

INSPECTION OF COLOUR INFORMATION IN SCANNED RASTER MAPS

GENERAL DIRECTORATE STATE ARCHIVES OF BAVARIA (GDA)
LEIBNIZ INSTITUTE OF ECOLOGICAL URBAN AND REGIONAL
DEVELOPMENT (IOER)

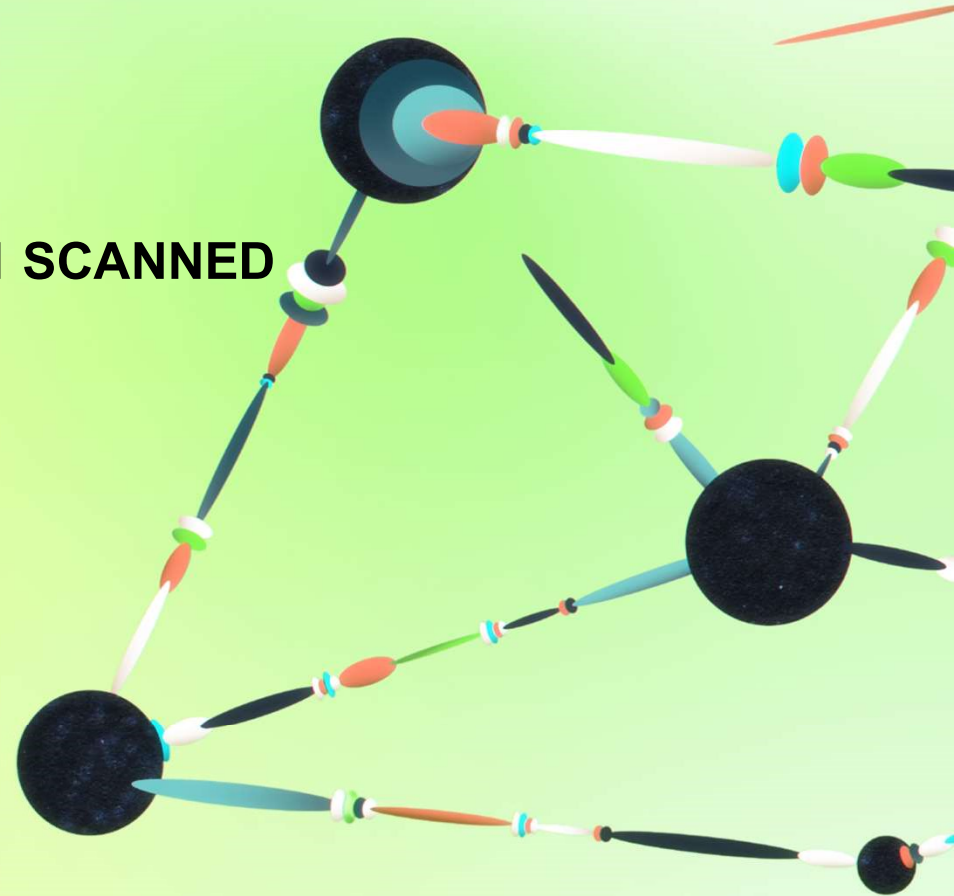
DataXplorers Hackathon

(NFDI4Biodiversity x NFDI4Earth x NFDI4Microbiota)

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Peter Valena, Anna Lisa Schwartz (GDA)

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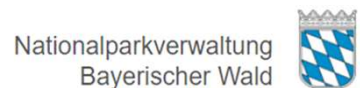
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Raumentwicklung



CHALLENGE PROVIDERS

GENERAL DIRECTORATE STATE ARCHIVES OF BAVARIA

- permanent archiving of all information of permanent value of all state agencies in Bavaria
- participant in NFDI4Biodiversity and NFDI4Earth (partners):



Staatliche Archive Bayerns



LEIBNIZ INSTITUTE OF ECOLOGICAL URBAN AND REGIONAL DEVELOPMENT

- Leibniz-research institute and one of the leading centers for spatial sustainability sciences
- monitoring and analysis of landscape structure, urban and rural land use
- historic map data hold information on past land use, water ways and habitats > necessary insights for future ecological development

