

STATGRAPHICS *Plus*

Alphabetical List of Analyses and Features Version 5

2D Biplot (P)
3D Biplot (P)
2D Factor Plot (P)
3D Factor Plot (P)
3D Histogram (Skychart) (S)
2D Scatterplot (P)
3D Scatterplot (P)
3 RSR Smoothing Method (P)
3 RSS Smoothing Method (P)
3 RSSH Smoothing Method (P)
5 RSS Smoothing Method (P)
5 RSSH Smoothing Method (P)

A

Acceptance Chart Analysis (QD)
Acceptance Chart (QD)
Acceptance Chart Report (QD)
Acceptance Individuals Chart Analysis (QD)
Acceptance Sampling - Attributes Analysis (QD)
Acceptance Sampling - Variables Analysis (QD)
Adjusted R-Squared Plot (P)
Advanced Regression Analyses (P)
Agglomeration Distance Plot (P)
Agglomeration Schedule (P)
Alias Structure Table (QD)
Alpha Level Specification, all appropriate analyses
Analysis of Means Plot (S)
Analysis of Variance (ANOVA) - Multiple Factor, One Factor (S)
Analysis of Variance, for Testing Significance of Regression (S/P)
Anderson-Darling A_2 Test (S)
Annual Subseries Plot (P)
ANOM (Analysis of Means) Plot (S)
ANOM (Analysis of Means) Report (S)
ANOVA Table (S/QD)
AOQ Curve (QD)
ARIMA Chart Analysis (QD)
ARIMA Chart (QD)
ARIMA Chart Report (QD)
ARIMA Individuals Chart Analysis (QD)
ARIMA Individuals Chart (QD)
ARIMA Individuals Report (QD)
ARIMA Model (P)
ARL Chart (QD)
Arrhenius Plot Analysis (S)

Arrhenius Plot (S)
ATI Curve (QD)
Attributes Control Charts - \bar{p} , \bar{np} , u , c (QD)
Autocorrelation Estimates (P)
Autocorrelation Function Plot (P)
Autocorrelation (Partial) Estimates (P)
Automatic Forecasting (P)
Average (Mean), *see Summary Statistics* (S)
Axial Distance (QD)

B

Backward Stepwise Regression (S/P)
Barchart (S)
Barchart, Multiple (S)
Bartlett's Test - Variance Check (S)
Bernoulli Distribution Fitting (S)
Best Adjusted R-Squared Table (P)
Best c_p Table (P)
Beta Distribution Fitting (S)
Binomial Distribution Fitting (S)
Binomial Proportions (S)
Biplot, 2D and 3D (P)
Blocked 3-Level Factorial Designs (QD)
Blocked Box-Behnken Designs (QD)
Blocked Central Composite Designs (QD)
Blocked Draper-Lin Designs (QD)
Blocked Full and Fractional Factorial Designs (QD)
Bootstrap intervals (S)
Bonferroni Intervals (S/P)
Bonferroni Test - Multiple Range Test (S/P)
Box-and-Whisker Plot (S/QD)
Box-and-Whisker Plot, Multiple (S/QD)
Box-Behnken Designs (QD)
Box-Cox Power Transformations Analysis (S)
Box-Cox Power Transformation (P)
Box-Jenkins ARIMA Model (P)
Box-Pierce Test - Test for Randomness (P)
Brown's Linear Exponential Smoothing Model (P)
Bubble Chart Analysis (S)

C

c Chart Analysis (QD)
 c Chart Report (QD)
Calibration Models (P)
Canonical Correlations (P)
Canonical Variables Plot (P)
Capability Assessment (Grouped Data) (QD)
Capability Assessment (Individuals) (QD)
Capability Indices (Non-Normal Distribution, Normal Distribution) - User Preference, C_p , C_{pk} , C_{pk} (upper), C_{pk} (lower), Cr , C_{pm} , K ; or P_p , P_{pk} , P_{pk} (upper), P_{pk} (lower), K (QD)
Capability Plot (QD)

