



# Scicat for Powder Diffraction at ESS

Point of view of Instrument Data Scientist

Céline Durniak  
IDS for Diffraction (DREAM, BEER)

# Agenda



- 1 Description of DREAM

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- 2 Using Scicat for Powder Diffraction at ESS

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- 3 Examples from other facilities

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# DREAM

## Diffraction Resolved by Energy and Angle Measurements



One of the Tranche 1 instruments

### *Instrument features*

- bi-spectral: thermal + cold
- pulse-shaping: high flux vs high resolution
- polarized (cold) neutrons
- 3D  $^{10}\text{B}$  detectors

### *Science cases*

- Powder Diffraction
- Single Crystal Diffraction
- Pair Distribution Function
- SANS

Sample vessel



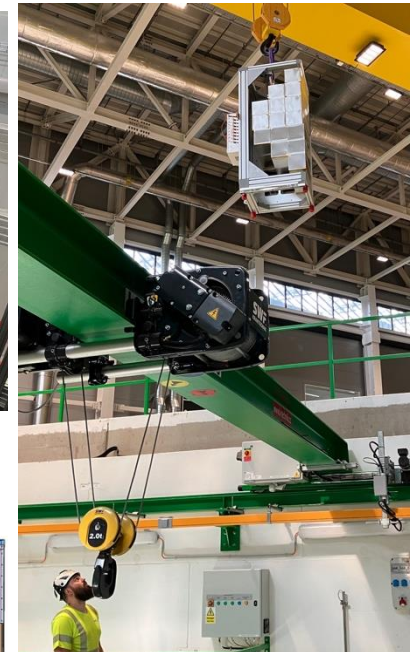
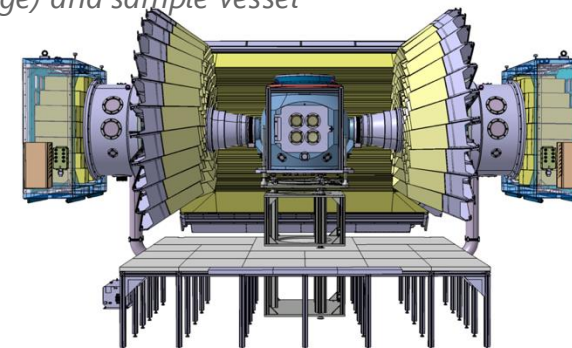
Experimental caves & control hatches



Installation of detectors

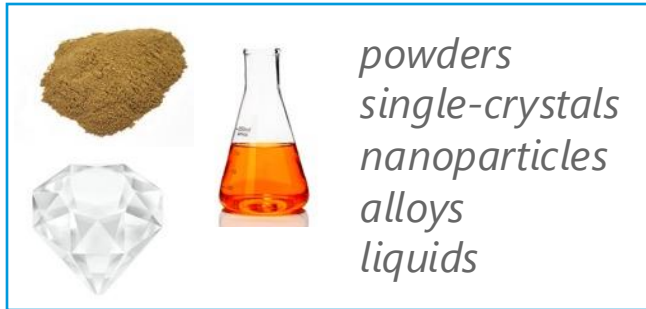


DREAM detector configuration (full coverage) and sample vessel



# DREAM

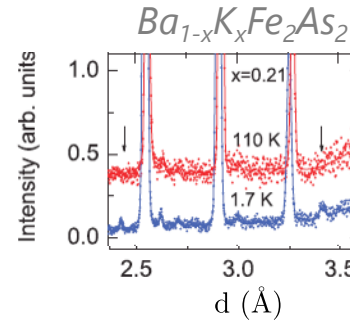
## Science Cases



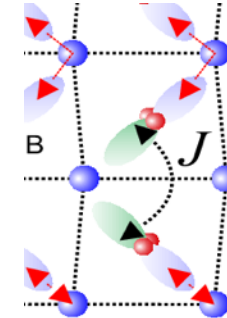
*powders  
single-crystals  
nanoparticles  
alloys  
liquids*



## Magnetism



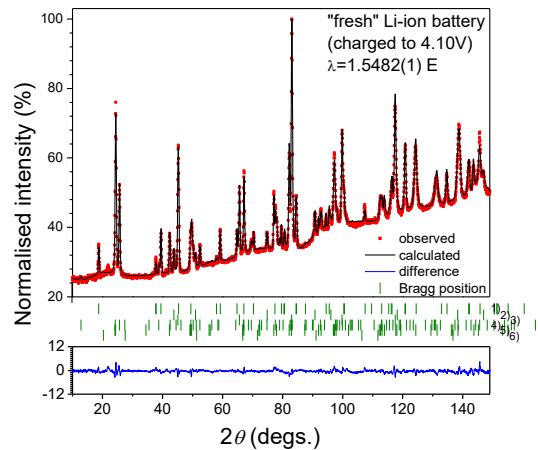
*weak moments  
phase diagrams of  
superconductors  
multiferroics*



