# Curve Fitting Toolbox™ Release Notes

#### How to Contact The MathWorks



www.mathworks.com

comp.soft-sys.matlab

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Newsgroup



suggest@mathworks.com bugs@mathworks.com

doc@mathworks.com

service@mathworks.com info@mathworks.com

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508-647-7000 (Phone)



508-647-7001 (Fax)



The MathWorks, Inc. 3 Apple Hill Drive Natick, MA 01760-2098

For contact information about worldwide offices, see the MathWorks Web site.

Curve Fitting Toolbox<sup>TM</sup> Release Notes

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## **Summary by Version**

This table provides quick access to what's new in each version. For clarification, see "Using Release Notes" on page 2.

Version (Release)	New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Latest Version V2.1 (R2009b)	Yes Details	No	Bug Reports Includes fixes	Printable Release Notes: PDF
				Current product documentation
V2.0 (R2009a)	Yes Details	No	Bug Reports Includes fixes	No
V1.2.2 (R2008b)	No	No	Bug Reports Includes fixes	No
V1.2 (R2007b)	Yes Details	No	Bug Reports Includes fixes	No
V1.1.7 (R2007a)	No	No	Bug Reports Includes fixes	No
V1.1.6 (R2006b)	No	No	Bug Reports Includes fixes	No
V1.1.5 (R2006a)	No	No	No	No
V1.1.4 (R14SP3)	No	No	No	No
V1.1.3 (R14SP2)	Yes Details	No	No	No
V1.1.2 (R14SP1)	No	No	No	No
V1.1.1 (R14)	No	No	No	No
V1.1 (R13)	Yes Details	No	No	No

#### **Using Release Notes**

Use release notes when upgrading to a newer version to learn about:

- New features
- Changes
- Potential impact on your existing files and practices

Review the release notes for other MathWorks<sup>™</sup> products required for this product (for example, MATLAB® or Simulink®). Determine if enhancements, bugs, or compatibility considerations in other products impact you.

If you are upgrading from a software version other than the most recent one, review the current release notes and all interim versions. For example, when you upgrade from V1.0 to V1.2, review the release notes for V1.1 and V1.2.

#### What Is in the Release Notes

#### **New Features and Changes**

- New functionality
- Changes to existing functionality

#### **Version Compatibility Considerations**

When a new feature or change introduces a reported incompatibility between versions, the **Compatibility Considerations** subsection explains the impact.

Compatibility issues reported after the product release appear under Bug Reports at The MathWorks<sup>TM</sup> Web site. Bug fixes can sometimes result in incompatibilities, so review the fixed bugs in Bug Reports for any compatibility impact.

#### Fixed Bugs and Known Problems

The MathWorks offers a user-searchable Bug Reports database so you can view Bug Reports. The development team updates this database at release

time and as more information becomes available. Bug Reports include provisions for any known workarounds or file replacements. Information is available for bugs existing in or fixed in Release 14SP2 or later. Information is not available for all bugs in earlier releases.

Access Bug Reports using your MathWorks Account.

## Version 2.1 (R2009b) Curve Fitting Toolbox Software

This table summarizes what's new in Version 2.1 (R2009b):

New Features and Changes	Version	Fixed Bugs	Related
	Compatibility	and Known	Documentation
	Considerations	Problems	at Web Site
Yes Details below	No	Bug Reports Includes fixes	Printable Release Notes: PDF Current product documentation

New features introduced in this version:

- New function to compute the first and second derivatives of a fitted surface. See differentiate in the User's Guide.
- New function to compute the volume under a fitted surface. See quad2d in the User's Guide.
- New surface fitting examples:
  - "Franke Data Interactive Surface Fitting Example"
  - "Biopharmaceutical Interactive Surface Fitting Example"
  - "Automotive Fuel Efficiency Programmatic Surface Fitting Example"
  - "Biopharmaceutical Drug Interaction Programmatic Surface Fitting Example"

#### Version 2.0 (R2009a) Curve Fitting Toolbox Software

This table summarizes what's new in Version 2.0 (R2009a):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports Includes fixes	No

New features introduced in this version:

#### **Interactive Surface Fitting**

You can interactively fit surfaces to data and view plots with the new flexible and intuitive Surface Fitting Tool GUI.

