



## Towards a user-friendly NFDI4Earth OneStop4All portal to support researchers in Earth System Sciences in Germany

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The National Research Data Infrastructure (NFDI) aims to create a sustainable and networked infrastructure for research data and helps to overcome the challenges associated with the storage, management and processing, security, and provision of research data in Germany [1]. It thus plays an important role in promoting open science and the exchange of FAIR research data. One of the NFDI initiatives is NFDI4Earth, which focuses on Earth System Sciences (ESS) [2]. Within the many ESS sub-disciplines, there is a diverse range of relevant high-quality data, services, tools, software, data repositories, as well as training and learning materials. Thus, it is not easy for researchers to find these various useful resources. Additionally, there is a lack of knowledge on how to use them due to an enormous diversity of standards, platforms, etc.

The NFDI4Earth OneStop4All addresses these issues by serving as the primary user-friendly access point (Web portal) to the relevant ESS resources. It gives a coherent overview of the (distributed) resources for research data management (RDM), and data analysis/data science that are made available by the members of the NFDI4Earth as well as the Earth System Science (ESS) community. In particular, the OneStop4All provides access to data and software repositories, subject-specific RDM articles and a learning management system for open educational resources relevant to ESS researchers. In addition, it guides users through the NFDI4Earth resources according to their specific ESS RDM and data science needs and capabilities. The OneStop4All also promotes seamless access to a distributed user support network.

The design and development of the OneStop4All is centered on the needs of the users. A good user experience requires an understanding of user behaviour, goals, motivations, and expectations and incorporating this knowledge into every stage of the design process. To achieve this, we use methods from user-centered design (UCD), complemented by knowledge and experience in various ESS disciplines from the members of the NFDI4Earth consortium, their extended scientific networks and by directly involving the community.

We present the process of developing the user interface concept for the OneStop4All concerning usability and user experience and first insights into the platform are given.

## References

- [1] Agreement between the Federal Government and the *Länder* concerning the Establishment and Funding of a National Research Data Infrastructure (NDFI) of 26 November 2018: PDF-Datei
- [2] NFDI4Earth Consortium. (2022, Juli 7). NFDI4Earth - National Research Data Infrastructure for Earth System Sciences. Zenodo. <https://doi.org/10.5281/zenodo.6806081>