

Peer Reviewed Data Publication in Earth System Sciences

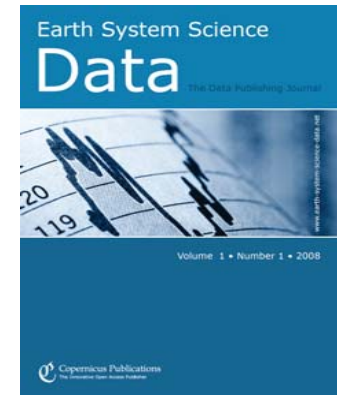
Earth System Science Data – A Data Publishing Journal

Sünje Dallmeier-Tiessen, Hans Pfeiffenberger

Alfred-Wegener-Institute for Polar and Marine Research, Helmholtz Association - Germany

Contact: suenje.dallmeier-tiessen@awi.de

Berlin 6 – Open Access Conference 2008, Düsseldorf, Germany



Yet another journal?! Principles and benefits of a data publishing journal...

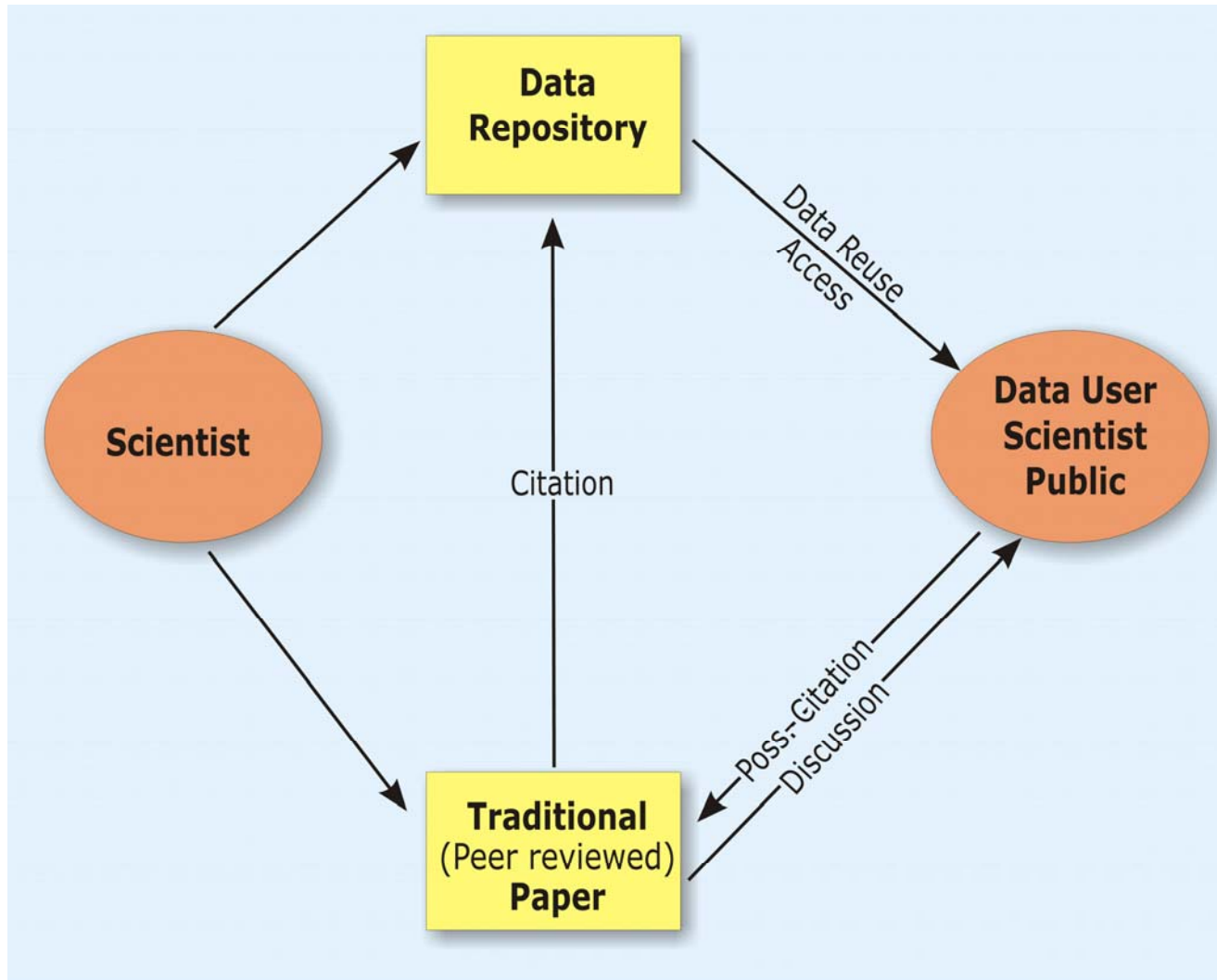
→ A journal to publish research data...