- Create, plot, and compare multiple surface fits
- Use linear or nonlinear regression, interpolation, local smoothing regression, or custom equations
- View goodness-of-fit statistics, display confidence intervals and residuals, remove outliers and assess fits with validation data
- Automatically generate M-code for fitting and plotting surfaces, or export fits to workspace for further analysis

For more information, see "Interactive Surface Fitting".

#### **Programmatic Surface Fitting**

New surface fit objects store the results from a fitting operation, making it easy to plot and analyze fits at the command line.

For more information, see "Surface Fitting Objects and Methods".

## Version 1.2.2 (R2008b) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.2.2 (R2008b):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	Bug Reports Includes fixes	No

## Version 1.2.1 (R2008a) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.2.1 (R2008a):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	Bug Reports Includes fixes	No

## Version 1.2 (R2007b) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.2 (R2007b):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	Bug Reports Includes fixes	No

New feature introduced in this version:

#### **Edit Custom Equations in Curve Fitting Tool**

When using Curve Fitting Tool, you can now edit your custom equations without copying them. Buttons to **Edit** and **Copy and Edit** appear with the list of custom equations in the Fitting GUI.

## Version 1.1.7 (R2007a) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1.7 (R2007a):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	Bug Reports Includes fixes	No

## Version 1.1.6 (R2006b) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1.6 (R2006b):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	Bug Reports Includes fixes	No

## Version 1.1.5 (R2006a) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1.5 (R2006a):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	No	No

## Version 1.1.4 (R14SP3) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1.4 (R14SP3):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	No	No

## Version 1.1.3 (R14SP2) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1.3 (R14SP2):

New Features and Changes	Version	Fixed Bugs	Related
	Compatibility	and Known	Documentation
	Considerations	Problems	at Web Site
Yes Details below	No	No	No

New feature introduced in this version:

#### **Prompt to Save Session**

The cftool graphical user interface now prompts you to save your session when you quit only if you have changed something (created data sets, created fits, etc.) since your last save. Prior to this release cftool would unconditionally prompt you to save every time you quit.

## Version 1.1.2 (R14SP1) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1.2 (R14SP1):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	No	No

## Version 1.1.1 (R14) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1.1 (R14):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
No	No	No	No

## Version 1.1 (R13) Curve Fitting Toolbox Software

This table summarizes what's new in Version 1.1 (R13):

New Features and Changes	Version Compatibility Considerations	Fixed Bugs and Known Problems	Related Documentation at Web Site
Yes Details below	No	No	No

New features and changes introduced in this version are organized by these topics:

- "Exclude GUI" on page 16
- "Viewing Data Numerically" on page 16

#### **Exclude GUI**

The Exclude pane of the Data GUI has been removed. To exclude and section data, a separate Exclude GUI is now available. You can open this GUI by selecting the **Exclude** button on the Curve Fitting Tool.

#### **Viewing Data Numerically**

The View pane of the Data GUI has been removed. To view data numerically, you can use:

- The Data Sets pane of the Data GUI to view imported data
- The Smooth pane of the Data GUI to view a smoothed data set
- The Exclude GUI to view existing exclusion rules.

## **Compatibility Summary for Curve Fitting Toolbox Software**

This table summarizes new features and changes that might cause incompatibilities when you upgrade from an earlier version, or when you use files on multiple versions. Details are provided with the description of the new feature or change.

Version (Release)	New Features and Changes with Version Compatibility Impact
Latest Version V2.1 (R2009b)	None
V2.0 (R2009a)	None
V1.2.2 (R2008b)	None
V1.2.1 (R2008a)	None
V1.2 (R2007b)	None
V1.1.7 (R2007a)	None
V1.1.6 (R2006b)	None
V1.1.5 (R2006a)	None
V1.1.4 (R14SP3)	None
V1.1.3 (R14SP2)	None
V1.1.2 (R14SP1)	None
V1.1.1 (R14)	None
V1.1 (R13)	None