

NAME

deroll_asol – modify an aspect solution file to remove roll and nominal pointing

SYNOPSIS

deroll_asol *options* [input file] [output file]

OPTIONS

—input *file*

The input `asol1` file or stack file. If not specified the first non-option argument will be used as the file name. See below for stack file usage.

—output *file*

The output `asol1` file or stack creation expression. If not specified the first unused non-option argument will be used as the file name. See below for stack file usage.

—verbose

If true, indications of progress will be output.

—version

Prints the version and exits

—help Prints this notice and exits

DESCRIPTION

deroll_asol modifies the RA, DEC, and ROLL columns in the input data file so that the observation appears to be at RA = 0, DEC = 0, and ROLL = 0. It also modifies the RA_NOM, DEC_NOM, ROLL_NOM keywords accordingly.

Note that the keywords will have to be modified in the level one event file in order for **acis_process_events** to properly make the aspect correction.

Stacks

If more than one aspect file needs to be de-rolled, a stack of files can be operated upon in one invocation of **deroll_asol**. A file stack (in this context) is a file containing the names files to operate on. Specification of the output files for an input stack of more than one file may be done with either another stack file, or by providing a Perl expression to transform the input file name.

To indicate to **deroll_asol** that file names are in stack files, pass the stack file names to it as if they were input or output files, but precede their names with the @ character. Alternatively, the filenames may be concatenated into a single string, with commas between them. For example:

```
--input=@input --output=@output
--input=i1.fits,i2.fits --output=o1.fits,o2.fits
```

If there is more than one input file, and the output file name does *not* begin with a @ and is not a comma separated list of files, it is assumed to be a Perl expression which will transform the input file name, made available as the \$_ variable into the output file name (also \$_). For example, to strip the path from an input file and append a suffix before the output .fits suffix, the following might be useful:

```
deroll_asol --verbose @stack 's{.*/(.*).fits.*}${$1_fix.fits}'
```

where `stack` is a file containing a list of files to operate upon. Note that **deroll_asol** will blindly evaluate anything you give it as an expression, so make sure it is valid Perl and that it doesn't delete all of your files.

AUTHOR

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