



## Use Case 2A

### Biodiversity monitoring in urban environment

**Use Case 2A** aims to transform **urban biodiversity monitoring** through advanced satellite data, making it accessible to cities of all sizes. Developed by CERTH with AQUATEC, the project leverages deep learning to **enhance Sentinel imagery** for **identifying plant species, assessing vegetation health, and mapping urban water bodies**. Unlike traditional methods, it uses **Copernicus data** for frequent, comprehensive **green and blue infrastructure monitoring**. This **scalable solution** will be tested across Spanish cities, supporting **new ecosystem services for municipalities**.

For collaboration, contact **Sotiris Paraskevopoulos**,  
[sotiripara@iti.gr](mailto:sotiripara@iti.gr) or **Agustin Torres Jerez**  
[agustin.torres@aquatec.es](mailto:agustin.torres@aquatec.es).



# ThinkingEarth

## Copernicus Foundation Models for a Thinking Earth

ThinkingEarth will utilise AI to create Copernicus Foundation Models and a Graph representation of the Earth. Four Use Cases are being developed under the project.



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