Subject: Re: scopes
Posted by David Fanning on Fri, 20 Sep 2013 21:44:22 GMT
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spluque@gmail.com writes:

>
> Hi,
>
> Using the following script to convert calendar date to day of year (test.pro):
>
> FUNCTION calendar2doy, year, month, day
> jd=julday(month, day, year)
> caldat, jd, Null, Null, year
> doy=string(jd - julday(12, 31, year - 1), format='(i03)')
> RETURN, doy
> END
>
> PRO TEST
> year=2011
> mon=10
> day=15
> DOY=calendar2doy(year, mon, day)
> RETURN
> END
>
>
> I expected the variable year in the TEST procedure to remain as defined (the long integer 2011), but this is what I see after calling the call to calendar2doy with a breakpoint at the RETURN line:
>
> IDL> .run "test.pro"
> % Compiled module: CALENDAR2DOY.
> % Compiled module: TEST.
> IDL> breakpoint,'test.pro',14
> IDL> test
> % Compiled module: JULDAY.
> % Compiled module: CALDAT.
> % Breakpoint at: TEST 14 test.pro
> IDL> print, year
> 2012
>
> What am I missing?

Ah, yes, I've seen this before. It's weird. :-)

The problem comes about in the way you are calling CalDat:

caldat, jd, Null, Null, year

You are using the same variable for the day and month. This causes CalDat great confusion! If you use different variables, you will get what you expect.

caldat, jd, Null1, Null2, year

It must be something about variables getting updated in a particular sequence or something. I don't understand exactly what is happening, but I remember struggling for hours with exactly this thing one time. ;-)

Cheers,

David

--
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")
