Maximize the potential of research data with Data Notes on ORE

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Open Research Europe

Contents

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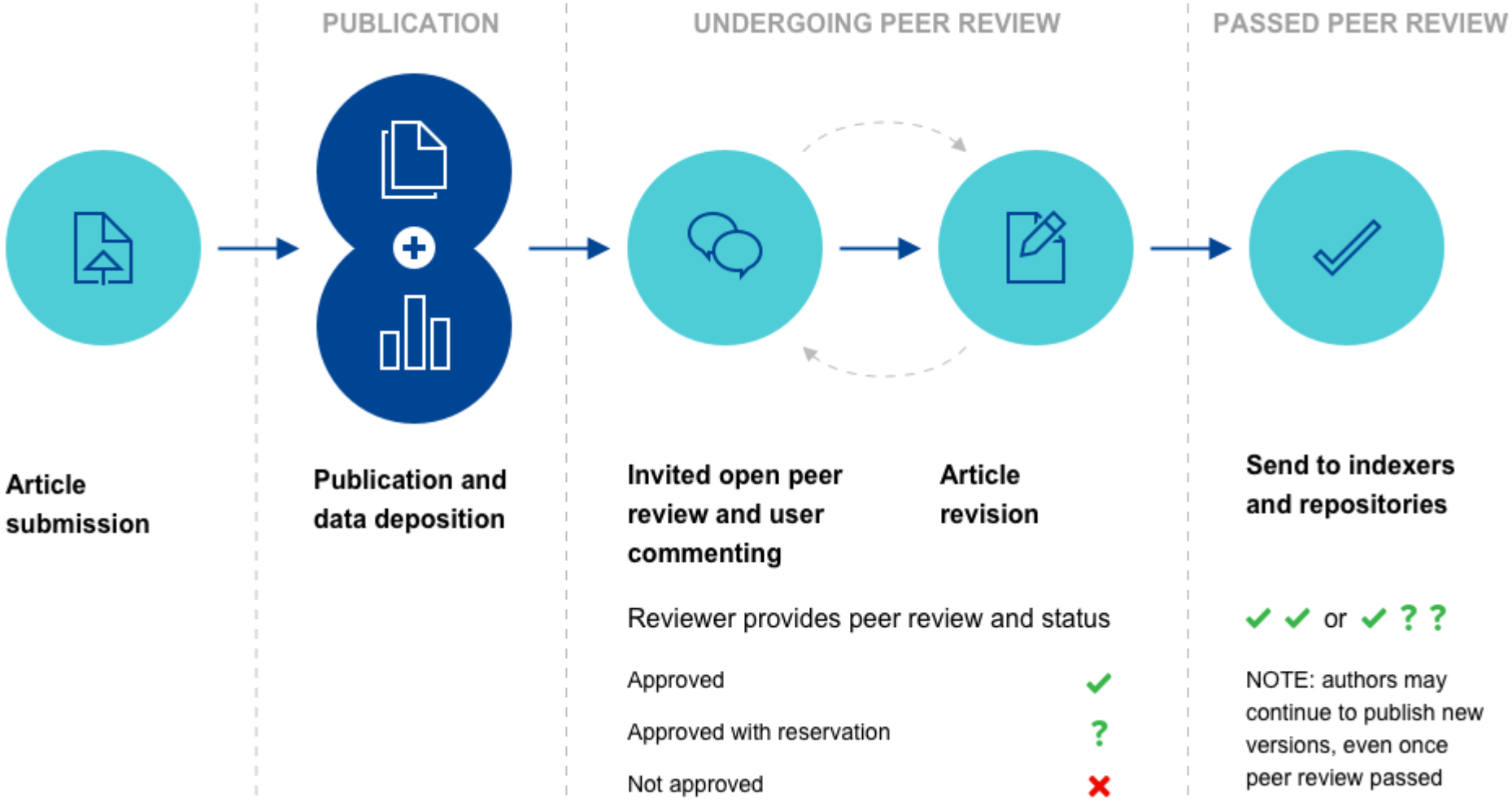
Background and aims of Open Research Europe

Launched in March 2021

- ✓ A fully open access platform which leads by example
- ✓ Early sharing of research without editorial bias
- ✓ Underlying data linked to trusted repositories
- ✓ Article level metrics and indicators of quality
- ✓ Transparency and cost-effectiveness
- ✓ Diamond open access as a sustainable model
- ✓ Capturing all possible outputs throughout a research project
- ✓ “As open as possible, as closed as necessary”

Open Research Publishing Model



What a Data Note is

- A Data Note is a short article which describes **why** and **how** a dataset was collected
- A Data Note does this by providing:
  - Dataset rationale, protocol, validation, and limitation details
  - Information on where and how to access the dataset
  - Reference to the dataset using a formal data citation
- A Data Note is fully peer-reviewed. Reviewers are asked to check that the methods have been sufficiently reported and the dataset has been published in FAIR data format
- A Data Note does not provide any analyses or conclusions, and it does not prevent the publication of a research article using the same dataset

Benefits of publishing a Data Note

- Increase visibility and certification of the dataset
- Promote effective data management practices and form an integral part of a Data Management Plan
- Researchers receive extra credit for their work
- Assurance of full compliance with the European Commission’s Horizon funding mandate and ambitions toward open research practices
- Enhances the FAIR credentials of a research project

Published Data Note example

1

307 Views | 119 Downloads | 2 Citations Cite | Download | Export | Share | Track

Home › Articles › A spatiotemporal atlas of hydropower in Africa for energy modelling ...