Casement Plot (S)
CDF Plot (S)
Censored Data Handling, [see Distribution Fitting - Censored Data Analysis](#) (S)
Centerpoints - can be added to applicable designed experiments (QD)
Central Composite Designs (QD)
Centroid Clustering Method (P)
Chi-Square Distribution Fitting (S)
Chi-Square Goodness-of-Fit Test (S/QD)
Chi-Square Test (for Independence) (S)
City Block Distance Metric (P)
Classical Factoring (P)
Classification Functions (P)
Classification Table (P)
Cluster Analysis (P)
Cochran-Orcutt Transformation (S)
Cochran's C Test - Variance Check (S)
Coefficient of Determination (R-Squared) (S/P)
Coefficient of Determination (R-Squared), Adjusted (S/P)
Coefficient of Variance, [see Summary Statistics](#) (S)
Collapse Design (QD)
Communality (P)
Comparison of Alternative Models (S)
Comparison of Rates Analysis (S)
Comparison of Means (S)
Comparison of Medians (S)
Comparison of Proportions Analysis (S)
Comparison of Regression Lines (P)
Comparison of Standard Deviations (S)
Component Effects Plot (S)
Component Line Chart (S)
Component Plots, 2D and 3D (P)
Component Weights (P)
Composite Designs (QD)
Conditional Gamma (S)
Conditional Sums of Squares ANOVA (S/P)
Confidence Intervals (Pooled s) (S)
Confidence Intervals (Individual s) (S)
Confidence Levels Limits for Forecast Means (S/P)
Confidence Levels Limits for Individual Forecasts (S/P)
Confounding (QD)
Contingency Coefficient (S)
Contingency Tables Analysis (S)
Contour Plot (S/P/QD)
Control Charts, Variables and Attributes (QD)
Control Ellipse (QD)
Cook's Distance (P)
Correlation Matrix (S/P/QD)
Correlation Matrix for Estimated Coefficients (P)
Correlation Matrix for Estimated Effects (S/QD)
Correlation (Spearman's Rank) (S)
Correlations (S)
Correlations (Partial) (S)
Covariance (S)

C_p - Capability Index (QD)
 C_{pk} - Capability Index (QD)
 $C_{pk \text{ (lower)}}$ - Capability Index (QD)
 $C_{pk \text{ (upper)}}$ - Capability Index (QD)
 C_{pm} - Capability Index (QD)
 C_r = Capability Index (QD)
 Cramer-von Mises W^2 test (S)
 Cramer's V (S)
 Critical Values, Inverse CDF - estimated for any distribution; [see Probability Distributions](#) (S)
 Crosscorrelation Analysis (S/P)
 Crosscorrelation Function Plot (P)
 Crosstabulation Analysis (S)
 Cube Plots (P/QD)
 Cubic Model Type (QD)
 Cumulative Distribution Function (CDF) Plot (S)
 Cumulative Distribution (Tail Areas) - estimated for any distribution; [see Probability Distributions](#) (S)
 Cumulative Hazard Function Plot (S)
 Cumulative Pareto Chart (QD)
 Curve Fitting (S)
 Custom Chart (S/QD)
 CuSum Chart (QD)
 CuSum Chart (H-K) Analysis (QD)
 CuSum Chart Report (QD)
 CuSum Chart (V-Mask) Analysis (QD)
 CuSum Individuals Chart (QD)
 CuSum Individuals Chart (H-K) Analysis (QD)
 CuSum Individuals Chart Report (QD)
 CuSum Individuals Chart (V-Mask) Analysis (QD)

D

Daniel Plot (Half-Normal Probability Plot) (QD)
 Death Density Function Plot - Estimated (S)
 Dendrogram (P)
 Density Function Plot (S)
 Density/Mass Function Plot (S)
 Density Trace (S)
 Design of Experiments (QD)
 DFITS Statistic (S/P/QD)
 Diagnostic Plots (S/P/QD)
 Differencing, Seasonal Order/Nonseasonal Order (P)
 Discrete Uniform Distribution Fitting (S)
 Discriminant Analysis (P)
 Discriminant Functions Plot 1 & 2 (P)
 Distribution Fitting - can be fit to any one of 24 probability distributions; [see Probability Distributions](#) (S)
 Distribution Fitting - Censored Data Analysis (S)
 Distribution Fitting - Uncensored Data Analysis (S)
 Distribution-Free Tolerance Limits (S/QD)
 Distributions, [see Probability Distributions](#) (S)
 Dixon's test (S)

Dot Diagram (S)
Dot Diagram, Multiple (S)
Double Reciprocal Calibration Model (P)
Double Reciprocal Regression Model (S/P)
Draftsman's Plot (S)
Draper-Lin Designs (QD)
Duncan's Intervals
Duncan's Multiple Range Test (S/P)
Dunnett's Test - Multiple Range Test (P)
Durbin-Watson Statistic (S/P)

