Manteo AI - Democratizing geospatial intelligence

The Product. We are building Manteo - manteo.ai , an advanced AI-powered chat/map assistant for geospatial data. Manteo leverages LLM agents and a toolset that allows it to understand Earth Observation (EO) data. The assistant uses Deep Learning models for downstream applications (e.g. damage assessment, object detection, land cover classification) and to provide textual description of remote sensing imagery.

Relevance with AI. Manteo is directly relevant with a number of innovations in AI. We build LLM agent pipelines, AI models tailored to Earth Observation data and use multimodal representations to perform geospatial reasoning.

Progress

- Won the Cassini Idea Challenge (10k euros prize).
- Selected for the ESA BIC Greece (50k euros cash incentive). Started March 2025.
- Functioning prototype, MVP to be launched soon (probably before the symposium).
- Currently looking for users and conducting interviews.

Team. The founding team of Manteo consists of Ioannis Prapas, Spyros Kondylatos and Charalampos Gavriilidis. Ioannis and Spyros possess extensive experience in the AI for Earth Observation (AI4EO) domain, and experience in both industry and research domains. They have published works in top AI venues (NeurIPS, ICCV, Nature Communications, AGU). Harry Gavriilidis, completes the founding with great expertise in Scalable Data Management and proficiency in full-stack development for scalable applications. Harry has published works in top Data Systems venues (ICDE, VLDB, SIGMOD). Stella Girtsou is also part of the team with many years of experience as a top-tier geospatial researcher and engineer.

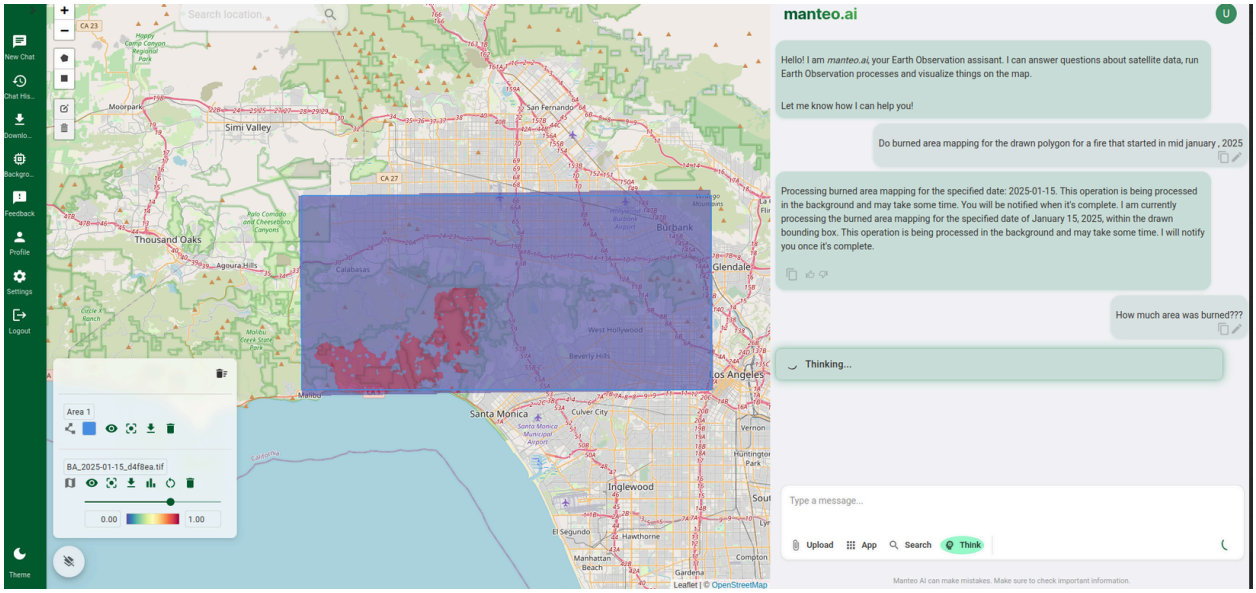

Figure 1: Prototype of the application. A user asks to do burned area mapping. The agent calls the appropriate function and displays the result on the map.