Geocluster

Getting Started

TeamView 0.5

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TeamView Getting Started 0.5 - September 2003

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Chapter

1

Installation and first steps

This first chapter introduces the TeamView application. You will find the following sections:

- Pre-requisites
- Running
- Data

1.1 Pre-requisites

As TeamView is written in Java, a Java Virtual Machine (JVM) installed on your computer. In addition to this, the value of the environment variable JAVA_HOME must be correctly defined.

To check that you have a JVM, look in the /usr directory:

```
% cd /usr
% find . -name "java"
./lib/gcc-lib/i386-redhat-linux/2.96/include/gnu/java
./lib/gcc-lib/i386-redhat-linux/2.96/include/java
./lib/netscape/java
./java
./java/j2sdk1.4.1_01/jre/bin/java
./java/j2sdk1.4.1_01/bin/java
```

In this example, the last three lines are important. They show that the Java Software Development Kit version 1.4 for Java2 is installed. Currently, TeamView requires version 1.4 or better.

The value of the JAVA_HOME environment variable must be set to the root of the Java installation. This is /usr/java/j2sdk1.4.1_01 in the example above.

```
% setenv JAVA_HOME /usr/java/j2sdk1.4.1_01
```

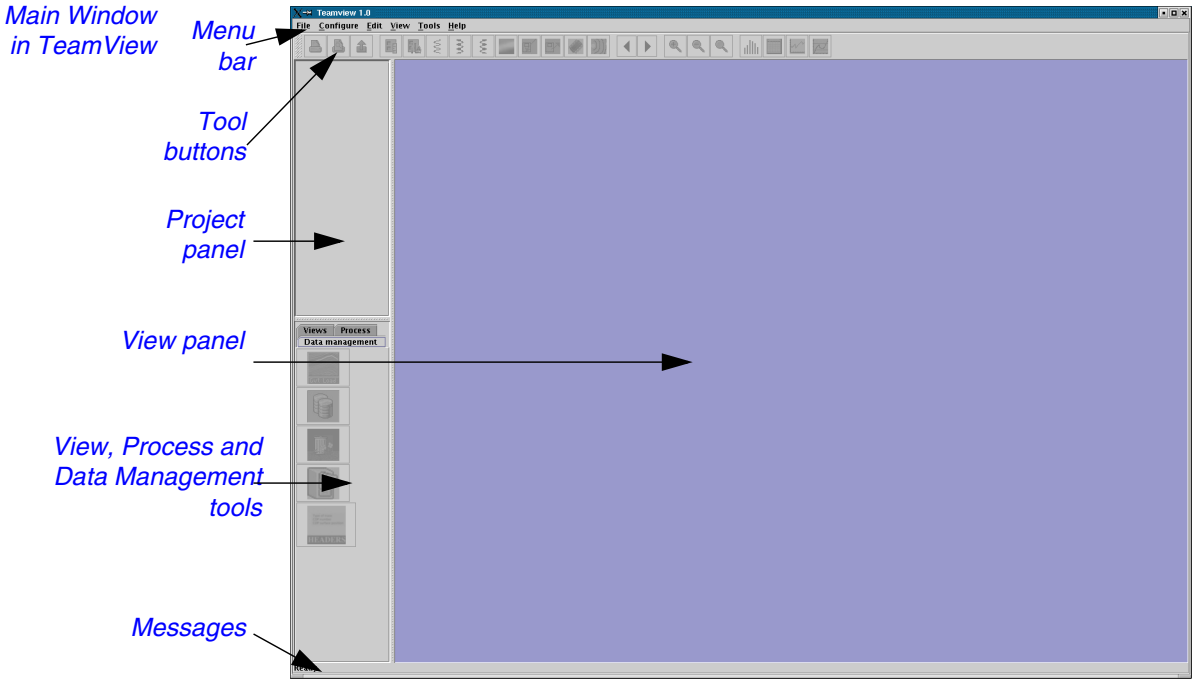
The application is started by executing a launch script, which in a normal Geocluster configuration is installed below the $APPLIROOT directory. This launch script sets some environment variables (such as CLASSPATH) necessary for the execution of the Java program.

To execute the launch script, when $APPLIROOT is correctly defined:

```
% $APPLIROOT/TEAMVIEW/teamview
```

1.2 Running

When you start the application, the Main Window appears. this is where almost all of the user's interaction with the program takes place.



The project panel shows the currently loaded objects. These can be projects, files, ...

The view panel is where TeamView displays data. It is in this panel that you make selections and apply operations to the data.

