
Subject: global variables again - and passing out common blocks

Posted by [Martin Schultz](#) on Tue, 28 Apr 1998 07:00:00 GMT

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

Hi,

This is how fast things change. Here I was doubting the necessity to pass global variables back from a routine, and now this is what I am stuck with:

I tried to add two features to my EXPLORE tool, but it turns out that only one of them works at a time:

- (1) upon exit: extract the data of the last active window, store it as a heap variable in a common block and return it to the main program (if a named variable was passed as a keyword)
- (2) use the /NO_BLOCK keyword to xmanager to have the command line available

The trouble lies in the program flow: without /NO_BLOCK, IDL continues program execution after the call to xmanager when the widget is closed, so there is a chance to do additional things in the mainprogram (like retrieving the pointer information). However, with /NO_BLOCK set, IDL runs through the main program (pro explore) completely, and when exiting the widget application, you only get a call to the cleanup routine, but there is no way to pass anything out any more except "activating" the common block EPOINTERS in \$MAIN\$ which leads to a bit of trouble described below and makes it mandatory to manually free the pointers if you don't need them. Any better idea is greatly appreciated.

Another problem, which I consider a real bug, is related to common blocks: if you define a common block inside a subroutine and you want to make it accessible to \$MAIN\$, you are in bad luck if you had issued a HELP command on any variable in the common block before. Example:

```
pro test
common testcom,a
a=10
end
```

```
IDL>test
IDL>help,a
A      UNDEFINED = <Undefined>
IDL>common testcom
% A is already defined with a conflicting definition.
; if it says "undefined" before, how can it be "defined" now ?
; It works after delvar,a !
```

Regards,
Martin.

Dr. Martin Schultz
Department for Earth&Planetary Sciences, Harvard University
186 Pierce Hall, 29 Oxford St., Cambridge, MA-02138, USA

phone: (617)-496-8318
fax : (617)-495-4551

e-mail: mgs@io.harvard.edu
IDL-homepage: <http://www-as.harvard.edu/people/staff/mgs/idl/>
