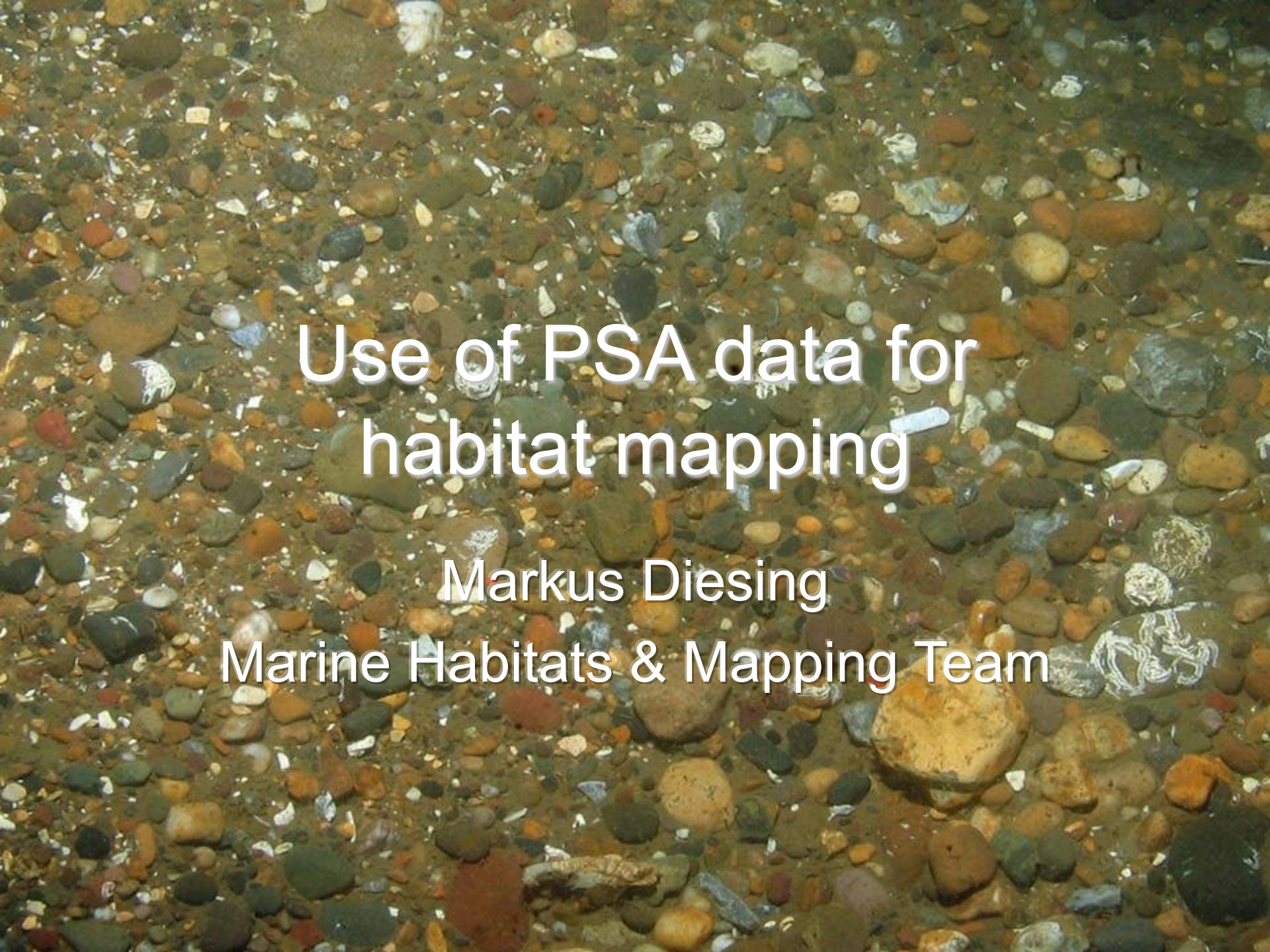
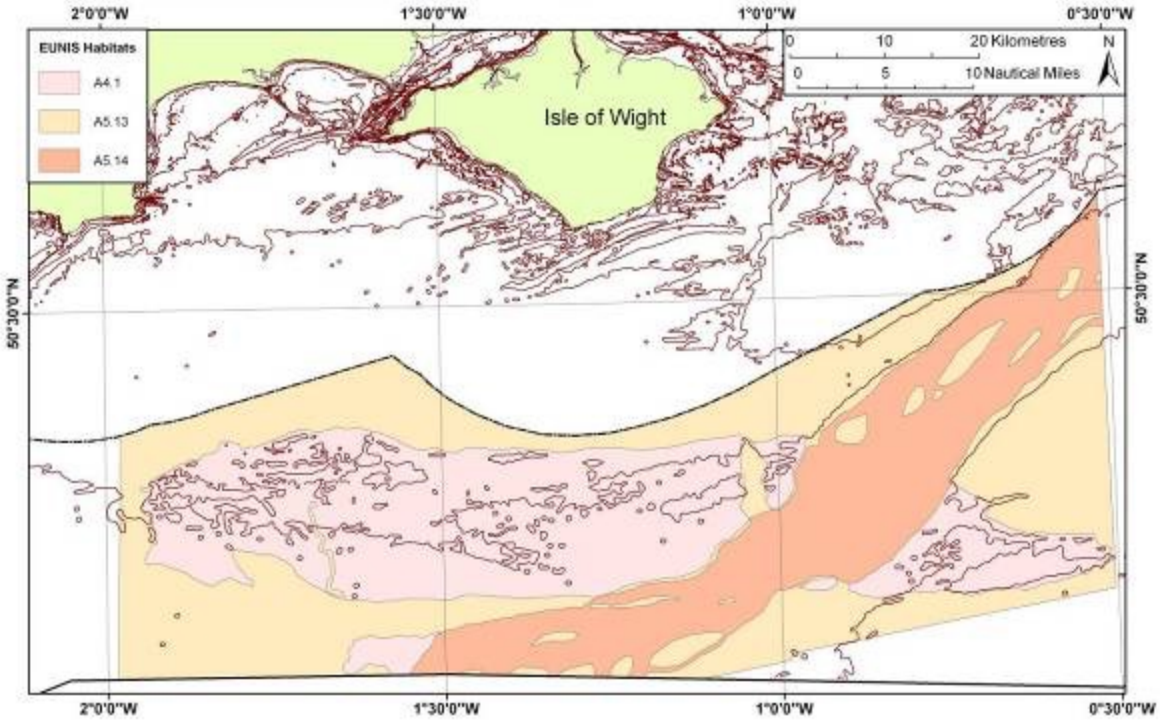


