

Making Slides and Videos

1 Making Slides from the Computer at NIH

The easiest method for making slides from the computer at NIH is to use one of the formats listed below so that the files can be submitted to Visual Arts Services electronically. This service is \$4 per slide. They currently accept electronic submissions from the following programs:

- **Powerpoint 4.0 Mac or PC and 7.0 for PC**
- **Adobe Photoshop 2.5, 3.0, 4.0 (TIFF, PICT, JPEG, EPS...)**
- **Adobe Illustrator 6.0 Mac**
- **Corel Draw 6.0 PC**
- **Claris Draw**
- **Macdraw Pro**
- **Canvas 3.5, 5**
- **Cricket Graph 1.5.3**
- **Delta Graph 4.0**
- **Adobe Persuasion 4.0**
- **Freehand 5.5 and 7.0**

Submitting Mac files is very easy. Simply start **Chooser** and select **AppleShare**. Then select **NCRR MAPB**, select **JETSTREAM FOLDER**, and login as "guest". The selected folder will appear on the screen. Open it, and select **READ ME NOW** for instructions. Submitting files simply involves putting

them all in a folder with some additional information and placing this personal folder inside the **JETSTREAM FOLDER**. PC users can use **ftp** at IP address 137.187.68.105. For detailed instructions, call Visual Arts Services at 496-3221. No matter which method you use, be ready to provide the correct billing number (or “X” number). Slides are generally ready within 24 hours and can be picked up in Room B2L323 of Building 10.

Before creating your slides, transfer any previously created files that you will need to the correct machine using **ftp**. Of the Mac programs available here, **Adobe Illustrator 6.0** seems to provide the most flexibility for manipulating encapsulated postscript (eps) files. This is the format for saving files created by many UNIX-based programs such as **xmgr** and **xfig**. Regular postscript files can be converted to eps files by editing the file and defining a bounding box. This just means adding a line in the top section of the file of the form:

```
%%BoundingBox: llx lly urx ury
```

which defines the coordinates of the lower left and upper right corners of the figure. The values to use can be determined by viewing the file in **ghostview**, which automatically displays the coordinates of the mouse. Alternatives include the unix program **ps2epsi** (syntax: **ps2epsi file [file2]**) and the Mac program **epsConverter**, which converts the file to an **Adobe Illustrator** file that can be read also by **Photoshop**. Finally, you can use the scanner on the Mac to scan images and save them as eps files. **Illustrator** will handle many other formats such as GIF and JPEG.

The slides you create should have a ratio of 2 vertical units to 3 horizontal units. So for example, you could set up document pages which are custom-sized to be 600pt by 900pt. After starting **Illustrator**, you can read in eps files by selecting **place** under the **file** menu. Choosing **parsed eps** in the window that pops up will allow you to edit the resulting image if possible. Usually, it is possible to do things

like scale objects, move objects, change colors, edit text, and change line properties using the standard Mac mouse-based options. If you use the scanner to create the eps file, the editing options are limited. You can move the image around and scale it but will not be able to edit individual objects in the image. The same is true of many other formats. In general, using the **Illustrator** tools to edit your slides is very easy after a little experimentation.

Visual Arts Services will also create black and white slides from submissions on paper (\$2.90) and will make poster titles (\$40). Slightly less professional looking poster titles can be created free of charge at the User Resource Center in Building 31. Call 496-5025 to reserve computer time or obtain more information.

2 Making Videos from the SGI

Videos are captured directly from the screen so there are many options for displaying data. One possibility is to run a program on another machine and display the data on the SGI. There are also numerous data visualization tools on the SGI, such as **projector** and **vcr**, that allow animation with sequences of data. Another helpful tool is a program called **showcase** which allows you to create colorful images to use as titles or transitional frames in videos. There is also a tool called **capture** which can be used to get a single image from the screen and load it into **showcase**. Then you can use **showcase** to add text labels and arrows.

When you are ready to make the video, place the cart with the television and the video recorder near the SGI. Place one end of the cable in the SGI Galileo Video Panel where it says “OUTPUTS” and “COMP”. Place the other end in the back of the video recorder where it says “VIDEO” and “IN”. If you are using the double cable, be sure that the two ends that you choose have the same color code. (One cable has yellow rings around the end pieces, and one has white rings.)

Turn on the television and the video recorder, and put a tape in the video recorder. Be sure to rewind the tape to the area where you would like the video to begin. You can either use the video recorder remote or use the buttons directly on the machine. (Some of the buttons on the machine are in the hidden panel at the bottom left of the machine.) Push the “input” button until it says “input select: LINE”. Also select the standard play speed (SP).

Start a program on the SGI called **videopanel**. In the program window, select **Live Video Output** under the **Utilities** menu. A box will appear on the SGI screen, and the area in the box should be also be visible on the television screen. This is what will be recorded onto tape. Click on one edge and drag the box to the area of the screen that you would like to record. When you are ready to record, press “play” and then “record” on the video recorder or remote. When you are done, push “stop”.

A few things to remember while recording:

- Be sure that the mouse cursor does not appear inside the videopanel box so that it won't appear on the tape.
- Each time you are ready to record a new image or animation, back up the tape and hit “play”. When you reach the point on the tape where you are ready to record, hit “record”. This will minimize glitches on the tape due to starting and stopping during recording.
- Due to some sort of bug, **vcr** runs slower when the **videopanel** box is in front of it. So when using **vcr**, position the **videopanel** box correctly so that your animation is well-positioned on the television screen, then click on the border of the **vcr** window so that it is in front before you run the sequence for recording.