The database challenge
an OpenEarth approach

www.openearth.eu

Mark van Koningsveld
TUDelft / Van Oord

Fedor Baart
TUDelft / Deltares

Data SIO, NOAA, U.S. Navy, NGA, GEBCO
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Image © 2009 TerraMetrics
Image IBCAO
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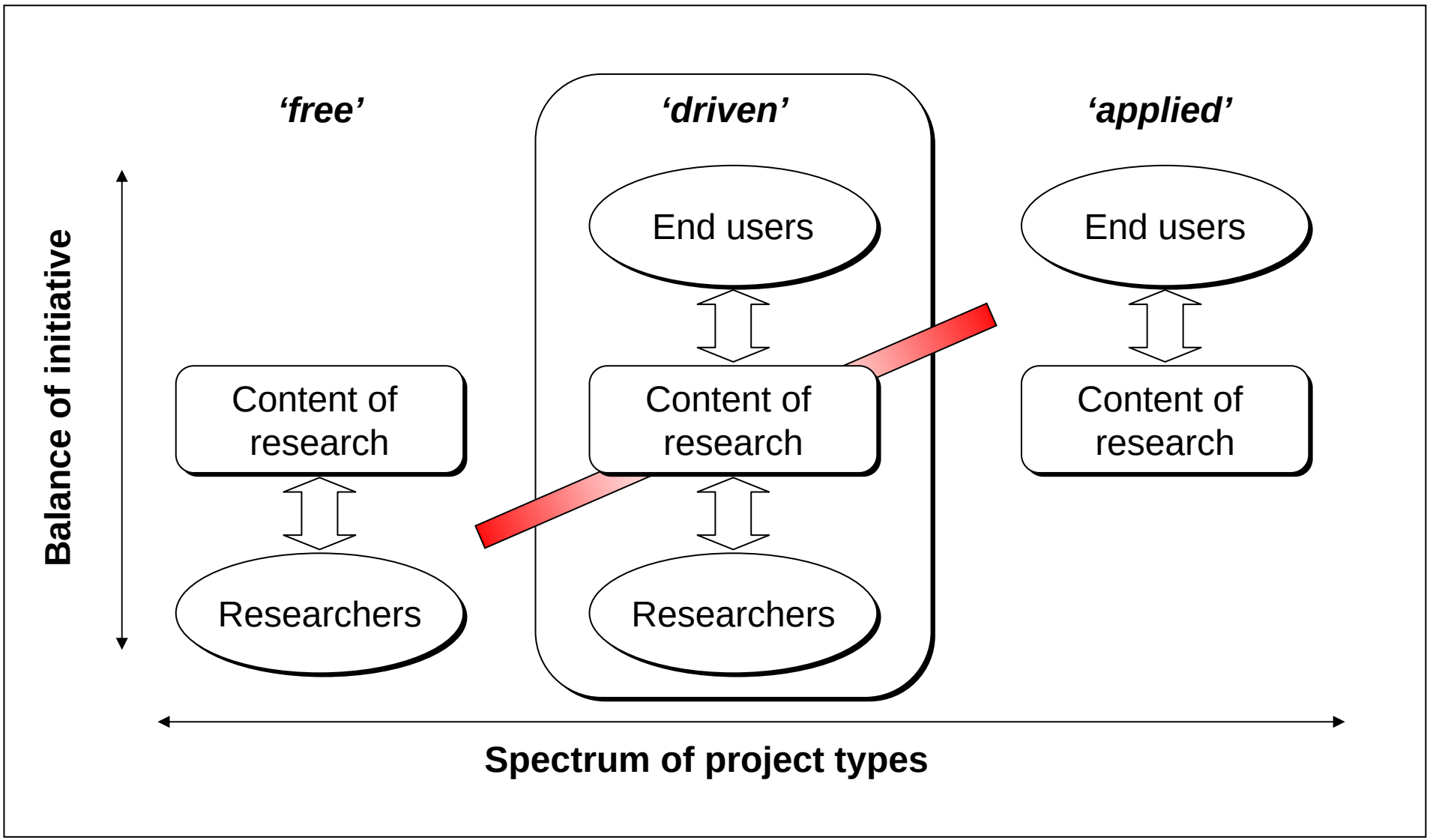
56°55'12.83" N 1°49'45.14" W elev -42 ft
Eye alt 1022.97 mi

