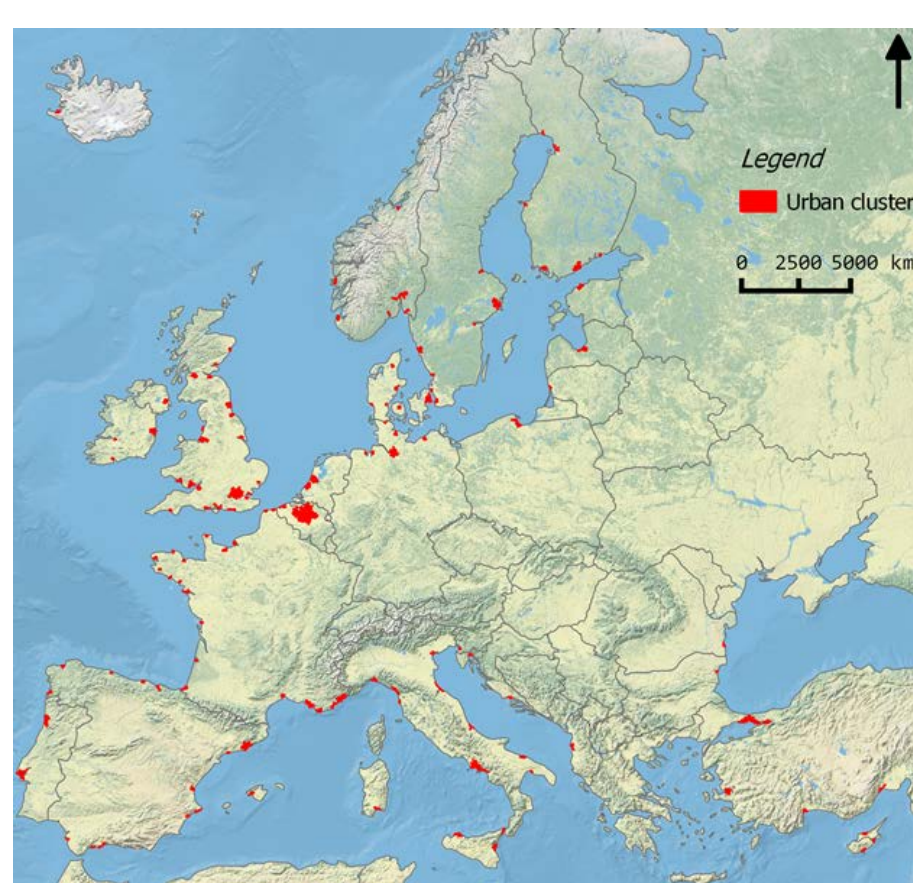


Luís Costa (carvalho@pik-potsdam.de)

Objective: Systematic assessment of impacts and adaptation to coastal flooding in European cities.

