Subject: Re: Reading large arrays of complex numbers Posted by Mark Hadfield on Tue, 27 Sep 2005 04:32:55 GMT

View Forum Message <> Reply to Message

David Fanning wrote:

> acquiredtaste7 writes:

> >

- >> Hi, everyone. I am fairly new to IDL, and I have a problem that I
- >> can't figure out. I have some large 2D arrays of complex numbers that
- >> I need to read into a program. I found some code in this group for
- >> reading in complex arrays that works by reading the data into a long 1D
- >> array of real numbers, then reforming the data into a 2D array of
- >> complex numbers. Unfortunately, the arrays I'm dealing with are so
- >> large (2048x2048), that IDL won't create a 1D array of the necessary
- >> length (2*2048*2048). Can anyone tell me how I can read in my arrays?

> >

- > I guess that's a bigger than normal array, but it doesn't seem
- > HUGE to me. In fact, I can easily create that size array on
- > my fair to middling machine. How exactly are you trying to do this?

You (acquiredtaste7) could be running into the old short-integer-overflow problem, eg:

IDL> x = complexarr(2*2048S^2)
Array dimensions must be greater than 0.
Execution halted at: \$MAIN\$

Try forcing your integers to be long:

 $IDL > x = complexarr(2, 2048L^2)$

Or just set the DEFINT32 compiler option everywhere.

--

Mark Hadfield "Kei puwaha te tai nei, Hoea tahi tatou" m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)