Subject: Re: Do netCDF Files Have a DataType of INT?
Posted by Paul Van Delst[1] on Mon, 03 Jun 2013 14:23:37 GMT
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From the netCDF docs:

<quote>
A variable external data type is one of a small set of netCDF types. In
classic and 64-bit offset files, only the original six types are
available (byte, character, short, int, float, and double).
</quote>

That indicates to me that the netCDF "int" is equivalent to the IDL
"long", i.e. a 4-byte integer.

Similarly, the netCDF "short" is equivalent to the IDL "int"

From netcdf.h:

```
/*
 * The netcdf external data types
 */
#define NC_NAT     0
#define NC_BYTE    1
#define NC_CHAR    2
#define NC_SHORT   3
#define NC_INT     4
#define NC_LONG    NC_INT
#define NC_FLOAT   5
#define NC_DOUBLE  6
#define NC_UBYTE   7
#define NC_USHORT  8
#define NC_UINT    9
#define NC_INT64   10
#define NC_UINT64  11
#define NC_STRING  12
#define NC_MAX_ATOMIC_TYPE NC_STRING
```

cheers,

paulv

On 06/02/13 22:36, David Fanning wrote:
> Folks,
>
> I've run into a problem with a netCDF file and I need a sanity check.
>
> I define a variable attribute "colortable" with an integer value, say
> 33. As far as I know netCDF files don't have a datatype named "INT", so

> I use the datatype "SHORT" when I create the attribute:
>
> NCDF_ATTPUT, fileID, self.ID, 'colortable', 33, /SHORT
>
> Now, I want to read this attribute out of the file and copy it to
> another file. To learn something about this attribute I use the IDL
> routine NCDF_ATTINQ:
>
> attrInfo = NCDF_AttInq(fileID, GLOBAL=1, 'colortable')
>
> But, the datatype field of this attribute structure is inexplicably set
> to INT:
>
> IDL> Print, attrInfo.datatype
> INT
>
> Does that make *any* sense to anyone?
>
> Cheers,
>
> David
>
>
