

IAPS 2024

“Enacting Transdisciplinary Knowledge: People, Places, Movements and Sustainabilities”

Special activity SA. 9

Risk, Risk Perception, Flooding and Coastal Phenomena

Science – Policy interaction for coastal adaptation and management : is it a match ?

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Adaptation of coastal cities to coastal risks

- Necessarily interdisciplinary (natural sciences and social sciences)
- And in interaction with stakeholders (at various scales)
- Aiming at transdisciplinarity



Transdisciplinarity according to Ismail-Zadeh et al. (2017)

1. the joint elaboration of the question between researchers of different disciplines and between researchers and stakeholders
2. the co-production of applied knowledge
3. the integration of the knowledge produced into scientific and social practice.



Source: www.vhv.rs

Pluridisciplinarity



Source: petit-dejeuner-toulouse.com

Interdisciplinarity



Source: blogspot.com

Transdisciplinarity

Inspired by Nissani, 1995

How to translate this ? How to make a « good match » ?

Between researchers :

- Use of shared conceptual models (eg Moine 2006)
- Mutual acculturation of concepts and methodology (survey tools)

With stakeholders : How to construct the question together ? Who starts the process ?

How to integrate / translate the knowledge into scientific and social practice ?

Example of the PRECOAST programme (Provence-Alpes-Côte d'Azur (PACA) region)

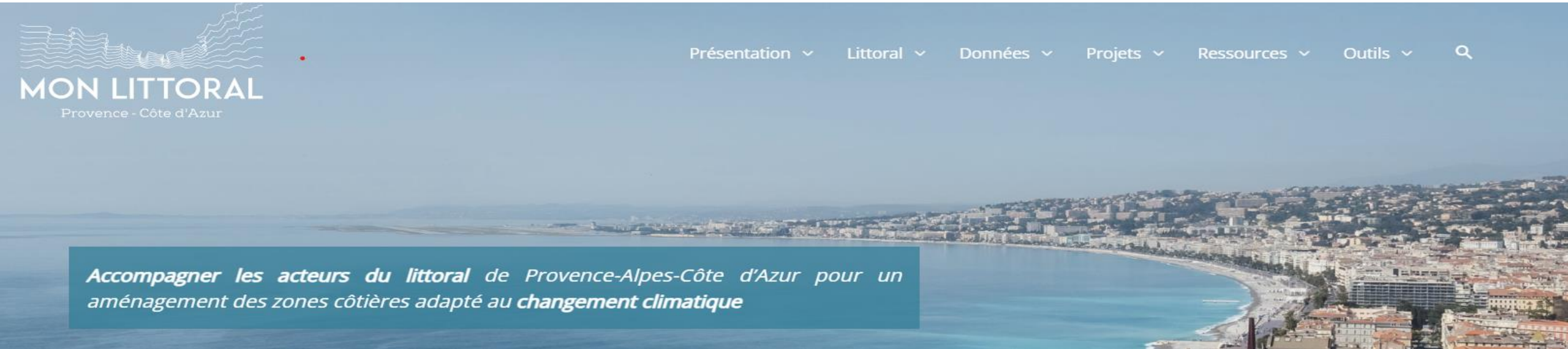
National context: National Strategy for Integrated Coastline Management (SNGITC) in 2012;

Local Context : In 2018, **DREAL PACA** (Regional representation of the Ministry of Ecology in charge of environment, planning and housing issues in the PACA region) :

- **initiates a steering committee** including scientists to create a tool to share knowledge and good practices for coastal management : platform [Mon Littoral – Provence – Côte d'Azur](#)
- **proposes to finance** scientific studies
 - long exchange between researchers and DREAL representatives on possible questions (we did not agree with the initial service demand)
 - PRECOAST study (Robert et al. 2023) on the representations of local authorities of climate change and coastal risks

Integration of knowledge into scientific and social practice

Through the platform “Mon littoral” (<https://www.monlittoral.fr/>)



PRECOAST study presented on the platform and in several conferences (communication/debates)



