

COASTAL CLIFF RETREAT STUDY: FUTURE SHORELINE PREDICTIONS

Location: South Hams, Devon

Project Dates: May 2020

Clients: Private Homeowner

 www.plymouth.ac.uk/cmar

 cmar@plymouth.ac.uk

 01752 586177

 @pu_cmar

Scope of work:

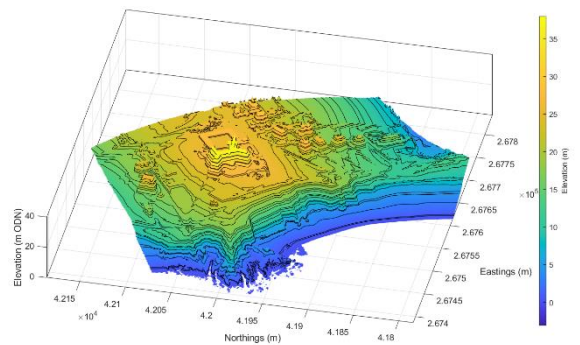
- Assessment of historic coastline positions from historic mapping and response to relative sea level rise
- LiDAR analysis of recent cliff response
- Prediction of future cliff position under future sea-level rise scenarios

“Many thanks for your expert, comprehensive and fast response to my request, I'm very grateful to you for turning the report around so quickly” Client feedback.

PROJECT DESCRIPTION

Any investment in coastal properties, either as a private residence, business or renovation work, needs to be considered in the context of projected changes in the current coastline position and property risk. Understanding how the coastline has responded in the past, under historic sea-level rise and wave action, combined with expected climate change impacts can provide understanding on shoreline behaviour.

Using historic mapping, recent LiDAR data and the latest UKCP18 sea-level rise scenarios, CMAR are able to provide a bespoke service to deliver likely future coastline positions. This can provide peace of mind over existing or future coastal investments.



Upper: Coastal cliffs in South Devon. *Middle:* Detailed LiDAR mapping is used to map cliff behaviour. *Lower:* Future shoreline/cliff positions, for a range of scenarios and epochs can be projected onto current aerial imagery to influence investment/ development risk.

Coastal Marine Applied Research



UNIVERSITY OF
PLYMOUTH