P31: Coastal erosion	
Maturity score	
Mean: 2.6	**STD:** 0.64

Constraints and limitations

- Cloud presence
- Variability in sea level due to tides, storm surges, and other factors can introduce noise and uncertainty in detecting shoreline shifts.
- Subpixel changes in shoreline positions might be challenging to detect and measure accurately, impacting erosion rate calculations.

Relevant user needs

UN12: Analysis of potential risks in specific regions.

UN14: Need to screen the feasibility of projects against different hazard criteria.

UN37: Projection of risk to portfolio assets into the future.

UN40: Need to monitor the risk of sea level rise threatening coastal property, infrastructure, and supply chains.

R&D gaps

- Limitation of high spatial and temporal resolution historical satellite imagery.

Potential improvements drivers

- Global data of shoreline change rate

Utilisation level review

Utilisation score	
Mean: 2.17	**STD:** 1.07

No utilisation

- Unavailability of freely available sources of the EO product.
- Unacceptable reliability and accuracy of the EO product.

Low utilisation

- Unawareness of the existence of commercial EO products with better specifications.

Medium utilisation

- Unawareness of the existence of the best available commercial EO product with better specifications.

High utilisation

Critical gaps related to relevant user needs

Guideline gap

UN37: Projection of risk to portfolio assets into the future.

Utilisation gap

UN12: Analysis of potential risks in specific regions

UN14: Need to screen the feasibility of projects against different hazard criteria.

UN40: Need to monitor the risk of sea level rise threatening coastal property, infrastructure, and supply chains