Driven research projects

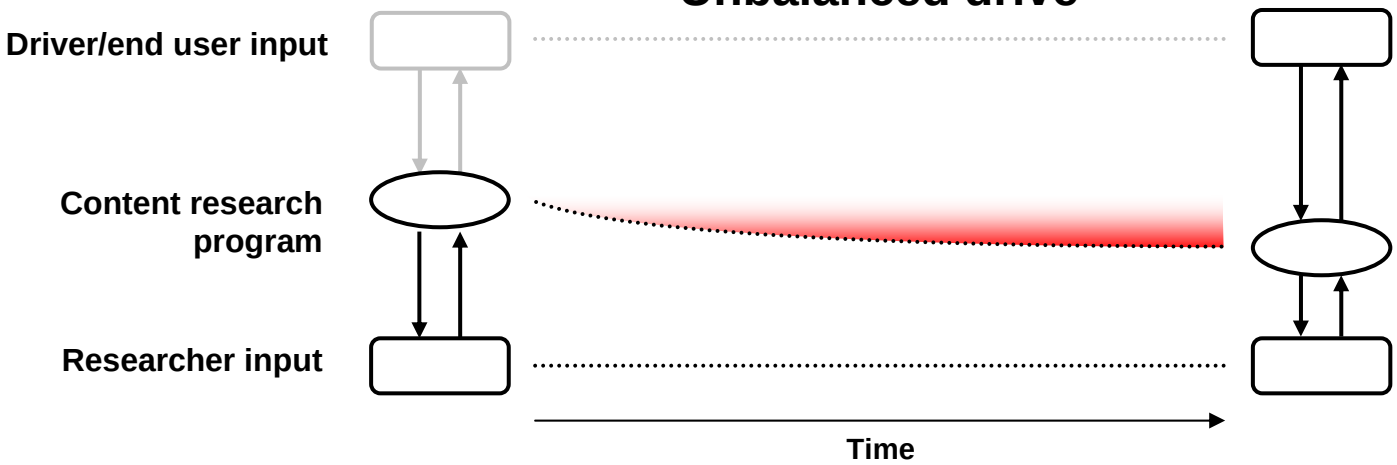
a special kind of project

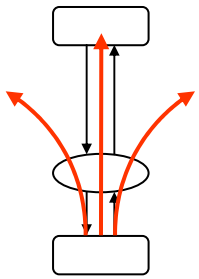


Usefulness of research

a matter of perception

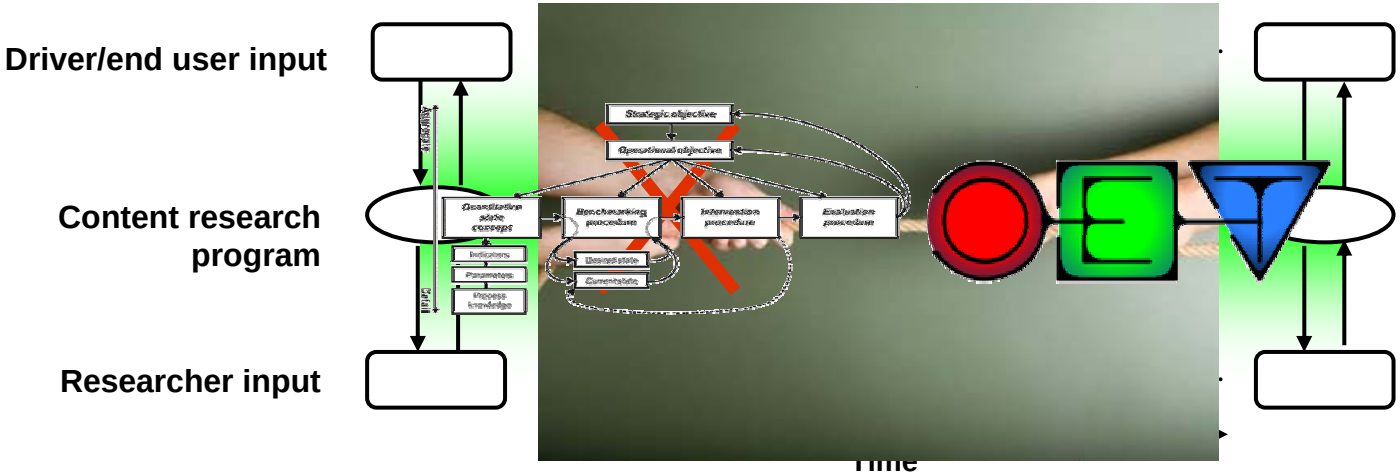
Unbalanced drive

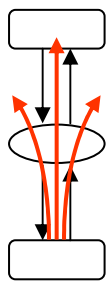




Uncoupling with end user needs ...

