

# Coastal Dune Ecomorphodynamics



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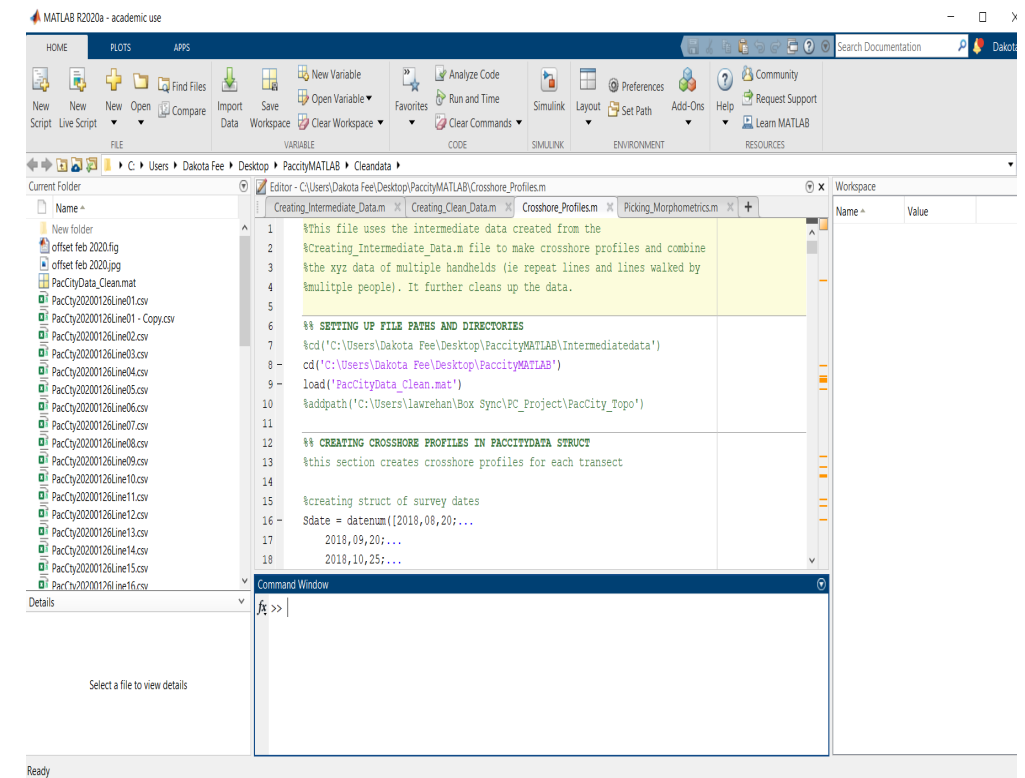
College of Earth, Ocean, and Atmospheric Sciences

# One Word, Three Definitions

- Eco
- Morpho
- Dynamics



A dune taken from the toe (bottom front of dune) in Pacific City



The program MATLAB: Valuable for converting data formats and creating plots, images, etc.

# Methods: To Walk, to Ride, to Extrude

For topography



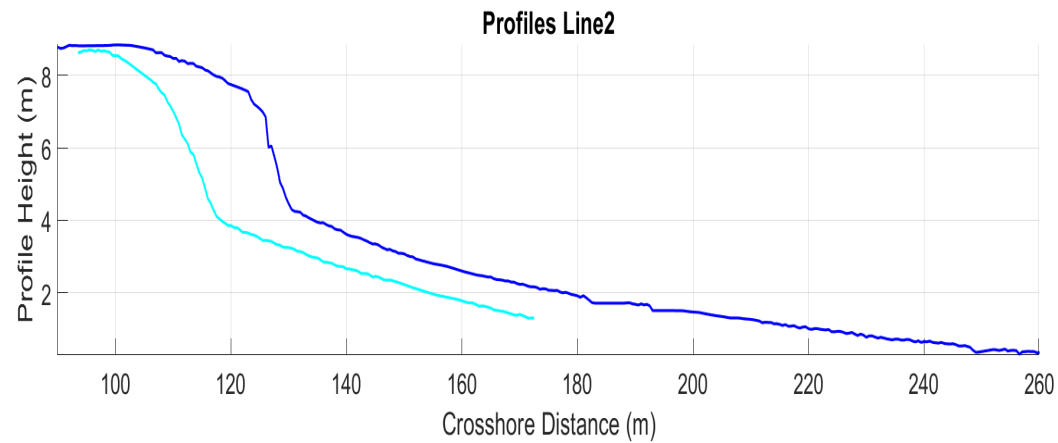
For bathymetry



Extruding sand process to  
bag and track depth of  
sand cores Photo taken by  
John S.



# Results: Cross-Shore Profiles



Cross-shore profile of the path walked on transect 2, showing change in topography.



An eroded dune from Feb. 2020.  
Photo taken by Meredith L.



Dune grasses mowed in Washington.  
Photo taken by John S.



Not even one full days worth of sand  
collections. Photo taken by John S.



The full safety outfit for bringing the  
jet skis in and out of the water

# Acknowledgments

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