

# **OCEAN DRILLING PROGRAM**

## **MSTVIEW (MSTV)**

### **USER'S MANUAL**

# Table of Contents

<b>Introduction</b> .....	<b>1</b>
<b>Document Layout</b> .....	<b>1</b>
<b>Installation and Setup</b> .....	<b>2</b>
Requirements .....	2
Installing MsTV .....	2
<b>Working with MsTV</b> .....	<b>3</b>
The MsTV data display screen .....	3
Navigating the data display screen .....	4
The Graph Areas .....	4
The Graph Controls .....	4
Selecting data to be plotted .....	4
Exiting MsTV .....	5
Panning and Zooming Options .....	6

## Table of Figures

Figure 1. Main MsTV window. ....	3
Figure 2. Set of controls for each graph. ....	4
Figure 3. Main window showing the hole and core selections. ....	5
Figure 4. The graph palette of MsTV. ....	6
Figure 5. Zooming options. ....	6

## **Introduction**

MsTV is a program designed to aid in the viewing of Multi-Sensor Track (MST) data (GRAPE, magnetic susceptibility, NGR, P-Wave). Data is displayed on three graphical interfaces on the main MsTV window. Data can be viewed for entire holes, or for a particular core. The three graph areas allow for the comparison of data from different holes, or different data types for the same hole. Because data is available on MsTV as soon as it is uploaded to the database, this program can be used as a guide for sampling and visual core descriptions.

## **Document Layout**

This document is divided into two main sections and multiple subsections. The first section describes how to install and setup MsTV. The second section describes how to use the main window and how to utilize all graphical tools.

## Installation and Setup

### Requirements

In order to install and use MsTV, you must have the following equipment:

- A 486 or higher IBM-compatible computer with a minimum 8 MB of RAM (16 MB recommended)
- A hard disk drive with at least 1 MB of free disk space
- SVGA or higher resolution monitor
- Windows 3.1
- LabView 4.0
- DataView Oracle 7 drivers
- ODBC

### Installing MsTV

To install MsTV on your computer, follow these steps:

1. Create a directory where you want MsTV installed (e.g. **C:\ MsTV**).
2. Copy the MsTV program file to the directory you created. The file is either provided as a diskette, or must be pulled from the server. The file name is **MSTVIEW.LLB**.
3. Create an icon on your desktop for MsTV. The command line for this icon should run LabView. Be sure the path and filename designate the MsTV program file (e.g. **C:\LABVIEW\LABVIEW.EXE** and **C:\MSTV\MSTVIEW.LLB**). The working directory should be the directory you created (e.g. **C:\MSTV**).
4. Setup an ODBC data source named "janus", which uses an oracle driver to access the Janus database. Do this using ODBC administrator. Test this new data source to make sure it is activated with software such as ODBCTEST, or MSQUERY.
5. If you were provided with a diskette distribution of MsTV, remove the diskette and store in a safe place.

# Working with MsTV

## The MsTV data display screen

Use the main, and only, MsTV screen to obtain quick plots of Multi-Sensor Track (MST) data (GRAPE, Magnetic Susceptibility, NGR or P-Wave).

