

ECOMONDO 2022

BLUE ECONOMY

Conferenza

RIGENERAZIONE DELLE AREE

COSTIERE E DEI PORTI

E ADATTAMENTO AI

CAMBIAMENTI CLIMATICI

L'iniziativa Europea "Knowledge Hub on Sea Level Rise" e gli impatti sulla costa

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Ecomondo, Rimini 8/11/2022

The Knowledge Hub on Sea Level Rise
is a joint effort by JPI Climate & JPI Oceans,
focusing on regional to
local sea level change in Europe.



Please participate to the survey on SLR user needs
<https://ec.europa.eu/eusurvey/runner/KH-SLRsurvey2022>

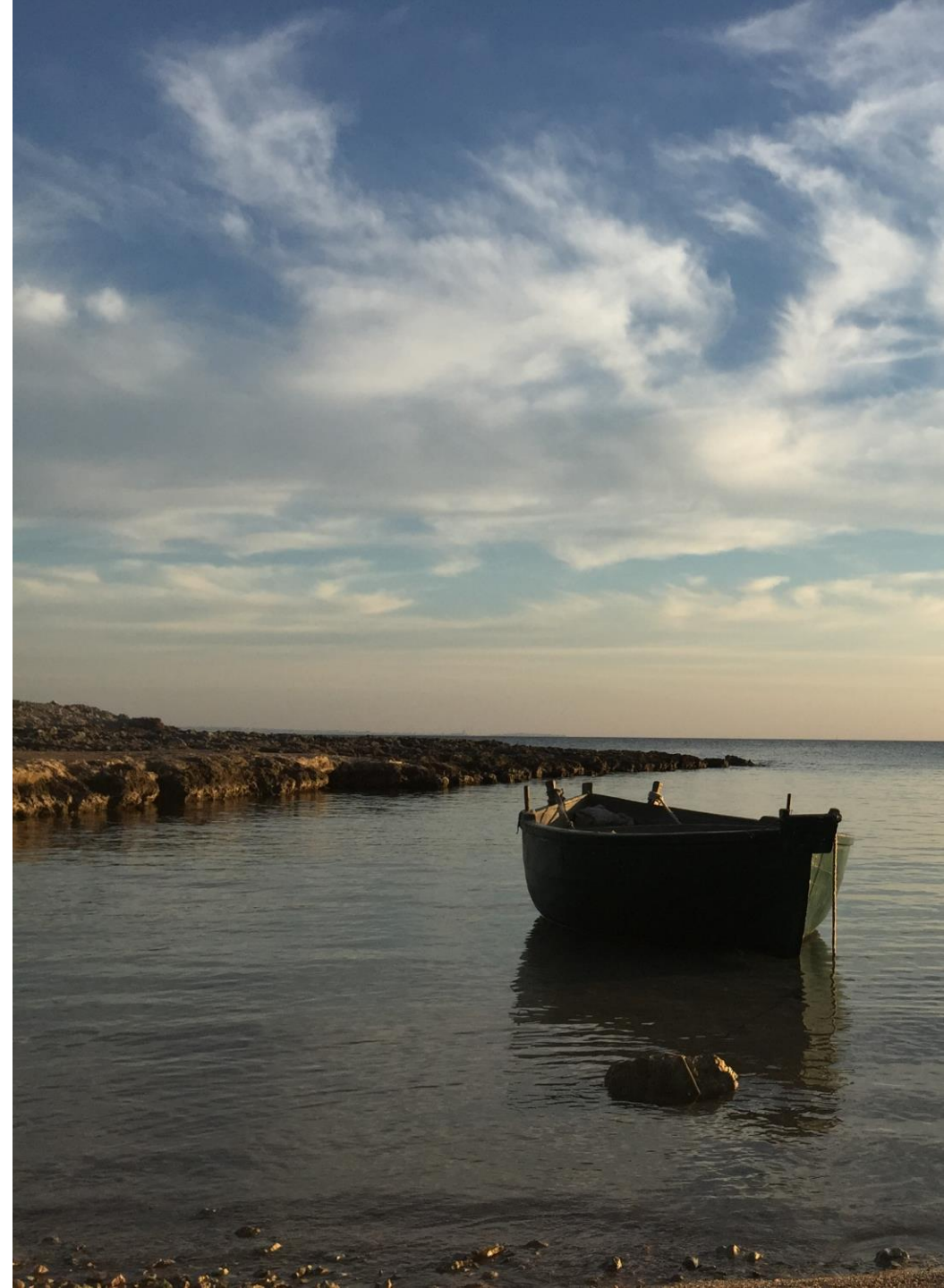
KH-SLR Governing Council

NCPs	BELGIUM	Koen Lefever
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	FRANCE	Maurice Héral
		Sylvie Joussaume
	GERMANY	Armin Mathes
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		Jelte Verberne
	NORWAY	Clint Conrad
	SPAIN	Esther Chacon
		Abraham Trujillo
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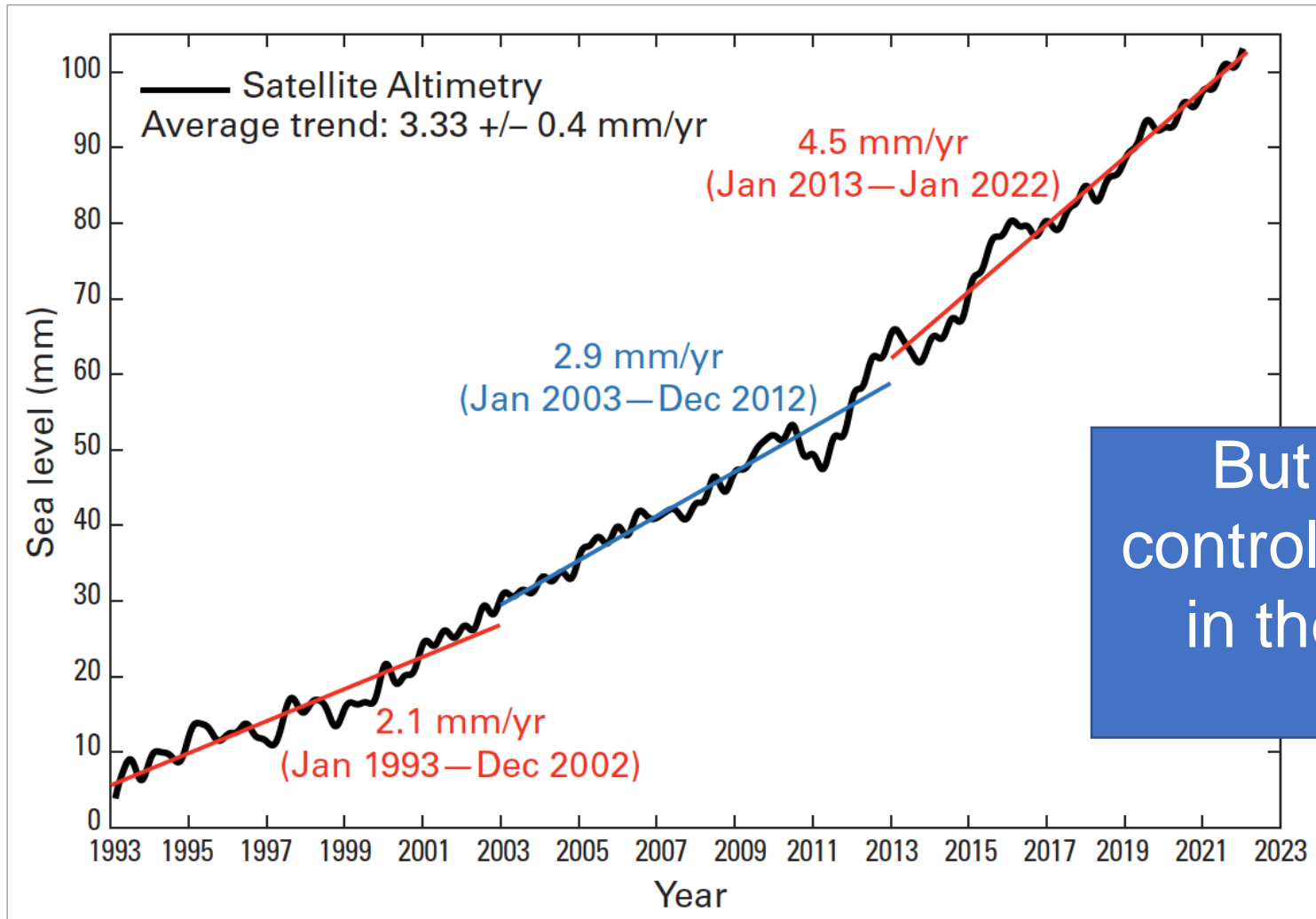


