



Presented by:  
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# A new metadatabase on vegetation-plot data: the Global Index of Vegetation-Plot Databases (GIVD)

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**Introduction** Metadatabases have since long improved data visibility and availability to the scientific community. However, in vegetation science, where numerous databases were established on a (multi-)national, regional or very local scale, no global metadatabase existed that would allow the communication of vegetation data. We compiled the Global Index of Vegetation-Plot Databases (GIVD; <http://www.givd.info>), an internet-based resource aimed at registration of metadata on existing vegetation databases. For inclusion, databases need to (i) contain temporally and spatially explicit species co-occurrence data and (ii) be accessible to the scientific public. This poster summarizes the already registered databases in GIVD as by 22 September 2010. GIVD is hosted on a server located at the University of Greiswald, Germany.

## Facts & Numbers

- Registered databases: **133**
- Non-overlapping plots: **2 444 701**
- Europe: **71 DB / 1 500 000**
- North America: **13 DB** / S-America: **6** / Africa : **8** / Asia: **8** / Australasia: **8** / Multi-continental: **1**
- Oldest Database from 1864 (**EU-DL-01**)

## Most frequently reported with species data

- Altitude (44%), slope & aspect (35%), land use (25%), soil properties (<7%)

## Most frequently reported plant guild

- Woody (95%) / Herbaceous (75%) / Bryophytes (14%) / Lichens (10%) / Algae & non terricolous non-vascular plants (~1%)

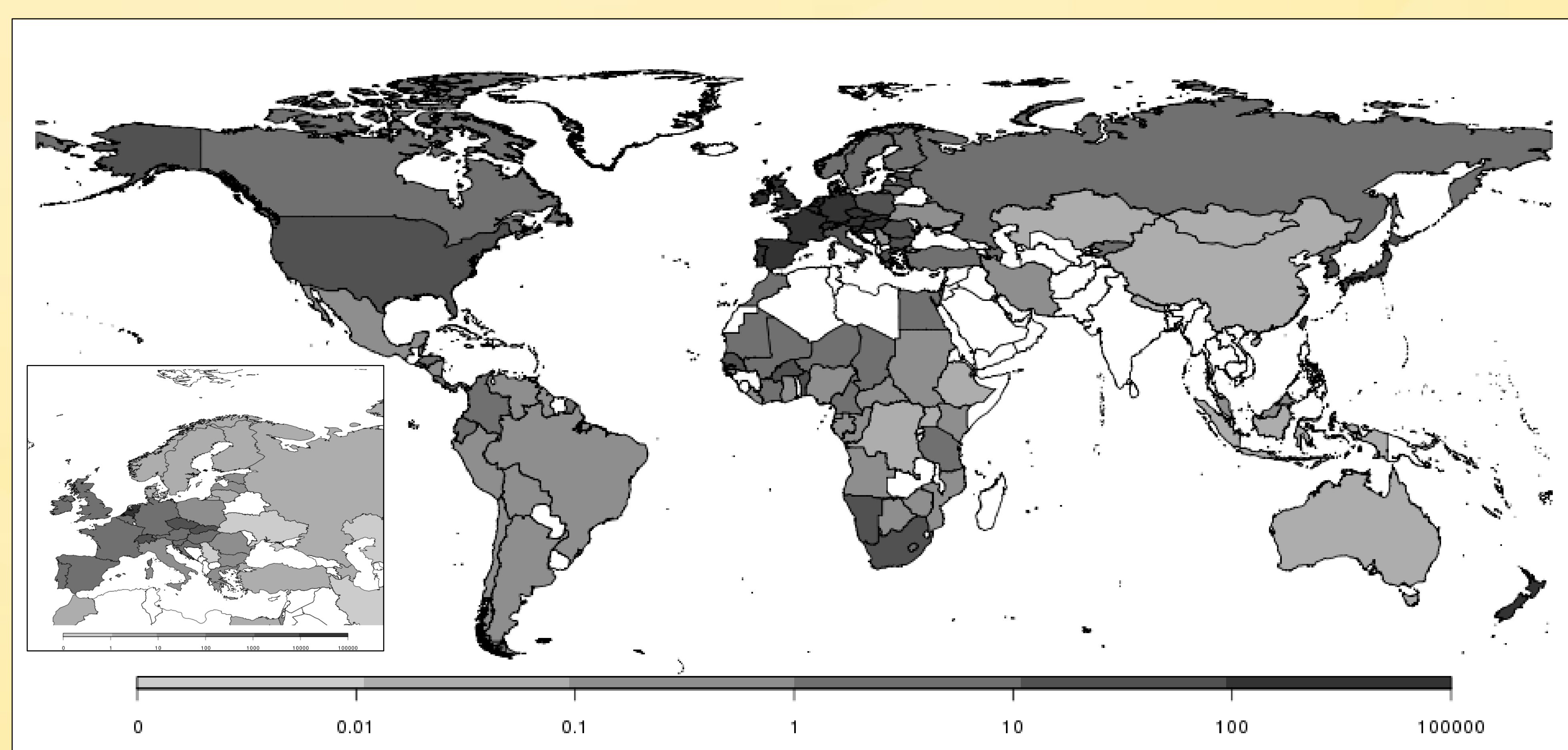


Fig. 1. Density of non-overlapping vegetation plots per 1000km² available, based on GIVD on 22.09.2010

