




Abstract

The World Data System (WDS) is a global member organization dedicated to supporting scientific data repositories. WDS engages in critical efforts focused on federated search, open science, and repository certification. These efforts are exemplified by key initiatives such as Polar Data Search (PDS) and UNESCO-CODATA's Data in Times of Crisis Working Group. By fostering high-quality data practices and international partnerships, WDS aims to build trusted communities that advance the global scientific enterprise.

Motivation

The WDS is an affiliated body of the **International Science Council (ISC)**.

The **mission of the World Data System** is to enhance the capabilities, impact, and sustainability of our member data repositories and data services by:

-  Creating trusted communities of scientific data repositories
-  Strengthening the scientific enterprise throughout the entire lifecycle of data and all related components creating first-class data that feeds first-class research output
-  Advocating for accessible data and transparent and reproducible science

Acknowledgments

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WDS Initiatives

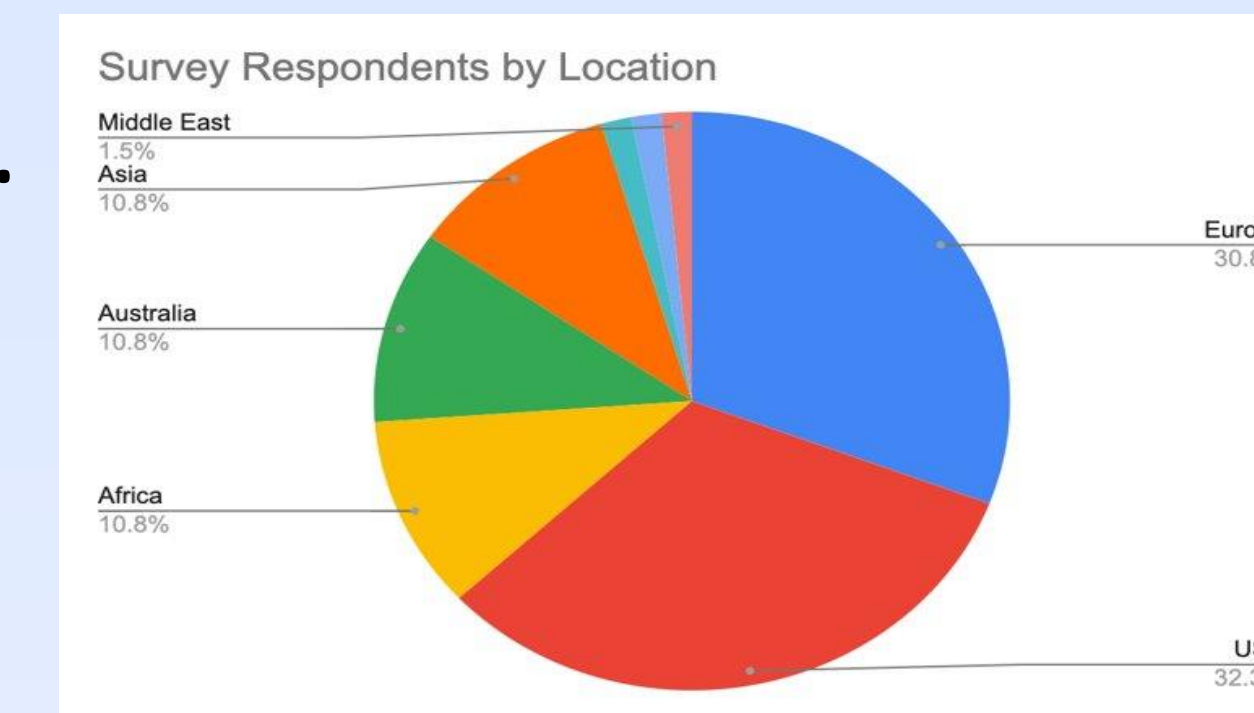
WDS Subcommittee on Standards and Certifications

Purpose:

- Identify standards and certifications that ensure scientific data repositories are reliable and trustworthy.

Impact:

- Extended certification processes for a more inclusive WDS membership.



Key players in:

POLAR Data Search (PDS)¹

Purpose:

- Supports open data in environmental research.

WDS-ITO significant contributions:

- Enhanced federated search capabilities
- Harmonized "dialects" of metadata standards

Impact:

- Metadata discovery, data integration, analysis, visualization, and advanced, reproducible workflows

Data Policy for Times of Crisis (DPTC) Working Group² UNESCO-CODATA

Purpose:

- Leverages data for crisis management (e.g., disasters, pandemics)

Achievements:

- Rapid mobilization of critical datasets
- Ensured high-quality, reliable repositories
- Creating guidance and checklist to add to the UNESCO Open Science Toolkit

Impact:

- Enabled informed decision-making during preparation, response, and reconstruction of crises.



WDS' Impact

WDS strives to empower DOE colleagues globally by:

Building Bridges:

Fostering international collaborations with entities, researchers, and engineers to tackle data challenges together.

Setting Standards:

Providing exemplary global policies, processes, and standards to help organizations establish their own international benchmarks.

Amplifying Voices:

Learning about international activities and representing the U.S. perspective in international forums to ensure our insights and innovations are shared worldwide.

Collaboration Opportunities

Harness the Power of Trusted Repositories

Explore exciting opportunities to tap into a network of reliable repositories, ensuring robust and credible data sources.

Expand Horizons with Global Partnerships

Connect with esteemed global partners, building relationships that transcend boundaries and drive impactful collaborations.

Empower Young Leaders:

WDS ECR Network

Join a vibrant community of emerging researchers, fostering collaboration and innovation.

Data Stewardship Award

Recognize outstanding young leaders with the prestigious WDS Data Stewardship Award.

References

1. Verhey, C., Minch, M., & Payne, K. (2023). Polar federated search: New infrastructure to support the polar community. *Polar Science*, 36, 100947. <https://doi.org/10.1016/j.polar.2023.100947>
2. <https://codata.org/initiatives/data-policy/dptc/>