



PoliRuralPlus RAG, GeoRAG and global or local solution

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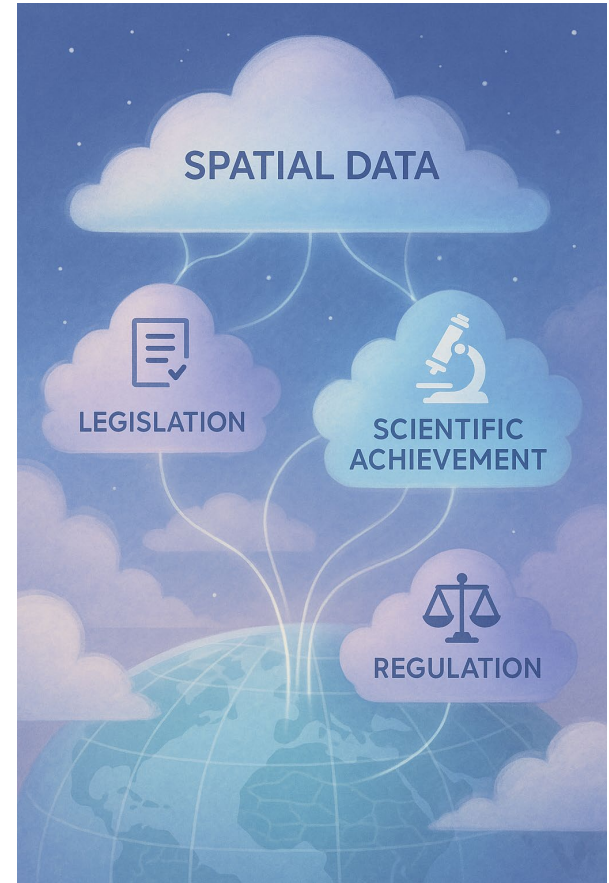


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Why RAG and GeoRAG

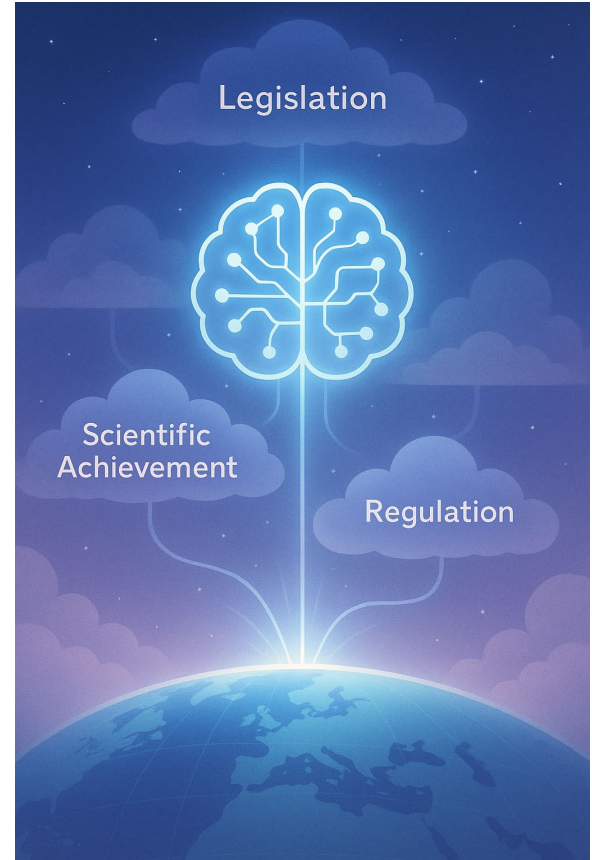
In the FutureFarm project around 2007, researchers from ZALF introduced the idea of combining spatial data analysis with legislation, scientific achievements, and regulations.

At that time it was only a dream...



