Map & GIS Library

Geospatial Resources for Ecosystem Science & Management

ATM
Map & GIS Library

Sierra Laddusaw, Program Assistant
Cecilia Smith, Ph.D., Geospatial Librarian
## ABOUT
- **Location:** Room 202 of the Sterling C. Evans Library
- **Contact:** (979) 845-1024, maps-gis@library.tamu.edu
- **Hours**
- **Services**
- **Circulation Policy**
- **Staff**
- **Need GIS Help?**
- **Geospatial Tech Support**

## COLLECTIONS
- **Brazos County Aerial Photos from 1940**
- **Geologic Atlas of the United States**
- **Tobin Global Planner Tobin Topos**

## GIS & MORE
- **GIS / Interactive Maps**
  - GIS Services
  - GIS Data & Interactive Maps
  - GIS LibGuide
  - Remote Sensing LibGuide
  - Bathymetry
  - Census Data Resources
  - Hardware & Software
  - GIS Training at TAMU
  - Map & GIS Tutorials
  - GPS Units
  - GIS Day!

- **JOIN**
  - GIS Texas A&M Group

## News & Events
- Mitchell Exhibit on Boxing and Literature Opens Feb. 12
GIS | Geographic Information Systems

GIS Services

Map and GIS Collections and Services furthers the mission of the TAMU Libraries by acquiring, managing and delivering geospatial information for members of the Texas A&M University community from all colleges and agencies associated with TAMU, as well as members of the local community.

Data Support

Using personal service and expertise, we distribute local, state, national and international geospatial data in print and digital format. We offer GIS assistance for those seeking difficult to find data, in format ranging from GIS files, vector and raster data, as well as printed maps to complement the GIS work.

Teaching Support and Data Packages

Every semester we offer guest lectures to introduce our data and services and share with students the vast array of library-owned and free online resources available to enhance GIS projects. Faculty members interested in scheduling a GIS session for their class(es), please contact us.

We have launched a pilot project to offer GIS Data packages stored in our ArcGIS Server infrastructure. Faculty members may submit a request to work in a package for their teaching needs. Please contact us to schedule a meeting and discuss your needs and our possible options.

GIS Software

Request a Free ArcGIS Student 1-year License

ArcGIS at OPEN ACCESS LAB (OAL) DESKTOPS

ESRI's ArcMap(View) 10 and ArcCatalog 10 are available at all OAL computers. Five stations are located in the Map & GIS Library.
Adding or Transforming Projection of XY Data | Video

The first tutorial shows how to map coordinate data obtained from a GPS or a tabular dataset. It covers preparing an Excel table of data with coordinates and adding it to ArcGIS 10 to create a GIS layer with a Geographic Coordinate System of WGS 1984.

The second tutorial shows how to change the data frame projection after mapping XY coordinate data obtained from GPS or a tabular dataset. It is specifically aimed to explain how to solve the discrepancy between XY data in decimal degrees (Geographic Coordinate System) and a GIS project in Projected Coordinate System (i.e. UTM, State Plane).
Monday, November 17

9:00 AM

Intro to Python & ArcPy
Dan Goldberg - TAMU Geography  Library Annex 116A

Introduction to ArcServer
Aaron Harmon - TAMU Geoinnovation Service Center
Payton Baldridge - TAMU Geoinnovation Service Center  Student Computing Center (SCC) 4.102B
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<td>Geographic Information Systems for Resource Management</td>
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<tr>
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<td>Advanced GIS Analysis for Natural Resource Management</td>
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<tr>
<td>BAEN 651/ESSM 651</td>
<td>Introduction to Geographic Information Systems</td>
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<td>BAEN 652</td>
<td>Advanced Topics in Geographic Information Systems</td>
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<td>CVEN 689</td>
<td>Civil Engineering Applications of GIS</td>
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<tr>
<td>FRSC 398/GEOG 398/SPSC 398</td>
<td>Interpretation of Aerial Photographs.</td>
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<td>ESSM 655</td>
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<td>ESSM 656</td>
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<td>ESSM 660</td>
<td>Landscape Analysis and Modeling</td>
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DATA
Tobin Global Planner
Local Historical Aerials
Geological Atlas of the US
Local GIS Datasets Available

- Land use
- Land cover
- Imagery
- Hydrology
- Roads
- Political Boundaries
- Census
- FEMA Flood Plain
- Historic Zoning
- Buildings
- Elevation
- Climate
- Geology
### ABOUT

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**Hours**

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**Staff**

#### Need GIS Help?

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- Print Maps & Atlases
- Search the Catalog
  - Basic LibCat Catalog Search
  - Map of US Catalog Search
- Online Cartographic Resources
  - Online gazetteers
- Exhibits & Special Collections
  - Mapping Historic Aggieland

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### GIS & MORE

#### GIS Services

- GIS Data & Interactive Maps
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- Remote Sensing LibGuide
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GIS Online Data

Note: The icons are offered as an attempt to provide useful information about data availability and website features. Our staff carefully surfed each website and, if available, downloaded and reviewed the retrieved data to confirm everything works fine. However, we do not have control over listed websites, and their content may change on an ongoing basis.

