
Subject: Plotting a long vector on PV-WAVE

Posted by [Christos Siopis](#) on Mon, 01 Dec 1997 08:00:00 GMT

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Greetings,

I have a long real-number vector (of more than 10,000 elements) that I would like to plot (e.g., versus time). However, if I plot the whole thing the display gets crammed... The best way I can think of to view the data is to see it as a time series: plot only a few data points at a time and "pan" (scroll) the viewing window to the right.

I tried to do something like that, using the Z buffer to avoid the flickering, but the program runs very slow (it takes about 1/3 or 1/2 of a second between consecutive frames on a Pentium/Linux machine). Is this normal? Here is the procedure I used (PV-WAVE):

PRO pan, x, n, win, stp

```
; x = fltarr(n)
; n = number of datapoints (e.g., 10000)
; win = viewing window size (e.g., 100 data points at a time)
; stp = how much to shift to the right between successive
;      snapshots (e.g., 10)
```

```
thisdev = !D.Name
for i = 0, n-win-1 do begin
  set_plot, 'z'
  plot, x(i:i+win), psym=-2
  snap = tvrd(0,0,640,512)
  set_plot, thisdev
  tv, snap
  if (get_kbrd(0) ne "") then return
endfor
END
```

What's also funny is that the "TV, snap" command worked instantaneously on a low-end Sun workstation but it would need half a second or more to "unroll" on a much faster DEC Alpha machine. Could it be that the Alpha's display holds more information?

Thank you,
Christos

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