Subject: Re: IDL 8.2.2 released
Posted by Fabzi on Wed, 13 Feb 2013 10:04:35 GMT
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Hi Timothy

On 02/13/2013 01:43 AM, timothyja123@gmail.com wrote:
> I have been looking into your NetCDF suggestion.
>
> I have hit a problem however in that the IDL library
> does not seem to have an option to compress the NetCDF files.

Which version of IDL are you using? With 7.1.1 (patched for netCDF) and higher this should be no problem. But you have to specify that you want to use netCDF 4 when creating the file, with the /NETCDF4_FORMAT keyword: http://www.exelisvis.com/docs/NCDF_CREATE.html

NetCDF4 allows you to create files larger than 2gb (upper limit for netCDF3 files) and also to use the three compression keywords when defining a variable (GZIP, CHUNCK_DIMENSIONS, SHUFFLE): http://www.exelisvis.com/docs/NCDF_VARDEF.html

NetCDF is very fast, but the more you compress, the slowier it will be though. I found almost no win in file size when going from GZIP=5 to GZIP=9 so I suggest to stick by 5. I also noticed that creating compressed files takes longer but that reading them is almost as fast as uncompressed ones, but this should be tested in a proper benchmark. The compression will be very efficient if your data is very recurrent (many zeros for example).

And again, I highly recommend David's NCDF_FILE object, which makes it much more fun to work with ncdf files and has no limitations (all keywords are accessible):
http://www.idlcoyote.com/programs/ncdf_file__define.pro
(the only drawback of David's tool is that it is "all objects" and therefore parsing a lot of files having a lot of variables/attributes is a bit slow)

Cheers,

Fab