Subject: Re: Speed penalty using START and COUNT with HDF_SD_GETDATA
Posted by Mark Hadfield on Thu, 06 Sep 2001 00:29:31 GMT
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From: "Bob Fugate" <rqfugate@mindspring.com>

> I don't have any control over how the data are written or stored. How can
I
> do what you suggest? I am doing something like the following now (assumes
> there are 8000 frames in the SDS):
>
> hdf_sd_getdata,arrayid,data,start=[46,43,0],count=[32,32,800 0]
>
> where the first two numbers are the indices where I want to start
extracting
> the data from the 128x128 array and 32 is the size of the extracted array.
> The above is much slower than
>
> hdf_sd_getdata,arrayid,data
>
> or even
>
> hdf_sd_getdata,arrayid,data,start=[0,0,0],count=[128,128,800 0]

One strategy you might consider is

```
data = fltarr(32,32,8000)
for i=0,7999 do begin
   hdf_sd_getdata,arrayid, frame, start=[0,0,i], count=[128,128,1]
   data[*,*,i] = frame[46:77,43:74,0]
endfor
```

The motivation for this is that reading data along the final dimension is slow in any case (for reasons explained by Reimar) so the loop won't hurt you too much. By reading a full frame of data on each step you are reading contiguous data, which is fast. And by looping you avoid having to store large amounts of unneeded data.

But test it for yourself!

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