



Acronym	ForestMind
Full Title	ForestMind: A Multi-Agent AI System for Autonomous Geospatial Intelligence on the ForestWard Observatory
Partner(s)	3Bee S.r.l., Italy
Grant Theme	Knowledge to Practice: Develop applications and AI solutions utilizing the ForestWard Observatory
Start Date	July 2026
Duration	10 months
Description	The ForestWard Observatory aggregates critical forest data across Europe, yet accessing and analysing these heterogeneous datasets requires specialised GIS skills and programming knowledge, limiting uptake among the practitioners and policymakers who need them most. ForestMind addresses this gap with an orchestrated system of autonomous AI agents that enables natural language interaction with the Observatory. The solution rests on three pillars: • a Model Context Protocol (MCP) tool suite connecting a fleet of specialised agents to the Observatory's REST and STAC APIs, where each agent masters a specific data domain (species distributions, biomass, disturbance maps, ICOS super-sites, field inventories) and a coordinator agent routes queries to the appropriate specialist; • a task orchestration engine where the coordinator decomposes complex analytical questions into sub-tasks, delegates them to domain agents in parallel, and assembles their outputs into structured reports with maps, charts, and statistics; • a proactive monitoring scheduler that triggers recurring multi-agent analyses and delivers results via email or messaging APP without human intervention. The system integrates exclusively via public APIs, requires no modifications to the existing GeoDjango/PostGIS infrastructure, and runs on a single minimal cloud instance. ForestMind builds on a geospatial AI agent already deployed in production on 3Bee's XNatura platform across 15 countries, substantially reducing technical risk. The interdisciplinary team of eight combines AI engineering, geospatial development, forest ecology, and European project management, AI Ethics expert, with a track record of 15+ EU-funded projects. All deliverables will be released open-source under Apache 2.0 and FAIR principles.

