



Title	Essential Material for Humanities Researchers: An Introduction to Research Data Management and Publishing and Utilizing IIIF Images with OUKA
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Note	

The University of Osaka Institutional Knowledge Archive : OUKA

<https://ir.library.osaka-u.ac.jp/>

The University of Osaka



The University of Osaka Global Japanese Studies Education and Research Incubator

[Incubator-Supported Project]

- Developing Digital Humanities Educational Materials to Enhance Research Data Management in the Humanities

**Essential Material for
Humanities Researchers:
An **Introduction** to Research Data Management
and Publishing and Utilizing IIF Images with
OUKA**



1. Objective of this Material



Q: Is data management and sharing necessary for research in the humanities?



- In the humanities, individual insight and the accumulation of long-term research are essential, so isn't sharing data perhaps unrealistic?
- Many people don't know how to properly manage or publish humanities-based research data.

**A: Yes. It's a necessary
foundation to revitalize research
in the humanities**

- Advances one's own research
- Revitalizes outreach efforts and student advising



A Guide to Data Sharing in the Humanities and Social Sciences

Japan Society for the Promotion of Science (JSPS)

https://www.jsp.go.jp/j-di/data/guide/tebiki_p.pdf (in Japanese)



From [Column for the Humanities 1: The Significance of Data Sharing in the Humanities] (p.4):

1. Organizing research materials increases awareness
2. Enables long-term preservation of highly transparent research materials that anyone can reproduce
3. Promotes further research through secondary analysis and reuse



Open Science Gains Momentum Worldwide

Open Science

An effort to practice research data sharing as much as possible

- In principle: Research activities through international joint research and engagement with the general public
- In policy: Returning research outcomes to society from publicly funded research, fair use of research funding, transparency in research, and open access

Reference: National Institute of Informatics, Research Center for Open Science and Data Platform

<https://rcos.nii.ac.jp/en/document/openscience/>

**Sustaining open science activities
as an individual is challenging.**



National Institute of Informatics (NII): Building a Research Data Ecosystem for the Promotion of Data-Driven Science

https://www.nii.ac.jp/creded/project_e.html

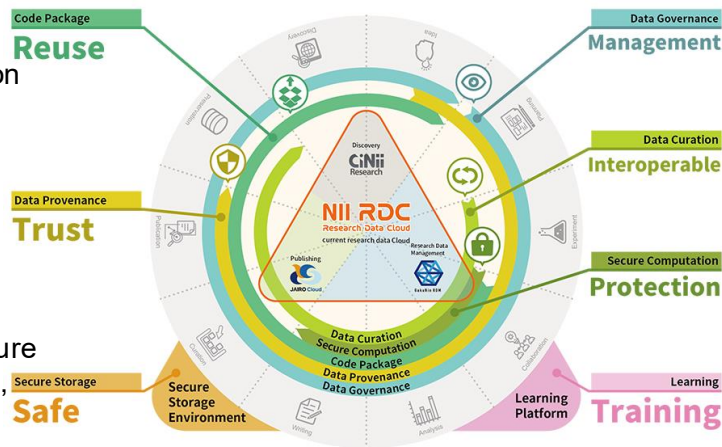
Developing a Research Data Ecosystem for the Promotion of Data-Driven Science



Developing a Research Data Ecosystem for the Promotion of



Data-Driven Science



Provides data, program, and analysis environment packaging and distribution functions to dramatically improve reproducibility of research outcomes

Data provenance management enables monitoring of data usage and provides an incentive model for data publication

Provides ultra-secure storage with secure and robust data storage and protection, preserving sensitive information with confidence

Reuse
Supports data management planning, transforming Data Management Plans (DMPs) into an essential part of project management

Trust
Contribute to the promotion of data reuse by building an ecosystem that enables specialized curation practices

Safe
Uses secure computation technology to safely analyze sensitive information, supporting new data-driven research

Learning
Provides an environment to learn skills necessary for Research Data Management (RDM), educating researchers to practice new scientific approaches

Platform Integration Team

RIKEN



- Organize and design functions to link NII RDC with institutional services
- Organize requirements and develop functions to effectively manage, use, and disseminate research data
- Central organization of metadata to be registered
- Coordination of specifications and joint development with related organizations

Integration & Utilization Development Team

The University of Tokyo



- Scrutinize initiatives that develop into data utilization and data collaboration between different fields.
- Generate specific use cases for data utilization and data linkage between different fields
- Creation of a toolkit that summarizes use cases and public relations activities with the toolkit

