Aggregation and upscaling of scientific results for policy needs

Reviewing ELOISE research for policy and management - a digesting process

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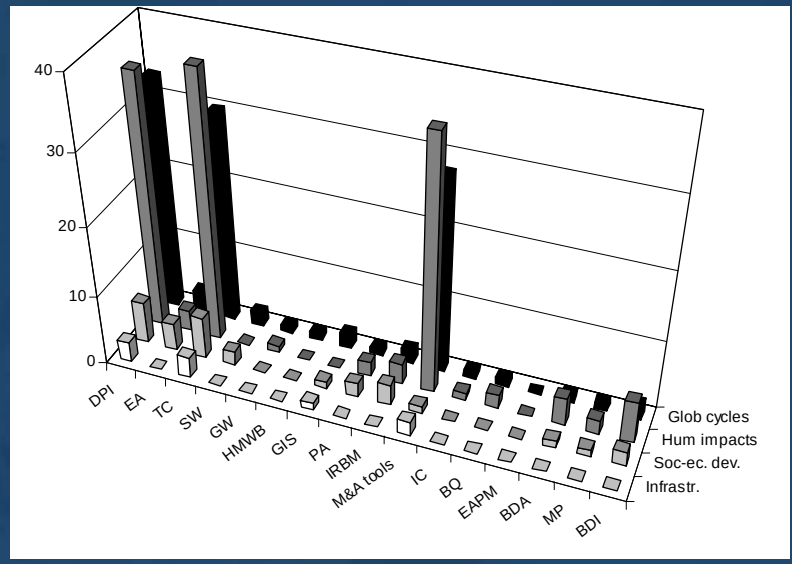
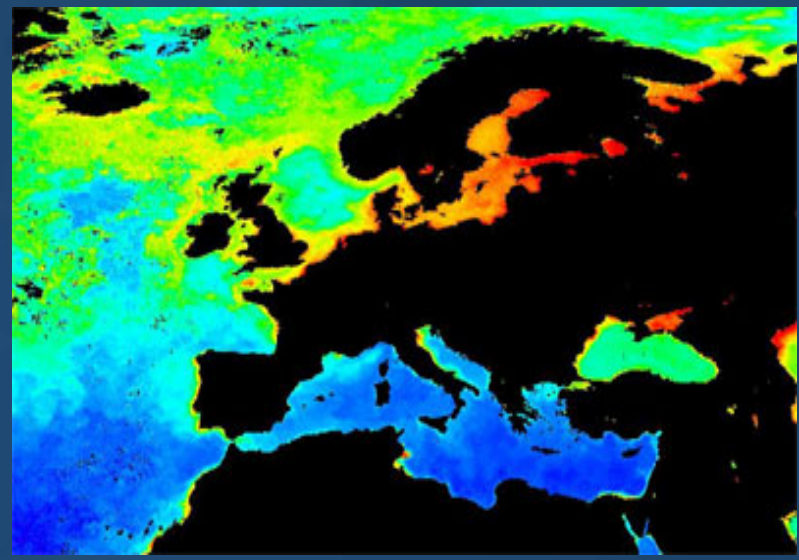
ELOISE?

- A large thematic research cluster funded by the EC
- contribution of the EC to the LOICZ core project of the International Geosphere-Biosphere Programme
- > 50? projects, 1994-2005, 6 pan-European conferences
- A science plan was drafted, but ..
- Submitted/funded projects were not distributed evenly





