

Susceptibility Hazard mapping fRamework - SHIRE

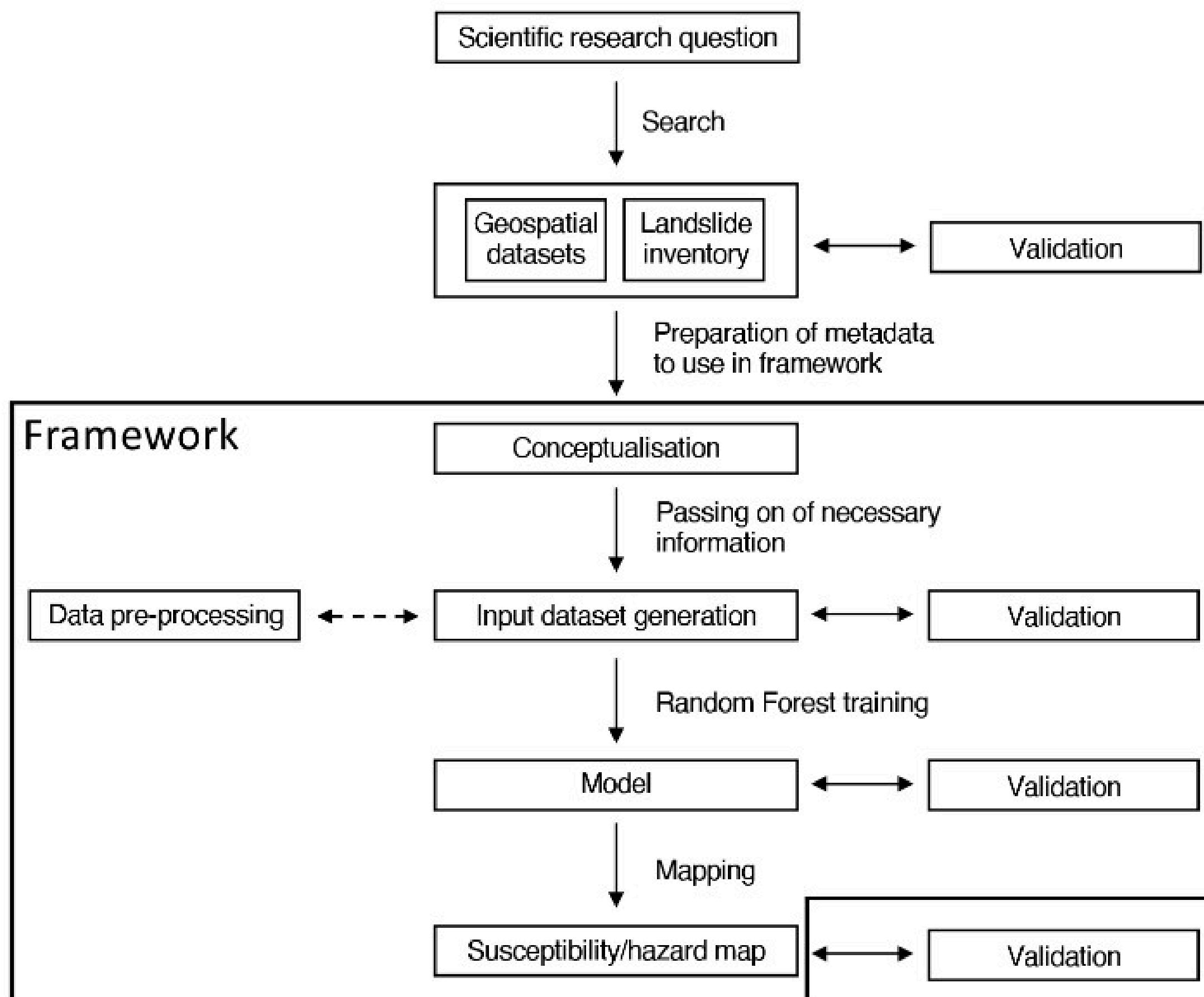
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Landslides, Random Forest



Schematic Flow Chart



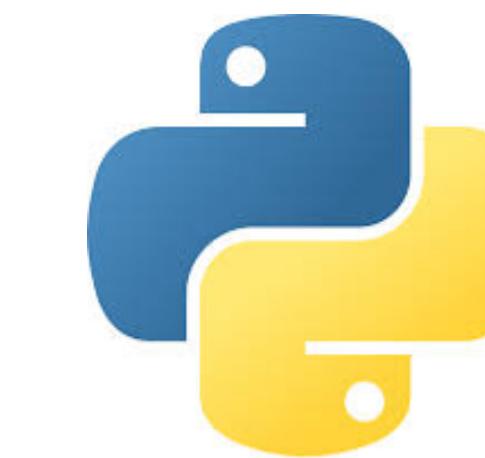
Features

- handles geospatial data
- probabilistic susceptibility mapping
- shallow landslides
- dataset management
- One-hot or ordinal encoding
- Supports parallel prediction



Framework

Available as plain code and GUI version.)



Python-based modular framework can be complemented with individual modules.

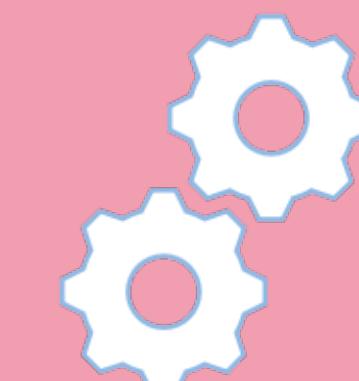
Bibliography

- [1] A.-K. Edrich, A. Yildiz, R. Roscher, and J. Kowalski, “A modular framework for FAIR shallow landslide susceptibility mapping based on machine learning,” *Natural Hazards*, 2024, doi: <https://doi.org/10.1007/s11069-024-06563-8>.
- [2] A.-K. M. Edrich, “Machine learning based landslide susceptibility assessment : Challenges of study design and opportunities for early warning,” Dissertation, RWTH Aachen University, 2024. doi: 10.18154/RWTH-2025-02493.

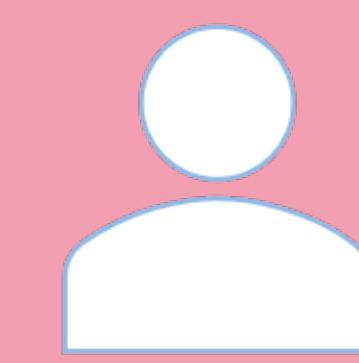
Overview



User Manual



Example



Contact



Acknowledgments



Federal Ministry
for the Environment, Climate Action,
Nature Conservation and Nuclear Safety

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