Task Groups

- 1. Co-design TG-1:** Joint scoping with multiple stakeholders
- 2. Policy TG-2:** Interfacing science and policy.
- 3. Science TG-3:** reviewing scientific knowledge
- 4. Outreach TG-4:** co-designing the main output products



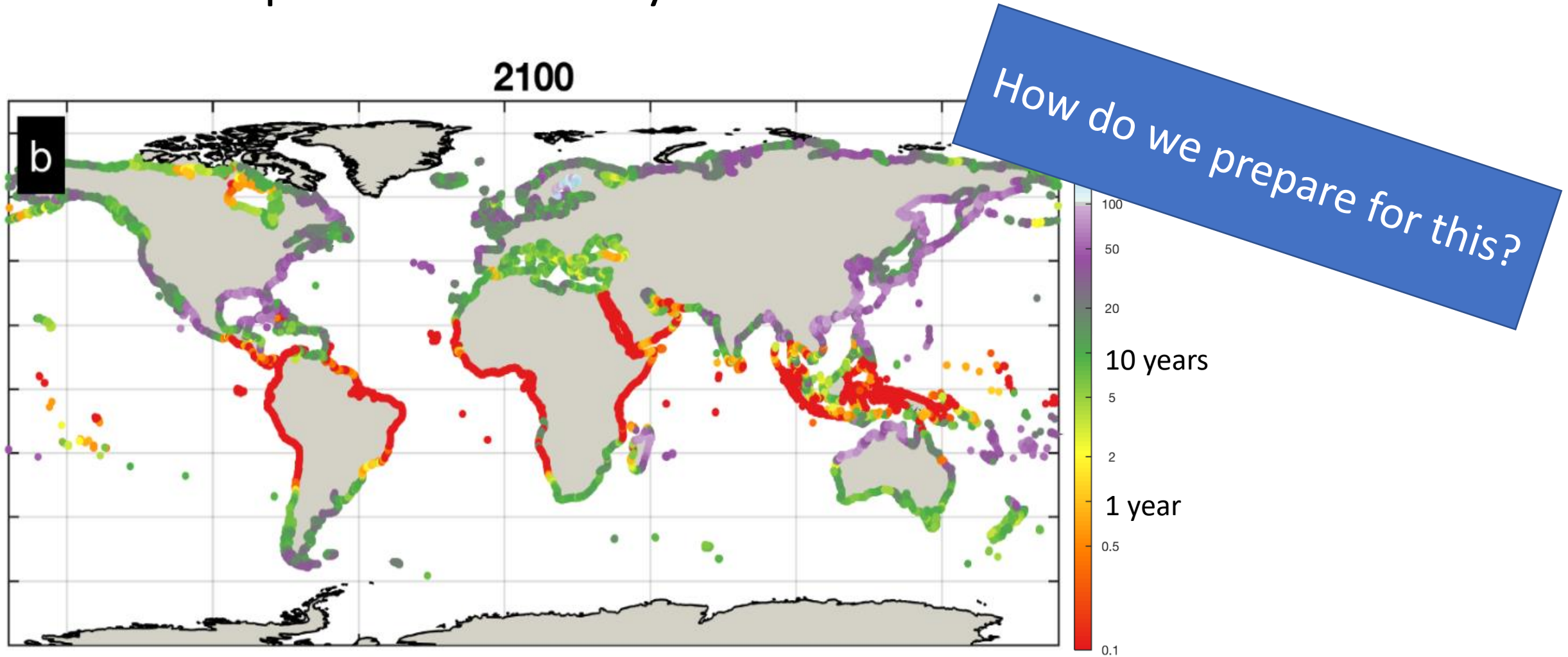
The facts: globally, sea level rise is accelerating



