
Subject: SIGN function: signof(num or array of num)

Posted by [Ding](#) on Tue, 16 Mar 2010 10:51:30 GMT

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

Dear IDL users,

I cannot find the SIGN function in IDL procedures, but one in Solarsoft ssw/maths/ SIGN which occupy the name, but different purpose(sign(a)*b). so I wrote the SIGNOF() function which is to get the sign of a number or array,

Hopefully I am not repeating someone' work! you are welcome to comments!

```
; return the sign of the input data in an array of the same size
; -1 for negative elements
; 1 for positive elements
; 0 for 0 and complex number
; only works for numerics
```

Ding Yuan
Ding.Yuan@warwick.ac.uk
PhD
Center for Fusion,Space and Astrophysics
Department of Physics
University of warwick

```
function signof,input
;+
; NAME:
;   signof
;
; PURPOSE:
;   return the sign of the input data in an array of the same size
;   -1 for negative elements
;   1 for positive elements
;   0 for 0 and complex number
;   only works for numerics
; CATEGORY:
;   maths
;
; CALLING SEQUENCE:
;   signof(input)
; INPUTS:
;   scalar,vector, or array
;
```

```

; OPTIONAL INPUTS:
; None
;
;
; KEYWORD PARAMETERS:
; None
;
;
; OUTPUTS:
; the same size of the input but in integer
;
; OPTIONAL OUTPUTS:
; None
;
; COMMON BLOCKS:
; None
;
; SIDE EFFECTS:
; none
;
; RESTRICTIONS:
; none
; EXAMPLE:
; a=[[1,-2],[0,3]]
; print, signof(a)
; 1 -1
; 0 1
;
; MODIFICATION HISTORY:
; 2010-02-09Written by Ding Yuan (Ding.Yuan@warwick.ac.uk)
; CFSA, Dept. of Physics, University of Warwick
;
; The author should be notified if modifications are made
;-
return, fix(abs(input)/input)

end

```
