Subject: Re: Code to convert grib spherical harmonic coefficients to gridded lat/lon
Posted by Kenneth P. Bowman on Thu, 29 Nov 2007 22:41:09 GMT

In article
<30b87d0d-e14a-4c09-abca-31ed7971fa23@g30g2000hsb.googlegroups.com>,
 Bill Gallery <wgallery@aer.com> wrote:

> I have some ECMWF grib files where the data is stored as spherical
> harmonics. Does anyone have idl code to convert the coefficients to
> gridded (lat/lon) data? Alternatively, do you have other programs to
> dump the data from the grib file, convert the spherical harmonics, and
> write it out? (I know there is a lot of stuff out there to handle
> grib files [ncl_convert2nc, wgrib, emos, PyNIO, ..] but I need someone
> with real experience to sort it out.

The do-it-yourself approach is to use SPHEREPACK from NCAR

   http://www.cisl.ucar.edu/softlib/SPHERE.html

You will have to figure out how to read the GRIB files also.
The wgrib utility can be used to convert the GRIB files to
plain binary files. The wgrib pages have some good examples
of how to extract a particular field from a GRIB file.

Ken Bowman