# PSP/PIR Daily Operating Procedure for AMF

#### I. Purpose:

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This document describes the required daily care and maintenance of Eppley PSP and PIR radiometers at the ARM Mobile Facility (AMF) site.

### II. Cautions and Hazards:

- Use extreme care when cleaning the domes. Excessive force scratches the domes and alters the calibration.
- Never touch the domes of the instrument with bare fingers.

#### III. Requirements:

- Lint-free soft cloth or Kimwipe
- Distilled water
- Compressed air (canned)

### IV. Procedure:

### A. Steps:

- 1. Check dome for scratches, cracks, or breaks. If none, go to step 2; if damaged, enter this fact in the site operations log and report the problem to on-site technician.
  - **Caution**: Use extreme care when cleaning the domes; excessive force scratches the domes and alters calibrations.
- 2. Wipe outer dome with a clean, lint-free, soft cloth; one or two wipes suffices. (If this worked, go to step 4.)
  - Note: If one or two wipes cannot remove all debris from the dome, use distilled water as a cleaning agent. (Refer to step 3 below.)
- 3. Dampen a fresh cloth with distilled water to almost its dripping point and gently wash away any debris on the dome; then use a dry lint-free cloth to remove any excess water from the dome.
- 4. Check desiccant. If the desiccant is orange/brown, go to the next step; if the desiccant is blue/green, see *PSP/PIR*, *PRO(PSP)-008*.
  - **Note**: The desiccant is located on the side of the ventilator and is viewed through a small viewing hole about 1 cm in diameter.

5. Enter the date: start-time, end-time, comments of the daily maintenance in the Site Data Log. Was a desiccant change performed?

# V. References:

- 1. "Instrumentation for the Measurement of the Components of Solar and Terrestrial Radiation," Eppley vendor manual.
- 2. "Manual Translation of Eppley, NIP, PSP, PSP and Ventilator" translated by S. Sandberg.
- 3. "Solar and Infrared Observation Station (SIROS) System Manual": drafted by S. Sandberg.

## VI. Attachments:

None.