

DIGITAL VIDEO HACKS™

*Tips & Tools for
Shooting, Editing,
and Sharing*

LOCATION

TAKE

SOUND

DATE

SCENE

DIRECTOR

O'REILLY®

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HACK
#63

Zoom In from a Satellite

Use a series of satellite images to establish a location.

Establishing the location of a scene can sometimes be critical to your story. Thanks to the United States Geological Survey (USGS), you can download satellite images of almost any location. You can use a series of these images to *zoom in* on your location.

There are a number of great web sites that allow you to both locate and view satellite images. I prefer to use TerraServer USA (<http://www.terraserver-usa.com>). The instructions in this hack pertain to that site, but the process can be applied to any other sites, as well.



Google Maps (<http://maps.google.com>) now also offers satellite images of locations, searchable by street address. Like the images provided by TerraServer, you can zoom in on a location (using a handy scroll bar and an altogether nifty interface). Though Google's images are in full color, many locations don't offer the same level of detail provided by TerraServer's images.

Find an Image of Your Location

On the TerraServer USA Home page, click the Advanced Find link, and then select the Address menu item. From the Address Search page, enter the address of the location you would like to view. **Figure 6-9** shows a TerraServer image of Fenway Park.



You can also search by using Latitude/Longitude or Place. The Place search will attempt to find matches for what you enter, including Sites of Interest. For example, entering fenway will return both Fenway, Massachusetts, and Fenway Park.

The Results Page should contain a set of links to various images of the location. You will most likely want to download either the Urban Areas or Aerial Photo image type.

Download a Series of Images

Once you have made your selection, you will be presented with the satellite image of your location. You should quickly notice that when you click on the image, you are able to zoom in closer to point where you click. You can use this feature to continue zooming in until you have exhausted all of the



Figure 6-9. TerraServer image of Fenway Park

available images. You can also use the Navigate pane on the left side of the page (shown in Figure 6-10) to zoom in on the location by changing the resolution. You might increase the size of the current image by selecting from the Map Size pop-up button.



Figure 6-10. TerraServer USA Navigate pane



You will want to download the largest possible image available. Using the Navigate pane, you can select Large from the pop-up menu. The ideal image will have a resolution of at least 720×480 (NTSC) or 720×576 (PAL).

By following this process, you will be able to collect a series of images, which you can use to simulate a satellite zooming in on your location:

1. Click the Download button.
2. Save the image to your computer.

Zoom In from a Satellite

3. Click the Back to TerraServer link.
4. Zoom Out one level.

After gathering all of the available satellite images, you will need to import the images into your editing system.

Create the Zoom Effect

While using your editing program, import the images, like so:

Avid

File → Import

Final Cut

File → Import → Files...

Movie Maker

File → Import

Premiere

File → Import → File

iMovie

File → Import

Most editing systems also allow you to import files by dragging-and-dropping them to specific windows within the application.

To simulate zooming in on your location, you will want to start with the image that shows the largest land mass and is farthest from your location. To do this, place each image in succession on your timeline, as shown in [Figure 6-11](#).

Hacking the Hack

How you proceed from here is your creative decision. Here are a few ideas to get you going:

- Make the zoom more pronounced by slowly increasing each image's size/scale.
- To simulate a lens clicking into place (think microscope), insert a three-frame black transition between each image and add a dissolve.
- Overlay a Fog effect over one image to simulate flying through clouds.

Also, just because you can download images of the exact location where your scene was shot does not mean you have to. If you want to establish your child's baseball game at Fenway Park, go right ahead!

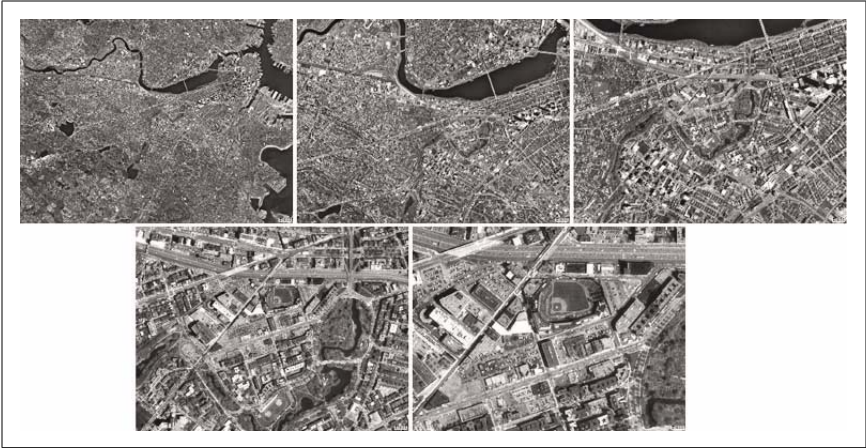


Figure 6-11. Five images, zooming in on Fenway Park