

Geogiga RImager 7.0

Release Notes



Copyright © 2022, All rights reserved.

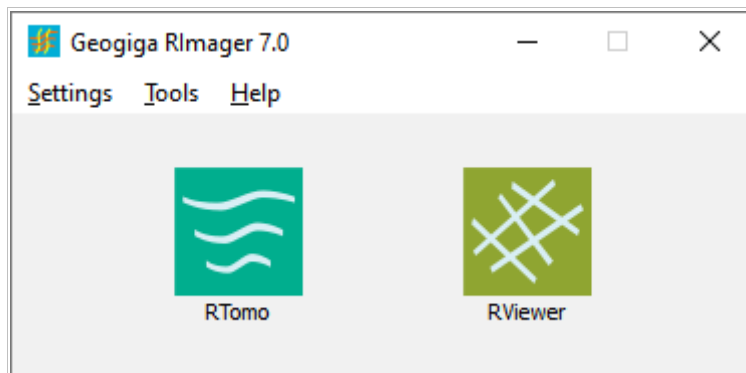
Table of Contents

Introduction.....	1
Feature Updates.....	2
General Updates.....	2
Updates to Individual Modules.....	3
Bug Fixes.....	5
List of Figures.....	6

Introduction

Geogiga RImager™ is a 2D resistivity and IP data processing and interpretation software package for electrical imaging surveys. It has two modules:

- **RTomo** – Resistivity and IP tomography software
- **RViewer** – Resistivity and IP data mapping software



Geogiga RImager 7.0 Launchpad

Version 7.0 is a major release, including new features, feature enhancements, and bug fixes. These release notes are provided in the following order:

- Feature updates
- Bug fixes
- List of figures

Feature Updates

The following first lists the common feature updates to **Rlmager** 7.0, and then describes the updates to each individual module.

General Updates

The following updates apply to all modules in **Rlmager**:

1. Contour Plotting

(1) Levels

- Levels can be reset by interval or number of levels, given a level method and a plot range.

(2) Colors

- A colormap can be efficiently generated with defined key colors and related level scaling ratios.
- The colormap is automatically updated once the number of levels is changed.
- The defined key colors can be saved and loaded for future use.

(3) Contours

- Contour labels are automatically generated and reasonably distributed on a section map according to a specified label density.
- Labels are properly inserted into contour lines according to the length of the labels, regardless of how sparse or dense the data points are.
- The position of contour labels can be adjusted by manually adding or deleting labels on a section map.
- The decimal places and font of contour labels can be changed.
- Contours can be quickly selected by a specified interval for plot and label.

(4) Colorbar

- Labels can be adjusted by the start and frequency of levels.
- Colors can be separated by ticks or separate lines.

2. Section Display

- (1) Gridlines can be plotted on a section map.
- (2) The vertical axis can be labelled as either elevation or depth.
- (3) Some parameters of the display settings are automatically saved and restored.

3. The last displayed position and size of common dialog boxes are kept, so that they are not always shown in the middle of the main window when they are opened.

4. More shortcut keys are added for the main interface and dialog boxes.

In addition, a Settings menu is added to the **RImager** 7.0 launchpad to select meters or feet for axis labels.

Updates to Individual Modules

The following are updates to each individual module in **RImager**:

RTomo

- (1) The depth starting factor (0.0, 0.5, or 1.0) of the first layer is added to set the depth starting point of a section map.
- (2) Section and/or elevation data can be horizontally reversed with the support of undo and redo.
- (3) Section map and curves can be plotted together, allowing data to be simultaneously edited in both windows.
- (4) When data is manually edited, the color, size, and line width of the selection box around a data point can be changed.
- (5) Data points can be shown or hidden on curves, and the display size of data points can be changed.
- (6) A single bad data point can be automatically rejected.
- (7) A colormap can be fixed in preprocessing data.
- (8) The elevation profile can be plotted on the section map.
- (9) The blanking file of section can be exported starting from the ground surface.