<table>
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<th>LOCAL</th>
<th>AUSTIN AREA</th>
<th>DALLAS AREA</th>
<th>HOUSTON AREA</th>
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**LOCAL**

- **Brazos County**
  - It offers downloadable shapefiles of county and city limits, cemeteries, rivers and streams, railroads and roads, and PDF maps of roads and 100-year floodplain

- **Brazos County Appraisal District**
  - This property search application allows to access a viewer to display the property and retrieve its tax report. Our Library catalog holds the [BCAD data](#) from 2004-2012, available to review and copy at Map and GIS Collections and Services.

- **Bryan/College Station/Brazos County Flood Map Modernization**
  - Interactive mapping service that offer a preliminary update of all flood insurance rate maps (FIRM) presented in a digital form. The final DFIRM will be available after the appeal process and the final determination is made.
Data Search & Download

Datasets are available at four levels: State, County, Quadrangle, and Quarter-Quadrangle.

You can search by County or Quad below using auto-fill or a drop down list to identify your desired dataset.

SEARCH

County

Select or search for county by name

Quadrangle

Search for quadrangle by name

STATEWIDE DATASETS

Click on a link to download a compressed file containing the data to your local drive.

Bathymetry

- Texas Bathymetry
- Texas-Louisiana Bathymetry

Elevation

- StratMap Elevation Spots
- Stratmap Elevation Contours

Geology

- GAT

Hydro

- Hydrologic Unit Codes (HUCs)

National Land Cover Dataset

- National LandCover Dataset 1992
- National LandCover Dataset 2001
- National LandCover Dataset 2006

Natural Regions

- Natural Regions

Transportation
GIS Data

All GIS datasets are available for download in shapefile format. All datasets are in DD NAD 83. Please click a data category below to open or right click to save the datasets to your desktop. To preview the data, please click the thumbnail for a larger image. All shapefiles are zipped.

Note: For Lake Contour Data or Bathymetric Data, please refer to the Hydrographic Surveys.

Natural Features

The GIS datasets listed below are related to various types of natural features. Although TWDB utilizes this data in our most commonly used maps, some of the datasets were created and are maintained by other state and federal agencies.

**Major Aquifers** - The 9 major aquifers of Texas as defined by the TWDB, Updated December 2006.

[Major Aquifers Shapefile](#)

**Minor Aquifers** - The 21 minor aquifers of Texas as defined by the TWDB, Updated December 2006.

**Texas Precipitation** - Average monthly and annual precipitation for the climatological period 1981-2010. Data is from NRCS.

[Precipitation Shapefile](#)

**Major Rivers** - Data extracted from NHD, Updated December 2006.
Welcome to EnviroMapper for Envirofacts, a single point of access to select U.S. EPA environmental data. This Web site provides access to several EPA databases to provide you with information about environmental activities that may affect air, water, and land anywhere in the United States. With Envirofacts, you can learn more about these environmental activities in your area or you can generate maps of environmental information.
Why are there so many ENSO indexes, instead of just one?

January 29, 2015

ENSO blogger Tony Barnston explains why climate forecasters can't get by with just a single indicator for predicting El Niño and La Niña.

read more
USFWS NATIONAL GIS DATA

Quick Jump to:

- Coastal Barrier Resources System (CBRS)
- Critical Habitat
- USFWS Ecosystem Regions
- Landscape Conservation
- Cooperatives (LCCs)
- Migratory Bird Conservation
- North American Bird Conservation
- Joint Ventures
- National Wetlands Inventory (NWI)
- National Wildlife Refuge System (NWRS) Boundary Data
- NWRS Transportation Assets
- Office Locations
- Regional Boundaries

Coastal Barrier Resources System (CBRS)

The Coastal Barrier Resources Act (CBRA) of 1982 established the John H. Chafee Coastal Barrier Resources System (CBRS), comprised of undeveloped coastal barriers along the Atlantic, Gulf, and Great Lakes coasts.
GIS Data Downloads

Data Download Information

Base Layers

Boundaries

Ecological Mapping Systems of Texas

Elevation

Geology

Hydro

Natural Regions

State Parks Trails
The Mission of NOAA's National Geophysical Data Center (NGDC) is to provide long-term scientific data stewardship for the Nation's geophysical data, ensuring quality, integrity, and accessibility.

NGDC provides stewardship, products, and services for geophysical data from our Sun to Earth and Earth's sea floor and solid earth environment, including Earth observations from space.

We are active in many international programs, offering scientists around the world access to global databases through international exchange.

Learn more about NGDC's activities, mission, and organization.

NGDC is one of three National Environmental Data Centers operated by NOAA's Satellite and Information Service (NESDIS).
1. Choose a Layer
   ETOPO1 (Ice)
   Grid of Earth’s surface depicting the top of the Antarctic and Greenland ice sheets (1-minute resolution)

2. Select an Area from the map

3. Choose Output Format
   GeoTIFF

4. Download the Data
General Bathymetric Chart of the Oceans (GEBCO)

GEBCO's aim is to provide the most authoritative, publicly-available bathymetry for the world's oceans. It operates under the joint auspices of the Intergovernmental Oceanographic Commission (IOC) and the International Hydrographic Organization (IHO).

