
Subject: Re: Simple? problem

Posted by [Jaco van Gorkom](#) on Tue, 09 Apr 2002 17:52:16 GMT

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"Ivan Valtchanov" <ivanv@discovery.saclay.cea.fr> wrote in message

news:20020409174917.78c62461.ivanv@discovery.saclay.cea.fr... .

< skipped code of not quite so simple problem ... >

> This is obviously quite unoptimised - two cycles etc. Do you have any ideas, references or do you know if it is already solved in IDL?

>

> I have looked for something similar in David Fanning pages and IDL astronomical libraries but I couldn't find something to adapt, maybe I have missed it?

Well, I would start by reading the dimensional juggling tutorial on David's pages

a few times. Then read it again, and practice with the examples.

A nice compromise between the speed penalty for using loops and excessive memory use for array operations is usually found by vectorizing the inner loop

only. Thus FOR j=... until ENDFOR could be replaced by something along the lines of:

```
ygi = findgen(ny)/ny
dy = rebin(y, 1000, ny, /sample) - rebin(reform(ygi, 1, ny), 1000, ny,
/sample)
dr = rebin(dx^2, 1000, ny, /sample) + dy^2
arg = dr^2 / rebin(w2, 1000, ny, /sample) > -20.0
image[i,0] = total(exp(arg), 1) ; the total over only the first dimension
(1000)
```

Probably I mixed up all the rebin statements here, since I have not read the juggling tutorial in months. But thirty minutes of toying around on the command

line with help statements usually gets the syntax right.

Jaco

P.S.: It is quite possible that I have misunderstood the meaning or purpose of your code. Maybe you could describe in words exactly what you want to accomplish?
