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Subject: Re: FITS WCS routines  
Posted by [Chris\[7\]](#) on Thu, 19 Aug 2010 21:02:06 GMT  
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I would also love to see the IDL astro WCS procedures handle N-dimensional (or at least 3 dimensional) image arrays. I've had to write clumsy wrappers to extract coordinate information from spectral data cubes.

chris

On 8/19/10 10:49 AM, wlandsman wrote:

> On Aug 19, 3:51 pm, Jeremy Bailin<astroco...@gmail.com> wrote:  
>> Does anyone know of a good IDL implementation or wrapper of up-to-date  
>> routines to deal with world coordinate systems in FITS files? The ones  
>> in the astronomy library aren't sufficient - in particular, I need  
>> something that can deal with a TNX coordinate system (tangent point  
>> plane with distortions).  
>  
> Well, to be fair, there is no established standard yet for  
> representing distortions within FITS. (There is a draft standard  
> that has been in the works for at least 10 years -- but nobody uses  
> it ( see Paper IV in  
> <http://www.atnf.csiro.au/people/mcalabre/WCS/index.html> )  
>  
> The TNX distortion keywords and convention were created by the IRAF  
> software group ( <http://fits.gsfc.nasa.gov/registry/tnx.html> ). I  
> have implemented a more popular distortion convention -- the Simple  
> Imaging Polynomial or SIP ( <http://fits.gsfc.nasa.gov/registry/sip.html> ) in the Astronomy  
> Library. Unfortunately, that won't help you if you are given files  
> using the TNX keywords.  
>  
> I think I once saw IDL code for parsing the TNX keywords but I can't  
> remember where just now. Perhaps someone else will have idea. --  
> Wayne

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