

Traces Scaling

Geogiga Technology Corp.

Trace Scaling

1. Scale Traces in three ways
2. Scale single or multiple traces.
3. Perform gain control on all traces at a time.
4. Select an appropriate display mode to automatically scale trace on the fly, the seismic data keep unchanged.

Scale Single Trace

The screenshot displays the Geogiga Front End software interface. The main window shows a seismic trace plot with time (s) on the vertical axis (0.00 to 0.10) and distance on the horizontal axis (0.0 to 105.0). A vertical blue line is positioned at approximately 25.0 on the horizontal axis. The plot shows multiple traces, with the selected trace highlighted in blue. The control panel on the right has several buttons and options:

- Operation:** Browse, Regional Edit, Single Trace, Multi-traces, Above, Below, Inside, Outside,
- Commands:** , , , , ,
- Shot Time Correction,
- , ,
- ,
- , ,
- Save:** SEG-2, C:/dataset/, shot1_07_seg2.dat, Don't Change Name,
- ,
- , , ,

Red arrows point from the **Single Trace** radio button, the **0** command button, and the **Undo** button to the selected trace in the plot.

2007-6-6

Scale Multiple Traces

The screenshot displays the Geogiga Front End interface. On the left, a file explorer shows a directory structure with folders like 'rtomo_data', 'sample', 'offset', 'reflect', 'refract', 'surface', and 'seis_test'. Below it, a list of files includes 'shot1_07.dat', 'shot1_08.dat', 'shot1_08_saved.dat', 'shot1_08_saved_1.dat', and 'shot1_09.dat'. The main window shows two seismic trace plots. The top plot has a time axis from 0.00 to 0.04 seconds and a horizontal axis from 0.0 to 105.0. The bottom plot has a time axis from 0.06 to 0.10 seconds. A control panel on the right includes tabs for 'Geometry', 'Edit', and 'Resample'. Under the 'Edit' tab, the 'Operation' section has radio buttons for 'Browse', 'Regional Edit', 'Single Trace', and 'Multi-traces' (which is selected). Below this are 'Commands' buttons: '>>', '<<', '0', '1/2', and '+/-'. The 'Undo' and 'Redo' buttons are also visible. A yellow text box with a black border is overlaid on the plots, containing the text: 'Select traces with left mouse button; deselect with right mouse button.' Red arrows point from the 'Multi-traces' radio button to the 'Commands' buttons, and from the 'Undo' button to the text box.

Select traces with left mouse button;
deselect with right mouse button.

