Subject: IDL and FITSIO library
Posted by Jeffrey Newmark on Thu, 05 Sep 1996 07:00:00 GMT
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Hi,

I am using the CFITSIO library to read FITS binary tables. I am linkimage'ing this into IDL and therefore am taking advantage of the IDL internals. Below is a fragment of my code where the "***" is the offending line. The column data I want to read is of type long. In the RSI Advanced Development Guide it recommends the use of IDL_TYP_LONG for machine independence of long type, i.e. so long is 32-bits always whereas on 64-bit machines C uses long as 64-bits.

Therein lies my problem, at least I think. When I compile the code I do get a compiler WARNING of incompatible pointer types for the input of the CFITSIO routine ffgcvj (fits_read_col_lng). When I run this to read the data into pointer pix it blows up with a segmentation violation. I believe the memory address is not large enough but what why?

I tried using "long" instead of "IDL_LONG" but that didn't seem to work any better. Has anyone else tried this sought of thing before? Are there any C/IDL gurus out there who can recognize quickly my mistake????

thanks in advance,
Jeff Newmark

```
IDL_VARIABLE *dirbe_aaf(argc,argv,argk)
int argc;
IDL_VARIABLE *argv[];
char *argk;
{

  IDL_LONG *pix,*srecs,dim[2],inull,frow,nelmt,index;
  fitsfile *iunit;
  pix = (IDL_LONG *) IDL_MakeTempArray(IDL_TYP_LONG,1,dim,
                    IDL_BARR_INI_ZERO,&ret_dat[numargs]);
   ffgcvj(iunit,colnum,frow,felem,dim[0],inull,pix,&anyflg, &status); ***
  IDL_VarCopy(ret_dat[numargs],argv[numargs+2]);

}
```

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1) help.let, downloaded 76 times