

## ESC Measurement SI Mode Assignment Rules.

The following rules pertain to the creation, and possible update, of each load week Preliminary Schedule. Specifically, to the assignment of the Perigee Passage, inbound and outbound ESC measurement SI modes for the week.

ACIS Ops is responsible for adjusting the nominal ECS SI mode assignments made by FOTMP to assure cold and total time balance across the ECS SI modes.

In order to accomplish this, several files have to be made available, to ACIS Ops, and a procedure followed by ACIS, SOTMP and FOTMP.

- 1) SOTMP must include FOTMP to the Preliminary Schedule announcement emails
  - ACIS Ops will use Reply All in order to be certain FOTMP is aware of any required SI Mode alteration.
  
- 2) FOTMP will make initial SI mode assignments for each ECS measurement in the Preliminary Schedule.
  - This initial assignment MUST comply with the ECS Assignment rule #2:  
  
"Rule #2: Each of the three, default, 6 chip, SI modes (or their 5 or 4 chip equivalents) must be used at least once in each load week."
  
- 3) FOTMP will make the Thermal Model Temperature output text files and the CTI Report file for each Preliminary Schedule, available for download by including them in the "Predicted Thermal Plots" directory of every "Prelim" link

within the "AO[XX] CXC Observing Schedules" web page:

<https://icxc.harvard.edu/mp/html/schedules.html>

Example:

<https://icxc.harvard.edu/mp/mplogs/2020/MAY1820/thermal/>

shows:



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- [MAY1820\\_PFTANK2T\\_prelim.png](#)
- [MAY1820\\_PFTANK2T\\_prelim.txt](#)
- [MAY1820\\_timeline\\_prelim.png](#)

The 2 files pertinent to ECS SI mode assignments are highlit in magenta above: though all the .txt and .png files are expected.

The agreed upon file naming convention is:

<load week>\_ACISFP\_prelim.txt  
<load week>\_CTI\_Report\_prelim.txt

ACIS Ops expects this file naming convention to be adhered to. **Any changes to file content, content format, or file name format MUST be discussed with ACIS Ops first with an associated release schedule.**

**NOTE:** On occasion you will see other files on the web page with lower cased filenames. For example:

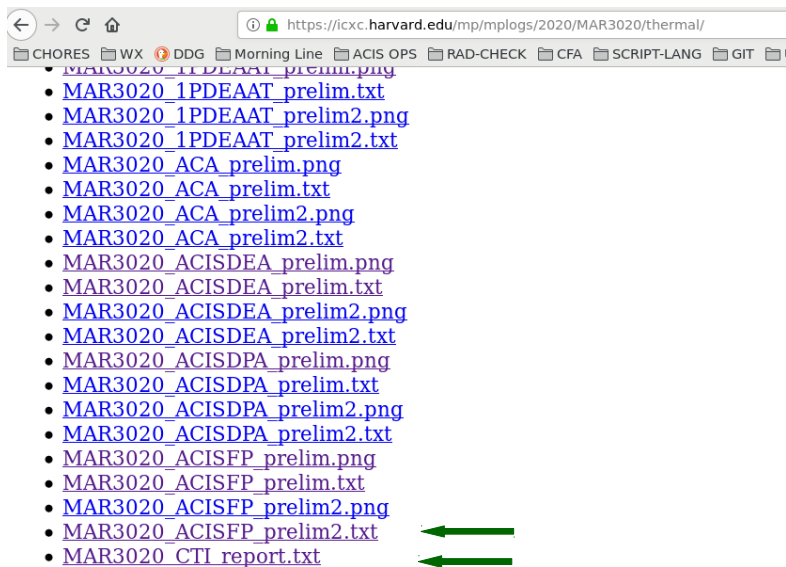
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- [MAR2320B\\_1pdeaat\\_plot.txt](#)
- [MAR2320B\\_4rt700t.png](#)
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- [MAR2320B\\_aca.png](#)
- [MAR2320B\\_aca\\_plot.txt](#)
- [MAR2320B\\_acis\\_fp.png](#)
- [MAR2320B\\_acis\\_fp\\_plot.txt](#)

These files should be ignored by ACIS Ops. Only the files adhering to the convention are used.

3) From time to time, multiple Preliminary Schedules are released for a particular week. The naming convention used, and expected, is to append a number to the end of the file names. An example is shown on the MAR3020/thermal page:

<https://icxc.harvard.edu/mp/mplogs/2020/MAR3020/thermal/>



The green arrows show the latest ACISFP and CTI Report file. The higher the number the later the version. CTI report files may have a numerical version but there will not be a new version unless it was actually changed even though a new ACISFP file version appeared.

- 4) ACIS Ops is responsible for assessing the assignments and specifying any changes to maintain Cold and Total Time balances. When ACIS Ops is executing its Preliminary Schedule Check, the supplied .txt files will be utilized to determine if any ECS measurement SI modes need to be changed. The email report that ACIS Ops publishes, for every Prelim Schedule, will contain a statement regarding the ECS SI modes for that week.

Within the body of the email, a line will appear, near the top, starting with:

ECS SI Modes:

- 5) If the default assignments are satisfactory, the entry will look like:

ECS SI Modes: No Change

If ACIS Ops concludes that one or more ECS inbound or outbound SI mode assignments needs to be changed, it will list the required changes on the ECS SI Mode line or lines, for each SI mode that needs to be changed. An example of what this could look like is:

ECS SI Modes: FOT MP please swap the ECS SIMODEs on DOY 2020:097.  
Please schedule TE\_007AE on the descending leg and TE\_007AC on the ascending leg.

The text is free form because one cannot predict the changes that may occur.

- 6) FOTMP is responsible for noting any SI Mode assignment changes listed in the ACIS Ops Preliminary Schedule Report email, and executing the SI mode re-assignment for that schedule and the subsequent Weekly Load.
- 7) If there is a second, or more, release of the Preliminary Schedule, any re-assignment that was requested by ACIS Ops in any previous Prelim Schedule for that week will be carried over by FOTMP.