Using USGS Digital Orthophotos from 1991/92

This document outlines how to set up the viewing software and use USGS DOQs from the 1991/1992 set.

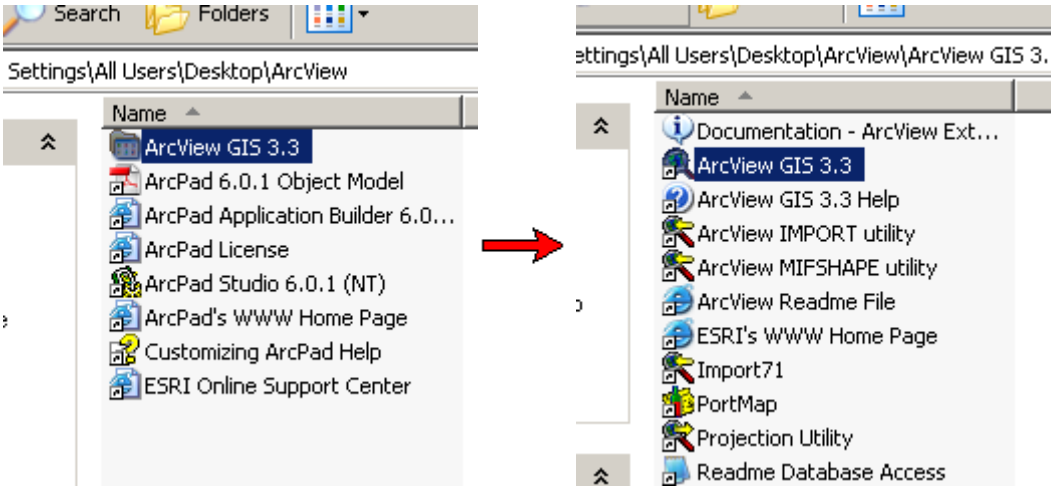
USGS Digital Orthophoto Quadrangles (DOQs) from 1991-92 are available on CD in the ACIC. This collection is the brown-labeled CDs on the shelves in the back of the lab. In addition to Minnesota counties, a few areas from other states are available as well.

The CDs are sorted alphabetically by county, and the Orthophotos themselves are sorted by USGS 1:24000 Topographic quadrangle names. To locate the quadrangle name for the area you are interested in, consult the 1:24:000 index map for Minnesota, the USGS online map locator at http://store.usgs.gov, or ask a staff member at the Borchert reference desk.

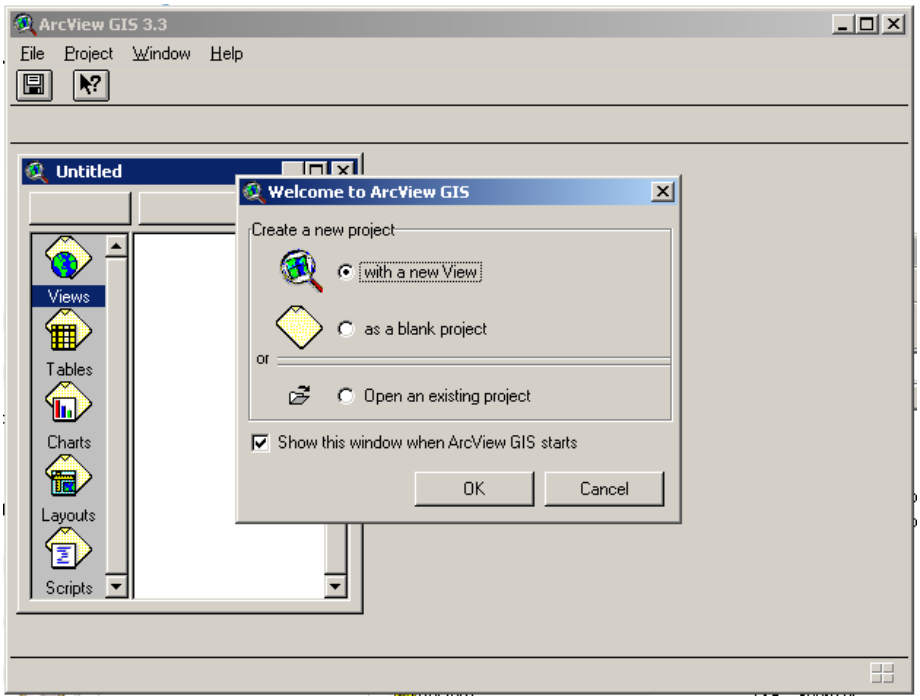
The simplest way to view data from the 1991-92 CDs is through the ArcView application.

