NAME

mbm_multidatalist – Macro to use mbdatalist with the **–O** option to generate standard ancilliary files, using parallel processes.

VERSION

Version 5.0

SYNOPSIS

mbm_multidatalist –I*datalist* [**–X***nprocesses* [**–N –H –V**]

DESCRIPTION

mbm_multidatalist is a macro used to efficiently generate ancilliary files for the swath data files referenced in the input datalist file. This is accomplished by executing **mbdatalist** with the **–O** or **–N** option for each swath file.

Programs such as **mbgrid** try to check statistics or "inf" files to see if the corresponding data files include data within the specified geographic bounds. Other programs look for "fast bathymetry" or "fast navigation" ("fbt" or "fnv") files in order to read the data more quickly. The **–N** option causes **mbm_multidatalist** to create these three types of ancillary files for each swath data file. By default, **mbm_multidatalist** creates the "inf", "fbt", and "fnv" files only when they don't already exist or are out of date (older than the data file). The **–N** option causes **mbm_multidatalist** to create (or recreate) the ancillary files for each swath data file.

The **–X***nprocesses* option sets the number of parallel processes that can be started by **mbm_multidatalist**. In general, the most efficient (fastest) execution of the overall command will be achieved when *nprocesses* equals the number of available CPUs or cores.

AUTHORSHIP

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SIMPLE DESCRIPTION OF BASIC OPTIONS

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

–C
This option causes the program to check if each output file already exists, and to forgo copying those that do exist.

–I *datalist*
Sets the input datalist filename. A datalist is an ascii file containing a list of the input swath sonar data files to be copied and their formats. In the *datalist* file, each swath data file should be followed by a data format identifier, e.g.:

```
datafile1 11
datafile2 24
```

As discussed in the **MB-System** manual page, datalists may reference other datalists, allowing users to construct recursive datalist structures. This program uses the **MBIO** library and will read or write any swath sonar format supported by **MBIO**. A list of the swath sonar data formats currently supported by **MBIO** and their identifier values is given in the **MBIO** manual page.

−N This argument causes **mbm_multidatalist** to generate the three ancillary data files ("inf", "fbt", and "fnv") even if they already exist and are up to date.

−V Causes **mbm_multidatalist** to operate in "verbose" mode so that it outputs more information than usual.

−X *nprocesses*
This option sets the number of parallel, simultaneous **mbdatalist** processes that may be run.

EXAMPLES

Suppose one has two format 88 Reson 7125 data files:
20110805_053612.mb88
20110805_054149.mb88
One can generate a datalist called datalistr.mb-1 referencing these three swath files using a text editor or by using **awk**:
ls −1 *.mb88 | awk '{print $1" 88"}' > datalist.mb-1
In order to generate the usual ancilliary files (*.inf, *.fbt, and *.fnv files) use the **mbm_multidatalist** macro:
mbm_multidatalist −I datalist.mb-1 −X2 −V
The macro prints out the following as it generates the *.inf, *.fbt, and *.fnv files for each swath data file:

```
Running mbm_multidatalist...
Executing mbdatalist −I20110805_053612.mb88 −O −V
Executing mbdatalist −I20110805_054149.mb88 −O −V

Program mbdatalist

Version $Id: mbm_multidatalist.ps 2191 2014-06-05 00:59:01Z caress $
Program mbdatalist
MB-system Version 5.3.1904
Version $Id: mbm_multidatalist.ps 2191 2014-06-05 00:59:01Z caress $
MB-system Version 5.3.1904

Generating inf file for 20110805_054149.mb88

Generating inf file for 20110805_053612.mb88
Generating fbt file for 20110805_054149.mb88
Generating fbt file for 20110805_053612.mb88
Generating fnv file for 20110805_054149.mb88
Generating fnv file for 20110805_053612.mb88

Total swath files:      1

Total swath files:      1
```

Note that the terminal messages from the two **mbdatalist** processes are mixed because the processes are executed in parallel.

SEE ALSO

mbsystem(1), **mbdatalist**(1), **mbcopy**(1), **mbdatalist**(1)

BUGS

Perhaps.