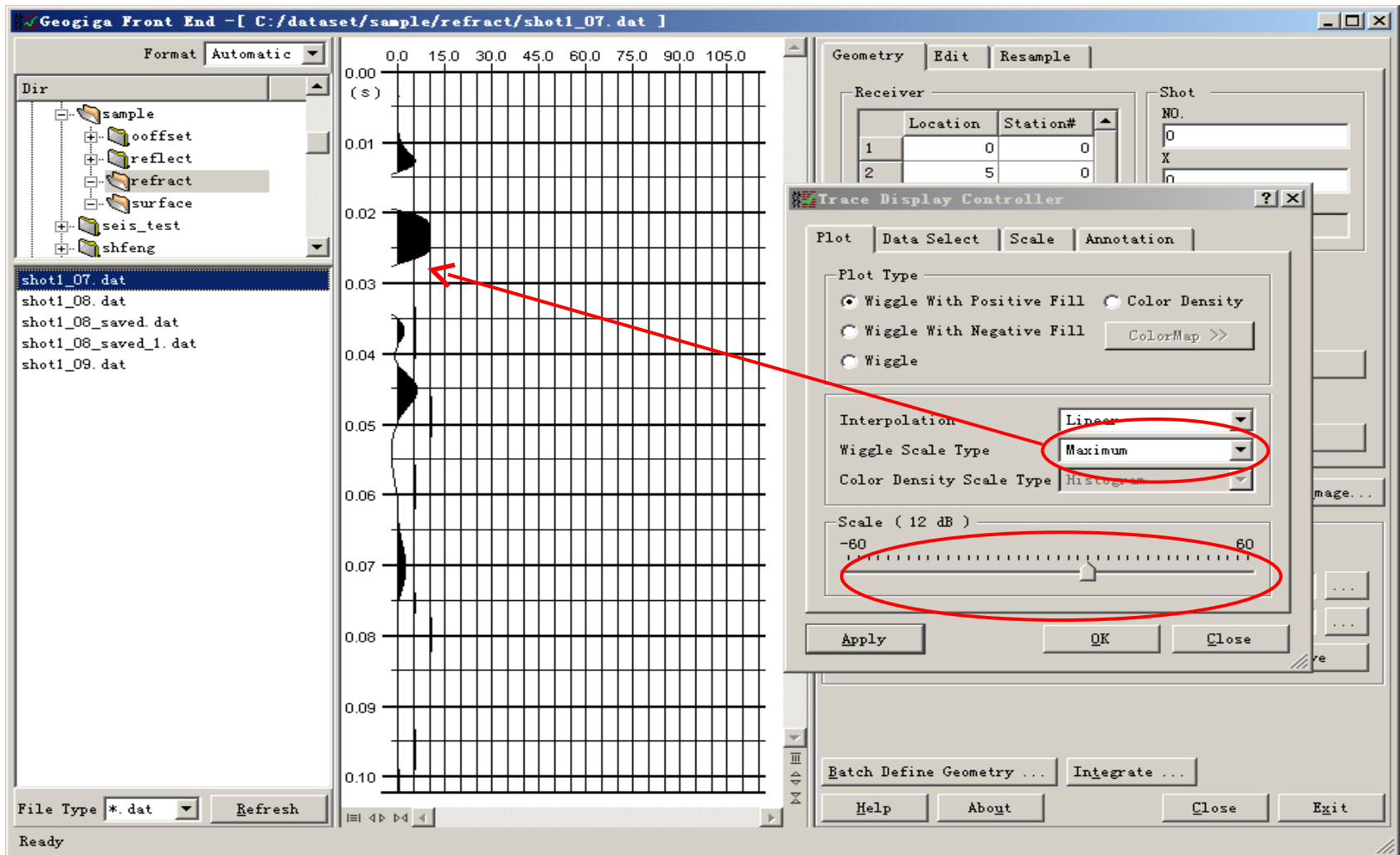
Gain Control on All Traces

The screenshot displays the Geogiga Front End software interface. The main window shows a seismic data plot with time (s) on the y-axis (0.00 to 0.10) and distance on the x-axis (0.0 to 105.0). The plot shows multiple traces with varying amplitudes. On the left, a file browser shows the directory structure: C:/dataset/sample/refract/shot1_07.dat. The right panel contains the 'Gain Control' dialog box, which is highlighted with a red circle. The 'Gain Control' dialog box has the following settings:

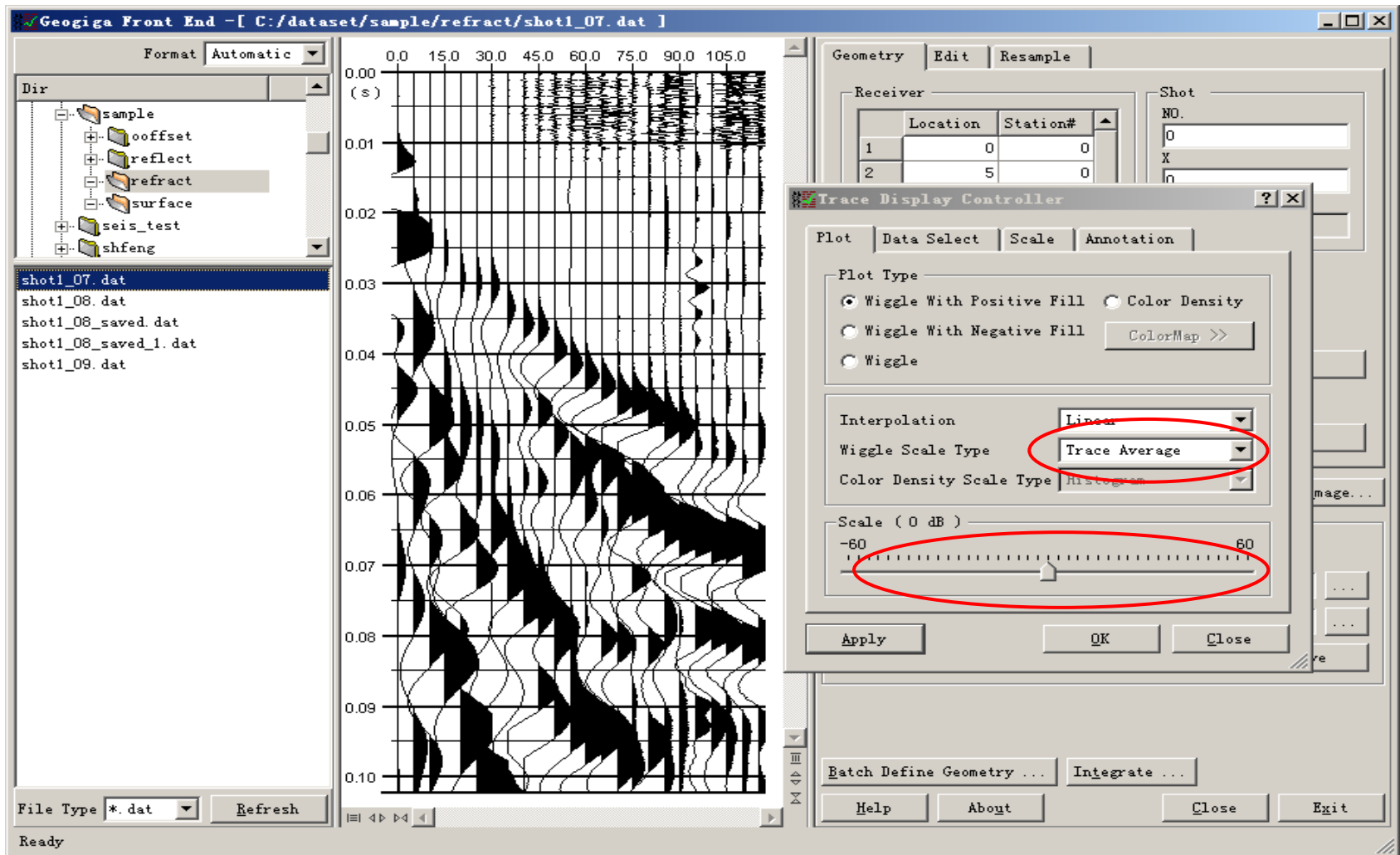
- AGC: AGC 255
- Trace Balance: RMS, Quantile 0.98, Mean Subtraction
- Scale: Time 1, Exp 2, Power 0.5, Constant 1
- Range: All Records, Current Record

The 'Gain Control' dialog box also includes 'Apply', 'Close', and 'Exit' buttons. A red arrow points from the 'Gain Control ...' button in the main window to the 'Gain Control' dialog box.