1. From the desktop, double-click on the ArcView Icon:

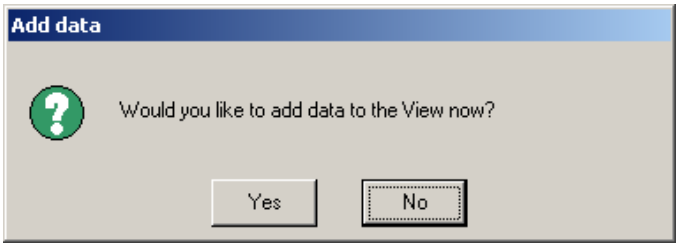
2. When the ArcView folder opens, double click on the “ArcView GIS 3.3” folder, and when it opens, click on “ArcView GIS 3.3”



3. When ArcView opens, click “OK” on the first dialog that pops up, which creates a new project with a new view.



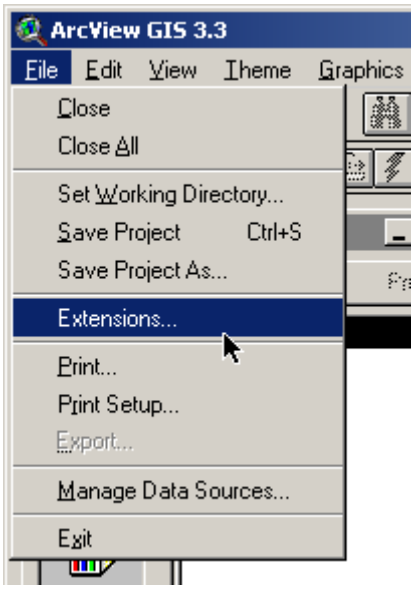
4. Then click “No” on the “Add data” dialog.



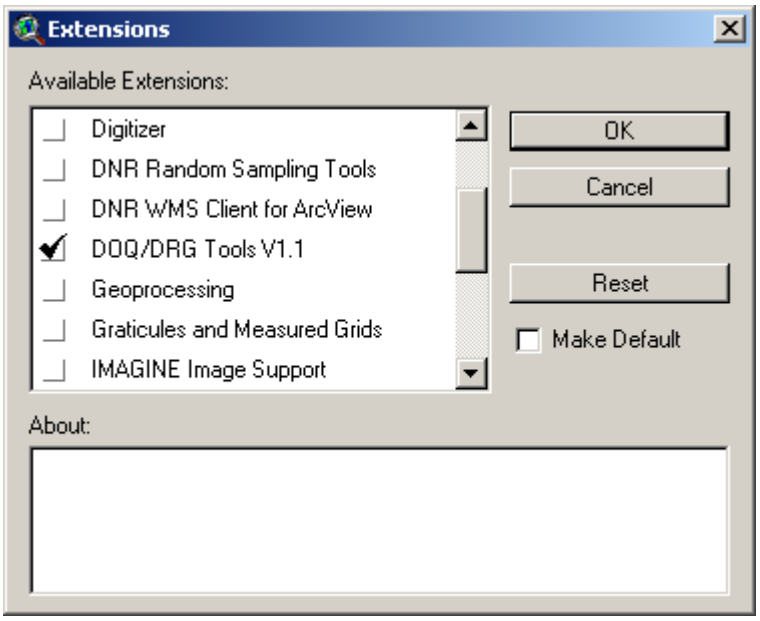
To view the Orthophoto data as indexed by USGS Quad names, you will need the DOQ/DRG Tools extension in ArcView. If this extension is already activated, you will see a menu at the top of the ArcView window named “DOQ/DRG Tools”

If this menu is already visible, please skip to page four. If the menu does not appear, the three steps on the following page will set up the extension.

1. Click on the File menu in ArcView, and select “Extensions”.



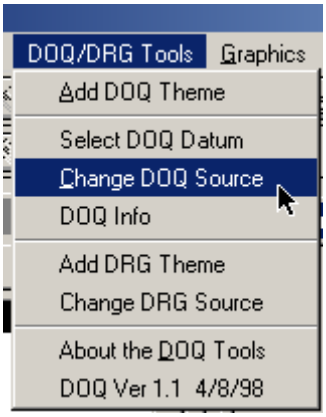
2. When the Extensions window opens, scroll down the list and click the check box next to “DOQ/DRG Tools V1.1”. A black checkmark will appear to indicate that the extension has been selected. Click OK.



