1) CHECK LEVELING OF PYRANOMETER

The bubble in the bubble level on pyranometer body should be as close to centered as possible, but always no more than half a diameter out of the marked center ring of the level. Note: Some pyranometers have a level that can only be viewed when the white plastic shield is removed. First loosen the two bolts that secure the pyranometer to the base, then use the two leveling screw 'feet' of the pyranometer to center the bubble in the level and re-tighten securing bolts.

2) CLEAN GLASS DOME

Using a window cleaning solution and lint-free lens paper, clean the dome of the pyranometer making sure not to leave any streaks. If any significant contaminant is found on the dome, please send an e-mail to Joel Schafer noting the date and time it was observed, as well as the most recent previous cleaning date

joel.schafer@nasa.gov

3) CHECK DESICCANT COLOR

It is critical that the desiccant remain active so that the interior of the pyranometer is not damaged by condensation. On the side of the pyranometer is a plastic canister containing desiccant pellets. Some canisters are removed by flipping a small metal arm out of the way so it can be slid out. The more recent model requires the canister to be unscrewed.

There are also two types of desiccant. Each type has two humidity-related colors. One type of desiccant changes color from blue/purple (dry) to pink (wet) as the humidity increases. The more recent version of the desiccant changes from a deep orange to pale orange (or nearly clear). So, if the desiccant appears pink or very pale orange in color, it needs to be re-activated.

Desiccant can be de-hydrated by placing it in a microwave on high until the color changes. The amount of time needed depends on the power of the microwave, but 5 minutes will usually suffice. Once the desiccant is blue or deep orange again, the canister can be replaced in the pyranometer.