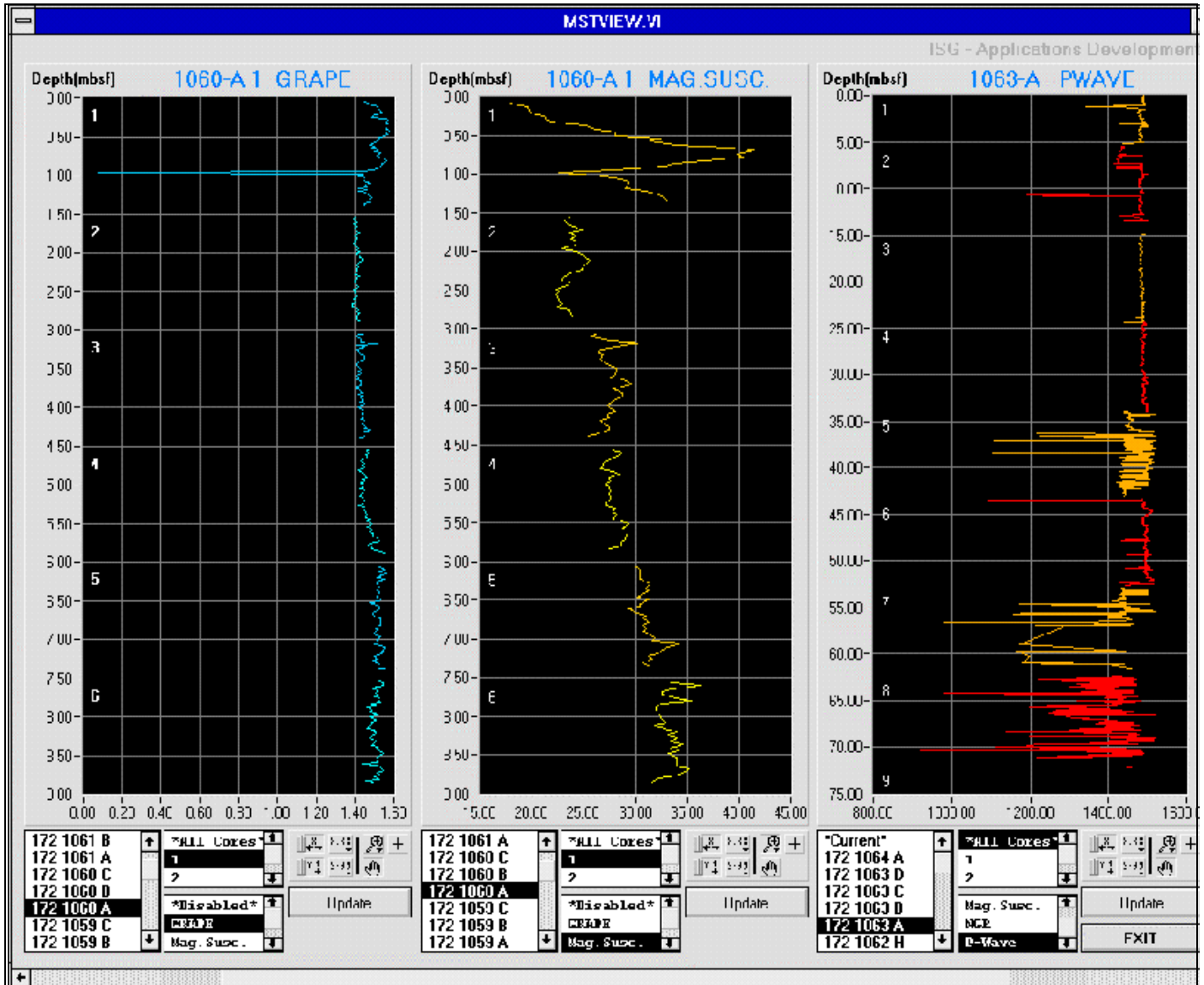


Figure 1. Main MsTV window.

Use this program to view data for entire holes or a particular core. With the three graph areas you can compare data from different holes or compare different data types for the same hole. Because the data is available to MsTV as soon as it's uploaded to the database, you can also use this program as a guide for sampling and visual core description.

## Navigating the data display screen

MsTV uses a standard Graphical User Interface. However, not all utility tools are accessible from the keyboard. Use the mouse to utilize any of the graphical tools that control the scales, resolution or position of the plots.

### The Graph Areas

Each graph area can display any of the MST data types for a particular core, or for all the cores in a hole. The title of each graph describes the hole or core, and the data type being displayed. The Y axis, labeled “Depth(mbsf),” represents the depth of each data point, given in meters below sea-floor (mbsf). The X axis represents the measurement as given by the MST.

### The Graph Controls

A set of controls is displayed below each graph (See Figure 2). Use the controls to specify the data that you want to plot and to manipulate the display. These controls are covered in detail in the following sections.



Figure 2. Set of controls for each graph.

Use the **Update** button to query the database for new or changed data. Use this button in cases where the data is not completely uploaded to the database, or if the data has errors. Once the data is corrected or uploaded, click on **Upload** to refresh the data you selected and rebuild your plots.

## Selecting data to be plotted

To select the data to be plotted, follow these steps:

1. Make sure the graph is disabled. Before changing to a new set of data, click on the **\*Disabled\*** option from the list of “Data Types”. This prevents the program from updating the plot until you have made all of your selections.
2. Select the leg, site and hole from which you want data. Do this by clicking once on your selection from the list of holes under the graph area.