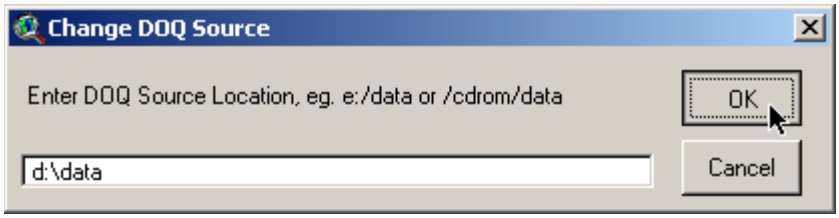
3. Click OK on the two information dialogs that appear, and you will be returned to the main ArcView window. Now you should see “DOQ/DRG Tools” in the menu bar.

Next, you need to tell ArcView where to look for DOQ Files.

1. Click on the DOQ/DRG Tools menu and select “Change DOQ Source”.



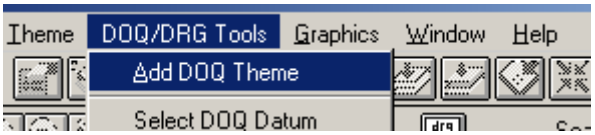
2. In the input box, enter the location of the DOQ CD and the Data directory. On the ACIC workstations the upper DVD drive is “d”, and the lower DVD/CDRW drive is “e”. If the CD is in the upper drive enter “d:\data”, and if it is in the lower drive, enter “e:\data”. Click OK.



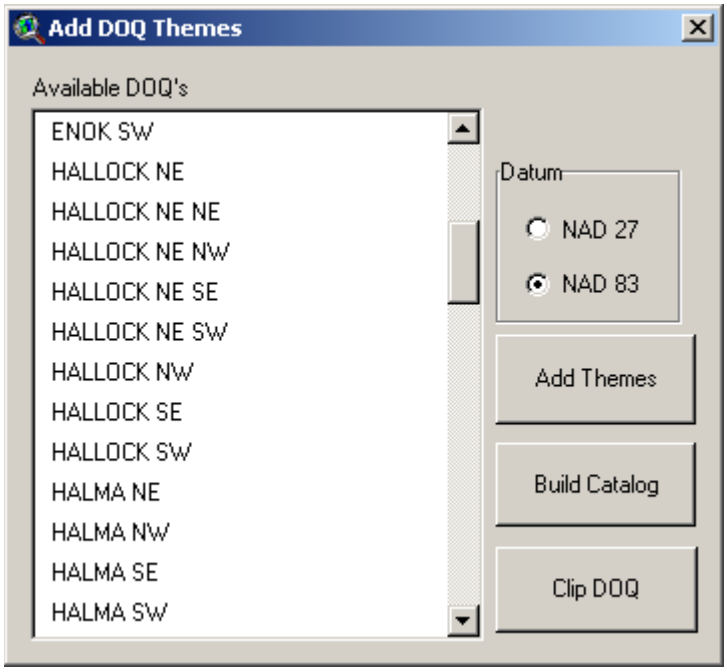
3. Click OK on the information box that pops up. If you get an error message, go back to step 2 and ensure that the correct drive is named and that the CD is in the drive.

Now that everything is set up, you can proceed to view DOQ data.