But what processes control local sea level rise in the past and (near) future?

From: World Meteorological Organization *State of the Global Climate 2021*

The future: how frequent will become the present 100 yr sea level extreme?



From: Vousdoukas et al., Nature communication, 2018

The Knowledge Hub ambition

**Promote the
exchange, synthesis,
integration and
generation of
knowledge
on regional to local,
historical and future
sea level rise**



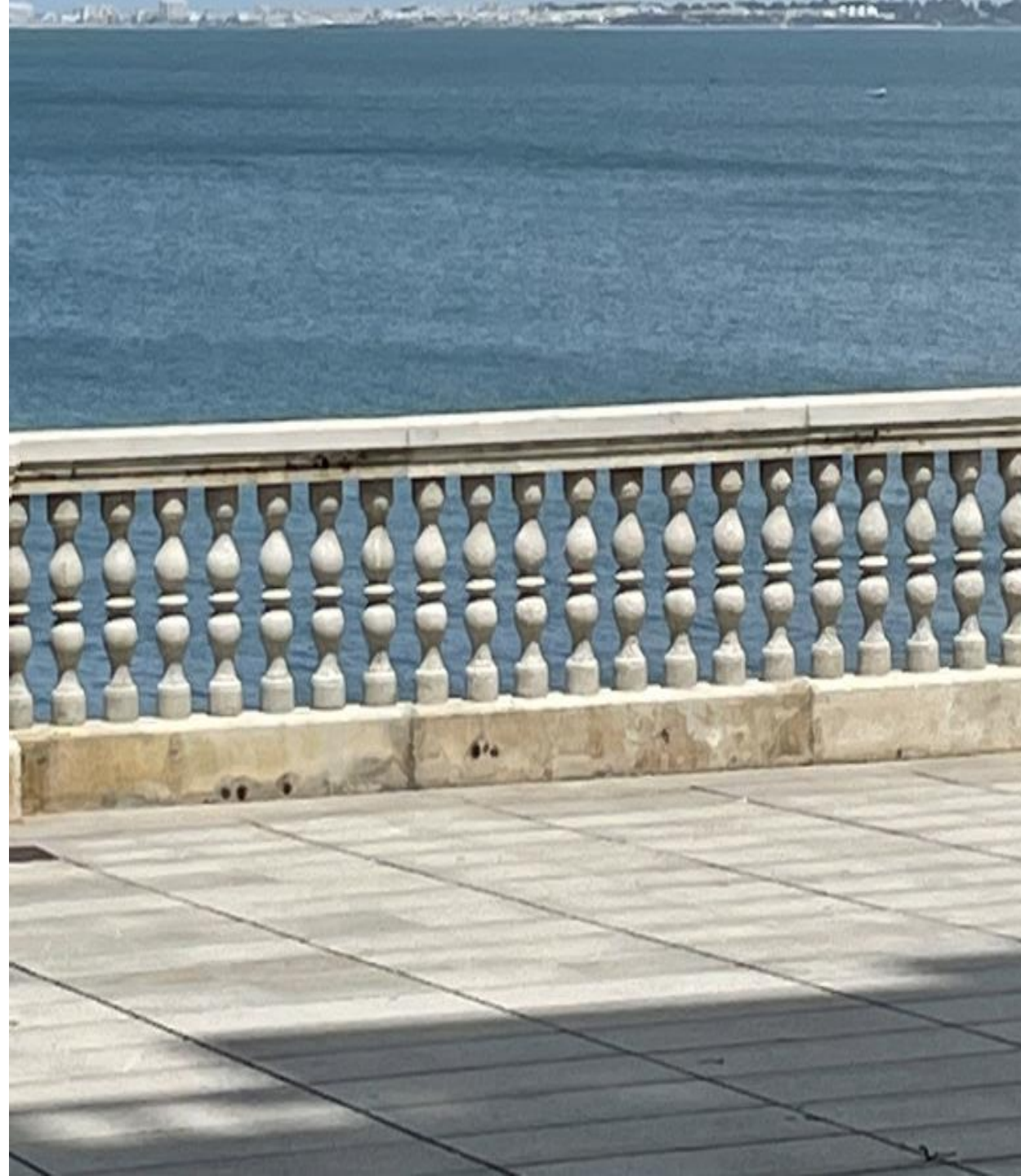
NEED to

- **Bridge spatial scales** (global to local scales)
- **Bridge disciplines** (oceanography, glaciology, meteorology, hydrology, geomorphology, social sciences, policy, communication)
- **Accelerate** the Research to Operations and Operation to Research transfers
- **Use of new science paradigms** to arrive at solutions



The key outcome of the KH-SLR Effort

- Provide **periodic assessments** of knowledge on sea level rise drivers, impacts and policy options for each of the major ocean basins around Europe.



Workshops in 2022

Basin	Host	Date
Arctic and North Sea	Deltares (NL)	March 21
Eastern Atlantic	Ifremer (FR)	April 28/29
Mediterranean and Black Sea	UPC (ES)	May 5
Baltic Sea	IOW (DE)	May 9/10



How do we prepare in Emilia Romagna?

A UN Decade Collaborative Center on Coastal Resilience is @ UNIBO

- **The DCC-CR will work on:**
 - A) Supporting Endorsed Decade Actions
 - B) Stakeholder Engagement
 - C) Catalyzing New Decade Actions
 - D) Communication, Awareness Raising and Outreach
 - E) Resource mobilization
 - F) Monitoring and Evaluation

The DCC for Coastal Resilience is a Departmental Center of UNIBO funded by the Emilia Romagna region