**Select the \*Current\* option to automatically select the current hole in the database. This may or may not be the first hole in the list, depending on whether the ship is drilling at a previously visited site.**

3. Select the core(s) from which you want data. Do this by clicking once on your selection from the list of cores. Use the **\*All Cores\*** selection to plot all data for the selected hole. When this option is selected, each core is plotted as a separate plot. Each core number is displayed in the far left of the graph area. If you select one core, each section is plotted as a separate plot, with the section number displayed in the far left of the graph (See Figure 3).
4. Select the data type you wish to display by clicking on your choice from the list of data types.

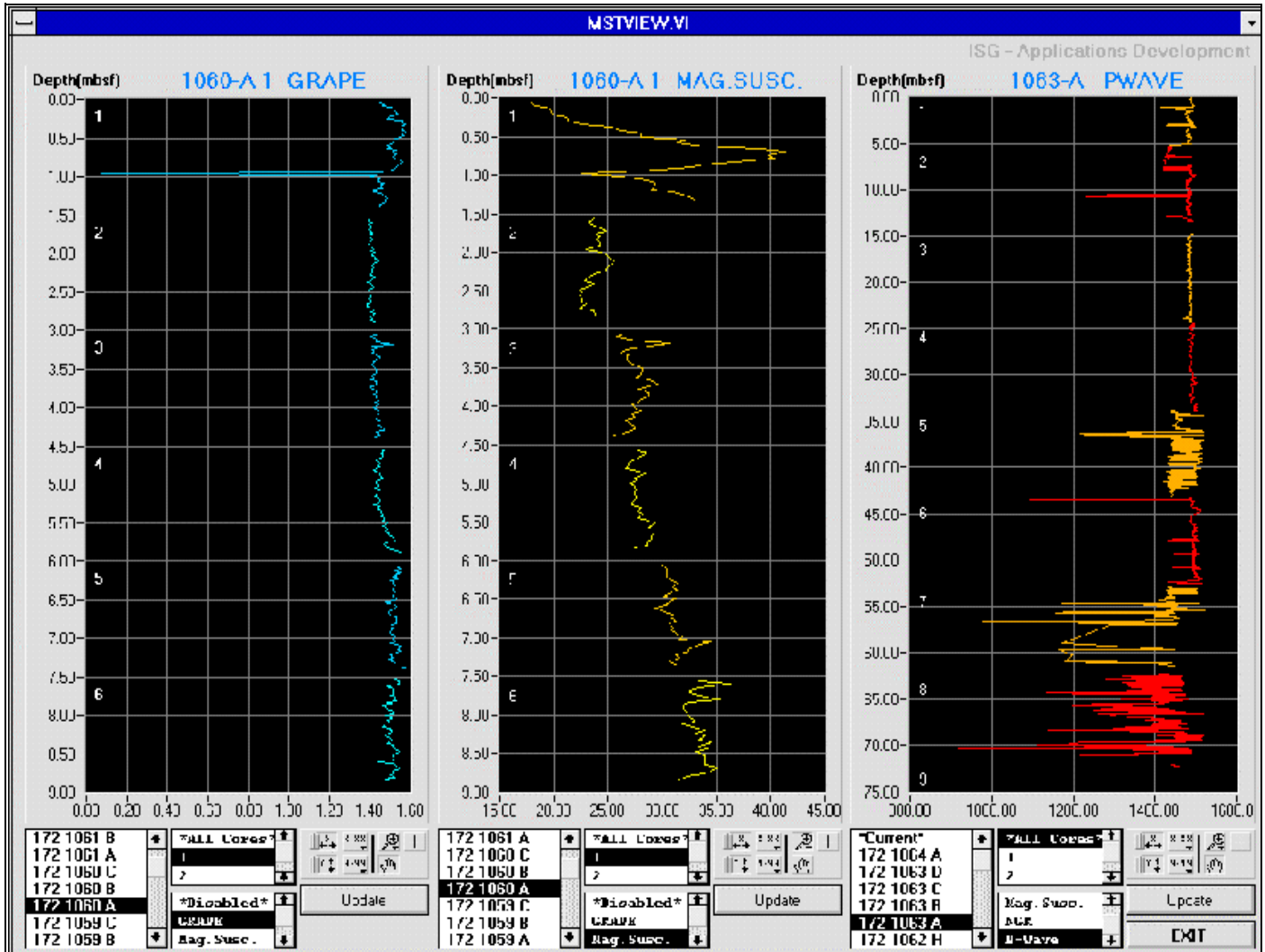


Figure 3. Main window showing the hole and core selections and the corresponding graphs.