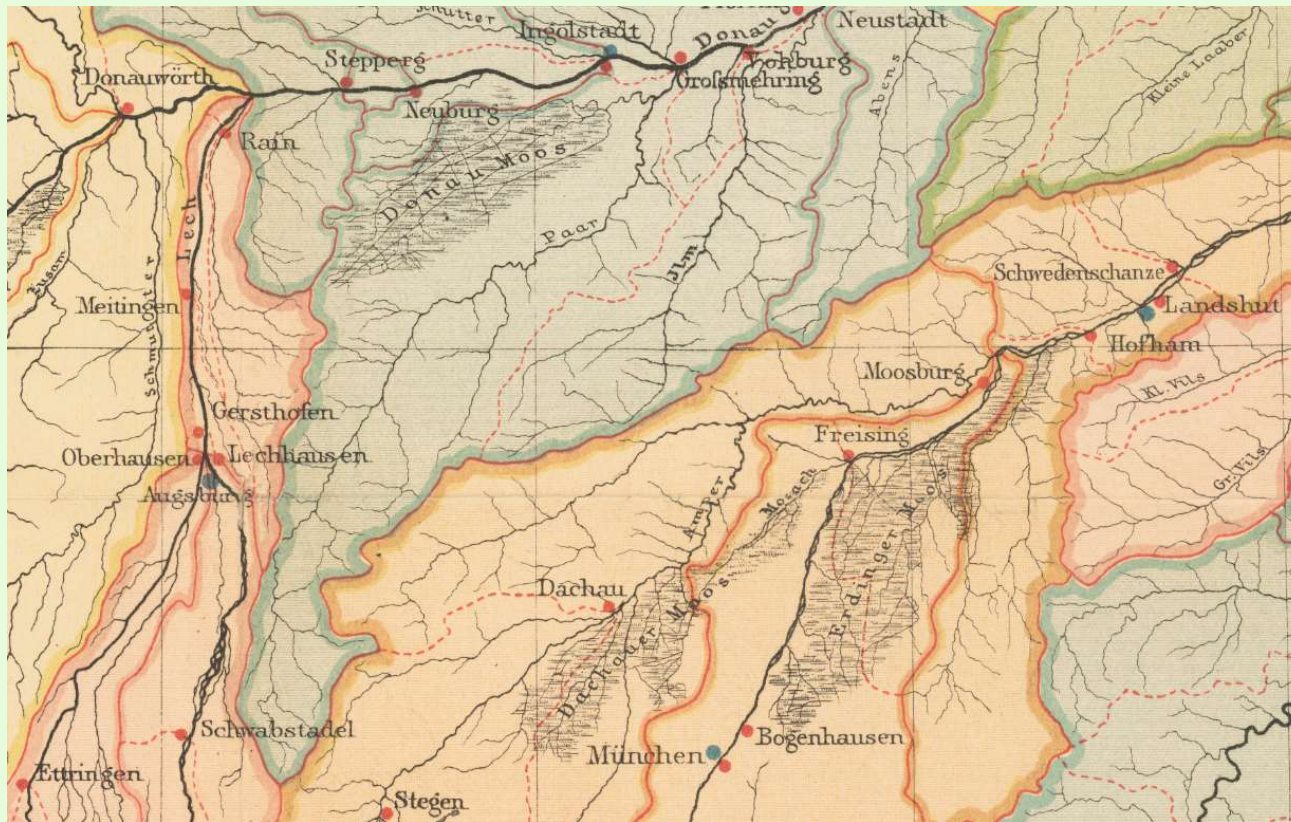


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(Foto: R. Vigh/IÖR-Media)

