Introduction

Overview

This introduction provides an overview of the NCSA HyperCard Scientific Animation Package capabilities on Macintosh systems. The organization and use of this manual are described and notational conventions explained.

About The NCSA HyperCard Scientific Animation Package

NCSA HyperCard Scientific Animation Package was developed by Louis Wicker and Tim Krauskopf at the National Center for Supercomputing Applications. They would like to thank Aaron Contorer and Gaige B. Paulsen for their help and assistance in creating this Package.

The NCSA HyperCard Scientific Animation Package allows you to create a movie animation from a series of graphics images. It is an add-on XCMD, or X command, for HyperCard which imports sequences of graphics images into a stack of cards. Specifically, the package allows you to translate vector graphics images, typically created on the Cray supercomputer and translated into a series of Tektronix 4010 drawing commands, into PICT format; read the resultant file into a HyperCard stack and animate the images. Specifically, the package is based on the concept that you can produce from your simulations sets of vector graphics images which can be put into Tektronix 4010 format. (Any series of vector graphics images in 4010 format can be animated.)

The NCSA HyperCard Scientific Animation Package consists of a script for translating your metacode into Tektronix 4010 drawing commands, an application for translating the Tektronix commands into PICT format, a sample PICT animation file, and a template HyperCard stack.

System Requirements

To run the NCSA HyperCard Scientific Animation Package, you will need a Macintosh with at least one megabyte of RAM, and System software version 6.0.2 or later. If you plan to animate more than 100 frames, you may need greater than two megabytes of RAM. The HyperCard stack is capable of animating up to about 300 frames.

Use of This Manual

This section describes the organization of this manual, and the conventions and nomenclature used in developing it. Before using the NCSA HyperCard Scientific Animation Package, you should be familiar with the Macintosh user interface; that is, you should know how to use the mouse and menu bars. If you need more information concerning the Macintosh user interface or these procedures, refer to your Macintosh user's guide.

The instructions in this manual should allow you to successfully use the NCSA HyperCard Scientific Animation Package, though familiarity with HyperCard may enhance your work. Specifically, because the program's template HyperCard stack retains all of the features associated with HyperCard, you can modify the button scripts, add buttons or fields, create new cards or stacks of cards, and use tools to customize your cards. For information regarding HyperCard features, consult your HyperCard user's guide.

Organization of This Manual

This manual is organized into two chapters. Each page is given a unique number that consists of the chapter number, a period, and the number of that individual page (beginning with the first page of the chapter). For example, page 2.3 is the third page of the second chapter.

Manual Contents

The manual is organized into the following chapters:

Chapter 1, "Getting Started," familiarizes you with the basic steps involved in using the NCSA HyperCard Scientific Animation Package: installing the package, converting Tektronix 4010 files into PICT format, creating and controlling an animation, and exiting the application.

Chapter 2, "Options and Special Features," explains how to select parameters for your animation and create multiple movies from a single Tektronix file.

Form of Presentation

In explaining various features and commands, this manual often presents a word within a paragraph in *italics* to indicate that the word is defined within the paragraph.

Portions of this manual refer to other portions of the manual that explain related topics. These cross references usually mention the title of sections or chapters enclosed in quotation marks, such as, See Chapter 2, "Options and Special Features."

Entry Format Notation

Throughout this manual, several explanations instruct you to make entries by typing on the keyboard. These entry instructions are printed in **`courier bold type`** and appear within a screen display, paragraph, or on a separate line.

Among the courier bold type instructions are ***`italicized`*** entries. These entries should be substituted appropriately with your own particular filenames, pathnames, or commands.