1.3 Data

TeamView reads Geocluster CST format files, and also SEG-Y files. These can be stored on a local disc (directly attached to the computer running the application), or on an file server somewhere on your network.

A future development will allow TeamView to communicate with the SDS (Seismic Data Server) system.

Chapter

2

Using TeamView

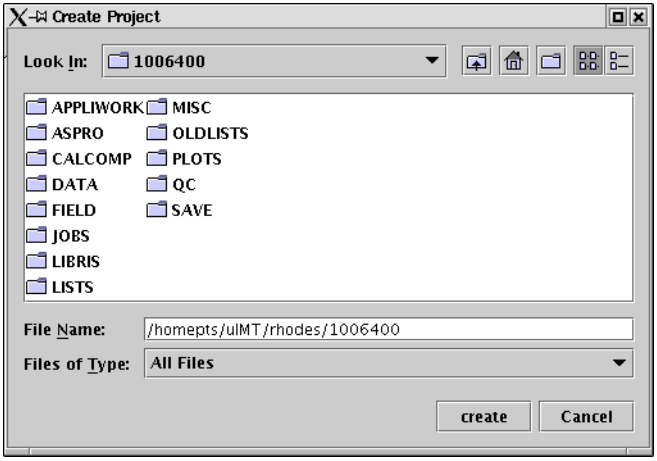
This chapter explains how to use the application:

- Creating a Project
- Data Management
- Viewing
- Tool Bar

2.1 Creating a Project

TeamView uses the idea of a “project” to group together data. You must have a project open in order to do any work.

To create a project, use File->Create project. In the Create Project dialog, you choose where to create a directory which will hold all the data created by TeamView during your work sessions.

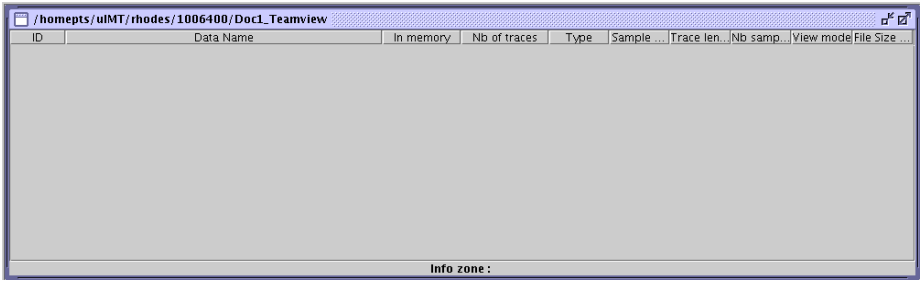


When you click on OK, a directory is created.

Note:

The TeamView application automatically appends the string “`_Teamview`” to the name that you define.

When a project is created, TeamView displays a Data List in the main panel.



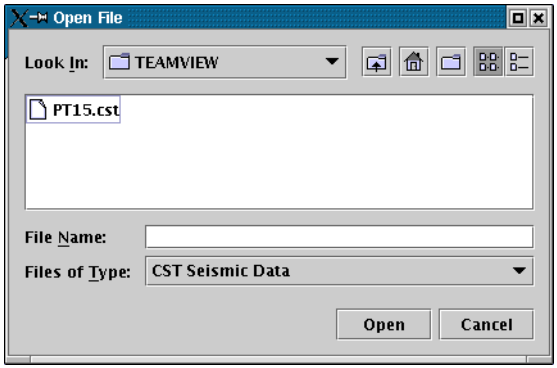
2.2 Data Management

2.2.1 Loading Seismic Data

Geocluster CST or SEG-Y format

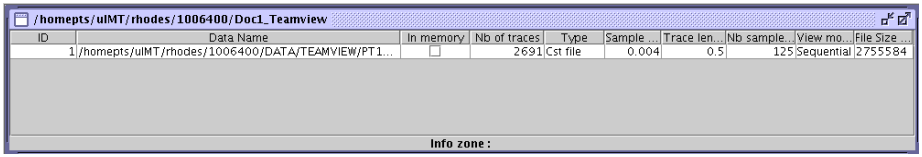
Use File->open trace file or click on the GvtLoad icon in the Data Management tools.

A selection box appears, allowing you to locate seismic data files (CST or SEG-Y).



A filter displays either all files, CST files only, or SEG-Y files only.

When you load a seismic file, it is listed in the Data List.



You can change the size of this list by dragging on the corners of the bounding box, and the width of its fields by dragging on the column separators.

