Subject: PV-WAVE
Posted by grueber on Wed, 28 Jun 1995 07:00:00 GMT
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My Problem with the PV-WAVE SDS interface, a subset of HDF from NCSA:

I want to read a one dimensional array of a scientific data set (SDS)
from a HDF file via the function SDreaddate into a two dimensional array
(respective into a subarry of buffer array).
For example:

```
------------------------
length = 3000000L
number = 12L

buffer = intarr(length,number)

k = 2
...

status = SDreaddata(sdsid,[0],[1],[len],buffer(0:len,k))
------------------------    ^^^^^^^^^^^^^
```

This example doesn`t work, despite it's possible to address subarrays
in this manner (array(from:to)) in PV-Wave. Status doesn't indicate
an error! I work around it in this way:

```
------------------
tmpbuf = intarr(len)

...
status = SDreaddata(sdsid,[0],[1],[len],tmpbuf)

buffer(0:len,k) = tmpbuf
-------------------
```

But the disadvantage of this work around is the unacceptable
waste of time for the additional copy operation.
Reading 4 MB via SDreaddata lasts about 2 seconds, but copying
the buffer lasts about 10 seconds !!??!!
(This tests were made on a Sparc 20 with enough memory and fast
hard disks)

Does anybody have a solution or a more efficient work around for this
problem?

Thanks for help in advance

Wilhelm Gr"uber

PS: Please send an email directly to my address (grueber@dv.kp.dlr.de)