

AdriaClim

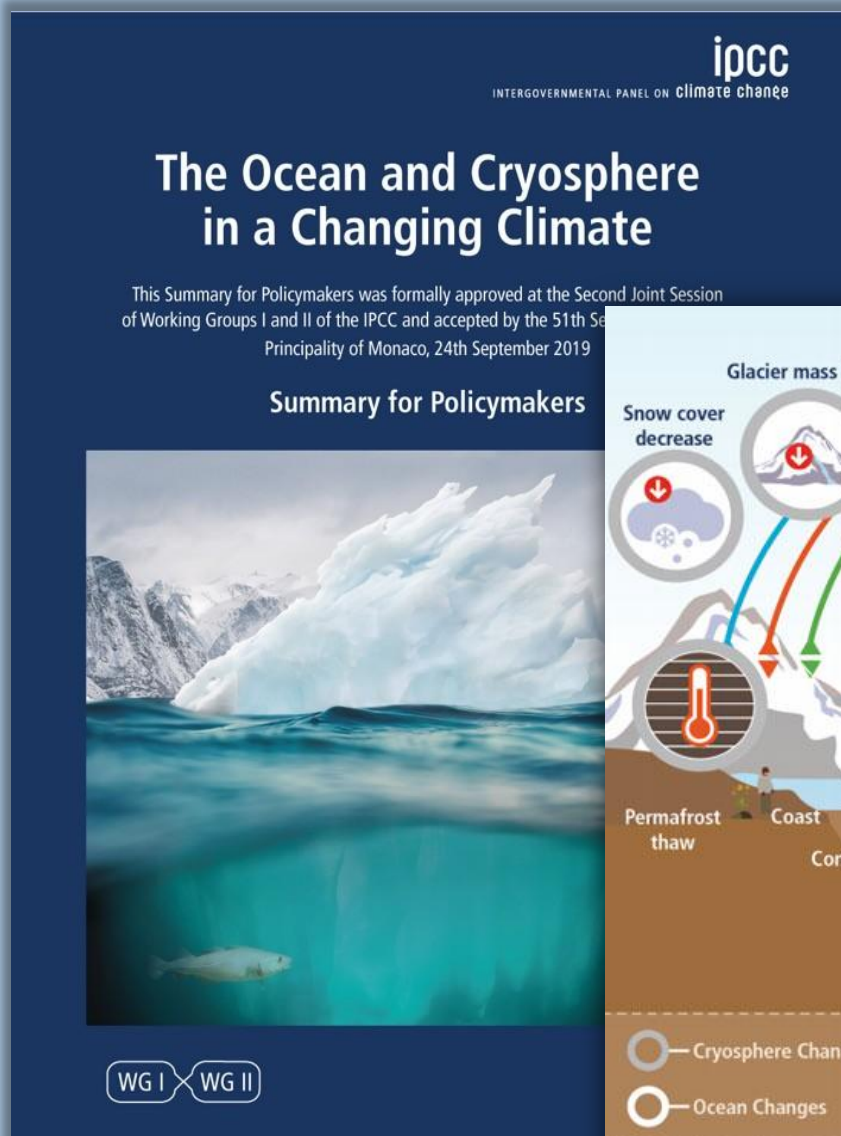
Climatic change information, **monitoring** and **management** tools
for **adaptation strategies** in the **Adriatic coastal areas**

