SuperSMITH YBath™ Revisions:

'5.0DU - 26 Feb 2022 (File Version 5.0.0.421) [Not released, supereded by 6.0]
'Consistent with SSW revisions

'5.0DT - 23 Dec 2021 (File Version 5.0.0.420)
'Consistent with SSW revisions

'5.0DS - 28 Oct 2021 (File Version 5.0.0.419)
'Consistent with SSW revisions

'5.0DR - 04 May 2021 (File Version 5.0.0.418)
Panel for user notes is now called "Logbook" instead of "Analysis History" or "Log"

'5.0DQ - 12 Oct 2020 (File Version 5.0.0.417)
Consistent with SSW revisions (Language, help)

'5.0DP -25 May 2020 (File Version 5.0.0.416)
Improved Data Paste functions

'5.0D0 - Skipped

'5.0DN -06 Apr 2020 (File Version 5.0.0.414)
'Update of Language Files

'5.0DM - 30 Mar 2020 (File Version 5.0.0.413)
Added Exit confirmation box
Added precise fit routine
Changed "Log" panel to "Analysis History"
Analysis History now displays last item (Sometimes scrolled to top when item was added)
Improved fd_FindX routine to calculate simple linear fits and not iterate/search
Improved Grid Edit box behaviour.
Changed Val() function to Cdbl() for better international use
Updated Monte Carlo for Normal, Gumbel sampling
Default plot/chart background changed to white, Heavier plot line
Improved data paste routine now accepts (time)x(qty) or (time)x(Probability)
New Program: Added SuperSMITH(R) Dice access

'5.0DL - 20 Jan 2020 (File Version 5.0.0.412)
Increased data points allowed (Var type from integer to long)

'5.0DK - 07 Oct 2019 (File Version 5.0.0.411)
Improved Data Grid paste operations
Updated plot fit lines(-t0 or steep lines sometimes did not plot)
Improved Y Scale labels extreme values and added logic to reduce label overlap

'5.0DJ - 21 Jan 2019 (File Version 5.0.0.410)
Consistent with updates to Weibull and Visual

'5.0DI (Skipped)

'5.0DH - 24 Aug 2018 (File Version 5.0.0.408)
Improved Y axis plotting for small CDF values

'5.0DG - 05 JUN 2018 (File Version 5.0.0.407)
Consistent with updates to Weibull and Visual

'5.0DF - 07 APR 2018 (File Version 5.0.0.406)
Consistent with updates to Weibull and Visual

'5.0DE --03 MAR 2017 (File Version 5.0.0.405)
Consistent with updates to Weibull and Visual

'5.0DD -- 07 AUG 2017 (File Version 5.0.0.404)
Consistent with updates to Weibull and Visual

'5.0DC -- 21 APR 2017 (File Version 5.0.0.403)
Consistent with updates to Weibull and Visual

5.0DB -- 09 FEB 2017 (File Version 5.0.0.402)
Consistent with updates to Weibull and Visual

5.0DA -- 06 JAN 2017 (File Version 5.0.0.401)
Consistent with updates to Weibull and Visual

5.0CZ -- 24 OCT 2016 (File Version 5.0.0.3.26)
Consistent with updates to Weibull and Visual

5.0CY -- 11 SEP 2016 (File Version 5.0.0.325)
Drag zoom of plot past boundary now increases Y Scale
Options to remove grid lines in parameter box to commonize with SSW

5.0CX -- 15 JUL 2016 (File Version 5.0.0.324)
Changed User Modes from Basic/Standard/Advanced to Student/Standard
Stop date display when date format is "(none)"
Update "MuAL" to "Med" for consistency with SSW

5.0CW --26 JAN 2016 (File Version 5.0.0.323)
Added Flow chart animation to the wizard (magic wand) icon

5.0CV - 14 Dec 2015
Consistent with updates to Weibull and Visual

5.0CU - 03 Dec 2015
Added option in Monte Carlo to set Right Suspensions at last failure time
Added ccc^2 and PVE to distribution analysis for rank regression

'Mouse Wheel: Capability added for data grid
Added Flow chart to Data Wizard icon

5.0CT - 02 May 2015
Added Click&Drag to zoom option on chart
Updated MouseOver tooltips to chart
Added menu to the printer icon to allow copy and file export
Added to File/Print menu to include hard copy, soft copy, and export
Updated mouseover values on chart for Gumbel+ values
Updated print setup so 'Cancel' does not print the form
Removed "- -" on negative values for Normal and Gumbel
Updated GetScalePoints to allow zoomed in values without exceeding values of Long

5.0CS - 17 Apr 2015
Consistent with updates to Weibull and Visual

5.0CR - 25 Mar 2015
Updated fd_FindX routine. Improves 3P fits and mixture fits with extreme values.
Updated fd_txt2dbl routine. Routine is now more robust for data values.
Updated Monte Carlo Suspensions to check if "-" or ">" is for suspensions

5.0CQ - 19 Jan 2015
Consistent with updates to Weibull and Visual

5.0CP - 09 Dec 2014
Consistent with updates to Weibull and Visual (Desktop icon)

5.0CN - 14 May 2014
Consistent with updates to Weibull and Visual

5.0CM - 25 Mar 2014
Updated Random Number Generator to Wichmann-Hill 4 seed method
Enhanced Monte Carlo Simulation with Suspensions (left, right, random, specific suspensions)
Improved copy to smithw (Copy 'X Data' column will add failure/suspension data in smithw format for
easy paste in smithw)

5.0CL - 20 Jan 2014
Added option to pick Monte Carlo Seeds for Standard and Advanced User Mode

5.0CK - 02 Jan 2014
Consistent with updates to Weibull and Visual

5.0CJ - 04 Dec 2013
Updated chi square routines to estimate values for extreme values
Added information on Distribution Analysis table

5.0CI - Skipped

5.0CH - 04 Nov 2013
Updated chi^2 routines to handle extreme values.

