

Representativeness of sites across Europe

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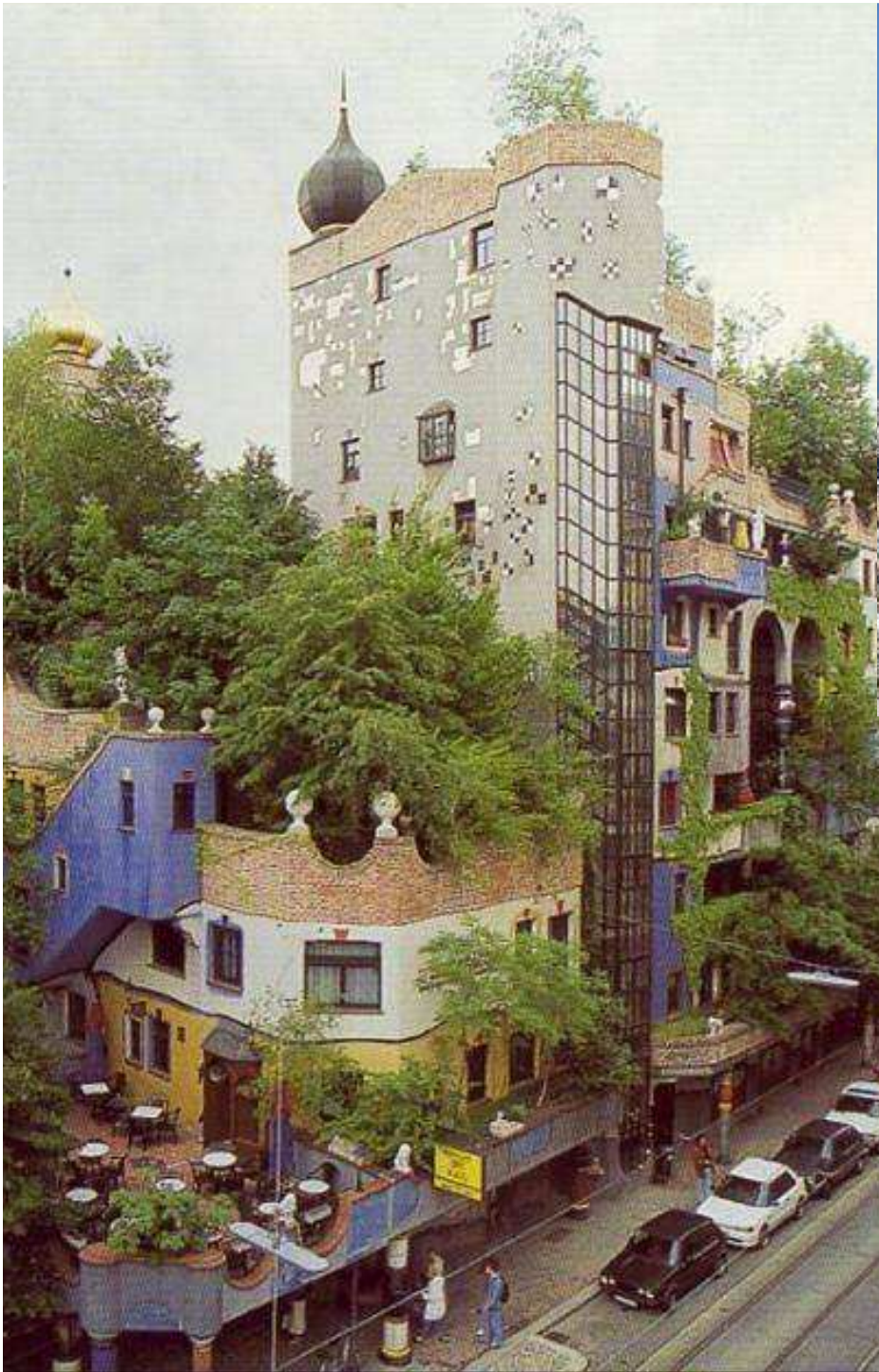


Presentation Plan

- Introduction
- Objectives
- AlterNet socio-ecological stratification
- First analyses







Objectives

Partition environmental and socio-economic variation to produce relatively homogenous strata

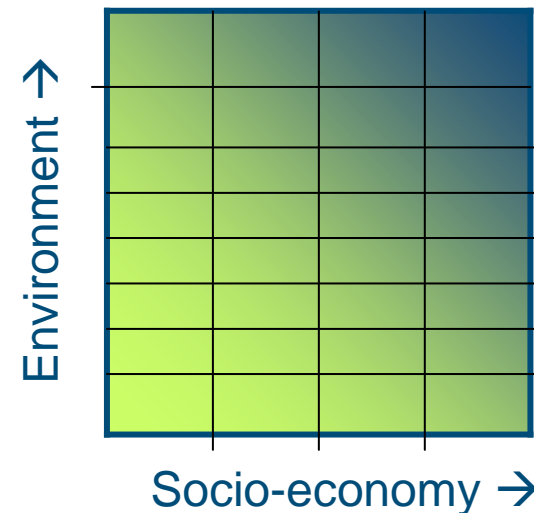
which can be used to

- explore representativeness sites
- help comparison between sites
 - similarities and differences drivers, impacts etc.
- identify underrepresented regions