Balanced drive





Better match with end user needs!

The CoastView Project

Developing coastal video monitoring systems in support of coastal zone management

Last update 31 March 2005

- The Project
- Coastal Video Systems
- Coastal Management
- Coastal State Indicators
- Field Sites
- Data Archive
- Project Output
- Gallery
- Links
- Contacts
- Deliverables
- Meetings
- Timetable
- Document Library
- Work Packages
- Home

Supported by the EC Under Framework V Research & Technical Development (RTD Action).

The CoastView Project aims to:

- Simplify the task of the coastal manager by developing simple video-derived parameters (Coastal State Indicators or CSIs) that are directly related to management issues, and are informative about the current state and evolutionary trends

CONSCIENCE

CONCEPTS AND SCIENCE FOR COASTAL EROSION MANAGEMENT

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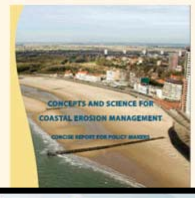
REPORT

'*Concepts and Science for Coastal Erosion Management. Concise report for policy makers*'. (M. Marchand, Ed., Deltares, Delft. 2010)



CONCEPTS AND SCIENCE

An operational support structure for sustainable coastal erosion management

The EU-FP6 CONSCIENCE project was launched in 2007 with a view to enhancing the implementation of a scientifically based sustainable coastal erosion management in Europe. It has been testing scientific concepts and tools in six pilot sites around Europe.

It has shown that the sediment balance approach can be applied for almost any coastal type, but that this approach to achieve sustainable coastline management is often hampered by lack of a well defined and institutionalised government policy for Integrated Coastal Zone Management (ICZM).

Learn more about it ...

- Project
- Guidelines for sustainable erosion management
- Documents online

EVENTS

Final CONSCIENCE Event - APRIL 2010

The **final public event of the CONSCIENCE project**, including the participation of local study sites end-users has taken place at the occasion of the International Conference on Coastal Conservation & Management in the Atlantic & Mediterranean, http://icccm.dcea.fct.unl.pt/, 11th -17th April 2010, in Cascais, Portugal.

EcoShape

Building with nature

Home | Program | Practice | Projects | Organization | Pressroom | Contact | Disclaimer

U bent hier: Home RSS

Welkom op de website van Building with Nature

'Building with Nature' (ecodynamisch ontwikkelen en ontwerpen) biedt ons de kans om te bouwen, gebruik makend van de dynamiek van het natuurlijke systeem. Daarbij maken we gebruik van de krachten in de natuur om waterbouwkundige infrastructuur tot stand te brengen en tegelijkertijd kansen te scheppen voor die natuur.

Naarmate we de dynamiek van de natuur beter begrijpen, kunnen wij onze mogelijkheden vergroten om de natuur in het ontwikkel- en ontwerpproces te integreren. Met behulp van nieuwe inzichten en kennis wordt de natuur dan zelf een drijvende kracht achter de duurzame ontwikkeling van waterbouwkundige infrastructuur.

Subsidie

EcoShape ontvangt co-financiering van EFRO (Europees Fonds voor Regionale Ontwikkeling), de Gemeente Dordrecht, het Ministerie van Verkeer & Waterstaat en Rijkswaterstaat

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Voeg toe aan uw favorieten! Zoeken

micore

MORPHOLOGICAL IMPACTS AND COASTAL RISKS INDUCED BY EXTREME STORM EVENTS

» home User: Password:

- project overview
- consortium
- management structure
- deliverables & public documents
- events
- media centre
- useful links
- glossary
- contacts

The MICORE Project

Both the EU and The United Nations are now taking seriously the predicted climate change scenarios of the IPCC. Of particular relevance to Integrated Coastal Zone Management is the predicted increase in the intensity and frequency of powerful storm events characterised by larger peak wind speeds and consequently larger waves.

photo: Marcel Bakker, Deltares

The MICORE project will provide the knowledge necessary to assess the present day risks and to study the economic and social impact of future severe storm events. The project will also develop operational predictive tools in support of emergency response to storm events. Together, these elements will have an important strategic impact on the safety of the people living in coastal areas. The project will also investigate with stakeholders and end-users the possibilities of producing EU-wide guidelines for a viable and reliable risk mitigation strategy.

photo: Marcel Bakker, Deltares

MICORE will produce an up-to-date data base for each partner country that will include: an historical review of storms; an inventory of data related to the forcing signals; quantification of the morphological response of coastal

