

Search tips for finding geospatial data held by the Center for Ancient Middle Eastern Landscapes (CAMEL)

The CAMEL component of the Oriental Institute's Integrated Database makes geospatial data available for public search and download.

CAMEL is a research laboratory at the Oriental Institute of the University of Chicago that is dedicated to the long-durée study of Middle Eastern landscapes, environments and cultural heritage, primarily through archaeological fieldwork, satellite imagery analysis, and spatial analysis within Geographical Information Systems (GIS).

CAMEL's database includes over 20,000 unique objects of spatial data that relate to the archaeology, anthropology, and history of the Middle East. The main strengths of our collection are:

- Digitized and georeferenced versions of historical maps held by the Oriental Institute
- Historical aerial photographs of particular archaeological sites and landscapes
- Georeferenced historical satellite imagery covering large swaths of the Middle East, primarily from the Cold War-era Corona spy satellite program

Some data held by CAMEL is not publicly distributable because of copyright, donor wishes, and active research projects. The data searchable and downloadable online is therefore a subset of our holdings, right now just over 6000 datasets. As the database has just gone public, we are continually reviewing our data access settings and making more data available. This process will continue through January 2017.

If you are familiar with other online geospatial data repositories, you will be used to searching for maps and GIS data via a map interface or some other type of spatial search. Due to funding constraints, we have not yet been able to implement a spatial search function in the Integrated Database. It is thus necessary to use text-based queries to locate data. Once you have located a georeferenced dataset of interest, an interactive map with up-to-date satellite imagery embedded in the dataset's page will allow you to see the spatial coverage of the dataset.

Search tips:

1. Select "CAMEL" from the first drop-down menu (default selection is "Search All").
2. For most users, it will be most effective to begin a search with "Category", "Keyword (CAMEL)", and/or "Spatial Type".
3. If you know the general type of data you are looking for, begin your search with "Category." Choosing "Category" in the second drop-down menu will populate the third drop-down menu with the names of categories that CAMEL uses to organize its data. These categories are usually defined by and named after map series, satellite imagery programs, topographic datasets, and survey missions. For example, popular categories that CAMEL receives data requests for are historical maps from the Survey of Egypt ("Survey of Egypt") and high-resolution satellite Corona imagery from the 1960s-70s ("Corona").

4. If you want to simply explore what data is available, begin your search with “Keyword (CAMEL)”, and/or “Spatial Type”. “Keyword (CAMEL)” searches the text of our data’s titles and descriptions in order to return datasets described with the word(s) entered. Please note that this type of text search cannot be a replacement for a spatial search. For example, if you type “Iraq” into the “Keyword (CAMEL)” search box, the search will return datasets that have a description that includes the word Iraq, not all datasets that fall within the boundaries of the country of Iraq. “Keyword (CAMEL)” searches will be much more effective at returning maps (which usually contain some text describing their spatial coverage in our database) and will right now be much less effective at returning satellite images and other types of data, which are typically labeled by mission or indexing number. The descriptions of satellite imagery and other types of data do not contain all of the major place names that are covered by the dataset. The “Spatial Type” search allows you to restrict your query to either maps or remote-sensing (imagery, elevation model) datasets.
5. The main page provides you with other options for refining your search. A brief description of each option is below:
 - a. “Category”: name of map series, satellite imagery program, topographic dataset, or survey mission. Examples: Survey of Egypt, Corona
 - b. “Subcategory”: subdivision of a map series, satellite imagery program, topographic dataset, or survey mission. Example: the highest resolution Corona images come from the KH4A and KH4B missions, which are each subcategories within the Corona category
 - c. “Type”: specifies whether a record is that of a category, subcategory, or “image” (individual map/satellite image/vector dataset)
 - d. “Spatial Type”: specifies whether a dataset is a map or a remote sensing dataset (“Far-remote sensing”)
 - e. “Creation Date (Year)”: year a map was published or year a remote sensing dataset was captured
 - f. “Language”: language(s) present in a map
 - g. “Multimedia”: yes/no, whether or not data is attached to a record and available for download
 - h. “Projected/Rectified”: yes/no, whether or not the dataset is georeferenced. Please note that CAMEL retains ungeoreferenced copies of all datasets in its database, so if you are interested in downloading a georeferenced version of a dataset, double-check that you have the right record. Most but not all of CAMEL’s datasets are georeferenced.
6. After an initial search the results page provides you with a second opportunity to refine your search. Many of the options are the same as above. A brief description of two additional options is below:
 - a. “Resolution”: scale of a map or on-the-ground pixel size of a remote sensing dataset
 - b. “Visibility”: for remote sensing datasets only; ranks the clarity and cloud cover of aerial and satellite images on a scale from one (less clear/most clouds) to four (most clear/no clouds)
7. If you wish to download a dataset, click on that dataset’s name in the result list to access its record. If the dataset is georeferenced (Projected/Rectified=yes), then an embedded

interactive map on the record will show the spatial coverage of the dataset in the lower right. Below a preview image of the dataset on the right side, you will find a link for downloading files. A zipped file should download to your machine. This download will include metadata (citation information, etc) for the dataset in a txt file.

8. If you do not see an interactive map on the dataset's record, it is likely that you have accessed the record for the non-georeferenced version of the dataset or that the dataset has never been georeferenced. Click the "View Associated Images" link at the bottom of the page. This will display any georeferenced versions of your search result. Or, return to the results list and select "yes" under "Projected/Rectified" to locate the record for the georeferenced version, if it exists.

The data made available for download through the Oriental Institute Integrated Database is believed to be in the public domain. Researchers intending to publish these images or products derived from these images are encouraged to contact the CAMEL Lab with questions about citation and distribution.