

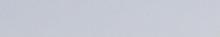




Cultural Organization







#### **CLIMATE SERVICES WORKSHOP**

Gonéri LE COZANNET, Robert NICHOLLS, Roderik VAN DE WAL, Michael SPARROW, Julie BILLY, Jing Li, Kate HILL, Detlef STAMMER

WCRP Climate Services Workshop 12-13th November 2019 Orléans, France



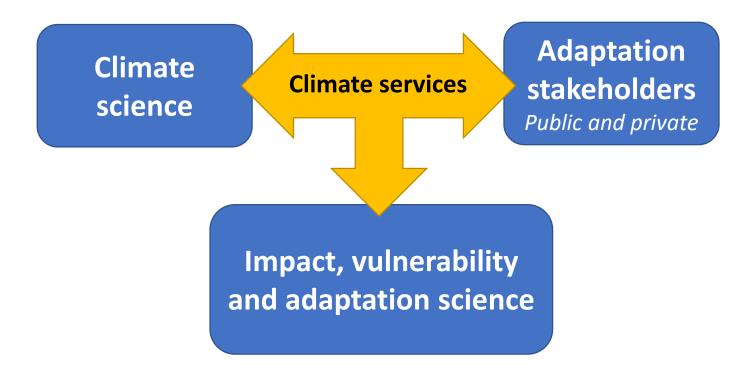
#### What are climate services?



Climate services provide the scientific information relevant for adaptation to and mitigation of climate change



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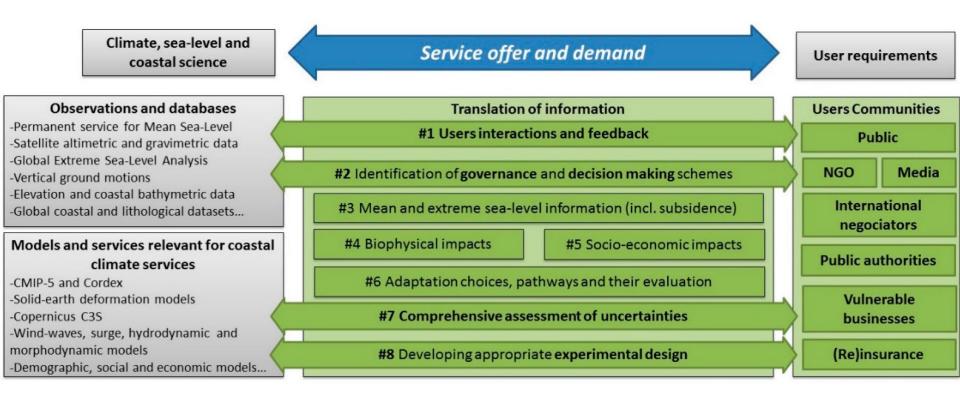
Climate services provide the scientific information relevant for adaptation to and mitigation of climate change

Estimated investment needs (excluding OECD): 60 to 300 billion euros/year by 2030 (IPCC, 2014; UNEP, 2016)

Hewitt et al., 2012; Brasseur and Gallardo, 2016

### Coastal climate services

- From a market analysis of climate services: strongest potential for services in support to flooding risk management (Cavelier et al., 2017)
  - Coastal zones are especially in need of climate services for adaptation, in particular due to committed sea-level rise (Le Cozannet et al., 2017)





# Coastal climate services exist already...

... but many relevant activities do not identify themselves as coastal climate services



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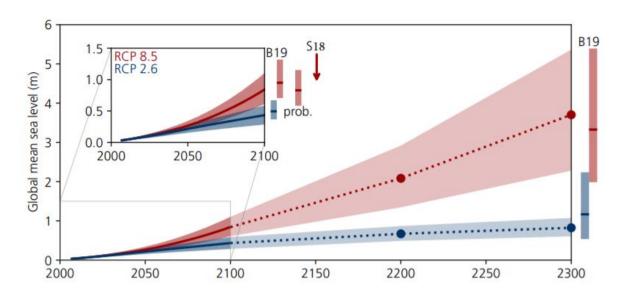


