evalcorr

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Abstract

Evaluate the output of eposcorr

1 Instruments/Modes

Instrument	Mode
EPIC	Imaging

2 Use

pipeline processing	yes
interactive analysis	no

3 Description

The task evalcorr performs a simple evaluation of eposcorr amended source lists. The RAOFFSET , DEOFFSET and LIK_HOOD keywords are used assess the correlation as good (POSCOROK=T) or bad (POSCOROK=F) and set the value of SYSERRCC accordingly. The new parameters POSCOROK and SYSERRCC are written to the output as keywords. If the correlation is bad then the RA, DEC , LII and BII columns are used to overwrite the RA_CORR , DEC_CORR , LII_CORR and BII_CORR columns respectively.

The 'force' command line options are mutually exclusive. For example the '–forceposcorok=Y –poscorok=N' will set POSCOROK to False but will not cause the _CORR columns to be overwritten.

The evaluation is:

POSCOROK = False if (($\sqrt{RAOFFSET^2 + DEOFFSET^2}$) > radiusthreshold OR LIK_HOOD < likhoodthreshold) and True otherwise.

In the event that neither the 'amendinput' or 'withoutput' options are given no changes are made to the input but all messages are generated as if they were (so you can test what the program would do).

4 Parameters

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

Parameter	Mand	Type	Default	Constraints
input	yes	set		
Input data set.				
amendinput	no	boolean	no	
Make changes to input data set. Ignored if withoutput option given.				
output	no	set		
Output data set.				
withoutput	no	set	no	
Output data set.				
forcesyserrcc	no	boolean	no	
Force the value of SYSERRCC.				
syserrcc	no	real		
Value of SYSERRCC when forced.				
forceposcorok	no	boolean	no	
Force the value POSCOROK.				
poscorok	no	bool		
Value of POSCOROK when forced.				
forcecopycols	no	boolean	no	
Forcably overwrite XX_CORR columns with XX columns.				
corrsyserrcc	no	real	0.5	
Value of SYSERRCC when correlated.				
uncorrsyserrcc	no	real	1.5	
Value of SYSERRCC when Uncorrelated.				
radiusthreshold	no	real	6.0	
See description for how this fits into the evaluation				
likhoodthreshold	no	real	5.0	
See description for how this fits into the evaluation				

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.

InputIdenticaltoOutput *(error)*
The input and output files are the same file. Use the 'amendinput' if you really want to amend the input source list.

VitalColumnMissing *(error)*
One of the columns such as RA or DEC does not exist and as such cannot be copied to the corresponding _CORR column.

AttributeMissing *(error)*
An attribute needed for the evaluation is missing from the input. Maybe eposcorr has not been run.

6 Input Files

1. PPS product: output of eposcorr with right ascension offset (RAOFFSET), declination offset (DEOFFSET) and likelyhood (LIK_HOOD) keywords.

7 Output Files

1. PPS product: Input copied. Keywords SYSERRCC and POSCOROK added to the SRCLIST table. The XX_CORR tables can be overwritten with the corresponding XX column when forced or POSCOROK=F.

8 Algorithm

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read keywords RAOFFSET , DEOFFSET and LIKHOOD.

Evaluate RAOFFSET , DEOFFSET and LIKHOOD setting POSCOROK accordingly.

Set SYSERRCC depending on POSCOROK.

Write SYSERRCC and POSCOROK to ouput.

Replace RA_CORR , DEC_CORR , LII_CORR and BII_CORR with RA , DEC , LII and BII respectively
if POSCOROK = F.
```

9 Comments

References