



Acronym	CEURDIST
Full Title	Estimating forest disturbance area and trends for Central Europe using remote sensing data
Partner(s)	Technical University of Munich, Germany
Grant Theme	Characterization of European forest disturbances
Start Date	September 2024
Duration	12 months
Description	Europe's forests constitute the main carbon sink of the European Union, but increasing disturbances have raised concerns about their future climate change mitigation potential. Understanding how changing forest disturbances impact Europe's forest carbon pools requires rigorous monitoring, but monitoring is difficult as most existing datasets were not designed to estimate disturbance area and trends. CEURDIST aims to overcome this problem by creating a disturbance database from manual interpretation of remote sensing data covering all of Central Europe. CEURDIST will: • update and harmonize existing databases from the literature • expand existing databases to increase sampling densities using novel semi-automatic interpretation tools • estimate disturbance area and trends from the database. The project is expected to yield one of the most comprehensive and up-to-date databases on forest disturbance in Europe, covering 40 years from 1985 to 2023. CEURDIST will also provide a workflow for rapidly updating the disturbance database into the future, as well as robust estimates of disturbance area and trends for Central Europe at national and aggregated levels. As such, the project addresses the overall aim of the call, which is "to compile an exhaustive open-access European forest disturbance reference dataset" and also contributes to the overall aims of the FORWARDS project by improving our knowledge on the "integration of remote sensing-derived maps and reference data for the statistically rigorous estimation of forest disturbance area" and by "reviewing strengths, weaknesses, limitations, and potential implementations of remote sensing in forest disturbance monitoring".



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