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# Introducing MagicPlot 2.7

- [Full release notes](#)
- [Help contents](#)
- [List of features](#)

This update is free for MagicPlot Pro 2.x users. Just download and run the new version.

[Download MagicPlot](#)

## Color Map Plots (in Pro edition only)

We are proud to introduce the long-awaited color map plots support in MagicPlot with the following features:

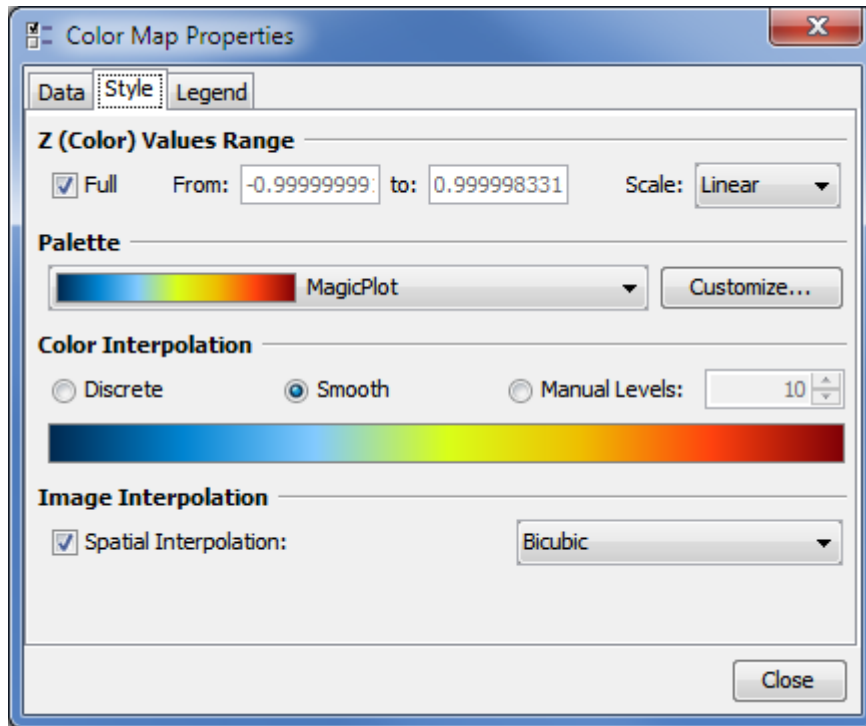
- **Non-uniform x/y data support**
- **Bicubic and bilinear image interpolation, available with non-uniform data also**
- Fast rendering of large tables (>1000×1000)
- Discrete and smooth color interpolation options
- Zooming with mouse/touchpad
- Multiple color map plots and curves in one axes box
- Palette customization and saving of presets
- Transparent colors support
- Exporting compact images in vector formats
- Fully integrated in MagicPlot work flow (copying/pasting color map, zooming etc.)

See also: [Manual topic on Color Map Plots](#).

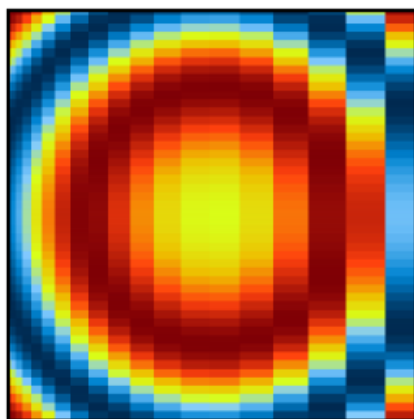
## Non-Uniform X/Y Data Support and Image Interpolation

MagicPlot offers 3 image interpolation options:

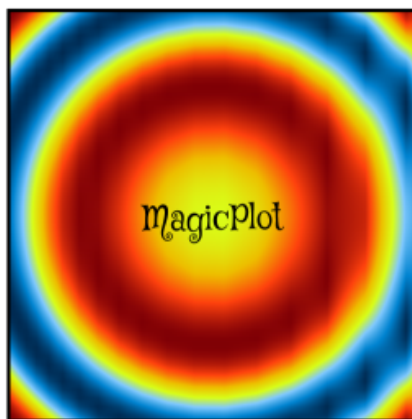
- Off (nearest neighbor);
- Bilinear;
- Bicubic.



