Subject: Re: Extracting a sub-cube from a cube Posted by wlandsman on Wed, 06 Jul 2016 14:03:41 GMT

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On Tuesday, July 5, 2016 at 7:13:29 PM UTC-4, miguelfigue...@gmail.com wrote:

>

> Moreover, is it possible to use hextract for a velocity-latitude 2-D array (in short, a 2D fits file whose CTYPE1-2 are not longitude and latitude) and update the header? I manage to extract the area I wanted but the WCS keywords disappear after the extraction.

>

I don't know of any existing routines in the Astronomy library to do this, but it is not hard to do it yourself. The FITS format describes a linear velocity scale with a reference pixel (CRPIX1) and value at the reference pixel (CRVAL1), and increment per pixel (CDELT1). When you extract a subarray you are just shifting the origin so CDELT1 doesn't change. You just need to update CRPIX1 so it accounts for the offset. So if you extract starting at pixel 30, you just need to subtract 30 from CRPIX1 (using sxaddpar for example).