Display with Global Maximum Mode

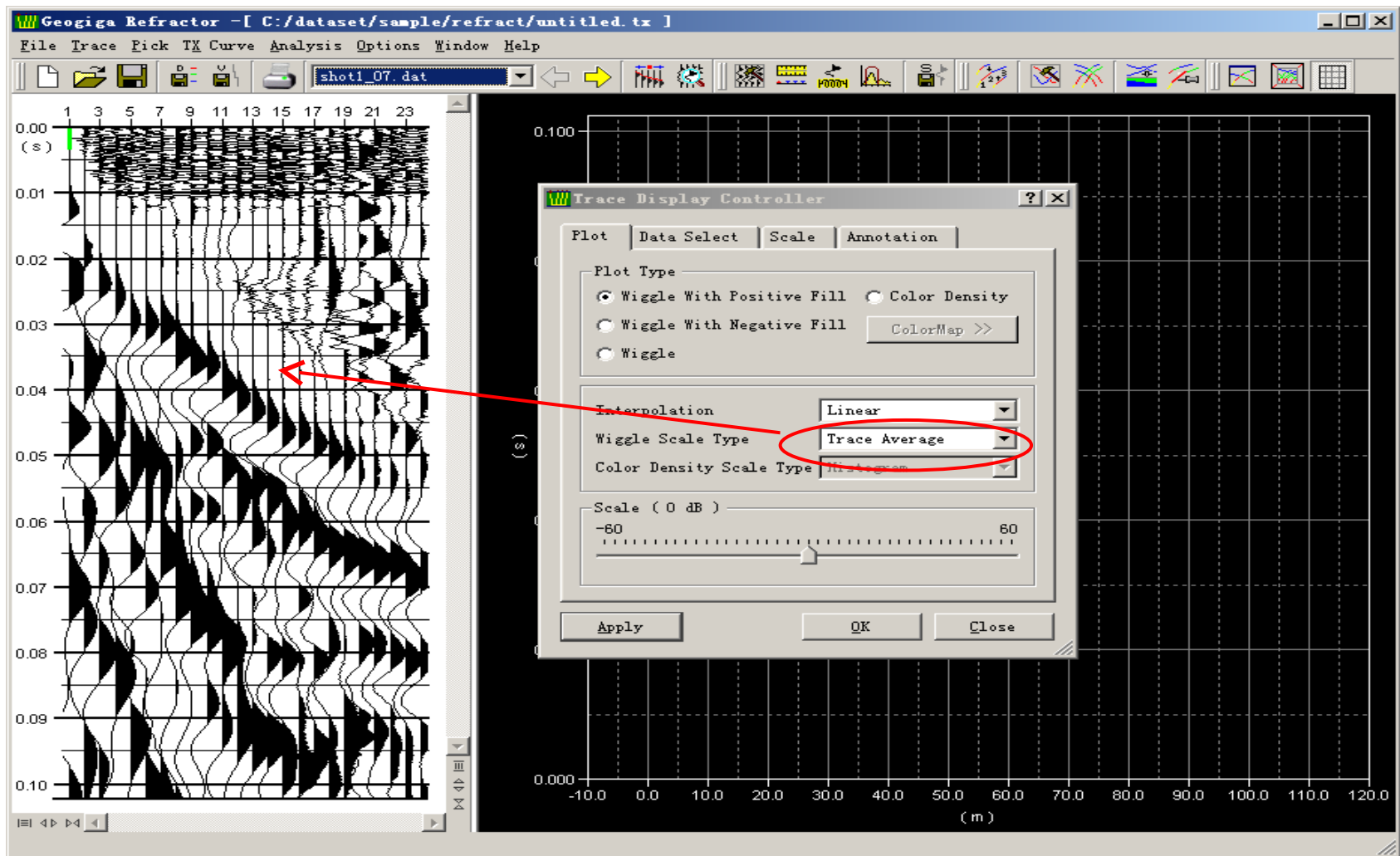


Display with Trace Average Mode



2007-6-6

Display With Average Mode in Refractor



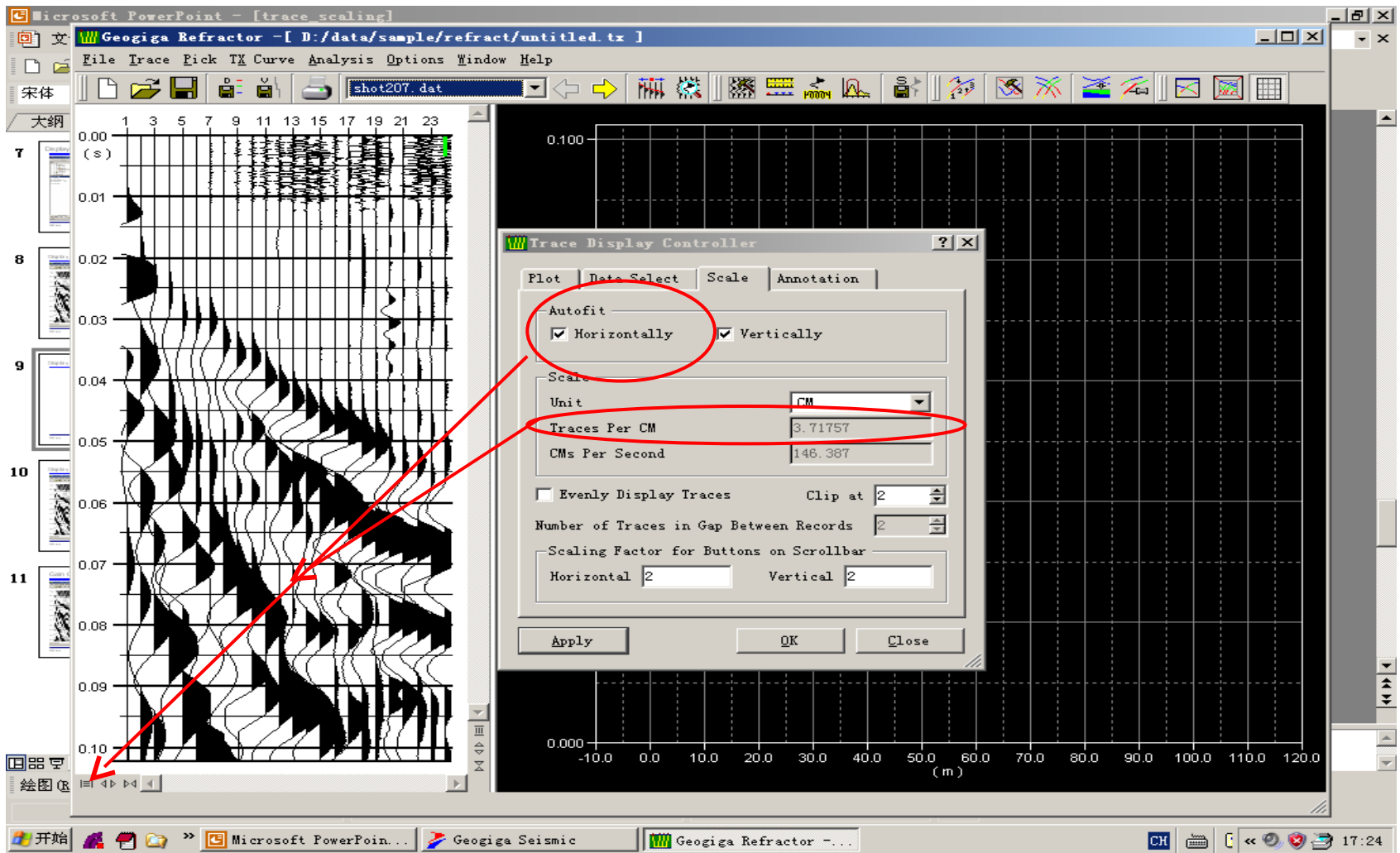
2007-6-6

Change Vertical Display Scale in Refractor

The screenshot displays the Geogiga Refractor software interface. On the left, a seismic trace plot shows multiple traces over a time interval from 0.00 to 0.10 seconds. The horizontal axis represents distance in meters (m), ranging from -10.0 to 120.0. A 'Trace Display Controller' dialog box is open in the foreground, with the 'Scale' tab selected. The 'Autofit' section has both 'Horizontally' and 'Vertically' checked. The 'Scale' section shows 'Unit' set to 'CM', 'Traces Per CM' at 3.71757, and 'CMS Per Second' at 148.387. The 'Scaling factor for Buttons on Scrollbar' is set to 2 for both horizontal and vertical axes. Red circles highlight the 'Vertically' checkbox and the 'CMS Per Second' value. A red arrow points from the 'CMS Per Second' field to the vertical axis of the plot.