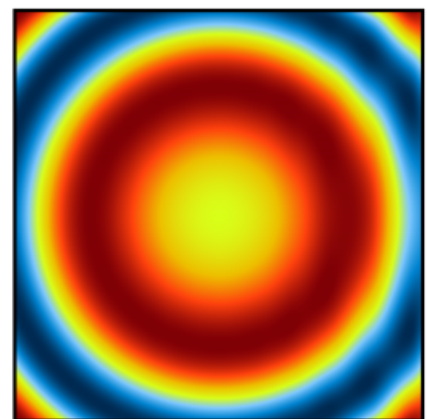
MagicPlot supports non-uniform X/Y data and interpolation is available for non-uniform data also:



Off



Bilinear



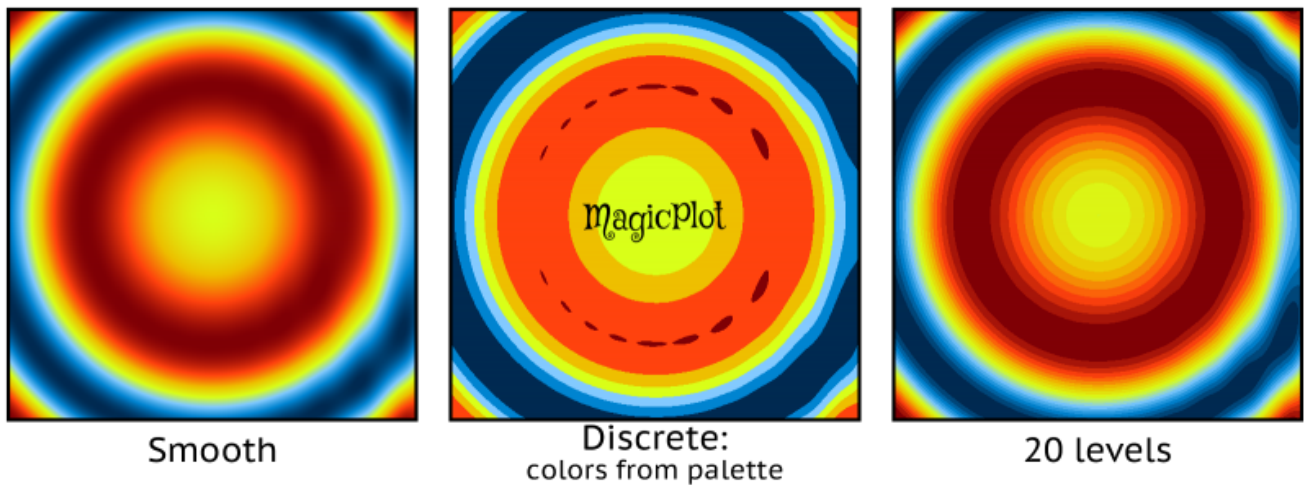
Bicubic

This image in PDF: [spatial-interpolation-demo.pdf](#)

## Color Interpolation Options

MagicPlot offers 3 color interpolation options:

1. Use exact color values from palette;
2. Interpolate colors;
3. Set the number of equal color intervals.



This image in PDF: [color-interpolation-demo.pdf](#)

## Zooming with Mouse/Touchpad

All the standard MagicPlot navigation tools are available:

- Zooming in by selecting a region;
- Dragging with 'Hand' tool, right mouse button works with other tools;
- Mouse wheel vertical scrolling, horizontal scrolling with Shift;
- Ctrl+scroll – vertical scale adjustment;
- Ctrl+Shift+scroll – horizontal scale adjustment;
- Left mouse button + scroll – proportional scaling.

