OpenAIRE

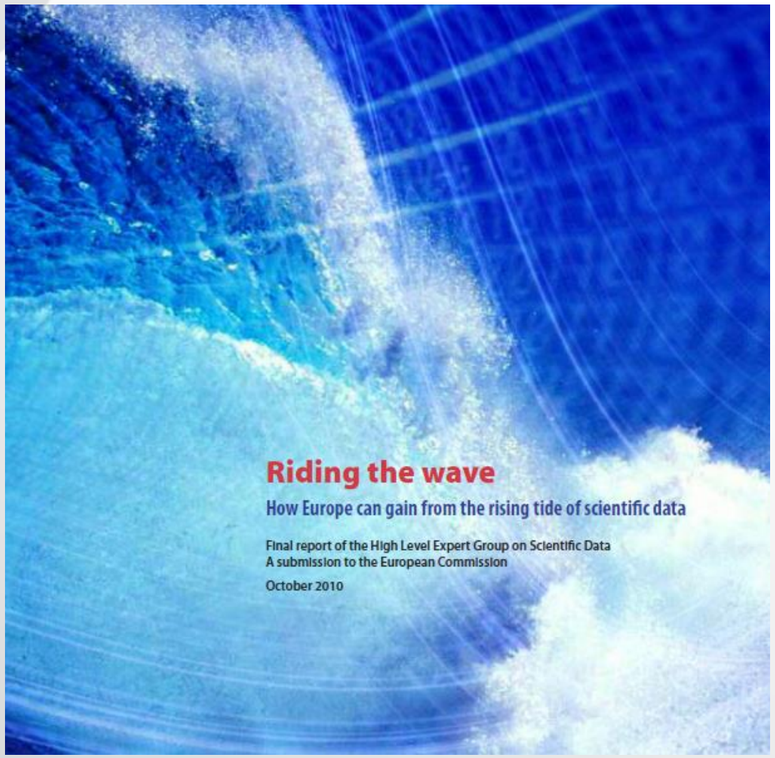
OPEN ACCESS
INFRASTRUCTURE

How it works

Najla Rettberg, University of Göttingen Library

Infrastructures support policy

Supporting top-level research at European level for publications and data



- *„Our vision is a scientific e-infrastructure that supports seamless access, use, re-use of data“*
- **Despite national policy differences**
- **Mandates: no one size fits all**
- **Science 2.0**

Riding the Wave Report , High level group on data, 2010

OA to ‘results of publicly funded research’ 100%

Horizon 2020

EC’s Communication & Recommendation , July 2012

What is OpenAIRE

1 **PORTAL Services**

Access to Research records. Linking publications to datasets, author information and above all, funding information

2 **OA SUPPORT**

Helpdesk. Engaging people and scientific repositories in almost 27 EU member states and beyond

3 **ZENODO**

Repository for data and articles that can be stored neither in institutional nor in subject-based/thematic repositories

E-Infrastructure to support Research

zenodo

Research. Shared.

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30 July 2013 Journal article Open access

Pelagic community production and carbon-nutrient stoichiometry under variable ocean acidification in an Arctic fjord

Silyakova, A ; Bellerby, R. G. J. ; Schulz, K. G. ; Czerny, J. ; Tanaka, T. ; Nondal, G. ; Riebesell, U. ; Engel, A. ; De Lange, T. ; Ludvig, A.