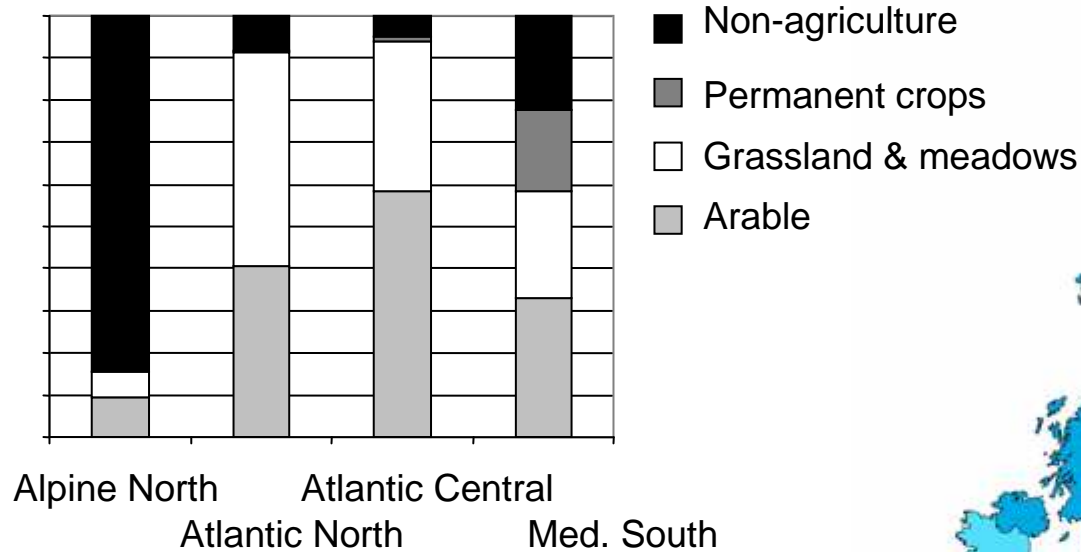
Socio-ecological stratification

- Minimum personal judgment
- Balance between complexity and functionality

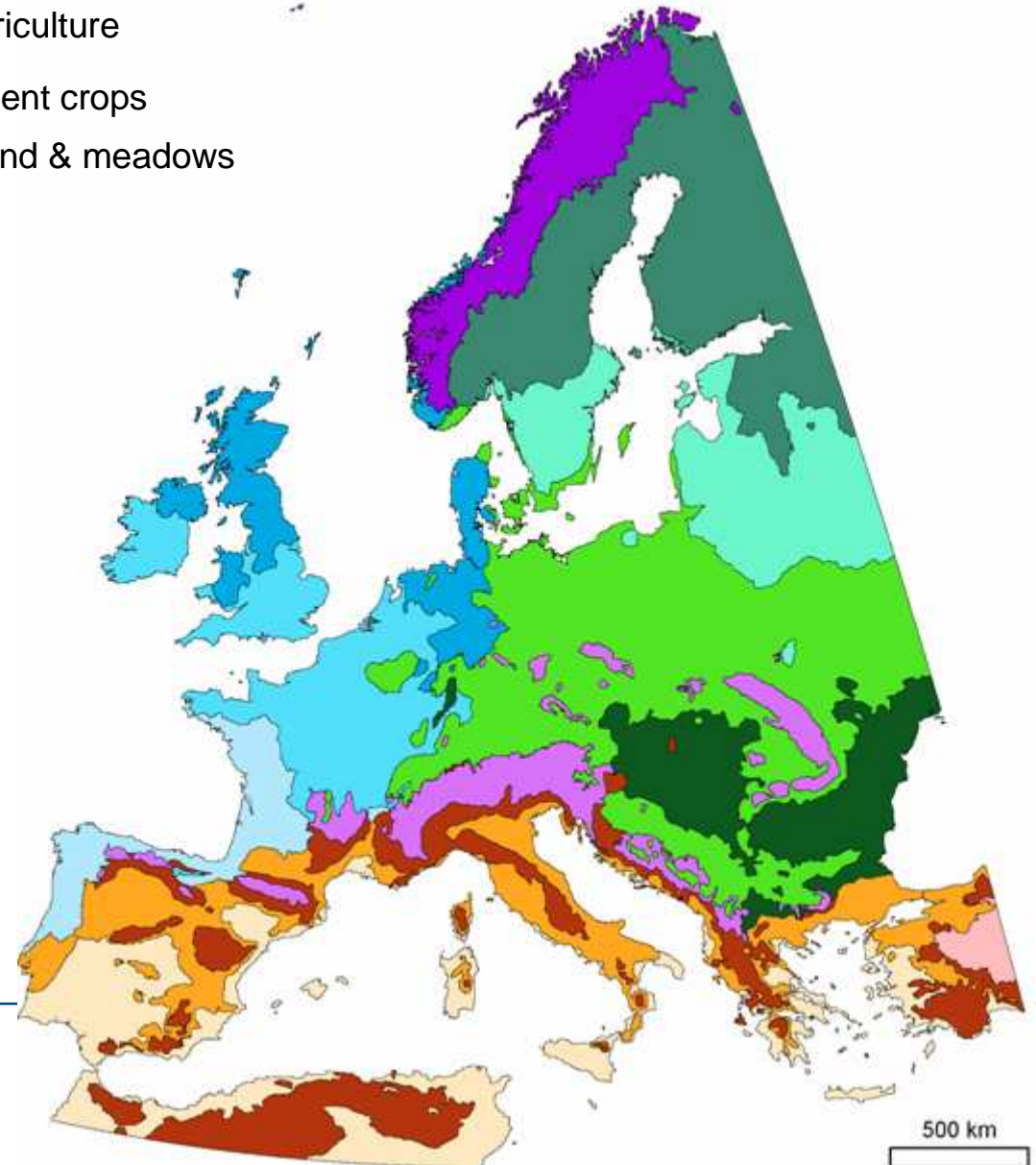
classes in a two-dimensional matrix based on primary gradients



Environmental Zones of Europe



- climate
- species
- land use
- env. pressures
- ...