The MICORE database challenge

WP2

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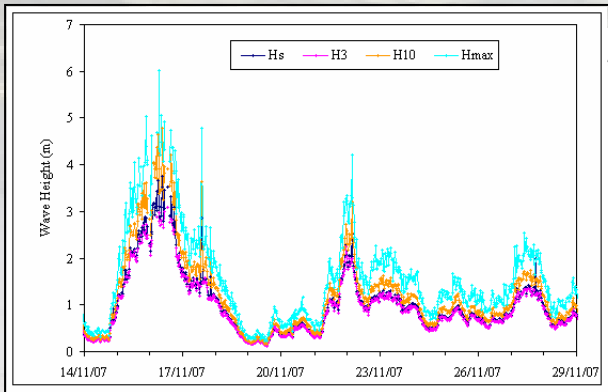
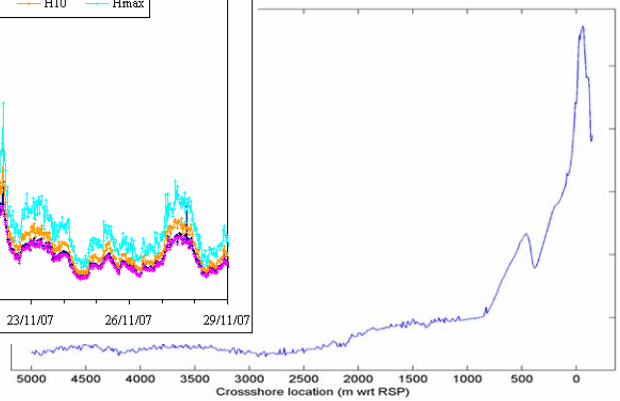
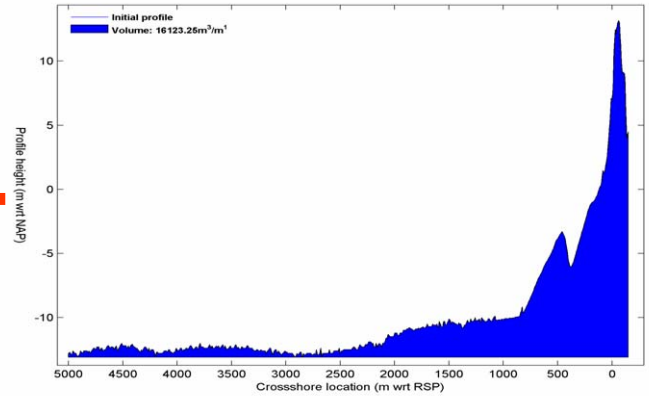


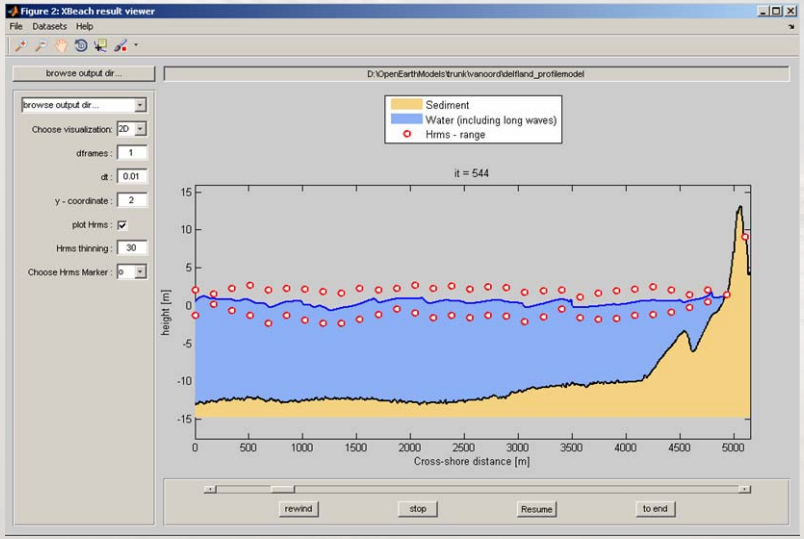




Data

Tools

Models



XBeach

Hotel California

ESPRESSO
CONCENTRATE
Need ASAP!