*orbital ordering  
charge ordering  
distortion  
magnetic exchange*

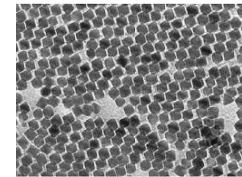
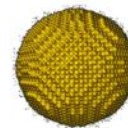


## Energy Materials



*multiphase  
catalysts  
in-operandi  
batteries*

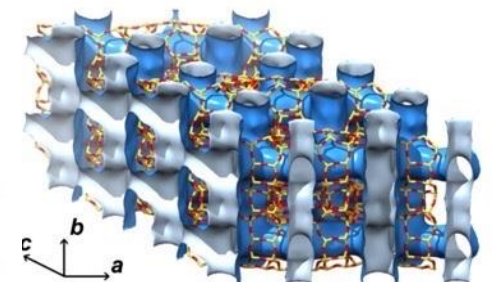
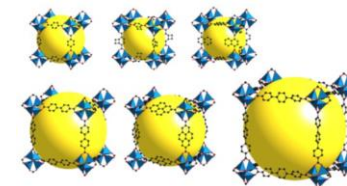
## Nanostructures



*magnetic nanoparticles  
core-shell structures  
self-assembly  
synthesis*

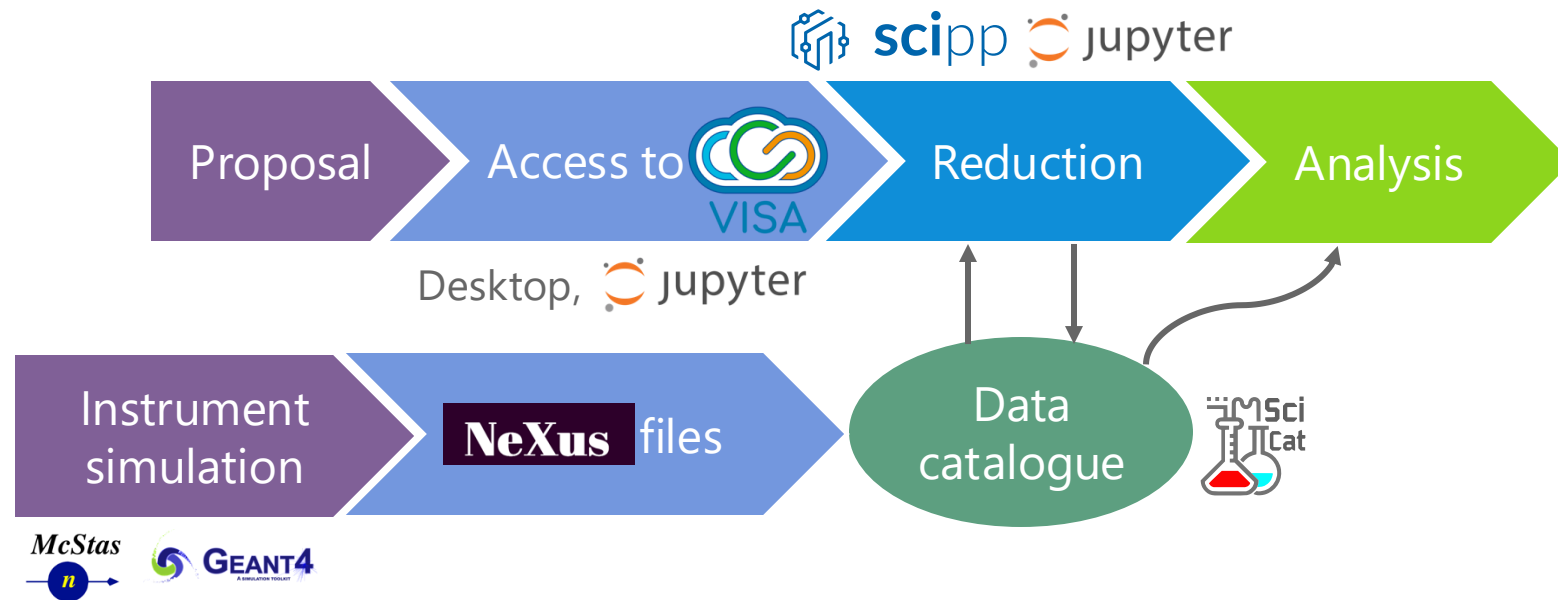
## Large Unit Cells

*MOFs  
Thermo-electrics  
molecular sieves  
H<sub>2</sub> - storage*



# Data workflow @ ESS

## Software & frameworks for Powder Diffraction



### Derived data

- different science cases to support
- no standard format in Diffraction

→ importance of metadata



# "Raw" and derived data on Scicat

Raw data

General Information

Dataset Name

Simulated Silicon powder at DREAM

Description

McStas/GEANT4 Si powder at DREAM (High Flux configuration)

