GT Demo Installation
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SUN4 Version

1. Updating OpenWindows Version 3.0.

OpenWindows that comes with SunOS releases 4.1, 4.1.1, 4.1.2 and 4.1.3 has a number of bugs that causes OpenWindows to crash when running programs built around Motif. A patch has been released by Sun that corrects these errors. This patch needs to be installed by the system administrator before GT can be run, otherwise OpenWindows will crash intermittently when GT is run. Included with this demo is a tar file named `patch.100444-35.tar` which contains all the files necessary to install the patch -- see the `README` file contained in the tar file for complete instructions.

2. Installing demo files.

The demo comes in the form of a compressed tar file with the name `gt_demo_031793.tar.Z` where `031793` is the data of the demo release. In the following example, we will install the programs in the directory `/usr/home/demo_user/gt`. The file `gt_demo_031793.tar.Z` will be assumed to be in `/usr/home/demo_user`. The commands the user will have to type are in bold.

```
sparkie% cd /usr/home/demo_user
sparkie% mkdir gt
sparkie% cd gt
sparkie% zcat ../gt_demo_031793.tar.Z | tar xvf -
x ./gt, 2015232 bytes, 3936 tape blocks
x ./EXCODSPP.RES, 1053575 bytes, 2058 tape blocks
x ./EXDEFSTD.RES, 323392 bytes, 632 tape blocks
x ./EXIONEST.RES, 1152443 bytes, 2251 tape blocks
x ./EXMAUPRP.RES, 1126766 bytes, 2201 tape blocks
x ./EXSTDHLM.RES, 244291 bytes, 478 tape blocks
x ./app-defaults/Gt, 1507 bytes, 3 tape blocks
x ./XKeysymDB, 3157 bytes, 7 tape blocks
x ./patch.100444-35.tar, 2646016 bytes, 5168 tape blocks
x ./gt.README, 301 bytes, 1 tape blocks
```

Now all the necessary files are in the directory `/usr/home/demo_user/gt`.

3. Updating the `.cshrc` file.
The user will need to make changes to their `.cshrc` file so that the GT program file (`gt`) will be found in the users path and the GT resource file (`Gt`) will be found when the GT program first starts up. Also, OpenWindows will need to be told to use a XKey Symbol file (`XKeysymDB`) that is compatible with Motif. Normally there is a line in the `.cshrc` (some systems set up differently, consult your system administrator if your set up is different) file that defines `OPENWIN-HOME`, for example:

```
setenv OPENWINHOME /usr/local/openwin
```

After this line in the `.cshrc` file, the following four lines should be added:

```
setenv GTHOME /usr/home/demo_user/gt
setenv XFILESEARCHPATH $OPENWINHOME/lib/%T/%N%S:$GTHOME/%T/%N%S
setenv XKEYSYMDB $GTHOME/XKeysymDB
set path = ($path $GTHOME/gt)
```

Again, we have assumed that the GT demo version was installed in `/usr/home/demo_usr/gt`. The file `gt.README` has a copy of these lines.

### 4. Short tour through the demo program.
At the unix prompt, type `gt`. The program should start and the main window appear on the screen. Currently only the first menu item File actually does anything. First, load in a file to look at. With the mouse, click on the File menu. A sub menu will pop up and the menu will look like (Figure 1):

Figure 1:

The arrow behind Load indicates that there are further selections that need to be made for this menu item. Moving the pointer into the arrow region while the mouse button is still pressed will display the additional options (Figure 2):

Figure 2:
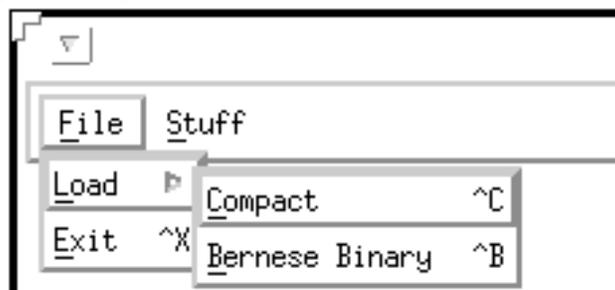
The ^B behind the option Bernese Binary indicates that by typing Cntrl-B in the main GT window, this option can be directly started. If the mouse becomes ineffective while traversing the menu, either use the Escape key to reset the menu or use the arrow keys and the return key to

traverse the menu from the keyboard.

Selecting the Bernese Binary option will cause the file selection menu to pop-up (Figure 3). With the mouse, click on the scroll arrows in the Files Box until the file `EXMAUPRP.RES` is in the Files window. Then click on this file name so that it is highlighted and then click on the OK button. Once this is done, the contents of the file will be displayed (Figure 4).

Click on the line `WETT 14201S020 :GRAZ 11001M002 ...` to highlight on it and then click on the `OK` button. More than one file at a time can be loaded. GT figures out which frequencies are available for each file and will load every possible frequency unless they are deselected by pressing clicking on the buttons after `Frequencies to load:`.

