

---

Subject: Define a region between curves

Posted by [Rafael Cirolini](#) on Thu, 08 Jun 2017 15:27:10 GMT

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

---

Hello,

I'm needing help getting regions to map each of the regions between these equations below. These equations describes the BPT diagram btw.

Curve plot

```
x=findgen(135)*0.01-1.49
```

```
y= 0.61/(x-0.05)+1.3
```

Curve plot

```
xke=findgen(175)*0.01-1.49
```

```
yke= 0.61/(xke-0.47)+1.19
```

Line plot

```
xc=findgen(94)*0.1-0.2
```

```
yc= 1.01 * xc + 0.48
```

These equations plot two curves and a line, where they form four different regions. A region is below the first equation, the second is between the second and the first (which are the two curves), a third and fourth regions that are above and below the line equation also above the second curve equation.

I tried to apply the equations in the range they are defined in the diagram and I made this relation to go through a certain number of values:

```
for c= -12,9 do begin
```

```
number = make_array(1, 1, /float, value=c)
```

```
number = number/10
```

```
endfor
```

My problem is that I can not find a way to define each region. I tried to set a fixed value of x and vary y (x) but it did not work out. How can I define these regions without being polygons? Because my goal is to mount the tvscale and later the imcontour. I think i made myself clear of what i'm having trouble with. But summarizing my problem is to define a region between these equations to make a tvscale.

I accept any ideas or suggestions. Thanks.

---