Pid

20.500.12269/76f5ff02-2dc2-4bfb-a903-2ff28da91999

Type

raw

Creation time

2024-10-04 00:00

Keywords

POWDER\_DIFFRACTION

DIFFRACTION

POWDER

ESS

DREAM

SI

SILICON

HIGH FLUX

DMSC\_STAP

MCSTAS

Edit

Creator Information

Owner

Celine Durniak

Principal Investigator

Celine Durniak

Contact Email

[celine.durniak@ess.eu](mailto:celine.durniak@ess.eu)

Owner Group

339400

Access Groups

ecdc,sims,dram,ess,scientific information management systems group,ess employees

File Information

Source Folder

/ess/data/dream/2024/339400/derived/ac716bda-81bf-11ef-8e41-5f58ffa4375a

Related Documents

Proposal

[DREAM for DMSC STAP](#)

Sample

[Simulated Silicon Powder](#)

Instrument

[dream](#)

Derived data

General Information

Name

DREAM demo reduced data for Raw sample id 20.500.12269/76f5ff02-2dc2-4bfb-a903-2ff28da91999, reduction id 0d7692ec-ca2d-46b8-bf9d-60d73254de28

Description

DREAM derived dataset created for DMSC STAP demo with raw sample id 20.500.12269/76f5ff02-2dc2-4bfb-a903-2ff28da91999, vanadium id 20.500.12269/084d8676-ca50-4a07-a16f-81ceffd064cf, Proposal 339400, Reduction id 0d7692ec-ca2d-46b8-bf9d-60d73254de28

PID

20.500.12269/e6edbebf-5e4b-46c4-a693-316699d4ccfa

Type

derived

Creation Time

2024-10-22 14:57

Keywords

DREAM

DMSC\_STAP

Edit

Creator Information

Owner

Celine Durniak

Principal Investigator

Celine Durniak

Contact Email

[celine.durniak@ess.eu](mailto:celine.durniak@ess.eu)

Owner Group

339400




Access Groups

ecdc,sims,dram,ess,scientific information management systems group,ess employees



# Simulated data on Scicat

## McStas/GEANT 4 simulations (csv and NeXus files)

 Name	 Run No.	 Source Folder
Simulated silicon powder sample (NeXus)		...9dbc06539c
Simulated vanadium sample (NeXus)		...6d20a9a0df
Simulated silicon powder sample		...cd314f9e24
Simulated MOF (MIL-53) sample, high flux		...63fd23ca3a
Simulation Si powder sample, high flux, new hkl		...a3f4fed1e6
Simulated vanadium sample, incoherent + coherent scattering, high flux		...70653d744
Simulated vanadium sample, incoherent scattering, high flux		...aef943309c
Simulated vanadium can, high flux		...0db4e77b0c
Simulation diamond powder sample in vanadium can, run 2		...138c17b23e
Simulation diamond powder sample in vanadium can, run 1		...8a3f8fcf3f

General Information

Dataset Name

Simulated silicon powder sample (NeXus)

Description

McStas + GEANT4 simulation of DREAM in high-flux configuration with a silicon sample, converted to NeXus.

Pid

20.500.12269/87558e53-7946-4c18-be7c-f2e936185e21

Type

derived

Creation time

2025-02-05 10:31

Keywords

DREAM

McStas

simulation

NeXus

high flux

GEANT4

Creator Information

Owner

Céline Durniak

Principal Investigator

Céline Durniak

Contact Email

[celine.durniak@ess.eu](mailto:celine.durniak@ess.eu)

Owner Group

037980

Access Groups

ess,dmsc

File Information

Source Folder

/ess/data/dream/2025/037980/upload/35a85d60-4b40-4fb6-9748-599dbc065390

Related Documents

Proposal

[DREAM simulations](#)

Input Datasets

[20.500.12269/1b7c5c6e-dd03-453a-bfe6-4d07e9d86c77](#)

Derived Data

Software Used

McStas 3.4,GEANT4

Scientific Metadata

View

Edit

Name	Value	Unit
Silicon Bc Offset	240	deg



# Experimental data

From other institute(s) SNS ORNL

## POWGEN



Datasets / 20.500.12269/2b0d9e7f-a98f-462e-be0c-4ecf5a89840b /

Details

Datafiles

Related Datasets

Logbook

Lifecycle

General Information

Dataset Name

2020B Calibration Empty PAC instrument HR July13rd

Description

Empty instrument run at POWGEN.