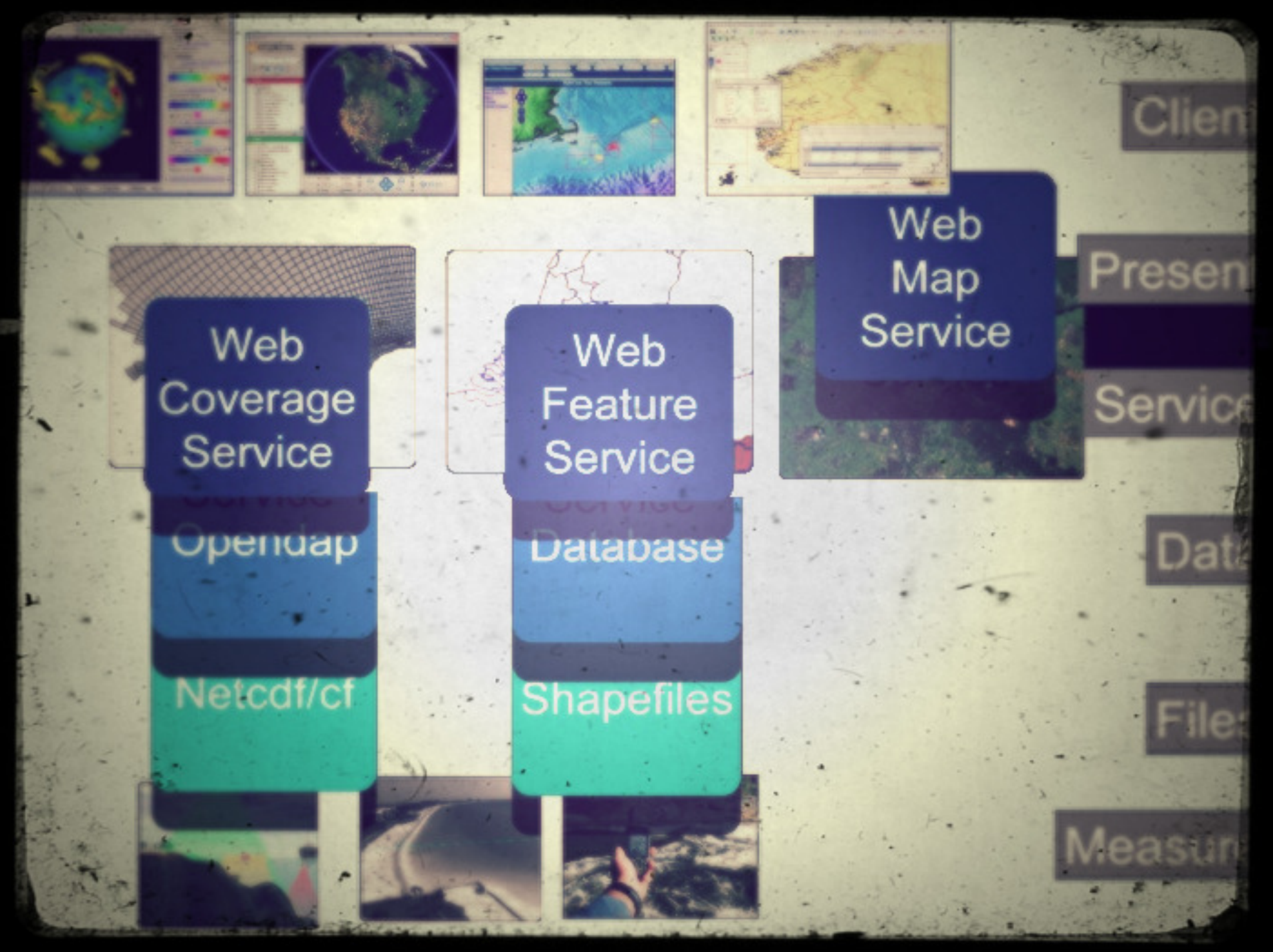
www.openearth.eu

What is OpenEarth

- Make **existing** data, models and tools available
  - in crease efficieny of projects
  - prevent double work
  - prevent loss of previous work
    - > due to lack of archiving (no time to store)
    - > due to new bugs (no time to test)
  - make work nicer: less maintenance, more development

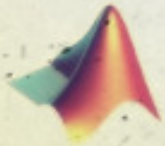
- **a data and source code repository**
- **a community**
  a repository is useless without people using it
- **a philosophy**
  a community is useless without collaboration: **cooperate!**

Deltares

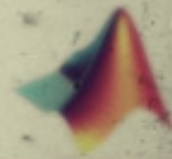

Clien
Web
Map
Service
Presen
Service
Web
Coverage
Service
Web
Feature
Service
Opendap
Database
Netcdf/cf
Shapefiles
Data
File
Measur

