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Subject: Re: reading long files  
Posted by [rdc](#) on Sat, 06 Nov 1993 09:51:08 GMT  
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A previous post mentions a two pass method of reading the file first determining the necessary size of the array and then reading into it. For people running on unix systems spawning a 'wc' will accomplish the first pass faster than reading it with idl. Our wc returns # lines, # words, and # characters in the file so the array dimensions can be calculated by your procedure. (its more efficient to use a 1d array and REFORM it to 2d after reading it) One drawback (other than portability) is when some entries completely fill the available width of their column. This causes two entries to run together and a free format read will lose its place. But this situation can be flagged when  $\#cols = \#words / \#lines$  doesn't come out integer. This situation has to be handled as a special case, otherwise a procedure to do this can be kludged up to be pretty general.

Another aproach I have used a few times is to grow the array a record at a time into a static array. This avoids both the wasteful use of memory and also greatly speeds things up since the array isn't repeatedly being recopied. Of course you have to predimension the array to be at least as large as the file being read and you can have nightmares thinking about ways you can overflowing it. Don't know if the options I used still work with version 3.x, it was about 2.2 when I tried this. I dropped it in favor of the safer two pass method.

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For the 10,000th time: it's in Astronomical Algorithms by Jean Meeus!

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