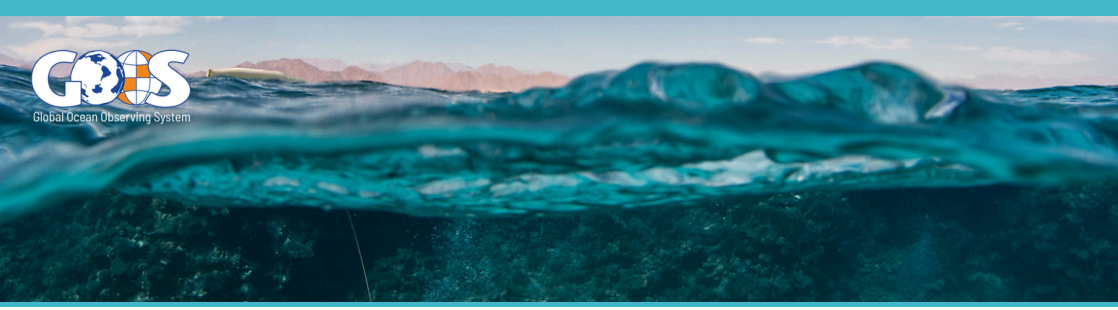


Sea-level rise is a global threat with local effects

SEA LEVEL RISE / GLOSS

Sea-level rise is a global phenomenon, but its impacts and risks vary from place to place. Different places see the consequences on their coastline, in their city, around a port or across an island. Decision-makers need reliable information about how sea level is changing in their regions and communities, what that means for future risk, and where investment in adaptation will matter most.

Long-term observations are needed to understand these changes, identify trends and provide evidence for adaptation, infrastructure and disaster-risk decisions. Coastal stations feed storm-surge and coastal-flood warnings and help confirm tsunami warnings, while the wider Global Ocean Observing System (GOOS) tracks the ocean warming that contributes to sea-level rise. Yet gaps remain in the coverage, quality and continuity of sea-level observations, and in translating global data and projections into information that countries and communities can use.

These gaps matter most where exposure is high and technical capacity is limited, including Small Island Developing States (SIDS), Least Developed Countries (LDCs) and other low-lying coastal areas.

FROM GLOBAL SCIENCE TO LOCAL ACTION

The solution is not simply more measurements. It is a stronger chain from observation → understanding → decision. The Global Sea Level Observing System (GLOSS) is a core component of the global response to sea-level rise. Investment in GLOSS and the capabilities around it can strengthen three parts of that chain:

- **Keep the observing system working.** Maintain, calibrate and modernise existing stations, close critical geographic gaps and protect long-term records, with particular attention to SIDS, LDCs and other under-observed regions.
- **Turn observations into decisions.** Translate observations and global projections into regional and local sea-level indicators, risk information and decision-support tools for adaptation planning, resilient infrastructure, disaster risk reduction, sustainable ocean planning and investment.
- **Build the capacity to use it.** Strengthen coordination, technical expertise, regional cooperation, data sharing and national capabilities so countries can generate, access and apply sea-level science themselves.

The goal is to give decision-makers the information they need before today's projections become tomorrow's losses.

Produced in collaboration with the GO Ocean campaign
http://www.go-ocean.org/

A MOMENT TO TURN COMMITMENT INTO ACTION

The UN General Assembly High-Level Meeting on the existential threats posed by sea-level rise provides an opportunity to turn political commitment into practical action. The draft Political Declaration puts knowledge, data and science at the heart of the response, recognising the need for stronger observation, data and modelling and for interoperable, accessible and sustained global systems, including GOOS and GLOSS.

The opportunity now is to invest in that infrastructure.

The OceanEye International Alliance, co-led by the European Union and Canada in cooperation with the Intergovernmental Oceanographic Commission (IOC) of UNESCO, provides a framework for governments, philanthropy and the private sector to support GOOS. For sea-level rise, this means investing in GLOSS and the capabilities around it, from long-term observations and stations to coordination, technical expertise and decision-support.

WHAT BETTER INFORMATION MAKES POSSIBLE

Stronger sea-level observations and services will help countries anticipate risk, plan adaptation, invest in resilient infrastructure, prepare for coastal hazards and protect communities and livelihoods.

For SIDS, LDCs and other highly exposed coastal states, better access to sea-level science can strengthen their capacity to plan for and respond to accelerating sea-level rise.

Better observations provide the evidence to decide where, when and how to act. Invest in GLOSS and the global capacity behind it, coordinated by IOC-UNESCO, so that countries can turn sea-level science into action.