



make_mask

January 12, 2017

Abstract

This task is called by *cheese* in *mode=2* to create a cheese mask from the filtered source list.

1 Instruments/Modes

| Instrument | Mode |
|------------|---------|
| EPIC | Imaging |

2 Use

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

3 Description

make-mask is called by *cheese* to create a cheese mask from the filtered source list.

Warning and requirements: *make_mask* is part of the *esas* package integrated into SAS, but it is limited to work within the *esas* data reduction scheme. This is specially true wrt the structure and names of the input files. In particular, **make_mask** assumes that another task from the package, *mos-filter* / *pn-filter*, has been successfully run for the exposure to be used.

4 Parameters

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

| Parameter | Mand | Type | Default | Constraints |
|-----------|------|------|---------|-------------|
|-----------|------|------|---------|-------------|

| | | | | |
|----------------|-----|--------|-------------|--|
| inimage | yes | string | inimage.fit | |
|----------------|-----|--------|-------------|--|

Input event image corresponding to the exposure.



| | | | | |
|---------------|-----|--------|------------|--|
| inmask | yes | string | inmask.fit | |
|---------------|-----|--------|------------|--|

The exposure mask.

| | | | | |
|----------------|-----|--------|-------------|--|
| outmask | yes | string | outmask.fit | |
|----------------|-----|--------|-------------|--|

Output file name for the cheese mask.

| | | | | |
|----------------|-----|--------|-------------|--|
| reglist | yes | string | reglist.fit | |
|----------------|-----|--------|-------------|--|

The filtered source region list.

| | | | | |
|----------------|----|---------|-----|-----|
| clobber | no | boolean | yes | T/F |
|----------------|----|---------|-----|-----|

Clobber existing files?

5 Input Files

User-specified event image, mask, and region list.

6 Output Files

mosprefix-cheese.fits - The output file name is an input parameter to the program, however as *make_mask* will typically be called by **cheese** or **cheese-bands** the name will be as above where *prefix* is the standard definition (e.g., 1S001 for the MOS1 S001 exposure)

7 Algorithm

8 Comments

References