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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.

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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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>  
> Thanks,  
> ken.

if ( N\_elements(long) eq 0 ) then long = 277.5

Andrew Loughe \*\*\*\*\*

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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  
[View Forum Message](#) <> [Reply to Message](#)

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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)
```

Cheers,  
Liam.

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