DATA NOTE

2

REVISED **A spatiotemporal atlas of hydropower in Africa for energy modelling purposes [version 3; peer review: 2 approved, 1 approved with reservations]**

Sebastian Sterl, Albertine Devillers, Celray James Chawanda, Ann van Griensven, Wim Thiery, Daniel Russo

3

This article is included in Energy Systems Modelling collection

This article is included in Societal Challenges gateway

Article | Authors | Metrics

4

Abstract

The modelling of electricity systems with substantial shares of renewable resources, such as solar power, wind power and hydropower, requires datasets on renewable resource profiles with high spatiotemporal resolution to be made available to the energy modelling community. Whereas such resources exist for solar power and wind power profiles on diurnal and seasonal scales across all continents, this is not yet the case for hydropower. Here, we present a newly developed open-access African hydropower atlas, containing seasonal hydropower generation profiles for nearly all existing and several hundred future hydropower plants on the African continent. The atlas builds on continental-scale hydrological modelling in combination with detailed technical databases of hydropower plant characteristics and can facilitate modelling of power systems across Africa.

Open Peer Review

Approval Status ✓ ? ✓

	1	2	3
Version 3 (Revision) 29 Mar 22			✓ view
Version 2 (Revision) 22 Dec 21	✓ view		? view
Version 1 26 Mar 21	✓ view	? view	

1. **Matteo De Felice**, Joint Research Centre (JRC), European Commission, Petten, The Netherlands
2. **Benoît Hingray**, Université Grenoble Alpes, Grenoble, France
3. **Jean-Philippe Vidal**, INRAE, Lyon, France

Comments on this article

All Comments (0)

Sign in to comment

5

Alongside their report, reviewers assign a status to the article:

✓ **APPROVED**
The paper is scientifically sound in its current form and only minor, if any, improvements are suggested

? **APPROVED WITH RESERVATIONS**
Key revisions are required to address specific details and make the paper fully scientifically sound

✗ **NOT APPROVED**
Fundamental flaws in the paper seriously undermine the findings and conclusions

https://open-research-europe.ec.europa.eu/articles/1-29

Data availability statement

Data availability

1. HydroShare: Online repository of materials for an all-Africa hydropower atlas (v2.0). https://www.hydroshare.org/resource/5e8ebdc3bfd24207852539ecf219d915[33].

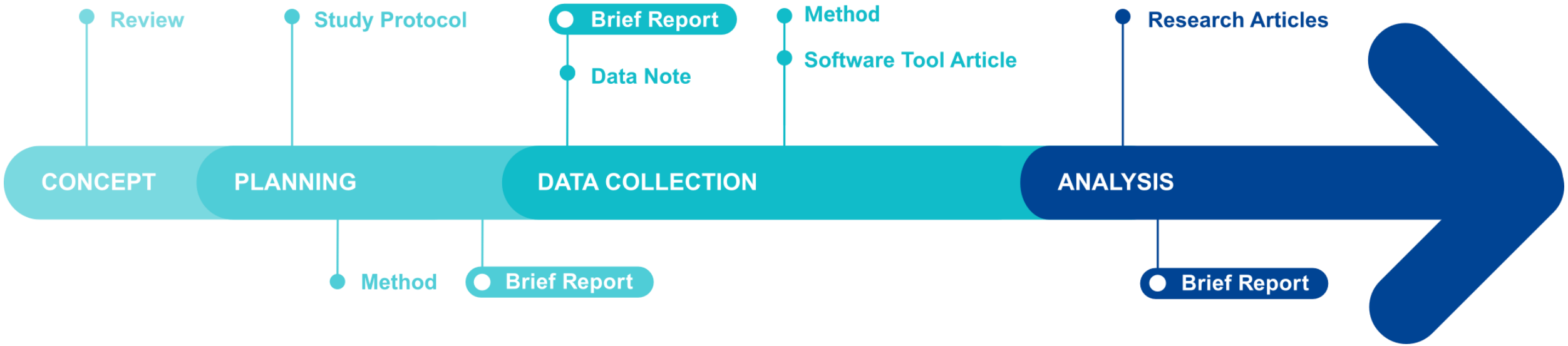
2. This project contains the following underlying data:

   - The AHA (v2.0) provided as a spreadsheet (.XLSX), containing the geospatial references of the hydropower plants and their technical characteristics used in the calculations, as well as their typical monthly capacity factor profiles for normal, dry and wet years
   - SWAT+ simulation results used to extract river flow profiles provided as text files (.TXT). The historical runs based on EWEMBI observations are entitled "SWAT+_channel_mon_EWEMBI_hist" and "SWAT+_reservoir_mon_EWEMBI_hist". We refer to the SWAT+ output documentation (accessible through https://swatplus.gitbook.io/docs/download-docs) for further metadata on the columns included in this .txt file.
   - SWAT+ simulation results based on runs from an ensemble of global climate models (GCMs). The channel and reservoir .txt files are given in the zipped folders "SWAT+_simulations_GCM_historical.rar" and "SWAT+_simulations_GCM_ssp_rcp.rar".
   - GIS shapefile of the river sections covered in the SWAT+ simulation.

3.

https://open-research-europe.ec.europa.eu/articles/1-29

When a Data Note can be published



Misconceptions

- The dataset is already described in the metadata and therefore a Data Note is not necessary
- The dataset is already linked as a supplementary file from a published research article so this would be considered a duplicate publication
- Publishing a Data Note will require redepositing the data in ORE (reminder: not a data repository!), or in another data repository.

Further resources

- ORE Data Notes Resource Hub: https://open-research-europe.ec.europa.eu/data-notes/
- ORE author guidelines for STM, Humanities, and Social Science disciplines
- F1000, *Data reuse success stories: how to ensure your data is reused:* https://youtu.be/SihyG8rz6_c
- Colavizza et al., *The citation advantage of linking publications to research data* https://doi.org/10.1371/journal.pone.0230416

Thank you!

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