Chandra X-ray Center

AHELP for CIAO 3.4   # pix_fpc_to_msc   Context: pixlib

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Synopsis

Convert from the Focal Plane (FPC) to Mirror Spherical (MSC) coordinate system.

Syntax

```
Array_Type pix_fpc_to_msc( Double_Type x, Double_Type y )
```

Description

This routine converts a position in the Focal Plane coordinate (FPC) system to the matching position in the Mirror Spherical (MSC) coordinate system, using the current settings of the pixlib module. The inputs (x,y) are the position in the FPC system. The return value is a three−element array. The first element is the inverse of the focal length, in mm, and the remaining two elements are the theta and phi angles in degrees.

Example

```
chips> require( "pixlib" )
chips> pix_init_pixlib
chips> msc = pix_fpc_to_msc( 4580, 4730 )
chips> print( msc )
−10070
0.108913
52.6484
```

Using the default settings of the pixlib module (i.e. the detector is ACIS with the aimpoint on ACIS−I1), we find that the FPC location (4580, 4730) corresponds to the off−axis angle of theta=0.108913 degrees and phi=52.6484 degrees.

CHANGES IN CIAO 3.2

This function was added in the CIAO 3.2 release.

Bugs

See the bugs page for the pixlib library on the CIAO website for an up−to−date listing of known bugs.

See Also

modules

  pixlib

pixlib

  pix_chip_to_fpc, pix_chip_to_gdp, pix_chip_to_tdet, pix_fpc_to_chip, pix_fpc_to_gdp, pix_tdet_to_chip

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See Also