
Subject: Re: HDF_VD_WRITE for string data
Posted by [jameskuyper](#) on Tue, 14 Oct 2008 18:42:50 GMT
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Brian wrote:

```
> I'm attempting to add string data to VDATA. I've been mixing data
> types using the HDF_PACKDATA function (float and long in example
> below), but can't get the string type to work. Instead of "Test" I get
> a 4 byte value.
>
> Any suggestions?
>
> -----
> PRO testvd
>
> fid = HDF_OPEN('out.hdf', /CREATE)
> Vdat = HDF_VD_ATTACH(fid, -1, /WRITE)
> HDF_VD_SETINFO, Vdat, NAME='ancillary'
> HDF_VD_FDEFINE, Vdat, 'VAR1', /FLOAT, ORDER=1
> HDF_VD_FDEFINE, Vdat, 'VAR2', /LONG, ORDER=1
> HDF_VD_FDEFINE, Vdat, 'VAR3', /BYTE, ORDER=4
>
> v1 = 134.5
> v2 = 30000L
> v3 = 'Test'
>
> odata = HDF_PACKDATA(v1,v2,v3,HDF_TYPE=[5,24,4],HDF_ORDER=[0,0,4])
> HDF_VD_WRITE,Vdat,'VAR1, VAR2, VAR3',odata
>
> HDF_VD_Detach,Vdat
> HDF_CLOSE, fid
>
> END
```

HDF doesn't have a string type, as such. The closest it comes is an array of character type. It has special type codes for DFNT_CHAR8 (=4) and DFNT_UCHAR (=3). These are different type codes than the ones used for 8 bit integers: DFNT_INT8(=20) and DFNT_UINT8(=21). However, not all of the IDL HDF routine support all of the possible HDF type codes. The /BYTE option of HDF_VD_FDEFINE is the only documented option that produces an 8-bit type, and that type is DFNT_UINT8.

According to the documentation for "IDL and HDF Data Types", DFNT_CHAR8 is recognized by IDL's routines, and in some unspecified contexts it is matched up with IDL's string types, but HDF_VD_FDEFINE is apparently not one of those contexts.