Pid

20.500.12269/2b0d9e7f-a98f-462e-be0c-4ecf5a89840b

Type

raw

Creation time

2023-02-21 14:07

Keywords

powder diffraction diffraction powder external legacy empty instrument

Creator Information

Owner

Qiang Zhang

Principal Investigator

Celine Durniak;Qiang Zhang

Orcid

orcid.org/0000-0003-0389-7039

Contact Email

celine.durniak@ess.eu

Owner Group

276591

Access Groups

ess,swap,dram,dream

File Information

Source Folder

/ess/data/dream/2023/276591/legacy/2b0d9e7f-a98f-462e-be0c-4ecf5a89840b

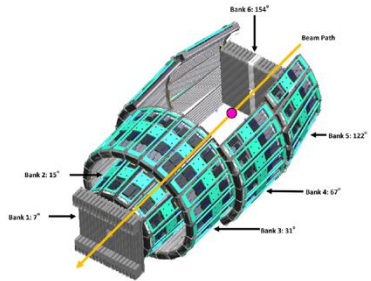
Size

672 MiB

Data Format

NeXus

## NOMAD



Details

Datafiles

Related Datasets

Logbook

Attachments

Lifecycle

General Information

Dataset Name

NOMAD Calibration file

Description

Calibration file for NOMAD instrument

Pid

20.500.12269/74988253-ca91-4305-a7a8-1b8251db8ab8

Type

raw

Creation time

2023-06-28 15:35

Keywords

diffraction external legacy pair distribution function NOMAD calibration

Edit

Creator Information

Owner

Yuanpeng Zhang

Principal Investigator

Celine Durniak; Qiang Zhang

Orcid

orcid.org/0000-0003-4224-3361

Contact Email

celine.durniak@ess.eu

Owner Group

662861

Access Groups

swap,dram,dream



# User feedback

# Scicat

## Webpage



- Unclear terminology
- No distinction between datafiles and scripts
- Cannot compare files from different datasets

Search

Search Reset Search

Filters and Conditions

Group

Type

Keyword

Start Date - End Date

Text

More Filters...

Apply Reset Filters

My Data All Public Data

Items per page: 100 1 - 100 of 77212

Add to Cart

	Pid	Name	Run No.	Source Folder	Size	Start Time	Type	Image	Proposal ID
<input type="checkbox"/>	20.500.12269/8b6d1aa-fa163e9aae0a	odin	...	025/97769f	48 MiB	2025-06-01 17:05	raw		977695
<input type="checkbox"/>	20.500.12269/75d7705-fa163e9aae0a	nmx	...	025/97769f	4 GiB	2025-06-01 16:57	raw		977695
<input type="checkbox"/>	20.500.12269/7d38d40-fa163e9aae0a	loki	...	025/97769f	1 GiB	2025-06-01 16:42	raw		977695
<input type="checkbox"/>	20.500.12269/9c45de3-fa163e9aae0a	estia	...	025/97769f	23 MiB	2025-06-01 16:35	raw		977695
<input type="checkbox"/>	20.500.12269/cb64ac42-4216-11f0-9-fa163e9aae0a	dream	...	025/97769f	1 GiB	2025-06-01 16:22	raw		977695
<input type="checkbox"/>	20.500.12269/e6c90de-4214-11f0-9-fa163e9aae0a	bifrost	...	025/97769f	2 GiB	2025-06-01 16:20	raw		977695
<input type="checkbox"/>	20.500.12269/6a2a5a6-fa163e9aae0a	odin	...	025/97769f	40 MiB	2025-06-01 15:43	raw		977695
<input type="checkbox"/>	20.500.12269/018ff8d4-fa163e9aae0a	nmx	...	025/97769f	3 GiB	2025-06-01 15:37	raw		977695
<input type="checkbox"/>	20.500.12269/cde8d4a-420f-11f0-9-fa163e9aae0a	loki	...	025/97769f	1 GiB	2025-06-01 15:27	raw		977695
<input type="checkbox"/>	20.500.12269/0c7ef08e-fa163e9aae0a	estia	...	025/97769f	23 MiB	2025-06-01 15:18	raw		977695

Details Datafiles Related Datasets Lifecycle

Maximum allowed download size: 999 MiB  
Selected: 0 B / 999 MiB

2 datafiles.

Notebook Selected Notebook All Download Selected Download All

Items per page: 25 1 - 2 of 2

	Path	Size	Time
<input type="checkbox"/>	DREAM_ebwd_339400_00000001_202410231649.xye	27 KiB	2024-10-23 16:49
<input type="checkbox"/>	ReductionDREAM_PowderDiffraction_Scipp_Nov2024.ipynb	51 KiB	2024-11-28 15:49



# Scicat

## Accessing stored data

- `scp` from terminal
- `scitacean` in Python script or Jupyter notebooks
- direct download from Scicat webpage for small files

## Unknowns at this stage of the project

- storing electronic logbooks
- interface with Scichat: any filters?

# Examples from other facilities



# Examples from other facilities

ILL data.ill.eu

Experimental DataReactor ShuttersLegacy DataHelp

Global Search

☐ Include experiments without data

Search

Advanced Search

My role in the experiment (?)

Member

Cycle

All cycles

Instrument

D4 (Disordered materials diffractometer)

Number / Title / Abstract (?)

Proposer (?)

Data Metadata or Numor (?)