After the OK button is pressed, GT will display the data that has been loaded, one fileset per frequency (Figure 5).
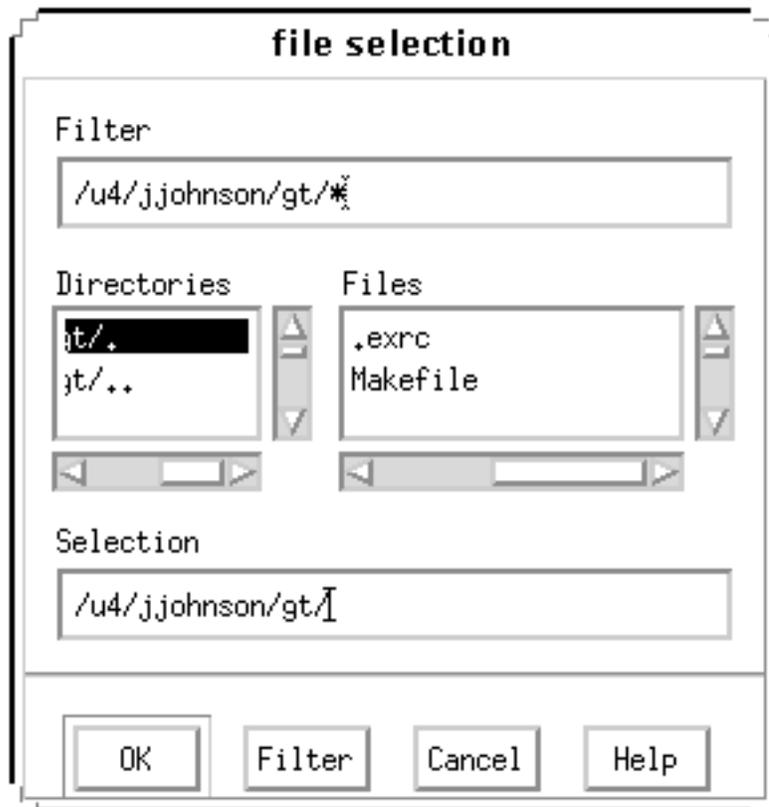
.

file selection

Filter

/u4/jjohnson/gt/*

Directories

jt/.
jt/..

Files

.exrc
Makefile

Selection

/u4/jjohnson/gt/

| OK | Filter | Cancel | Help |

Figure 3: File selection box which appears after the Bernese Binary option is selected.

Bernese Binary File Sele

Double/triple difference
Title: CONVERSION RINEX -- BERNESE
Files:

```
GRAZ 11001M002   :MODRA-PIESKY      Ref Time   48807,356[MJD]; 30 second Ph
WETT 14201S020   :GRAZ 11001M002    Ref Time   48807,000[MJD]; 30 second Ph
ZIMM 14001M004   :MODRA-PIESKY      Ref Time   48807,356[MJD]; 30 second Ph
```

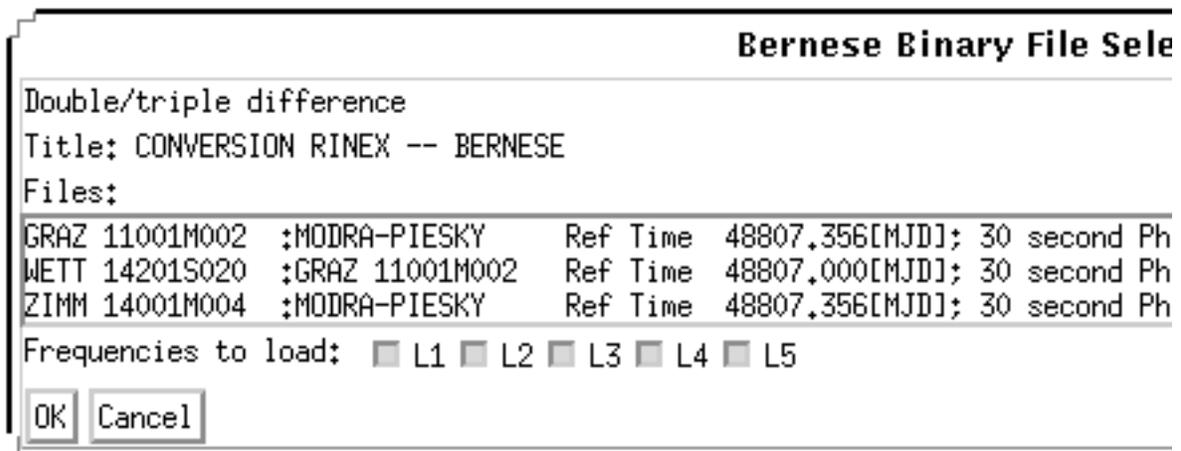Frequencies to load: ☐ L1 ☐ L2 ☐ L3 ☐ L4 ☐ L5