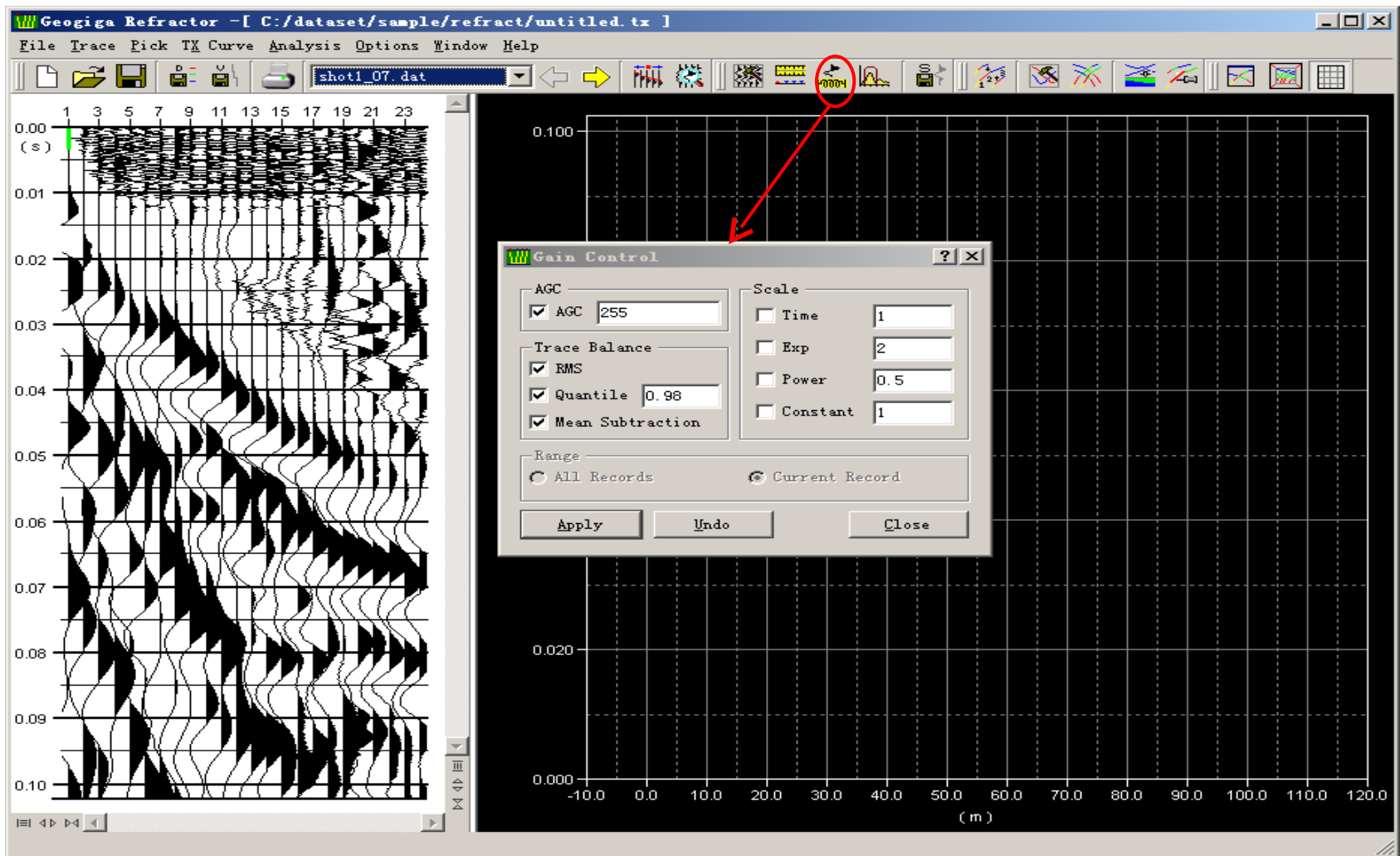
Parameter	Value
Autofit Horizontally	Checked
Autofit Vertically	Checked
Unit	CM
Traces Per CM	3.71757
CMS Per Second	148.387
Horizontal Scaling Factor	2
Vertical Scaling Factor	2

Change Horizontal Display Scale in Refractor



2007-6-6

Gain Control in Refractor



2007-6-6