
Subject: Matlab/PV wave interface

Posted by [kevin](#) on Thu, 20 Aug 1992 00:13:13 GMT

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

I have gotten many responses from people who are interested in getting the code for the PV wave/matlab interface, so I thought I would update folks in this group on its status. First, for those of you who didn't see the original posting, here is a description of what the interface does and my current status as to trying to get it released (this is copied from a note I just sent to somebody who inquired about the interface):

- > Thanks for your interest in the interface. The software I wrote is
- > an interface between matlab and PV wave. I believe IDL is something
- > different than PV wave (I've never used IDL). The simplest thing that
- > the interface does is emulate matlab graphics functions in PV wave, which
- > you can call from inside of matlab. For example, to do a 2d plot using
- > PV wave from matlab, you would call wplot instead of plot, or to do a
- > mesh plot, you would call wmesh instead of mesh. The advantage of this
- > is that:

- > 1) the graphs look a nicer
- > 2) it is approximatly 1 order of magnitude faster
- > 3) you can use pv wave's plotting paramters to create more
- > complex plots (titles, tick marks, colors, etc)
- > 4) you can get post script output of your plots from matlab (this feature
- > alone is worth all the trouble it took to write the interface).

- > The real advantage, though, to using the interface is that you can create
- > your own custom graphics programs in PV wave and call them from matlab.
- > For example, I just finished a program which takes a vector from matlab
- > as input and diplays it as two plots in the same window. The upper
- > plot shows the whole signal, and the lower plot shows a sub section of
- > the signal which is indicated by a boxed section in the upper signal.
- > Using the mouse, the user can change the size/location of the box in the
- > upper plot (thus changing the section of the signal displayed in the lower
- > plot), or scroll the signal in the lower plot using the mouse buttons.
- > When the PV wave function exits, it returns the sub-signal in the lower
- > plot to matlab.

- > I have been in contact with the project manager for PV wave CL at PVI,
- > and he is very interested in it. He is trying to work things out
- > on their end, and I am trying to work things out on Lockheed's end.
- > If everything goes right, then PVI will make the interface
- > available to their customers. Unfortunatley, cutting through the
- > Lockheed beaurocracy is a major nightmare. If I just released it,
- > I could conceivably be fired. The response I get whenever I tell

- > somebody (in Lockheed) that I want to give the interface to PVI is,
- > "Are you crazy?". When I tell them that (in its current form)
- > it's not a commercial product (ie no money), then they say, "Why are
- > you wasting my time". I have gotten this response from several
- > managers and it's very frustrating. I'm still trying, though, and
- > I think I will eventually be able to get it out of Lockheed (hopefully
- > before Hell freezes over).

Kevin Anderson