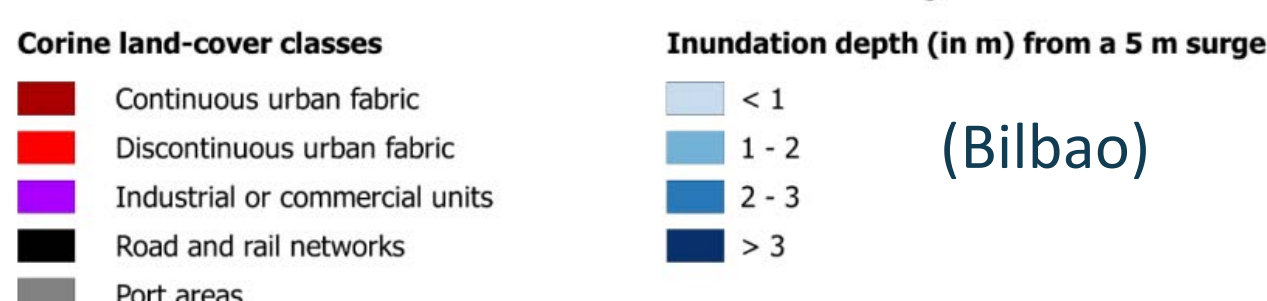
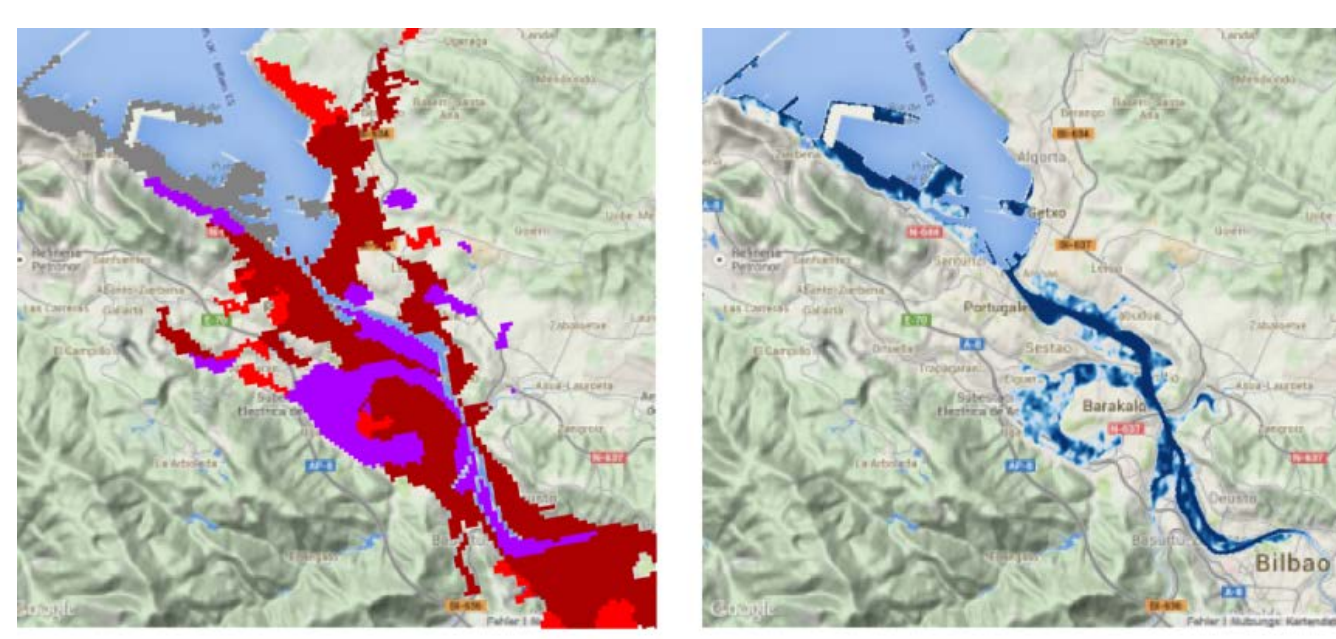
METHODS

Case study selection



140 urban areas analyzed

Corine land-cover and inundation



(Bilbao)

Maximum damage by land-use

Land-use	Average maximum damage [€/m ²] (2006)
Residencial	760
Commerce	621
Industry	534
Agriculture	0.77
...	...

