Database Development

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1. Atlas of Paleocene Planktic Foraminifera

The Atlas of Paleocene Planktic Foraminifera contains descriptions and illustrations of 67 species with SEM images and paleobiogeographic maps (http://services.chronos.org/resources/foramatlas.html). An interactice guide to Cretaceous planktic foraminifer taxa is also hosted by CHRONOS (http://service.chronos.org/guideplankforam/index/htm).

2. Interactive Guide to Planktonic Foraminifera

An HTML-based illustrated guide to the taxonomy and descriptive morphology of Cretaceous planktonic foraminifera contributed by Marius Dan Georgescu, University of Saskachtewan. http://services.chronos.org/guideplankforam/index.htm

3. Mesozoic Planktic Foraminifera Taxonomic Database

The Mesozoic Planktic Foraminifera Taxonomic Database is a hosted relational database with over 300 senior synonym species record that include original and emended species descriptions, morphologic descriptor fields, biostratigraphic range information, images of the species holotypes, and SEM images that illustrate the morphologic variability of the species concept.

4. Neptune

NEPTUNE is CHRONOS's main hosted data engine. It is a relational database of microfossil occurrences reported in Deep Sea Drilling Project and Ocean Drilling Program samples. *NEPTUNE* containts the occurrences of about 8,800 plankton species names (nannofossils, foraminifera, diatoms, and radiolarians) in Mesozoic and Cenozoic samples of approximately 230 DSDP and ODP drill holes from all ocean basins.

The *NEPTUNE* database was developed at the ETH Zürich and is currently hosted by CHRONOS (http://services.chronos.org/databases/neptune/index.html). It contains quality controlled, micropaleontology and stratigraphy data from DSDP-ODP for taxonomic and evolution studies. Tools include graphic correlation. The database schema is in Postgresql. Further information on the history and conception of *NEPTUNE* can be found in Spencer-Cervato (1999, Palaeontologia Electronica http://palaeo-electronica.org/1999_2/neptune/issue2_99.htm).

5. Time Scale

The Time Scale Database consists of the data and information included in the 2004 Global Time Scale of the International Commission on Stratigraphy (http://www.stratigraphy.org) with and XML interface, 19 older time scales (from Holmes 1937 to Remane et al., 2000), and tools that allow to convert ages between some of the time scales.