Use of PSA data for habitat mapping

Markus Diesing
Marine Habitats & Mapping Team

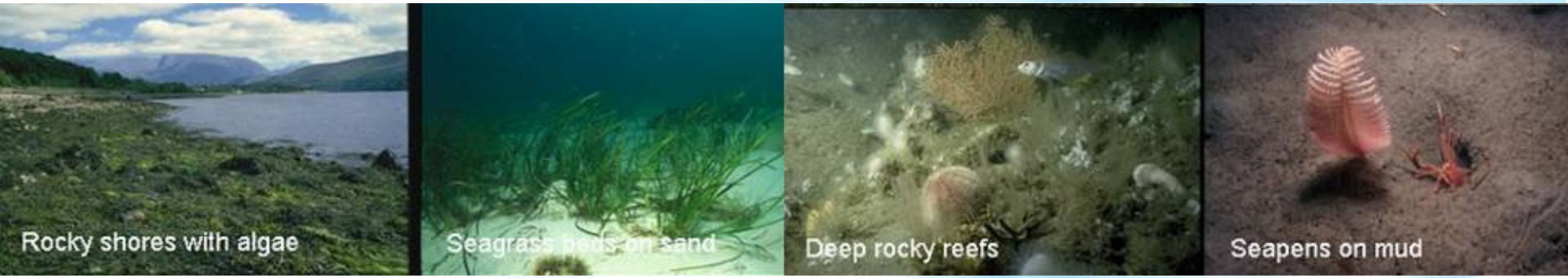
What is habitat mapping?

- Plotting the distribution and extent of habitats
- Output: map with complete coverage of the seabed showing distinct boundaries separating adjacent habitats



What are habitats?

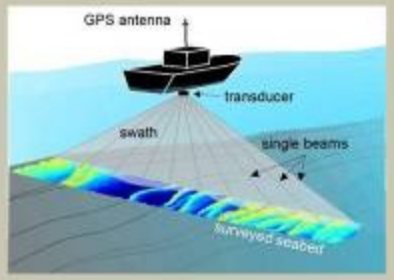
- Place where an animal or plant lives
- Place where a community lives
- Physical and environmental conditions that support a particular community
- Often used synonymous with biotopes



Cefas

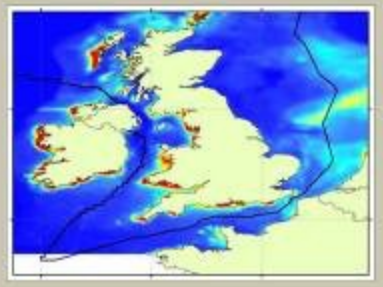
How do we map habitats?

