

EUDAT & ENES

EUDAT User Forum

03-Feb-2016

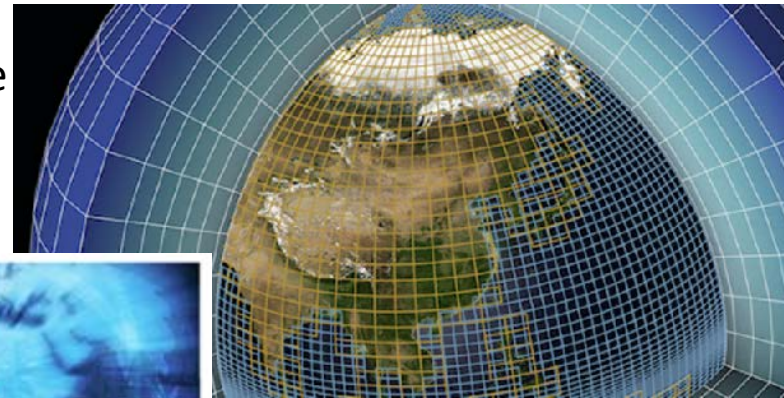
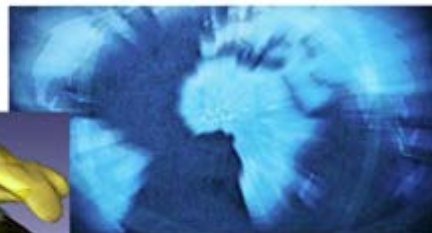
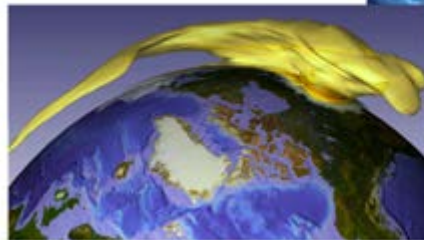
Rome

Hannes Thiemann, DKRZ

ENES: European Network for Earth System Modelling

ENES is intended

- to help in the **development** and evaluation of state-of-the-art climate and earth system models
- to facilitate focused model **intercomparisons** in order to assess and improve these models
- to encourage **exchanges** of software and model results
- to help in the development of high performance computing **facilities** dedicated to long high-resolution multi-model ensemble integrations.



ENES portal at
<https://verc.enes.org/>

Status of ENES

- Approx. 50 partners
 - Universities
 - Research Organizations
 - Industry
- In terms of IT ENES is a very mature community:
HPC, Extreme Data, Network
- international research and infrastructure projects.
- Earth System Grid Federation (ESGF) is the proven and operational data infrastructure