GEBCO's bathymetric data sets comprise of **global gridded bathymetric data sets** and a **global set of digital bathymetric contours**. The data sets are maintained and updated on behalf of GEBCO at BODC.

GEBCO's grids are **available to download** from the internet. The full set of GEBCO's data sets are included in the **GEBCO Digital Atlas** (GDA) along with accompanying documentation and a software interface for viewing and accessing the data sets.

Find out more about GEBCO and its data sets and products

- [Project overview](#) — find out more about the GEBCO project
- [Official web site](#) — visit the GEBCO web site hosted at the British Oceanographic Data Centre
- [Download data](#) — download data from GEBCO's gridded bathymetric data sets
- [GEBCO Digital Atlas](#) — find out about the latest release of the GEBCO Digital Atlas
- [Order product](#) — details on how to order the GEBCO Digital Atlas disc set
- [GEBCO world map](#) — a global map/image of bathymetry data
- [GEBCO feature names](#) — access the GEBCO Gazetteer of Undersea Feature Names in GIS friendly formats
- [GEBCO WMS](#) — access the Web Map Service (WMS) for the GEBCO_08 Grid
- [IHO-IOC GEBCO Cook Book](#) — access a technical reference manual on how to build bathymetric grids
MEASURED AND ESTIMATED SEAFLOOR TOPOGRAPHY

**NEW! SRTM15 PLUS** V1 November 29, 2014

**NEW! SRTM30 PLUS** V10 November 29, 2014

**NEW! Global Topography** V17.1 November 29, 2014


Quick Contents:

- Get an ASCII XYZ file
- View digital gridded data
- Plot Profiles for 36" HP Plotter
- GMT Scripts to Create Global Tectonic Maps

- Seamount Discovery Tool for Google Earth - April 27, 2009
- Concept for new radar altimeter mission
- Google Explores the 10th Planet - Essay - February 2, 2009
- Globe Gallery - December 22, 2005
- WWW Article: Global Bathymetric Prediction for Ocean Modelling and Marine Geophysics
- Exploring the Earth from Mars: Essay on Confirming Plate Tectonic Theory - June 5, 2001
- Bathymetry from Space: White paper in support of a high-resolution ocean altimeter mission - April 5, 2001

Interactive Maps

The maps below have been sectioned into 16 clickable regions. Clicking on a particular region will open a new window showing the zoomed-in region in more detail.

![Map Image](image-url)
BATHYMETRY AND COASTLINES FOR THE GULF OF MEXICO

BATHYMETRIC DATA COLLECTIONS

The site includes currently available bathymetric data in the Gulf of Mexico.

**Entire region**

- SRTM30PLUS - 30 arc second SRTM Land topography with measured and estimated seafloor topography in the Gulf of Mexico. The data was based on SRTM30_PLUS V6.0

**Northern Gulf of Mexico (US)**

- NGDC Coastal Relief Model (CRM)
- Multibeam Bathymetry (MB) - The georeferenced multi-beam full soundings data
  - ArcInfo point coverage format (MB-Pts)
  - 50 m gridded data in XYZ format (MB-GRID)
  - 50 m gridded data in UTM zone (MB-UTM)
- Others - Bathymetry related data in shapefile format (Shapefiles)
Map & GIS Library Services

• ArcGIS Student License
• GPS Units available for checkout
• Map scanning
• Data requests
• Class visits
• LibGuides/Tutorials/Workshops
THE HISTORY OF SCIENCE FICTION

ENLIGHTENMENT

SCIENCE

SUPERNATURAL

ROMANTIC MOVEMENT

GOTHIC NOVEL

THEATRICAL SCIENCE

HORROR

EROS

HELEN

FURIOUS

CRIMINAL

NEW SPACE OPERA

SPACE OPERA

HARD

CYBER PUNK

MAINSTREAM STYLE

PROVOCATION

SOCIOLOGY DOMINANT

ENDER MONSTERS

RELIGION DOMINANT

BIOLOGICAL CRISIS

DISTANCE DOMINANT

POSTMODERN CURSE

THE ENLIGHTENMENT

SCIENCE FAIR

SUPERHUMAN

SCIENCE FICTION

GOTHIC

SUPERSTITION

Mysticism

FORAL

HORROR SCIENCE FICTION

THEATRICAL SCIENCE FICTION

THEATRICAL SCIENCE FICTION
• Consultations
• Metadata
• Geospatial Data Management Plans
  – Increase:
    • Authority
    • Usability
    • Citations
Data Management Planning Tool
Create, review, and share data management plans that meet institutional and funder requirements.

DMPTool.org
GIS “Lite”

ArcGIS Online  ScribbleMaps
GeoCommons  IndieMapper
Google Fusion Tables
Google Maps
Open Heat Map
MapMe
OpenStreetMap
Map & GIS Library
Evans Library – Room 202
maps-gis@library.tamu.edu

Thank you!