Subject: Re: Optimization "AMOEBA"
Posted by Wout De Nolf on Thu, 24 Sep 2009 07:56:44 GMT
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On Wed, 23 Sep 2009 19:13:13 -0700 (PDT), Nicki
<nickireiter87@yahoo.de> wrote:

> Okay, I added the other variables now and it works... and also the 3D
> plot works...
> If I have 3 Variables now, what do i need to add to the ploting
> section? And is it possible to get the results for a second minimum as
> well (if there is another local minimum?)

I just included the surface plot to see whether the maximum found by
amoeba (within the box constraints) made any sense.

If you want to check this for more than 2 parameters, you can do
something like changing one of the parameters at a time while keeping
the others fixed at their optimized position (i.e. where the function
is maximal):

```
; Plot
n=200
b=P0-dP
inc=(2*dP)/n
y=fltarr(n)
for j=0,n_elements(P0)-1 do begin
 x=b[j]+inc[j]*indgen(n)

 P=xmax
 for i=0,n-1 do begin
  P[j]=x[i]
  y[i]=-func(P,/NOCONSTR)
 endfor

 window,j
 plot,x,y
 plots,xmax[[j,j]],[!y.crange[0],ymax],psym=-2
endfor
```

As for the second local minimum: I guess you need to play with your
box-constraints to get one or the other.