4. Click on the DOQ/DRG Tools menu and select “Add DOQ Theme”.

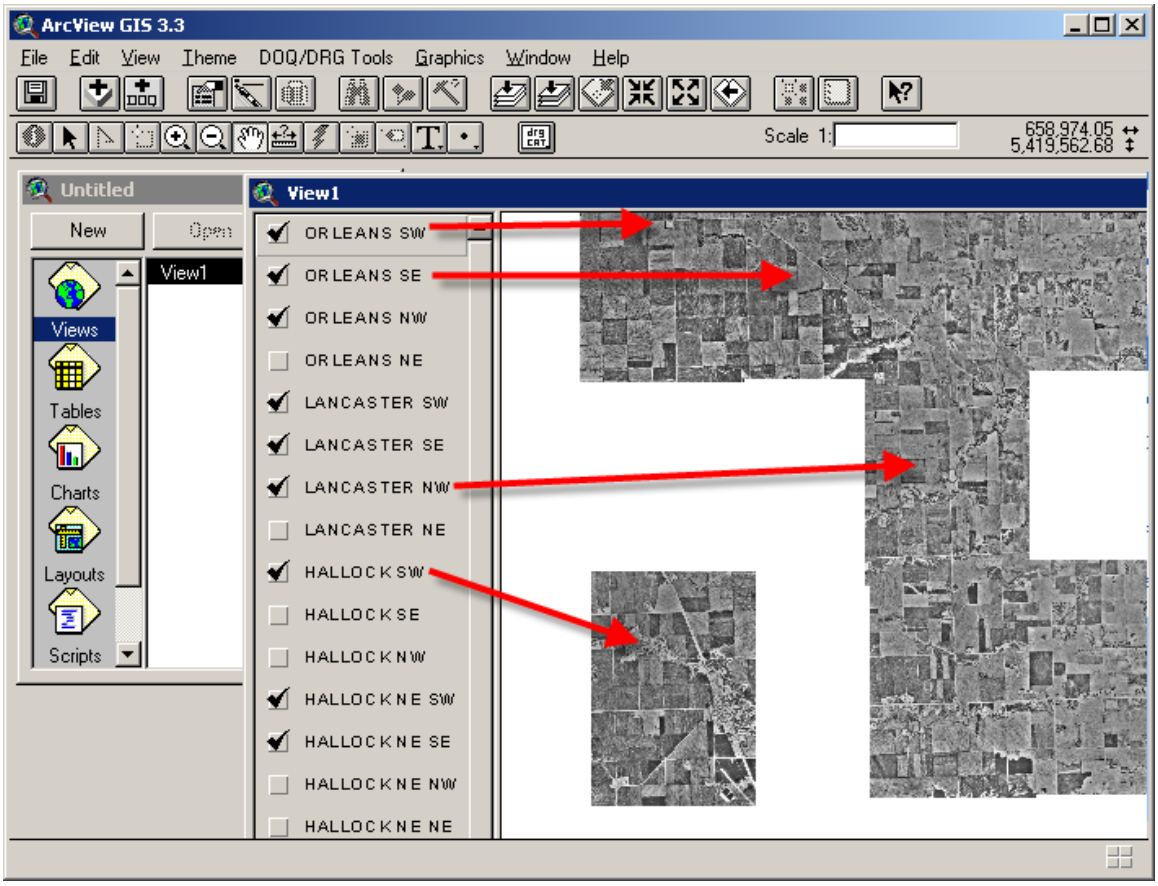


A list of all images on the CD will appear, alphabetized by USGS quadrangle name. Each quad is broken up into four Orthophotos, a Northeast, Southeast, Northwest, and Southwest photo. Note that quads with directional names will have two sets of direction abbreviations after them. For example, Kittson County has a "Hallock" quadrangle, and a "Hallock NE" quadrangle, both of which are divided into four sections. The "Hallock NE NE" item on the list is the Northeastern quarter of the quadrangle named "Hallock NE".



5. Select the items you want and click "Add Themes". Multiple items can be selected by holding down the Shift key while clicking. Once you click "Add Themes", the DOQs for those areas are added to the ArcView window, but are not immediately displayed.

6. To display the images, close the "Add DOQ Themes" window and return to the main ArcView window. Click the check boxes next to each desired image, and they will appear in georeferenced layout in the ArcView window (adjacent quadrangles and sections will appear next to eachother).



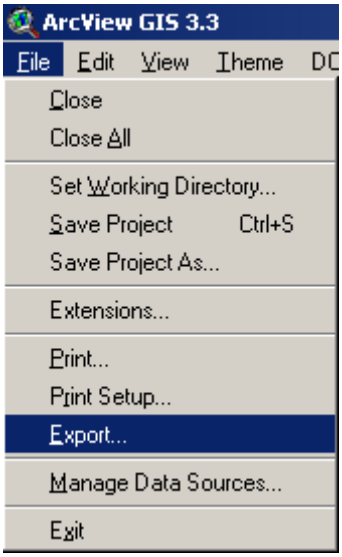
(Arrows added to show relative layout)

You can now navigate the visible images with the zoom and pan tools at the top of the screen.