Huizinga et al., 2006

RESULTS

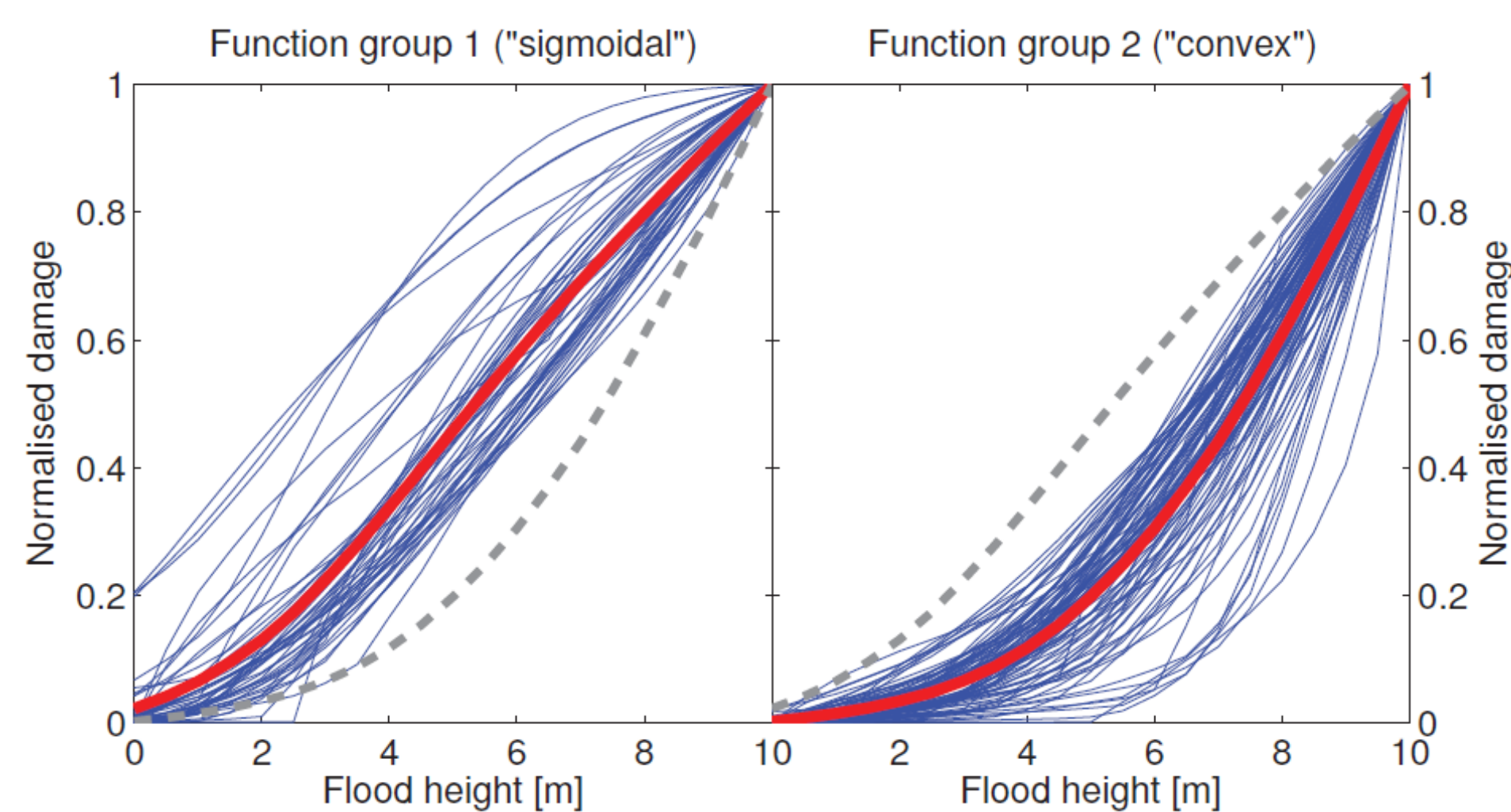
Damage estimate



(Bilbao)

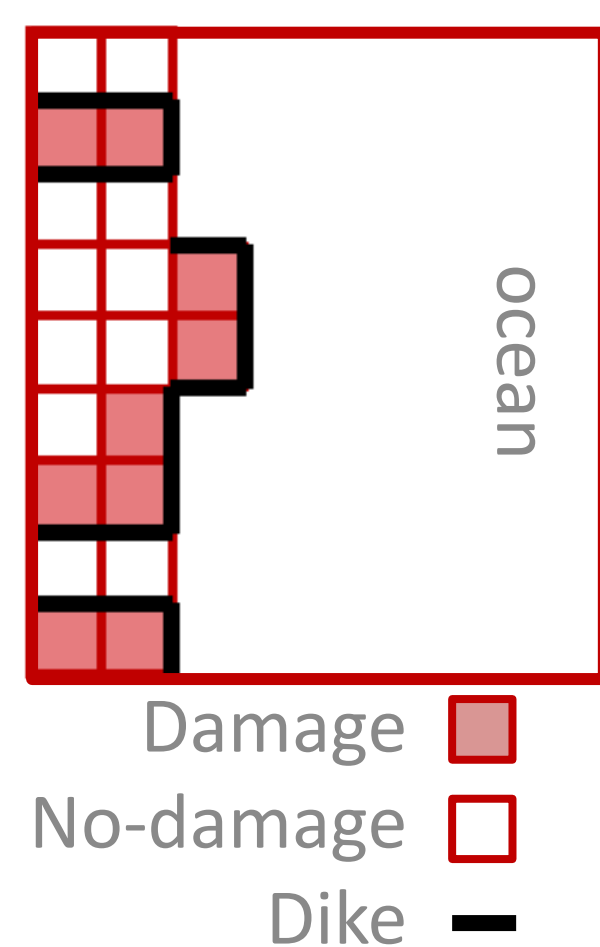
Sum of damages across all land-uses and pixels and flood heights.

