# epsplitproc

February 1, 2016

**Abstract**

Split and analyse large epic event files

## 1   Instruments/Modes

| Instrument | Mode |
|---|---|
| EPIC PN | IMAGING, TIMING, BURST |

## 2   Use

| | |
|---|---|
| pipeline processing | no |
| interactive analysis | yes |

## 3   Description

**epsplitproc** is a metatask that allows users to analyse large EPIC PN events files, that produce a **out of memory** error while running **epframes**.

**epsplotproc** calls **epsplitter** to split the original event file into parts depending on the `slices` parameter. Then the task creates a backup copy of the original event file (named original_file_name_BACKUP.FIT) located in the odf directory to keep it untouched. Once the backup copy has been created, the task creates softlinks between the diferent parts and the original event file. Then, **epproc** is executed only for the exposure and ccd of the original file. Several **epproc** product files are created (depending on the `slices` parameter) and all of them are finally merged running **merge** task. Finally, temporary files are removed and the backuped original event file is restored.

**NOTE OF CAUTION!!!** This task deals with the ODF content; making file copies, creating soft links, removing files, etc. So, after the task execution, the user must check the ODF integrity. It is possible that after any error during the task execution, the ODF content could be wrong and the user should have to restore manually the backuped file.

# 4 Parameters

This section documents the parameters recognized by this task (if any).

| Parameter | Mand | Type | Default | Constraints |
|-----------|------|------|---------|-------------|
| **pnfile** | yes | dataset | | |

The name of the input event table

| **slices** | no | int | 2 | |
|-----------|------|------|---------|-------------|

number of parts to split the event file

# 5 Errors

This section documents warnings and errors generated by this task (if any). Note that warnings and errors can also be generated in the SAS infrastructure libraries, in which case they would not be documented here. Refer to the index of all errors and warnings available in the HTML version of the SAS documentation.

**filenotfound** *(error)*
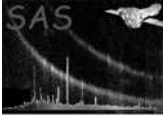> input event file not found

# 6 Input Files

1. EPIC pn raw event file

# 7 Output Files

1. Several EPIC pn raw event files (see `slices`)

# 8 Algorithm

```
1.- Run epsplitter
2.- Backup EPIC pn raw event file
3.- Loop over event pieces
  3.1.- Create soft link
  3.2.- Run epproc
  3.3.- Rename epproc output name
4.- Restore backup copy
5.- Merge epproc products
6.- Remove temporary files
```

# 9 Comments

- 

# References