



Acronym	OAKS
Full Title	Enhancing forest monitoring of oak forests in South-East Europe
Partner(s)	Croatian Forest Research Institute, Croatia (<i>coordinator</i>) Slovenian Forestry Institute, Slovenia Institute of Lowland Forestry and Environment, Serbia
Grant Theme	Pilots of long-term climate impact forest monitoring sites
Start Date	July 2024
Duration	18 months
Description	Since climate change is supposed to greatly influence the forest ecosystems in Europe, there is a great need for better forest monitoring that would encompass terrestrial and airborne techniques. This topic is also in the focus of the European Union, as evidenced from the proposal for a new regulation for a monitoring framework for resilient European forests, where a comprehensive, high-quality forest monitoring system is envisaged to help counter new pressures and hazards. Existing monitoring schemes, such as UNECE ICP Forests, with its harmonised monitoring methodology, enhanced by additional, modern technologies can be a strong base for such a monitoring system. Due to complex stand and ecological conditions, pedunculate oak forest ecosystems occupying large lowland areas in South-East Europe, are no longer as stable as they used to be. Therefore, the objectives of OAKS are to: • enhance the existing intensive monitoring on ICP Forests pedunculate oak plots in South-East Europe (Slovenia, Croatia and Serbia) in order to link water availability with tree growth • perform parallel terrestrial and airborne measurements in the crowns of pedunculate oak trees to determine the relation of actual physiological data and vegetation indices acquired from multispectral images • provide the FORWARDS project with near-real time data on tree growth in relation to weather conditions and soil water status for the duration of the project and additional three years. For this purpose, the existing west-east climate/precipitation gradient in the form of three ICP Forests intensive monitoring plots, one in each country, is being utilised.



**Funded by
the European Union**