

living planet symposium | BONN 23–27 May 2022

TAKING THE PULSE
OF OUR PLANET FROM SPACE



Invited session

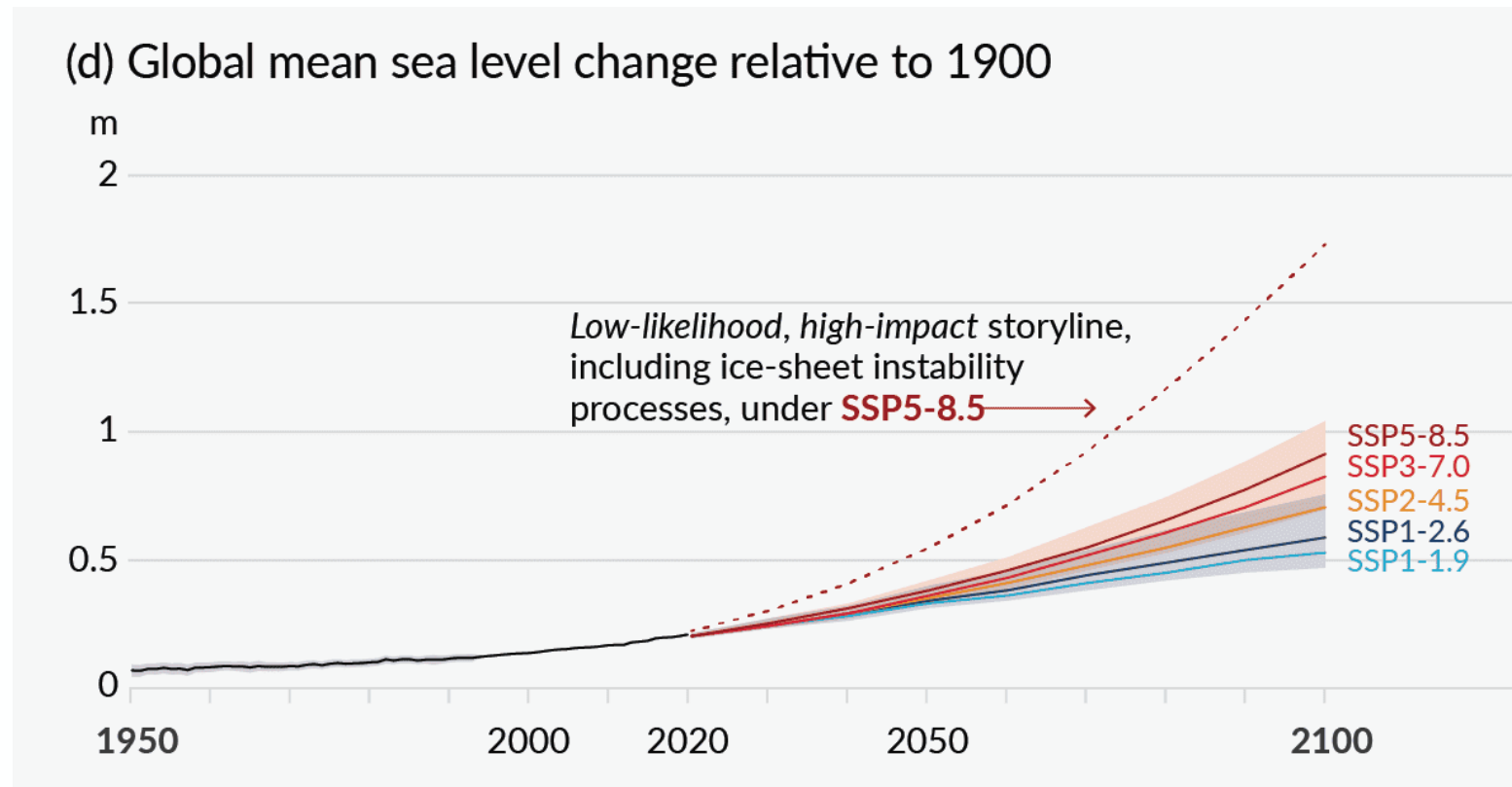
Coastal Erosion: THE Satellite Contribution

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The IPCC AR 6 report indicates a best estimated world sea level rise of 66 cm by end of this century. As a result, the coastal erosion process as visible and measured by satellite since the 80s could only increase in the near future. This session intends to provide a dedicated forum to scientists associated to public authorities to report on the use of satellite data to characterize this process over the past 30 to 40 years. To this purpose, the Agency placed in 2018 two contracts that studied the process in 9 ESA member states. Algorithms, methods and results will be presented together with other relevant studies in other part of the world.

Extract from IPCC AR6 Summary for Policymakers - Figure SPM.8



ESA Coastal Erosion

The studied sites

Coastal Erosion from Space – ARGANS

United Kingdom

- ✓ Chesil Beach
- ✓ Start Bay
- ✓ Perranporth
- ✓ Spurn Head to Hunstanton
- ✓ Cardigan Bay

Ireland

- ✓ Dublin Bay
- ✓ Ravens Point and Rosslare
- ✓ Waterford Estuary
- ✓ Cork Harbour
- ✓ Muir Eireann

Spain

- ✓ Barcelona and Tordera Delta
- ✓ Port of Castellón and Port of Sagunt
- ✓ Cadiz and Mazagón Beach
- ✓ El Puntal de Santander
- ✓ Bay of Biscay

Canada

- ✓ Pointe au Loup
- ✓ Pointe aux Outardes
- ✓ Longue Pointe de Mingan
- ✓ Bylot Island
- ✓ Baffin Bay

Italy

- ✓ Lido di Jesolo
- ✓ Catania, Sicily



Space for Shore – i-Sea

France

- ✓ Coast of the New Aquitaine
- ✓ Coast of Normandy
- ✓ Provence-Alpes-Côte d'Azur Region
- ✓ Vendée Department
- ✓ Morbihan Department
- ✓ Charente-Maritime Department
- ✓ Occitany Region (Roussillon)

Greece

- ✓ Eastern Macedonia & Thrace
- ✓ Peloponnese
- ✓ Euboan Gulf
- ✓ Rhodes Island

Germany

- ✓ North Sea
- ✓ Baltic Sea
- ✓ Southern Schleswig-Holstein Wadden Sea tidal flats

Portugal

- ✓ Northwest coast
- ✓ Peniche
- ✓ Alentejo
- ✓ Algarve

Romania

- ✓ Romanian Coast
- ✓ Constanta
- ✓ Chilia secondary delta

Norway

- ✓ Svalbard