

Assessment of Library Collections

Earth Sciences

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Journals

Library subscriptions by general count

FIU has 713 online journals in Earth Sciences; 61 in Atmospheric Sciences; and, on a broader level, 860 in Environmental Studies (according to the Citation Linker on the library's web page). Print journals in Earth Sciences are 91 in number; in Environmental Studies, 42. Overall, FIU has 1,767 journals in these three areas, of which 92% (1,634) are online. The online collections include the American Geophysical Union, American Meteorological Society, GeoScience World, *Oil & Gas Journal* packages, and selected titles of Nature Publishing.

Citation-ranked literatures

The library's holdings in 11 citation-ranked literatures are outlined in Table 1. For the eight literatures of direct relevance to Earth Sciences, the library's holdings range from 82% in Oceanography to 46% in Geology. The overall proportion of holdings is 62% (238 of the 381 journals). Since the last assessment of 2005, the library has added 54 citation-ranked journals—at that time, the overall proportion of holdings was 48%.

In addition are three literatures in environmental fields. As shown, these holdings range from 85% for Environmental Studies to 70% for Environmental Sciences. The overall proportion is 73% (202 of the total 277 journals). Since the last assessment of 2005, the library has added 14 citation-ranked journals—at that time, the proportion of holdings for those three literatures was 68%.

Books

The library's book approval plan for the sciences generally covers all university press titles and all trade-publisher titles on contemporary social or public policy aspects of science, engineering, and technology. For Earth Sciences, it includes textbooks at the advanced-undergraduate level or above in Geology. In addition, it includes handbooks and guidebooks in Biology, Natural History, Botany, and Zoology. In the social sciences (e.g., environmental fields), the approval plan is fairly comprehensive, without any substantive subject limitations.

Monograph standing orders in Earth Sciences include *Advances in Geophysics*; *Annual Review of Earth and Planetary Science*; *Ocean Yearbook*; and *University of Chicago Geography Research Papers*. Those in Environmental Studies include *Advances in Ecological Research*; *Advances in Environmental Science and Technology*; *Annual review of Ecology, Evolution, and Systematics*; *Environment*; and *Excellence in Ecology*.

Both campus libraries have expansive budgets for faculty orders of additional books, as well as audio-visual and reference materials.

Of the library’s approximately 55,000 electronic books, 64 have *earth sciences*, *atmospheric sciences*, or *environmental sciences* as subject descriptors.

Table 1: Library Holdings in 11 Citation-ranked Literatures				
	Total number of journals	Number of FIU subscriptions	Percentage of FIU subscriptions	Number of titles not held by the library
Geology	35	16	46%	19
Geosciences, Multidisciplinary	117	78	67%	39
Geochemistry and Geophysics	47	35	74%	12
Mineralogy	24	13	54%	11
Mineral Processing	19	7	37%	12
Oceanography	39	32	82%	7
Water Resources	55	28	51%	27
Meteorology & Atmospheric Sciences	45	29	64%	16
TOTALS	381	238	62%	143
<u>Set 2: Literatures in Environmental Fields</u>				
Ecology	102	72	71%	30
Environmental Sciences	128	90	70%	38
Environmental Studies	47	40	85%	7
TOTALS SET 2	277	202	73%	75

Databases

The library’s collections of databases, about 300 in number, have at the core for Earth Sciences *GeoRef*; *GeoBase*; *GeoScience World*; *Aquaculture Abstracts*; *Aquatic Science and Fisheries Abstracts*; *Oceanic Abstracts*; *National Technical Information Service*; and *Science Citation Index*.

Supplementary databases for Earth Sciences include *Access Science*; *AGRICOLA*; *ANTE: Abstracts in New Technologies and Engineering*; *Applied Science and Technology Full Text*;

Biological Abstracts (BIOSIS; Biological and Agricultural Index Plus; Biological Sciences; Earthquake Engineering Abstracts; EIS: Digests of Environmental Impact Statements; Environmental Sciences and Pollution Management; General Science Full Text; Ellis and Messina Catalogue of Foraminifera and Ostracoda; Oxford Reference Online Premium; Gale Virtual Reference Library; and NetLibrary Reference Center.

Digital Collections Center (Gail Clement, Head, <http://digitalcollections.fiu.edu>)

The Digital Collections Center has three collections of particular relevance to Earth Sciences: the *Everglades Digital Library*, the *Miami Metropolitan Archive*, and *Linking Florida's Natural History*. These cross-disciplinary, multi-format collections offer extensive and some unique information about the abiotic components of the South Florida environment (geology, hydrology, climate and biogeochemistry); and the human impacts to the same (water and waste management; resource exploration and use).

The *Everglades Digital Library* aims to be a collection of national significance. Begun in 1995 in partnership with the Everglades National Park, it is certainly established in the scholarly system, having a usage count in FY07 of 781,133 from scores of countries. New technologies continue to improve search and retrieval and to connect it to the National Science Foundation's National Science Digital Library. The *Everglades Online Thesaurus: A Standard Vocabulary for the South Florida Ecosystem*, funded by the Department of Interior through its Critical Ecosystems Studies Initiative, provides a standardized vocabulary of concepts and terms of the South Florida environment with several hundred terms in the following categories: Lithosphere, Hydrosphere, Landscape, Chemical/Physical Aspects, Natural resources; and Human Impacts.

The *Miami Metropolitan Archive* is a digital collection of reports, documents, photographs, and other unique materials contributed by local and urban agencies. One of its focal points is the urban environment—water management and supply; coastal zone management; natural hazards; land use planning; and waste management. Numerous partnerships with local agencies and municipalities enable the Digital Collections Center to continue enhancing this collection with hard-to-find local documents and images.

Linking Florida's Natural History and its searchable database, *Florida Environments Online*, provide online access to extensive full-text reports relating to Florida geology, hydrology, oil exploration, water management, and paleontology.

Geographic Information Systems (Jennifer Fu, Head <http://gislab.fiu.edu/>)

The GIS Center supports the curriculum of Earth Sciences and allied programs (Environmental Sciences, Environmental Studies, Ecology, and Marine and Freshwater Biology) by providing a computer teaching laboratory with spatial datasets. The newly formed Maps and Imagery User Services area houses some of the print cartographic materials and provides access to geo-spatial datasets and satellite imagery, principally of Florida and the U.S. shore line, Latin America and the Caribbean, East Africa, and historical hurricane tracts data.

The principal geo-spatial datasets are those of ESRI; Global Data Bundle military, topographic, and aeronautical maps; Landsat; and GeoCover.

The Center collaborates with various faculty members of Earth Sciences, providing GIS software licenses and datasets at both the national and international levels. Ms. Fu works closely with Dr. Dean Whitman, chair of the university-wide GIS Advisory Committee, to continue to strengthen the GIS program for FIU.

Special Collections and University Archives (Vicky Silvera, Head)

The University Archives houses a collection of the papers and records of Mr. George Winston, a petroleum geologist of the 1960s to 1980s, who resided in Coral Gables. Special Collections has a primary focus on the Caribbean. In its collections are early geologic studies on the islands. These include: Butterlin, Jacques, *La Constitution Géologique et la Structure des Antilles*, 1956; Pressoir, C. (Catts), *Eléments de Géologie d'Haïti*, 1943; *Geología de Cuba* / Ministerio de Industrias, Instituto Cubano de Recursos Minerales, Departamento 37 Científico de Geología ; Gustavo Furrázola-Bermúdez ... [et al.], 1964.