E

Effect Estimates (QD)
Eigenvalues (P)
Equimax Rotation (P)
Erlang Distribution Fitting (S)
Estimated Model Effects (QD)
Eta (S)
Euclidean Distance Metric (P)
EWMA Chart (QD)
EWMA Chart Analysis (QD)
EWMA Chart Report (QD)
EWMA Individuals Chart Analysis (QD)
EWMA Individuals Chart (QD)
EWMA Individuals Chart Report (QD)
EWMA Smoothing Method (P)
Exponential Calibration Model (P)
Exponential Distribution Fitting (S)
Exponential Forecasting Model (P)
Exponential Plot (S)
Exponential Regression Model (S/P)
Exponential Trend Model (P)
Extraction Statistics (P)
Extreme Value Distribution Fitting (S)
Extreme Value Plot (S)

F

F Test - all appropriate analyses
F (Variance Ratio) (S)
Face-Centered Central Composite Designs (QD)
Factor Analysis (P)
Factor Means Plot Analysis (S)
Factor Plot, 2D and 3D (P)
Factor Scores (P)
Factorial Designs (QD)
Fishbone Chart (QD)
Fishbone Diagram Analysis (QD)
Fisher's Exact Test (S)
Fitted Model Plot (S)
Fitting Distributions Using Censored Data (S)
Fitting Distributions Using Uncensored Data (S)

Fixed Effects Model (S/P)
Folded Plackett-Burman Designs (QD)
Foldover Experimental Designs (QD)
Forecast Plot (P)
Forecast Table (S/P)
Forecasting Analysis (P)
Forecasting Models - Random Walk, Mean, Linear Trend, Quadratic Trend, Exponential Trend, S-Curve, Moving Average, Simple Exponential Smoothing, Brown's Linear Exponential Smoothing, Holt's Linear Exponential Smoothing, Quadratic Exponential Smoothing, Winter's Exponential Smoothing, and ARIMA Model (P)
Forward Stepwise Regression (S/P)
Fractional Factorial Experimental Designs (QD)
Frequency Histogram (S)
Frequency Table (S/QD)
Frequency Tabulation (S)
Friedman's test (S)
Full Factorial Designs (QD)
Furthest Neighbor Clustering Method (P)

G

Gage R&R Analysis (QD)
Gage Linearity (QD)
Gage R&R Methods - ANOVA, Average and Range, and Range (QD)
Gage Report (QD)
Gamma Distribution Fitting (S)
Gauss-Newton Method (P)
General Linear Models Analysis (P)
Geometric Distribution Fitting (S)
Geometric Mean, [see Summary Statistics](#) (S)
Goodness-of-Fit Tests - Chi-Square, Kolmogorov-Smirnov D, Kuiper V, Cramer-von Mises W^2 , Watson U^2 , Anderson-Darling A^2 (S/QD)
Group Average Clustering Method (P)
Group Centroids (P)
Group Comparisons (S)
Group Correlations (P)
Group Statistics (P)
Grubb's test (S)

H

Half-Normal Probability Plot (QD)
Hartley's Test - Variance Check (S)
Hazard Function Plot (S)
Henderson's Weighted Moving Average Smoothing Method (P)
High-Low-Close Plot Analysis (S)
High-Low-Close Plot (S)
Histogram - 3D, [see Skychart](#); [Cumulative Frequency](#); [Cumulative Relative Frequency](#); [Frequency](#); [Relative Frequency](#) (S)
Holt's Linear Exponential Smoothing Model (P)
Horizontal Time Sequence Plot (P)
Hotelling's T-Squared (P)

Hypothesis Tests - Binomial Proportion, One-Sample; Normal Mean, One-Sample; Normal Sigma, One-Sample; Poisson Rate, One-Sample; Two Binomial Proportions; Two Normal Means; Two Normal Sigmas; Two Poisson Rates (S)
Hypothesis Tests (Compare) Analysis (S)
Hypothesis Tests (Describe) Analysis (S)

I

Icicle Plot (P)
Individuals Charts Analysis (QD)
Individuals Chart Report (QD)
Inflation Adjustment (P)
Influential Points (S/P/QD)
Integrated Periodogram Plot (P)
Interaction Plot (S/P/QD)
Interquartile Range, [see Summary Statistics](#) (S)
Interval Plots (S)
Inverse CDF (Critical Value Estimation) - estimated for any distribution; [see Probability Distributions](#) (S)
Irregular Component Plot (P)