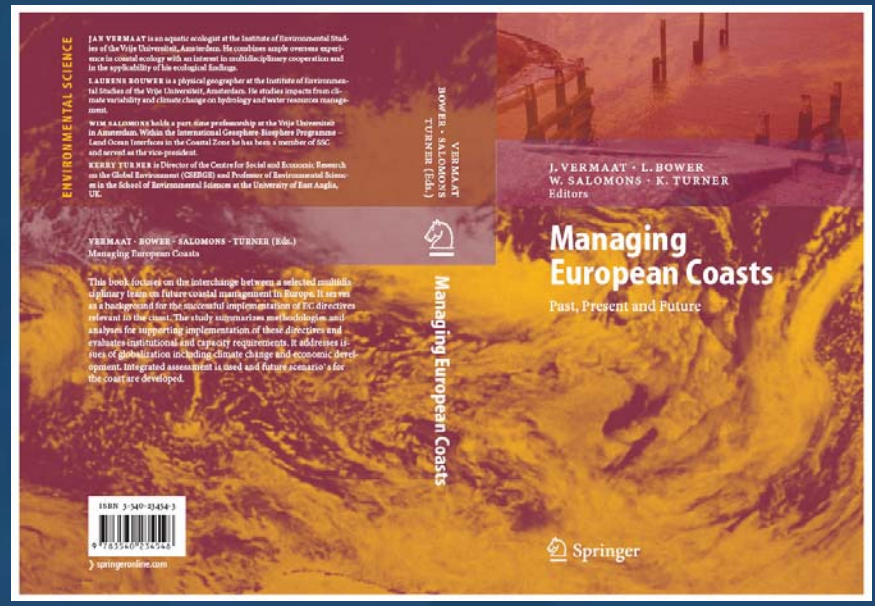
digesting ELOISE

- ‘Along the way’ a need arose for:
  - a comprehensive review of the wide range of research findings, tailored to CZ managers and other audiences
  - A mechanism to maintain accessibility in an economic fashion and beyond traditional means of publications

- Our consortium’s solution followed several tracks:
  - Collect project info in database at www?
  - Cross-cutting, thematic reviews from Dahlem-type workshops (see book, papers)
  - Thematic digests: new, accessible format, 2x peer reviewed, different audiences, pre-processed for these (see www.eloisegroup.org)

products

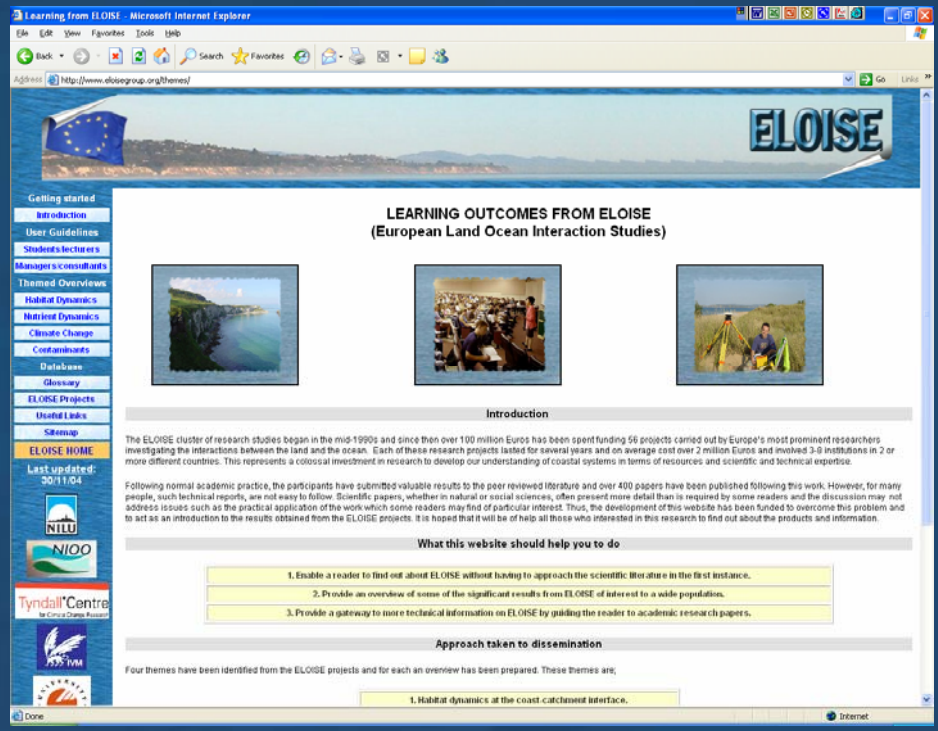
- Meta database (at www.eloisegroup.org)
- Multidisciplinary book of the Dahlem-type workshops (Vermaat et al., 2005; Springer)
- Comparative papers (e.g. Gazeau et al., 2004, ECSS 60)
- Conferences, proceedings
- Digests (at www.eloisegroup.org)



digests

Four themes that were considered policy-relevant:

1. Habitat dynamics at the coast-catchment interface.
2. Nutrient dynamics in European water systems.
3. Climate change.
4. Contaminant budgets in the coastal zone.