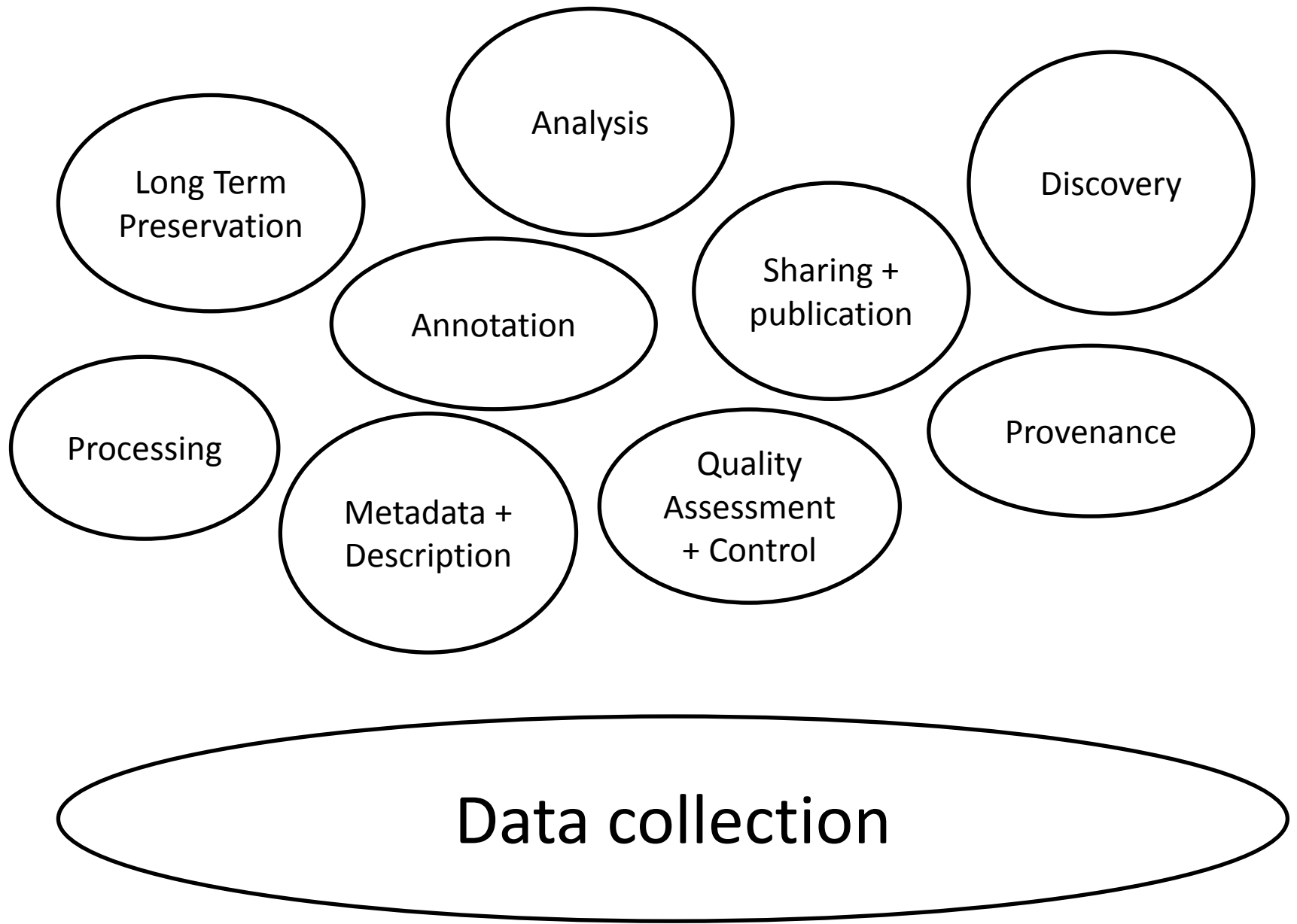
ENES & EUDAT

- ENES is one of the core communities of EUDAT
- ENES partners involved
 - Max-Planck-Institute for Meteorology
 - Centre Européen de Recherche et de Formation Avancée en Calcul Scientifique (CERFACS)
 - Deutsches Klimarechenzentrum (DKRZ)



Max-Planck-Institut
für Meteorologie



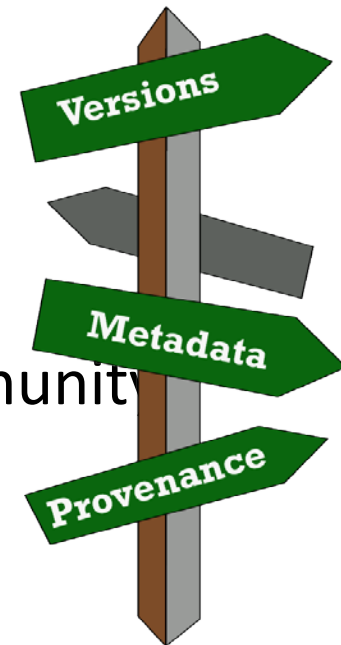


PID services

- Introducing PID services to ENES
 - New development – benefit from EUDAT experience
- Using the same tools and software stack as EUDAT will reduce additional effort
- Standardization effort of PID records content resonates well with similar effort for ENES

Tool support requires harmonization

- Planned ENES data information tool with PID and versioning support
 - will use B2Handle library
 - depends on standardized PID types
 - may also display provenance information
- Such tools should be interoperable!
 - Used interdisciplinary, also outside core community
 - Benefit from overarching EUDAT efforts



Data Analysis



Requirement is to perform data analysis close to the archive location.

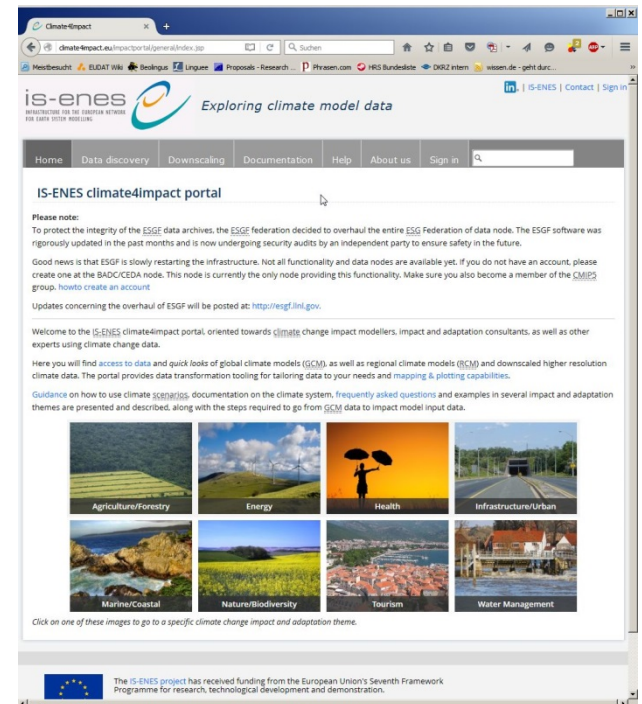
- This requirement is already addressed within the community.
- More complex data analysis are expected from the users.
- Often data from other communities are required.

Data Analysis

Requirements ask for

- Workflow services
- Federated service registry
- User workflow registry

→ How to make these accessible to users?



Long Term Data Preservation

Within ENES several partners have already established infrastructures for the long term preservation of data, especially well structured large data collections.



Not everything in ENES is Big Data!

Long Tail

- There is a need for the preservation of long tail data within ENES.
- DKRZ is interested to run a B2SHARE instance for ENES users.



This will be a service aiming at individual users but also at projects!

Certification

- DKRZ aims at DSA certification of its long tail B2SHARE repository.



Benefit from the experiences made within
EUDAT2020

Trust

Vision of EUDAT is to enable European researchers from any discipline to preserve, find, access and process data in a trusted environment.



One important element to build trust is the certification of community repositories.

Trust is not only a question of certification.

We see a great value in the interaction with

- other EUDAT communities
- other service providers



Thank you!