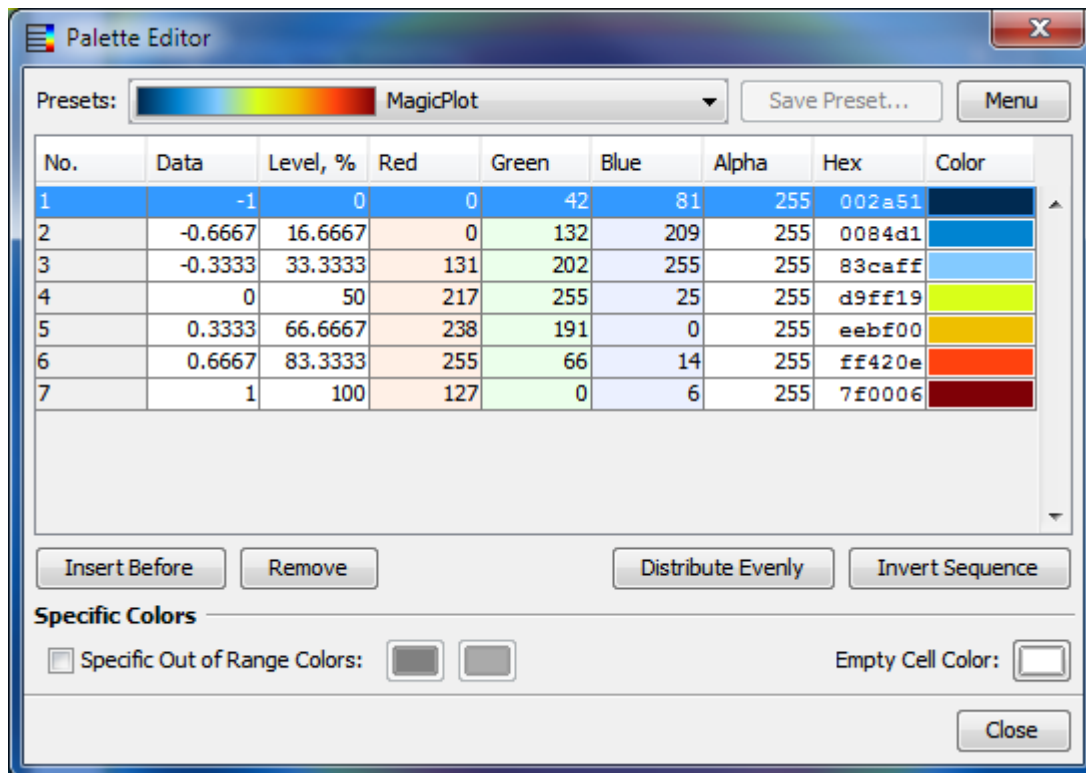
## Fast rendering of large tables

Plot dragging and zooming with mouse is smooth even with table of size 1000×1000.

## Palette Customization and Presets Saving

MagicPlot supports saving of color map palette presets. These presets are stored in .mppc files.

See also: [Additional Color Map Palettes](#).



## Text Annotations and Drawing Tools in Student Edition

In the freeware MagicPlot 2.7 Student edition text and drawing tools from the Pro edition are now available.



### Available tools are:

- Text
- Line
- Arrow
- Rectangle
- Ellipse
- Image insertion
- Dimensions toolbar

## Various Improvements and Fixes

Many enhancements and bug fixes were made based on the user feedback and testing. The full list can be found in [release notes](#).

## A Correction in Chi Square Calculation if Y Errors are Set

In nonlinear fitting algorithm in MagicPlot 2.5.1 and older, if Y error column(s) were set, weights of points were normalized so that the sum of weights was equal to one. The resulting chi square value shown in 'fit report' in old releases did not take into account real Y error amplitudes. In MagicPlot 2.7 the points weights are not normalized and chi square is calculated correctly. Note that this modification does not affect the resulting fit parameter values and standard deviations which were correct in old releases. See also: [Fitting Algorithm and Computational Formulas](#).

[Download MagicPlot](#)

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