Subject: Re: structure use
Posted by R.Bauer on Tue, 02 Jul 2002 07:41:24 GMT
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Patrick McEnaney wrote:
>
> Folks- This one should be easy I guess. I'm using a pointer to a 3d
> structure array to store ascii data so I can create simple plots. I've
> got the structure set as such:
>
> profiledata=fltarr(11,9999,3)
>
> Then when I access the data I just call (*pstate).profiledata(5,*,0)
> for a specific column of data, (*pstate) is the pointer. Here's my
> problem, and I'm challenged when it comes to fixing bugs so don't
> laugh if the fix is really obvious, my file sizes vary from just a few
> hundred samples to several thousand samples depending on the rate the
> instrumentation is set at. So if the file is 500 lines I'm reading in
> 500 valus in an array that 9999 samples long, the result is a decent
> profile of data but there are lots of unwanted data values plotting as
> well. So I want to plot just the good values and not the zeroes but
> the use of a structure doesn't allow changing a field size no matter
> if I use a named or anonymous type from what I've read. The question
> is, how do I just read the good values and ignore the zeroes.

Dear Patrick,

lots of question lots of answers.

Your problem is that's you always read with a fix dimensioned
array.
If you use a small routine fileline you can dimension your reading
array to the number of availabel lines of the file.
If you like it more comfartable you can use e.g. read_data_file
to read in the whole file in a data-structure.

http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl _html/dbase/download/fileline.tar.gz
http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_source/idl
_html/dbase/download/read_data_file.tar.gz

If you like to have fix sizes you can use the where function to
determine
the 0 values.
e.g. valid=where(values[0,*,0] ne 0 , count)
if count gt 0 then plot,values[0,valid,0]

>
> Another question, hopefully really easy this time...I've been
> attempting to use idl to visualize data or otherwise just program for
> the better part of two years. I get pulled away from the programming
> to perform other tasks very frequently so the results of my learning
> are, well....mixed. Before I started using idl I hadn't programmed at
> all in several years since taking fortran in college. I've taken two
> classes from RSI and have the books from the course and also Dr.
> Fanning's book. The problem I have with these books is that I haven't
> learned much from them because I don't perceive them as about idl as a
> programming language (no offense to any of the authors). For example
> if I went out and bought an O'Reilly or some other simple step by step
> discussing perl or C as a programming language. What I'm looking for
> is a good, simple to follow book with lots of examples (I hesitate to
> say a dummies guide because I can't stand the writing style). I
> noticed several additional books on Dr. Fanning's website, what is the
> opinion on these? What I'm essentially looking for is an IDL
> programming guide for non-programmer scientists and I'd like to get an
> opinion before buying.

If you like you can meet us in one of our lessons at FZ-Jï¿½lich.
Next one is end of October.

Reimar

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Reimar Bauer

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a IDL library at ForschungsZentrum Juelich
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