



 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](#)

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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