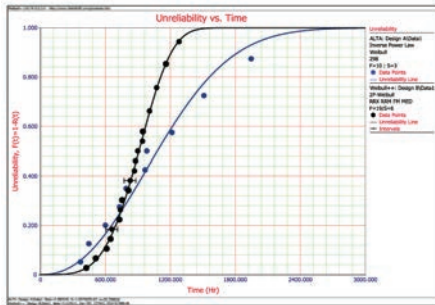




ALTA[®]

Accelerated life tests... quantifiable results™

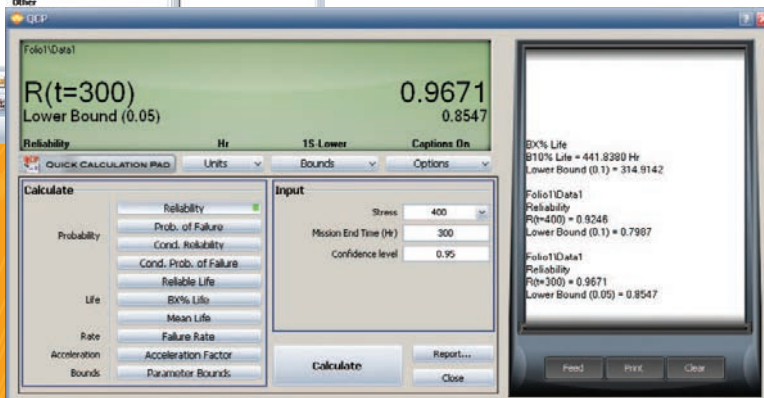
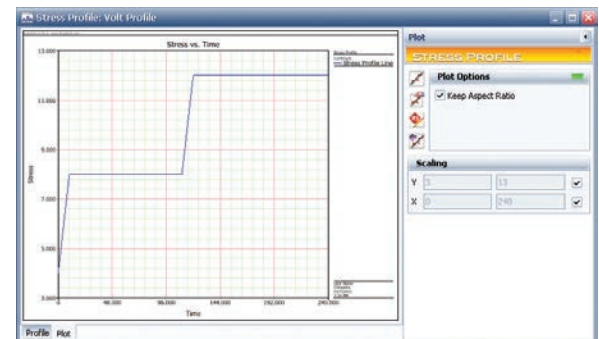
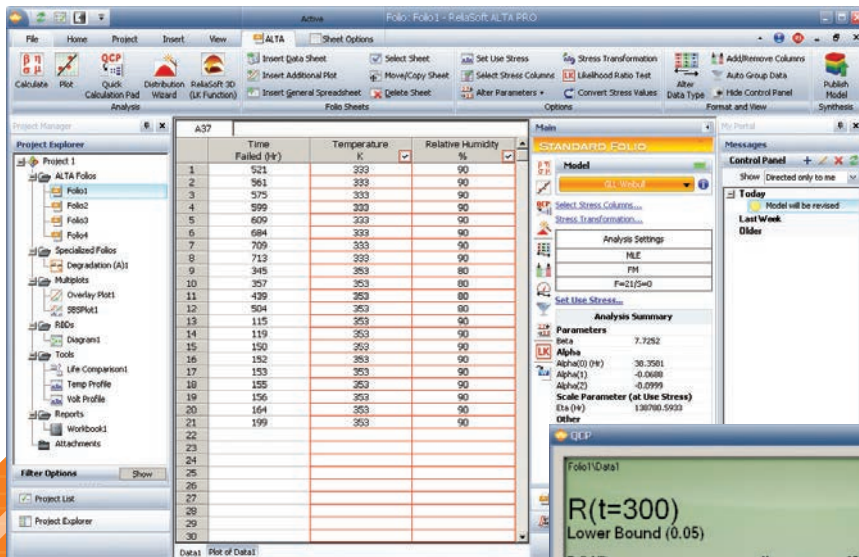
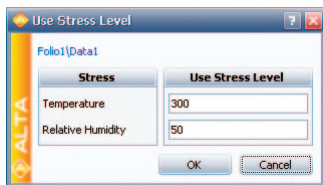


ReliaSoft's ALTA provides an intuitive and user-friendly way to utilize tremendously complex and powerful mathematical models. The software is available in two versions:

ALTA Standard provides the life-stress relationships required to analyze accelerated life test data with 1 or 2 constant stresses.

