
Subject: Re: FITS WCS routines

Posted by [wlandsman](#) on Thu, 19 Aug 2010 20:49:14 GMT

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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