Data Standards Process

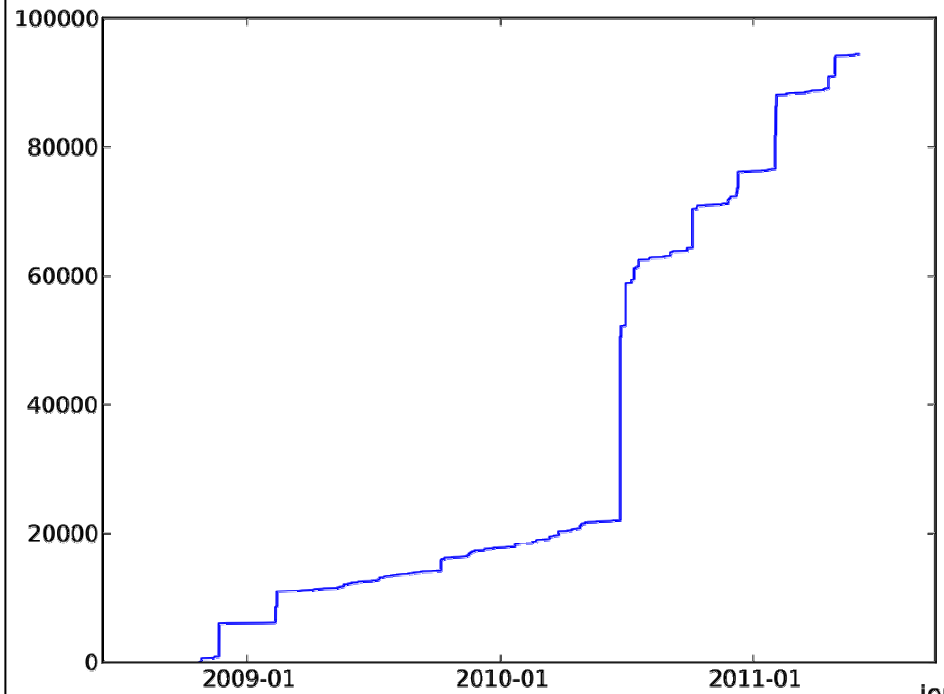
Extract	Transform	Load	Provide
Raw data	Scripts	Database	Charts & Maps
Store raw data in subversion to keep track of history	Add meta information Script to convert raw data into netcdf	Stored files (netcdf) accessible through the web	Tools and websites

