



GREENPEG

In-depth data

Informed decision-making

Optimised exploration

Understand your deposit

# GREENPEG Datasets



# GREENPEG Petrophysical Database

Comprehensive compilation of petrophysical data for pegmatite exploration and research. Data is gathered from field samples, core samples, and geophysical wireline borehole logging. Extensive metadata completes the dataset.

- The first open access petrophysical database of pegmatites and their host rocks
- Already more than 600 entries from 7 sites in Norway, Ireland, Austria, Portugal and Spain at the beginning of 2024, and still growing
- NYF / LCT pegmatite types considered, samples from deposit and host rock
- Easy-to-use dataset eligible for statistical analysis and qualitative assessment
- Allows cross-referencing between different sites to unlock hidden physical similarities

## Your benefit:

- Improved understanding of pegmatite deposits
- Informed decision-making for optimised geophysical exploration strategy
- Better interpretation of geophysical measurements

**Check out the GREENPEG Exploration Toolset! Petrophysics are part of it.  
Feel free to contact the authors to add data to this unique database.**



Image 1: Geophysical borehole logging at Koralpe lithium exploration mine, Wolfsberg, Styria, Austria

# GREENPEG Spectral Library

The GREENPEG project produced a comprehensive Spectral Library of European Pegmatites, Minerals, and Host-Rocks. Comprising a wealth of spectral signatures obtained through cutting-edge reflectance spectroscopy studies from samples of distinct pegmatite types (NYF & LCT) and host rocks from Austria, Ireland, Norway, Portugal, and Spain the database provides a treasure trove of insights, free access to data for many applications:

- **In-Depth Data:** Raw & continuum-removed spectra, sample photographs, and key absorption features extracted via advanced Python routines.
- **Unprecedented Scope:** The first open database showcasing NYF-type pegmatites alongside LCT-type specimens. It spans diverse mineralogy, structures, and genesis types.
- **Valuable Applications:** Ideal for academia and industry, aiding in pegmatite exploration globally. Use cases range from satellite image processing for exploration to resource estimation and ore processing.
- **High-added Value:** Distinguished from previous databases by its European scope and diverse pegmatite representation, offering unparalleled insights.
- **Empowering Exploration:** Informing spectral band selection for satellite-based pegmatite identification, supplementing visual inspections with detailed spectral mineralogy.



Image 2: Equipment and procedure used for data acquisition.

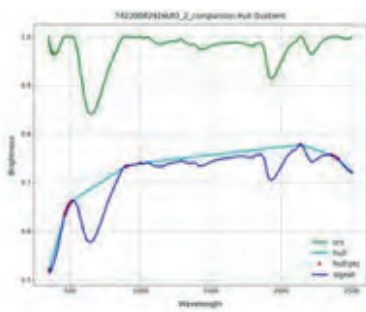


Figure 1: Raw & continuum-removed spectra extracted via advanced Python routines.

**Discover the wealth of European pegmatites through the GREENPEG Spectral Library. Uncover new frontiers in pegmatite exploration and resource identification!**

# Download the data for free!

## Petrophysical database:

### Database



### Publication



## Spectral library:

### Database



### Publication



The repository is indexed at OpenAIRE and supports the FAIR data principles.

Datasets receive unique digital object identifiers (DOI) and the repository facilitates a versioning system, keeping the history of a dataset alive and accessible.

## Any questions about GREENPEG and the datasets? Contact us!

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