
Subject: Re: Retrieving variables from a subroutine
Posted by [Kenneth P. Bowman](#) on Mon, 19 Feb 2007 15:22:11 GMT
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In article <ercbpk\$res\$1@south.jnrs.ja.net>,
Andy Heaps <a.j.heaps@reading.ac.uk> wrote:

> Does anyone know of any IDL magic that could be used to have a single
> procedural (or other) call, and then somehow end up with the NetCDF
> variables extracted back in the the calling procedure?

I think structures really are the best way to do this. I generally
use a function rather than a procedure, so it is called like this

```
data = READ_SAT_DAT(input)
```

where input is a file name or date, depending on the application.

READ_SAT_DATA packages all of the info from the file into an
anonymous structure.

It is not too difficult to get undergrads to understand, for example,
that

```
data.longitude
```

contains the longitudes of the satellite fields of view,

```
data.values
```

contains the radiances or retrieved quantities, etc.

The structure makes it easy to include the data and all of the
ancillary information (units, long names, etc.) in a single package.

Ken Bowman