☐ Include experiments without data

Search

Experiments list

1 proposal(s) found with the given criterias (sorted by proposal number)

6-05-966 : The evolution of medium range order in GeAsSe glasses

- Cycle/instrument:154 / D4

Experiment 6-05-966

ProposalMembersData rangesData folders

Filter data ranges list:

Download all data in a zip file

Data collected during the cycle 154 on instrument D4

Folder path in the illdata share on Serdon: 154/d4/exp\_6-05-966/rawdata/

First	Last	First date	Last date	Title	Sample	Size
266710	266768	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		691 KB
266769	266769	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		12 KB
266770	266792	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		259 KB
266793	266793	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		12 KB
266794	266867	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		876 KB
266868	266868	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		12 KB
266869	266886	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		210 KB
266887	266887	25/10/2015	25/10/2015	The evolution of medium range order in GeAsSe glasses		12 KB
266888	266942	25/10/2015	26/10/2015	The evolution of medium range order in GeAsSe glasses		629 KB
266943	266943	26/10/2015	26/10/2015	The evolution of medium range order in GeAsSe glasses		12 KB
266944	266983	26/10/2015	26/10/2015	The evolution of medium range order in GeAsSe glasses		457 KB

Data

Data

Context

Proposal

6-05-966

Cycle

154 (from 13/10/2015 to 17/12/2015)

Instrument

D4

Directory in the ILL file server

On Linux

/net4/serdon/154/d4/exp\_6-05-966/rawdata

On Windows

\\serdon\illdata\154\d4\exp\_6-05-966\rawdata

Data information

First numor

266769 generated on 25/10/2015 13:23

Last numor

266769 generated on 25/10/2015 13:23

Total size

12 KBytes (12636 Bytes) in 1 file(s)

Metadata (Common for all files)

Title

The evolution of medium range order in GeAsSe glasses

Files

266769

Download all range data in a zip file

Quick Help

Global Search

It is a "google like" search which searches on all proposal information including proposal and report documents and data files metadata. Results are sorted by relevancy and limited to 200 lines for performance reasons.

Advanced Search

It provides a more precise search by criterias. Results are sorted by proposals numbers (without number of lines limit).

InternalUse

Both searches allows to find *InternalUse proposals*. They are not real proposals but a per cycle/instrument public storage folders that should only be used for files of common interest (e.g. Calibration files). These internal use fake proposals appears with a Number like: internaluse-143-in1.

The "Include experiments without data" options

If unchecked, the proposals which haven't indexed data can't be found. Remark: a proposal can be considered as not having data even if it has, if the data scanning procedure has not already scanned its data.

Sftp on dt.ill.fr

[NEW] To download a large volume of data you can now connect to dt.ill.fr with a sftp client like [FileZilla](#) (not with your web browser).

Developed by: DPT / SI / Fabien Pinet

If you have any questions or feedback please contact me (pinet@ill.eu) or send an email to data@ill.eu

# Examples from other facilities

## SNS ORNL

[GUEST PORTAL HOME](#) [FEEDBACK?](#) [ABOUT ORNL](#) [CONTACT US](#)

MY ACCOUNT

- Edit Profile
- Update Password

CNMS Users

- Create a Proposal
- Proposal System

HFIR/SNS Users

- Confirmed Proposals
- Completed Proposals
- Create a Proposal
- Proposal System
- Data and Computing Resources
- Access Experiment Data
- Shipping Research Samples to ORNL

### Confirmed Proposals

ID	Title	Beamline	Experiment Dates	Team
34905	Calibration and Background	NOMAD	27-JAN-25 to 03-FEB-25 04-FEB-25 to 05-FEB-25 06-FEB-25 to 07-FEB-25 26-FEB-25 to 27-FEB-25 04-MAR-25 to 05-MAR-25 14-MAR-25 to 14-MAR-25 17-MAR-25 to 20-MAR-25 25-MAR-25 to 26-MAR-25 01-APR-25 to 02-APR-25 10-APR-25 to 11-APR-25 14-APR-25 to 17-APR-25 22-APR-25 to 23-APR-25 12-MAY-25 to 13-MAY-25	C.Durniak M.Everett C.Li J.Liu J.Neuefeind M.Rolinska M.Tucker E.Van Auken Y.Zhang



ONCat

## ONCat

v3.5.16  
THE ORNL NEUTRON CATALOG

ONCat is the catalog for neutron experiment data at SNS and HFIR.

Experiment teams and instrument staff can browse, download and search their data. DOI's can be created so that data sets are publicly available and citable.

Developers can integrate their tools with ONCat's API to support a variety of file-finding and metadata-searching use cases.

