AERI (FEP) Operations

I.   Purpose:

Routine procedures to be carried out daily to maintain and verify proper operation of the Atmospheric Emitted radiation Interferometer (AERI).

II.   Cautions and Hazards:

None.

III. Requirements:

None.

IV.   Procedure:

A.   OS-2 Desktop

1.   Verify that the clock display in the lower right-hand corner is keeping current GMT time.

2.   Verify proper collection of data by ADaM.

- First, open the C:\FTP\OUTGOING directory by clicking on the icon on the Launch Pad.

- Verify that no more than two days of data are in the directory. If data from three or more days of data are in the directory, notify TWP personnel.

- Do NOT close the window by clicking any of the upper right-hand icon controls!

- Close the window by double-clicking in the upper left-hand corner, or by single-clicking the upper left-hand corner and selecting Exit or Close.

3.   Verify that the data exists from the previous day and that the tape archival from the proceeding day was successful. If any errors were encountered during the archival procedure, they will be reported in the log file

- First, open an OS/2 window with the Launch Pad icon.

- Change to the directory for the previous day by typing "CD\FTP\Aeyymmdd" and pressing enter. (Note: yymmdd

stands for the date of the previous day. For example, to change to the directory for August 27, 1999; type: "CD\FTP\AE990927")

- Display the contents of the directory by typing: "DIR/w" and pressing enter. Record the number of files, and verify that the total size of the files is over 100MB.

- Display the contents of the archival log file by typing: "TYPEARCHIVE.LOG I MORE" and press Enter. Scroll down the display a line at a time by pressing the Enter key. Carefully scan the contents of the file, verifying that no errors are reported.

- Exit the OS/2 window by typing "EXIT" and press enter.

If errors are reported in the archival log file, notify TWP personnel to contact the instrument mentor.

B. The summary graphs and AERI (FEP) Sitter panel

The AERI display is composed of three parts: the summary graphs, the AERI Sitter panel, and the radiance spectra. The summary graphs are the bottom three graphs on the left-hand side of the screen. They display line graphs of data from the entire day beginning at 00:00 GMT.

1. Verify that the line graphs extend to the current time in GMT.

2. Verify that each line graph is continuous and does not have gaps or missing data points.

The AERI Sitter panel is the 3-column array of colored lights located at the bottom right-hand side of the screen. The color of the lights indicates the status of system values. Green indicates normal operation, yellow indicates caution, and red indicates alarming values. Blue indicates missing data. The AERI Sitter shows data from one data record at a time, usually the most current data record. The number of the data record and the time the data record was taken are at the top of the AERI Sitter window. Other data records may be selected for display by using the << and >> buttons. The I<and>I buttons display the very first and very last data records taken.

3. Verify that the time listed at the top of the AERI Sitter display is within 15 minutes of the current time.

4. Verify that there are no persistent error conditions by scanning through the day with AERI Sitter.

- First, select the "Hold" box so that it has an "X"

- Next, click the << button repeatedly, scanning the display for yellow, red. Or blue indicator lights. Verify that no persistent lights occur. Consider a light persistent if it happens more than five times. (the hatch light will be yellow whenever it, the hatch, is closed for an entire data record, so ignore yellow "Hatch: lights.)

- Finally, place AERI Sitter back in automatic update mode by clicking the "Hold" box again, removing the "X"

The two graphs at the top of the screen are the radiance spectra. Like the AERI Sitter display, the radiance spectra show data from only one data record at a time. It is possible to view the radiance spectra of any data record throughout the day, but they are somewhat difficult to interpret, so won't be used to check data quality.

V.   References:

None.

VI.   Attachments:

None.