(show affiliations)

Net community production (NCP) and carbon to nutrient uptake ratios were studied during a large-scale mesocosm experiment on ocean acidification in Kongsfjorden, western Svalbard, during June–July 2010. Nutrient depleted fjord water with natural plankton assemblages, enclosed in nine mesocosms of 50m3 in volume, was exposed to pCO2 levels ranging initially from 185 to 1420 µatm. NCP estimations are the cumulative change in dissolved inorganic carbon concentrations after accounting for gas exchange and total alkalinity variations. Stoichiometric coupling between inorganic carbon and nutrient net uptake is shown as a ratio of NCP to a cumulative change in inorganic nutrients. Phytoplankton growth was stimulated by nutrient addition half way through the experiment and three distinct peaks in chlorophyll a concentration were observed during the experiment. Accordingly, the experiment was divided in three phases. Cumulative NCP was similar in all mesocosms over the duration of the experiment. However, in phases I and II, NCP was higher and in phase III lower at elevated pCO2. Due to relatively low inorganic nutrient concentration in phase I, C :N and C : P uptake ratios were calculated only for the period after nutrient addition (phase II and phase III). For the total post-nutrient period (phase II+phase III) ratios were close to Redfield, however they were lower in phase II and higher in phase III. Variability of NCP, C :N and C : P uptake ratios in different phases reflects the effect of increasing CO2 on phytoplankton community composition and succession. The phytoplankton community was composed predominantly of haptophytes in phase I, prasinophytes, dinoflagellates, and cryptophytes in phase II, and haptophytes, rasinophytes, dinoflagellates and chlorophytes in phase III (Schulz et al., 2013). Increasing ambient inorganic carbon concentrations have also been shown to promote primary production and carbon assimilation. For this study, it is clear that the pelagic ecosystem response to increasing CO2 is more complex than that represented in previous work, e.g. Bellerby et al. (2008). Carbon and nutrient uptake representation in models should, where possible, be more focused on individual plankton functional types as applying a single stoichiometry to a biogeochemical model with regard to the effect of increasing pCO2 may not always be optimal. The phase variability in NCP and stoichiometry may be better understood if CO2 sensitivities of the plankton's functional type biogeochemical uptake kinetics and trophic interactions are better constrained.

Preview

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Existing approvals

EURO-BASIN, North Atlantic Marine Ecosystem Research — Reject

See more details

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0 readers on Mendele
0 readers on CiteULi

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SOCIAL MEDIA ATTENTION

THE MANUSCRIPT and DATA, FREE & NOW

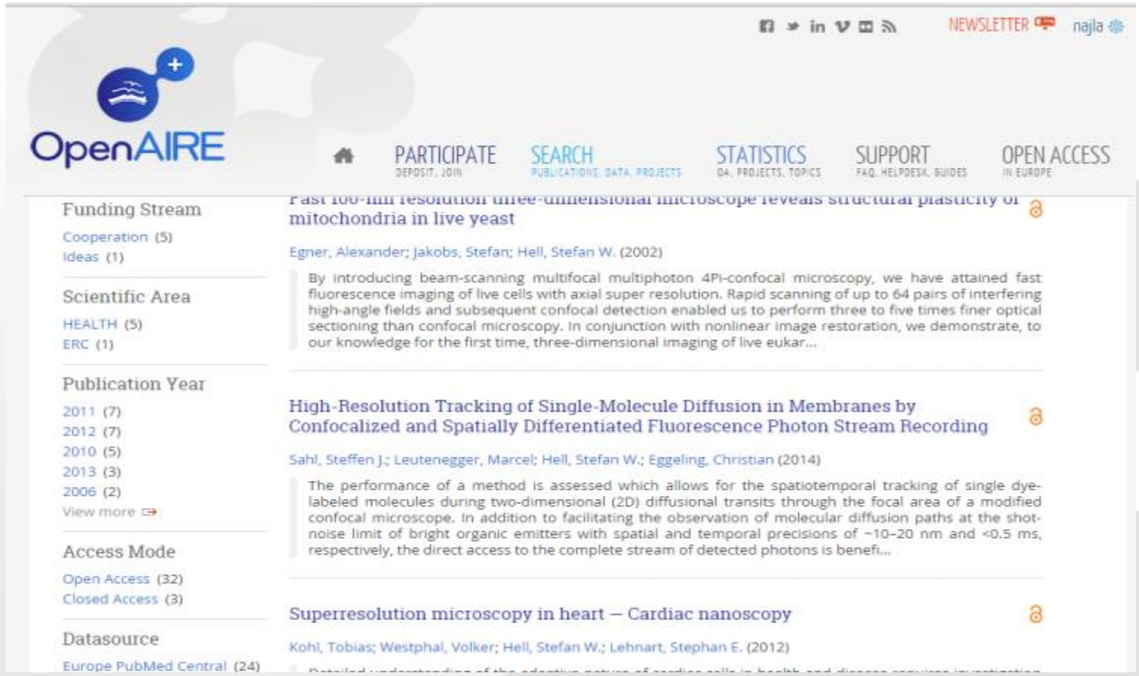
Deposit the final manuscript or publisher's PDF in a repository, either institutional or disciplinary.