[Release Notes](#)

[Browse](#) [Publish](#) [Documentation](#)

Search by Sample

[18.115706.260023.5](#)

Contact Security & Privacy

1 "Lightbulb" system generated by SNS, L.L.E. and converted by NeutronCat AI

OAK RIDGE National Laboratory

<b>BIO-SANS</b> Biological Small-Angle Neutron Scattering Instrument	<b>ARCIS</b> Wide Angular-Range Chopper Spectrometer
<b>CNPD</b> Cold Neutron Polarization Development Beamline	<b>BASIS</b> Backscattering Spectrometer
<b>CTAX</b> Cold Neutron Triple-Axis Spectrometer	<b>CNCS</b> Cold Neutron Chopper Spectrometer
<b>DEMAND</b> Dimensional Extreme Magnetic Neutron Diffractometer	<b>CORELLI</b> Elastic Diffuse Scattering Spectrometer
<b>DEV BEAM</b> Instrument Development Beam Line	<b>EQ-SANS</b> Extended Q-Range Small-Angle Neutron Scattering Diffractometer
<b>GP-SANS</b> General-Purpose Small-Angle Neutron Scattering Diffractometer	<b>HYSPEC</b> Hybrid Spectrometer
<b>HSD</b> Polarization Dev	<b>LIGRE</b> Liquids Reflectometer
<b>HDR</b> High Intensity Diffractometer for Residual stress Analysis	<b>MAGREF</b> Magnetism Reflectometer
<b>IMAGINE</b> Laser Diffractometer	<b>MANDI</b> Macromolecular Neutron Diffractometer
<b>MARS</b> Multimodal Advanced Radiography Station	<b>NOMAD</b> Nanoscale-Ordered Materials Diffractometer
<b>NOWG</b> nED on Wheels G	<b>NOWB</b> nED on Wheels B
<b>NOWV</b> nED on Wheels V	<b>NOWD</b> nED on Wheels D
<b>POWDER</b> Neutron Powder Diffractometer	<b>NSE</b> Neutron Spin Echo Spectrometer
<b>PTAX</b> Polarized Triple-Axis Spectrometer	<b>POWGEN</b> Powder Diffractometer
<b>TAX</b> Triple-Axis Spectrometer	<b>SEQUOIA</b> Fine-Resolution Fermi Chopper Spectrometer
	<b>SNAP</b> Scattering Neutrons and Research Diffractometer

ID	ITEMS ID	Sample	Formula	Mass (g)	Height (cm)	Container	Title
# 220,244	102,297	ScV6Sn6 powder	ScV6Sn6	2.00	0.00	Vanadium Sam.	MT_3mm_at_500K at temperature 500.0 K.
# 220,242	102,297	ScV6Sn6 powder	ScV6Sn6	2.00	0.00	Vanadium Sam.	MT_3mm_aquill_500K at temperature 500.0 K.
# 220,222	102,297	ScV6Sn6 powder	ScV6Sn6	2.00	0.00	Vanadium Sam.	MT_3mm_at_300K at temperature 199.99 K.
# 220,214	102,297	ScV6Sn6 powder	ScV6Sn6	2.00	0.00	Vanadium Sam.	MT_3mm_at_190K at temperature 100.0 K.
# 220,213	102,297	ScV6Sn6 powder	ScV6Sn6	2.00	0.00	Vanadium Sam.	MT_3mm_at_190K at temperature 100.0 K.
# 220,182	106,003	Carbon	C	1.00	0.00	PAC06	C_background_for_35874
# 219,905	-	-	-	0.00	0.00	-	MT_3mm_thickcap at temperature 300.01 K.
# 219,904	11,090	Na2Co3Al2F14	Na2Co3Al2F14	1.08	40.00	PAC06	NAC at temperature 299.99 K.
# 219,903	102,088	Si NIST SPM 640e	Si	5.00	0.00	PAC06	Si640e at temperature 299.99 K.
# 219,902	102,088	Si NIST SPM 640e	Si	5.00	0.00	PAC06	Si640e at temperature 300.0 K.
# 219,901	-	-	-	0.00	0.00	-	MT_3mm_thickcap at temperature 300.0 K.
# 219,899	-	-	-	0.00	0.00	-	MT_3mm_thickcap at temperature 300.01 K.
# 219,898	-	-	-	0.00	0.00	-	MT_3mm_thickcap at temperature 300.02 K.
# 219,879	45,026	V rod	V	8.00	0.00	Cylinder	V_rod at temperature 299.99 K.
# 219,878	39,000	MT 3mm V can	V	1.00	0.00	PAC06	MT_3mm_PAC at temperature 300.0 K.
# 219,877	39,000	MT 3mm V can	V	1.00	0.00	PAC06	MT_3mm_PAC at temperature 300.01 K.
# 219,876	36,396	Diamond	C	5.00	0.00	PAC06	diamond at temperature 300.0 K.
# 219,828	11,090	Na2Co3Al2F14	Na2Co3Al2F14	1.08	40.00	PAC06	NAC at temperature 299.99 K.
# 219,827	53,020	Si NIST SPM 640e	Si	5.00	0.00	PAC06	Si_640e at temperature 300.0 K.
# 219,866	-	-	-	0.00	0.00	-	MT_3mm_glass at temperature 300.0 K.
# 219,865	-	-	-	0.00	0.00	-	MT_3mm_glass at temperature 300.0 K.
# 219,827	-	-	-	0.00	0.00	-	MT_3mm_sag at temperature 300.0 K.
# 219,826	-	-	-	0.00	0.00	-	MT_3mm_sag at temperature 300.0 K.
# 219,825	53,020	Si NIST SPM 640e	Si	5.00	0.00	PAC06	Si_640e at temperature 300.01 K.
# 219,824	-	-	-	0.00	0.00	-	MT_3mm_thickcap at temperature 300.0 K.
# 219,823	45,026	V rod	V	8.00	0.00	Cylinder	V_rod at temperature 300.0 K.
# 219,822	39,000	MT 3mm V can	V	1.00	0.00	PAC06	MT_3mm_PAC at temperature 300.01 K.
# 219,821	41,228	Diamond furnace	C	2.04	5.90	PAC06	diamond at temperature 300.0 K.
# 219,260	105,751	In situ battery Na2/3Ni1/3Mn2/3O2	Na2/3Ni1/3Mn2/3O2	6.00	0.00	Other	NB12_4m at temperature 297.2 K.
# 219,259	105,751	In situ battery Na2/3Ni1/3Mn2/3O2	Na2/3Ni1/3Mn2/3O2	6.00	0.00	Other	NB12_4m at temperature 297.2 K.

