omflatindex

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Abstract

Create/maintain an index of OM flat-field data

1 Instruments/Modes

Instrument	Mode
OM	Slew

2 Use

pipeline processing	yes
interactive analysis	no

3 Description

This task creates and maintains an index of an archive of OM flat-field calibration data which is used by the pipeline. The archive, and the format of the index file, are described in SSC-LUX-TN-0050.

The task can be run in two modes, **create** and **insert**. In create mode a new, empty flat-field archive index is created.

In insert mode the start and stop dates of the acqusition of the flat-field are extracted from the primary headers of the combined images (the task assumes that the earliest start time and latest stop time correctly represent the acquisition interval). The number of counts in the modulo-8 corrected flat-field images is also calculated. Using this information an entry is made in to the index at the proper place, maintaining the list in ascending order of observation start time. No check is made for overlapping observation intervals.

`omflatfield` is not intended for use outside the pipeline environment.

4 Parameters

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

Parameter	Mand	Type	Default	Constraints
operation	yes	string	insert	create—insert

Mode of operation (`create` creates the index file, `insert` inserts the data files into the index

indexset	yes	string		

Name of the index file

mod8sets	no	string		

Names of the modulo-8 corrected images (must be 4 filenames). Ignored in **create** mode.

combinedsets	no	string		

Names of the combined science window images (must be 4 filenames). Ignored in **create** mode.

rootdirectory	no	string		

Name of the directory in the archive holding the files. Ignored in **create** mode.

ppsversion	no	string		

Version of the slew pipeline which created the files. Ignored in **create** mode.

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.

wrongNumber *(error)*
Wrong number of image files

badDirectory *(error)*
Root directory not specified

badVersion *(error)*
PPS version number not specified

badTime *(error)*
Bad time stamp in input file

unknownOp *(error)*
Unknown value for parameter opmode

diffObs *(error)*
Observation in files IDs differ

6 Input Files

1. Archive index
2. Four combined images (optionally)
3. Four mod-8 corrected image (optionally)

7 Output Files

1. Archive index

8 Algorithm

```
subroutine omflatindex

  Check parameters

  if(mode == "create")

    Create index file

  else if(mode == "insert")

    Open index file
    Read date, observation ID from combined image files
    Calculate total counts in mod-8 images
    Find row index file to insert entry
    Insert entry
    Close index file

  endif

end subroutine  omflatindex
```

9 Comments

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10 Future developments

References