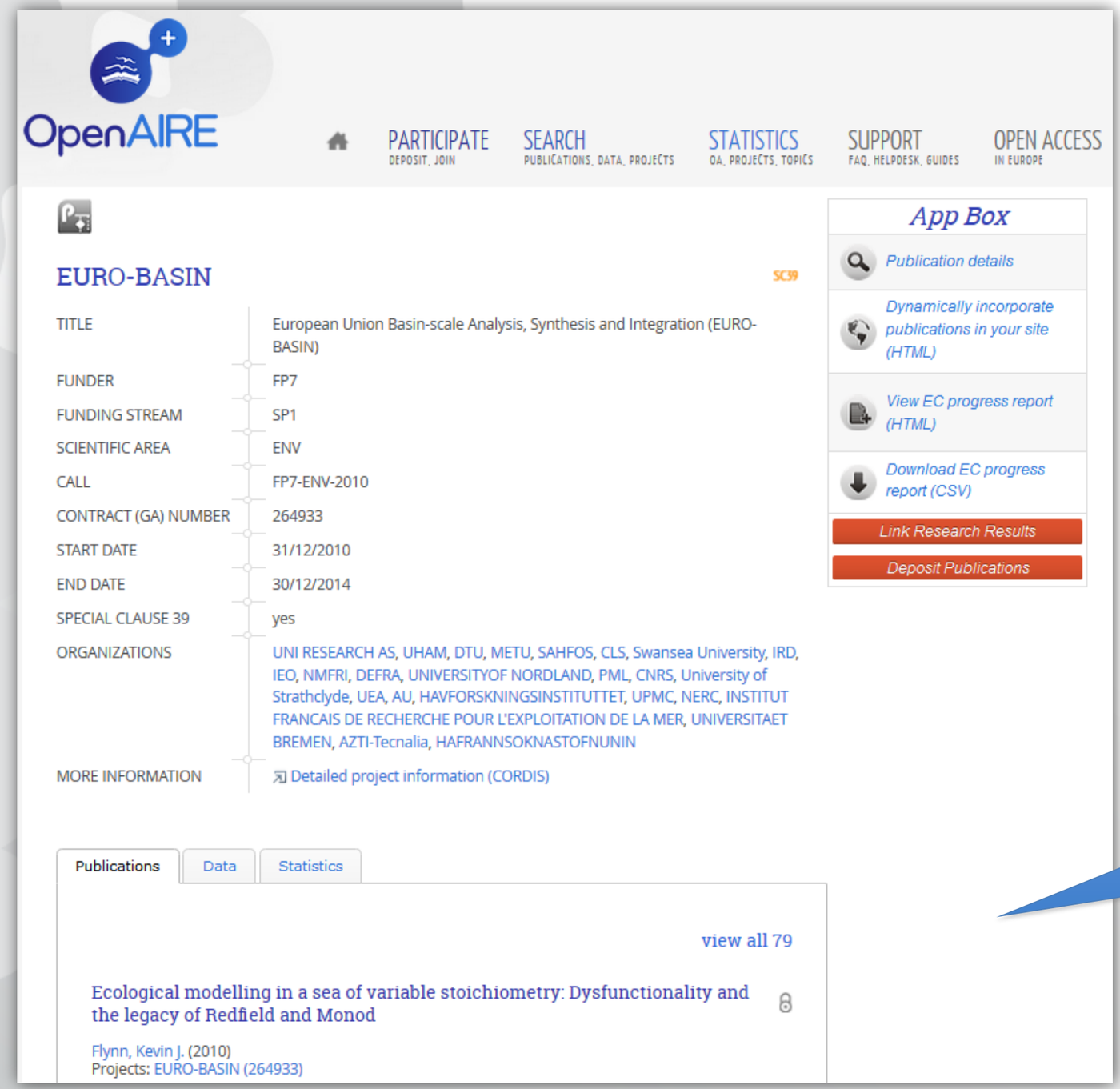
Harvested via OAI-PMH

Project Coordinators

Tools to ease some workflows

- **Dissemination of research output**
- **Reporting to the EC**
- **STATISTICS!**