K

K - Capability Index (QD)
K-Means Clustering Method (P)
Kaplan-Meier Estimates (S)
Kendall's Tau b (S)
Kendall's Tau c (S)
Kendall's Tau in Multi-Variable Analysis (S)
Key Glyph (S/QD)
Kolmogorov-Smirnov D Test (S/QD)
Kolmogorov-Smirnov Test for Comparing Two Populations (S)
Kuiper V Test (S/QD)
Kurtosis, [see Summary Statistics](#) (S)
Kruskal-Wallis Test (S)

L

Lack-of-Fit Test (S/QD)
Lambda Values (S)
Laplace Distribution Fitting (S)
Least Significant Difference (LSD) Method (S/P)
Least Square Means (S)
Levene's test (S)
Leverage (S/P/QD)
Life Data Regression (P)
Life Tables (Intervals) Analysis (S)
Life Tables (Kaplan-Meier) (S)
Life Tables (Times) Analysis (S)
Linear Calibration Model (P)
Linear Model Type (QD)
Linear Regression (S/P/QD)

Linear Trend Adjustment (P)
Linear Trend Forecasting Model (P)
Log Probit Regression Model (S/P)
Log Survival Function Plot (S)
Logarithmic-X Calibration Model (P)
Logarithmic-X Regression Model (S/P)
Logistic Calibration Model (P)
Logistic Distribution Fitting (S)
Logistic Plot (S)
Logistic Regression Analysis (P)
Logistic Regression Model (S/P)
Logit Plot (P)
Lognormal Distribution Fitting (S)
Lognormal Plot (S)
Logrank Test (S)
Lower Quartile, [see Summary Statistics](#) (S)
LSD Intervals (S/P)
LSD Multiple Range Test (S/P)

M

MA Chart Analysis (QD)
MA Chart Report (QD)
MA Individuals Chart Analysis (QD)
MA Individuals Chart Report (QD)
Mahalanobis Distance (S/P/QD)
Main Effects Plots (QD)
Mallows' C_p Plot (P)
Mann-Whitney (Wilcoxon) W Test (S)
MANOVA (P)
Marquardt Method (P)
Matrix Plot (Scatterplots) (S)
Maximum Likelihood Estimation (S/P)
Maximum Value, [see Summary Statistics](#) (S)
Mean Absolute Error (S)
Mean Chart (QD)
Mean, [see Summary Statistics](#) (S)
Mean Forecasting Model (P)
Means Plot (S/P)
Means Table (S)
Median, [see Summary Statistics](#) (S)
Median Absolute Deviation (MAD) (S)
Median Clustering Method (P)
Median Plot (S)
Membership Table (P)
Minimum Value, [see Summary Statistics](#) (S)
Mixed Effects Model (QD)
Mixture Designs (QD)
Mode, [see Summary Statistics](#) (S)
Modified Z-scores (S)
Mosaic Plot (S)
Moving Average Chart (QD)
Moving Average Forecast Model (P)

Moving Range Control Chart (QD)
 MR(2) Chart (QD)
 MSE Comparison Table (S)
 MSE Comparison Plot (S)
 MSE Plot (P)
 Multifactor ANOVA (S)
 Multilevel Factorial Designs
 Multiple Barchart (S)
 Multiple Box-and-Whisker Plot (S)
 Multiple Comparisons, *see Multiple Range Tests* (S/P)
 Multiple Dot Diagram (S)
 Multiple Range Tests - Least Significant Difference (LSD) Method, Duncan's Multiple Range Test, Tukey's HSD Test, Scheffe's Test, Bonferroni's Test, Newman-Keul's Test, Dunnett's Test (S/P)
 Multiple Regression Analysis (S)
 Multiple-Sample Comparison Analysis (S)
 Multiple Variable Analysis (S)
 Multiple X-Y Plot (S)
 Multiple X-Y-Z Plot (S)
 Multiplicative Calibration Model (P)
 Multiplicative Regression Model (S/P)
 Multiplicative Seasonal Adjustment (P)
 Multivariate Analysis (S/P)
 Multivariate Control Chart Analysis (QD)
 Multivariate Chart Report (QD)
 Multivariate t Multiple Range Test (P)
 Multi-Vari Charts (QD)