Andrea Valentini

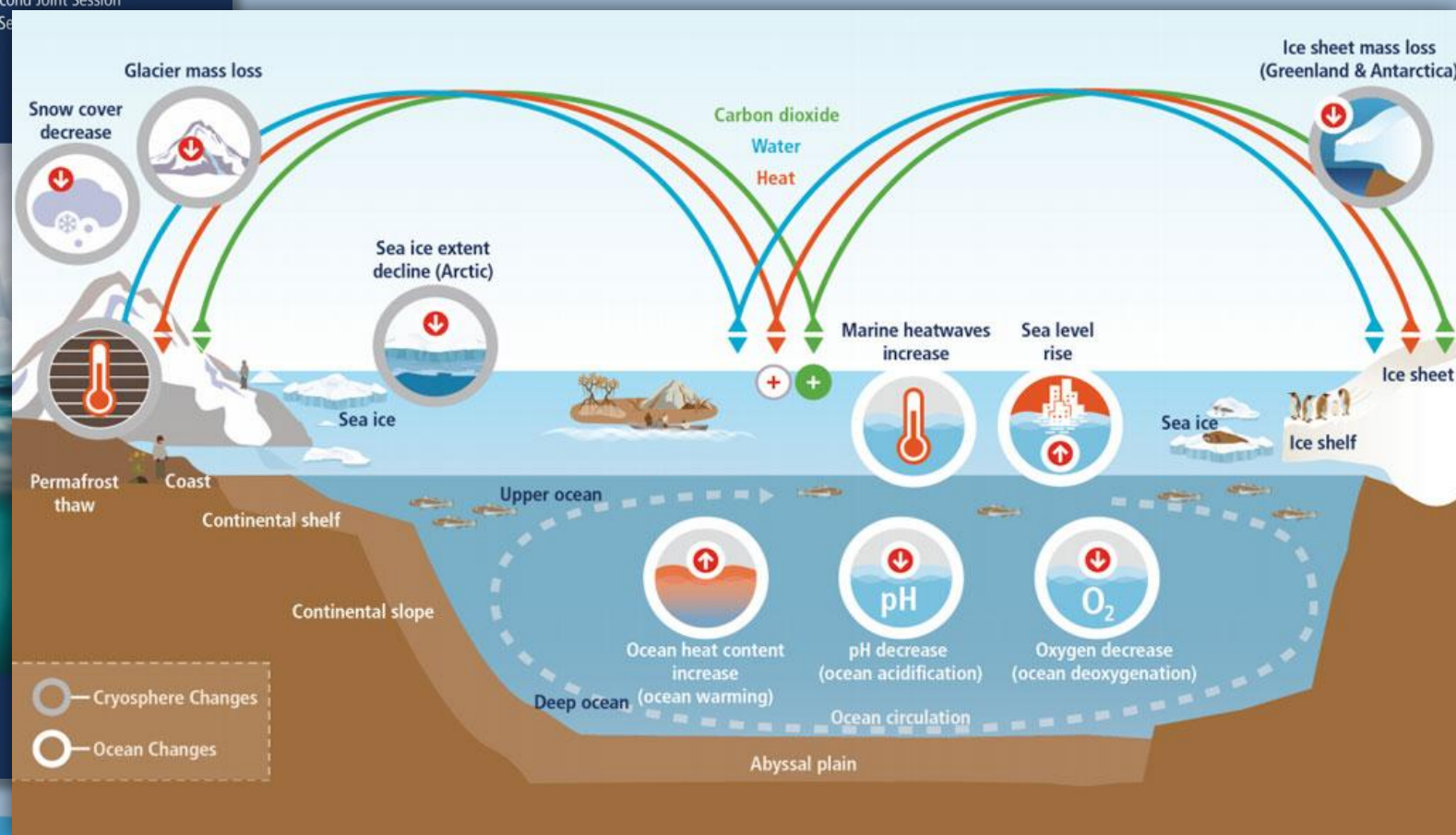


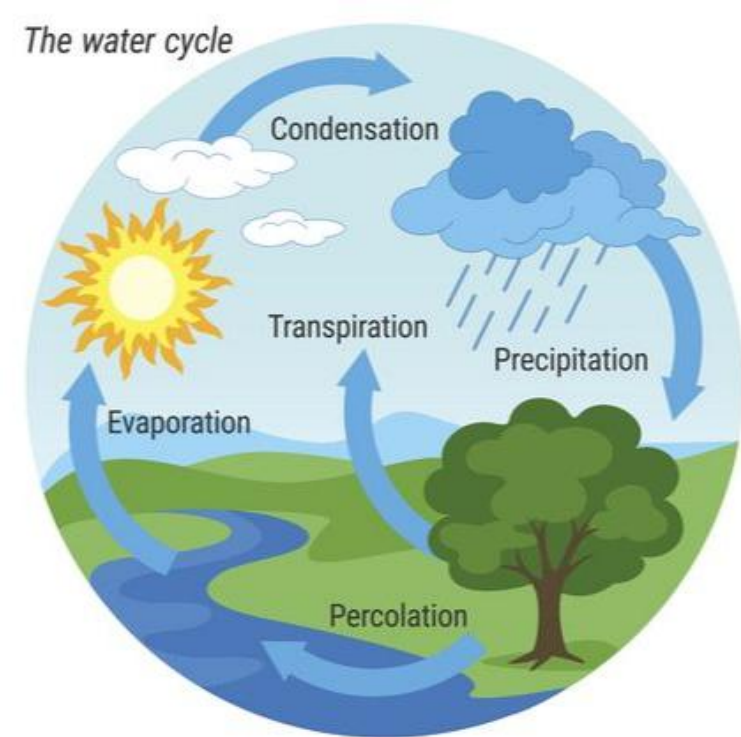
SPECIAL REPORT ON THE OCEAN AND CRYOSPHERE IN A CHANGING CLIMATE 2019

<https://www.ipcc.ch/srocc/home/>



ipcc
INTERGOVERNMENTAL PANEL ON climate change





All people on Earth **depend** directly or indirectly on the **OCEAN** and **CRYOSPHERE**

Human communities in close connection with coastal environments, small islands, polar areas and high mountains **are particularly exposed to changes, such as sea level rise and melting glaciers.**

These changes are increasingly pushing adaptation responses “to their limits”, with the most vulnerable people having “the lowest capacity” to respond.