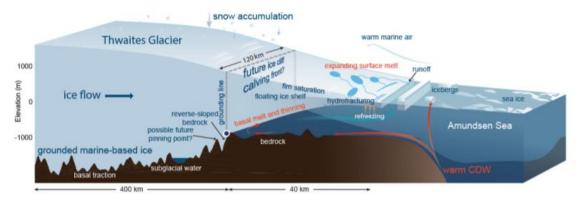






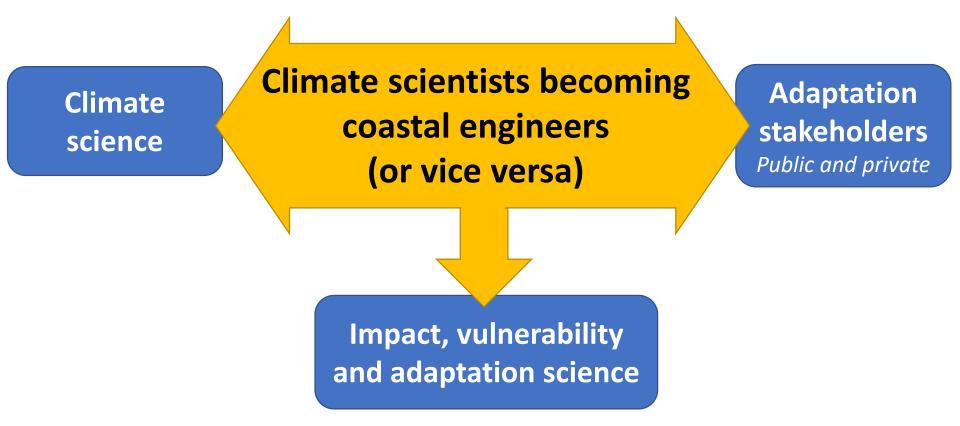








## Current coastal climate services leadership

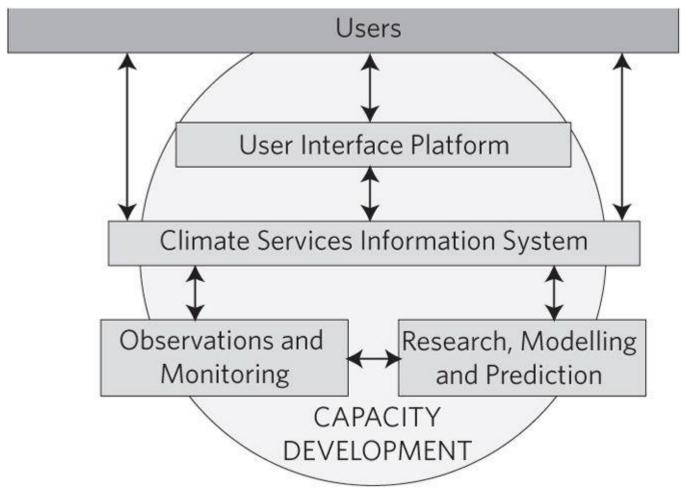


This is not sufficient to respond to committed sea-level rise



# **Existing frameworks for climate services**

Need for infrastructure, expertise, training focused at the interface between climate science, coastal engineering and users





## Our workplan for these two days

- Current status of climate services and planned activities (session 1)
- Users and their needs (session 2)
- Translating science to operations (session 3)
- Interacting with users (session 4)
- Challenges and recommendations (session 5)

#### Cross-cutting issues:

- What are barriers and opportunities?
- Where/how can breakthroughs take place?
- What are research and development needs?
- Are there urgent policy, guidance, funding, regulation, normalization needs?
- How can the agenda be moved forward?
- ⇒ outcome: policy brief, a white paper, a journal paper or a special issue



# **Summary**

## We are here to move forward the agenda

Public and private policies, developments and research are needed to develop coastal climate services to the scale it is required given committed sea-level changes

Workshop outcome: a set of recommendations for the development of coastal climate services

This could take the form of a policy brief, a white paper, a journal paper or a special issue

To be discussed Wednesday afternoon





