**Workhorse Sentinel 1200 kHz Post-Processing**

Setting up file folders and directories for each crate in a deployment and/or a single deployment crate (Steps are repeated on the fluorometer and CTD post-deployment instructions, but only need to be completed **once for each crate per deployment**.

1. Create a Deploy Data File if one does not currently exist in the Frying Pan Shoals project folder. Within the deploy data file, create a folder labeled as “BOEMTest#\_startDate\_endDate”. The pound resembles the deployment number and the date should be in a format similar to previous deployments or as follows (EX. Start date: 062923 and End date: 063023). The folder should follow this format “BOEMDeploy\_1\_062923\_063023”.
2. Within the BOEMTest folder, create a folder for the individual crates in the deployment (Ex: Crate1)
3. Within the crate# folder:
   1. Instruments: (only create the folder if the instrument was on the specified crate). These folders will hold the raw output files from the instruments’ specific software. The specified folder names are needed for the \_load.m functions to pull the correct raw file for each instrument.
      1. RRBtri
      2. RDI\_WH
      3. SBE37
      4. RBRsoloT
      5. NortekSig
      6. C6

Recovering Data from ADCP Deployment:

1. After the instrument is recovered. Open WinSC --> File --> Recover Recorder Data --> select the appropriate file directory for the output file (RDI\_WH Folder).
   1. Data files will be outputted in a format ending in \*000.000, \* 000.001 etc.
   2. The data files can be opened in WinSC and WavesMon.

WavesMon Processing

1. Open WavesMon and select "File" -> "New Waves Project"
2. Select "Reprocess" then click "Next"
3. Select the raw .000 or .001 file that you wish to process. In the “File Information” section, check the start and end times of the data sampling along with the number of ensembles and wave burst to compare with your intended results based on pre-deployment settings. Then click "Next"
4. Input the correct "Altitude Above Bottom" in meters. Also check that the Magnetic variation that was input at the time of deployment is correct. If it is incorrect make a note, this can be changed later. Click "Next"
5. There is no need for input on the "Data Sampling" page. Click "Next"
6. Under "Project Name" input the folder name (RDI\_WH) that you want the processed data to be in. Then select the directory that you wish the folder to be stored in under "Working Directory". Finally, select "Enter Advance Configuration" and click "Next"
7. No changes need to be made on the "ADCP Environment" page. Click "Next"
8. In “Advanced Processing”, select “VPS” under the “Spectrum used to calculate wave parameter”. Click “Next”
9. Continue clicking "Next" until you reach the "Advance File Outputs" page. Here you will select format 9 under the "Wave Parameters Log." Then under "Processed Waves Data" select "Save Text File."
10. Click Next until you reach the "Summary" page. Then click "Finish." The file will be loaded into WavesMon.
11. To begin processing, press the play button at the top left of the screen. Once it is done you should have a folder that contains the direction spectrum, pressure spectrum, surface spectrum and velocity spectrum. There will be a .prj file, a .WVS file, a .PD0 file and a .txt file included in the folder as well.
12. You will end up with several files. An explanation for the various files is below.
    1. Direction Spectrum: file will be named like "DSpec.....txt" There will be a txt file for every burst that the ADCP took.
    2. Pressure Spectrum: file will be named like "Pspec....txt" and there will be a file for each burst for each burst.
    3. Surface Spectrum: file will be named like "SSpec....txt" and there will be a file for each burst for each burst.
    4. Velocity Spectrum: file will be named like "VSpec....txt" and there will be a file for each burst for each burst.
13. The .prj and .WVS files can be opened using RDI's WavesView software. The .PD0 file contains the currents and can be opened using RDI's WindADCP software.
14. Advance to “RawtoL0\_ MATLABprocessing.docx”