Sustainable development and climate change resilience depend “**critically on urgent and ambitious emissions reductions** coupled with coordinated sustained and increasingly ambitious **adaptation actions**”.

<https://www.carbonbrief.org/in-depth-qa-the-ipccs-special-report-on-the-ocean-and-cryosphere>

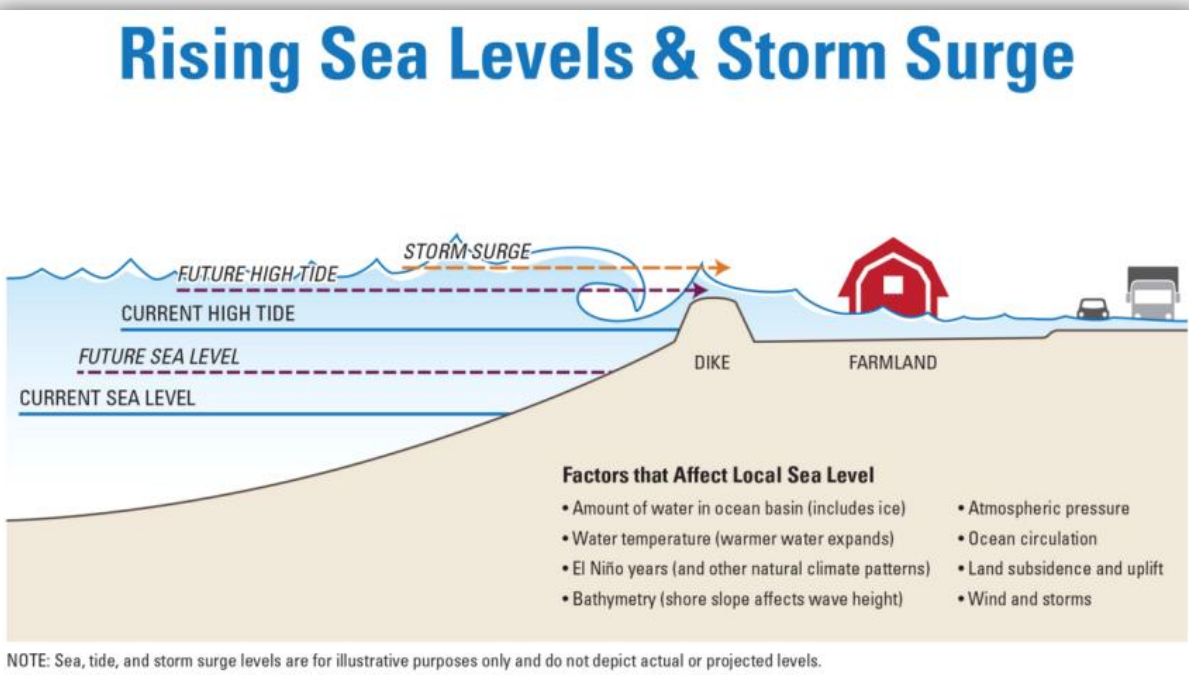
Sea level rise
Subsidence
Sea storms increasing



Reduced effectiveness of defense works
Coastline retreatment
Marine ingressions and salt intrusion



Loss of coastal habitat and ecosystems
Decay of water quality in transitional
and marine environments
Alteration of flora and fauna and the loss
of biodiversity
Increase of algal and micro-algal
blooms



Reduction of fish stocks and/or modification of
fish and benthic communities
Increase in **invasive alien species**
Risks for the fishing and aquaculture sector, with
the **decrease in productivity**
Risk of **structural damage and business
interruption**

AdriaClim

Climate change information,
monitoring and management tools
for adaptation strategies
in Adriatic coastal areas



**Protect the coast,
adapt to climate change!**

PROJECT PARTNERS



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www.italy-croatia.eu/adriaclim



KEY PROJECT NUMBERS

PROJECT DURATION

01/01/2020 - 31/12/2022



TOTAL BUDGET

8.823.415,00 €



NATIONAL CO-FINANCING

1.323.000,00 €



ERDF

7.499.902,75 €



ADRIACLIM

AdriaClim is a new cross-border cooperation project that supports the development of scientific plans to adapt to the consequences of current climate change and the challenges that await us, and to turn potential threats into economic opportunities. AdriaClim will develop regional and local adaptation plans based on up-to-date meteorological and oceanographic information for the Adriatic Sea.

