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Subject: Re: plot structured data II

Posted by [John-David T. Smith](#) on Mon, 12 Mar 2001 15:35:01 GMT

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David Fanning wrote:

```
>
> Dirk Burose (dirk.burose@uni-bonn.de) writes:
>
>> sorry for being unprecise last time.
>> What I like to know is how to get access to the data in the structure or
>> as David Fanning already said how to tear that structure apart and get a
>> 2d array for further use.
>> The data in the structure is already gridded and I know how to use
>> surface function but until now I can't find information how to use it
>> with structured data sets.
>> thanks a lot
>
> Structures are de-referenced with a "dot". You want
> something like this:
>
>   Surface, struct.mydata, struct.my_xvector, struct.my_yvector
>
> Sometimes structures have structures inside them. Then you
> use two dots, etc.:
>
>   Surface, struct.mydata.grid, struct.mydata.xvec, struct.mydata.yvec
```

And sometimes you are using structures entirely inappropriately, like when you really want an array instead, but are using `read_ascii` to get it out of file. You might try crafting your own formatted read and avoid `read_ascii` altogether, reading it directly into a 15xn array. It's really pretty simple.

`Read_ascii` is best for multi-variable plots, not higher dimensional data. If you are really stuck with a structure of fields with columns of data the same length, and you'd like to convert it to a 2d array, try:

```
for i=0,n_tags(st)-1 do $
  if n_elements(a) eq 0 then a=1#st.(i) else a=[a,1#st.(i)]
```

But really, a better solution is to use the correct data type in the first place.

Good luck,

JD

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