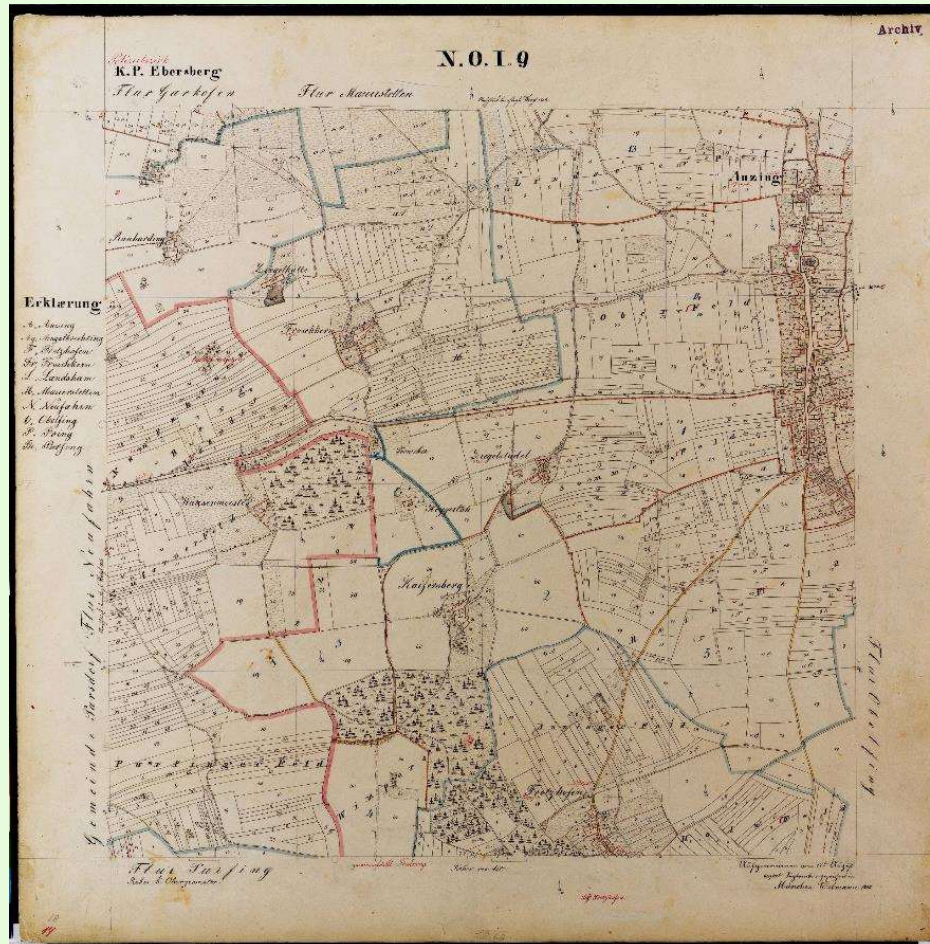
MAPS AS SOURCE FOR DATA ON HISTORICAL LAND USE



Detail of a 19th century moorland map.

Bavarian State Archive, KuPI 6811.

MAPS AS SOURCE FOR DATA ON HISTORICAL LAND USE



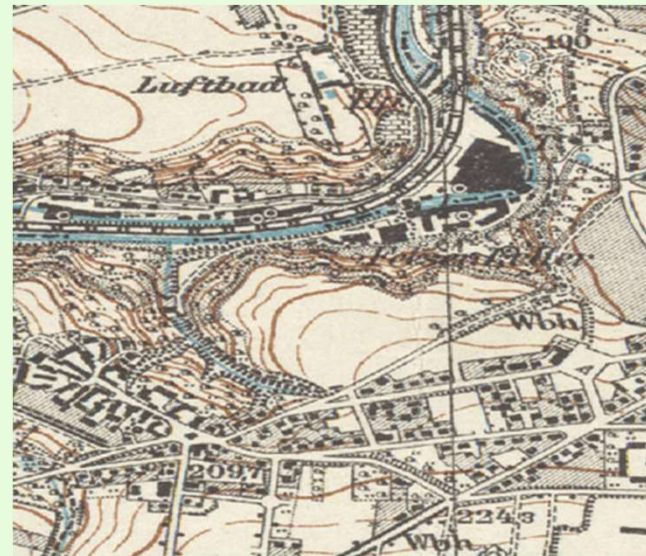
cadastral map from 1855,
police district Ebersberg.

Bavarian State Archive,
Flurkartenarchiv,
NO_001_09_1855.

WHAT IS THE CHALLENGE?

THE CHALLENGE

- scanned historic maps are „coloured“ digital images, BUT might not contain colour coded information
- “yellow-ish” paper with one-colour vs. multi-colour cartographic information
- knowledge about colour information in scanned maps is beneficial for automated meta data extraction



Messtischblätter 4012 (1897) and 4948 (1925)

Is it possible to decide whether a scanned map contains colour coded information?

- Challenged to develop a method that allows for the automated colour inspection of map scans
- use programming environment you prefer (JupyterLab etc. recommended)
- add-on: try to derive as much meta data as possible from these colour information (e.g. what land use classes are presented?)

ANY QUESTIONS?

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