Subject: Re: Two quick questions
Posted by Martin Schultz on Fri, 09 Oct 1998 07:00:00 GMT
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Colin Rosenthal wrote:
>
> 1) What happened to the libraries that used to be at
> http://xlr8.lpl.arizona.edu/idl.html
>
> 2) Does anyone have any nice collections of user plotting symbols I could
> steal.
>
You can check out my function sym.pro (attached below).
Usage: plot,x,y,psym=sym(N)

Martin.

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```
;------------------------------------------------------------ --
;+
; NAME:
;       SYM
;
; PURPOSE:
;       define a standard sequence of plotting symbols
;
; CATEGORY:
;       utility
;
; CALLING SEQUENCE:
;       SYM, NUMBER
;
; INPUTS:
;       NUMBER    ->   symbol number
;
;             0 : dot
```

```
;               1 : filled circle
;               2 : filled upward triangle
;               3 : filled downward triangle
;               4 : filled diamond
;               5 : filled square
;               6 : open circle
;               7 : open upward triangle
;               8 : open downward triangle
;               9 : open diamond
;              10 : open square
;              11 : plus
;              12 : X
;              13 : star
;              14 : filled rightfacing triangle
;              15 : filled leftfacing triangle
;              16 : open rightfacing triangle
;              17 : open leftfacing triangle
;
; KEYWORD PARAMETERS:
;
; OUTPUTS:
;       function returns the symbol number to be used with PSYM= in the
;       PLOT command
;
; SUBROUTINES:
;
; REQUIREMENTS:
;
; NOTES:
;       This function produces a side effect in that the USERSYM procedure
;       is used to create a symbol definition. It's meant for usage within
;       the PLOT, OPLOT, etc. command
;
; EXAMPLE:
;       PLOT,X,Y,PSYM=SYM(0),SYMSIZE=3
;               produces a plot with dots (standard symbol 3)
;       FOR I=0,17 DO OPLOT,X+1,Y,PSYM=SYM(I),COLOR=I
;               overplots 17 curves each with its own symbol
;
; MODIFICATION HISTORY:
;       mgs, 22 Aug 1997: VERSION 1.00
;
;-
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; This software is provided as is without any warranty
; whatsoever. It may be freely used, copied or distributed
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; be used commercially or sold as part of a larger package,
; please contact the author to arrange payment.
; Bugs and comments should be directed to mgs@io.harvard.edu
; with subject "IDL routine sym"
 ;------------------------------------------------------------ --


function sym,number

    on_error,2  ; return to caller


    if(n_elements(number) eq 0) then return,1  ; default



    result=8    ; default: return psym=8, i.e. user defined symbol

; define some help variables for
; circle :
    phi=findgen(32)*(!PI*2/32.)
    phi = [ phi, phi(0) ]


    case number of

       0  : result = 3    ; dot

       1  : usersym, cos(phi), sin(phi), /fill
                    ; filled circle

       2  : usersym, [ -1, 0, 1, -1 ], [ -1, 1, -1, -1 ], /fill
                    ; filled upward triangle

       3  : usersym, [ -1, 0, 1, -1 ], [  1, -1, 1, 1 ], /fill
                    ; filled downward triangle

       4  : usersym, [ 0, 1, 0, -1, 0 ], [ 1, 0, -1, 0, 1 ], /fill
                    ; filled diamond

       5  : usersym, [ -1, 1, 1, -1, -1 ], [ 1, 1, -1, -1, 1 ], /fill
                    ; filled square

       6  : usersym, cos(phi), sin(phi)
                    ; open circle

       7  : usersym, [ -1, 0, 1, -1 ], [ -1, 1, -1, -1 ]
                    ; open upward triangle
```

```
      8  : usersym, [ -1, 0, 1, -1 ], [  1, -1, 1, 1 ]
                   ; open downward triangle

      9  : usersym, [ 0, 1, 0, -1, 0 ], [ 1, 0, -1, 0, 1 ]
                   ; open diamond

     10  : usersym, [ -1, 1, 1, -1, -1 ], [ 1, 1, -1, -1, 1 ]
                   ; open square

     11  : result = 1    ; plus

     12  : result = 7    ; X

     13  : result = 2    ; star

     14  : usersym, [ -1, 1, -1, -1 ], [1, 0, -1, 1 ], /fill
                   ; rightfacing triangle, filled

     15  : usersym, [ 1, -1, 1, 1 ], [1, 0, -1, 1 ], /fill
                   ; leftfacing triangle, filled

     16  : usersym, [ -1, 1, -1, -1 ], [1, 0, -1, 1 ]
                   ; rightfacing triangle, open

     17  : usersym, [ 1, -1, 1, 1 ], [1, 0, -1, 1 ]
                   ; leftfacing triangle, open

    else : begin
           print,'invalid symbol number - set to 1'
           result = 1
           end

  endcase

return,result
end
```

File Attachments

1) sym.pro, downloaded 109 times