Input

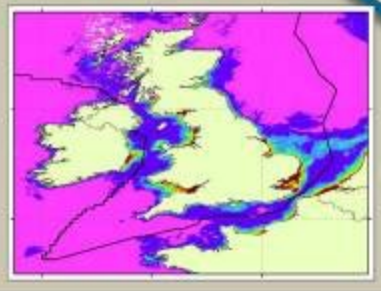


Acoustic mapping
Multibeam
Sidescan Sonar

Ground-truth sampling
Grabs, trawls, video

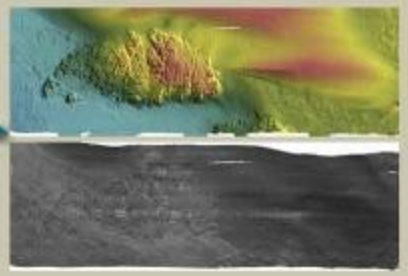


Modelling
Waves, tides



Remote sensing

Product



Acoustic base maps

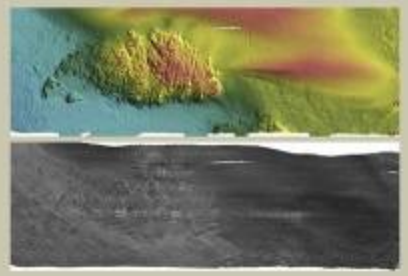
Substrate
Biota

Exposure

Biological zones

How do we map habitats?

