

Integration of Databases

Table of contents

1 FAUNMAP and MIOMAP.....	2
2 Janus.....	2
3 Paleobiology.....	2
4 PaleoStrat.....	2
5 Pangaea.....	3

CHRONOS is a growing network of hosted and federated relational databases and data files containing mainly published sedimentary rock data pertaining to Earth history and collected from globally distributed marine cores and terrestrial outcrops. These data sets are fully attributed and include paleobiological, geochemical, geochronological, lithological, and magnetostratigraphic data with related temporal and spatial information.

1. FAUNMAP and MIOMAP

FAUNMAP and MIOMAP are electronic databases that document the distribution of mammal species in the U.S. from present to about 30 million years ago. They run on a Paradox, and they have been recently federated with CHRONOS.

<http://www.museum.state.il.us/research/faunmap/aboutfaunmap.html>

<http://www.ucmp.berkeley.edu/miomap/>

2. Janus

Janus is the Ocean Drilling Program's Oracle relational database. The database contains 450 tables of ODP's marine geoscience data that are collected onboard the drillship *JOIDES Resolution*. The database includes paleontological, lithostratigraphic, chemical, physical, sedimentological, and geophysical data for ocean sediments and hard rocks.

Janus has been used to collect data since Leg 171A (January 1997). During the first postcruise (moratorium) year, access to proprietary ODP data is only given to scientists who participated on the cruise. Proprietary data are released to the public one year after the end of each cruise. Non-proprietary data such as ODP and DSDP site information are available to everyone. Data collected prior to Leg 171A are being added to Janus as time permits. JanusLegacy, a clone of Janus with publicly released data, is lined up to be networked with the CHRONOS System in fall 2004 (<http://www-odp.tamu.edu/database/>).

3. Paleobiology

The purpose of the Paleobiology Database is to provide global, collection-based occurrence and taxonomic data for marine and terrestrial animals and plants of any geological age, as well as web-based software for statistical analysis of the data (<http://paleodb.org>). Hosted at the National Center for Evolutionary Analysis and Synthesis (NCEAS), Univ. California at Santa Barbara, Paleobiology is federated to the CHRONOS system.

4. PaleoStrat

PaleoStrat is a collaborative digital information system for sedimentary, paleontologic, and stratigraphic data designed to help phylogenetic, paleobiologic, sequence stratigraphic,

chemostratigraphic, deep-time paleoclimatology, basic analysis, paleogeographic, and other studies that address a variety of questions about the evolution of the Earth's tectonostratigraphic systems (<http://paleostrat.org>).

5. Pangaea

Pangaea is a German public data library for science aimed at archiving, publishing, and distributing georeferenced data with special emphasis on environmental, marine, and geological basic research. <http://www.pangaea.de>