Subject: Re: another request for help with getting rid of for loops... Posted by Benjamin Hornberger on Tue, 15 Aug 2006 14:10:34 GMT

View Forum Message <> Reply to Message

davede10@gmail.com wrote:

- > Hi everyone,
- > i read alot about eliminating for loops in idl, and yet i can't get
- > rid of this simple loop.
- > here is what i'm trying to do (multiply each plane in a data cube by a
- > number):
- > any idea?

>

- > A=fltarr(100,100,10); my data cube
- > A(*,*,*)=1.
- > b=findgen(10); just a culumn of numbers
- > c=a
- > for i=0.9 do c(*,*,i)=A(*,*,i)*B(i)

>

- > thanks.
- > david

>

Here is the solution:

http://www.dfanning.com/tips/rebin_magic.html

Keep in mind, however, that once the arrays reach a certain size, your computer might not be able to allocate the memory for the intermediate "blown-up" array any more and the loop is suddenly orders of magnitude faster than the pure array operation.

And as a side note, you should better use [] instead of () for array subscripting. Check the IDL help index for "subscripts" -> "syntax".

Good luck, Benjamin

Subject: Re: another request for help with getting rid of for loops... Posted by Maarten[1] on Tue, 15 Aug 2006 14:18:02 GMT View Forum Message <> Reply to Message

davede10@gmail.com wrote:

- > Hi everyone,
- > i read alot about eliminating for loops in idl, and yet i can't get
- > rid of this simple loop.
- > here is what i'm trying to do (multiply each plane in a data cube by a
- > number):

```
> any idea?
>
> A=fltarr(100,100,10); my data cube
> A(*,*,*)=1.
> b=findgen(10); just a culumn of numbers
> for i=0.9 do c(*,*,i)=A(*,*,i)*B(i)
a = findgen(100,100,10)
b = findgen(10)
c = transpose(rebin(b, 10, 100, 100, /sample))
c = a*c
(Using findgen makes it easier to verify the result by searching the
old and new method for differences).
Maarten
Subject: Re: another request for help with getting rid of for loops...
Posted by Craig Markwardt on Wed, 16 Aug 2006 05:00:23 GMT
View Forum Message <> Reply to Message
Benjamin Hornberger <br/> <br/> denjamin.hornberger@stonybrook.edu> writes:
> And as a side note, you should better use [] instead of () for array
> subscripting. Check the IDL help index for "subscripts" -> "syntax".
Suit yourself whippersnapper :-)
Craig
```

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu

Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response