N

Nearest Neighbor Clustering Method (P)
 Negative Binomial Distribution Fitting (S)
 Nested Designs (S/P/QD)
 Nested Factors (S/P/QD)
 Newman-Keuls Intervals (S)
 Newman-Keuls Multiple Range Test (S/P)
 Nonlinear Regression Analysis (P)
 Non-Normal Capability Indices (QD)
 Nonparametric Limits (S)
 Nonparametric Tests (S)
 Normal Distribution Fitting (S/QD)
 Normal Means (S)
 Normal Plot (S)
 Normal Probability Plot (S/P/QD)
 Normal Probability Plot of Effects (QD)
 Normal Probability Plot of Residuals (P/QD)
 Normal Sigmas (S)
 Normal Tolerance Limits (S/QD)
 Normality, Tests for - Chi-Square Goodness-of-Fit Statistic, Shapiro-Wilk's W Statistic, Z-Score for Skewness, Z-Score for Kurtosis (S)
 np Chart Analysis (QD)
 np Chart (QD)

O

Observed versus Log Odds Plot (P)
Observed versus Predicted Plot (S/P/QD)
OC Curve Plot (QD)
One-Variable Analysis (S)
One-Way ANOVA (S)
Operating Characteristic Curve Plot (QD)
Operator and Part Plot (QD)
Orthogonal Central Composite Designs (QD)
Outlier Identification (S)
Overlay Plot (S)

P

p Chart (QD)
 p Chart Analysis (QD)
p Value - all appropriate analyses
Paired t-Test (S)
Paired-Sample Comparison Analysis (S)
Parameter Estimation (S)
Pareto Analysis (QD)
Pareto Chart, for defect analysis (QD)
Pareto Chart, for estimated effects in a designed experiment (QD)
Pareto Distribution Fitting (S)
Partial Autocorrelation Estimates (P)
Partial Autocorrelation Function Plot (P)
Partial Correlations (S)
Partial Covariances (S)
Path of Steepest Ascent (QD)
Pearson's R (S)
Percentile (S)
Periodogram Ordinate (P)
Periodogram Plot (P)
Periodogram Table (P)
Piechart (S)
Plackett-Burman Designs (QD)
Plackett-Burman (Folded) Designs (QD)
Plot of Fitted Model (S/P)
Poisson Distribution Fitting (S)
Poisson Rates p Chart (S)
Poisson Regression (P)
Polar Coordinates Plot Analysis (S)
Polar Coordinates Plot (S)
Polynomial Regression Analysis (S)
 P_p - Capability Index (QD)
 P_{pk} - Capability Index (QD)
 $P_{pk \text{ (lower)}}$ - Capability Index (QD)
 $P_{pk \text{ (upper)}}$ - Capability Index (QD)
Post-Hoc Comparisons, [see Multiple Range Tests](#) (S/P)
Power Curve (S/QD)
Power Transformations Analysis (S)
Prediction Capability Plot (P)
Prediction Histograms Plot (P)

Prediction Limits (P)
Principal Components Analysis (P)
Probability Density Function (PDF) Plot (S)
Probability Distributions - Bernoulli, Binomial, Discrete Uniform, Geometric,
Hypergeometric Negative Binomial, Poisson, Beta, Cauchy, Chi-Square, Erlang,
Exponential, Extreme Value, F (Variance Ratio), Gamma, Laplace, Logistic, Lognormal,
Normal, Pareto, Student's *t*, Triangular, Uniform, Weibull (S)
Probability Plot Analysis (S)
Probability Plot - Half-Normal, Normal, Weibull (S/P/QD)
Probit Analysis (S/P)
Process Capability Analysis (QD)
Process Capability Plot (QD)

Q

Quadratic Exponential Smoothing Model (P)
Quadratic Model Type (QD)
Quadratic Trend Adjustment (P)
Quality Control Analyses (QD)
Quantile Plot (S)
Quantile/Quantile Plot (S)
Quartile (S)
Quartimax Rotation (P)

R

R&R Plot (QD)
R Chart (QD)
R-Squared Plot (P)
R-Squared Statistic (S)
R-Squared Statistic (Adjusted) (S)
Radar/Spider Plot Analysis (S)
Radar/Spider Plot (S)
Random Effects Model (S/P)
Random Numbers - generate from any distribution; *see Probability Distribution* (S)
Random Walk Forecasting Model (P)
Randomness, Tests for - Runs Up and Down, Runs Above or Below the Median, Box-Pierce
Test (P)
Range, *see Summary Statistics* (S)
Range Chart (QD)
Range Chart by Operator Plot (QD)
Range Chart by Part Plot (QD)
Range Plot (S)
Rank Correlations (S)
Rank Regression (S)
Reciprocal Mathematical Adjustment (P)
Reciprocal-X Regression Model (S/P)
Reciprocal-Y Regression Model (S/P)
Regression, ANOVA to test significance of regression (S/P)
Regression Coefficients, all appropriate analyses (S/P/QD)
Regression Model Lack-of-Fit Test (S)
Regression Model Selection Analysis (P)
Regression - Multiple, Nonlinear, Polynomial, Simple Linear (S/P/QD)

