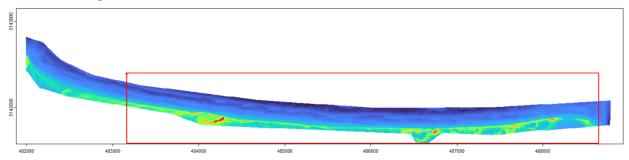
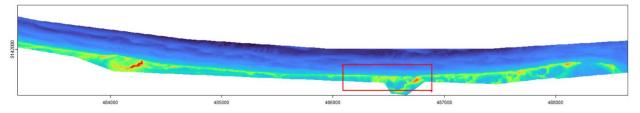
## **Optional features in MARR**

1. Lines 66-74: Optionally select a subset of data to use instead of the entirety of the DEM. This could be for any reason, including different dune/beach states, to reduce processing time, etc. Run the lines and select the extent of the area to keep by clicking the map in the upper left and lower right corners of a rectangle extent. In this example the left section of the study site is removed due to a different dune state, the right extent is set to remove extraneous data as well. The data used in MARR is therefore, based on the extracted DEM within the red rectangle.



2. Lines 94-99: For larger datasets it can be difficult to visualize ridge/swale rasters. Therefore, it may be beneficial to extract a subsample of the data that represents a small section of the dataset for plotting purposes only (similar to the first optional feature). In this example the red boundary defines the extent of the subset DEM that will be used sparingly to visualize toe/crest features.



- 3. Lines 115-129: Optionally smooth or resample data. This is dependent on the dataset itself and should be used sparingly.
- 4. Lines 133-134: Optionally load in a saved environment or model manually. This can be helpful if you need to restart the MARR process, or if you have a trained model from the same site but with a dataset from a different year.
- 5. Lines 149-150: Manually assign the scales used. It can be used to save time if you have other examples of scales used for the site.
- 6. Lines 523-556: Optionally remove sections of the resulting toe/crest classifications. This is useful when you have areas with no crest/toe location such as a washover, bluff, structures, etc. This process is the same as making training data. You first select subsample DEMs that are just beyond a region you wish to remove. Next you select point locations that define the bounds of the region you wish to remove, instead of clicking on lines, you click on an imaginary horizontal/vertical line that defines a boundary location. In this example two regions are set for removal, one is the middle of a washover channel, and the other is the curve of an inlet channel arm. The bounds selected are highlighted by vertical lines, the area between these sets of lines will be removed from the results.