- Datasets are in an approved repository and not in the article, the article links to the dataset
- Peer review on article and data

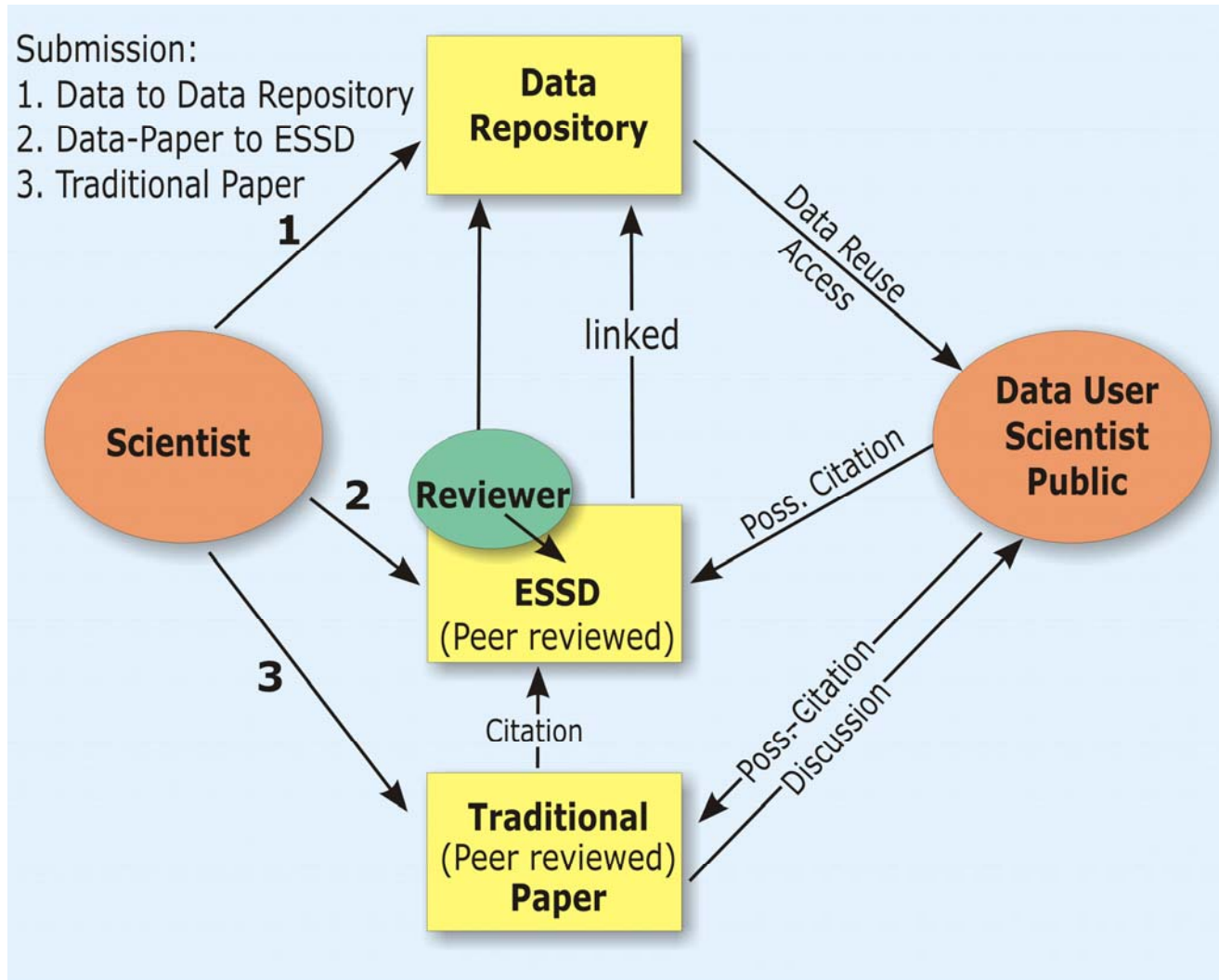
- ! Provides reward for data collection, data description and data publication
- ! Provides a citable publication – facilitates easy reuse and reconstruction of data
- ! “Scientist-Friendly” – making use of the established publication process
- ! Quality assessment of data and data description/documentation