5.0CG - 03 Sep 2013
Improved Distribution Analysis display - added description after table
Updated call from SSW for longer path names

5.0CF - 22 July 2013
Distribution Analysis, MLE will always include 2 Par Weibull for Likelihood Ratio Test.
Update Help file call for consistency with SSW and SSV
Demo Version will now do fits and graphs with modified data.

5.0CE - 10 Jun 2013
Update to match SSW and SSV
Demo Version can be unlocked when code entered in SSW

5.0CD - 23 Feb 2013
Improved YBath compatibility with certain Windows XP configurations

5.0CC - 22 Feb 2013
Help file changes
INI file modified for DEMO version

5.0CB - 22 Jan 2013
Data can now be copied and pasted from SS Weibull
Eliminated Status messages when SS Weibull called YBath as macro

5.0CA - 30 Nov 2012
Updated internal version routine

5.0C - 20 Sep 2012
Monte Carlo routine was using MLE, even if RR was chosen.
Removed unused controls

5.0BZ - 13 Sep 2012
Minor formatting updates

5.0BY - 5 May 2012
Updated chart profile items.

5.0BX - 23 Apr 2012
Entirely new User Interface to coordinate with other SuperSMITH products.
- Project Tree with recycle bin
- Log window for notes and comments as you work your project
  - Automatically saves date, analysis, and small data sets.
- Data window with per line failure mode and comments
- Distribution Analysis with Likelihood ratio test

- New Fit window with all fit history shown
- Added Normal, LogNormal, Gumbel, Exponential, and Weibayes
- Added Basic User mode for ease of learning program
- Advanced User mode for ultimate graphic adjustments
- SuperSMITH style toolbar and icons
- Strip toolbar
- Digits to display can be adjusted
- Chart window with vector graphics instead of bitmap
  - Right click copy to put into presentations.
- Enhanced chart capabilities including:
  - Custom sizing/location of chart, plot area, and parameter box
  - Multiple fit lines for same data set
  - Additional options for X/Y scales
  - Twenty Six plotting symbols
  - Custom colors for all symbols, lines and text
    - 25 preset colors
    - "No Color" to overlay chart on a graphic
    - RGB, HSL, Grayscale, or click/drag graphic
  - Grid colors and line styles
  - Custom zoom

- Single set Monte Carlo sampling
- User preferences saved
- Fit Wizard helps you pick a model for your data
- Entirely new help file
- Right click popup menus

1.25 - 19 Nov 2001

Program sold to Fulton Findings. No change in algorithms or data, but references updated in program and help file to reflect change of ownership.

1.2. - 09 Nov 2001

Changed display of characteristic life (eta) for three parameter Weibull On the file 3pos.ybd, t0 is 200. In previous versions, eta would be displayed as 1000, which is where the line through the data crosses the characteristic life line. Now eta is displayed at 800, which is the characteristic life of the curve after 200 has been subtracted from each data point. The new method is consistent with WinSMITH.

1.2.3 - 29 Oct 2001

Added Benard's approximation for ranks.
Made Benard's approximation the default ranking method.
  (Beta Binomial Median ranks are now optional.)
New algorithm for 3 parameter Weibull.
Added warning for 3 parameter non-convergence.

1.2.2 - 24 Sep 2001

Consistent version numbers (1.02.01 is same as 1.2.1 to VisualBasic)
Updated WinSMITH file open routine
Added Help button to dialog boxes when iteration ends
For data files, parameter boxes change to the best fit solved so far.
Allowed plotting before data analysis.
Removed redundant dialog boxes ("Solve this fit again?", and "1. Normal Exit")
Modified Overflow message in Draw Line Routine.

1.02.01 - 23 Jul 2001

Upgraded program to 32-bit version. (Long file names, Active X controls, etc.)
Changed Options - Show Errors to False by default. This means that YBath will not display minor errors
that it can recover from.
Added Demo option so program can be used in Demo mode.
Changed portion defective nomenclature from "p" to "u" to avoid confusion with p-values used in
WinSMITH.
Removed warning when plot window was minimized.
Added right-click menu item to Data window for ease in cut/copy/paste

Added registry items for ease in access from other programs.
Added Mixture lines on plot.
Updated plot Copy routine to include parameter box.
Updated print routine.
Updated ccc calculations for 2and 3 parameter Weibull per SAE paper
Changed order of b, h on grids to match WinSMITH format.

(Data file format did not change.)

1.0B - 13 Dec 1997

Removed warning when called from WinSMITH
Added Plot button to Data Window
Added warning if printing a plot for a fit that is only an estimate.
Replaced text buttons with Icons on Data Window
Improved grid editing features.
Added additional information to help file.
Added Context help so {F1} key will call an appropriate topic.
 - This eliminated "Help Topic not found" message..
Changed Initial estimate method for Monte Carlo simulations.

1.0A - 29 Nov 1997

Removed Help Call to old file
Improved initial estimates for 5 parameter fits.
Improved grid editing features

Added Exit warning if print orientation changed.
Added logic to allow custom Y data that may not be median ranks.
Added fit and status line to Parameter Grid
Improved plot format (Color, parameter grid)
Improved plot print routine - Print Setup and Auto Redraw handled automatically.
Print setup includes standard page formats

Added time display and confirm breaks in Monte Carlo

1.0 - 20 Nov 1997

Original Release of YBath™. Program has Macro, Monte Carlo, and Plot capabilities.