RViewer

- (1) The section boundaries can be smoothed when two partially overlapping sections are merged.
- (2) When a new project is created, the coordinates of all survey lines can be pasted at one time from the data copied in a spreadsheet or text editor.

Bug Fixes

The following bug fixes apply to all modules in **RImager**:

- The automatically generated contour labels were too sparse.
- Sometimes, the color fills were partially wrong for sparse data points.

Bug fixes in **RTomo**:

- (1) When data was manually edited on curves, the data value was not shown in the Edit dialog box, and the data points of the minimum and maximum values could not be searched.
- (2) After the curve display scale was changed, the scale always resets when manually editing data on curves.
- (3) Only partial original elevation data was saved in the blanking file.

Bug fixes in **RViewer**:

- (1) The program crashed when two parallel and close sections were merged.
- (2) The GPS coordinates could not be correctly displayed in the map view of survey lines.

List of Figures

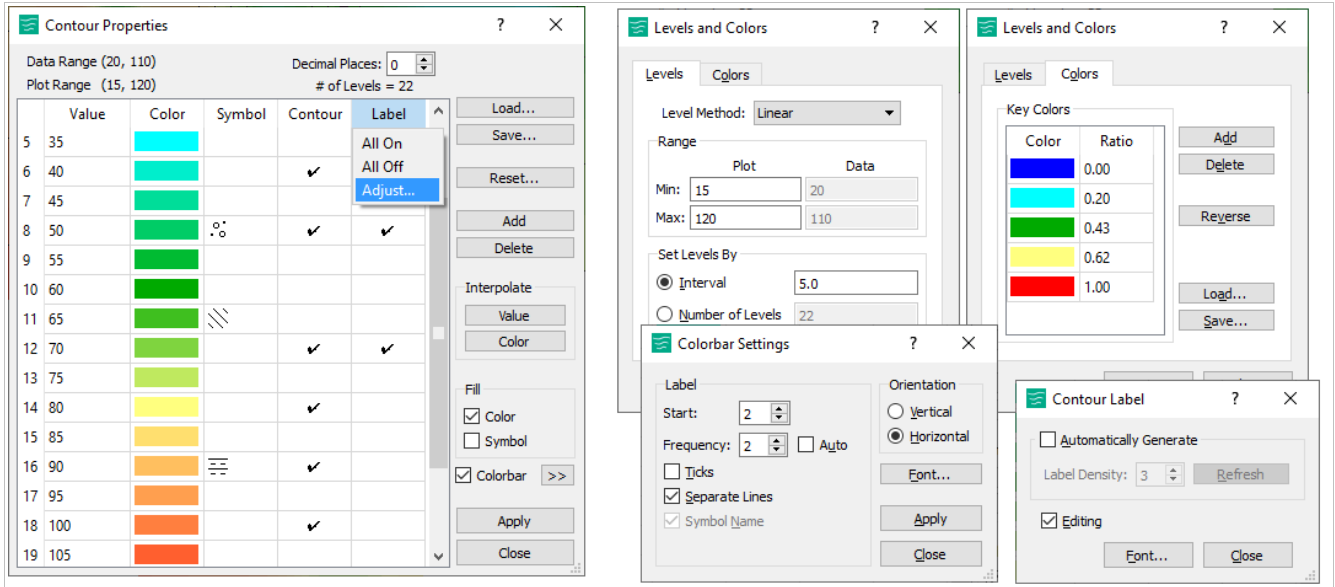


Figure 1: Enriched contour settings

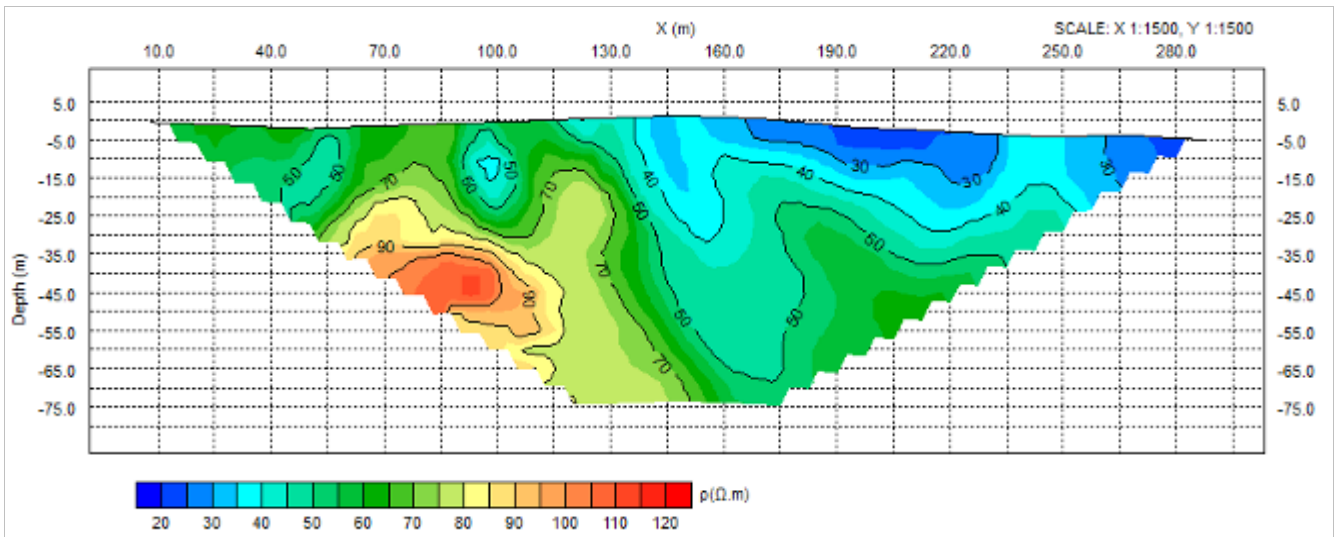


Figure 2: Enhanced section plotting

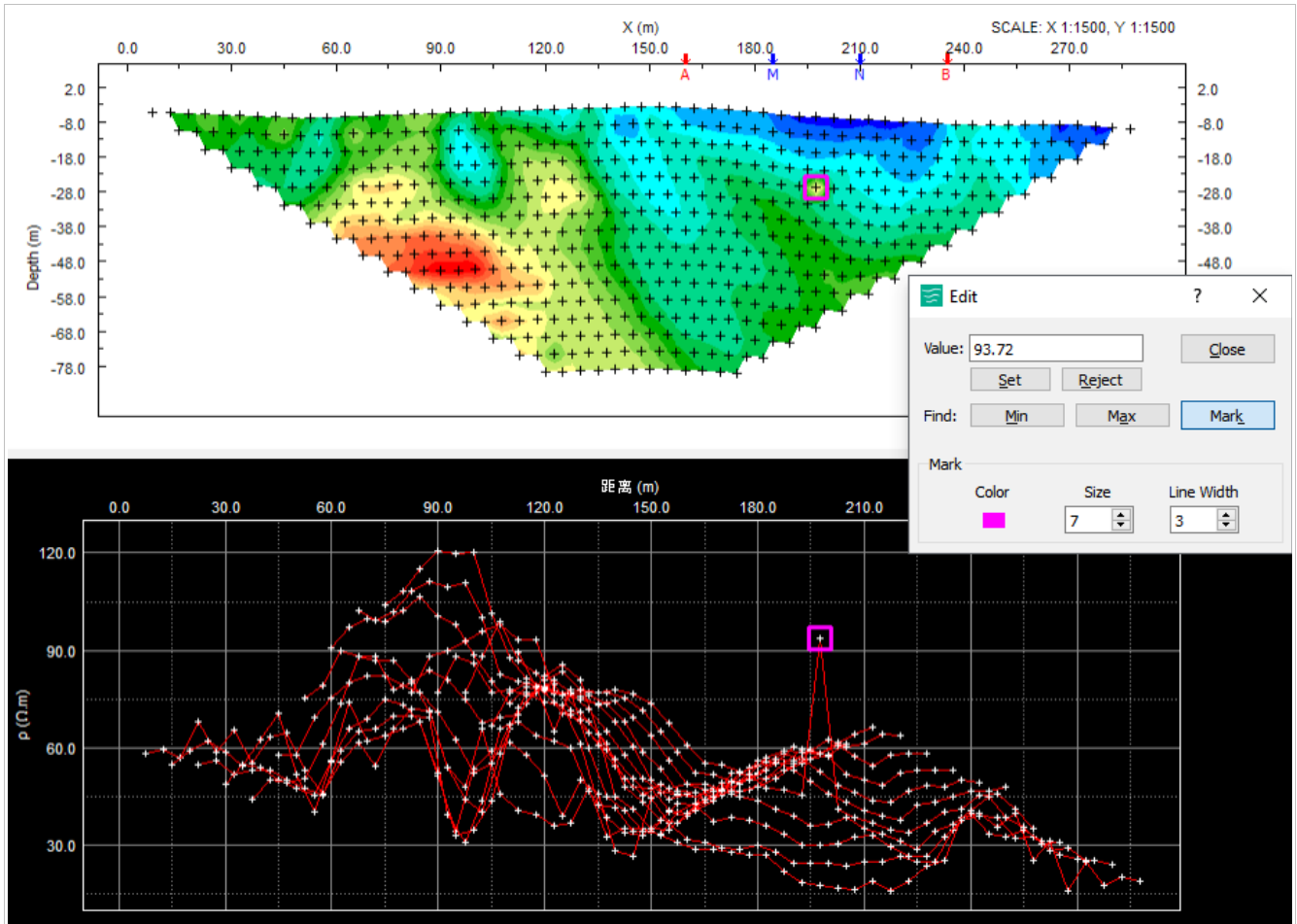


Figure 3: Simultaneous plot of section and curves in **RTomo**

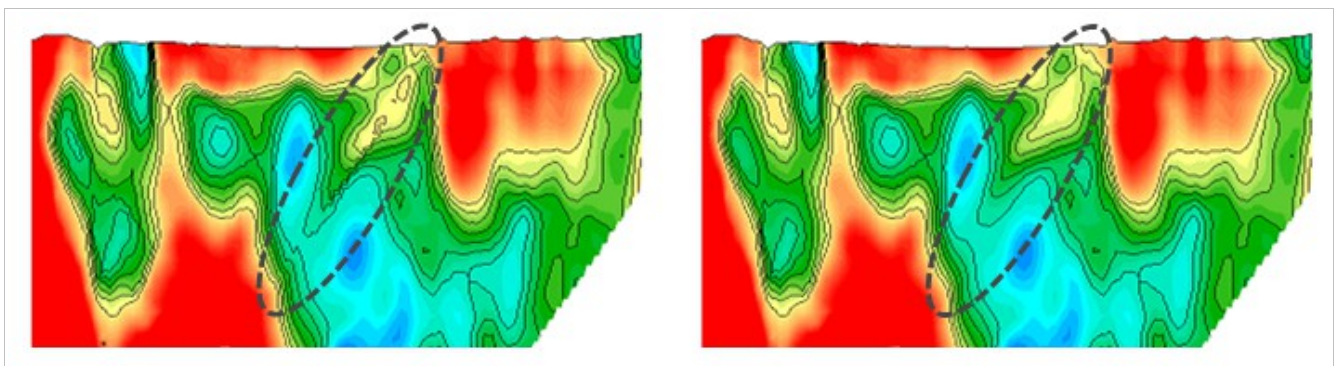


Figure 4: Boundary smoothing in **RViewer**
(Left: before smoothing, Right: after smoothing)