

Forest Inventory

This report lists all trees whose height is between
4.0 m (shortest included) and
50.0 m (tallest included).

All heights are derived from the Canopy-Height Model (CHM),
after filtering out low vegetation.

Total trees: 606
Average height: 14.81 m
Highest tree: 17.63 m
Average crown area: 33.22 m²

Carbon Estimation Summary

Carbon estimates derived from LiDAR-measured tree heights using species-specific allometric models calibrated on European forest data. Species model: Scots Pine (*pinus_sylvestris*)

Trees analysed: 606
Total carbon stock: 16.65 t C
Total CO₂ equivalent: 61.10 t CO₂eq
Total above-ground biomass: 28.80 t
Mean DBH (estimated): 15.2 cm

Combined uncertainty: $\pm 25\text{-}40\%$ per tree.

Methodology & References

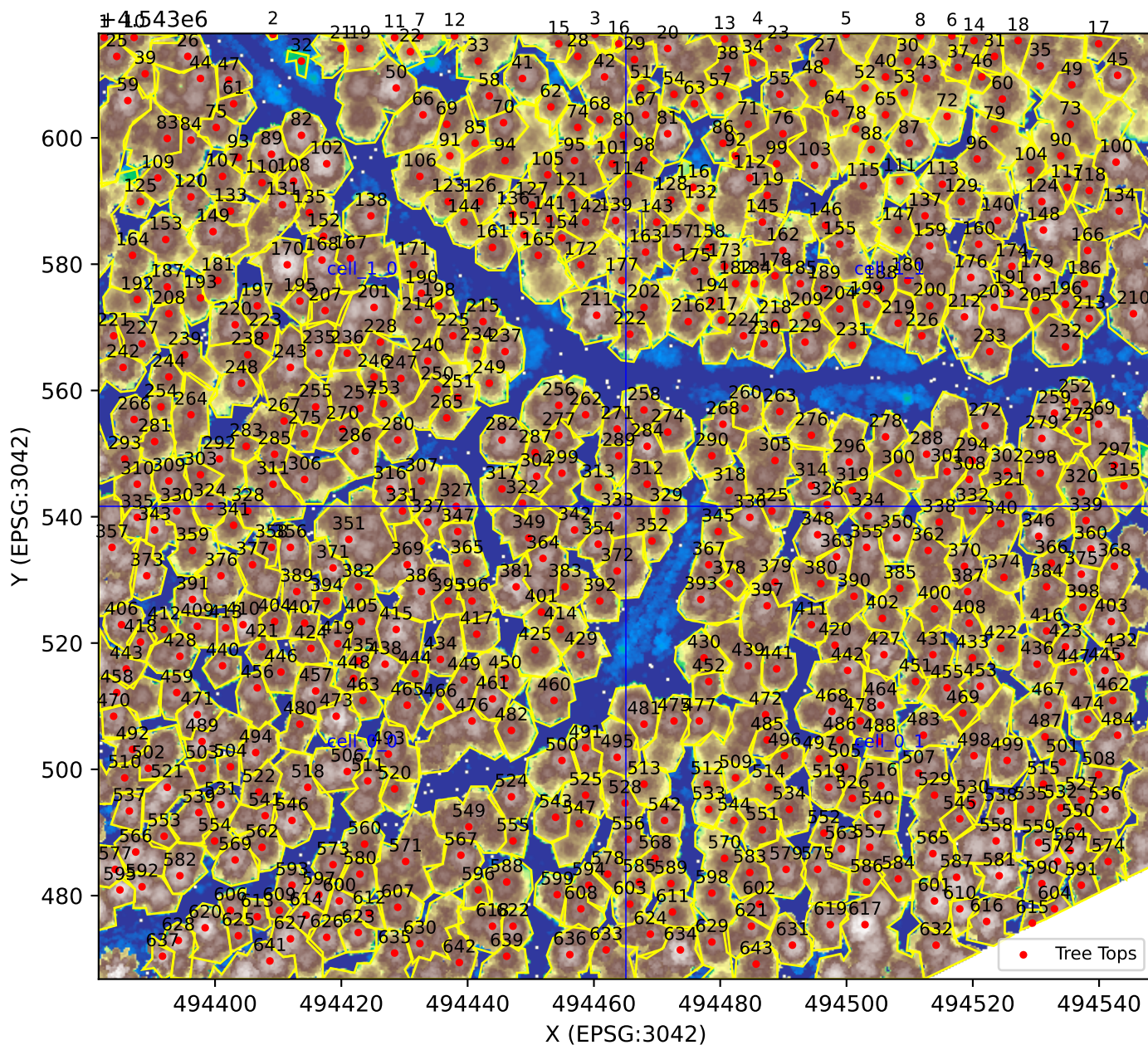
Standards applied:

- Carbon fraction: IPCC Tier 1 default for temperate/boreal forests (0.47)
- Below-ground biomass: IPCC root-to-shoot ratio
- CO₂ equivalent: IPCC molecular weight ratio (44/12)

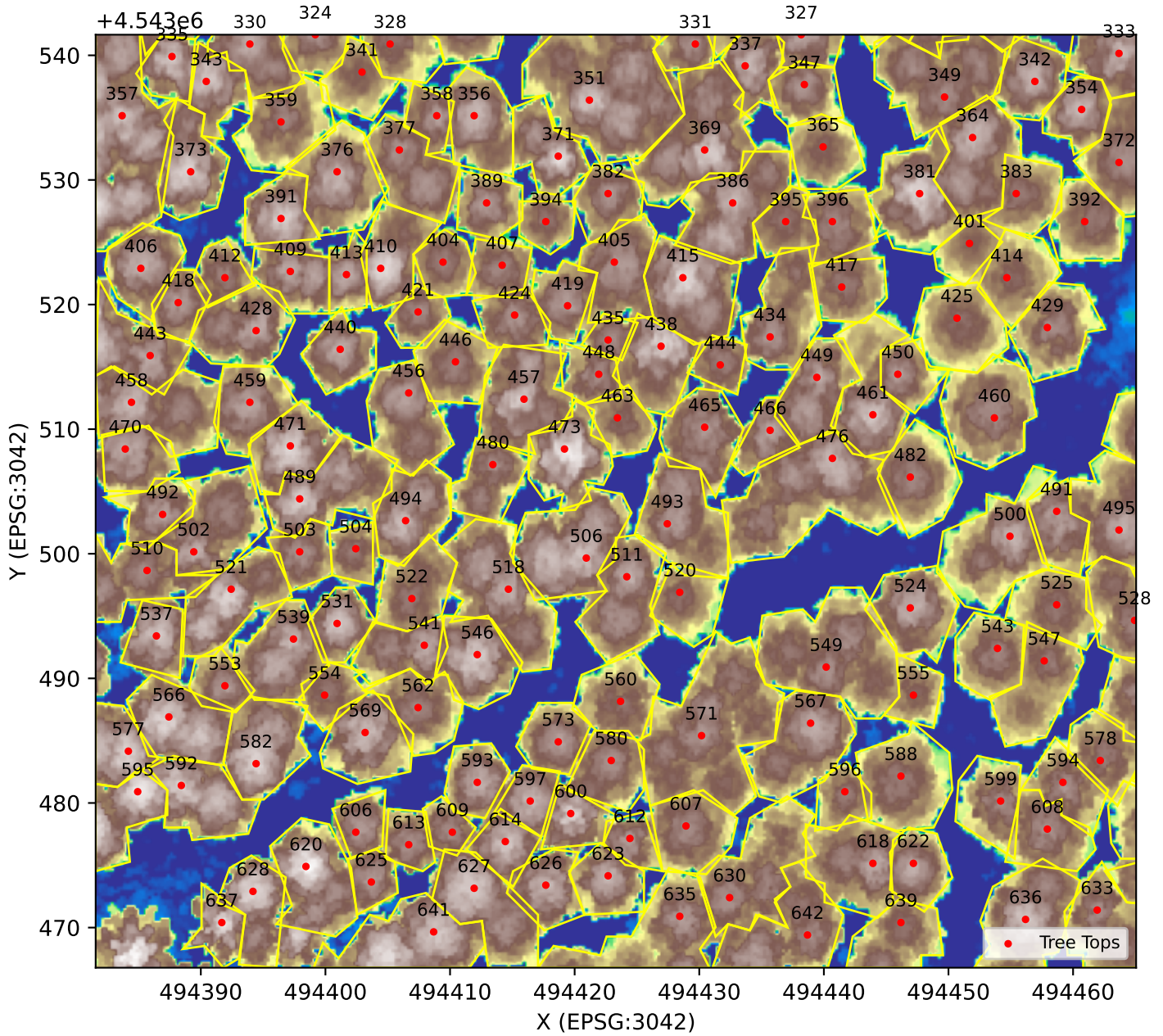
Sources:

- IPCC (2006) Guidelines for National Greenhouse Gas Inventories, Vol. 4, Ch. 4 — Forest Land
ipcc-nggip.iges.or.jp/public/2006gl
- Zianis D. et al. (2005) Biomass and stem volume equations for tree species in Europe. Silva Fennica Monographs 4
researchgate.net/publication/232304857
- IPCC (2019) Refinement to the 2006 Guidelines, Vol. 4, Ch. 4
ipcc-nggip.iges.or.jp/public/2019rf

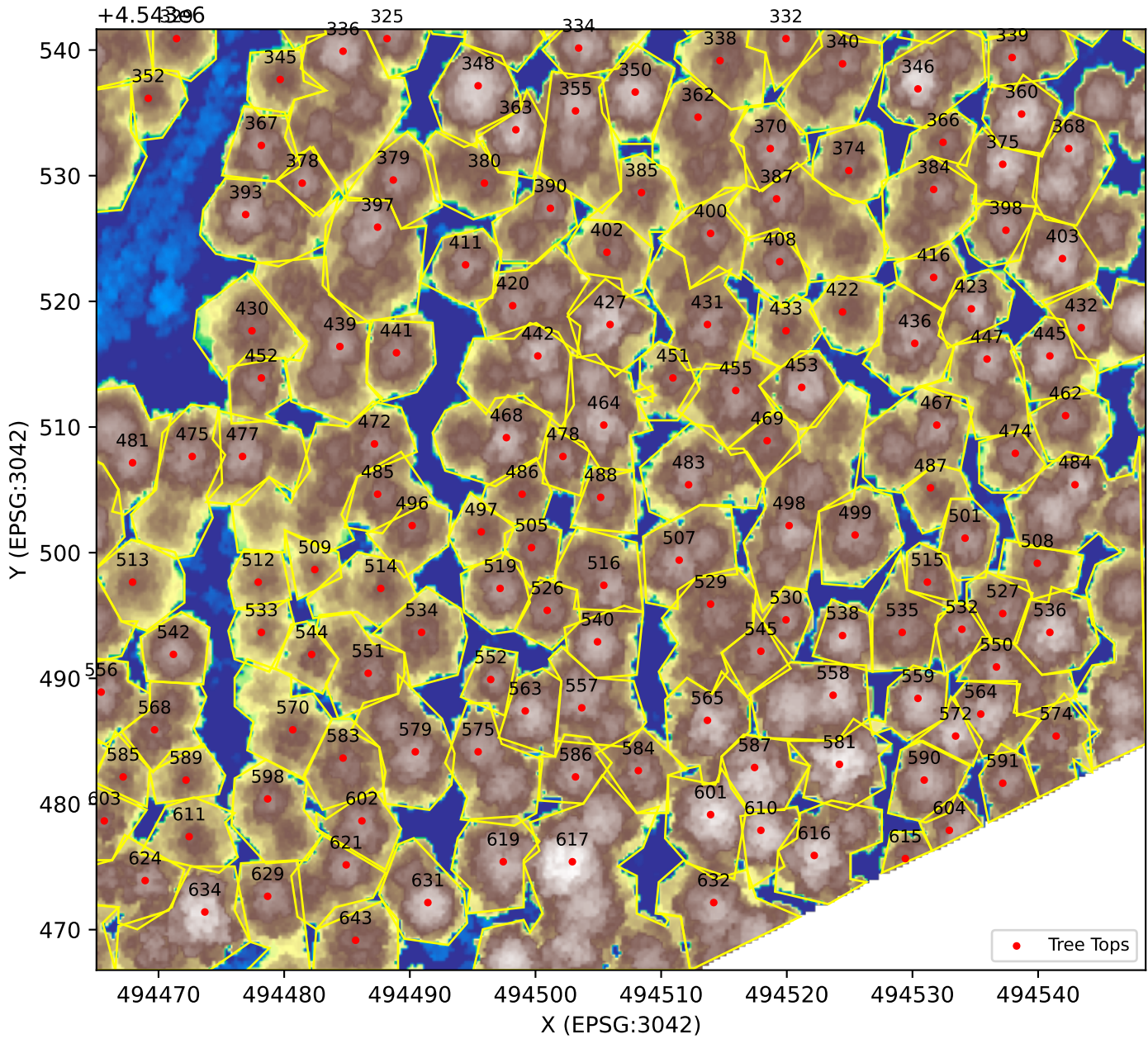
CHM - Full extent overview



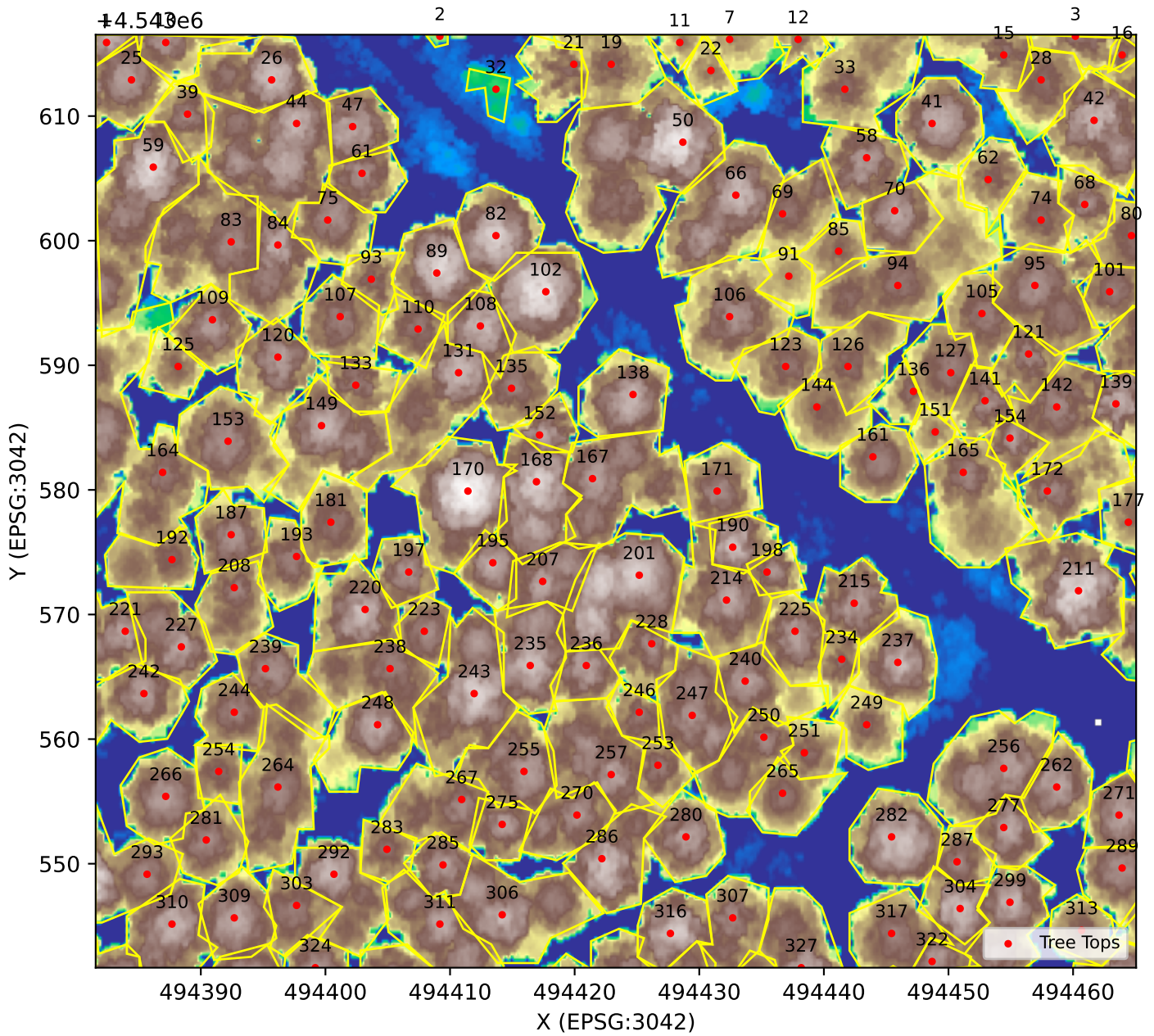
Grid cell: cell_0_0



Grid cell: cell_0_1



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