None.

VI. Attachments:

None.