Product



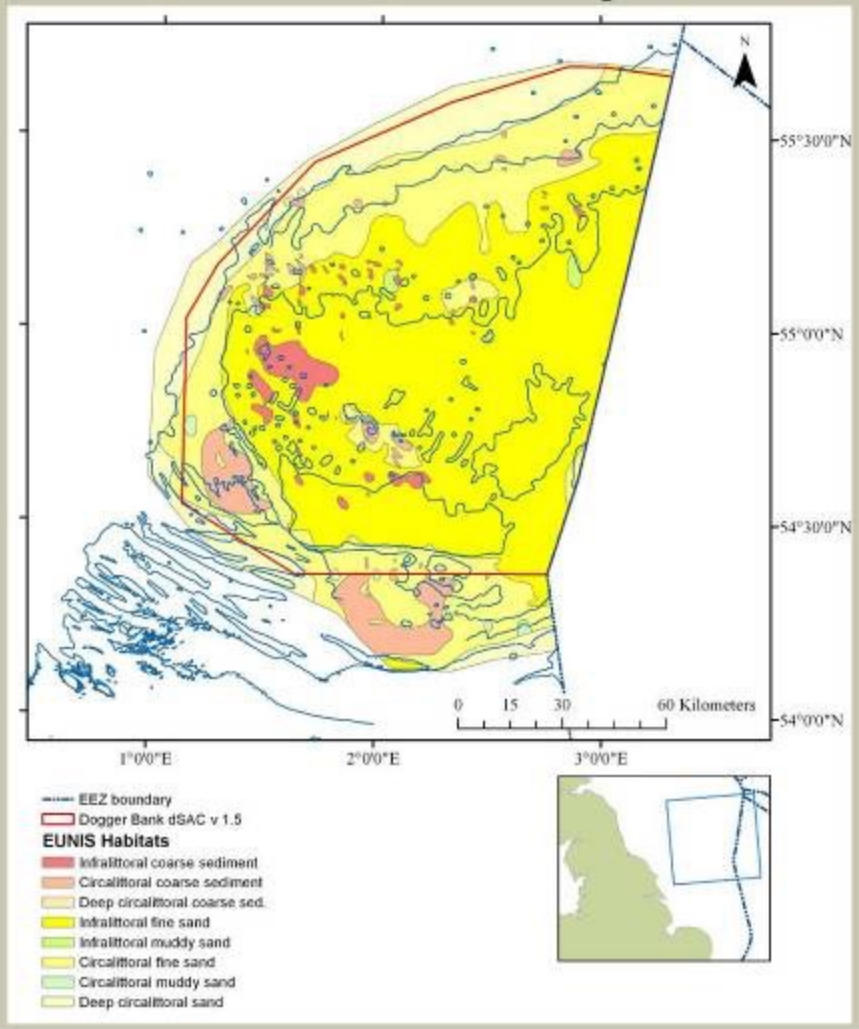
Acoustic base maps

Substrate
Biota

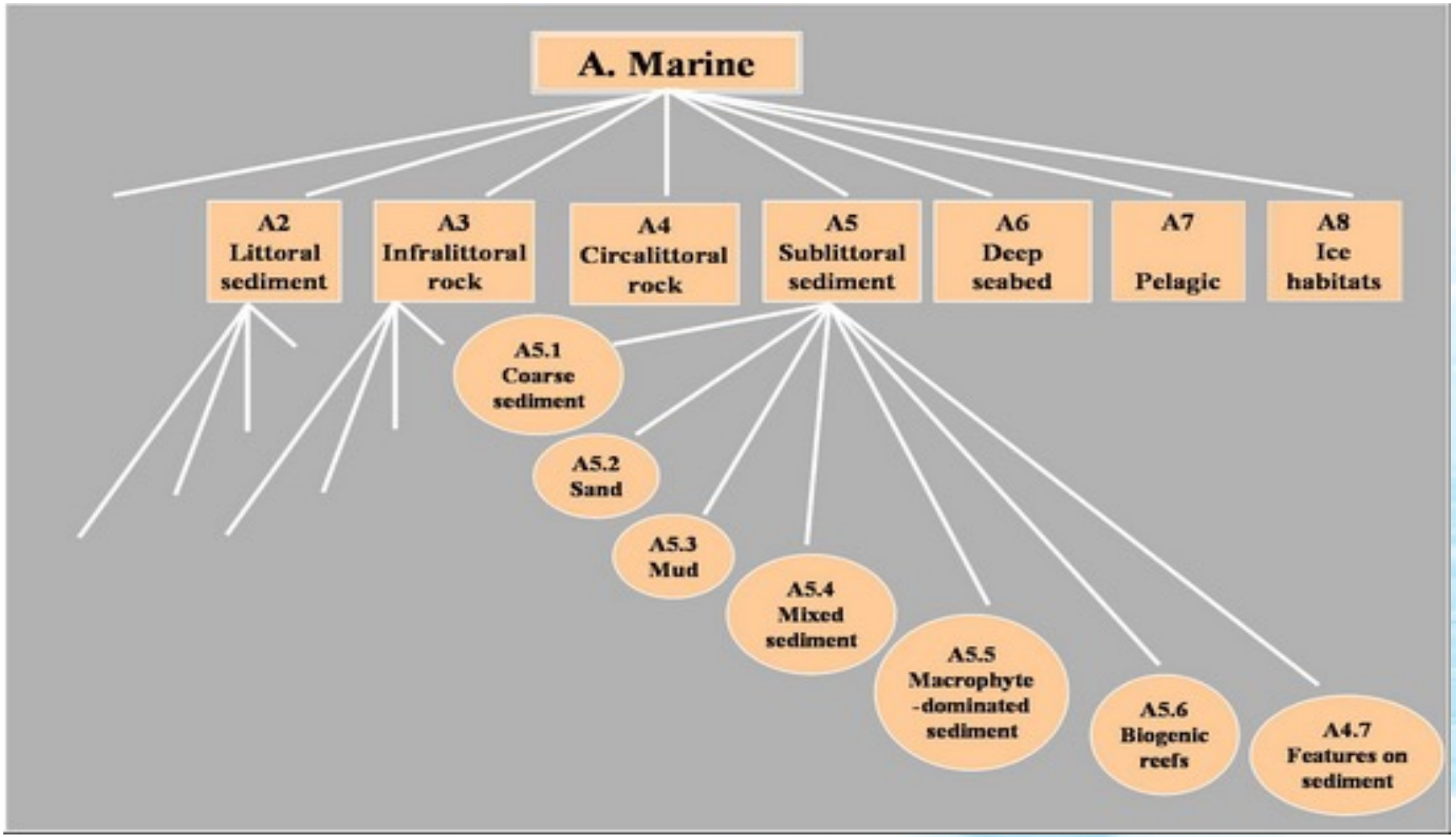
Exposure

Biological zones

Habitat map