Linking to Data
CRIS Info

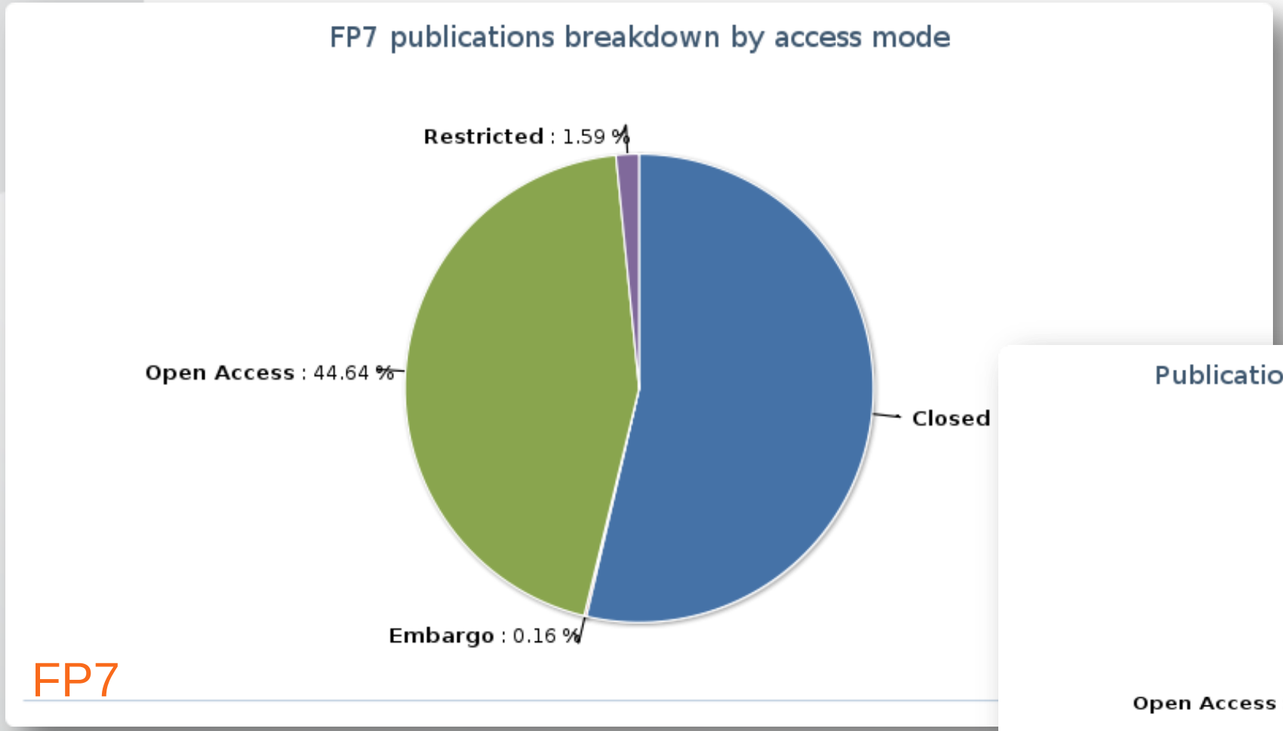
http://tinyurl.com/l2garx6

Funders

…Measuring Impact

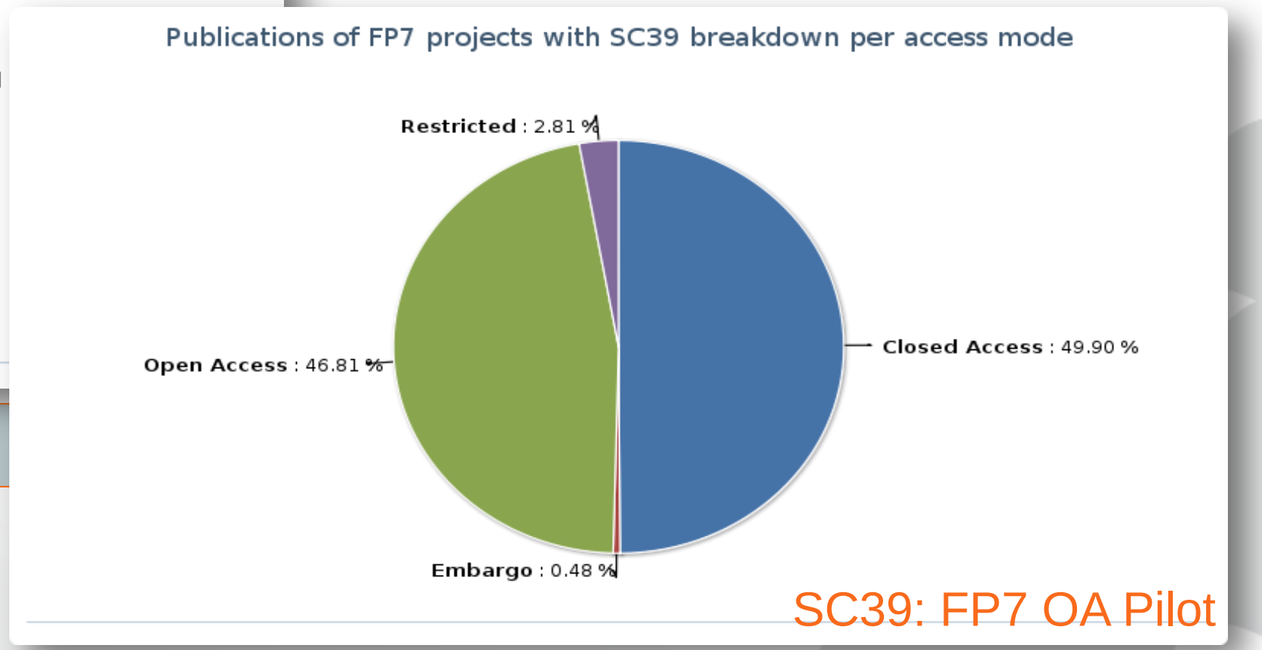
- **Return on Investment**
  - **The money invested can be measured with output**
- **Tracking what they fund**
  - **How is this output used?**
- **Strengths in research areas**
  - **What is used and how often?**
- **Support for policies**

Monitoring OA policy – beyond EC



FP7

66K pubs – 7.5K projects



SC39: FP7 OA Pilot

8.5K pubs –725 projects

Open Data Pilot

- **Data Management Plan (DMP)**
- **DMP questions: what data, what standards, what data will be exploited, what data will be made open, curation**
- **Opting out (commercial exploitation, protection of personal data, security issues, etc.)**
- **So far (of 3000+ proposals): 24% opt out, 27% opt in**

Got Data?

REPOSITORY?

Publisher?

Got funding?

www.openaire_eu
@openaire_eu

GET IN TOUCH

… and together we can make this work.