



JMP Book Descriptions

The collection of JMP documentation is available in the JMP Help > Books menu. This document describes each title to help you decide which book to explore.

Each book title is linked to the book's Portable Document Format (PDF) file. Click the title to open the book in your PDF viewer.

All books are also combined into one PDF file, called *JMP Documentation Library*, for convenient searching. Click [JMP Documentation Library](#) to open the PDF file from here, or select the title from the Help > Books menu.

Discovering JMP

Discovering JMP provides a basic introduction to using JMP. For new users of JMP, this is a great place to start. The book also includes details about importing your data into JMP, analyzing the data, and sharing the results.

Topics

Gallery of JMP Graphs

- Introducing JMP
- Working with Your Data
- Visualizing Your Data
- Analyzing Your Data
- Saving and Sharing Your Work
- Special Features

Using JMP

Using JMP shows you how to perform common tasks such as importing data, setting column properties, exporting analyses as graphics or HTML, and modifying JMP preferences. Details about connecting to SAS and working in the Formula Editor are also provided.

Topics

- Get Started
- Import Your Data
- Enter and Edit Data
- The Column Info Window
- Reshape Data
- Formula Editor
- Summarize Data
- JMP Platforms
- Save and Share Data
- Personalize JMP
- JMP Preferences
- Formula Functions Reference

Basic Analysis

Basic Analysis covers the initial types of analyses that you often perform in JMP, such as univariate, bivariate, and oneway analyses. Creating tables of summary statistics with the Tabulate platform is included along with approximating sampling distributions using bootstrapping. Find information about how to clean up your data before performing analyses.

Topics

Introduction to Basic Analysis
Distributions
Introduction to Fit Y by X
Bivariate Analysis
Oneway Analysis
Contingency Analysis
Logistic Analysis
Matched Pairs Analysis
Bootstrapping
Tabulate
Modeling Utilities

Essential Graphing

Start with *Essential Graphing* to find the ideal graph for your data. The book begins with Graph Builder, a quick way to create graphs in a drag-and-drop window. Line charts, ellipses, box plots, and maps are just a few of the graphs available in Graph Builder. Find information about creating other types of plots: bubble plots, scatterplots, parallel plots, and more.

Topics

Introduction to Interactive Graphing
Graph Builder
Overlay Plots
Scatterplot 3D
Contour Plots
Bubble Plots
Parallel Plots
Cell Plots
Treemaps
Scatterplot Matrix
Ternary Plots
Summary Charts
Create Maps

Profilers

Profilers covers the family of interactive profiling tools, which enable you to view cross-sections of any response surface. The book also includes details about plotting points and surfaces in a three-dimensional graph.

Topics

Introduction to Profilers

Profiler

Contour Profiler

Surface Plot

Mixture Profiler

Custom Profiler

Simulator

Noise Factors

Excel Profiler

References

Design of Experiments Guide

Design of Experiments Guide covers classic DOE designs (for example, full factorial, response surface, and mixture designs). Read about more flexible custom designs, which you generate to fit your particular experimental situation. Discover JMP's definitive screening designs, an efficient way to identify important factor interactions using fewer runs than required by traditional designs. And read about creating designs that test systems where failures occur as a result of interactions among components or subsystems. The book also provides guidance on determining an appropriate sample size for your study.

Topics

Introduction to DOE
Starting Out with DOE
Custom Designs
Examples of Custom Designs
Definitive Screening Designs
Screening Designs
The Screening Platform
Response Surface Designs
Full Factorial Designs
Mixture Designs
Covering Arrays
Discrete Choice Designs
Space-Filling Designs
Accelerated Life Test Designs
Nonlinear Designs
Taguchi Designs
Evaluate Designs
Augmented Designs
Prospective Sample Size and Power
Column Properties
Technical Details
References

Fitting Linear Models

Fitting Linear Models focuses on the Fit Model platform and many of its personalities. Linear and logistic regression, analysis of variance and covariance, and stepwise procedures are covered. Also included are multivariate analysis of variance, mixed models, generalized models, and models based on penalized regression techniques.