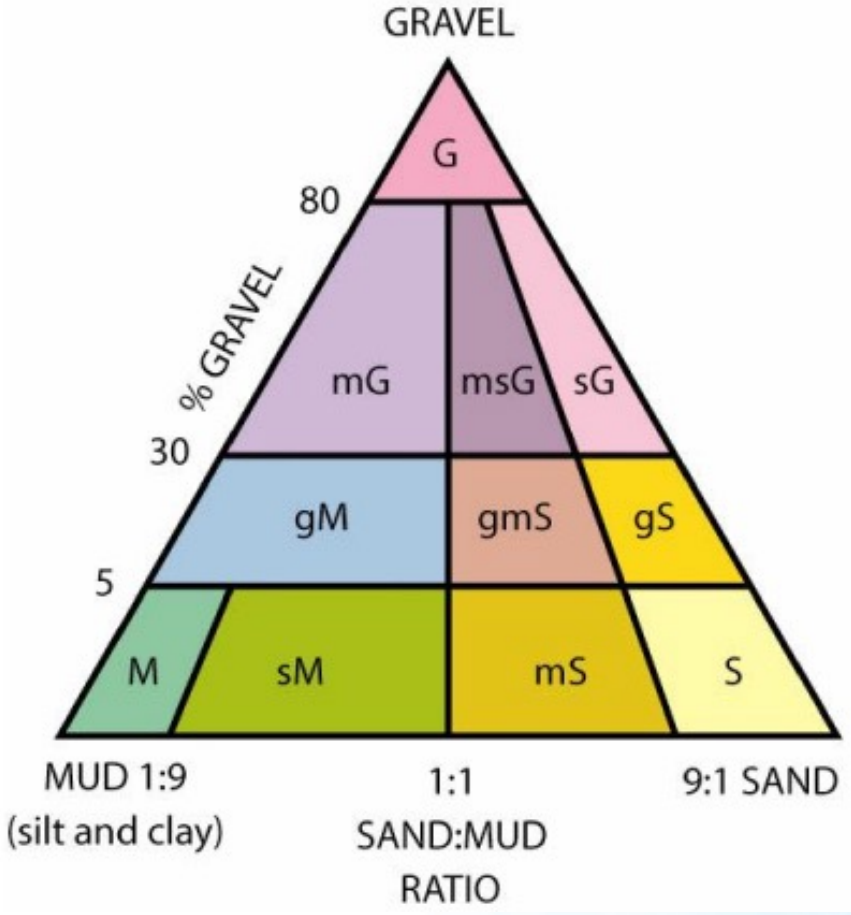


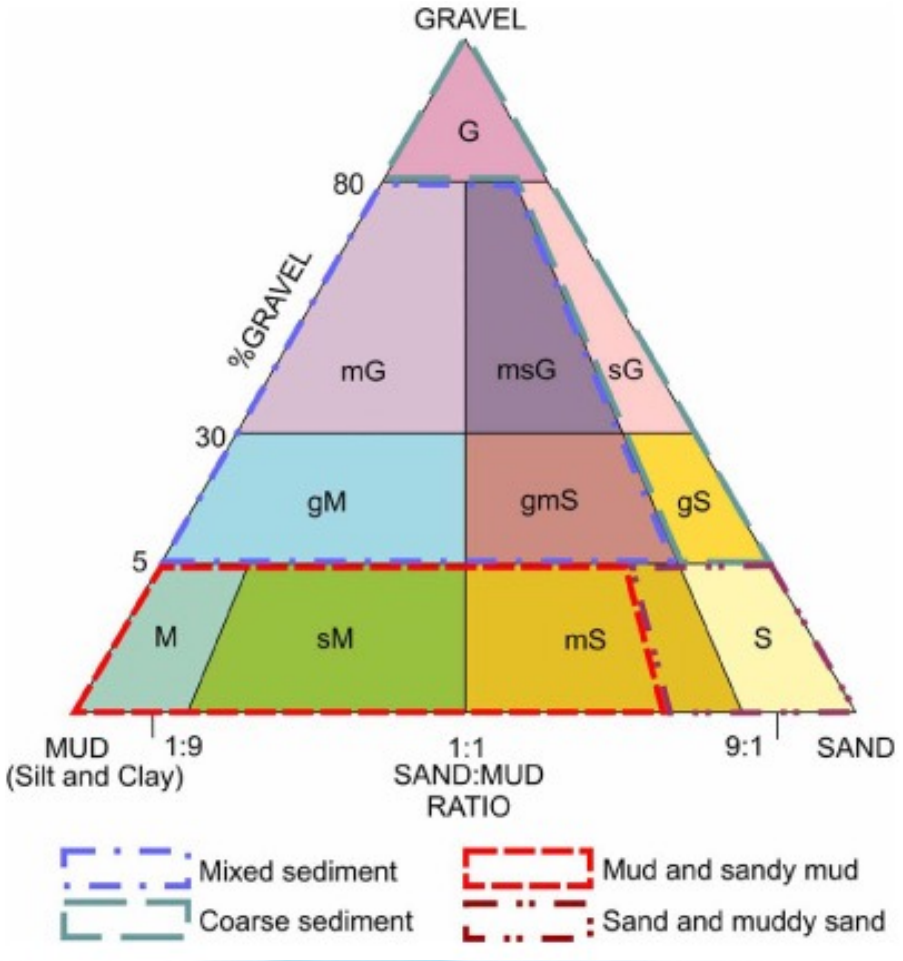
EUNIS classification



Cefas

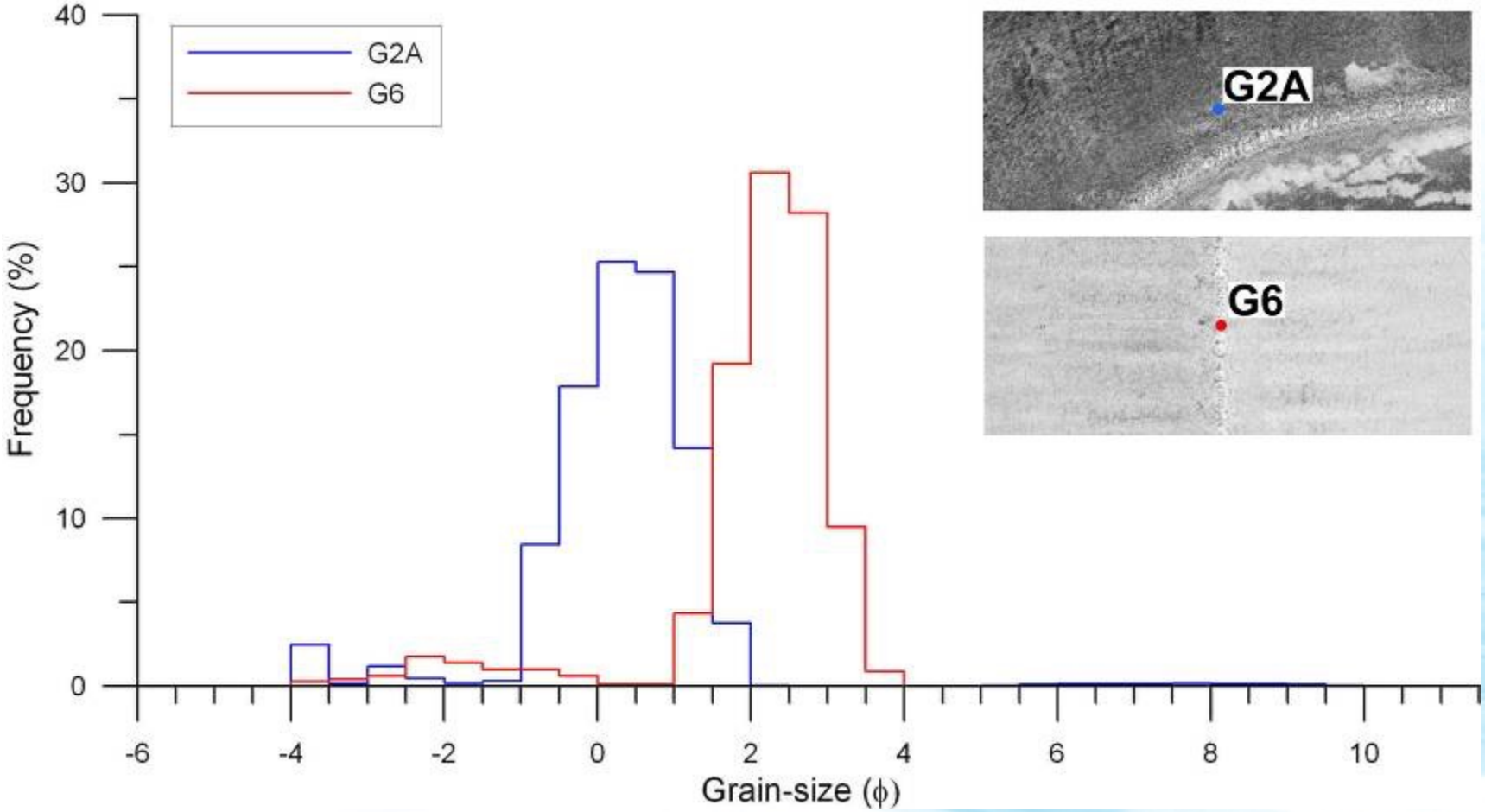
Reclassification





