

# Pan-European coastal vulnerability: developing a new coastal behaviour data product, EMODnet Geology

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Identifying potential risks faced by coastal-zone populations is becoming increasingly important to inform coastal managers on sustainable policy and practice. This so-called coastal vulnerability has been assessed, quantified and mapped using a wide variety of approaches, focussing on hazard, risk and resilience.

## Steps to a pan-European assessment of coastal vulnerability

- Create literature database
- Conduct case studies of coastal vulnerability (risk/hazard/resilience)
- Extract maps and generate associated meta-data
- Geo-locate maps and generate associated meta-data
- **Harmonise data to develop a simple and uniform pan-European legend**



Example maps of coastal risk, hazard, resilience, vulnerability from existing studies; > 100 maps geo-located.



**Harmonised data** indicating lower, intermediate and higher coastal vulnerability (light to dark blue; grey line = no data available).

Our research indicates incomplete coverage by existing studies. Using data from existing EMODnet products such as shoreline migration, geology and bathymetry, we will develop a basic coastal vulnerability index that can be validated against existing studies and used to fill the gaps. The resulting applied data product will help raise awareness in the general public and facilitate the work of coastal policy makers, planners and practitioners.