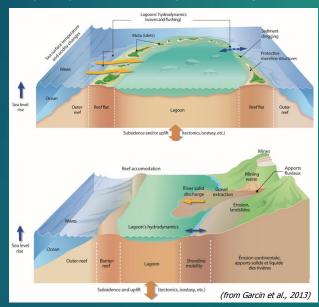
Valdives and French Polynesia are pilot sites for local coastal climate services because popical islands are high impact sectors and currently receive little attention"



## Interactions between scientists and users

INSeaPTION involves climate, impact and social scientists as well as practitioners of coastal adaptation, building on previous interactions between users and the project partners. The project's transdiciplinary approach combines continuous interactions with users of both the global and local services to be developed with cutting edge sea-level, impact modeling, decision making and governance research.

Physical processes affecting atoll and high islands



#### How is INSeaPTION funded?

INSeaPTION is supported by the "European Research Area for Climate Services" (ERA4CS),  $(1.5M\in)$ , with  $700k\in$  of additional funding from the partner organizations: the Global Climate Forum (Germany), the universities of Balearic islands (Spain), of La Rochelle (France), of Utrecht (The Netherlands), CREOCEAN and the French Geological Survey (France).

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**INSeaPTION** 

# **INSeaPTION**

INtegrating SEA-level Projections in climate services for coastal adaptation



European Research Area for Climate Services ERA4CS

Transnational Collaborative Research Projects 2016

*Topic A - Researching and Advancing Climate Services Development by Advanced co-development with users* 

#### What is ERA4CS?



European Research Area for Climate Services

ERA4CS is an initiative aiming at developing climate services in Europe. ERA4CS supports research that will ultimately support the development of tools, methods and standards to transfer reliable climate information in support to climate change adaptation and mitigation.

More information: http://www.jpi-climate.eu/ERA4CS

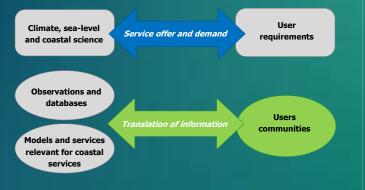
# Why InSeaPTION?

While future sea-level rise is recognized to be a major threat to coasts, sea-level rise related information currently available is not customized to the practice of coastal adaptation. Indeed, coastal managers require services tailored to users' needs including full information on uncertainties, high-end estimates, accurate storm and flood modeling, shoreline change projections and relevant adaptation options within the context of current practices and governance arrangements.

### Project objectives

INSeaPTION is a research project, which aims at addressing these limitations by co-designing and co-developing, together with users, coastal climate services based on state-of-the art sea-level rise, impact, adaptation and transdisciplinary science. The project will deliver coastal climate services based on end-users' needs and their decision and governance context, covering the whole chain of climate service development from global to regional mean and extreme sea-level projections with their impacts and uncertainties to local sea-level, coastal impacts and adaptation pathways.

#### Research developements and needs required to develop coastal climate services (adapted from Le Cozannet et al. 2017)



### What are climate services?

"Climate services provide climate information in a way that assists decision making by individuals and organizations"

(World Meteorological Organisation)

## *Global to local climate services to be developed*

Specifically, the project will co-design and co-develop the following coastal climate services with several groups of diverse users:

- Global to regional coastal climate service, addressing the needs of major companies, international organizations and governments to have globally consistent information on sea-level rise, its impacts and adaptation pathways for long-term locational planning, climate policy making and financing adaptation and loss & damages.
- Regional to local coastal climate services addressing the needs of planners and policy makers forlocal tailored sea-level projections, impact and adaptation information useful for long-term development, infrastructure and land-use planning for two high impact territories: the Maldives and French Polynesia.

"Both global and local services address the committed impacts of sea-level rise and potential large adaptation needs arising in the case polar ice-sheets melt rapidly"

*Climate services may support adaptation or mitigation policies, and may be supplied to private and public users of climate information, as well as researchers. They cover all timescales (Past, present and future: seasonal, decadal, centennial to millennial timescales) and space scales (international, national, local). They are supported by observing and modeling capabilities, by tools such as information systems and user interface platforms. Finally, they also include capacity development activities such as education and training.* 