SDS

This is not yet implemented

Remove from project

This removes data from the project. Select the data in the project panel, then click on this icon.

Sort traces

This sorts traces. You can use this to sort seismic traces by gather, 3D line or 3D crossline. By default, TeamView uses Geocluster standard header words, but see also Configure Header Words, below.

Configure Header Words

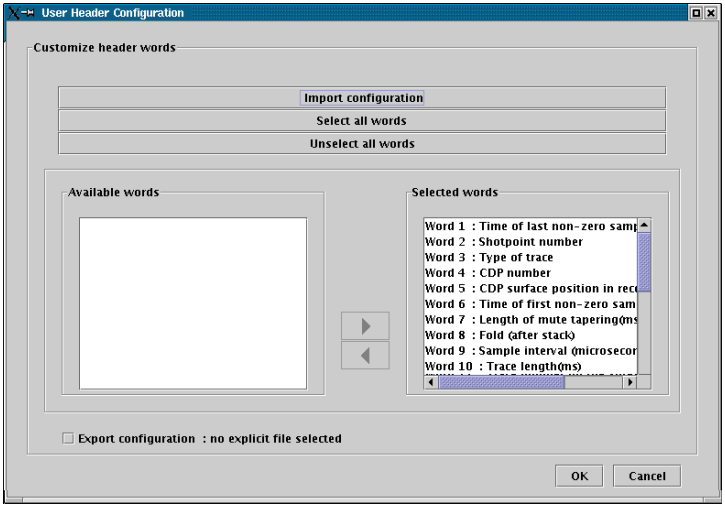
To configure header words, select a Seismic in the project, then click on this icon.

Note:

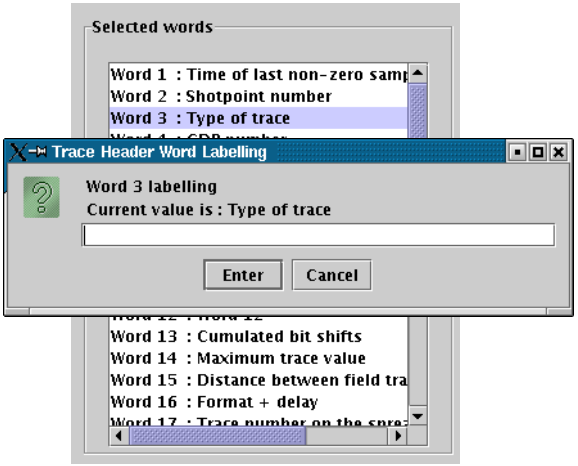
Modifications that you make to the header word configuration are applied only to the selected seismic.

This allows you to do two things.

Limit which header words can be used to carry out other operations. Only those header words which are in the “Selected Words” column can be used in other operations (such as sorting).



Attribute a new textual description to the header word numbers. This new description is then used in dialog boxes (such as Sort traces, above) and in display annotations. To do this, double click on a header description in a list.



2.3 Viewing

To view data, you must select it in the project panel, then click on one of the icons in the Views.

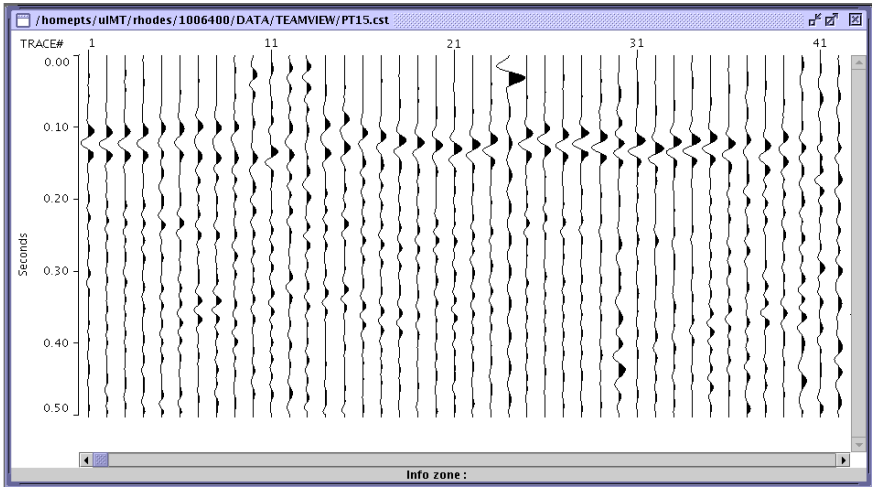
2.3.1 Traces

Seismic traces can be displayed in two ways, as seismic sections or in a concertina view.