PROJECT OBJECTIVES

The goal of AdriaClim is to increase the capacity to develop new and update existing plans for adaptation to climate change in the Adriatic. Strategies to mitigate its effects on coastal and marine areas at risk will be developed. Capacities and cooperation on climate change monitoring and modeling systems will be improved, and an advanced information system, tools and indicators for optimal climate change adaptation planning will be developed.

ADRIACLIM

AdriaClim is a new cross-border project that supports the development of scientific research on the consequences of current climate change that await us, and to turn potential challenges into opportunities. AdriaClim will develop adaptation plans based on up-to-date oceanographic information for the Adriatic Sea.

PROJECT OBJECTIVES

The goal of AdriaClim is to increase knowledge on climate change in the Adriatic. Strategies to protect coastal and marine areas at risk will be developed and cooperation on climate change adaptation systems will be improved, and a monitoring system, tools and indicators for adaptation planning will be developed.

WHY ADRIACLIM?

The Adriatic coastal and marine areas are particularly vulnerable to the effects of climate change.

By 2050, according to "Piano Nazionale di Adattamento ai Cambiamenti Climatici (PNACC)" (National Climate Change Adaptation Plan) issued in 2017, the Adriatic Sea is supposed to experience major climate change:

- ❌ The temperature of the Adriatic Sea is expected to increase by about **+ 1.5 / 1.6 ° C**.
- ❌ The sea level in the Adriatic Sea is expected to increase by **7cm possibly leading to coastal erosion**
- ❌ With increasing temperature and volume, **the salinity of the Adriatic Sea is supposed to increase.**
- ❌ Fresh water **salinization** and **coastal erosion** are possible.
- ❌ Adverse effects on the **marine ecosystem are inevitable.**

ADRIACLIM

AdriaClim is a new cross-border project that supports the development of scientific research on the consequences of current climate change that await us, and to turn potential threats into opportunities. AdriaClim will develop adaptation plans based on up-to-date oceanographic information for the Adriatic Sea.

PROJECT OBJECTIVES

The goal of AdriaClim is to increase knowledge on climate change in the Adriatic. Strategies to protect coastal and marine areas at risk will be developed, and cooperation on climate change adaptation systems will be improved, and a common system, tools and indicators for adaptation planning will be developed.

WHY ADRIACLIM?

The Adriatic coastal and marine areas are highly vulnerable to the effects of climate change.

By 2050, according to "Piano Nazionale di Adattamento Climatico (PNACC)" (National Adaptation Plan) issued in 2017, the Adriatic Sea is expected to experience major climate change:

- The temperature of the Adriatic Sea will increase by about **+ 1.5 / 1.6 ° C**.
- The sea level in the Adriatic Sea is expected to rise by **7cm possibly leading to coastal erosion**.
- With increasing temperature and volume of fresh water, **the salinity of the Adriatic Sea is expected to decrease**.
- Fresh water **salinization** and **coastal erosion** will increase.
- Adverse effects on the **marine ecosystem** will be significant.

OUTPUTS

In Italy and Croatia climate monitoring, modelling and adaptation are necessary to face adverse climate change effects (or impacts) and to turn potential threats into economic opportunities.

AdriaClim aims to achieve the following results:

- + develop accurate information able to support the development of regional and local climate change adaptation plans.
- + plan a coastal adjustment, for a sustainable blue economy, based on reliable and accurate information
- + contribute to fill the gaps in existing observing systems and will enhance and complement the existing modelling capacity by developing high resolution integrated models.
- + consolidate planning of measures for strengthening the adaptation capacity in Italy and in Croatia also building upon cross-border cooperation during and after project completion.

APPROACH

AdriaClim addresses the identified territorial challenges by proposing a clear and structured work plan that results in outcomes that are:



integrated

climate risks and impacts on coastal and marine areas are included in the planning of activities



designed

partnership with external actors



holistic

work on improving the climate monitoring system and proposing solutions



geographically distributed

activities are carried out in almost all Adriatic coastal regions



tangible

development of climate adaptation plans for 9 pilot areas (6 Italian and 3 Croatian)



available

facilitated knowledge sharing and capacity building



long-term

creation of a Transnational Expert Management Body



complementary

the proposed activities are fully integrated into existing systems



Interreg
Italy - Croatia
AdriaClim

European Regional Development Fund



EUROPEAN UNION

ECOSS open meeting | May 19, 2021



www.italy-croatia.eu/web/adriaclim/

AdriaClim LP **arpae**
emilia-romagna

✉ adriaclim-arpae@arpae.it

📍 Viale Silvani, 6 – 40122 Bologna (Italy)

🌐 <https://www.arpae.it/sim/>



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www.youtube.com/channel/UCz1icHMIWGzxBfJ-Ida-ABQ/featured



www.twitter.com/adriaclim



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