Filter by Path

Expand All Collapse All

22

Images/

news/

Updated 20 hours ago

2025-06-03 11:33

3 TB

2024-12-08 11:59

8 Bytes

2025-05-28 13:47

18.1 KB

2025-05-28 13:38

1.3 KB

2025-05-28 14:09

5.7 KB

2025-05-28 15:11

1.7 KB

2025-05-28 15:58

1.5 KB

2025-05-28 15:59

46.4 MB

Update File List

1 selected file(s).

Size: 24.8 GB (~8 GB saved in 1 hour @ 2 MB/s)

Download

# Examples from other facilities

## SNS ORNL

List of methods and commands to download data


### Terminal (SSH)

scp

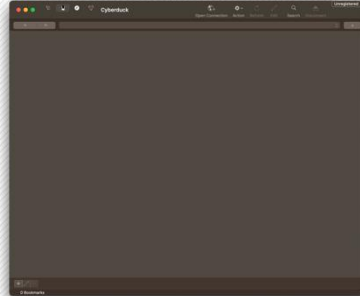
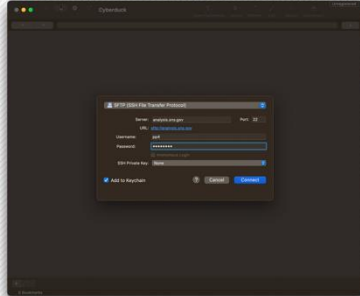
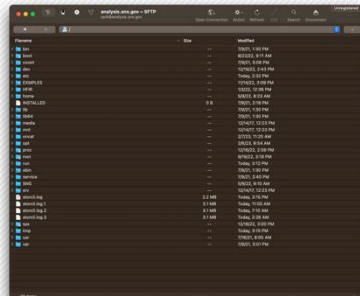
```
bash
> scp -r <your-username>@analysis.sns.gov:/SNS/NOM/IPTS-34905 .
```

rsync

```
bash
> rsync -rP --rsh=ssh <your-username>@analysis.sns.gov:/SNS/NOM/IPTS-34905 .
```


CyberDuck
Download CyberDuck Client

Protocol	SFTP (SSH File Transfer Protocol)
Server	analysis.sns.gov
Port	22
Username	celine_durniak
Password	*****
Directory	/SNS/NOM/IPTS-34905

# Examples from other facilities

## ISIS Data Analysis as a Service (IDAaaS)

ISIS Data Analysis as a Service [tutorial](#) LOGOUT

Workspaces

**Data**

Experiments

Help

Watch [the video](#) to transfer large or many files.

Show 10 entries Search:

<input type="checkbox"/>	Name	Size	Modified
<input type="checkbox"/>	Desktop		1 year, 3 months ago
<input type="checkbox"/>	Downloads		1 year, 3 months ago
<input type="checkbox"/>	IMAT		1 year, 23 days ago
<input type="checkbox"/>	SXD		1 year, 1 month ago
<input type="checkbox"/>	SansPol		2 years ago

ISIS Data Analysis as a Service LOGOUT

Workspaces

Data

**Experiments**

Help

**RB2410617-1 : SXD**  
Examining the order-disorder transition in 4-methylpyridine pentachlorophenol

**RB2410052-1 : IMAT**  
Study of cold neutron extraction efficiency of the bi-spectral switch optics for the engineering ToF-diffractometer BEER at ESS.

**RB2410052-2 : IMAT**  
Study of cold neutron extraction efficiency of the bi-spectral switch optics for the engineering ToF-diffractometer BEER at ESS.

