
Subject: Re: Large Arrays in IDL
Posted by [thompson](#) on Sat, 13 Jan 1996 08:00:00 GMT
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szoonem@astro.sunysb.edu (Saeid Zoonematkermani) writes:

> Hi;

> This is a question that concerns astronomers once in a while. I have
> wondered what the limit is to the size of the arrays that IDL can create.
> Some times IDL fails to read a FITS image complaining:

> % Unable to allocate memory: to make array.
> not enough core

> This is not so uncommon if one has to deal with even moderate size cubes.
> I have tried to use .SIZE to increase the default value for data area but
> it doesn't seem to work. So the question is if there is a way to open a
> very large image by IDL. IRAF seems to have no problem with this. Does
> this problem arise from lack of RAM on the computer?

The .SIZE command doesn't have anything to do with the size of arrays that you can handle in IDL. It's more related to how many variables (regardless of size) that you have, and how many routines you have.

The size of arrays is controlled by how much RAM you have. On VMS computers, it's also controlled by various system and process quotas--talk to your system manager. If you can't allocate space for arrays, try deleting any arrays you may already have in memory.

Another reason why you may be having trouble allocating array space is because of memory fragmentation. For more information, read the FAQ.

As I understand it, IRAF avoids this problem by doing everything on disk. That way, it only needs to have enough memory for one array at a time.

William Thompson