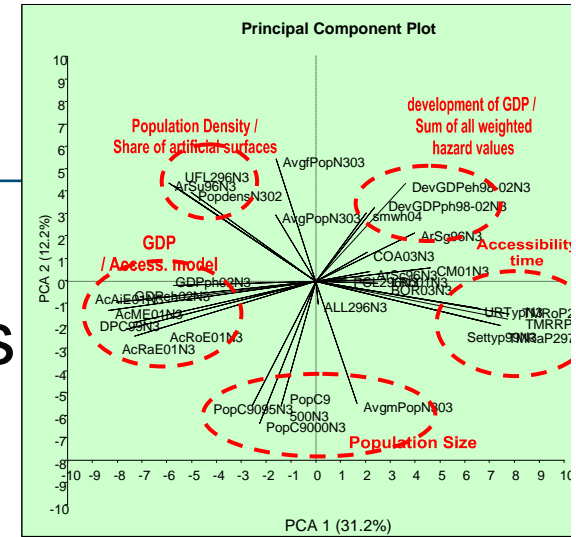
Metzger *et al.* GEB 14:549-563

Jongman *et al.* LE 21: 409-419

Socio-economic zones

■ Screening socio-economic variables

- GDP
- population density
- accessibility



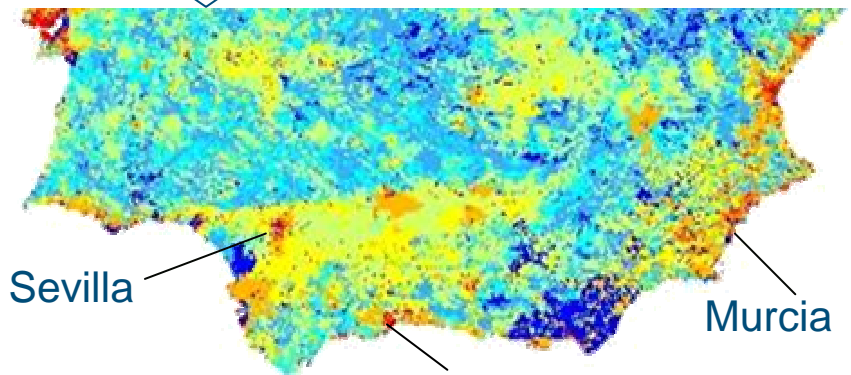
■ Resolution



regional statistics (NUTS)