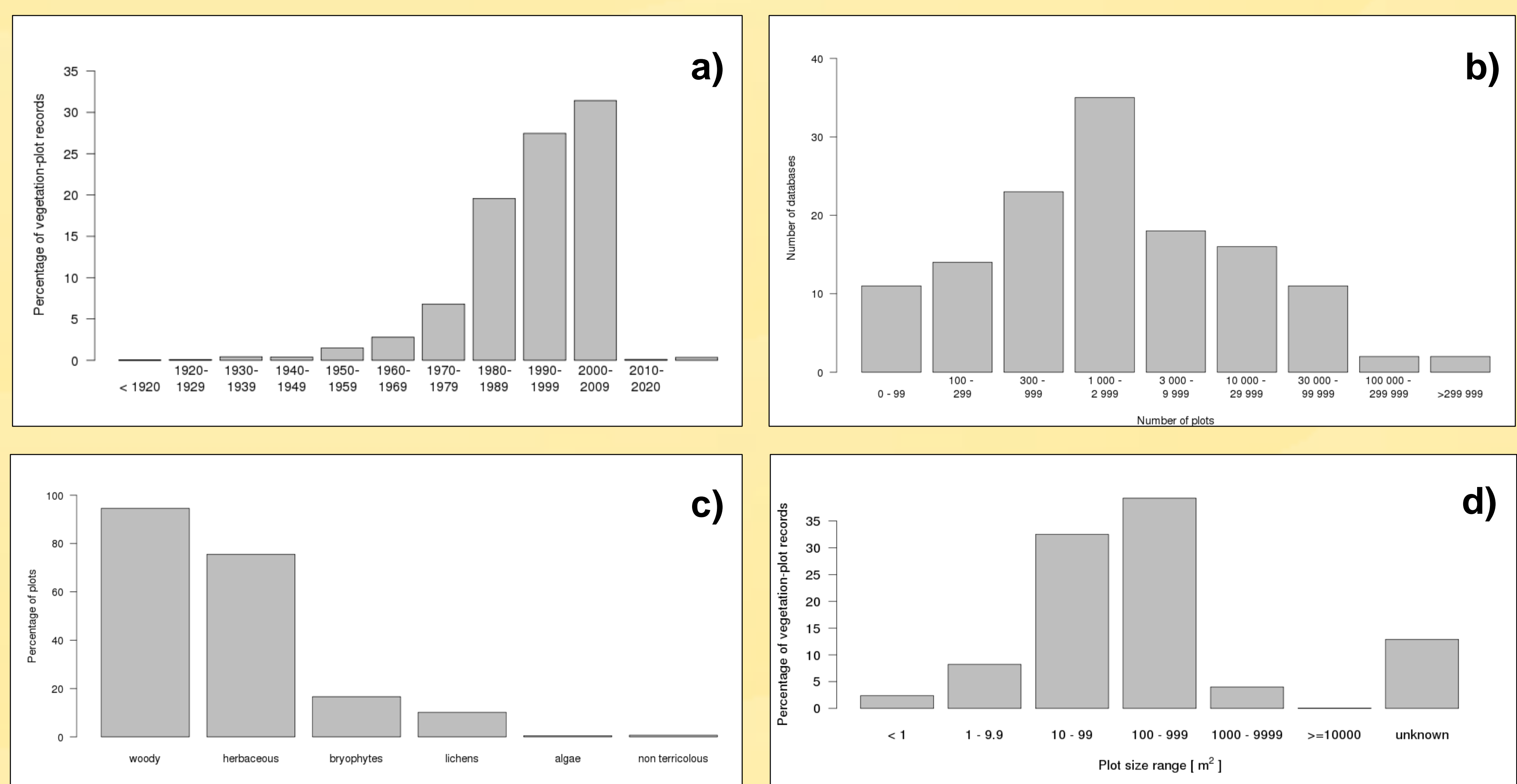


Fig. 2. Analysis of a) database establishment, b) number of plots in database, c) coverage of plant guilds and d) distribution of applied plot sizes in all registered databases based on GIVD on 22.09.2010

## Problems of joint analyses of multiple DBs

- Technical Problems
- Taxonomical Problems
- Variability of Plot Size
- Sampling Methodology
- Geographical and ecological biases

**Conclusion** GIVD is a major step towards a more intensive and more effective use of vegetation-plot data. We hope it will provide better incentives for data collection and sharing, developing user-friendly exchange standards between databases and allow sound research. Suggestions for further improvement are welcome.

## Expected roles of GIVD

- Increased vegetation data availability
- Incentivise data sharing
- Stimulation of vegetation surveys in underrepresented regions
- Source for Earth Observation Systems
- Source for Biogeography and Macroecology
- Foster linkage between other metadatabases

Literature about GIVD [www.GIVD.info](http://www.GIVD.info)

- Dengler, J. & Committee, G.S. (2010) GIVD, a new ecological metadatabase. *Frontiers of Biogeography*, **2**, 70
- Upcoming special Issue in Journal of Vegetation Science on "Vegetation Databases and Climate change"
- Short and Long Database reports in next issue of *Biodiversity & Ecology* (ISSN: 1613-9801)