

Updated Latin American Pollen Database: Version 2013 in preparation for NEOTOMA



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The Latin American Pollen Data Base, better known as the LAPD, is an extensive database of pollen from peat and lake cores and surface samples. It covers the areas of Central America, the Caribbean, and South America. The database was launched in 1994 by a research group headed by Vera Markgraf at the University of Colorado, USA, and its management moved to the University of Amsterdam in 1998, where it was hosted by Robert Marchant at the Institute of Biodiversity Ecosystem Dynamics (IBED).

The LAPD started as a website where palynologists were encouraged to share their data. Unfortunately, after the project ended in 2003 no further updates were made to the website and the related database, and the list of pollen data of Latin America quickly became outdated. Recognizing the urgency for an updated LAPD, the group at IBED decided to revive it. Supported by three grants from the Amsterdam-based Hugo-de-Vries-Foundation (Van Boxel and Flantua 2009; Flantua and Van Boxel 2011), Suzette Flantua initiated a search for studies published after 2003. While the exploration for pollen records continues, this new "LAPD 2013" inventory contains 1478 pollen sites throughout Latin America, multiplying by a factor of three the number of sites compared with the last update in 1997 (463 sites). The number of

countries represented has increased from 15 to 29.

In the meantime, the "NEOTOMA" database (www.NEOTOMAdb.org) was developed through an international collaborative effort of individuals from 23 institutions. This cyber infrastructure was designed to manage large multiproxy datasets, which makes it easy to explore, visualize, and compare a wide variety of paleoenvironmental data. This is why it was chosen as the primary archive site for the Global Pollen Database. The LAPD data in the 1997-list is now available through NEOTOMA (Fig. 1), and the complete 2013 LAPD inventory with metadata will soon be available through NEOTOMA Explorer (<http://ceiwin5.cei.psu.edu/Neotoma/Explorer/>).

Although all LAPD data will be incorporated in NEOTOMA, the LAPD database will still exist as an independent entity. There will be a LAPD page within the existing NEOTOMA website which can be used to obtain information on updated pollen sites, the pollen data, and events related to LAPD. It was also proposed to form a Latin American NEOTOMA group of paleoecological researchers to manage the database, and upload and control the quality of the data.

As almost no new data has been contributed to LAPD since 2003, IBED is in the process of digitalizing and uploading their pollen

database to make a significant contribution to LAPD and thus stimulate global collaboration, and data input and use by other research groups. The data of the newest pollen sites will be kept on "standby" in an offline database and made publicly available once the related research papers are accepted for publication.

We would like to make researchers aware of the much richer palynological information now available for Latin America and we hope the pollen community will recognize LAPD-NEOTOMA as an important archive, where the original authors are cited and acknowledged to have contributed to the database. We emphasize the great opportunity to promote multidisciplinary research on a continental scale and international scientific cooperation.

We invite anyone with questions, doubts, or relevant information to contact us through Suzette Flantua and to support this global palynological initiative for an improved integration of knowledge and efforts.

References

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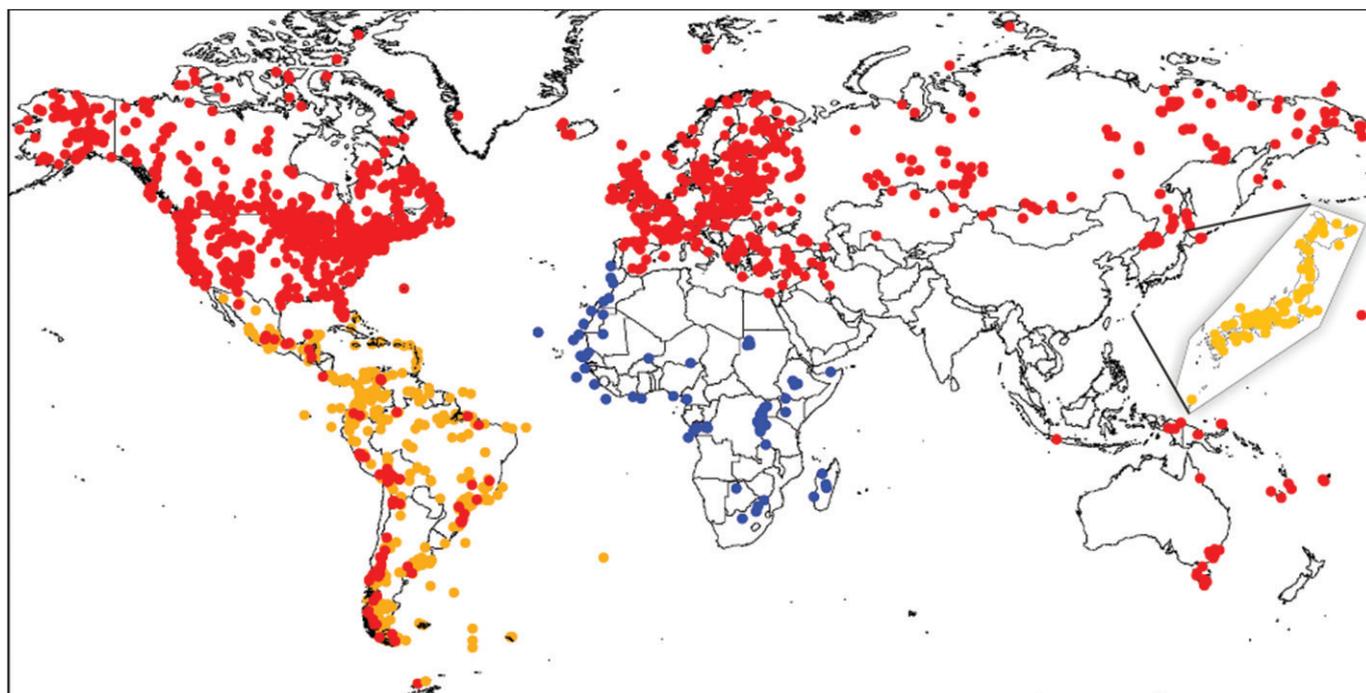


Figure 1: NEOTOMA and LAPD pollen sites. Red dots: existing NEOTOMA database; blue dots: African Pollen Database; yellow dots: inventoried sites for inclusion from Latin America and Japan. (Figure from Grimm et al. 2013).