

CLAIMA

CLAIMA will build a European AI-driven climate digital twin platform that delivers fast, high-resolution and trustworthy climate simulations for science, industry and policy. It will integrate three strands of climate AI (emulators of physics-based models, deep-learning downscaling, and emerging foundation models) within a modular, standards-based system that follows FAIR data and open API principles. Rigorous evaluation, provenance tracking and uncertainty quantification will ensure scientific integrity at every stage. The platform will orchestrate end-to-end workflows across EuroHPC systems and European AI Factories, while interoperating seamlessly with Destination Earth, and will be demonstrated in this operationally relevant environment to reach TRL 6. The project will also provide an indicative estimate of the costs of operating the platform in such a production-like environment, including compute and service operation costs.