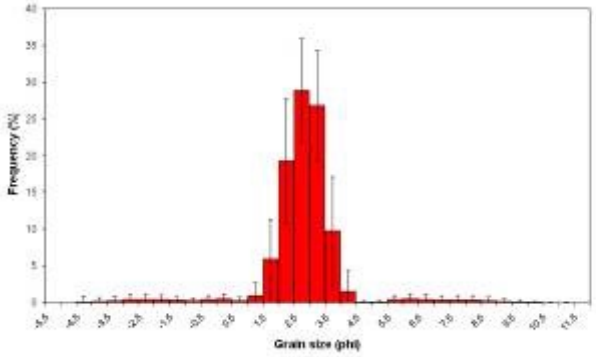
Cefas

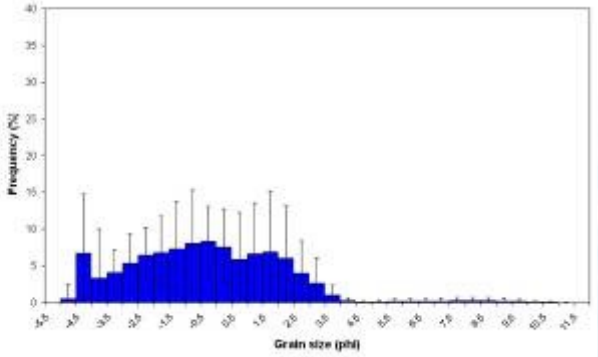
Same EUNIS class but…

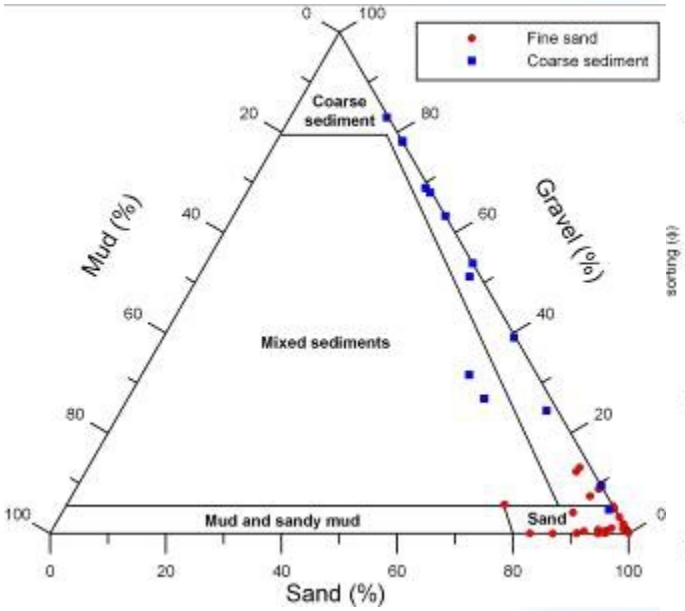


