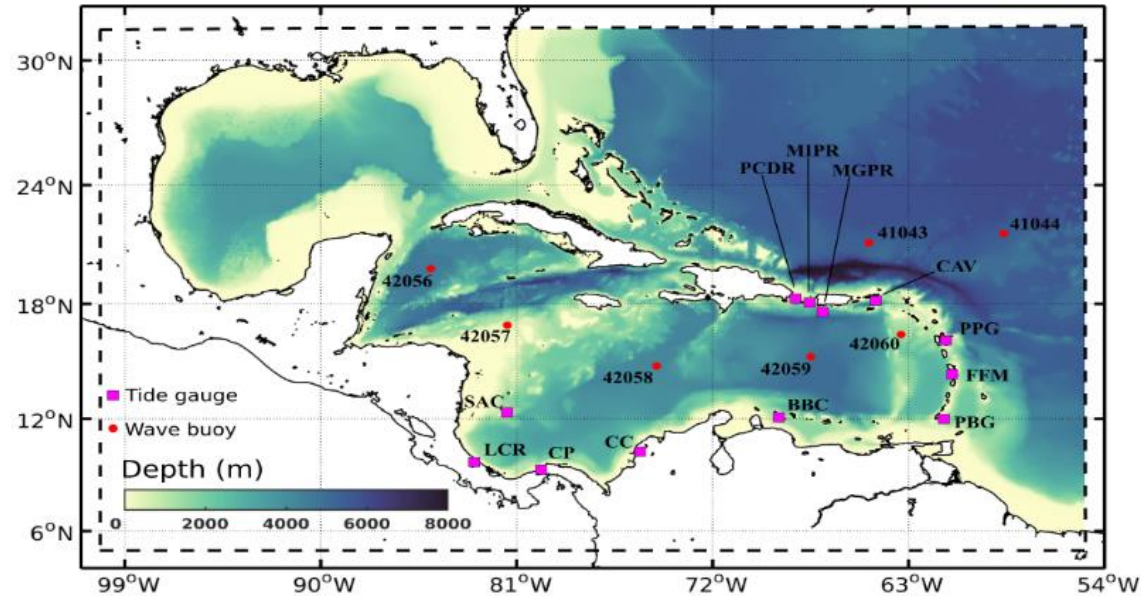


# Developing future sea level services for Small Island Developing States



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Map of the Caribbean Sea with locations of 12 tide gauges and 7 wave buoys used for this study

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2. National Oceanography Centre, Liverpool, UK
3. British Oceanographic Data Centre, Liverpool, UK

# Pilot coastal data hub for stakeholder access in the Caribbean region, <https://www.psmssl.org/cme/index.php>

CO Meeting Organizer EGU x | CO Meeting Organizer EGU x | Commonwealth Marine Eco x | NOC\_RandC\_67\_Final.pdf x | NOC\_RandC\_67\_Final.pdf x | +

psmsl.org/cme/index.php

## CME Portal

- Portal Homepage
- Tide Gauge Data Viewer
  - Download Data
- Auto QC Procedure
- Sea Level Data Catalogue
- Sea Level Projections

## Commonwealth Marine Economies Data Portal

This section of the PSMSSL website contains work undertaken by the National Oceanography Centre (NOC) as part of the UK government's [Commonwealth Marine Economies \(CME\) Programme](#). The pages listed form a prototype data portal for sea level data information from the Caribbean, particularly the Windward Islands, and details some of the work undertaken as part of the project.

More details of the whole of NOC's contribution to the CME programme are given in the [project page on the main NOC website](#).

This work is summarised in the following report:

- [Development of a coastal data hub for stakeholder access in the Caribbean region - NOC internal report \(2 MB\)](#)

### Product List:

[Sea Level Data Catalogue](#)  
A catalogue of tide gauges in the Caribbean, what type of data is available for them, and how to access that data. If you are looking for fully quality controlled data, this is the link to follow.

[Automatically Quality Controlled Tide Gauge Data](#)  
As part of the project, a method of applying an automatic, initial quality control of tide gauge data was developed. This link displays the automatically quality controlled data, illustrating the QC procedure. Instructions for how the download the data are on a [separate page](#).

