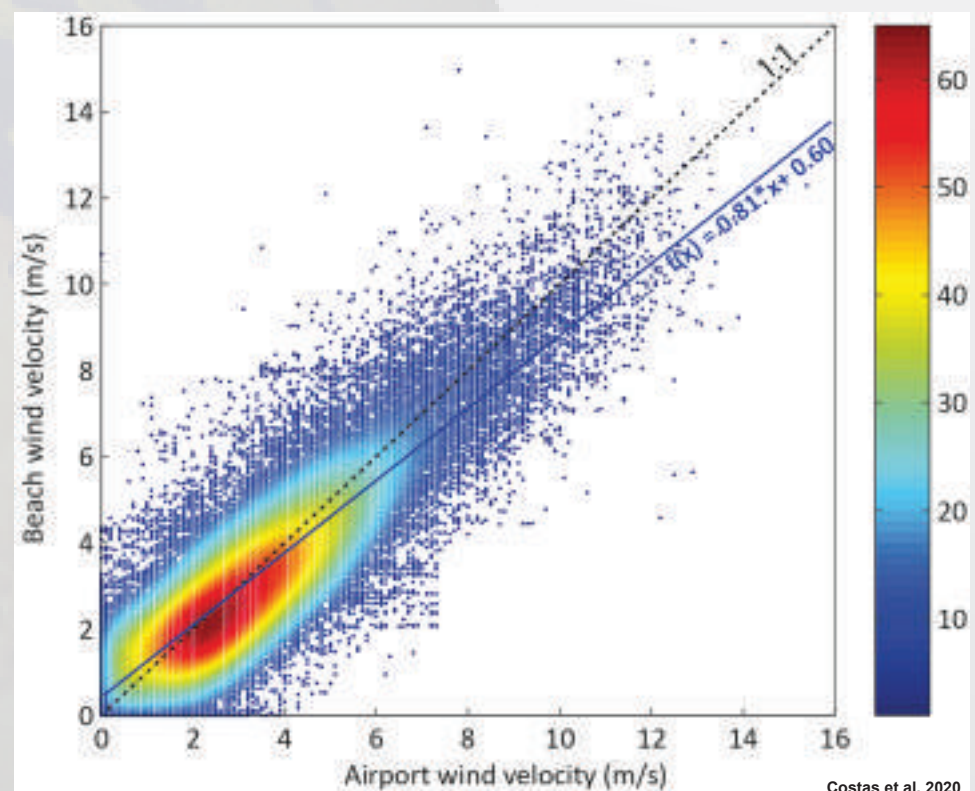
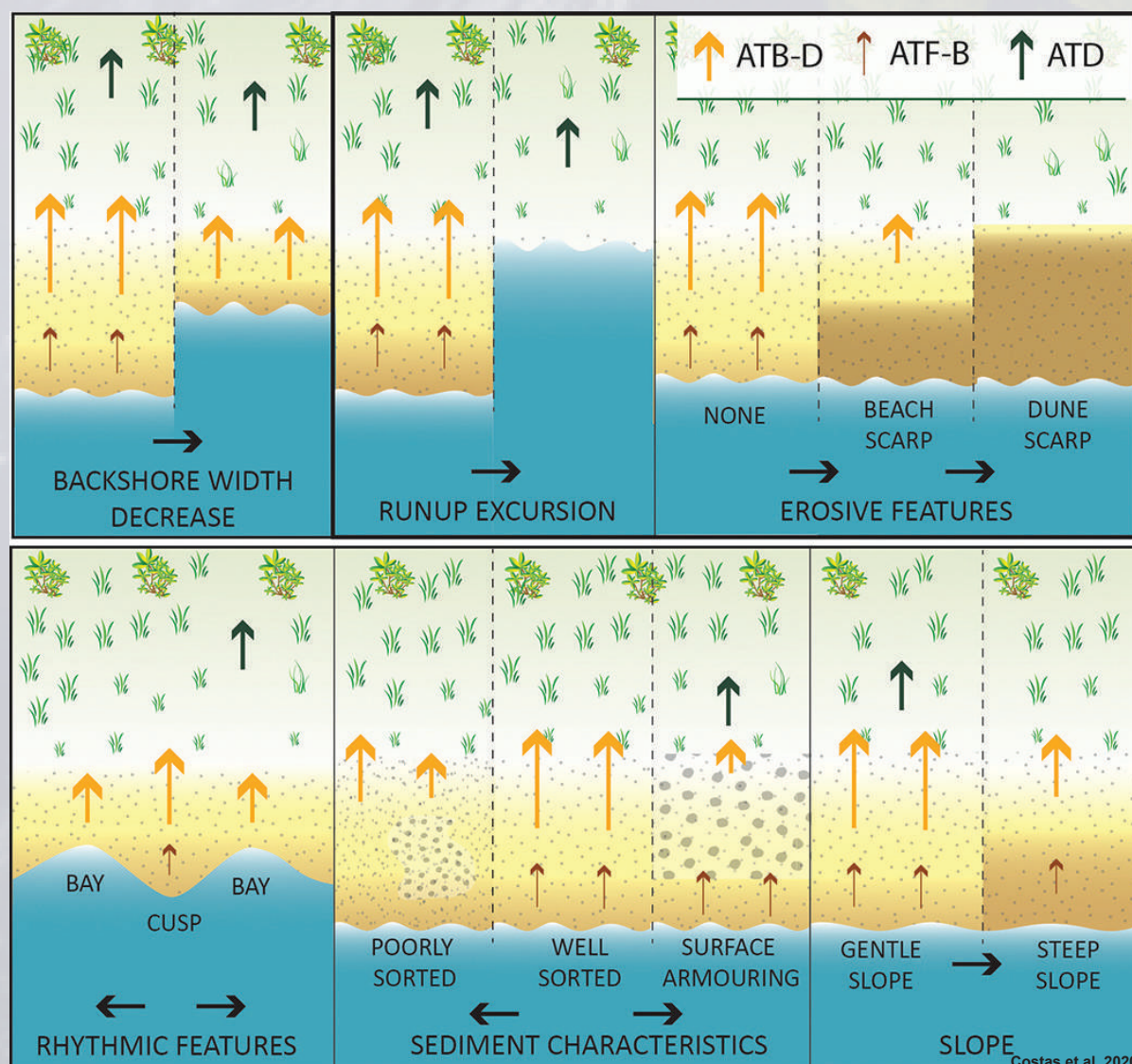


# SOLID EARTH SEMINARS

## COASTAL DUNES IN A CHANGING CLIMATE



### WHAT'S THIS ABOUT?

Coastal dunes represent the first line of defence wave attack, acting as sediment reservoirs during erosional episodes and protecting inland areas from sea water flooding during storm. The stability of coastal dune systems is linked to the binding effect of vegetation. Sand may be transferred landward via unvegetated transgressive dunes and blowouts, whereas vegetation traps sediment and encourages vertical dune growth. Coastal dunes respond rapidly to changing environmental conditions and have the potential to serve as indicators of multiple facets of climate change as their survival and growth results from the combined effect of winds, precipitation, sediment and nutrients availability, and to a lesser extent, temperature. Considering the relevance of these landforms as indicators of climate change and providers of ecosystem services, we focus our research on (i) exploring how coastal dunes adapt to changing climate conditions over different temporal scales, including the ongoing climate change, and (ii) investigating the best strategies to simulate long-term coastal evolution at sandy coasts using holistic approaches that integrate beach and dune dynamics in process-based models.

ZOOM



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**September 15**  
**Wednesday: 13:00**

PASS: 2021\_RG234

<https://videoconf-colibri.zoom.us/j/89018419156>