**Manual for WW-ADCP analysis Matlab code**

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1. Open function ‘process\_WW\_ADCP\_main.m’
2. Set up file paths for different products

Text

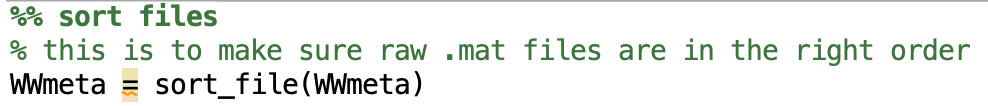
Description automatically generated

1. Set up variables used for analysis, according to ADCP’s configuration

Text

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1. Sort files. Sometimes raw .mat files are not in time sequences, therefore, this function is to sort them according to time and will help with further combination



1. Combine raw .mat files and chunk into up/down casts. Here, note that if you defined a figure path (figpath) in the previous set path section, then a figure showing up/down cast separation will be saved everyone ‘create\_profiles.m’ function is run. Also the ‘thhold’ value may vary with WW deployments, so remember to adjust this value.

Timeline

Description automatically generated with low confidence

1. Combine cut-off profiles

Text

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1. WW – ADCP analysis. This function follows the analysis procedures described in Zheng et al., 2021, which basically includes WW motion correction and a box-averaging technique. An updated version is used for upward looking adcps (WWvel\_upward) with additions by Devon Northcott. This includes shear calculated from raw data and binned, and box averaged amplitudes and Nav variables. It also takes instrument tilts into account by interpolating beam data onto an even depth grid before earth velocities are formed. Use this version upward looking and slightly tilted ADCPs.Text, letter

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2. Take a quick look

