



AHELP for CIAO 3.4

pix_chip_to_gdp

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Synopsis

Convert from the Chip to Grating Dispersion Plane (GDP) coordinate system.

Syntax

```
Array_Type pix_chip_to_gdp( Integer_Type chip_id, Double_Type x,
Double_Type y )
```

Description

This routine converts a position in the Chip coordinate system to the matching position in the Grating Dispersion Plane (GDP) coordinate system, using the current settings of the `pixlib` module. The inputs are chip ID (the `ccd_id` value for ACIS and `chip_id` value for HRC data) and the chip location (x,y) in pixels. The return value is a two–element array which gives the GDP coordinates in pixels.

Example

```
chips> require( "pixlib" )
chips> pix_init_pixlib
chips> pix_set_detector( "HRC-S" )
chips> gdp = pix_chip_to_gdp( 2, 512, 512 )
chips> print( gdp )
41331.4
17286.2
```

Using the default settings of the `pixlib` module for the HRC–S detector (i.e the aimpoint is on HRC–S2), we find that the chip position (512,512) on HRC–S2 corresponds to the location (4620, 3573) in the GDP system.

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](#)

pix_chip_to_gdp

Ahelp: pix_chip_to_gdp – CIAO 3.4

pixlib

[pix_chip_to_fpc](#), [pix_chip_to_tdet](#), [pix_fpc_to_chip](#), [pix_fpc_to_gdp](#), [pix_fpc_to_msc](#),
[pix_tdet_to_chip](#)

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URL:
http://cxc.harvard.edu/ciao3.4/pix_chip_to_gdp.html
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