TREE RING ARCHIVE OF HISTORICAL WOOD SAMPLES FROM SOUTH AND EAST GERMANY ('HISTRA') & INTEGRATION INTO THE INFORMATION SYSTEM 'PANGAEA'

Friedrich, M.[1,2], Bleyer, H.J.[3], Hofmann, J.[4], Remmele S.[1]

[1] Institute of Botany, D-70059 Stuttgart, Germany ; michaelf@uni-hohenheim.de
[2] Heidelberg Academy of Sciences, D-69120 Heidelberg, Germany
[3] Ingenieurbüro Bleyer, D-72555 Metzingen, Germany
[4] Jahrringlabor Hofmann, D-72622 Nürtingen, Germany

The 'HISTRA'-Project:

In this project, funded by the BMBF (Bundesministerium für Bildung und Forschung) we integrate existing tree ring data from historical buildings into the information system PANGAEA (Publishing Network for Geoscientific & Environmental Data).
At University of Hohenheim and associated private tree-ring laboratories 'Jahrringlabor Hofmann' and 'Ingenieurbüro Bleyer' about 50.000 datasets of tree ring width were produced in the last centuries for dating purposes. Tree-ring samples (12 mm cores / beam sections) originate from southern, middle and eastern Germany. Wood species are mainly oak, silver fir, spruce and pine. The set of tree-ring width data cover the last millenium and give the possibility of spatially differentiation on a very small scale.
These datasets, validated and geocoded in a searchable database will be available for scientific purposes and so can be used for wider climate and environmental research. Downloads of ring width data will be controlled by the laboratories by passing specific passwords.

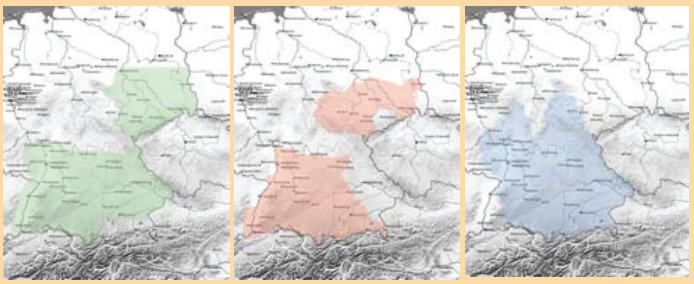


Fig. 1: Regional extension of dendrochronological data within the project. Institute of Botany, Hohenheim University (green), Ingenierbüro Bleyer (red), Jahrringlabor Hofmann (blue). The combination of all data of the three labs covers South Central Europe.

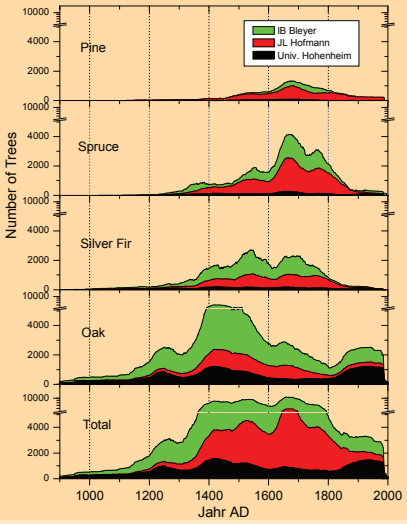


Fig. 2: Temporal distribution of the dendrochronological dated wood, classified to tree species and laboratories