Sommaire

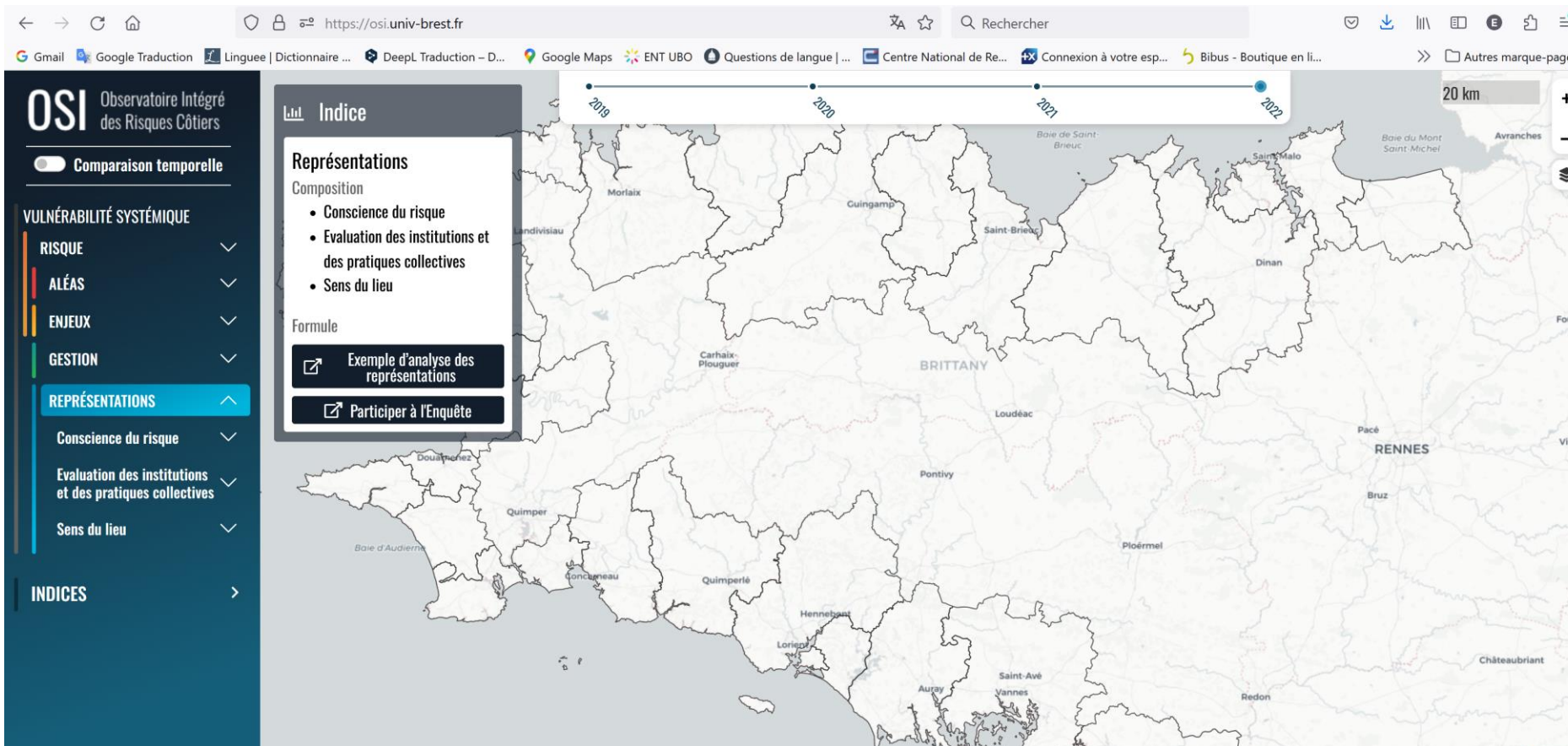
- > [Inventaire et organisation du recueil de données](#)
- > [Approche des besoins](#)
- > [Études pour cerner les acteurs du littoral et leurs besoins](#)

Annuaire des acteurs économiques de la gestion durable du trait de côte
Enquête sur la perception des risques côtiers par les acteurs du littoral en responsabilité



Example : OSIRISC Systemic vulnerability of coastal territories to erosion and marine flooding (Brittany region)

Coastal risks observatory



<https://www.risques-cotiers.fr/>
<https://osi.univ-brest.fr/>

Who observes?

Researchers
(various disciplines)

Costal risks
(marine erosion and
flooding)
Systemic vulnerability

Managers, elected
representatives

The aim

For research about
territorial
vulnerability
(geography,
psychology...)

Observations on:
- Hazards
- Stakes
- Management
- Representations

Management of
coastal risks

The Observatory
<https://osi.univ-brest.fr/>

**Indicators (4 components) and
indexes of systemic vulnerability**

What is OSI?

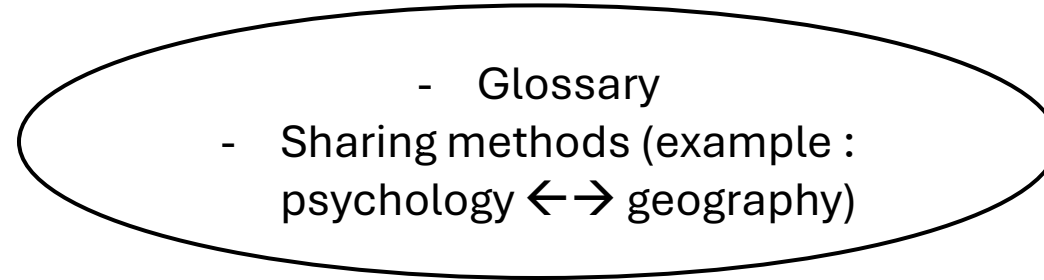
- *For researchers:* diagnostic and monitoring vulnerabilities trajectories
- *For managers:* decision-making tool, strategies...

Indirect contribution

- *Inhabitants:* survey, or participative forum (social memory, social knowledge...)

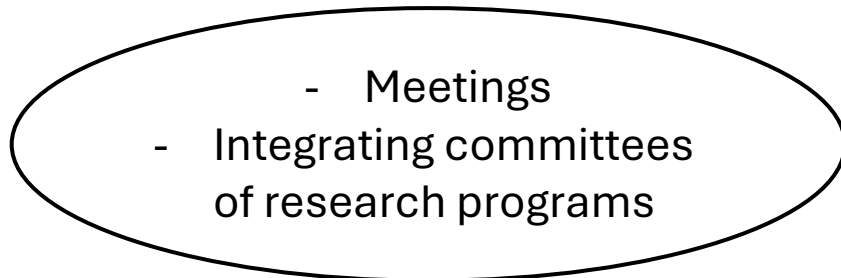
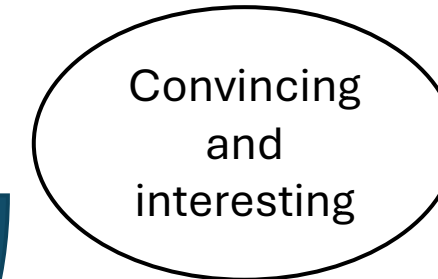
Discussion : The challenges

Need of time for :



Researchers of various
disciplines

**Studying and
managing coastal
risks**



Stakeholders (inhabitants, elected
representatives, engineering offices...)

Financing agencies
(public/private, national/local...)



Thank you for your attention !

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