- Regression (Stepwise) - Forward Selection, Backward Selection (S/P)
- Repeatability, Variation Due to (QD)
- Repeated Measures Designs (P)
- Replicated Experimental Designs (QD)
- Reports (S)
- Reproducibility, Variation Due to (QD)
- Residual Autocorrelation Function Plot (P)
- Residual Autocorrelations (P)
- Residual Crosscorrelation Function Plot (P)
- Residual Partial Autocorrelation Plot (P)
- Residual Partial Autocorrelation Report (P)
- Residual Periodogram Plot (P)
- Residual Periodogram Table (P)
- Residual Plots versus Component, Factor Level, Factor, Level Code, Number, Observation, Predicted, Row Number, Run Order, Sample, \bar{X} (S/P/QD)
- Residual Tests for Randomness (P)
- Residuals (S/P)
- Residuals (Studentized) (S/P/QD)
- Response Surface Designs (QD)
- Response Surface Plots (S/P)
- Ridge Regression Analysis (P)
- Ridge Trace Plot (P)
- Rotatable and Orthogonal Central Composite Designs (QD)
- Rotatable Central Composite Designs (QD)
- Row-Wise Statistics Analysis (S)
- Runs Tests (QD)

S

- Sbi (S)
- S Chart (QD)
- S-Curve Forecasting Model (P)
- S-Curve Regression Model (S/P)
- S-Curve Trend Adjustment (P)
- S-Squared Chart (QD)
- Sample-Size Determination - Binomial Proportion, One Sample; Normal Mean, One Sample; Normal Sigma, One Sample; Poisson Rate, One Sample; Several Normal Means; Two Binomial Proportions; Two Normal Means; Two Normal Sigmas; Two Poisson Rates (S)
- Sample-Size Determination (Compare) Analysis (S)
- Sample-Size Determination (Describe) Analysis (S)
- Saturated Fractional Factorial Experimental Designs (QD)
- Scale Chart (QD)
- Scatterplot - 2D, 3D, Multiple X-Y, Multiple X-Y-Z, Univariate, X-Y, X-Y-Z (S/P)
- Scatterplot Matrix (S)
- Scheffe Intervals (S/P)
- Scheffe Multiple Range Test (S/P)
- Scree Plot (P)
- Screening Designs (QD)
- Seasonal Adjustment, Multiplicative/Additive (P)
- Seasonal Decomposition Analysis (P)
- Seasonal Index Estimation (P)
- Seasonal Index Plot (P)
- Seasonal Subseries Plot (P)

