Subject: Re: keyword issue (top 10 IDL request?) Posted by promashkin on Wed, 19 Jul 2000 07:00:00 GMT

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This matter has been discussed here before, and, in fact, is one of the few that are well covered in the manual. KEYWORD_SET is *only* to be used to check *status* of keywords (for "trigger" keywords) that you either *set* or don't, using "/":

pro temp, plot=plot if keyword_set(plot) then plot, indgen(10) \$ else print, 'No keyword - no plotting!' end

For KEYWORD_SET, value of zero means "not set", just like /SENSITIVE is the same as SENSITIVE=1 or SENSITIVE=2, while SENSITIVE=0 means "turn it off" (for WIDGET CONTROL procedure).

If your keyword is used to pass (numerical) values, you should, just as Andy pointed out, use N ELEMENTS instead of KEYWORD SET:

pro temp, plot=plot if n elements(plot) gt 0 then \$ case plot of 0: ; do nothing 1: plot, indgen(10) 2: plot_3dbox, indgen(10), indgen(10), indgen(10) else: ; do nothing endcase end

Cheers. Pavel

Kenneth Mankoff wrote:

> Hi all,

>

>

>

- > here is another thing with current versions of IDL that causes problems
- and confuses me:

> a keyword set to 0 should not be undefined, it should be defined as zero. > For example:

- > IDL> create_globe, lat=90, long=0, ...
- > I want create_globe to put longitude 0 at the center of the image (i.e.
- > pass "0" to map set). But if i don't use long= at all, then it should be
- > undefined, and the following code should run (inside create globe)

```
> IF ( NOT KEYWORD_SET( long ) ) THEN long = 277.5 ;;; geomagnetic pole '98
>
> However, the above line of code runs even if i set long to "0". I have
> been using long=0.1 as a work-around, but this is an ugly hack that others
> might not think to use.
> any ideas to fix this are welcome, and if no one has any good ideas, then
 please add this to your top ten list, David Fanning.
> Thanks,
  ken.
Subject: Re: keyword issue (top 10 IDL request?)
Posted by Andy Loughe on Wed, 19 Jul 2000 07:00:00 GMT
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Kenneth Mankoff wrote:
> Hi all,
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```

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if (N_elements(long) eq 0) then long = 277.5

Thanks,ken.

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Subject: Re: keyword issue (top 10 IDL request?)
Posted by Liam E. Gumley on Wed, 19 Jul 2000 07:00:00 GMT
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Kenneth Mankoff wrote:

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- > any ideas to fix this are welcome, and if no one has any good ideas, then
- > please add this to your top ten list, David Fanning.

I like to make a clear distinction between keywords which are used to supply a value, and keywords which represent a Boolean flag.

To check a keyword which supplies a value (as in your case), and set a default value if the keyword is undefined:

if (n_elements(key_value) eq 0) then key_value = -999.9

To check a keyword which represents a Boolean flag:

if keyword_set(key_boolean) then print, 'True' if (keyword_set(key_boolean) eq 1) then print, 'True' if (keyword_set(key_boolean) eq 0) then print, 'False'

If you wish to pass a Boolean keyword from inside your procedure/function another procedure or function:

myfunc, arg1, arg2, key=keyword_set(key_boolean)

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