



Let's talk about sea level rise 11 June 2025 – 10:30 am - 1:30 pm CEST Inspire Area – European Digital Ocean Pavilion United Nations Ocean Conference 2025

## Adapting to the Changing Cryosphere and Sea-Level Rise: Key Policy Insights from PROTECT & CoCliCo

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The cryosphere is undergoing rapid and irreversible changes with profound global impacts, particularly through accelerating sea-level rise. The policy briefs developed within the PROTECT and CoCliCo projects outline critical scientific findings and actionable recommendations to inform mitigation and adaptation strategies.

Central to the findings is the dual imperative: *mitigation is crucial and adaptation is urgent*. Reducing greenhouse gas emissions can significantly slow glacier and ice sheet mass loss, offering precious time to adapt. However, some degree of cryospheric change is now unavoidable, requiring the urgent implementation of adaptive measures.

Importantly, *regional variability matters*. Sea-level rise and cryospheric impacts differ widely across locations. Processes such as ice melt, ocean circulation, and land vertical motion result in differences in regional and local sea-level trends. Adaptation planning and implementation can be supported by climate services such as the PROTECT Sea Level Projection Tool or the CoCliCo coastal risks platform. Turning these advanced demonstrators into operational services will require institutional and policy support.

The briefs also underscores that *uncertainty is not a barrier to action*. Adaptive decisionmaking approaches allow for flexible, cost-effective planning that can evolve as new knowledge and observations become available.

Together, these insights reinforce a clear message: the pace and scale of our response today will shape the long-term habitability and resilience of coastal regions. Immediate, science-informed policy action is essential to meet the challenges of a warming cryosphere.