Seasonally Adjusted Data Plot (P)
 Shapiro-Wilk's W Statistics (S/QD)
 Sigma Plot (S)
 Sign Test (S)
 Signed Rank Test (S)
 Simple Exponential Smoothing Model (P)
 Simple Moving Average Smoothing Method (P)
 Simple Regression Analysis (S/P)
 Simplex-Centroid Mixture Designs (QD)
 Simplex-Lattice Mixture Designs (QD)
 Skewness and Kurtosis Plot (S)
 Skewness, [see Summary Statistics](#) (S)
 Skychart (3D Histogram) (S)
 Smoothing Analysis (P)
 Smoothing Methods - Simple Moving Average, Spencer's 15 Term MA, Spencer's 21 Term MA, Henderson's Weighted MA, EWMA, 3 RSS, 3 RSSH 5 RSS, 5 RSSH, 3 RSR (P)
 Somer's D Statistics (S)
 Spearman's ρ in Multiple-Variable Analysis (S)
 Spearman's Rank Correlations (S)
 Special Cubic Model Type (QD)
 Specification Limits (QD)
 Spencer's 15 Term Moving Average Smoothing Method (P)
 Spencer's 21 Term Moving Average Smoothing Method (P)
 Split-Plot Designs (P)
 Square Plots (P/QD)
 Square Root-X Regression Model (S/P)
 Square Root-Y Regression Model (S/P)
 Squared Euclidean Distance Metric (P)
 Standard Deviation, [see Summary Statistics](#) (S)
 Standard Deviation Control Chart (QD)
 Standard Errors, [see Summary Statistics](#) (S)
 Standard Error of Estimate (S)
 Standard Error (Individual s) Interval (S)
 Standard Error (Pooled s) Interval (S)
 Standard Kurtosis, [see Summary Statistics](#) (S)
 Standard Skewness, [see Summary Statistics](#) (S)
 Star Plot (S)
 Starpoints (QD)
 Statistical Tolerance Limits Analysis (S)
 Steepest Descent Estimation Method (P)
 Stem-and-Leaf Display (S)
 Stepwise Regression - Forward Selection, Backward Selection (S/P)
 Studentized values (S/P/QD)
 Student's t Distribution Fitting (S)
 Subset Analysis (QD)
 Subgroup Reports (QD)
 Sum, [see Summary Statistics](#) (S)
 Summary Statistics - Average, Median, Mode, Geo. Mean, Variance, Std. Deviation, Std. Error, Min., Max., Range, Lower Quartile, Upper Quartile, Interquartile Range, Skewness, Std. Skewness, Kurtosis, Std. Kurtosis, Coeff. of Var., Sum (S)
 Sums of Squares - Type I, Type III (S/P)
 Sunray Plot (S)
 Surface Plot (S/P/QD)

Survival Function Plot (S)
Symmetry Plot (S)

T

Table of Means (S)
Tabulation Analysis (S)
Tail Areas (S)
Ternary Plots, [see Response Plot](#) (QD)
Tests for Normality (S/QD)
Tests for Randomness (P)
Three-Level Factorial Design (QD)
Time Sequence Plot (S/P)
Tolerance Chart (QD)
Tolerance Limit - Non-Normal Distribution, Normal Distribution (S)
Tolerance Plot (S)
Toolwear Chart Analysis (QD)
Toolwear Chart Report (QD)
Toolwear Individuals Chart Analysis (QD)
Toolwear Individuals Chart (QD)
Trace Plot (QD)
Trading Days Adjustment (P)
Trend Adjustment - Linear, Quadratic, Exponential, S-Curve (P)
Trend-Cycle Component Plot (P)
Triangular Distribution Fitting (S)
Trimmed mean (S)
 t -Test - One Sample, Two Samples (Assuming Equal Variances), Two Samples (Assuming Unequal Variances), Paired (S)
Tukey HSD Intervals (S/P)
Tukey HSD Multiple Range Test (S)
Two-Sample Comparison Analysis (S)
Type I Censoring (S)
Type I Error (S/P)
Type I Sums of Squares (S/P)
Type II Censoring (S)
Type II Error (S/P)
Type III Sums of Squares (S/P)

U

u Chart Analysis (QD)
 u Chart (QD)
Uncensored Data Handling, [see Distribution Fitting - Uncensored Data Analysis](#) (S)
Uncertainty Coefficients (S)
Uniform Distribution Fitting (S)
Univariate Plot (S)
Unusual Residuals Report (S/P/QD)
Upper Quartile, [see Summary Statistics](#) (S)
User-Specified Experimental Designs (QD)
User-Specified Mixture Designs (QD)
User-Specified Response Surface Designs (QD)
User-Specified Screening Designs (QD)

V

V-Mask (QD)
Variables Control Charts - X-Bar and R, X-Bar and S, X-Bar and S-Squared, Individuals Charts (QD)
Variance, [see Summary Statistics](#) (S)
Variance Check (S)
Variance Components Analysis (S)
Variance Components Estimates (S)
Variance Components Plot (S)
Variance Control Chart (QD)
Variance Inflation Factor Plot (P)
Variance Inflation Factors (VIFs) (P)
Varimax Rotation (P)
Vertical Time Sequence Plot (P)

W

Ward's Clustering Method (P)
Watson U² Test (S)
Weibull Analysis (S)
Weibull Distribution Fitting (S)
Weibull Plot (S)
Wilcoxon Test (S)
Wilk's Lambda (P)
Winsorized mean (S)
Winsorized mean and sigma (S)
Winsorized sigma (S)
Winter's Exponential Smoothing Model (P)

X

X-Bar Chart (QD)
X-Bar and R Charts Analysis (QD)
X-Bar and S Charts Analysis (QD)
X-Bar and S-Squared Charts Analysis (QD)
X Chart (Individuals) (QD)
X-Y Plot (S)
X-Y-Z Plot (S)
X-Y-Z Plot, Multiple (S)

Z

z-Score for Kurtosis (S)
z-Score for Skewness (S)

KEY:

(S) = Standard Edition
(QD) = Quality and Design Edition, which includes all of the Standard Edition analyses, as well as analyses found in Quality Control and Experimental Design
(P) = Professional Edition

NOTE: All features are included in the Enterprise Edition and Professional Edition.