ALTA PRO offers the advanced statistical modeling power to analyze data with up to 8 simultaneous stress types and scenarios where stress is constant or varies with time.

ALTA is part of the Synthesis Platform[®].



<http://ALTA.ReliaSoft.com>

SOFTWARE HIGHLIGHTS - RELIASOFT'S ALTA

Data Types (individually or in groups)

- Complete
- Right Censored
- Left Censored
- Interval Censored
- Free-Form

Life-Stress Relationship Models

(single or multiple stress types; stress is constant or varies with time)

- Arrhenius
- Eyring
- Inverse Power Law
- Temperature-Humidity
- Temperature-NonThermal
- Proportional Hazards
- General Log-Linear
(with user-defined transformations)
- Cumulative Damage
- Generalized Eyring

Lifetime Distributions

- Weibull
- Lognormal
- Exponential

Analysis Methods

- Maximum Likelihood (MLE)
- Fisher Matrix Confidence Bounds

Calculated Results

- Reliability
- Probability of Failure
- Mean Life
- Reliable Life (aka Warranty Time)
- BX% Life
- Acceleration Factor
- Failure Rate

Plot Types (some 2D and some 3D)

- Probability
- Reliability vs. Time
- Unreliability vs. Time
- Failure Rate vs. Time
- *pdf* Plot
- Life vs. Stress
- Standard Deviation vs. Stress
- Acceleration Factor vs. Stress
- Standardized Residuals
- Cox-Snell Residuals
- Standardized Residuals vs. Fitted Values
- Stress Profile (for cumulative damage)

Degradation Analysis

- Linear
- Exponential
- Power
- Logarithmic
- Gompertz
- Lloyd-Lipow

Accelerated Test Plans

- 2 Level Statistically Optimum Plan
- 3 Level Best Standard Plan
- 3 Level Best Compromise Plan
- 3 Level Best Equal Expected Number Failing Plan
- 3 Level 4:2:1 Allocation Plan

Integrated Utilities

- Distribution Wizard
- Quick Calculation Pad
- Likelihood Ratio Test
- Overlay Plots (aka Multi-Plots)
- Side-by-Side Plots
- RS Draw® Metafile Graphics Editor
- 3D Plots
- Monte Carlo Data

• SimuMatic®

- Data Set Life Comparison
- Synthesis Workbooks (spreadsheet and word processing modules combined)
- Function Wizard
- Quick Parameter Estimator
- Quick Statistical Reference

Import Types

- Microsoft Excel® Files
- Text Files (*.txt, *.csv, *.prn, *.smc)
- Weibull++/ALTA 6, 7 Files

Centralized Data Storage

- Standard Repository
- Microsoft SQL Server®
- Oracle®
- Simultaneous Access by Multiple Users
- Shared Analysis Settings and Data
- Flexible User Access Levels

Integration

Integration with all other Synthesis Platform applications.

Multiple Languages Supported

For details, please visit:

<http://www.ReliaSoft.com/languages>

Available Services

- Detailed User Documentation
- Practical Example Files
- Theoretical eTextbook
- Step-by-Step Example Guide
- Training for Theory + Software
- Professional Consulting Services

Real Power for Real Applications

Some of the potential applications and benefits for using quantitative accelerated life testing data analysis techniques and ReliaSoft's ALTA software include the ability to:

- Understand and quantify the effects of stress (or other factors) on product life.
- Design accelerated tests that will be the most effective to achieve desired objectives.
- Significantly reduce the test time required to obtain reliability metrics for a product, which can result in faster time-to-market, lower product development costs and improved designs.

Why Upgrade to Version 10? (for details, visit <http://ALTA.ReliaSoft.com/version10.htm>)

- Major upgrades to the Synthesis Platform®, such as an integrated Project Planner with expanded actions tracking, automated watches and alerts, easier to find and filter analyses, batch properties editor for managing resources, better integration with Active Directory® for user account management, and the option to implement a Synthesis Enterprise Portal website.
- A new stress profile plot for ALTA PRO, a completely upgraded 3D plot utility and interactive plot zoom.
- A completely upgraded 3D plot utility, interactive plot zoom, the ability to open multiple projects simultaneously, new Synthesis Workbooks for custom reports and the option to import data from an external database (via the Synthesis Data Warehouse).