

Primary Databases in Earth sciences

GeoRef (covers 1785 - present)

GeoRef is the most comprehensive and important database covering the earth sciences. It is a commercial database, available through various hosts including CSA, Dialog, EBSCO, OCLC, Ovid, Proquest and STN. Established by the American Geological Institute (AGI) in 1966, GeoRef provides access to international geoscience literature. It contains over 3 million references to geoscience journal articles, books, maps, conference papers, reports, and theses, with 90,000 references added annually. Many earlier records do not include abstracts.

Geobase (covers 1980 - present)

Geobase is produced by Elsevier. It is a multidisciplinary citation database with wider subject coverage than GeoRef including cartography, climatology, energy, environment, geomorphology, hydrology, photogrammetry, sedimentology, geochemistry, geophysics, paleontology, petrology, and volcanology. GeoBase claims to have the most international coverage of any database in this field. It is especially good for geomorphology and natural hazard articles. 2000 journals are indexed. It can be used as a back-up to GeoRef, and does have some overlap with GeoRef. Geobase contains information from seven abstracts journals: *Geological Abstracts*, *Geomechanics Abstracts*, *Geographical Abstracts: Human Geography*, *Geographical Abstracts: Physical Geography*, *Ecological Abstracts*, *International Development Abstracts*, and *Oceanographic Literature Reviews*. Ovid now offers enhanced value to the database through the Geobase Links Package, providing links to free Open Access full-text titles and useful links to relevant Internet Resources on the web (Golderman 2008).

Comparisons of GeoRef and Geobase

EI Village provides a simple and useful overview and comparison of coverage of these databases [here](#).

A [study](#) from North Dakota State University has compared overlap between the 2 databases: GeoRef covers 18,603 titles; GeoBase covers 2065 titles; 615 titles are duplicated between them.

Other Geoscience Databases

A large number of these are free open access – these are noted below.

AESIS (Australia's Geoscience, Minerals and Petroleum database) (covers 1933-2001)

A citation database for Australian published and unpublished geoscience information. AESIS has now been updated and incorporated into [AusGeoRef](#), which can be searched as a subset of GeoRef.

American Geophysical Union (AGU) Digital Library (free open access for searching)

Allows searching of bibliographic records and abstracts of AGU publications from 1896 to present.

CAB Abstracts (covers 1910 - present) and Agricola (covers 1970 - present) both include soil science citations. Agricola has free open access.

[Colombia Earthscape](#) (free open access)

A comprehensive aggregation of resources in the Earth and Environmental Sciences. Click on "Research" section of the compass for article search options (ceasing operations in June 2009).

[Energy Citations Database](#) (covers 1948 - present; free open access)

Produced by the US Department of Energy, this database indexes energy related report literature, conference papers, journal articles, books, dissertations, and patents from DOE. There are a good number of geological/earth science reports indexed here.

[GeoArchive / EarthScienceWISE](#) (covers 1974 - present)

Produced by Geosystems; covers geoscience, hydroscience, and environmental science. Provides international coverage of over 5,000 serials, books from over 2,000 publishers, geological maps, and doctoral dissertations. The printed publications *Geotitles*, *Hydrotitles*, *Geoscience Documentation*, and the *Bibliography of Economic Geology* are derived from GeoArchive.

[GEOLIS-JP](#) (free open access)

Geological literature about Japan or by Japanese authors - click "search menu" to search

[Geologic Guidebooks of North America Database](#) (free open access)

Searchable database for geologic field trip guidebooks of North America.

[Geological Society of America Journals Index](#) (free open access)

Indexes *Geology*, *GSA Bulletin*, *GSA Today*

[GeoRef Preview Database](#) (free open access)

AGI provides free access to citations to recent geoscience publications.

[GEOSCAN Database](#) (free open access)

GEOSCAN is the bibliographic database for scientific and technical publications of the Earth Sciences Sector (ESS) of Natural Resources Canada. This database features approximately 50,000 records for Earth Science Sector publications and includes free downloadable full text of many of these records.

[Geoscience World](#) (free open access to search)

Describes itself as a comprehensive Internet resource for research and communications in the geosciences, built on a core database aggregation of peer-reviewed journals indexed, linked, and inter-operable with GeoRef A subscription to [GeoScienceWorld Millennium Collection](#) is needed to access the full text of documents.

[Hazlit](#) (free open access)

Indexes research and information on how society prepares for, responds to, recovers from, and mitigates damage and other losses from natural hazards, including earthquakes, tsunamis, landslides, and volcanoes.

[Meteorological & Geostrophysical Abstracts](#) (covers 1974 - present)

Contains citations, with abstracts for most years, to journals and series in meteorology,

climatology, atmospheric chemistry and physics, physical oceanography, hydrology, glaciology, and related environmental sciences. Updated monthly.

[New Zealand Geoscience Bibliography](#) (free open access)

This database contains references and abstracts of geoscience publications relevant to New Zealand.

[Oceanic Abstracts](#) (covers 1981 - present)

Covers marine biology and physical oceanography, fisheries, aquaculture, non-living resources, meteorology and geology, plus environmental, technological, and legislative topics.

[OilRef](#)

Compiled by OilTracers, L.L.C., OilRef indexes the petroleum geochemistry literature from journals, conference proceedings, theses, books, patents, and open-file reports. Claims to be the most comprehensive searchable list of petroleum geochemistry references.

[QUAKELINER Database](#) (covers 1987 - present; free open access)

Produced by MCEER and contains citations for 45,000 items related to earthquakes.

[SEG Digital Library](#) (free open access)

Includes Society of Exploration Geophysicists' two journals, its meeting abstracts, and its best-selling encyclopedic dictionary.

[SPE elibrary](#) (free open access for searching)

Society of Petroleum Engineers - leads to full text of SPE conference and technical journal papers; searches the full text since 1997 and bibliographic descriptions before 1997; can download full papers with payment.

[TULSA \(Petroleum Abstracts\)](#) (covers 1960 - present)

Produced by the University of Tulsa; provides citations of interest to geologists, geophysicists, petroleum engineers, and other technical professionals and managers in the oil and gas exploration and production industry. Some searching restrictions apply.

[US Geological Survey Publications Warehouse](#) (free open access)

The Publications Warehouse contains citations for almost 75,000 publications, with the full document available for over half of these. "Full-text (and image) availability depends greatly on the document genre, even in the same subject category" (Jasco 2006).

Multi-disciplinary databases that include earth sciences are [Web of Science](#), [Scopus](#), [Scirus](#). If at all possible these should be searched in addition to GeoRef and Geobase as in some cases there is very little overlap. Bosman et al. (2006) found that only 13% of GeoRef titles were indexed in Scopus, and only 9.4% in Web of Science, whereas Geobase had 52% indexed in Web of Science, and 87% in Scopus. [Digital Dissertations](#) (covers 1861 - present), is also useful to search as theses can contain very detailed geological studies on specific locations. The following databases from other disciplines all contain some earth science content: Water Resources Abstracts, Zoological Record (includes paleontology), Environmental Sciences and Pollution Management, and Biological Abstracts (includes

environmental science and paleontology). These are all available through [UIUC Online Research Resources](#).