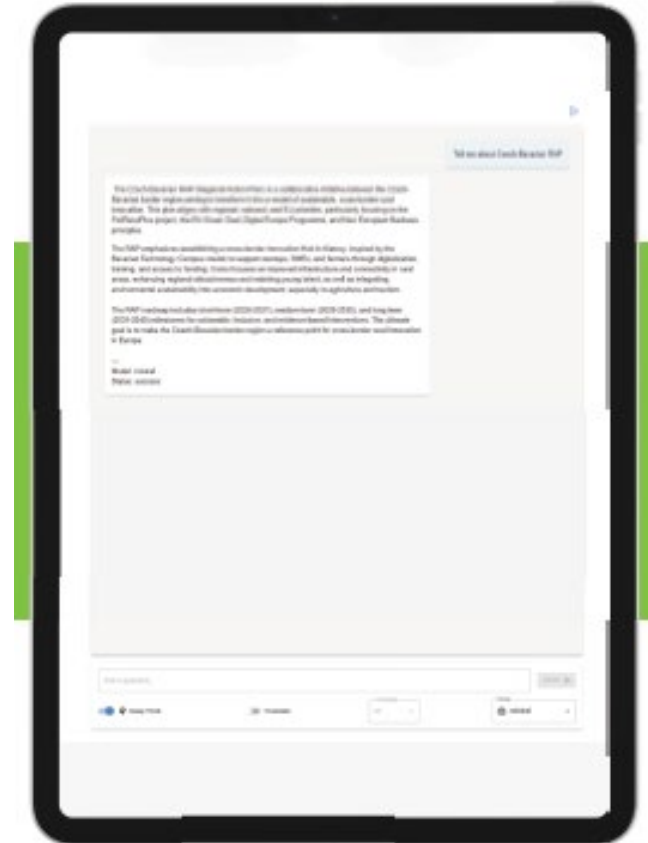
Why RAG and GeoRAG

Large Language Models turn this dream into reality



RAG

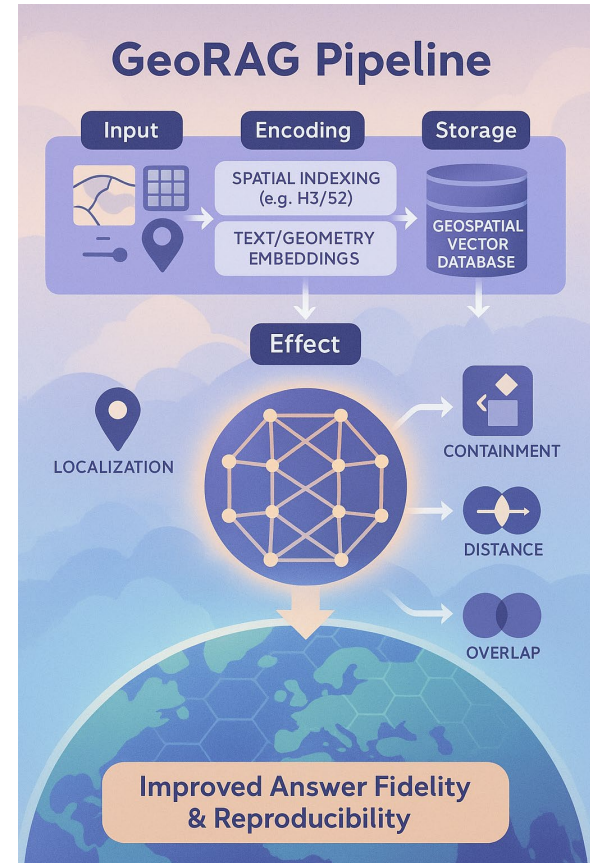
<https://rag.lesprojekt.cz/>



GeoRAG

GeoRAG: Pipeline that encodes spatial data (vector/raster/time) into an LLM-usable context by spatial indexing (e.g., H3/S2), text/geometry embeddings, geospatial vector storage, and retrieval via spatial queries at inference.

Effect: Converts geodata into environmental context with CRS-aware facts and provenance, enabling basic spatial reasoning (localization, containment, distance, overlap) and improving answer fidelity and reproducibility.



Demo

<https://rag2.lesprojekt.cz/client.html>