NAME

mbm_grd2arc – Macro to convert a GMT grid file in the GMT NetCDF grid format to an ArcView ASCII grid.

VERSION

Version 5.0

SYNOPSIS

mbm_grd2arc **–I***grdfile* **–O***arcfile* [**–H** **–N***nodata* **–V**]

DESCRIPTION

mbm_grd2arc is a macro to convert a GMT grid file in the GMT NetCDF grid format to an ArcView ASCII grid. This allows users to import the grid into Arc/Info and ArcView. The grids must have the same grid interval in both longitude and latitude. If the grid was created using **mbgrid** or **mbmosaic**, the **–E** option must have been used in that program to set the grid cell sizes equal (see the mbgrid and mbmosaic manual pages).

The macro first obtains the bounds, dimensions, and grid cell size of the grid using the GMT program **grdinfo**. The grid dimensions, the lower left position, and the grid cell size are written to the header of the output ArcView ASCII grid file. The macro then uses the GMT program **grd2xyz** to dump each of the grid values to a temporary ASCII file. This temporary file is read and parsed one value at a time. Any NaN values are replaced by the *nodata* value specified with the **–N** option. Each final value is printed to the output file.

AUTHORSHIP

David W. Caress (caress@mbari.org)
Monterey Bay Aquarium Research Institute
Dale N. Chayes (dale@ldeo.columbia.edu)
Lamont-Doherty Earth Observatory

OPTIONS

–H This "help" flag cause the program to print out a description of its operation and then exit immediately.

–I *grdname*
Sets the filename of the input GMT grid file. This file must be in the GMT NetCDF GRD format.

–N *nodata*
Sets the "no data" value used in the output ASCII file. Default: *nodata* = –99999.

–O *arcfile*
Sets the filename of the output ArcView ASCII grid.

–V The **–V** option causes **mbm_grd2arc** to print out status messages.

EXAMPLES

Suppose that we have used **mbgrid** to obtain a topography grid file called KohalaA_bath.grd in the GMT NetCDF GRD format:

```
mbgrid –Idatalist \
        -OKohalaA_bath \
        -R-155.72855/-155.31928/20.09488/20.47645 \
        -E30.0/0m! –A2 –N –G3 –C1 –V
```

In this case, the **–E** option was used to force **mbgrid** to use equal longitude and latitude grid cell sizes. See the **mbgrid** or **mbmosaic** manual pages for details on the usage of the **–E** option in those programs.

In order to convert KohalaA_bath.grd to an ArcView ASCII grid so that the data can be imported into the Arc/Info or ArcView GIS packages, we use the **mbm_grd2arc** macro:

```
mbm_grd2arc −IKohalaA_bath.grd \
        -OKohalaA_bath.asc −V
```

Running the example above produced the following output:

```
Program mbm_grd2arc status:
    Input GRD file:          KohalaA_bath.grd
    Output ArcView ASCII file: KohalaA_bath.asc
    Grid dimensions:  1426  1329
    Grid cell sizes:  0.0002871995719  0.0002871995719
    Grid bounds:      −155.72855  −155.3192906    20.09488  20.47628103

Generating temporary file...
Parsing temporary file...
10% complete
20% complete
30% complete
40% complete
50% complete
60% complete
70% complete
80% complete
90% complete
100% complete
```

SEE ALSO

mbsystem(1), **mbgrid**(1), **mbmosaic**(1), **mbm_arc2grd**(1), **mbm_grid**(1)

BUGS

Maybe. Maybe not.