Economic density

GDP/km²



1km grid

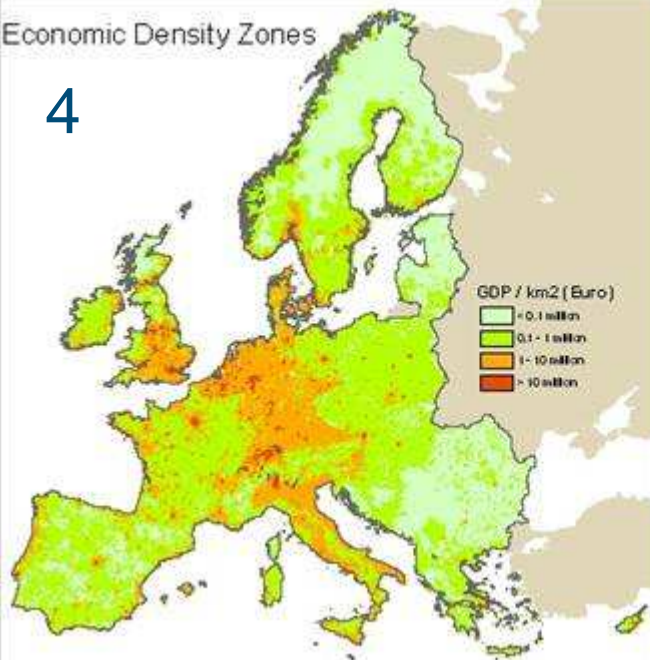
Environmental Zones

12



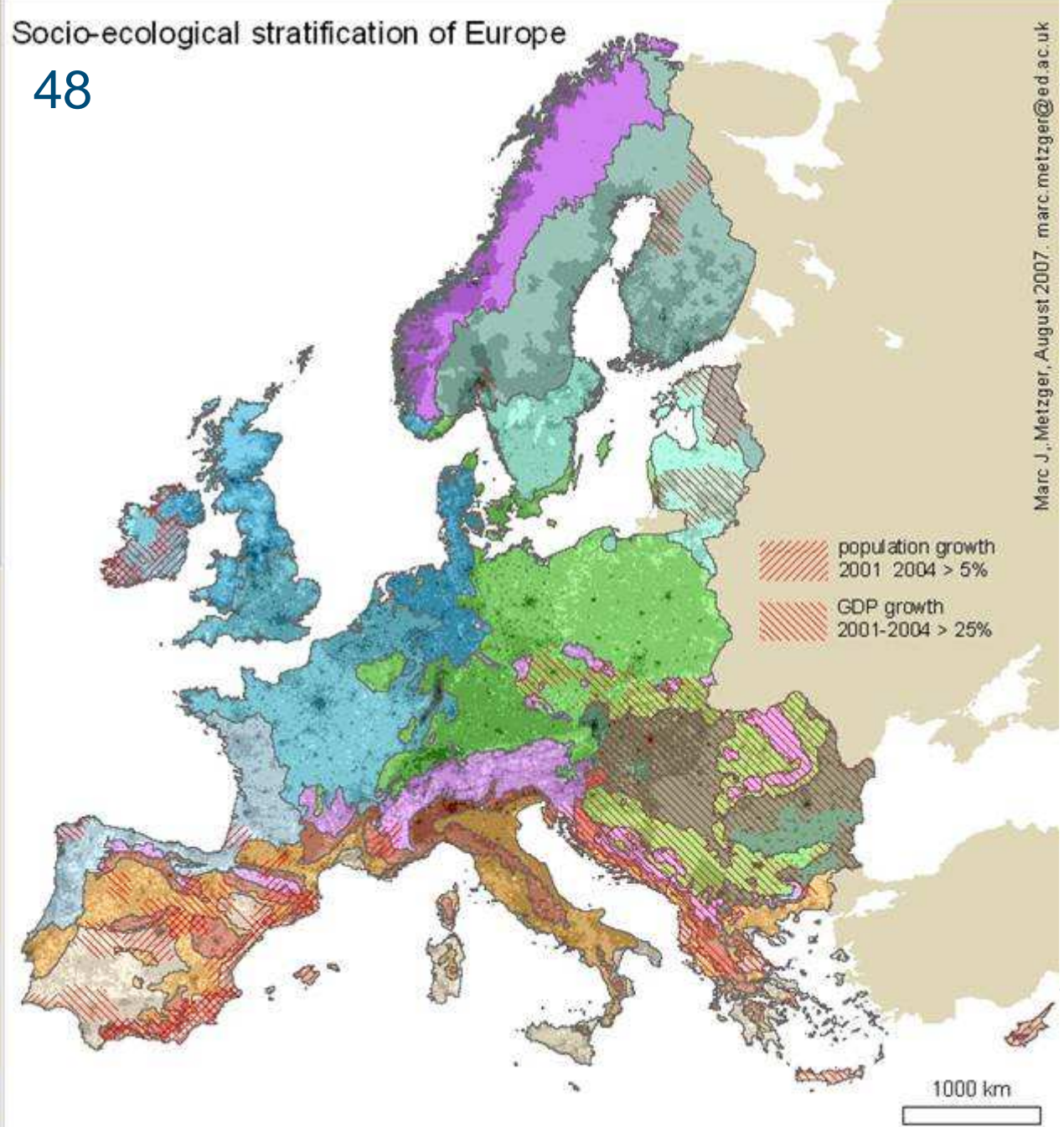
Economic Density Zones

4

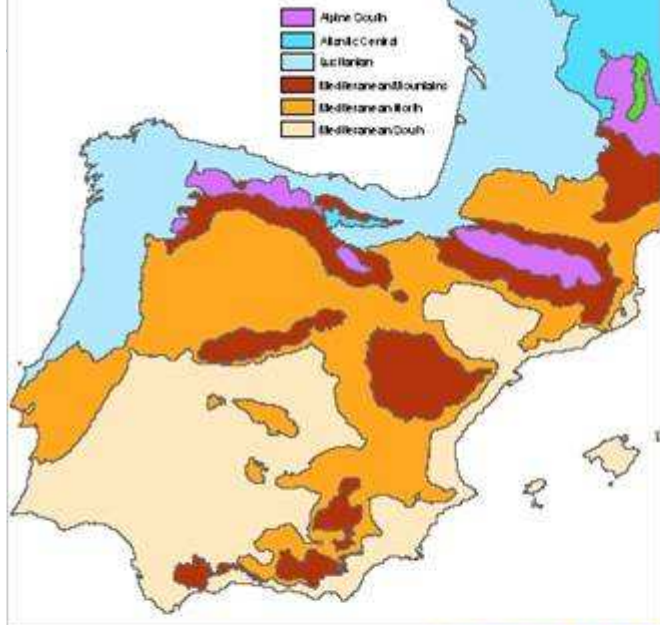


Socio-ecological stratification of Europe

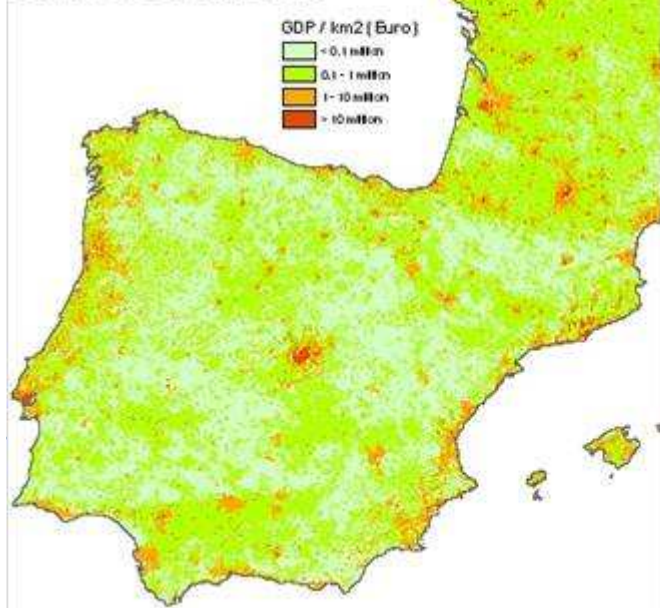
48



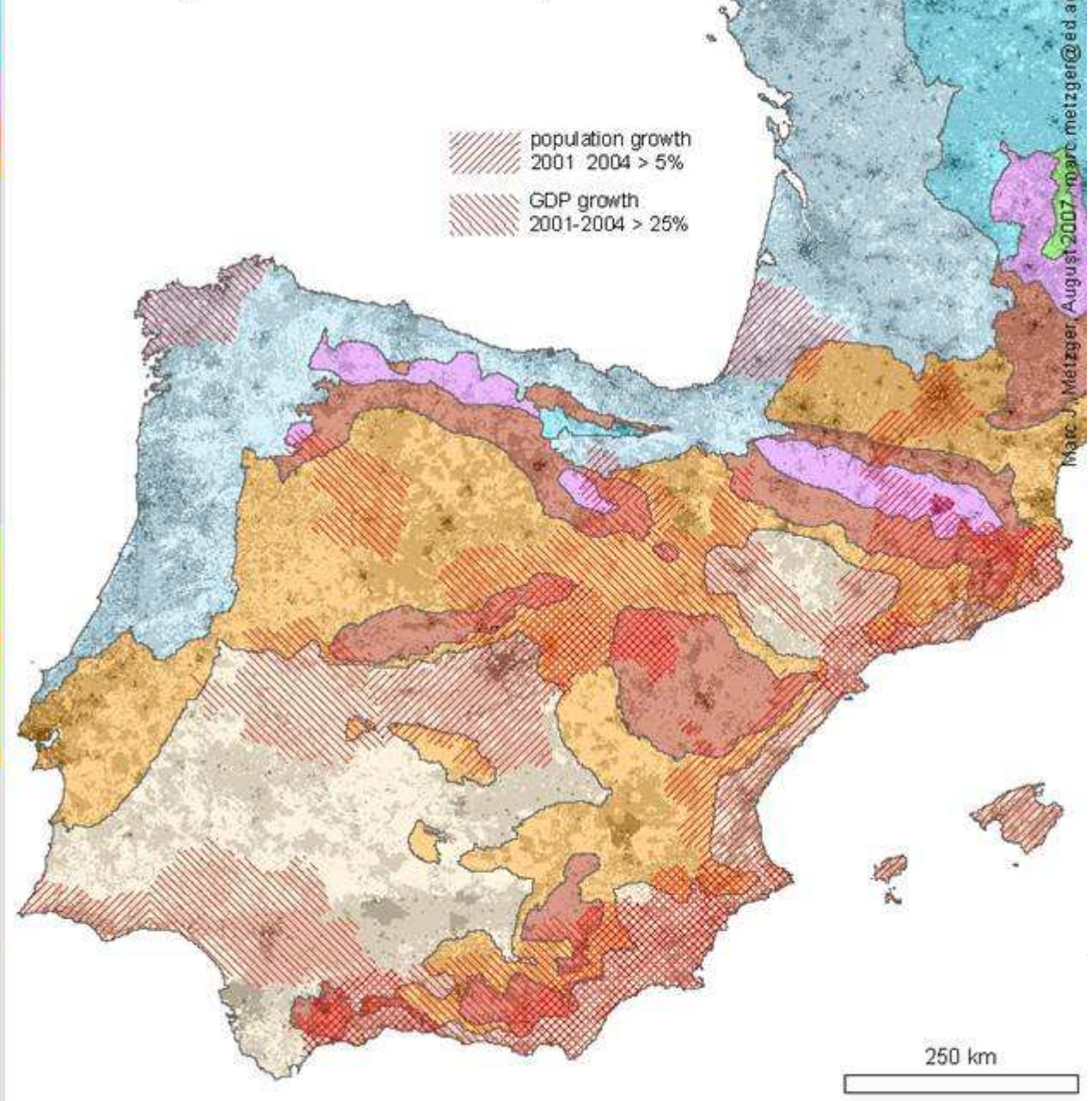
Environmental Zones



Economic Density Zones



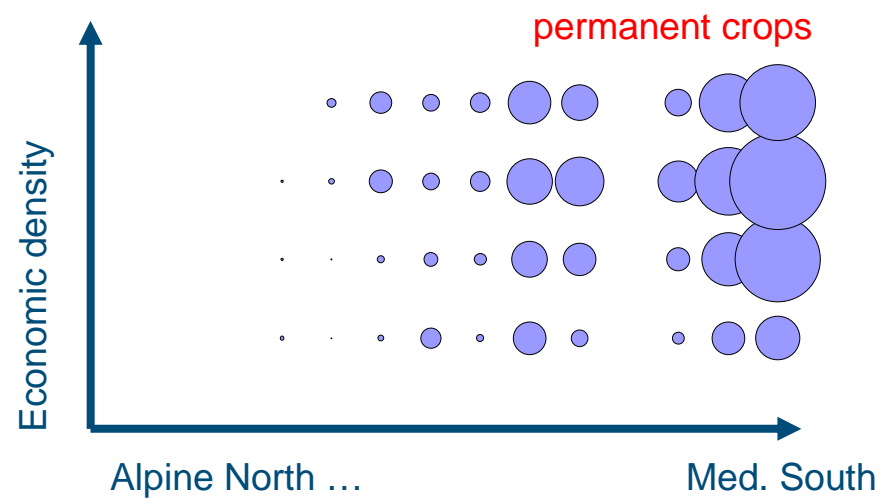
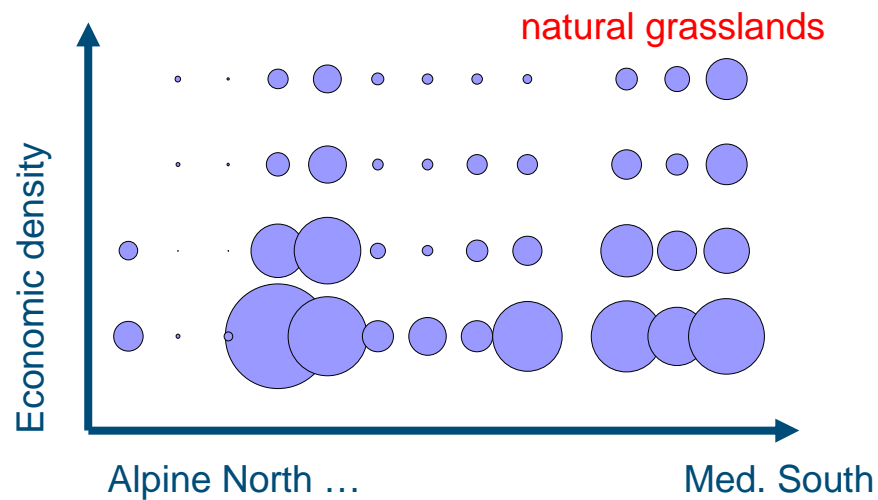
