Subject: Re: Fractional Pixels Origin?
Posted by JD Smith on Fri, 17 Feb 2006 21:25:04 GMT
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On Thu, 16 Feb 2006 17:02:20 -0700, David Fanning wrote:

> Wayne Landsman writes:
>
>> I'll say that the FITS convention is that [0,0] locates the center of
>> the pixel. (This differs from most other image processing standards
>> where [0.,0.] defines the lower lefthand corner.)
>
>
> Then, JD Smith writes:
>
>> FITS does indeed use [0.0,0.0]. I'd urge those of you making the choice
>> for your programs to save the world confusion, and adopt the "natural"
>> choice: pixels centered on [a.5,b.5].
>
> I'm confused. :-(

Sorry, I had it backwards, FITS centers the first pixel at [1,1], and the Nasa library uses [0,0] (which is called "IDL convention"). If you have a choice, don't choose the FITS standard ([1,1]), or the "IDL convention" ([0,0]), but the natural "I'm a tiny ant living on the surface of your detector and measuring pixel positions from the edge with my tiny little ruler": [0.5,0.5]. The only disadvantage is all pixel centers are now fractional.

Wayne is very careful to document the convention in all of the NasaLib routines, so if confused be sure to read the useful doc headers (as I just did to remedy my confusion!).

JD