Subject: very very strange thing is happening with modfits.....
Posted by Sapna Mishra on Fri, 22 Jul 2016 05:15:24 GMT
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Hello all, Here I am pasting a protion of my code:

```
readcol,'comb_file.dat',wav,new_flux,new_eflux,F='(f,f,f)'
          new_loglam=alog10(wav)
          id_ok  = where(new_eflux gt  0, cnt_ok)
           eivar_new=(1./new_eflux(id_ok))^2
          new_loglam=alog10(wav(id_ok))
          new_flux=new_flux(id_ok)
         aa=mrdfits(fname(n_elements(fname)-1),1,h1)
         aa.flux=cspline(new_loglam,new_flux,aa.loglam)
         aa.ivar=abs(cspline(new_loglam,ivar_new,aa.loglam))
         modfits,fname(n_elements(fname)-1),aa,h1,EXTEN_NO=1
```

I checked the value of aa.flux and aa.ivar before modifying with modfits:

They are just normal values eg. 14.7555,15.9066.....etc.
But after modifying it to a fits file stored in variable:fname(n_elements(fname)-1)
I got very different values: 2.26270e+28,-5.91691e-11.....with message:
%Program caused arithmetic error: Floating illegal operand.

I wasted my whole day in this checking what is going wrong after modfits. I am using the latest version of modfits.pro.

What is going wrong can anyone please tell me??????????????????////

I checked there is no problem in cspline or anything they are just normal finite values.(eg. not inf and NaN anywhere)

Subject: Re: very very strange thing is happening with modfits.....
Posted by wlandsman on Fri, 22 Jul 2016 14:59:55 GMT
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On Friday, July 22, 2016 at 1:15:26 AM UTC-4, Sapna Mishra wrote:
> ..etc.
> But after modifying it to a fits file stored in variable:fname(n_elements(fname)-1)
> I got very different values: 2.26270e+28,-5.91691e-11.....with message:

I don't know what is happening -- it works for me.

But why don't you just write a new FITS file (using mwrfits.pro) instead of using modfits.pro? It is likely faster (and certainly less complicated) to write a complete new FITS file, rather than modify bits and pieces of an existing file.

Subject: Re: very very strange thing is happening with modfits.....
Posted by Sapna Mishra on Fri, 22 Jul 2016 15:30:10 GMT
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On Friday, July 22, 2016 at 8:30:03 PM UTC+5:30, wlandsman wrote:
> On Friday, July 22, 2016 at 1:15:26 AM UTC-4, Sapna Mishra wrote:
>> ..etc.
>> But after modifying it to a fits file stored in variable:fname(n_elements(fname)-1)
>> I got very different values: 2.26270e+28,-5.91691e-11.....with message:
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>
> But why don't you just write a new FITS file (using mwrfits.pro) instead of using modfits.pro? It is likely faster (and certainly less complicated) to write a complete new FITS file, rather than modify bits and pieces of an existing file.

Actually what I want is that my fits file contains data and header in three extentions e.g. 0,1,2(h0,h1,h2) using mwrfits create a complete new files with a
certain extention. What If i want to recover values of all other two extensions?
Creating a new fits file with same name will do so???

Subject: Re: very very strange thing is happening with modfits.....
Posted by Sapna Mishra on Fri, 22 Jul 2016 15:31:57 GMT
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On Friday, July 22, 2016 at 8:30:03 PM UTC+5:30, wlandsman wrote:
> On Friday, July 22, 2016 at 1:15:26 AM UTC-4, Sapna Mishra wrote:
>> ..etc.
>> But after modifying it to a fits file stored in variable:fname(n_elements(fname)-1)
>> I got very different values: 2.26270e+28,-5.91691e-11.....with message:
>
> I don't know what is happening -- it works for me.
>
> But why don't you just write a new FITS file (using mwrfits.pro) instead of using modfits.pro? It is likely faster (and certainly less complicated) to write a complete new FITS file, rather than modify bits and pieces of an existing file.

And One more thing, have you ever modified a value of a single variable of a structure stored in a fits file in particular ext.???? I think after my this error we can not use modfits.pro to modify value of a single variable in a structure ...

Subject: Re: very very strange thing is happening with modfits.....
Posted by Craig Markwardt on Fri, 22 Jul 2016 18:01:40 GMT
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On Friday, July 22, 2016 at 11:30:12 AM UTC-4, Sapna Mishra wrote:

> On Friday, July 22, 2016 at 8:30:03 PM UTC+5:30, wlandsman wrote:
>> On Friday, July 22, 2016 at 1:15:26 AM UTC-4, Sapna Mishra wrote:
>>> ..etc.
>>> But after modifying it to a fits file stored in variable:fname(n_elements(fname)-1)
>>> I got very different values: 2.26270e+28,-5.91691e-11.....with message:
>>
>> I don't know what is happening -- it works for me.
>>
>> But why don't you just write a new FITS file (using mwrfits.pro) instead of using modfits.pro? It is likely faster (and certainly less complicated) to write a complete new FITS file, rather than modify bits and pieces of an existing file.
>
> Actually what I want is that my fits file contains data and header in three extentions e.g. 0,1,2(h0,h1,h2) using mwrfits create a complete new files with a
> certain extention. What If i want to recover values of all other two extensions?
> Creating a new fits file with same name will do so???

If I am modifying an existing FITS file I typically use the FXBOPEN, FXBWRITE, FXBCLOSE family of functions. They are documented on the IDL Astronomy Library site.

```
extnum = 1
fxbopen, unit, 'myfile.fits', extnum, hh, access='RW'
fxbwrite, unit, aa.flux, 'FLUX', 1
fxbfinish, unit
```

Done.