[Automatic Quality Control Process](#)  
This link describes the automatic quality control process used, and links to the code used to carry it out.

[Projected Sea Levels](#)  
Some visualisations of projected sea levels in the Windward Islands and an explanation of how they were derived.

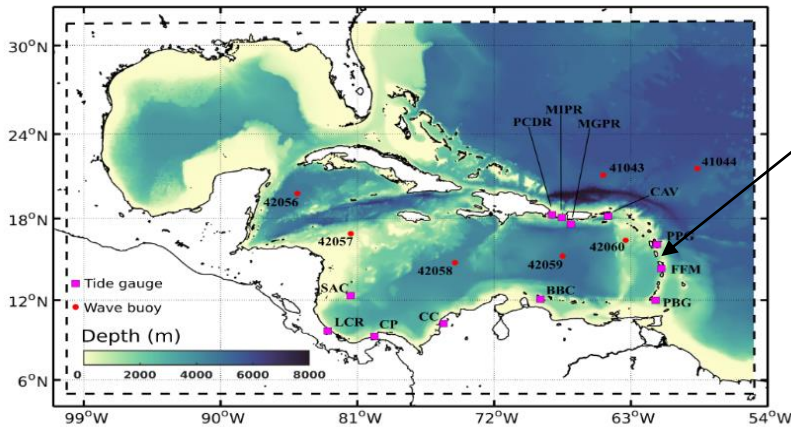
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# Impact of sea level rise (SLR) in St. Vincent (example)

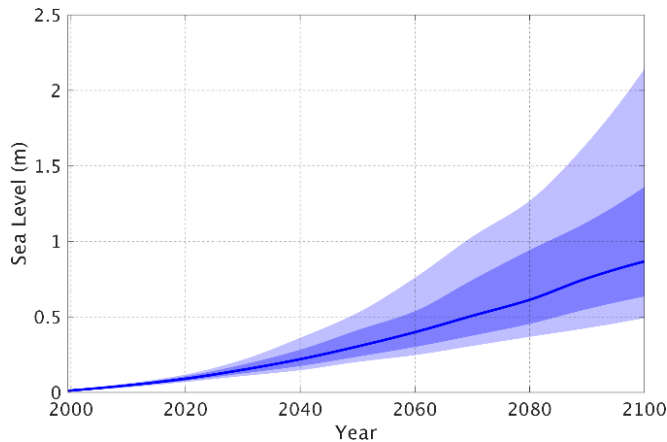


1 m SLR places at risk 67% of sea port land

With 2 m SLR 24% of major tourism resorts will be impacted

With 100 m of erosion (resulting from approx. 1 m SLR), 76% of the major tourism resorts will be impacted

Annual losses in tourism resulting from the beach loss is estimated to be between US \$46 million by 2050; to US \$174 million by 2080



Sea level projections for St. Vincent (RCP8.5), <https://www.psmsl.org/cme/projection.php>

Credits: "Climate Change Risk Profile for Saint Vincent and the Grenadines" **Technical Report** · January 2012

# Online information

Sea level portal: <https://www.psmsl.org/cme/index.php>

Report: [https://www.psmsl.org/cme/NOC\\_RandC\\_67\\_Final.pdf](https://www.psmsl.org/cme/NOC_RandC_67_Final.pdf)

Caribbean Tide Gauge Data Catalogue: <https://www.psmsl.org/cme/catalogue.php>

Automatic Quality Control Procedure Links to code, report, examples

<https://www.psmsl.org/cme/autoqc.php>

Sea level projections by 2100: <https://www.psmsl.org/cme/projection.php>

## Acknowledgement:

The work presented here is a contribution to the wide range of ongoing activities under the Commonwealth Marine Economies (CME) Programme in the Caribbean, falling within the work package 2.8 “Development of a coastal data hub for stakeholder access in the Caribbean region”, under the NOC led project “Climate Change Impact Assessment: Ocean Modelling and Monitoring for the Caribbean CME states”, 2018-2019.