
European Spallation Source ERIC

Policy for Scientific Data

1. GENERAL PRINCIPLES

Acceptance of this policy is a condition for the award of beam time and access to scientific research data held at the European Spallation Source ERIC ("ESS").

1.1. Coverage

- 1.1.1. This scientific data policy ("Policy") covers the collection, access, use, disposal and storage of scientific research data collected from the neutron beam instruments located at ESS under all access modes except proprietary access.

1.2. Revisions

- 1.2.1. Revisions to this Policy may occur for any reason or at any time, subject to the approval of the European Spallation Source ERIC Council ("Council").
- 1.2.2. Revisions to this Policy by the Director General of ESS may occur with immediate effect and can be retroactively approved by the Council.

1.3. Notifications

- 1.3.1. Once the Policy is revised, ESS shall make reasonable efforts to notify affected parties and allow such parties reasonable time to make appropriate adjustments accordingly.

1.4. Infringements

- 1.4.1. Users may not access, exploit, or distribute scientific research data collected at ESS unless they are entitled to do so under this Policy.
- 1.4.2. Deliberate infringements of this Policy may result in denial of access to data and/or denial of beam time requests in the future.

1.5. Legal Protection

- 1.5.1. All data will be subject to applicable EU data protection laws, including Swedish or Danish laws as applicable.

2. DEFINITIONS

- 2.1. "Instrument(s)" refers to any and all instruments, including beamline instruments, used at ESS during the execution of experiments.
- 2.2. Principal Investigator ("PI") refers to the main proposer identified on the experiment proposal.
- 2.3. Proposal Team ("PT") refers to anyone designated by the PI with the right of access by way of notification on the original experimental proposal or via written communication to the Scientific Coordination and User Office ("SCUO").
- 2.4. "Proposal number" refers to a unique identifier representing each experiment performed at ESS.
- 2.5. "Raw data" refers to the original neutron event data and / or neutron image data collected from neutron detectors and imaging cameras.

- 2.6.** “Meta-data” refers to data collected from instruments during an experiment that is not raw data. Meta data includes complimentary data including but not limited to parametric information and data from other instrumentation sources.
- 2.7.** “Scientific research data” refers to a collation of raw data and meta data.
- 2.8.** “Result” refers to data and intellectual property arising from the analysis of scientific research data.
- 2.9.** “On-line catalogue” refers to an externally accessible index of raw data and meta data held by ESS
- 2.10.** “Custodian” refers to the DMSC storing, curating, and providing access to raw data, meta data and results.

3. RAW AND META DATA COLLECTED BY ESS

3.1. Raw data and associated meta data

- 3.1.1. DMSC will act as the custodian of raw data and associated meta data.
- 3.1.2. ESS shall provide a persistent identifier for containers of raw data and meta data at the point of creation of said container.

3.2. Security, curation, archival of raw and meta data

- 3.2.1. Raw data will be read-only for the duration of their life time.
- 3.2.2. Raw and meta data will be stored in a defined format.
- 3.2.3. ESS will curate a means to read the raw data and meta data.
- 3.2.4. Two (2) copies of the raw data and meta data will be kept in physically different locations for at least first five (5) years commencing at the end of an ESS operations cycle when the raw data was taken.
- 3.2.5. ESS will move raw data and meta data to archival facilities for long term curation for a minimum of 10 years after the restricted access period.

3.3. Access to Raw data and associated meta data by ESS/PT

- 3.3.1. Access to the raw data and meta data shall be restricted to the original PT and ESS staff for the first three (3) years after the end of the ESS operations cycle when the raw data was taken. After this period, the raw and meta data will be open access.
- 3.3.2. ESS staff shall respect the confidentiality of the scientific research data for the restricted access period but may exercise the right to make public thereafter.
- 3.3.3. The PT shall be able to obtain an electronic copy of the scientific research data they collected.
- 3.3.4. It is the responsibility of the PT to curate their electronic copy.
- 3.3.5. Publications including data collected at ESS will cite the persistent identifier of the data.

3.4. Open Access to Raw and meta data

- 3.4.1. Three (3) years after the end of an ESS operations cycle when the raw data was generated, ESS shall make public an index of the raw data and meta data collected in an open on-line catalogue and notify PT of this event.
- 3.4.2. The PT may request an extension of the restricted access period of up to three years, by submitting a written request specifying the reasons for the extension to the ESS director of science who will decide following the advice of the chair of the science advisory committee.
- 3.4.3. The PT may request their data be made open before the expiration of the restricted access period.
- 3.4.4. The online index shall catalogue raw data and associated meta data for example: sample names/compositions, instrument names and basic parameters, number of runs, volume of data, sample environment equipment used, sample data itself, temperature ranges, etc., and the title from the original proposal with the name of the PI).
- 3.4.5. Access to the online catalogue of open data will be given to a user, not associated with the PT, providing said user registers with ESS and accepts the terms of this scientific data policy.
- 3.4.6. Publications or other generated intellectual property resulting from access to open data from ESS will cite the original persistent identifier of the data, the PT and the proposal number.

4. RESULTS

- 4.1.** Ownership of all results (intellectual property) derived from the analysis of the raw data shall be determined by the specific user agreement, subject to the European Spallation Source ERIC Intellectual Property Rights and Inventions Policy.
- 4.2.** ESS will provide curation of results on a best effort basis and act as custodian of results.
- 4.3.** Access to the results of analysis performed on raw data and meta data is restricted to the person or persons performing the analysis, unless otherwise requested by those persons. If the raw data being analyzed is still restricted, access to the analysis results must be granted by the PT.

DOCUMENT REVISION HISTORY

Version	Reason for revision	Date
0.0	Outline of policy contents	2015-03-24
1.0	First draft of the policy	2015-05-01
2.0	Second draft of the policy	2015-05-06
3.0	Third draft of the policy	2015-08-31
4.0	Fourth draft of the policy	2015-09-23
5.0	Fifth draft of the policy	2017-03-31
6.0	Sixth draft of the policy	2017-05-05
7.0	Seventh draft of the policy	2017-06-15