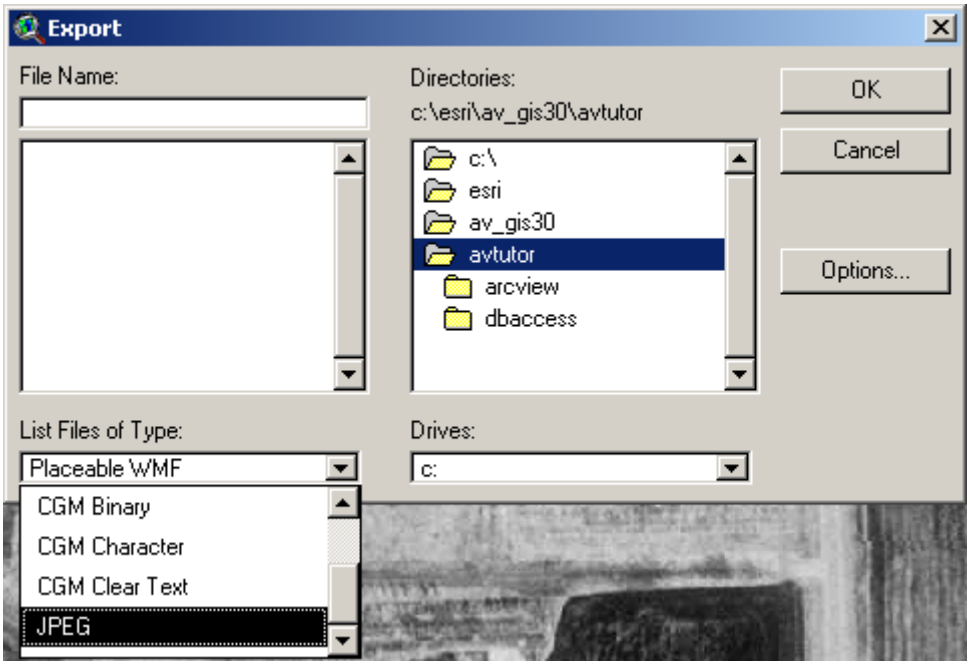
To save a copy of the current view, follow the next set of steps.

1. In ArcView, navigate to the area of the image you are interested in and zoom in to the desired level of detail.

2. Click the File menu and select “Export”



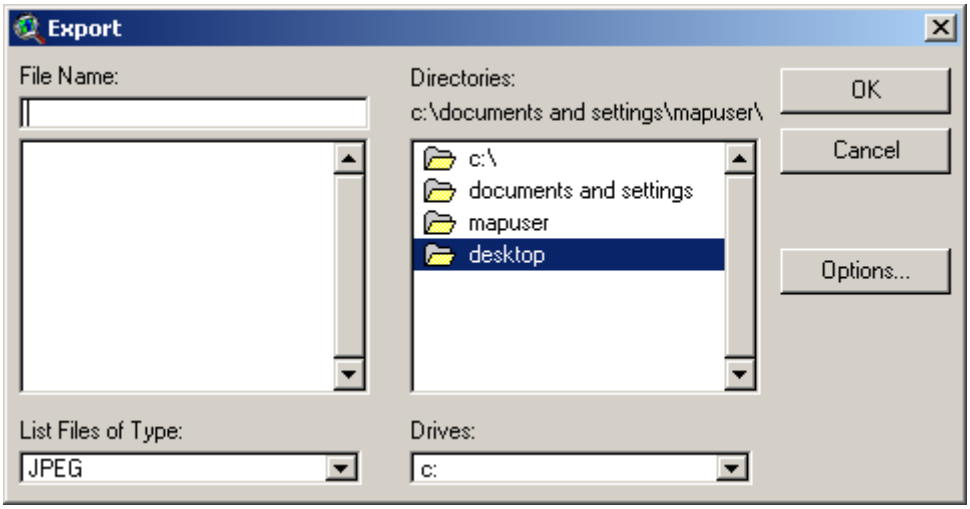
3. In the Export window, select an output type for your file. Windows Bitmap (bmp) and JPEG are two common image file formats. Don’t name the file yet, as the name box will clear itself every time you change another setting here.



4. Now choose the location to save your file. The default location is somewhere in the ArcView program folders. You should choose a storage location that we provide access to, such as the H:\ network drive, or removable media like a USB keychain. If you are emailing the image or uploading it to netfiles, save it to a temporary location on the H drive first. Files left on the lab computers will be automatically deleted overnight, and could be lost in the event of a crash. Please ask a lab attendant if you need help setting up a temporary folder.

   USB thumb drives attached to the computer will appear under "Drives" as something like "f:", or "g:". Once you select a drive, the folders it contains will appear in the center part of the window under "Directories". Choose the folder where you want to save.

   To access the Desktop, select the c: drive and navigate to "documents and settings\mapuser\desktop".



5. Now give your file a name and click OK. The Export window will close and a progress bar will appear on the bottom of the ArcView screen. When the progress bar disappears the file is finished saving (This can be very fast for JPEG files).