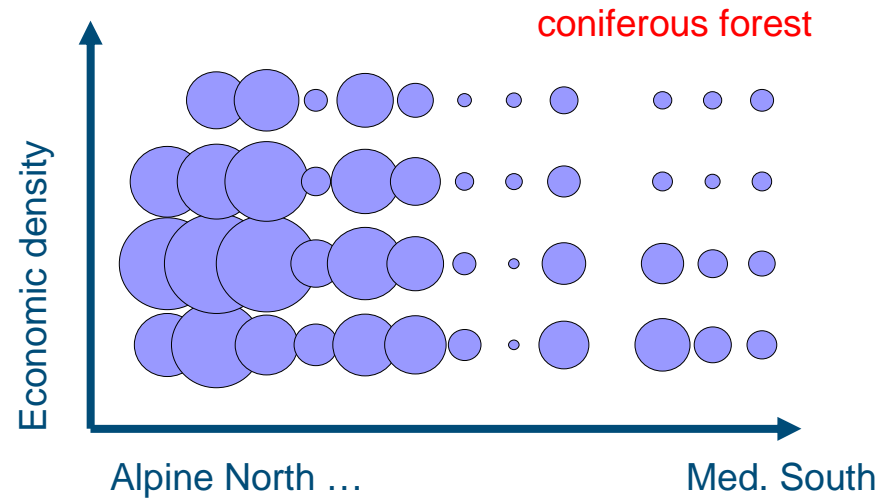
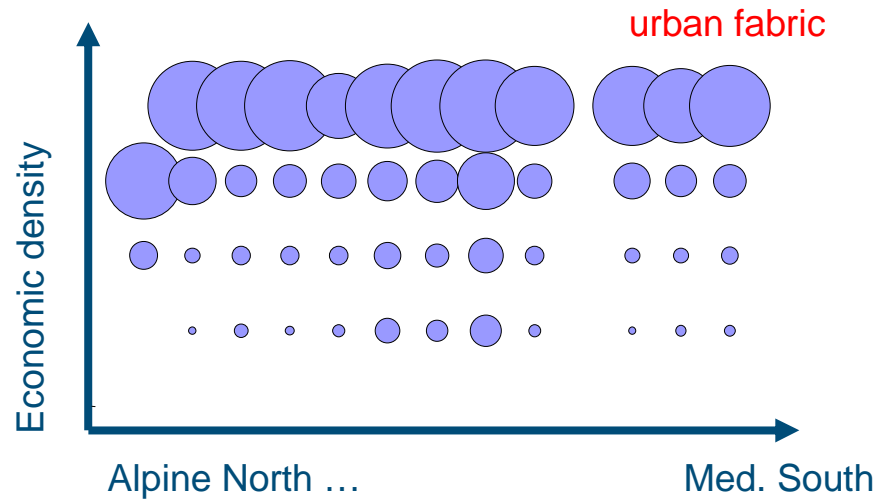
Socio-ecological stratification of Europe



Some examples of regions

	Boreal	Atlantic North	Continental	Atlantic Central	Med. North	Med. South
> 10 million	Oslo (NO)	Greater Manchester (UK)	Warszawa (PL)	Merseyside (UK)	Monacco (MC)	
€/km2						
1-10 million	Vestfold (NO)	Groningen (NL)	Stuttgard (DE)	Vlaams-Brabant (BE)	Vaucluse (FR)	Alicante (ES)
€/km2						