Topics

- Introduction to Fit Model
- Standard Least Squares Report and Options
- Standard Least Squares Examples
- Stepwise Regression Models
- Generalized Regression Models
- Mixed Models
- Multivariate Response Models
- Loglinear Variance Models
- Logistic Regression with Nominal or Ordinal Responses
- Generalized Linear Models
- References
- Statistical Details

Specialized Models

Specialized Models provides details about modeling techniques such as partitioning, neural networks, nonlinear regression, and time series analysis. Topics include the Gaussian platform, which is useful in analyzing computer simulation experiments. The book also covers the Response Screening platform, which is useful in testing the effect of a predictor when you have many responses.

Topics

- Introduction to Specialized Modeling
- Partition Models
- Neural Networks
- Model Comparison
- Nonlinear Regression with Built-In Models
- Nonlinear Regression with Custom Models
- Gaussian Process
- Time Series Analysis
- Response Screening
- References

Multivariate Methods

Multivariate Methods describes techniques for analyzing several variables simultaneously. The book covers descriptive measures, such as correlations. It also describes methods that give insight into the structure of the multivariate data, such as clustering, principal components, discriminant analysis, and partial least squares.

Topics

Introduction to Multivariate Analysis
Correlations and Multivariate Techniques
Cluster Analysis
Principal Components
Discriminant Analysis
Partial Least Squares Models
References
Statistical Details

Quality and Process Methods

Quality and Process Methods describes tools for evaluating and improving processes. The book begins by discussing creating control charts, which let you visualize process measurements over time, quantify common cause variation, and identify special cause variation. Details about estimating your process capability based on measurement systems analysis studies are included. Lastly, the book discusses Pareto plots and cause-and-effect diagrams to identify root causes of variability.

Topics

Introduction to Quality and Process Methods

Control Chart Builder

Shewhart Control Charts

Cumulative Sum Control Charts

Multivariate Control Charts

Measurement Systems Analysis

Variability Gauge Charts

Attribute Gauge Charts

Process Capability

Capability Analysis

Pareto Plots

Cause-and-Effect Diagrams

References

Reliability and Survival Methods

Reliability and Survival Methods provides details about evaluating and improving reliability in a product or system and analyzing survival data for people and products. The book explains how to fit the best distribution to your time-to-event data or analyze destruction data. A few other topics include analyzing competing causes of failure, modeling reliability as improvements are made over time, and analyzing recurring events.

Topics

Introduction to Reliability and Survival

Life Distribution

Fit Life by X

Recurrence Analysis

Degradation

Destructive Degradation

Reliability Forecast

Reliability Growth

Reliability Block Diagram

Survival Analysis

Fit Parametric Survival

Fit Proportional Hazards

References

Consumer Research

Consumer Research describes methods for studying consumer preferences and using that insight to create better products and services. Categorical response survey analysis tabulates and summarizes categorical response data. Uplift modeling identifies groups of individuals who are likely to react positively to a marketing action. Additional methods that support customer or consumer research are included.

Topics

Introduction to Consumer Research

Categorical Response Analysis

Factor Analysis

Choice Models

Uplift Models

Item Analysis

Multiple Correspondence Analysis

References

Scripting Guide

Scripting Guide provides details for taking advantage of the powerful JMP Scripting Language (JSL). Learn how to write and debug scripts, manipulate data tables, construct display boxes, create JMP applications, and more.

Topics

Introduction

Getting Started

Scripting Tools

JSL Building Blocks

Types of Data

Data Structures

Programming Methods

Data Tables

Scripting Platforms

Display Trees

Scripting Graphs

Three-Dimensional Scenes

Extending JMP

Creating and Sharing Applications

Common Tasks

Compatibility Notes

Glossary

JSL Syntax Reference

JSL Syntax Reference focuses on functions and their arguments, and messages that you send to objects and display boxes. Notes and examples are included.

Topics

JSL Functions

JSL Messages