



AHELP for CIAO 3.4

## pix\_apply\_aspect

Context: [pixlib](#)

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## Synopsis

Convert from FPC to Sky tangent coordinates by applying an aspect solution.

## Syntax

```
Array_Type pix_apply_aspect( Double_Type x, Double_Type y, Double_Type
u, Double_Type v, Double_Type roll )
```

## Description

This routine converts a position in the Focal Plane coordinate (FPC) system to the Sky tangent coordinate system. To perform this conversion the routine needs to know the aspect solution, knowledge of where the telescope was pointing at the time the photon was detected. The (x,y) values give the photon location in the FPC system, in pixels, while the (u,v,roll) values give the aspect offset information, with (u,v) in pixels and roll is the roll angle in degrees. The return value is a two–element array which gives the Sky tangent coordinates in pixels.

## Notes

It is recommended that the `pix_dmTanPixToWorld()` and `pix_TanWorldToPix()` routines are used instead of `pix_apply_aspect()` and `pix_deapply_aspect()`, since the results will be more accurate.

## 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\\_deapply\\_aspect](#), [pix\\_dmtanpixtoworld](#), [pix\\_dmtanworldtopix](#)

## Ahelp: pix\_apply\_aspect – CIAO 3.4

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URL:  
[http://cxc.harvard.edu/ciao3.4/pix\\_apply\\_aspect.html](http://cxc.harvard.edu/ciao3.4/pix_apply_aspect.html)  
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