0.1 –1 million	Telemark (NO)	North Yorkshire (UK)	Namur (BE)	Calvados (FR)	Toscana (IT)	Sevilla (ES)
€/km2						
< 0.1 million	Lappi (FI)	Highlands & Islands (UK)	Brasov (RO)		Valencia (ES)	Kriti (GR)
€/km2						

Land cover stratified



All facilities



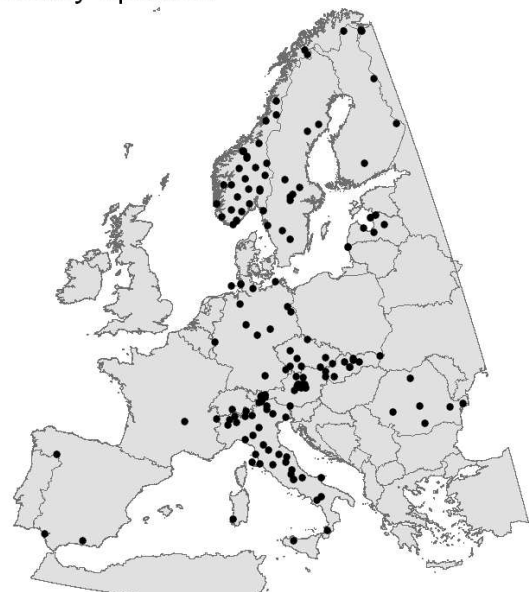
1083 sites
 1061 sites with
 coordinates

ICP Forest and IM



739 sites
 2 sites with coordinates
 !! Many countries without
 sites
 !! Very skewed
 distribution

