Table of Contents

Introduction

Overview ix

About NCSA Layout ix

Special Features ix

System Requirements x

Use of This Manual x

Organization of This Manual x

Manual Contents x

Form of Presentation xi

Chapter 1 NCSA Layout Tutorial

Chapter Overview 1.1

Installing NCSA Layout 1.1

Beginning a Layout Session 1.1

Opening a New File 1.2

Loading an Image 1.3

Moving an Image 1.3

Inserting Text 1.4

Moving Text 1.4

Loading a Palette 1.5

Saving Your Work 1.5

Using Online Help 1.7

Exiting the Program 1.8

Chapter 2 Laybat Tool

Chapter Overview 2.1

Creating a Batch Mask in NCSA Layout 2.1

Defining an Animation Template 2.1

Loading Multiple Images for Animation 2.4

Adding Counters 2.5

Selecting an Area of a Layout 2.5

Saving a Layout 2.5

Uploading an Animation Sequence 2.6

Using the Laybat Tool 2.7

Downloading and Displaying an Animation Sequence 2.9

Chapter 3 Formatting Your Data Files

Chapter Overview 3.1

File Formats 3.1

Raw Raster Files 3.1

Raw Palette Files 3.1

PICT Files 3.2

ASCII Files 3.2

HDF Files 3.3

How NCSA Layout Reads and Displays Data Files 3.6

Specifying the Dimensions of Raw Files 3.7

Chapter 4 Creating a Display

Chapter Overview 4.1

Loading Images 4.1

Loading a PICT File 4.1

Loading an ASCII File 4.1

Annotating an Image 4.2

Creating a Border 4.3

Inserting Grid Lines 4.5

Inserting Major and Minor Ticks 4.6

Pasting Annotations 4.7

Switching Images 4.8

Pasting Images from the Clipboard 4.8

Working with Contour Plots 4.9

Overlaying an Image with a Contour Plot 4.11

Color Bars 4.12

Working with Palettes 4.13

Loading Palettes 4.13

Copying and Pasting Palettes 4.13

Editing Text 4.14

Selecting Text 4.14

Justifying Text 4.15

Adjusting Text Margins 4.15

Choosing Text Fonts, Sizes, and Styles 4.15

Coloring Text 4.16

Coloring Text Background 4.16

Cutting, Copying, Clearing, and Pasting Text 4.17

Manipulating Objects 4.18

Picture Objects 4.18

Changing a Picture Object into an Image 4.18

Selecting Objects 4.19

Moving Objects 4.19

Layering Objects on the Screen 4.19

Aligning Objects 4.21

Cutting, Copying, Clearing, Duplicating, and Pasting Objects 4.24

Making Objects Transparent 4.25

Saving Your Work 4.26

Selecting a Region of the Display 4.26

Saving Selections 4.27

Saving Layout Files 4.27

Choosing a File Format 4.27

Printing Your Image 4.28

Specifying Page Setup 4.28

Specifying Print Options 4.29

Photographing Your Display 4.29

Coloring the Canvas 4.29

Enlarging the Canvas to Full Screen 4.30

Hiding the Menu Bar and Window Outline 4.31

Photographing the Screen 4.31

Exiting a Display 4.32

Chapter 5 NCSA Layout Menus

Chapter Overview 5.1

About the Layout Menus 5.1

The Apple Menu 5.1

The File Menu 5.2

The Edit Menu 5.4

The Special Menu 5.6

The Text Menu 5.8

The CanvasColor Menu 5.11

The Windows Menu 5.11

Figures and Tables

Figure 1.1 Layout Program Icon 1.2
Figure 1.2 File Menu 1.2
Figure 1.3 Layout Display Window 1.3
Figure 1.4 Hand Tool 1.3
Figure 1.5 Text Menu 1.4

Figure 1.6 Text Displays 1.5
Figure 1.7 Save Selection Dialog Box 1.6
Figure 1.8 Icon for a Layout File 1.6
Figure 1.9 About Box 1.7
Figure 1.10 Help Menu 1.7
Figure 1.11 Sample Help Screen 1.8
Figure 2.1 Load Image Directory Dialog Box 2.2
Figure 2.2 Edit Options Dialog Box 2.3
Figure 2.3 Save Dialog Box 2.6
Figure 3.1 HDF Environment 3.3
Figure 3.2 Specifying Dimensions for Raw Raster Image Data 3.7
Figure 4.1 Preferences Dialog Box 4.2
Figure 4.2 Edit Options Dialog Box 4.2
Figure 4.3 Borders Dialog Box 4.3
Figure 4.4 Grid Lines Dialog Box 4.5
Figure 4.5 Major Ticks Dialog Box 4.6
Figure 4.6 Contour Plot Dialog Box 4.9
Figure 4.7 User-Defined Contour Levels 4.10
Figure 4.8 Sample Contour Plot 4.11
Figure 4.9 Color Bar Dialog Box 4.12
Figure 4.10 Palettes Submenu 4.13
Figure 4.11 Style Submenu 4.15
Figure 4.12 Text Background Color Dialog Box 4.17
Figure 4.13 Edit Menu 4.21
Figure 4.14 Horizontal Alignment Dialog Box 4.22
Figure 4.15 Horizontal Alignment 4.23
Figure 4.16 Vertical Alignment 4.24
Figure 4.17 Sample Page Setup Dialog Box 4.28
Figure 4.18 Sample Print Dialog Box 4.29
Figure 4.19 Windows Menu 4.30
Figure 4.20 Canvas Dimensions Dialog Box 4.30
Figure 4.21 Side and Top Views of Photo Display Setup 4.32
Figure 5.1 Layout Menu Bar 5.1
Figure 5.2 About Box 5.2
Figure 5.3 File Menu 5.2
Figure 5.4 Edit Menu 5.4
Figure 5.5 Special Menu 5.6
Figure 5.6 Palettes Submenu 5.7
Figure 5.7 Text Menu 5.8
Figure 5.8 Fonts Submenu 5.8
Figure 5.9 Size Submenu 5.9
Figure 5.10 Style Submenu 5.9
Figure 5.11 Black-and-White View of Color Submenu 5.10
Figure 5.12 Black-and-White View of CanvasColor Menu 5.11

Figure 5.13 Windows Menu 5.11

Tables

Table 2.1 Increments and Counters 2.8