Damage functions for 140 cities

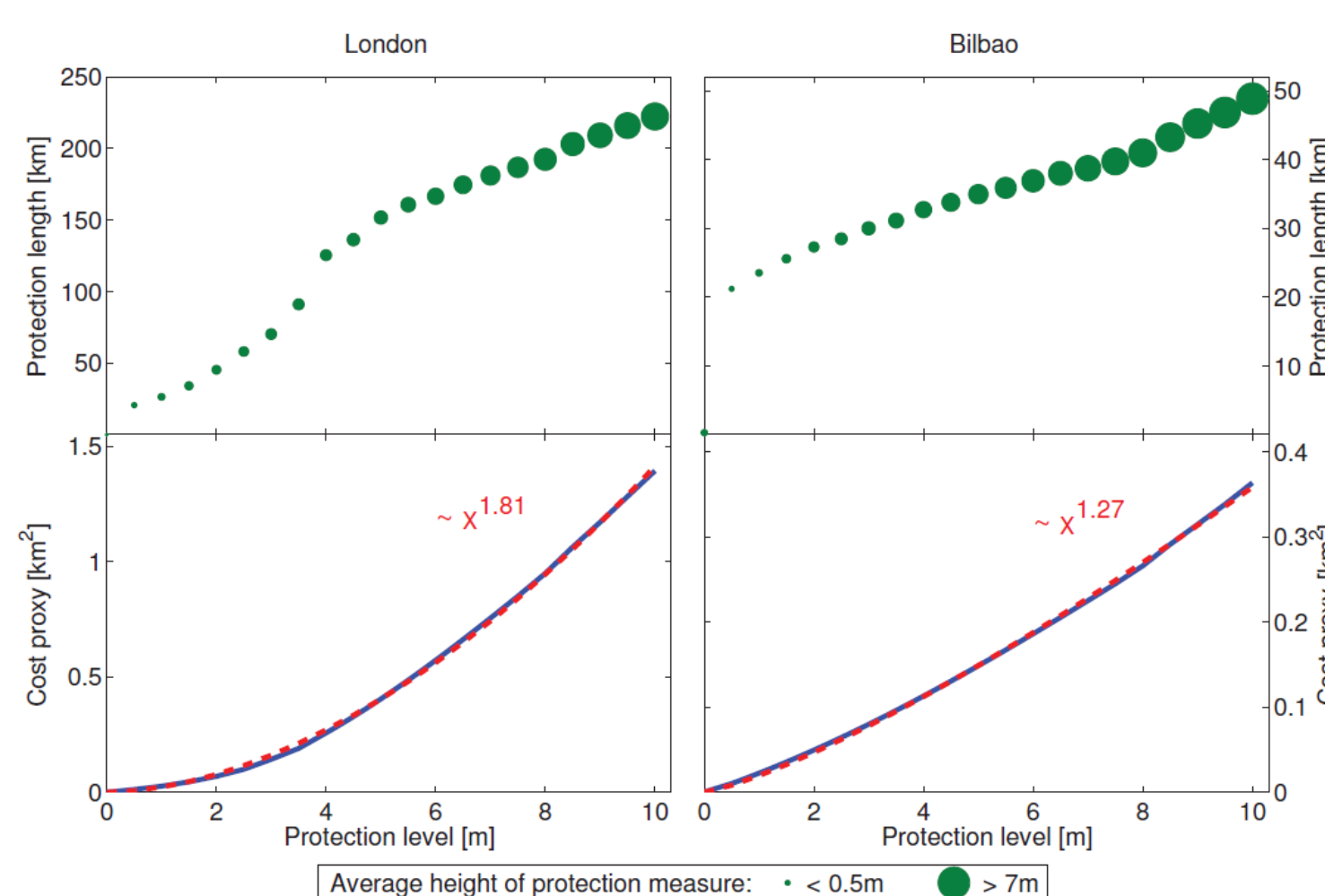


ADAPTATION

Assumption: First "damaged" cells needs protection



Protection length and height



? Expand the portfolio of adaptation options:
?
Which options?
How to simulate them?
Socio-ecologic barriers?
How to dialogue?
?

Conclusions:

- First step towards a systematic assessment of coastal adaptation.
- Expanding the option portfolio is contingent to more impact-adaptation community dialogue.