The operations that you can carry out are the same in each view.

Section

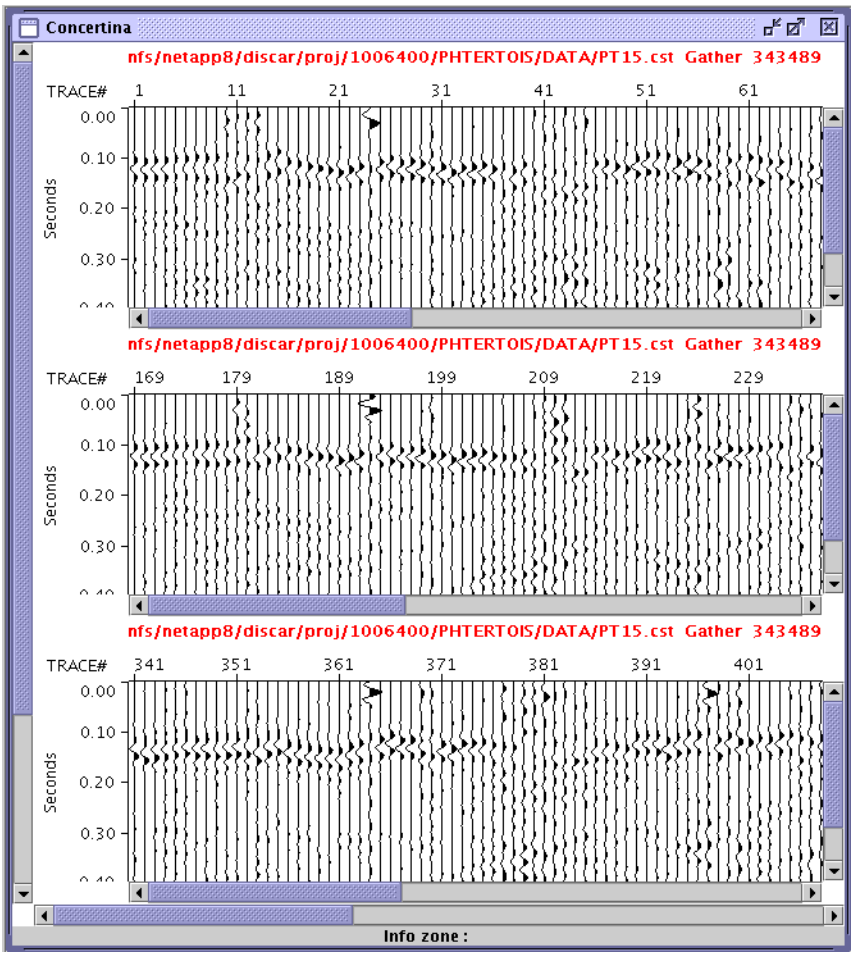
In this view, traces are displayed as shown in the screenshot below.



Select a trace by double clicking.

Concertina

In this view, traces are displayed as shown in the screenshot below.



Contextual menu

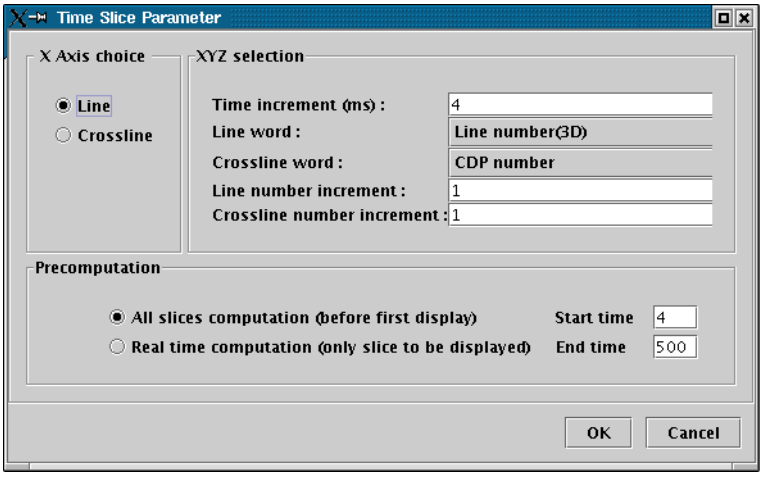
In both the Seismic and Concertina view, clicking MB3 makes a contextual menu appear. This allows you:

- to modify the display attributes (trace spacing, scale, etc.),
- to modify the display annotation,

- to inverse the plot direction,
- to de-select any selected traces.

