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Subject: Re: Question regarding HDF file  
Posted by [James Kuyper](#) on Tue, 07 Aug 2007 17:43:11 GMT  
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None wrote:

```
>>> HDF_SD_GETDATA, sdsIDsm, rr, start=[0,0], count=[x[j],y[j]],
>>> stride=[0,0]
>>
>> HDF_SD_GetInfo, sdsIDsm, NAME=name, HDF_TYPE=htype, TYPE=itype
>> PRINT, im[j], name, htype, itype, min(rr), max(rr)
>>
>>> HDF_SD_GETDATA, sdsIDsm2, r2
>>
>> HDF_SD_GetInfo, sdsIDsm2, NAME=name, HDF_TYPE=htype, TYPE=itype
>> PRINT, bd[j], name, htype, itype, min(r2), max(r2)
>>
>> PRINT, min(rowp), max(rowp)
>>
>
> Hi. I did the corrections which you had mentioned, but still I am
> getting the same results. I also changed the !PI and !DTOR.
```

Those were debugging printouts, not corrections. They're not intended to solve the problem, they're intended to help figure out what the problem is.

```
> I have changed it to read from the variable directly instead writing
> to the text file and again reading from it. these are the information
> which I got.
>
> sdsIDsm=      9 ImageData DFNT_UINT8 BYTE  40 249
> sdsIDsm2=     10 RadiometricCorrTable DFNT_FLOAT32 FLOAT
> -3.57843      2.47200
>
> Max(rowp) & Min(rowp) =      0.506396      0.000000
```

I see a very serious problem right here, and it's a problem at the design level, not at the level of coding. You're attempting to write floating point values that range from 0.0 to 0.5 to an output array whose type is an 8-bit unsigned integer. The best you can hope for is automatic conversion from the floating point value to the 8-bit unsigned integer; that would result in the output array being filled with 0s.

```
IDL> filename = 'test.hdf'
IDL> sd_name = 'Bytes'
IDL> file = HDF_SD_Start(filename, /CREATE)
% Loaded DLM: HDF.
```

```
IDL> Dims = [30,40]
IDL> sds = HDF_SD_Create(file, sd_name, dims, /DFNT_UINT8)
IDL> data = BYTE(40+randomu(Seed, dims)*209)
IDL> print,min(data),max(data)
    40 248
IDL> HDF_SD_AddData, sds, data
IDL> HDF_SD_EndAccess, sds
IDL> HDF_SD_End,file
```

```
IDL> file = HDF_SD_Start(filename, /RDWR)
IDL> idx = HDF_SD_NameToIndex(file, sd_name)
IDL> sds = HDF_SD_Select(file, idx)
IDL> fdata = 0.506396*randomu(Seed, dims)
IDL> HDF_SD_AddData, sds, fdata
IDL> HDF_SD_EndAccess, sds
IDL> HDF_SD_End, file
```

```
IDL> idx = HDF_SD_NameToIndex(file, sd_name)
IDL> sds = HDF_SD_Select(file, idx)
IDL> HDF_SD_GetData,sds, data
IDL> print, min(data), max(data)
    0  0
IDL> HDF_SD_EndAccess, sds
IDL> HDF_SD_End, file
```

> But if i open the hdf file, I am getting values like -3.5123 -1.5232  
> -3.5138 .....

How exactly are you reading the file? If you use the same methods shown in this code, you should be reading in the ImageData SDS as a BYTE array, which should have such values.

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