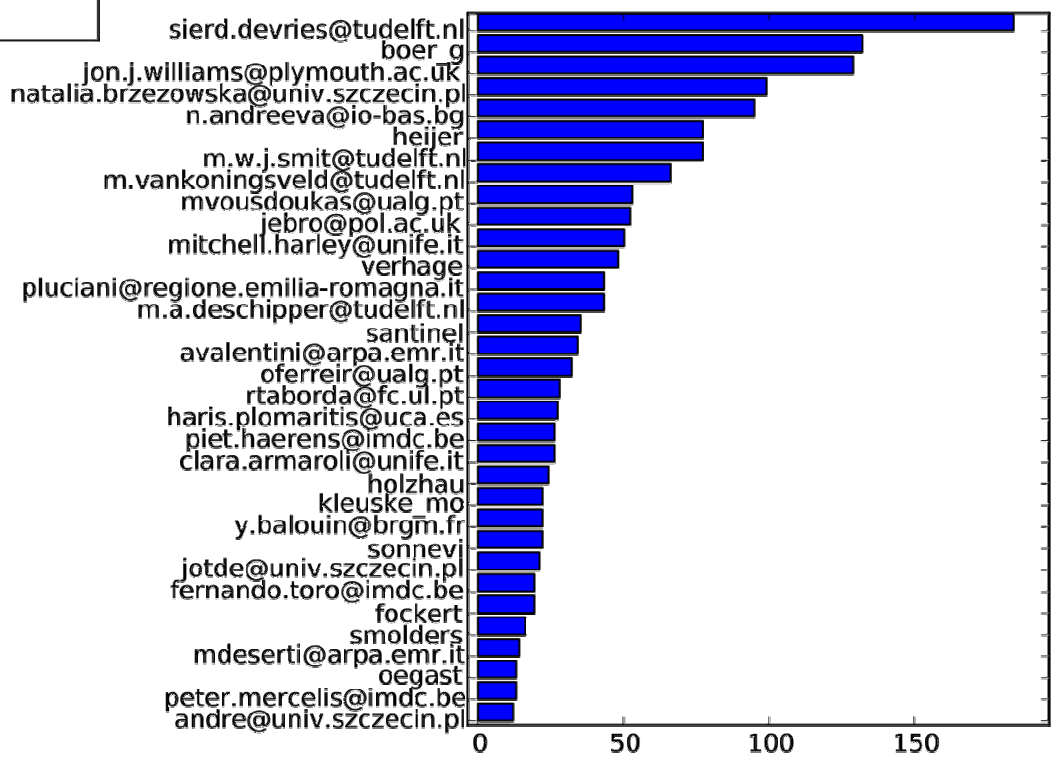


OPeNDAP



OpenEarth RawData	OpenEarth OPeNDAP	OpenEarth Tools





TOOLS:

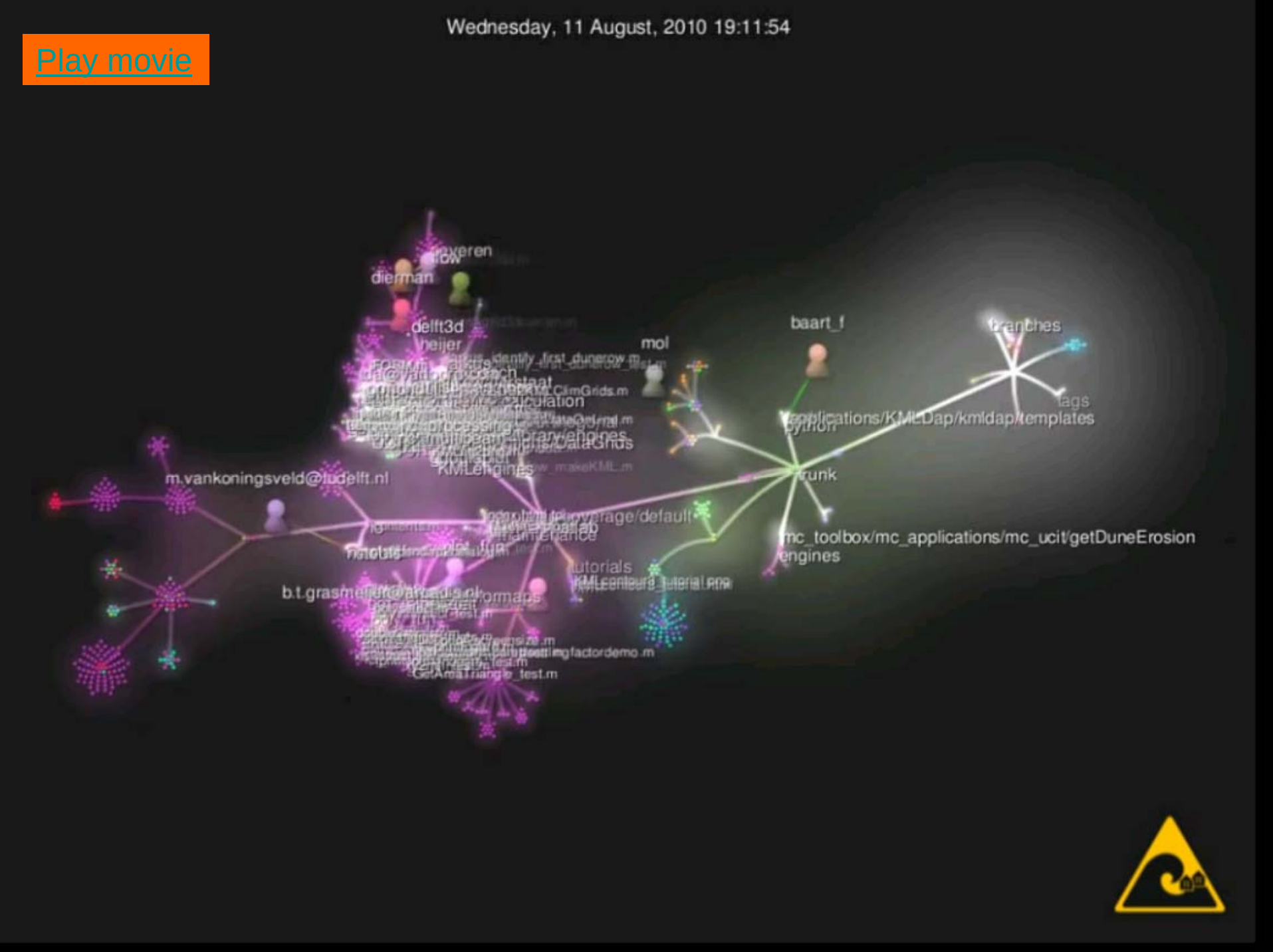
~ 4.450 commits !
~ 35.000 filechanges
~ 80 active developers
~ 200 users