Rules & Guidelines Development Team

Nagoya University



- Designing standardized descriptions for machine-readable data suitable for research data utilization
- Preparing necessary requirements and workflows for publishing research data
- Compiling guidelines for proper handling of research data
- Developing best practices for internal institutional frameworks

Human Resource Development Team

The University of Osaka



- Promoting the development of a research data management system centered on human resource development
- Examining the standard skills required for research data management personnel
- Creating curricula and developing online learning courses

Toward Promoting Open Science in the Humanities through Digital Humanities

Osaka University Research Data Policy (March 2023)

<https://www.osaka-u.ac.jp/ja/research/files/e30yqd> (Japanese)

<https://www.osaka-u.ac.jp/ja/research/files/Osaka-University-Research-Data-Policy.pdf> (English)

Issue: Limited opportunities to learn the foundations, practical methods and benefits of publishing & managing research data in the humanities

Digital Humanities

An interdisciplinary field that supports research in the humanities through information technologies (IT).

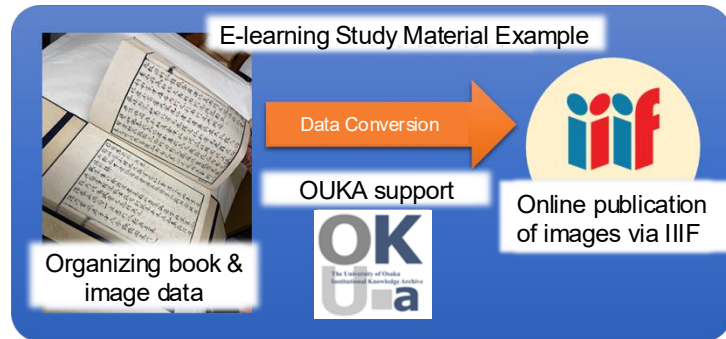
It explores methods for **introducing** a degree of **transparency** into the research process and for enabling the **possibility of data sharing** in the humanities.

Managing and Publishing Research Results: Image Data

IIIF (International Image Interoperability Framework)

<https://iiif.io/>

- a set of open standards for delivering high-quality, attributed digital objects online at scale, enabling to promote the online publication and reuse of original images of cultural heritage materials, such as rare books.



The University of Osaka Institutional Knowledge Archive OUKA

The University of Osaka Institutional Repository

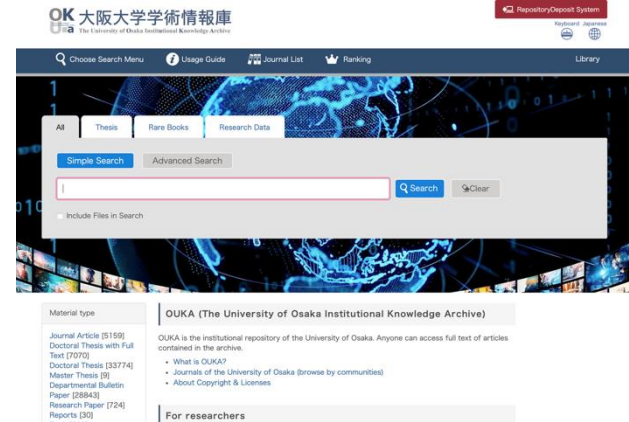
- A platform for disseminating the university's research and educational output
- All faculty and staff (including former members) can register their research output
- Registered works are preserved and remain publicly accessible permanently
- No cost to the user

■ Types of registerable content

- Journal articles
- Conference papers
- Doctoral dissertations
- Bulletin papers
- Research reports
- Books, conference presentations, teaching materials
- Other (e.g., supporting data for publications)

■ Registration support:

- Support for digitizing bulletins and university journals
- Research on publisher copyright policies
- Assignment of persistent identifiers (DOIs)



OUKA Top Page

<https://ir.library.osaka-u.ac.jp/repo/ouka/all/?lang=1>

Structure of this Material

1. Objective of this material
2. Research data management
3. What are IIF images?
4. Basic usage of IIF images
5. Potential of IIF
6. Materials and methods for creating IIF-compatible images using OUKA
7. Summary



(Reading note: “Triple-I-F”)



Research Data Management Fundamentals

“Fundamentals of Research Data
Management in the Open Science Era”

<https://doi.org/10.18910/101974>

(educational materials, in English,
Available in on demand video, pdf and
ppt format)



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