### Journal viewer

*Summary of data and metadata*

*Different filters*

*Customizable display*

*Saving to file*

JournalViewer (1.8.6)

File View Selection Tools

Display Filter

Instrument: IMAT Title: User: <All> Running: 08/07/2015 12:39 to 04/06/2025 16:22

Cycle: All Text Case Sensitive RB No. 2410052 Run No. 0 to 33646

Run No.	Start Date/Time	Duration	uAmps	RB No.	End Date/Time	Title	Mev
30487	Mon May 13 13:13:26 2024	27m 51s	17.513	2410052	Mon May 13 13:41:23 2024	FePowder_PH80	130.685
30488	Mon May 13 13:42:02 2024	27m 51s	17.5144	2410052	Mon May 13 14:09:58 2024	OpenBeam PH80	117.172
30489	Mon May 13 14:27:36 2024	3m 12s	2.0141	2410052	Mon May 13 14:30:54 2024	SiemensStar_Bottom_Right_PH80	13.2681
30490	Mon May 13 15:20:35 2024	50s	0.5167	2410052	Mon May 13 15:21:30 2024	Center of frame, Cd cross	3.0639
30491	Mon May 13 15:53:27 2024	3m 13s	2.0142	2410052	Mon May 13 15:56:46 2024	Empty beam, 20x50 mm	13.3944
30492	Mon May 13 16:26:08 2024	3m 13s	2.0166	2410052	Mon May 13 16:29:27 2024	BSW in the beam, 20x50 mm	13.7626
30493	Mon May 13 16:54:54 2024	3m 12s	2.0152	2410052	Mon May 13 16:58:12 2024	BSW in the beam, a_encoded=-0.7deg, 20x50 mm	13.7428
30494	Mon May 13 17:20:36 2024	3m 11s	2.0156	2410052	Mon May 13 17:23:53 2024	BSW in the beam, a_encoded=-0.7deg, 20x50 mm	13.1709
30495	Mon May 13 17:29:39 2024	3m 11s	2.0142	2410052	Mon May 13 17:32:56 2024	BSW in the beam, a_encoded=-0.7deg, omega=-0.6deg, 2x50 mm	13.1793
30496	Mon May 13 17:34:53 2024	3m 12s	2.0157	2410052	Mon May 13 17:38:11 2024	BSW in the beam, 1x50 mm, a_encoded=-0.7deg	13.1504
30497	Mon May 13 18:40:07 2024	31m 43s	20.0148	2410052	Mon May 13 19:11:56 2024	dy=-10, ua=20, beam=1x50 mm, ROT=-0.7deg	96.014
30498	Mon May 13 19:12:11 2024	31m 39s	20.016	2410052	Mon May 13 19:43:56 2024	dy=-9, ua=20, beam=1x50 mm, ROT=-0.7deg	96.2792
30499	Mon May 13 19:44:10 2024	31m 38s	20.0152	2410052	Mon May 13 20:15:54 2024	dy=-8, ua=20, beam=1x50 mm, ROT=-0.7deg	96.0678
30500	Mon May 13 20:16:08 2024	31m 40s	20.0139	2410052	Mon May 13 20:47:54 2024	dy=-7, ua=20, beam=1x50 mm, ROT=-0.7deg	96.2243
30501	Mon May 13 20:48:08 2024	32m 6s	20.0166	2410052	Mon May 13 21:20:19 2024	dy=-6, ua=20, beam=1x50 mm, ROT=-0.7deg	96.1836
30502	Mon May 13 21:20:34 2024	31m 53s	20.0148	2410052	Mon May 13 21:52:32 2024	dy=-5, ua=20, beam=1x50 mm, ROT=-0.7deg	96.1154
30503	Mon May 13 21:52:46 2024	31m 56s	20.0143	2410052	Mon May 13 22:24:48 2024	dy=-4, ua=20, beam=1x50 mm, ROT=-0.7deg	96.2214
30504	Mon May 13 22:25:02 2024	31m 41s	20.0148	2410052	Mon May 13 22:56:49 2024	dy=-3, ua=20, beam=1x50 mm, ROT=-0.7deg	96.2575
30505	Mon May 13 22:57:04 2024	31m 42s	20.0149	2410052	Mon May 13 23:28:52 2024	dy=-2, ua=20, beam=1x50 mm, ROT=-0.7deg	96.2162
30506	Mon May 13 23:29:07 2024	32m 17s	20.0157	2410052	Tue May 14 00:01:30 2024	dy=-1, ua=20, beam=1x50 mm, ROT=-0.7deg	96.227
30507	Tue May 14 00:01:44 2024	31m 24s	20.0156	2410052	Tue May 14 00:35:14 2024	dy=0, ua=20, beam=1x50 mm, ROT=-0.7deg	96.0916

NET SearchFilter Active - 224 of 33628 shown Grouping is Off

# Conclusion

## Usage of Scicat

### **Storage**

- simulated data (proposal)
- experimental data from other facilities (testing ESS data processing workflow)

### **Usage**

Download / upload "raw" and derived data