Subject: Re: NetCDF version in IDL 8.6?
Posted by Kenneth Bowman on Thu, 02 Mar 2017 19:13:35 GMT

On Wednesday, March 1, 2017 at 3:03:35 PM UTC-6, k-bo...@tamu.edu wrote:
>> ** NCDF - IDL NetCDF support (not loaded)
>>   Version: 4.3.2, Build Date: NOV 21 2016, Source: Exelis Visual Information Solutions, Inc.
>>   Path: /usr/local/harris/idl86/bin/bin.linux.x86_64/idl_netcdf.so
>>
>> regards,
>> Lajos
>
> Thanks, Lajos. It looks like the problem may be happening in 8.4, but not in 8.5 (despite being the same version of netCDF). Will do further testing.
>
> Ken

Unfortunately, the problem is not resolved in IDL 8.5 (and I expect in 8.6, which uses the same version of netCDF).

After much trial and error testing, the problem appears to be linked to use of the CHUNK_DIMENSIONS keyword when creating netCDF-4 files. When we omit CHUNK_DIMENSIONS, the problem does not occur.   In our case all the variables have no unlimited dimensions, so when CHUNK_DIMENSIONS is omitted the chunk size is the entire variable (assuming the docs are correct).

Contrary to the IDL docs, however, gzip compression *does* work when the CHUNK_DIMENSIONS keyword is omitted.

Fortunately for us, omitting the CHUNK_DIMENSIONS keyword will not cause any issues with our files.

The versions of netCDF and HDF5 that are currently included with IDL are quite out of date. I will be submitting a bug report and a request that Harris use more recent versions of those libraries and fix some errors in the netCDF documentation.

Cheers, Ken