

---

Subject: Re: partial derivatives of f(x,y)  
Posted by [korpela](#) on Fri, 14 Apr 1995 07:00:00 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

In article <D6xz1s.ADE@ireq.hydro.qc.ca>,  
<brooker@toka.ireq-ccfm.hydro.qc.ca> wrote:  
> I have a 2d function z=f(x,y). I need to calculate  
> the partial derivatives df/dx and df/dy for all the  
> grid points. Is there a routine for this somewhere?  
>

Provided free of charge..... (Unless Unisys has patented it :))

Assuming x and y are arrays.....

```
delta=some_small_number ;compared to the grid spacing
dz_dx=(f(x+delta,y)-f(x-delta,y))/(2.0*delta)
dz_dy=(f(x,y+delta)-f(x,y-delta))/(2.0*delta)
```

Eric

--

Eric Korpela | A day without meetings is like  
korpela@ssl.berkeley.edu | work.  
<a href="http://www.cs.indiana.edu/finger/mofo.ssl.berkeley.edu/korpe la/w">Click here for more  
info.</a>

---