Scale conflicts in ELOISE

Both during the Dahlem workshops and in producing the digests we were confronted with scale conflicts at the natural/social sciences interface, for example:

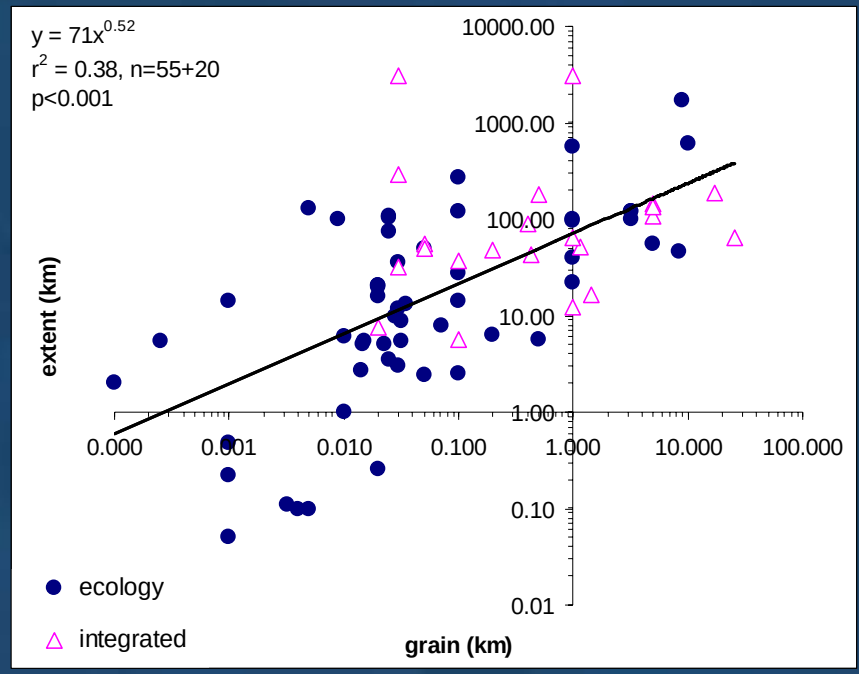
- Global, large-scale changes will have widely different impacts on the regional seas of Europe and particularly on their coastal zones. Common EU policy thus will also work out differently in different regional seas.

- Causes of degradation may be transboundary/multi-national; effects from local to regional sea scales

- Habitat degradation and loss operates at <km-scale. whereas Important drivers have a global scale. Necessarily legalistic interpretation of the habitat directive ignores the natural spatial dynamics of coastal waters.

scaling problems - 1

- Mismatch geographic scaling research findings and policy needs
- a natural friction between research content (mechanisms?) and policy or management demand (indicators, reference conditions, for policy evaluation)
- Relation with ‘the public’ at large: how to address the science – public – policy triangle?



Scaling problems - 2

- Integration of natural sciences with economics much better than with other social sciences: very little sociology or even social geography.

- DPSIR, used widely in Europe, is highly useful for scoping and fostering of disciplinary integration, but: it does not address SCALE
  - no spatial or temporal dimension;
  - spatial displacements, time lags and uncertainty are treated implicitly
  - Scale in governance: local to (multi-)national.

- A new generation is needed.

For the discussion

1. Bridging ICZM into sociology and social geography
   - needed?
   - what approach?

2. Upgrading DPSIR to include scale
   - correct?
   - how?

3. Friction between scientific information provision and management/policy needs
   - do we need more patience and better listening,
   - more lubricant
   - or new machines (PR staff, knowledge broking institutes, ..)?