Recently updated



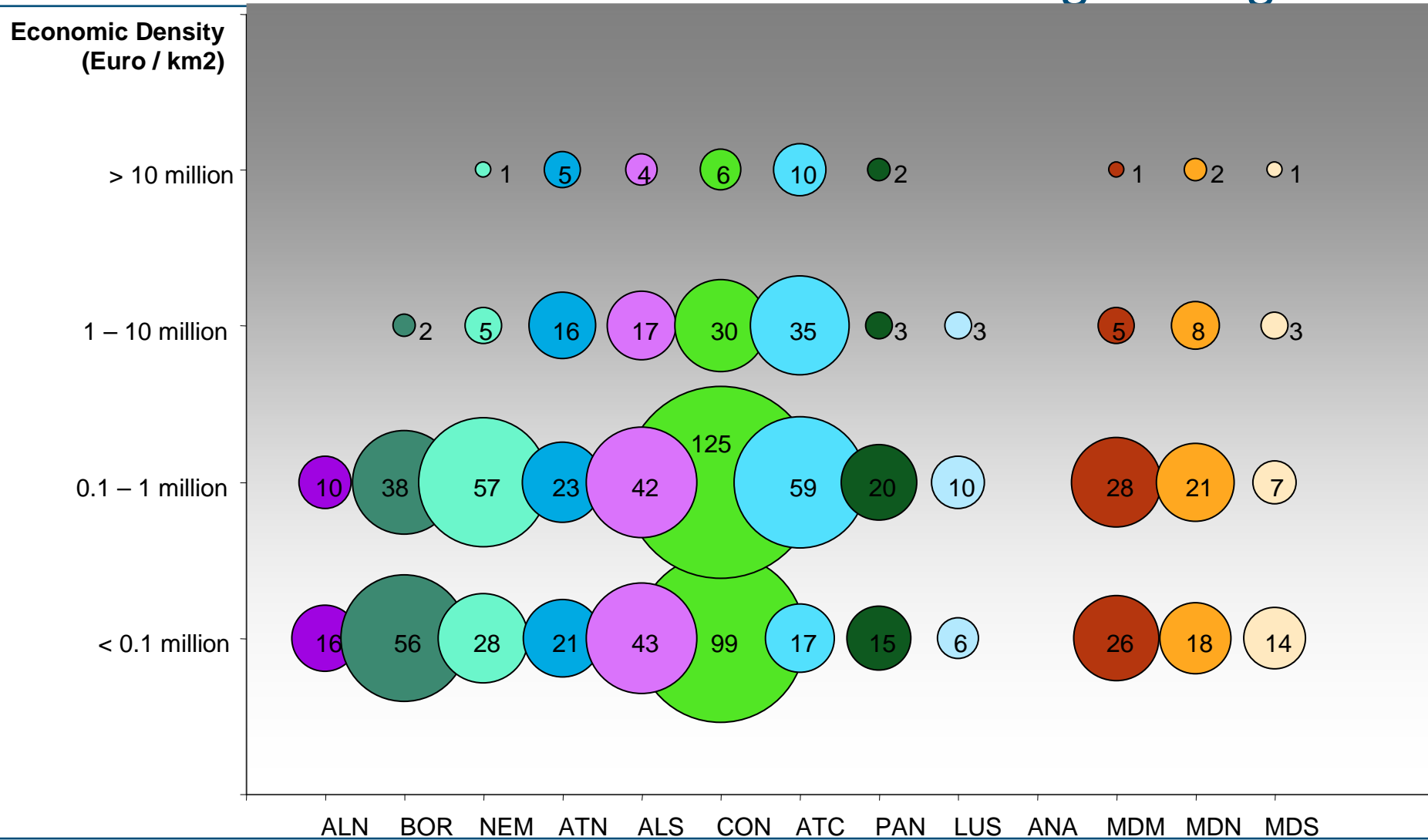
182 sites
 170 sites with
 coordinates
 !! countries without sites
 !! Very skewed
 distribution

