



AHELP for CIAO 3.4

pix_fpc_to_msc

Context: [pixlib](#)

Jump to: [Description](#) [Example](#) [CHANGES IN CIAO 3.2](#) [Bugs](#) [See Also](#)

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](#)

The Chandra X-Ray Center (CXC) is operated for NASA by the Smithsonian Astrophysical Observatory.
60 Garden Street, Cambridge, MA 02138 USA.
Smithsonian Institution, Copyright © 1998–2006. All rights reserved.

URL:
http://cxc.harvard.edu/ciao3.4/pix_fpc_to_msc.html
Last modified: December 2006