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Subject: Re: Maximum index for arrays?

Posted by [Chris\[6\]](#) on Mon, 15 Sep 2008 08:53:26 GMT

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On Sep 14, 8:08 pm, "hotplainr...@gmail.com" <hotplainr...@gmail.com> wrote:

```
> Hi guys,
>
> Thanks for helping me for the past few weeks. I've managed to get
> CUBLAS and other CUDA programs working in IDL. What I have now for you
> guys is this.
>
> Here is the code
>
> N = 181
> N2 = N^2
> a = fltarr(N2, 141)
> help,a
>
> A          FLOAT      = Array[32761, 141]
>
> N = 182
> N2 = N^2
> a = fltarr(N2, 141)
> % Array dimensions must be greater than 0
> % Execution halted at: TEST          5 /home/hpr/test.pro
> %          $MAIN$
> IDL>
>
> How big can the index go? Its because I need N = 100 to 1000
>
> Regards
> Zaki
```

The problem is that the line

```
N = 182
```

sets N to a 16-bit signed integer (max size 32767-ish). When you square it (33124), it overflows and becomes negative (-32412). Use something like

```
N=182L (long integer with max size about 2 billion) or
```

```
N=2. (floating point)
```

As long as you have the RAM, arrays can have millions or billions (i think) of elements, so you'll be fine.

chris

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