Data Accompanying Report for Tree Ring Width Analyses from tree coring carried out in the years 1996 to 1999 outside the ICP Forests Level II plots in Switzerland

Paolo Cherubini

Swiss Federal Institute WSL, Birmensdorf, Switzerland, 20.12.2022

Dataset DOI: *doi:10.16904/envidat.lwf.81*

General Description

A tree coring campaign was carried out in the buffer zone of the Swiss Level II plots between 1996 and 1999 (Cherubini & Dobbertin, 1998); Two stem core samples of 12 to 20 trees outside the plot of each main species in the plot were taken at breast height (1.3 m above ground) with a SUUNTO corer. Tree ring width and density were determined with the instruments CATRAS and TSAP, the Densitometer DENDRO 2003 and a stereo-microscope. The selected trees included at least 12 pre-dominant or dominant trees and if possible also 4 subdominant or surpressed trees. NOTE: The samplings were carried out between 1996 and 1999 for most plots and in 2003 for the plot Lantsch. The cores cover a time span depending on the age of the oldest trees on a plot. On one plot the oldest sampled tree ring grew in the year 1646. The method is described in detail in the chapter 'Bestandesgeschichte (Dendrochronologie)' written by Cherubini & Dobbertin in Brang (1997) as well as in Cherubini et al. (2002).

Explanations

IRH Form

The coring took place between September of the year of the last ring and March of the following year. In case the exact sampling date was not known, we set date_analyses to 1st of November.

Acknowledgements

We thank all collaborators that were involved in the work as well as the land owners for their agreement that the trees could be cored. The work was funded by WSL.

References

Brang, P. (1997). *Aufnahmeanleitungen aller Forschungsprojekte auf Flächen der Langfristigen Waldökosystem-Forschung (LWF)*. Birmensdorf: Eidg. Forschungsanstalt WSL.

Cherubini, P., & Dobbertin, M. (1998). The Swiss long-term forest ecosytem research: methods for reconstruction forest history. In M. Borghetti (Ed.), *Società Italiana di Selvicoltura ed Ecologia Forestale (SISEF)* (Vol. 1, pp. 19-22).

Cherubini, P., Fontana, G., Rigling, D., Dobbertin, M., Brang, P., & Innes, J. L. (2002). Tree-life history prior to death: two fungal root pathogens affect tree-ring growth differently. *Journal of Ecology, 90*(5), 839-850. Retrieved from http://dx.doi.org/10.1046/j.1365-2745.2002.00715.x