## Subject: Re: WCS Coordinates not kept with WRITEFITS Posted by jeanh on Thu, 10 Dec 2009 15:30:06 GMT

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## Laurence wrote:

- > Hi,
- > I am writing because I have a problem while creating new fits files
- > and I could not find any similar topic on the web.
- > Basically, I simply cut a small region from a larger fit file and save
- > it with writefits .

>

- > im1=readfits('pp.fit',hdr)
- > temp1='p.fit'
- > imnew1=fltarr(2000,2000)
- > imnew1=im1(3303:3512,3095:3293)
- > writefits,temp1,imnew1,hdr

>

- > But in the newly created .fit file, the coordinates are off and then
- > wrong!
- > Is there a way to solve this ? (I have idl\_6.0)
- > Thanks,

Hi,

you are saving the header of your big file along with the data of your small file... it can not work. You would have to update the header information (sorry, I don't use fits files so I can't help you on this one). Mainly, the new coordinate of your top left (could be another corner) corner is needed, as the resolution and map info should be the same.

Jean

Subject: Re: WCS Coordinates not kept with WRITEFITS Posted by Bringfried Stecklum on Thu, 10 Dec 2009 15:30:43 GMT View Forum Message <> Reply to Message

## Laurence wrote:

- > Hi,
- > I am writing because I have a problem while creating new fits files
- > and I could not find any similar topic on the web.
- > Basically, I simply cut a small region from a larger fit file and save
- > it with writefits .

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- > im1=readfits('pp.fit',hdr)
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> writefits,temp1,imnew1,hdr
>
> But in the newly created .fit file, the coordinates are off and then
> wrong!
> Is there a way to solve this ? (I have idl\_6.0)
>
> Thanks.

Of course, since the header needs to be updated as well to account for the size and WCS change. The routine hextract from the IDL Astro Lib does the job of extracting FITS subimages, see

http://idlastro.gsfc.nasa.gov/ftp/pro/astrom/hextract.pro

Regards,

Bringfried

Subject: Re: WCS Coordinates not kept with WRITEFITS Posted by Laurence on Tue, 15 Dec 2009 19:02:02 GMT

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On Dec 10, 3:30 pm, Bringfried Stecklum <steck...@tls-tautenburg.de> wrote:

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> Laurencewrote:
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- >> Hi,
- >> I am writing because I have a problem while creating new fits files
- >> and I could not find any similar topic on the web.
- >> Basically, I simply cut a small region from a larger fit file and save
- >> it with writefits .

> .

- >> im1=readfits('pp.fit',hdr)
- >> temp1='p.fit'
- >> imnew1=fltarr(2000,2000)
- >> imnew1=im1(3303:3512,3095:3293)
- >> writefits,temp1,imnew1,hdr

>

- >> But in the newly created .fit file, the coordinates are off and then
- >> wrong
- >> Is there a way to solve this ? (I have idl\_6.0)

>> Thanks,

>

- > Of course, since the header needs to be updated as well to account for the size
- > and WCS change. The routine hextract from the IDL Astro Lib does the job of
- > extracting FITS subimages, see

http://idlastro.gsfc.nasa.gov/ftp/pro/astrom/hextract.pro
 Regards,
 Bringfried

Thanks! In the meanwhile I used IRAF which works very well .

Laurence