ILTER

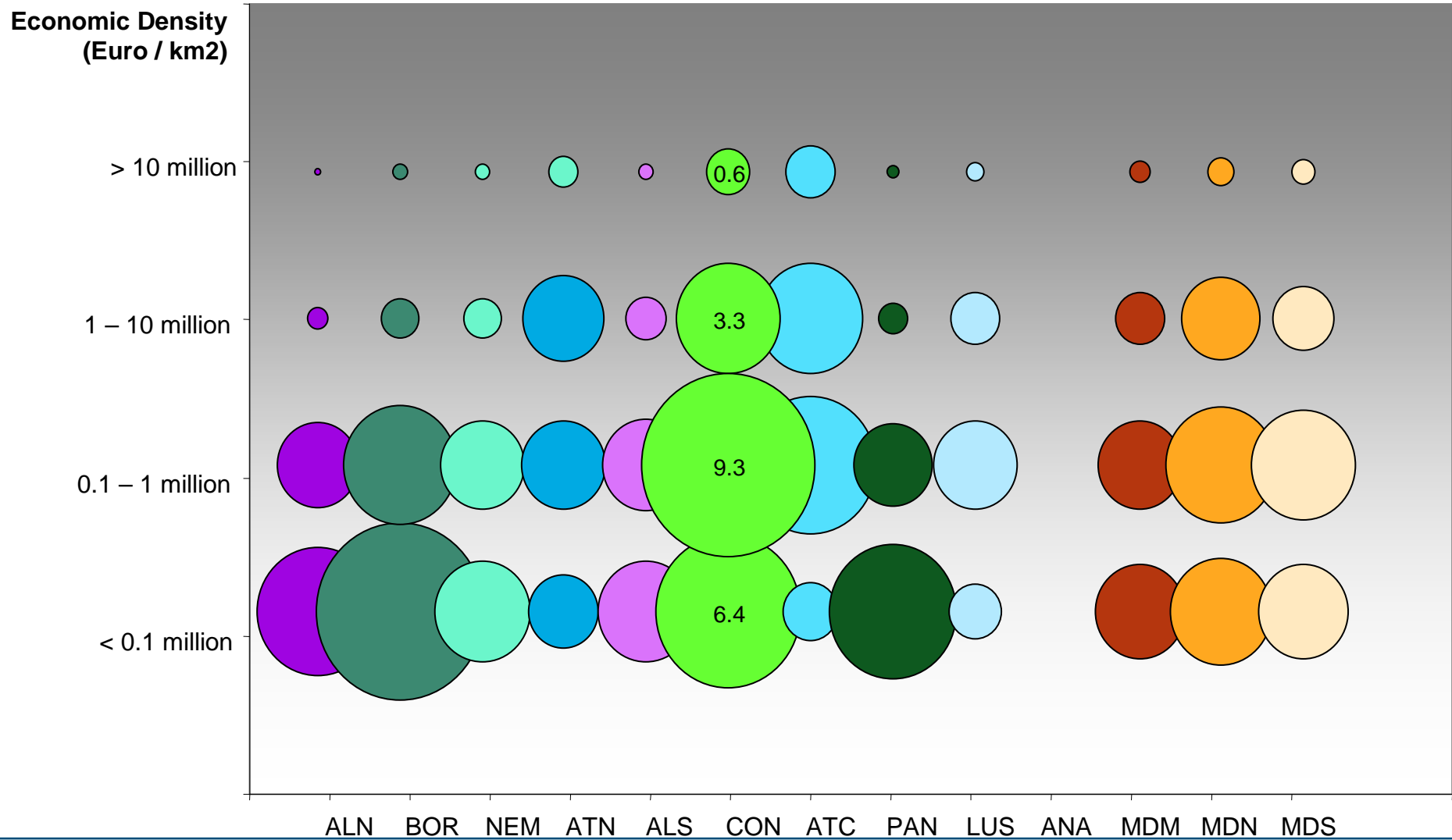


152 sites
 149 sites with
 coordinates
 !! Many countries without
 sites
 !! Very skewed
 distribution

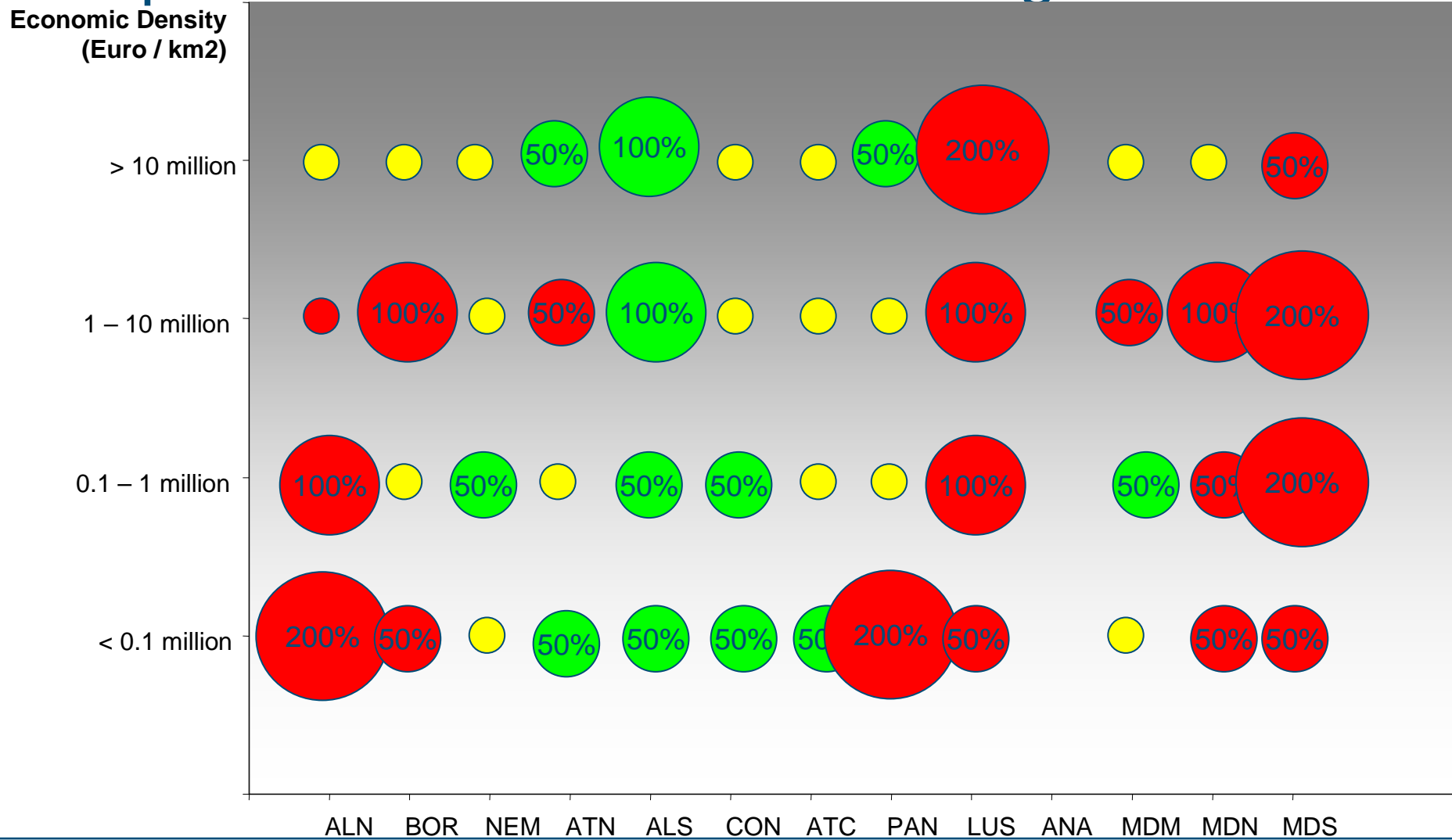
Number of sites across the socio-ecological regions



Relative area of the strata



Representation based on coverage of strata



under represented

over represented



Next steps

- Achieve greater completeness coverage to accessible data
- Importance access for European environmental science !
- Final analyses

Recently updated