- Awareness building for data preservation, documentation and publication
- Reuse facilitated by peer-reviewed documentation
- Article provides readable and understandable overviews of datasets

Today's Data Reuse, Citation and Quality Control



Reuse, Citation and Quality Assessment with ESSD



Who is who...

Advisory Board:

Paul J. Crutzen

Sydney Levitus

Alexander Petrovich Lisitzin

Editors in Chief:

David Carlson

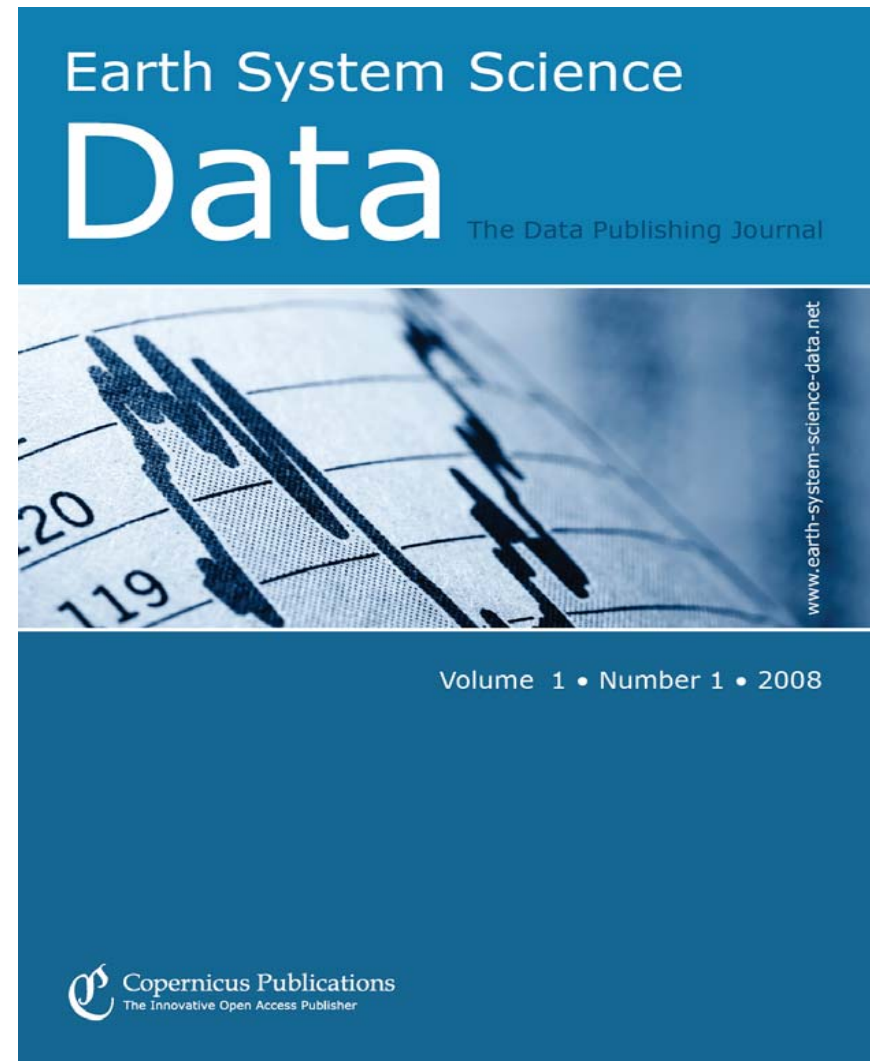
Hans Pfeiffenberger

Publishing House

Copernicus Publishers – OA Publisher, EGU

Managing Editor

Suenje Dallmeier-Tiessen



First discussion paper online

Earth Syst. Sci. Data Discuss., 1, 1–13, 2008
www.earth-syst-sci-data-discuss.net/1/1/2008/
© Author(s) 2008. This work is distributed under
the Creative Commons Attribution 3.0 License.



Earth System Science Data Discussions is the access reviewed
discussion forum of *Earth System Science Data*

Compilation of ozonesonde profiles from the Antarctic Georg-Forster-Station from 1985 to 1992

G. König-Langlo and H. Gernandt

Alfred Wegener Institute for Polar and Marine Research, Bussestraße 24, 27570
Bremerhaven, Germany

Received: 29 July 2008 – Accepted: 5 September 2008 – Published: 22 September 2008

Correspondence to: G. König-Langlo (gert.koenig-langlo@awi.de)

Published by Copernicus Publications.



ESSDD
1, 1–13, 2008

**Antarctic
ozonesonde profiles**
G. König-Langlo and
H. Gernandt

Title Page
Abstract Instruments
Data Provenance & Structure
Tables Figures

◀ ▶
◀ ▶
Back Close
Full Screen / Esc
Printer-friendly Version
Interactive Discussion



Repository Reference

Abstract

On 22 May 1985 the first balloon-borne ozonesonde was successfully launched by the staff of Georg-Forster-Station (70°46' S, 11°41' E). The following weekly ozone soundings mark the beginning of the continuous investigation of Germany to study the vertical ozone distribution in the southern hemisphere.

