Subject: Re: Routines for reading grib2 and BUFR
Posted by Kenneth P. Bowman on Tue, 22 Jun 2010 17:51:59 GMT
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In article
<7b5ab75b-f2de-43cc-bf67-de7766d90c15@j8g2000yqd.googlegroups.com>,
 Klemens <jokulhlaup@web.de> wrote:

> Hi all,
>
> working with Eumetsat satellite data, I am looking for routines to
> read grib2 and BUFR (Binary Universal Form for the Representation of
> meteorological data) data directly in IDL. I have played around with
> the IDL grib routine, but it does now work properly for grib2 data. I
> know the NCL library, but since I am working in the Windows
> environment, it is not very comfortable. To read BUFR, I have not
> found anything, that seems to be applicable for me. May be there is
> somebody out there who faced the same problems and spent some effort
> to code something in IDL...
>
> Thank for your help in advance !
>
> Cheers,
>
> Klemens

At this time your best bet is probably to use wgrib2

   http://www.cpc.noaa.gov/products/wesley/wgrib2/

to convert the files to binary, then read the binary
files using standard IDL I/O.

I have only done this with wgrib, not wgrib2, but it should
be very similar.

I have generally found that compiling wgrib is easy, even for
a non-C programmer like me. Just cc it to make an executable.

The approach that I use is:

1. Use wgrib to generate an inventory of the records in the file.
2. Parse the inventory file to identify records that you want to read
   (create a subset of the inventory records). STRSPLIT is your friend.
3. Use wgrib to convert the grib file to a binary file, copying
   only the records you selected in step 2.
4. Read the binary file into IDL using unformatted I/O.

All of this can be done within an IDL program (on a unix-based system, I guess) by using SPAWN to run wgrib.

It is ugly, but it works. Good luck.

Ken