omslewchain

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Abstract

Chain script used to run slew pipeline tasks

1 Instruments/Modes

2 Use

pipeline processing	/no
interactive analysis	/no

3 Description

This package contains a PERL script which takes a set of image mode OM SDF files in a single directory and processes them in a pipeline to produce OM image mode pipeline products see Fig. **??** . Given a directory with a set of SDF files that conform to the filename specification given in the ODF ICD the PERL script will process the image files and will crash out with an error should one of the tasks fail.

The test harness for OMSLEWCHAIN contains 4 simulated OM SDF dataset comprising of a single exposure with 2 observation science windows. Modulo-8 noise and flatfielding are included. The test harness runs OMSLEWCHAIN on the files, to produce the PPS products and populated the flatfield index. If the PERL script fails then the test harness fails.

4 Parameters

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

Parameter	Mand	Type	Default	Constraints
archive_root	no	string	./archive	Archive root directory

This defaults initially to the environment variable (ARCH_ROOT).

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.

Cannot create directory *(error)*
archiveroot does not exist or does not have permission

omprepslew failed *(error)*
package omprepslew failed - see its documentation

cant make subdirectory observation key *(error)*
permissions wrong

omcomb failed *(error)*
package omcomb failed - see its documentation

omcosflag failed *(error)*
package omcosflag failed - see its documentation

ommattmodmap failed *(error)*
package ommattmodmap failed - see its documentation

omflatindex failed *(error)*
package omflatindex failed - see its documentation

6 Input Files

1. Any fits file in the current working directory which has a name of the form defined in doc ref.

7 Output Files

1. Files in the flatindex structure with subdirectories and names as defined in ref.

8 Algorithm

```
get and create the archive root directory

get a list of file names in the current working directory.

sort the file names according to observation, exposure, window and file type.

run the pipeline.

for each orbit

   print orbit being processed

   for each slew  observation

       print Slew Observation being processed

       construct a list of filenames for:

           raw images
           combined images
           mod8 combined images

       for each exposure

           print exposure being processed

           check to see if Window Data File is present

           set pipeline variables.

           for each window data file

               prepare images for pipeline using omprepslew

               add filenames for

                   raw images
                   exposure image
                   raw exposure images

               to appropriate lists

           end window data files

           make archive subdirectory (if it does not exist)

           construct file names

           produce tracking history products using omcomb

           copy combined image to archive

           produce bad pixel map for ommodmap(see below) using omcosflag
```

```
            correct images for modulo-8 noise using ommodmap
            remove fixed pattern noise using ommattmodmap
            add mod8 combined file name to list
        end exposure
        update index using omflatindex
        remove work files
    end observation
end orbit
```

9 Comments

References