**Purpose:** A function used to map the bathymetry for both the inshore and offshore areas, can be used as a standalone function or as a call to another function (e.g. ScallopMap.r). The bathymetry can be obtained via a SQL call or local flat files. The “CHS” option uses the SQL call to get.bathy.r, thus to use this you need to provide a database connection, username, and password. Note that the CHS method is very slow and is not useful for the Bay of Fundy.

**Version Control:** The first version of this was produced by DK August 11, 2015

**Function Arguments Summary**

1. **db:** Where do we want to get our bathymetry data. Four options, CHS, topex, usgs, or quick
2. **un:** Username for your SQL call (CHS source only), please set this up in your R-profile and do not enter it directly into the function, default will only work on DK's computer
3. **pw:** Password for your SQL call (CHS source only), please set this up in your R-profile and do not enter it directly into the function, default will only work on DK's computer
4. **db.con:** SQL database connection name (CHS source only), user specific, default is “ptran”
5. **isobath:** isopleths (contour lines) for the bathymetry, default is 50,100,150 and 200 meters.
6. **plot.add:** True (default) is used if function is being called by another function with a plot device already opened, False used if making a unique plot with just land and survey strata shown, to work as a stand-alone function set this to False
7. **bounds:** Boundaries for the bathymetry, needed for quick option only
8. **b.col:** Colour of the bathymetry isopleths (contour lines)
9. **direct:** The working directory. default = "Y:/Offshore scallop/Assessment/Assessment\_fns/"

**Section 1**

In this section the plot is set up if creating a standalone plot.

**Section 2**

Here is where the bathymetry is added. There are 4 options here:

1. **CHS**: This goes to the CHS SQL database to retrieve the data. Coverage is good offshore and goes into Newfoundland but not all of St. Pierre Bank is there and nothing for inner Bay of Fundy. Very slow at large scales. Best used for Offshore Banks on the Scotian Shelf.
2. **topex:** This pulls data from a flat file, coverage is good throughout Maritimes including in the Bay of Fundy and plots relatively quickly
3. **usgs**: This pulls data from a flat file, be advised that it does not cover the whole region, stops around the Halifax line best used for Bay of Fundy Georges, Browns and German Banks.
4. **quick**: This pulls data from a flat file. As suggested it is the quickest method and coverage is good for the maritime region including the Bay of Fundy

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