| OK | Cancel |

Figure 4: After selecting a Binary file, GT displays the contents of the file. Individual files can be selected and frequencies to load can be deselected.
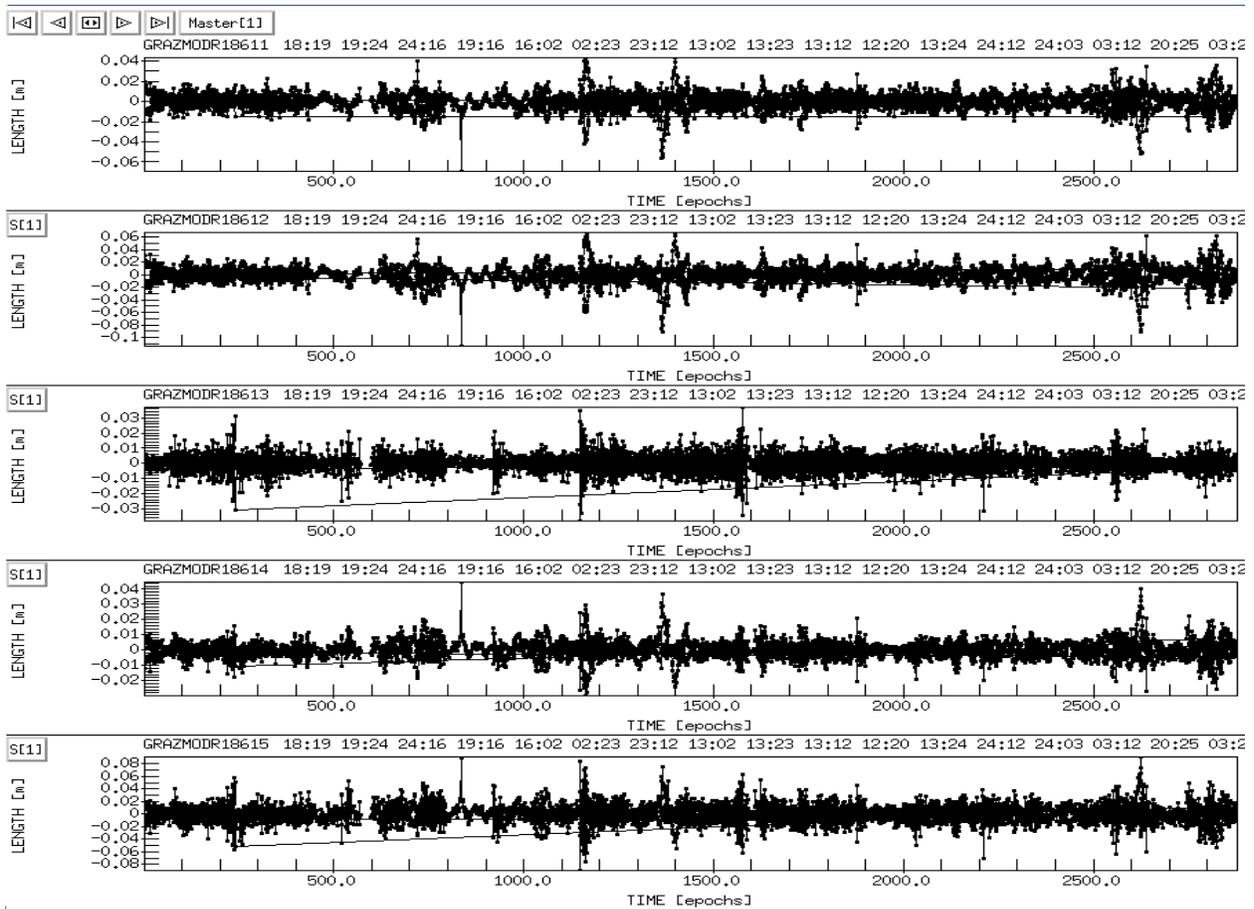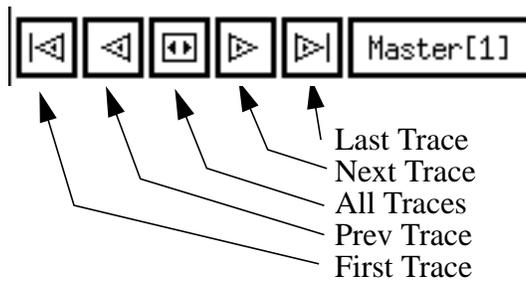
Figure 5: Each box contains one 'fileset', which is all the data for a singe station/station pair and frequency. For example, the first box contains all sv pairs for WETT/GRAZ, L1.

Trace selection buttons. The first five buttons control which traces are selected and the last button indicates which group is controlled by these trace selection buttons.

5. Zoom and Unzoom:
To zoom, press the right mouse button while the pointer is in the GT window. Them move the mouse to the begining of where the zoom is to be made, hold down the first mouse button, and then move the pointer, while holding the mouse button down, to the end of the desired zoom. GT will highlight the areas that will be zoomed. The zoom will effect all filesets between filesets selected for the start and end points of the zoom.

6. Other:
Currently no other features are working. When the right mouse button is pressed, the user will see the options of Slip, Amb and Mark. If one of these items is selected, GT will probably crash.