2.3.2 Time Slices

This generates and displays time slices through a block of 3D seismic data.

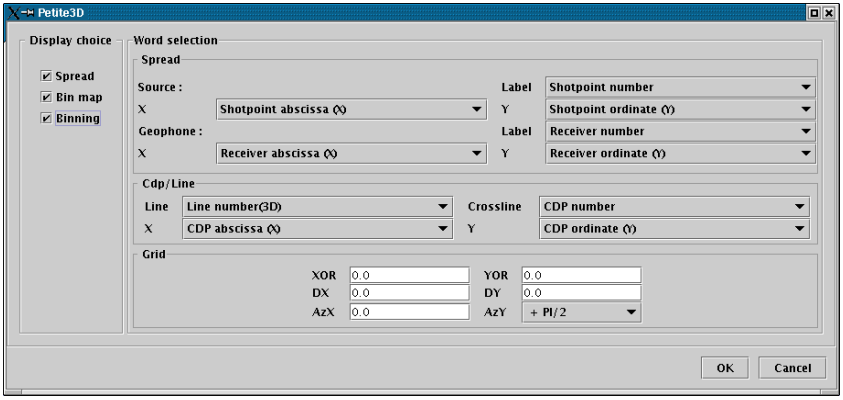


The header words that are available, and their descriptions, depend on the header word configuration (see Configure Header Words, above).

2.3.3 Map

This generates and displays a spread, bin, or binning map of the selected seismic data. Some parameters must be set. The header words that are

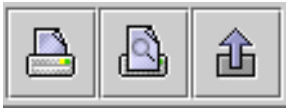
available, and their descriptions, depend on the header word configuration (see Configure Header Words, above).



2.4 Tool Bar

The tool bar at the top of the window contains a number of useful tools, in five groups.

2.4.1 Print and export



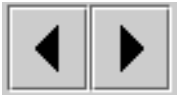
These tools allow you print to a printer, or export as a CGM file.

2.4.2 Display attributes and Propagation

The display attribute and annotation tools fulfil the same function as the contextual menu in the seismic section and concertina views.

The load, save, memory and propagate tools allow you to store and apply attribute definitions

2.4.3 Gather Steps

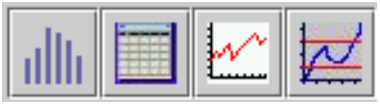


These step forwards and backwards when displaying gathered data.

2.4.4 Zoom

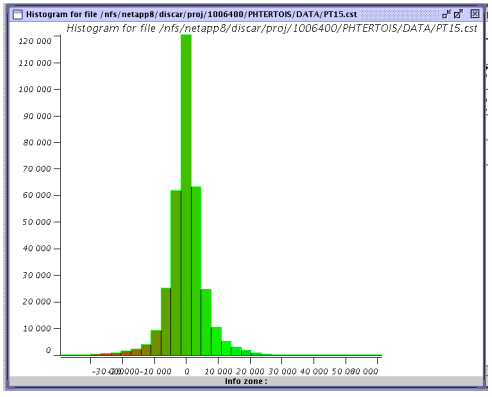
Zoom in, zoom out and cancel the zoom.

2.4.5 Others



Histogram

The histogram works on a seismic data file, and displays the distribution of amplitudes.



Sample values

This works on a selected trace (so you must select a trace within a Seismic or Concertina view). It displays the value of each available header word, and each sample in the trace.

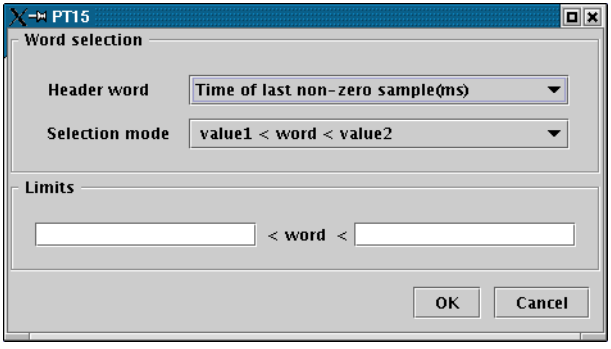
Header word

This acts on a Seismic or Concertina view (so data must be displayed for this tool to be active).

It displays a curve of a selected header word above the samples.

Select by header word

This selects traces in a view (so data must be displayed for this tool to be active).



Selections can only be made on available header words (see Configure Header Words). Traces are selected in the active view, depending on the selection mode and the values that you enter in the “Limits”.