v Director: Prof. Nadia Pinardi

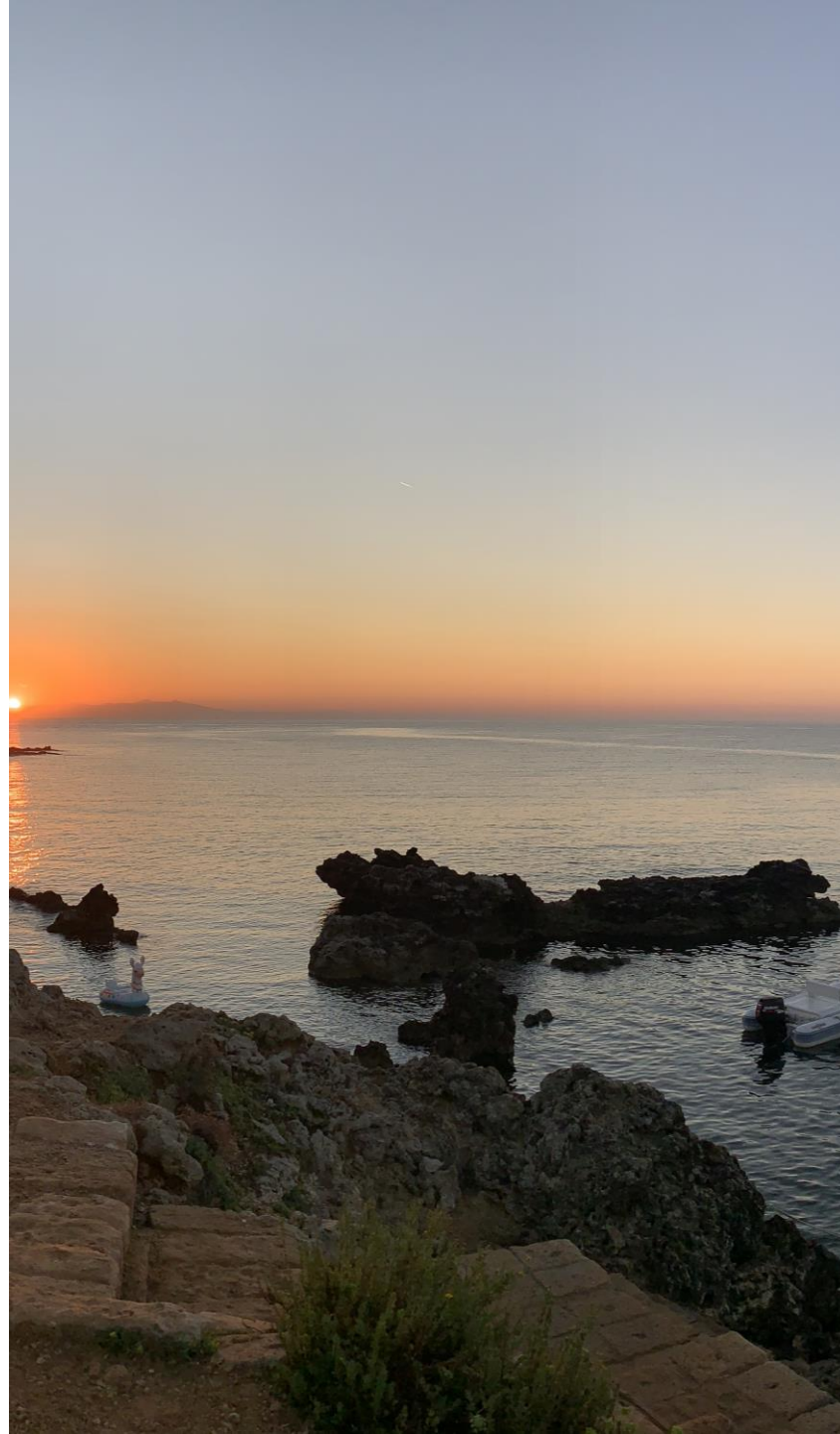
nadia.pinardi@unibo.it

v Office space at the University of Bologna, Department of Physics and Astronomy

v Junior programme specialist, Dr. Michela Marcatelli

michela.marcatelli@unibo.it

v Senior programme specialist and communication manager



Guidance for UN Decade implementation

- Decade Coordination Center @Unesco-IOC (Paris)