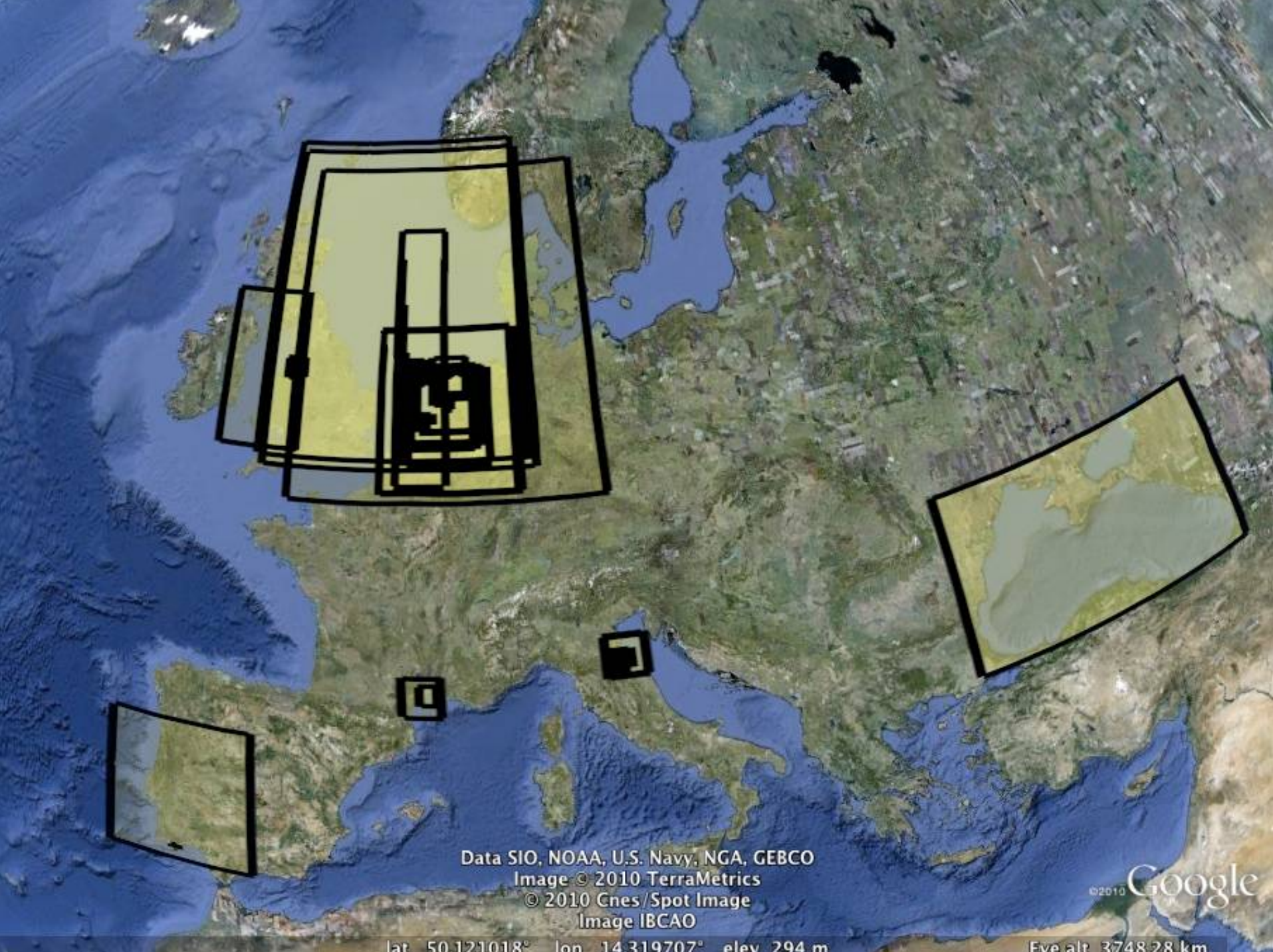
DATA:

~ 5.000 commits !
~ 90.000 filechanges
~ 70 active developers

Wednesday, 11 August, 2010 19:11:54

Play movie

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