STATGRAPHICS *Plus*

Analyses by Menu

PLOT MENU

Scatterplots

- Univariate Plot
- X-Y Plot
- X-Y-Z Plot
- Matrix Plot
- Multiple X-Y Plot
- Multiple X-Y-Z Plot
- Polar Coordinates Plot

Exploratory Plots

- Box-and-Whisker Plot
- Multiple Box-and-Whisker Plot
- Normal Probability Plot
- Frequency Histogram
- Dot Diagram
- Multiple Dot Diagram
- Bubble Chart
- Radar/Spider Plot

Business Charts

- Barchart
- Multiple Barchart
- Piechart
- Component Line Chart
- High-Low-Close Plot

Probability Distributions

Response Surfaces

Custom Charts

DESCRIBE MENU

Numeric Data

- One-Variable Analysis
- Multiple-Variable Analysis
- Subset Analysis
- Row-Wise Statistics
- Power Transformations
- Statistical Tolerance Limits
- Outlier Identification

Categorical Data

- Tabulation
- Crosstabulation
- Contingency Tables

Distributions

- Probability Distributions
- Probability Plots
- Distribution Fitting (Uncensored Data)
- Distribution Fitting (Censored Data)

Life Data

- Life Tables Data (Intervals)
- Life Tables Data (Times)
- Weibull Analysis
- Arrhenius Plots

Hypothesis Tests

Sample-Size Determination

COMPARE MENU

Two Samples

- Two-Sample Comparison
- Paired-Sample Comparison
- Hypothesis Tests
- Sample-Size Determination

Multiple Samples

- Multiple-Sample Comparison
- Comparison of Proportions
- Comparison of Rates

Analysis of Variance

- Factor Means Plot
- One-Way ANOVA
- Multifactor ANOVA
- Variance Components

RELATE MENU

Simple Regression

Polynomial Regression

Box-Cos Transformations

Multiple Regression

SPECIAL MENU

Quality Control Analyses

Pareto Analysis

Process Capability Analysis

Variables Control Charts

- X-Bar and R Chart
- X-Bar and S Chart
- X-Bar and S-Squared Chart
- Individuals Chart

Attributes Control Charts

- p Chart
- np Chart
- u Chart
- c Chart

Time-Weighted Charts

- Moving Average Chart
- MA Individuals Chart
- EWMA Chart
- EWMA Individuals Chart
- CuSum (V-Mask) Chart
- CuSum Individuals (V-Mask) Chart
- CuSum (H-K) Chart
- CuSum Individuals (H-K) Chart

Multivariate Control Charts

Special-Purpose Control Charts

- ARIMA Chart
- ARIMA Individuals Chart
- Toolwear Chart
- Toolwear Individuals Chart
- Acceptance Chart
- Acceptance Individuals Chart

Gage R&R

- Data Setup
- Average and Range Method
- ANOVA Method
- Range Method

Gage Linearity and Accuracy

Custom Chart

Fishbone Diagram

Acceptance Sampling

- Attributes
- Variables

Multi-Vari Chart

Experimental Design

Create Design

Optimize Design

Open Design

Analyze Design

Augment Design

Multiple Response Optimization

Time Series Analyses

Descriptive Methods

Smoothing

Seasonal Decomposition

Forecasting

Automatic Forecasting

Multivariate Methods Analyses

Principal Components

Factor Analysis

Cluster Analysis

Discriminant Analysis

Canonical Correlations

Advanced Regression Analyses

General Linear Models

Calibration Models

Comparison of Regression Lines

Regression Model Selection

Nonlinear Regression

Ridge Regression

Logistic Regression

Probit Analysis

Poisson Regression

Life Data Regression

SNAPSTATS MENU

One Sample Analysis

Two Sample Comparison

Paired Sample Comparison

Multiple Sample Comparison

Curve Fitting

Capability Assessment (Individuals)

Capability Assessment (Grouped Data)

Gage R&R

Automatic Forecasting