Interface with stakeholders

- Decade Collaborative Center for Coastal Resilience @UNIBO

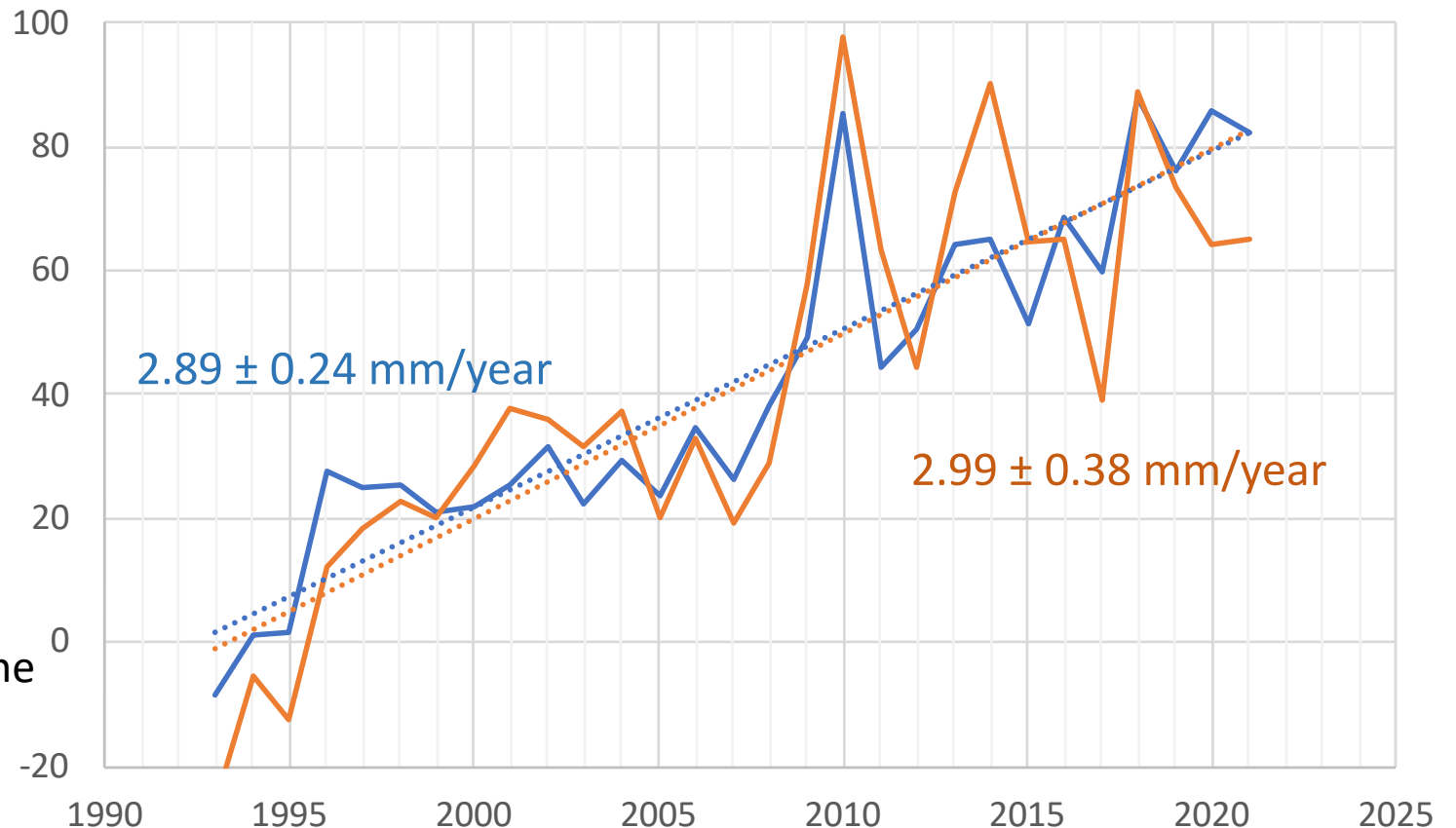
How do we prepare in Emilia Romagna?

Start assessments with advanced data on local Sea Level Rise trends



The Mean sea level in the Adriatic grows more rapidly than the mean sea level in the Mediterranean Sea. The reason is the different water balance of the two basins

Satellite Mean Sea Level Mediterranean vs. Adriatic, mm



Conclusions

Sea Level Rise Assessments for policy makers require advanced data at the local scales

Adaptation plans require interdisciplinary data sets and a continuous dialogue with different stakeholders

KH-SLR and DCC-Coastal Resilience will help to construct this framework

GRAZIE PER L'ATTENZIONE

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