

---

Subject: FG question: retrieve points within polygon  
Posted by [Helder Marchetto](#) on Thu, 04 Dec 2014 09:50:38 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Hi,  
I'm looking for an easier way to get the indices inside a polygon or ellipse created in function graphics.  
So here is a basic example that states what I want to do:

```
;first generate the graphics
img = dist(600)
w = window(dimensions=[500,500])
im = image(img, current=w)
pl = polygon([0.25,0.75,0.75,0.25],[0.25,0.25,0.75,0.75],/norm,ta rget=im)
;make some changes to the polygon
pl.rotate, 12

;now extract the mean value of the points of the image that are inside the polygon

pl->getData, xx, yy
o = obj_new('idlanroi', xx*600d, yy*600d, /double, type=2)
mask = o->ComputeMask(dimensions=[600,600])
obj_destroy, o
pts = where(mask, cnt)
meanVal = mean(img[pts])
print, 'the mean value inside the polygon is ', meanVal
```

So this method works fine. It's maybe not the most obvious, but works. Now the question is... How do I get the same result for an ellipse?  
Of course I could calculate the perimeter points of the ellipse and use the same method as above, but that would not really be... well ... cool.

Any better way to do this? I couldn't find any FG method to get such info.

Thanks,  
Helder

---