## **CSamagalsky R File Descriptions**

Files that were adapted from Aidan Draper: https://github.com/adraper2/DISC\_chesapeake

Files for Ordinal Forest Model (completed)

Files for Mixed Spectral Signal Model (incomplete)

File Name	Description
Collated_ADraper_files.R	File collating the most important parts of ADraper's random forest work, while editing code to work with my file formats. Use this file to create training data and ord_training data without using the function.  Data needed: band files, species (DominantSpPerPlot.csv)  Data created: full.data, training, ord_training
Data_function.R	File containing function create.data(), which allows a user to create training data from band data. Additionally, for loop that merges all RTK data into one data frame total.training  Data needed: band files, species files  Files created: training, total.training, ord_training
Marine Geo Classifier.R	Classifying Marine Geo Data in the ordinal forest model
Mixed_spectral_signal.R	Spectral signal mixing model. Attempt to obtain a spectral signal for each species (Can't be done)
Model_insights_mg.Rmd	Obtaining model insights (i.e. images and error values) from marine geo data
Model_insights_rtk.Rmd	Obtaining model insights (i.e. images and error values) from rtk data
model_testing_CS.R	Edited ADraper's file model_testing.R to work with my file formats.
Ntree_analysis.R	Analysis to discover the best # of trees to use for ordinal forest model
Ordinal_forest_func.R	Function that uses function create.ord.model() to create ordinal model using ord_training data. Next function run.ord.classifier will run the model with <b>test</b> data and return accuracy/error values.
Ordinal_forest_model.R	Ordinal Forest Model in its own file - final Reassigning codes for coverage and order performed here
Ordinal_perffunc_test.R	Testing performance functions for ordinal model, perffunction='equal' has lowest error
RF_Model_Drafts.R	File containing first drafts of ordinal forest model, spectral signal model, and grouped spectral signal models (C3/C4 groups - 1 and 2). Determined that Group1 has lowest accuracy of spectral signal models.
remote_sensing_CS.R	Edited ADraper's file remote_sensing.R to work with my file formats.
RTK Classifier.R	Classifying RTK data in the ordinal forest model
run_classifier_CS.R	Edited ADraper's file run_classifier.R to work with my file formats.
Spectral_signal_model.R	Contains spectral signal models from Random Forest Models.R. Original and grouped spectral signal models.
Split_mg_data.R	Splitting marine geo data into the correct format for analysis
training_CS.R	Edited ADraper's file training.R to work with my file formats.