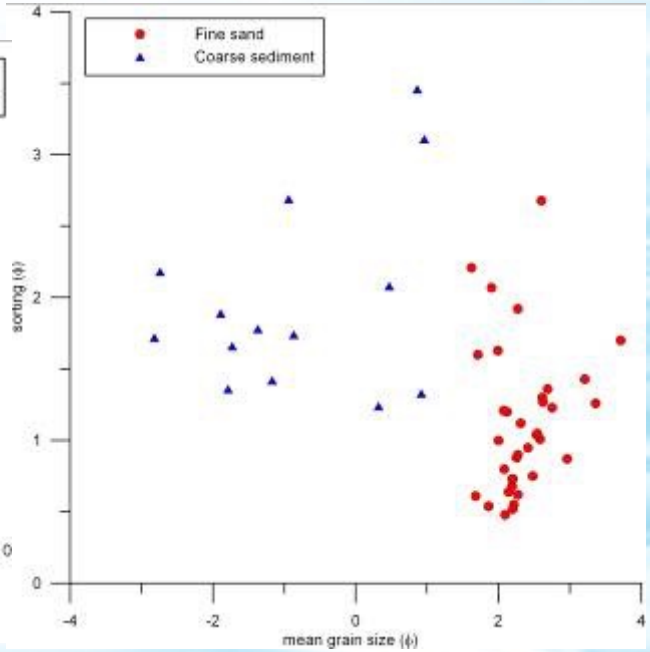
Cefas

Entropy analysis



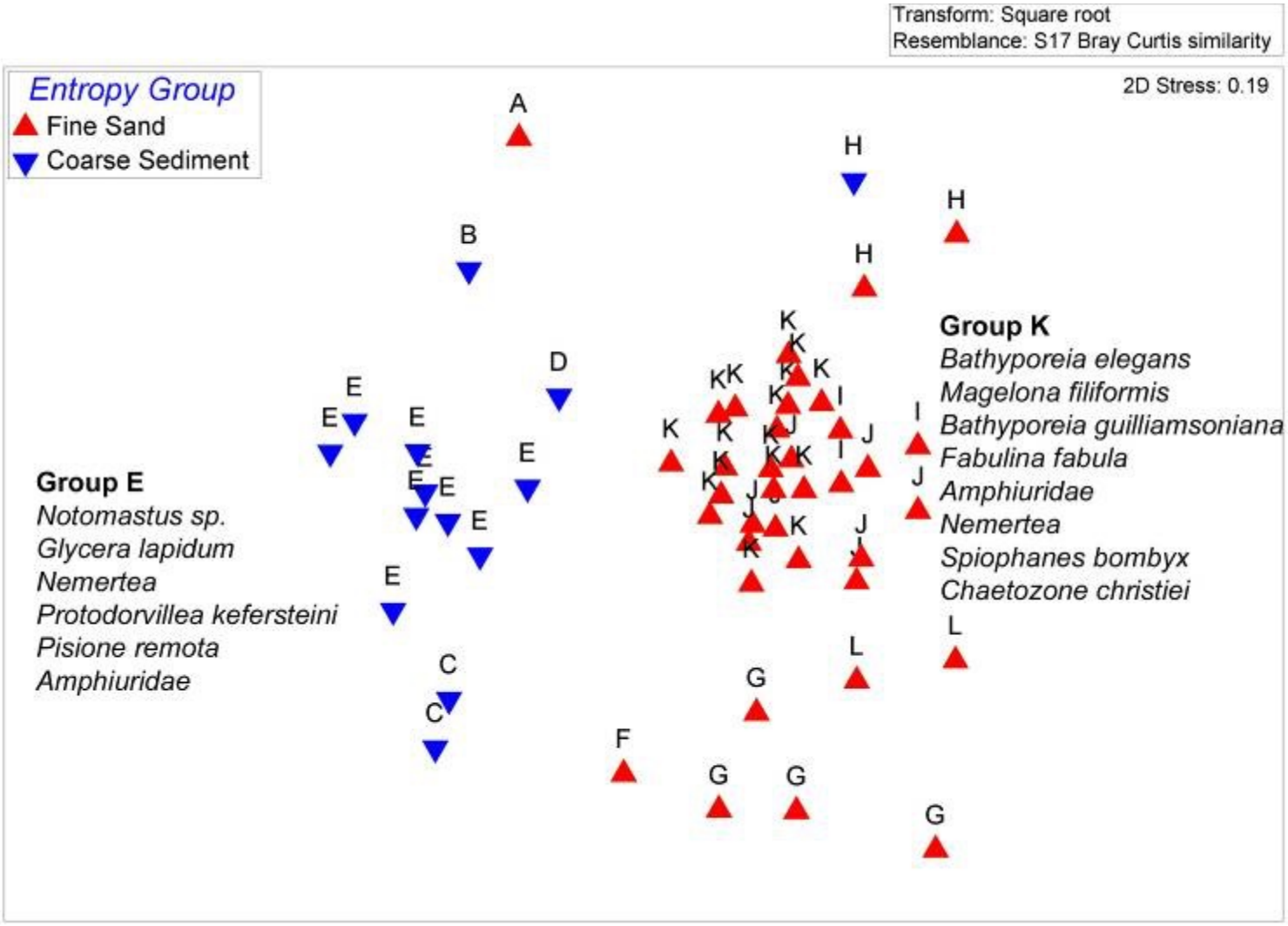






Cefas

Infaunal groups



Cefas

Current developments

- Attempt to link backscatter histograms, particle-size distributions and infaunal species abundance using Primer

  (abstract submitted to GeoHab Conference)

Cefas

Questions?