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Subject: Re: accessing variables with their string names  
Posted by [Martin Schultz](#) on Fri, 19 Dec 1997 08:00:00 GMT  
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Natalie Rooney wrote:

>  
> Hello. I'm trying to create a graphical user interface to do analysis  
> and plotting of research data. My widget contains a list widget where I  
> display the names of the data the user has read in.  
>  
> The problem is: I wanted the user to be able to read in a dat file of  
> saved variables. I don't know what the names of the variables will  
> necessarily be. I figured out a way to get the STRING names of the  
> restored variables into an array. But, I still need a way to access the  
> data that the variables contain for plots, etc. Is there any way to  
> access the variables' data if all you have is a string array of the  
> variables' names? I'd appreciate any help.  
>  
> Thanks,  
> Natalie Rooney

If I understand you correctly, all you need is something like

```
timeind = where(names eq 'TIME')  
ind = where(names eq VARNAME)  
if (ind(0) ge 0) then plot,data(timeind,*),data(ind,*)
```

Here data is the data array, and names stores the variable name strings.  
In the example above, data has the dimension (M,N), with M variable  
names and N observations.

You can get the VARNAME from the widget via the following procedure:

```
; get names and selection of x or y list  
widget_control,widget_id,get_value=names  
; determine selection in x or y list  
; (requires knowledge of the structure of cw_xysel !!)  
widget_control,widget_info(widget_id,/child),get_uvalue=xyst ate  
sel = widget_info(xystate.listID,/list_select)
```

This is actually a piece of code from my EXPLORE widget application.  
You may want to check my web page for this, and if you like the general  
idea, I am sure you can find a handful of information with respect to  
what you are trying to do if you take a look at the sources.

Regards,  
Martin.

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