3DForEcoTech

“There are many scans of trees, however, they have not been assembled into a data forest.”

Benchmarking tree species classification from proximally sensed laser scanning data: Introducing the FOR-species20K dataset

cost
EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY

The FOR-species20K initiative marks a turning point in the quest for automated, AI-driven forest monitoring. By assembling an unprecedented dataset of 20,000 individual trees, standardizing data preparation, and establishing open benchmarks for model evaluation, it transforms a fragmented research landscape into a shared platform for progress.

Puliti, S., Lines, E.R., Müllerová, J., Frey, J., Schindler, Z., Straker, A., Allen, M.J., Winiwarter, L., Rehush, N., Hristova, H., Murray, B., Calders, K., Coops, N., Höfle, B., Irwin, L., Junttila, S., Krůček, M., Krok, G., Král, K., Levick, S.R., Luck, L., Missarov, A., Mokroš, M., Owen, H.J.F., Stereńczak, K., Pitkänen, T.P., Puletti, N., Saarinen, N., Hopkinson, C., Terryn, L., Torresan, C., Tomelleri, E., Weiser, H., Astrup, R., 2025. Benchmarking tree species classification from proximally sensed laser scanning data: Introducing the FOR-species20K dataset. Methods in Ecology and Evolution 16, 801–818.