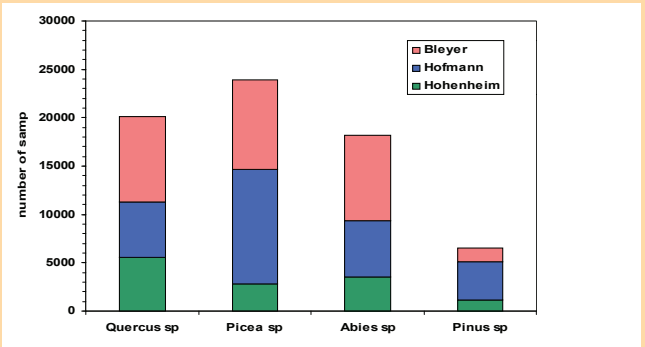


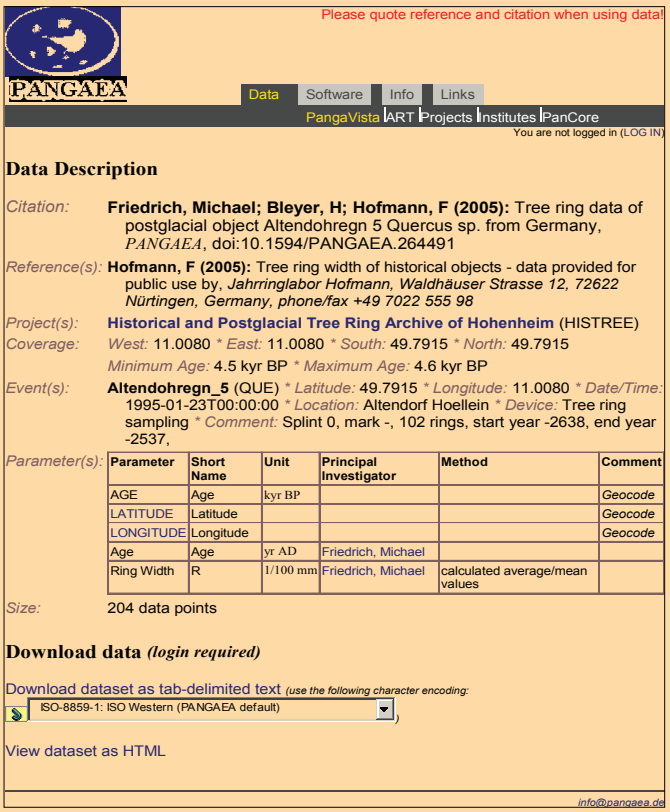
Fig. 3: Number of tree samples classified to tree species and laboratory

What is PANGAEA ?

Pangaea is an information system for georeferenced data from basic research on the earth system. Data are stored in a relational database which is accessible on the Internet. The system is open from individual scientist to international projects to make data public available or to use its content.

Intention and operation of Pangaea is comparable to a library - a public electronic library for research data.

The system faces any technical challenges, which a modern information system on the Internet should have. It is continously developed and adopted to new technical and scientific requirements and standards.



Please quote reference and citation when using data!

PANGAEA

Data | Software | Info | Links

PangaVista | ART | Projects | Institutes | PanCore

You are not logged in (LOG IN)

Data Description

Citation: **Friedrich, Michael; Bleyer, H; Hofmann, F (2005):** Tree ring data of postglacial object Altendohregn 5 Quercus sp. from Germany, *PANGAEA*, doi:10.1594/PANGAEA.264491

Reference(s): **Hofmann, F (2005):** Tree ring width of historical objects - data provided for public use by, *Jahrringlabor Hofmann, Waldhäuser Strasse 12, 72622 Nürtingen, Germany, phone/fax +49 7022 555 98*

Project(s): **Historical and Postglacial Tree Ring Archive of Hohenheim** (HISTREE)

Coverage: *West:* 11.0080 * *East:* 11.0080 * *South:* 49.7915 * *North:* 49.7915
Minimum Age: 4.5 kyr BP * *Maximum Age:* 4.6 kyr BP

Event(s): **Altendohregn_5** (QUE) * *Latitude:* 49.7915 * *Longitude:* 11.0080 * *Date/Time:* 1995-01-23T00:00:00 * *Location:* Altendorf Hoellein * *Device:* Tree ring sampling * *Comment:* Splint 0, mark -, 102 rings, start year -2638, end year -2537,

Parameter(s):

Parameter	Short Name	Unit	Principal Investigator	Method	Comment
AGE	Age	kyr BP			Geocode
LATITUDE	Latitude				Geocode
LONGITUDE	Longitude				Geocode
Age	Age	yr AD	Friedrich, Michael		
Ring Width	R	1/100 mm	Friedrich, Michael	calculated average/mean values	

Size: 204 data points

Download data ***(login required)***

Download dataset as tab-delimited text *(use the following character encoding:*
ISO-8859-1: ISO Western (PANGAEA default))

View dataset as HTML

info@pangaea.de

Example of a tree ring dataset published in PANGAEA. With an username and password it is possible to download the dataset.

Conclusion:

The goal of the historical tree ring data base is to create a permanent archive of existing and accurately dated tree ring data of Germany. The data will contribute substantially to the extension of the database for supraregional and global climatical and environmental reconstructions.
It also guarantee that the large number of tree ring data, which are collected in the last decades by the most important tree ring laboratories of southern Germany, are saved for future scientific work.

For further informations:

http://uni-hohenheim.de/palaeobotanik/dendro/index2.htm
http://www.pangaea.de

Acknowledgments:
This work is funded by the BMBF (Bundesministerium für Bildung und Forschung) ('DEKLIM' 01LD0501)

DEKLIM