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sui Cambiamenti Climatici

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Sea level Rise

Subgroup of SOE

10 – September– 2024

Scope and team

Goal: To provide a comprehensive guide on sea level rise (SLR), including the science, risk assessment, mitigation strategies, funding options, and monitoring.

- **Introduction**: Overview of the science behind sea level rise and its causes.
- **Risk Assessment**: Analysis of the risks posed by SLR. **Solutions**: Strategies to avert, minimize, and address loss and damage from SLR.
- **Funding Mechanisms**: Options to fund interventions for SLR.
- **Monitoring and Evaluation**: Recommendations for ongoing learning and process improvement.

Team

- Jaroslav Mysiak, Euro-Mediterranean Centre on Climate Change (CMCC), Venice, Italy
- Mariya Aleksandrova, German Institute of Development and Sustainability (IDOS), Bonn, Germany
- Albert Salamanca, Stockholm Environment Institute (SEI), Bangkok, Thailand
- Elisa Calliari, International Institute for Applied Systems Analysis (IIASA), Vienna, Austria
- Akhilesh Surjan, Charles Darwin University, Darwin, Australia

Risk Assesment

Introduction of the key terms

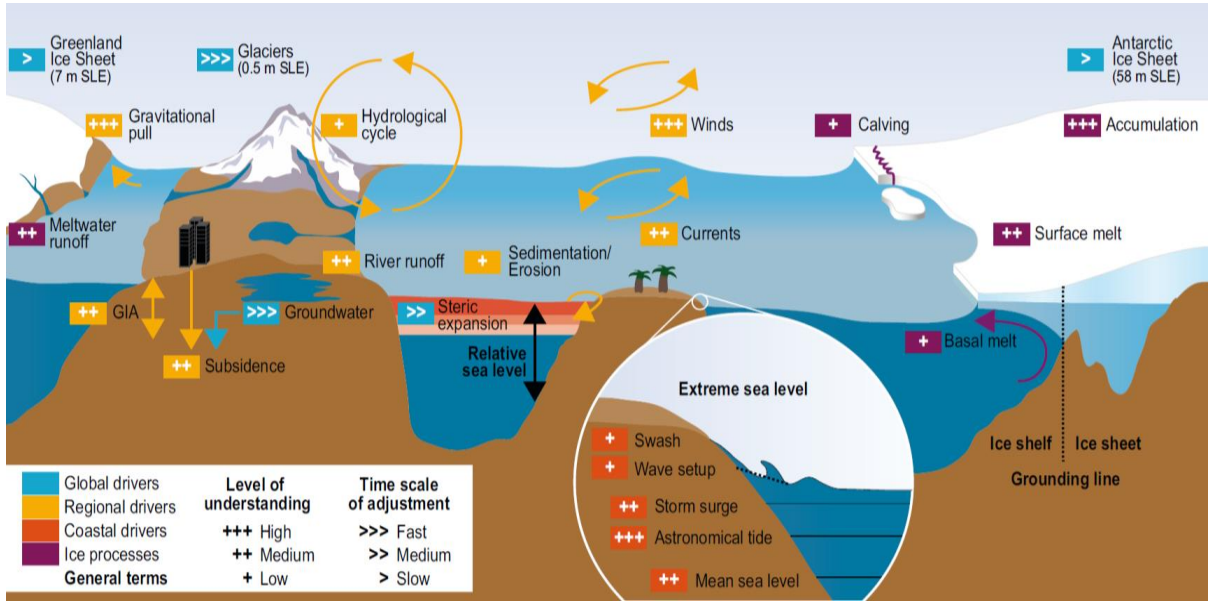
Observed global and regional sea level changes

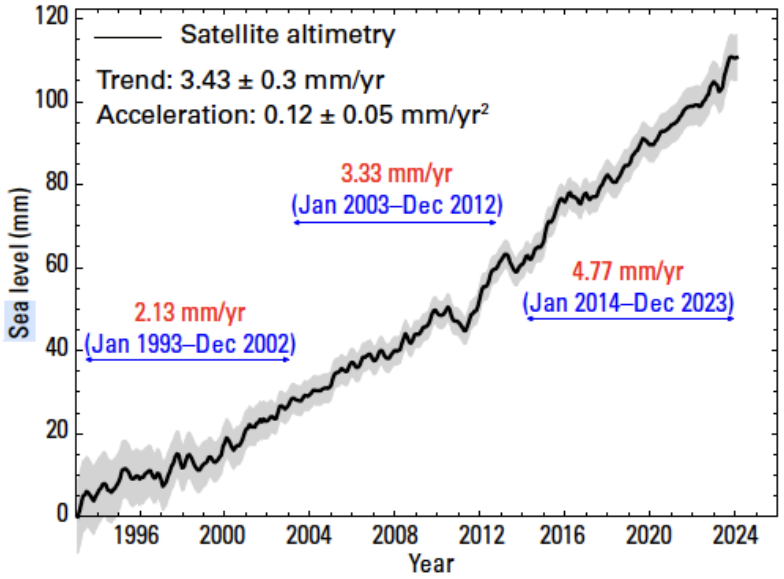
Future projection

Low-likelihood, high-impact storylines

Impacts on population, infrastructure, ecosystems, human health, intangible cultural heritage, well-being and security

Cascading risks





Solutions

- **Protect**: Defensive measures like dikes, levees, seawalls, and dune building safeguard areas from flooding and erosion. These can be improved over time to address rising sea levels. Social protection and equality are also important alongside infrastructure solutions.
- **Accommodate**: Adaptation strategies like elevating buildings, switching to salt-tolerant crops, managing groundwater, and using insurance allow continued use of vulnerable areas. Institutional measures like early warning systems and social policies are crucial.
- Retreat: Involves relocating people from high-risk areas and restricting new development. This strategy is used where protection or accommodation isn't feasible, and it helps preserve coastal ecosystems. Special attention is needed for marginalized groups often most affected by retreat

Case studies

- Tuvalu Coastal Adaptation Project
- Coastal Protection in Senegal
- Coral Reefs Restoration in Puerto Rico
- Social protection interventions supported by the Green Climate Fund (MA)
- Planned relocation in Fiji
- Climate Bridge Fund in Bangladesh

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