

## NAME

**mbauvnavusbl** – Adjusts inertial navigation of a submerged platform/vehicle to be consistent with more accurate but less precise surface tracking (USBL) navigation.

## VERSION

Version 5.0

## SYNOPSIS

**mbauvnavusbl** *-I**navfile* [*-L -O**navfile -U**usblfile -V -H* ]

## DESCRIPTION

MBauvnavusbl reads a primary navigation file (usually from a submerged platform swath survey) and also reads secondary navigation (e.g. USBL fixes). The program calculates position offsets between the raw survey navigation and the secondary navigation every 3600 seconds (10 minutes), and then linearly interpolates and applies this adjustment vector for each primary navigation position.

The inertial navigation is read in format 166 and the USBL navigation is read from format 165 files. The adjusted navigation is output in format 166.

## MB-SYSTEM AUTHORSHIP

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## OPTIONS

- H** This "help" flag cause the program to print out a description of its operation and then exit immediately.
- I** *navfile*  
Sets the input navigation filename. The navigation data must be in format 166. **-L** *lonflip*  
Sets the range of the longitude values used. If *lonflip*=-1 then the longitude values will be in the range from -360 to 0 degrees. If *lonflip*=0 then the longitude values will be in the range from -180 to 180 degrees. If *lonflip*=1 then the longitude values will be in the range from 0 to 360 degrees. Default: **mbauvnavusbl** uses the user default *lonflip* set using **mbdefaults**.
- O** *onavfile*  
Sets the output navigation filename. The navigation data will be in format 166.
- U** *usblfile*  
Sets the input usbl navigation filename. The usbl navigation data must be in format 165.
- V** The **-V** option causes the program to be verbose.

## EXAMPLE

Coming...

## SEE ALSO

**mbsystem**(1)

**BUGS**

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