
Subject: Re: Fractional Pixels Origin?

Posted by [Wayne Landsman](#) on Fri, 17 Feb 2006 07:50:17 GMT

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> I must be the only one *reading* Wayne's article. :-(
>
> Let me quote it again:
>
> "I'll say that the FITS convention is
> that [0,0] locates the center of the pixel."
>
> This whole thing just get curiousier and curiousier. :-)

Well, you must not take Wayne too literally. The correct statement is that the FITS convention is that [1,1] locates the center of the pixel. My conversion of the "first pixel is [1,1]" in FITS (or FORTRAN) to "first pixel is [0,0]"

of IDL is so automatic that I hardly think about it, and I was just pointing out that in FITS an integer value refers to the center of the pixel (whereas in a "ruler" convention it refers to a corner of a pixel).

The main reason this matters in astronomy is for conversion between the X,Y pixel centroid of a star to longitude, latitude. So I suppose the poster's original question is also relevant for the MAP_PROJ_INVERSE, MAP_PROJ_FORWARD routines in IDL.

--Wayne