## Exiting MsTV

To exit MsTV, click on the exit button located on the right bottom corner of the MsTV screen.



## Panning and Zooming Options

A Graph palette is included with each graph areas (See Figure 4). It includes controls for panning (scrolling the display area of a graph) and for zooming in and out of sections of the graph.

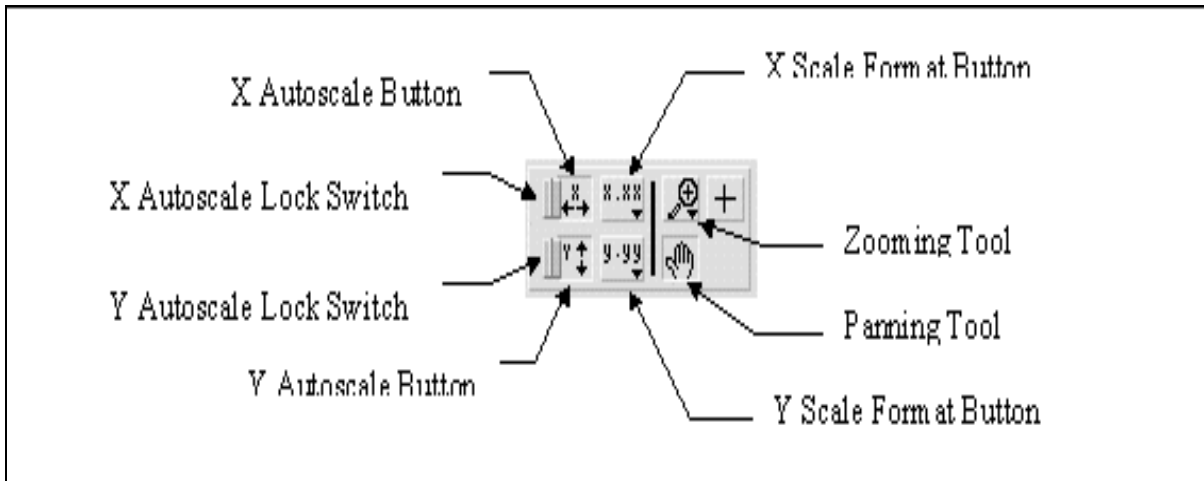


Figure 4. The graph palette of MsTV.

- Click on the **X Autoscale** button to autoscale the X data of the graph.
- Click on the **Y Autoscale** button to autoscale the Y data of the graph.
- Click on the **X or Y Lock Switch** buttons to autoscale either of the scales when the program retrieves data from the database. The lock switch must be in the on position as shown above. To turn continuous autoscaling off, click on the autoscale lock switch.
- Click on either **Scale Format** button to control the X and Y scale marker formats.
- Use the remaining three buttons to control the graphic operations. Normally, the graphs are in standard operation mode, indicated by the plus or crosshatch.
- Click on the **Panning** tool to switch to a mode in which you can scroll the visible data by clicking and dragging sections of the graph.
- Click on the **Zoom** tool to zoom in on a section of the graph by dragging a selection rectangle around that section. Clicking on this button opens a pop-up menu for selecting the zooming method (See Figure 5).

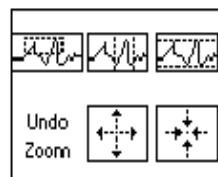


Figure 5. Zooming options.

The following are descriptions of each zooming option.



Zoom by rectangle.



Zoom by rectangle, with zooming restricted to x data (the y scale remains unchanged).



Zoom by rectangle, with zooming restricted to y data (the z scale remains unchanged).



Undo last zoom. Resets the graph to its previous setting.



Zoom in about a point. If you hold down the mouse on a specific point, the graph continuously zooms in until you release the mouse button.



Zoom out about a point. If you hold down the mouse on a specific point, the graph continuously zooms out until you release the mouse button.

**Note: For the last two modes (zoom in and zoom out about a point) clicking the Shift button at the same times as one of these buttons zooms in the other direction.**