**Raw to L0 Processing in MATLAB**

1. Open Matlab and create a .m file for the BOEMTest #. Save it to the BOEMTest#\_startDate\_endDate/crate# folder. This .m file will serve as a window to run raw to L0proccessing then L0 to L1processing.
2. Create a *deployname* variable that is the DeployData folder name in step 1 (EX: *deployname*= ‘BOEMTest1\_062923\_063023’ ).
3. Create a variable *CrateNum* that defines the name of the folder for the specific set of instruments you plan to process. (Ex: *CrateNum =* ‘Crate1’)
4. Create a deploy path variable from the FPS project folder to the deployment name
   1. deploypath = ['C:\Documents\FPS\DeployData', filesep, deployname, filesep, crateNum]
5. An example setup of variables above and the format for the functions below are on ‘FuncTestBOEM.m’

RDIWH

1. If not currently in your path, download and put the RDADCP toolbox in your path for MATLAB to pull from when running RDIWH\_load.m function.
   1. Here’s a link to the website to download the toolbox: <https://www.eoas.ubc.ca/~rich/>
2. The MATLAB function RDIWH\_load.m runs with the deploypath as the input to the function. It will output a structure containing the raw spectrum, wave, and current data as a .mat file with the instruments SN & date of deployment into the L0processing folder.

RBR Tridente

1. The RSKtools toolbox is needed to process the “.rsk” file. It can be downloaded at this link: <https://rbr-global.com/support/matlab-tools/> . The toolbox needs to be setup in your path when running the RBRtri\_load.m function in MATLAB.
2. The deploypath is the input to the RBRtri\_load function. It will output a structure with the values and units of chlorophyll-a, FDOM, turbidity, and SN along with a time vector. The data will be saved to a .mat file with the instruments SN & date of deployment into the L0processing folder.

SBE37

1. The MATLAB function SBE37\_load.m runs with deploypath as the input to the function. It will output a structure containing the chlorophyll-a, FDOM, and turbidity as a .mat file with the instruments SN & date of deployment into the L0processing folder.
2. After all load functions are completed move to L0\_to\_L1\_BOEMprocessingInstructions.docx