Subject: Re: read_ascii for more than one file
Posted by Maarten[1] on Fri, 24 Aug 2007 08:06:03 GMT
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On Aug 24, 6:33 am, britta....@gmail.com wrote:
> On Aug 23, 6:56 pm, Conor <cmanc...@gmail.com> wrote:
>
>
>
>> On Aug 23, 12:24 pm, b...@uni-mainz.de wrote:
>
>>> Hello,
>
>>> i'd like to read arrays (3 columns, 2072758 lines) from more than one
>>> file do get some kind of data(k) where k (k=146) is the number of
>>> files and data is the array.
>
>>> For one file it works quite well with:
>
>>> data = read_ascii(file) & data = data.(0)
>>> g = data[0, *]
>>> r = data[1,*]
>>> nir = data[2,*]
>
>>> For this code i do not need to declare data, g, r and nir
>
>>> But i do not know how i can manage it for k files (without getting
>>> error messages).
>
>>> Britta
>
>> Well, why not just create a gigantic 3-d array and fill the array one
>> by one?
>
>> everything = fltarr(3,2072758,146)
>
>> for i=0,146-1 do begin
>> file = 'file' + string(i+1,format='(i0)')
>> data = read_ascii(file) & data = data.(0)
>> everything[*,*,i] = data
>> endfor
>
>> In this case, the program expects the files to be named something
>> like: 'file1', 'file2', ... 'file146'. Obviously, you would have to
>> adjust the names accordingly. Worse comes to worse you could always
>> specify each one individually in a string array and extract the
>> filename as you loop through.
>

> Hello,
>
> when i try this suggestion i get the error message: "%Array has too
> many elements." at the line "everything = fltarr(3,2072758,146)".
>
> Is there a possibility to fix this error?

That is a flt array with about 900 million points, or just under 4 GB
of memory. I'd say: get more memory and use the 64 bit version of IDL.
Or rethink your analysis, and perform it in a way that does not
require all data in memory at teh same time. I'd vote for the latter,
as it is probably faster as well.

Maarten
