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Subject: Re: 3-D & 2-D plots simultaneously  
Posted by [landers](#) on Fri, 13 Aug 1993 22:25:56 GMT  
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In article <24e098\$hrn@senator-bedfellow.MIT.EDU>,  
jabarone@athena.mit.edu (John A Barone) writes:

```
|> Hi,  
|>  
|> I've been trying to plot a 3-D image and two 2-D images in  
|> the same plot window. These images are the surface plotted from  
|> arrays z, x, y and the 2-D plots of x vs z and y vs z. I do this  
|> by first plotting the surface plot using the save keyword and then  
|> exchanging the axis and using plot with the T3D and NOERASE keywords  
|> set for the other two plots.  
|>  
|> [ munched example and other stuff ... ]  
|>
```

Try something more like this:

```
a = shift(dist(15), 5, 5)  
a = exp(-(a/4)^2)
```

```
surface, a, /save, charsize = 2, title = "Surface"
```

```
; make the x and y coordinate arrays:
```

```
x = indgen(15) # replicate(1,15)  
y = replicate(1,15) # indgen(15)
```

```
; a dummy array for the 'squashed' axis  
dummy = replicate( 0., 225 )
```

```
plots, x, dummy, a, /t3d, psym = 2
```

```
plots, dummy, y, a, /t3d, psym = 4
```

```
; This will be just like what you want, except for one plot axis  
; you may not really want it, but:
```

```
axis, !x.crange(0), !y.crange(0), !z.crange(0), /zaxis, /t3d
```

```
; Now the only other missing things are the two side plot titles, which  
; you can add with xyouts....
```

```
xyouts, avg(!x.crange), !y.crange(0), z=!z.crange(1), 'Z vs X Plot', $  
/t3d, text_axes=1, charsize=2, align=0.5
```

```
xyouts, !x.crangle(0), avg(!y.crangle), z=!z.crangle(1), 'Z vs Y Plot', $  
  /t3d, text_axes=5, orient=-90, charsize=2, align=0.5
```

```
; Now if you want to put this on a partial page, just use !p.multi  
; or !p.position to slide the things around....
```

DISCLAIMER: I use PV-WAVE, I don't know if you're using WAVE or IDL  
(you didn't say). I don't know enough about the differences between  
WAVE and IDL to know if all this will work. It works for me in WAVE.

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