
Subject: Re: partial derivatives of $f(x,y)$
Posted by [korpela](#) on Fri, 14 Apr 1995 07:00:00 GMT
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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

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Eric Korpela | A day without meetings is like
korpela@ssl.berkeley.edu | work.

<http://www.cs.indiana.edu/finger/mofo.ssl.berkeley.edu/korpela/w>">Click here for more
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