Contribution ID: **21** Type: **Session**

Double Identification to Support Equitable Participation in Global Open Research

Tuesday 14 October 2025 16:00 (1h 30m)

The exponential growth of data-intensive research demands robust, interconnected infrastructure that can seamlessly translate local scientific efforts into global knowledge resources. This session directly addresses the critical challenge of developing scalable, interoperable research data infrastructure that supports the complex journey of research data from local repositories to international discovery platforms.

Research data increasingly represents a complex, dynamic ecosystem, and data repositories continue to shape and implement strategies to ensure local scientific outputs transcend institutional and national boundaries to realize their full potential. Persistent identifier (PID) systems emerge as a crucial facilitator, serving as the connective tissue that enables data discoverability, accessibility, and reusability across diverse research contexts.

Our session will present a comprehensive exploration of how national-level data centers can strategically develop infrastructure that supports data-intensive research. Drawing on concrete case studies from the Chinese National Space Science Data Center (parallel implementation of CSTR and DataCite DOI) and Japan Link Center (JaLC, offering JaLC DOI and DataCite DOI), we will demonstrate practical approaches to transforming local research data repositories into globally accessible scientific resources.

Session Structure and Approach: The 90-minute session will be structured into three integrated segments, each designed to provide insights into infrastructure development for data-intensive research. The first segment will provide theoretical and conceptual foundations, examining the current landscape of research data infrastructure. Presentations from DataCite, CSTR, Chinese National Space Science Data Center and Japan Link Center will offer nuanced perspectives on identifier implementation strategies.

Proposed Session Agenda:
Introduction (15 minutes): Framing the global challenges in research data infrastructure
Presentations (40 minutes):
DataCite: Global perspectives on persistent identifier adoption
CSTR: PIDs infrastructure for open data sharing
Chinese National Space Science Data Center: Chinese National Space Science Data Center User Case
Japan Link Center: Technological and community-based approaches to metadata infrastructure for research data
Interactive Discussion and Q&A (25 minutes): Collaborative exploration of challenges and opportunities

The session will examine how persistent identifier systems can be strategically deployed to:
Create seamless pathways between local and global research data ecosystems
Enhance the discoverability and impact of scientific research outputs
Support interdisciplinary and international research collaboration
Develop more equitable and accessible research infrastructure

Participants will gain actionable insights into developing infrastructure that supports data-intensive research, with a particular focus on technological, policy, and collaborative strategies that enable effective research data sharing.
By bringing together perspectives from national data centers, identifier service providers, and research infrastructure experts, this session will offer a comprehensive exploration of the complex journey from local data generation to global scientific discovery.

Proposed speakers and presentations:
CSTR-Liu Jia

Chinese National Space Science Data Center –Qi Xu
DataCite-Xiaoli Chen
JaLC - Satoko Fujisawa

Discussion prompts (work in progress)
As a data center or institution manager, how do you think identifiers can be better used in the context of resource sharing?
As an identifier service provider, what services do you think are most important to offer in the context of resource sharing?

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Track Classification: SciDataCon2025 Specific Themes: Infrastructures to Support Data-Intensive Research - Local to Global