

Project Prospectus Assignment and CEO Archive Tutorial

A one-paragraph prospectus for your project is due in class Thursday, **March 4**. The purpose of this assignment is to get you thinking about how to design a feasible project, and to allow the instructors an opportunity to offer suggestions early on in your process.

The prospectus should include a description of your proposed project, including a statement of goals, potential data to be used, and a list of ten or more references from the remote sensing and related literature (indicate with a check mark which of these papers you have read in the write-up).

Please read the Term Project Definition and the Project Ideas pages on the OEFS website for more information on the assignment and possible topics:

<http://www.yale.edu/ceo/OEFS/ProjDef.html> and
<http://www.yale.edu/ceo/OEFS/ProjectIdeas.html>.

You might also browse the class project binders in the CEO lab or the links from the website describing current and past student research projects:

<http://www.yale.edu/ceo/Projects/Students/students.html>.

The prospectus should get you thinking both about a concept for your project and about finding the datasets you'll need to complete it. In the past, projects for this course have been limited not by imagination, but by the availability of low-cost, easy to find images. As an introduction to some of the images available right here at the CEO, complete the following short tutorial on the CEO Archive.

CEO Archive Tutorial

Over the years, the CEO has collected hundreds of remote sensing images from around the world and archived them for future use. In this tutorial, you will identify an interesting image in the archive and follow directions in the CEO User Guide to load and save a subset of this image. Please complete each step.

- **Search for an image using the CEO web site. If you can, use this opportunity to look for an image for your actual project.**

Go to www.yale.edu/ceo, and click on the Dataset Archive link. There are a number of ways to search and find images from this page, including an interactive map. To use the map, scroll down to it and try clicking on an area of interest. Once you've found a region for which the CEO has archived images, your clicks will zoom you in to the selected region. As long as there are images available, you'll quickly click down to a list of available scenes (including a description with the date, satellite and sensor type, projection, location, and storage method). Most images also include a snapshot, which allows you to quickly check image quality (cloudiness, etc.).

While the archives are stored in a number of different formats, for now, choose an image that is available on a CD. Once you've identified an image and noted the CD number,

retrieve the disc with the proper number from the archive drawers at the back of the CEO lab. Bring the CD back to your workstation and load it into the CD drive.

□ **Load, browse, and save a subset of your image in ENVI.**

Often times, an archived image covers a larger area than you will actually use for a given project or task. Because it is much faster to work with a smaller image (not to mention the fact that smaller images take up less space on your user drive), it's good to get in the habit of subsetting images so they contain only the region in which you are interested.

The CEO FAQ web page: http://www.yale.edu/ceo/Documentation/ceo_faq.html has an online document explaining how to subset an image. You can also learn how to load and subset an image stored on an archive CD by following the directions in the CEO User Guide. A copy of the Guide is available on the CEO website (click on the User's Guide link from the CEO homepage or go directly to:

<http://www.yale.edu/ceo/Documentation/CEOGuide.html>). Follow the instructions in section I.3.

Append this subset image to end of your project prospectus report. Make sure to return the CD to its original location when you've finished.

□ **Use the Classes Drop-Box to submit this assignment.**