In 1985 these ozone soundings have been the only record showing the change of vertical ozone distribution in the southern polar stratosphere in September and October. The regular ozone soundings from 1985 until 1992 are a valuable reference data set since the chemical ozone loss became a significant feature in the southern polar stratosphere.

The balloon-borne soundings were performed at the upper air sounding facility of the neighbouring station Novolazarevskaya, just 2 km apart from Georg-Forster-Station. Till 1992, ozone soundings were taken without interruption. Afterwards, the ozone sounding program was moved to Neumayer-Station (70°39' S, 8°15' W) 750 km further west.

Data coverage and parameter measured

Repository-Reference: doi:10.1594/PANGAEA.547983
Available at: <http://dx.doi.org/10.1594/PANGAEA.547983>

Coverage: East: 11.8888; South: 70.7766

Location Name: Georg-Forster-Station, Antarctica

Date/Time Start: 1985-05-22T05:19:00

Date/Time End: 1992-01-29T01:19:00

ESSDD

1, 1–13, 2008

Antarctic ozonesonde profiles

G. König-Langlo and
H. Gernandt

Title Page

Abstract

Instruments

Data Provenance & Structure

Tables

Figures

◀

▶

◀

▶

Back

Close

Full Screen / Esc

Printer-friendly Version

Interactive Discussion



Review Guidelines

- Originality:

Are the data or methods new - i.e., never measured or employed before

- Significance:

Is there any potential of the data being useful?

Uniqueness

Usefulness

Completeness

- Data Quality

The data must be presented readily available.

Accuracy, methods, instrumentation and processing as state of the art

Summary - Outlook

- **Reward** for data publication, citable (impact factor)
- **Quality assured** data and data documentation to facilitate future reuse
- First article online as discussion paper – first experiences

Outlook

- Special Issue with 18 papers to be published soon
- Development of more specialized manuscript templates and review guidelines for other types of research data

References

1. Earth System Science Data (Journal): <http://www.earth-system-science-data.net/>
2. Digital Curation Centre, Lifecycle Model:
<http://www.dcc.ac.uk/docs/publications/DCCLifecycle.pdf>

Picture Credits: AWI, Copernicus