
Subject: IDLgrPLOT and log
Posted by [Bernard Puc](#) on Tue, 06 Jan 1998 08:00:00 GMT
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Hello,
Can somebody show me an example of plotting on a log/log scale using ObjectGraphics? I'm trying to learn Object Graphics and I can't seem to get log plots. Any help appreciated. Thanks.

-Bernard Puc

Subject: Re: IDLgrPlot
Posted by [davidf](#) on Mon, 01 Nov 1999 08:00:00 GMT
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Pavel Romashkin (promashkin@cmdl.noaa.gov) writes:

> I placed the X and Y vectors into IDLgrPlot. Vectors contain NANs.

I can't seem to get a vector with a NAN into IDLgrPlot.
How did you do it?

```
IDL> a=findgen(11)
IDL> a[5] = !Values.F_Nan
IDL> b=findgen(11)
IDL> ploter = Obj_New("idlgrplot", a, b)
IDL> ploter = Obj_New("idlgrplot", a, b)
% Program caused arithmetic error: Floating illegal operand
```

Cheers,

David

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: IDLgrPlot
Posted by [Pavel Romashkin](#) on Tue, 02 Nov 1999 08:00:00 GMT
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David,

Try the following. I realized that I had no NaNs in the X-vector, that's why I never saw the warning message you get. However, that warning message does not stop you from obtaining the right object, just annoys you. In the example below, you can generate the data with or without NaNs in the X-vector. You get the plot regardless. And, as long as you have NaNs in Y, you will have 0 in data[0,*].

```
*****
```

```
pro test, x, y, win=win, x_finite=x_finite
```

```
  ; Init the data if not passed.
  if n_elements(x) eq 0 then begin
    y=findgen(100)+1
    y[(indgen(20)+10)*2]=!values.f_nan
    if keyword_set(x_finite) then x=findgen(100)+1 else x=y
  endif
```

```
  if size(win, /type) eq 11 then begin
    if obj_class(win) ne 'IDLGRWINDOW' then goto, init_win
  endif else begin
    init_win:
    win = obj_new('IDLgrWindow')
  endelse
```

```
  x_min = min(x, max=x_max, /nan) & y_min = min(y, max=y_max, /nan)
  x_range = [x_min, x_max] & y_range = [y_min, y_max]
  ; Normalize plot range.
  n_xr = normalize(x_range)
  n_yr = normalize(y_range)
  Plots_symbol = obj_new('IDLgrSymbol', 2, size=[0.006/n_xr[1],
    0.008/n_yr[1]], $
    color=[0, 0, 200])
  Plots_lines = obj_new('IDLgrPlot', x, y, color=[0, 0, 0],
    symbol=Plots_symbol, linestyle=6, $
    xcoord_conv=n_xr, ycoord_conv=n_yr, xrange=x_range, yrange=y_range)
  x_axis = obj_new('IDLgrAxis', 0, ticklen=0.03, name='X_AXIS',
    location=[1000, 0, 0], /exact)
  y_axis = obj_new('IDLgrAxis', 1, ticklen=0.03, name='Y_AXIS',
    location=[0, 1000, 0], /exact)
  X_axis -> setProperty, range=x_range, xcoord_conv=n_xr
  Y_axis -> setProperty, range=y_range, ycoord_conv=n_yr
  Plots_model = obj_new('IDLgrModel')
  Plots_view = obj_new('IDLgrView', viewplane_rect=[-0.1, -0.1, 1.12,
    1.16], location=[0.0, 0.0])
  Plots_model -> add, Plots_lines
  Plots_model -> add, x_axis
  Plots_model -> add, y_axis
```

```
Plots_view -> add, Plots_model
Container = obj_new('IDL_Container')
Container -> add, Plots_view
Container -> add, Plots_model
Container -> add, Plots_symbol
```

```
Plots_lines -> getProperty, data=data
print, 'Min of X from IDLgrPlot equals', min(data[0, *], /nan)
print, 'While in the real data it equals', min(x, /nan)
```

```
win -> draw, Plots_view
```

```
obj_destroy, Container
```

```
end
```

```
*****
```

Cheers,
Pavel

David Fanning wrote:

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