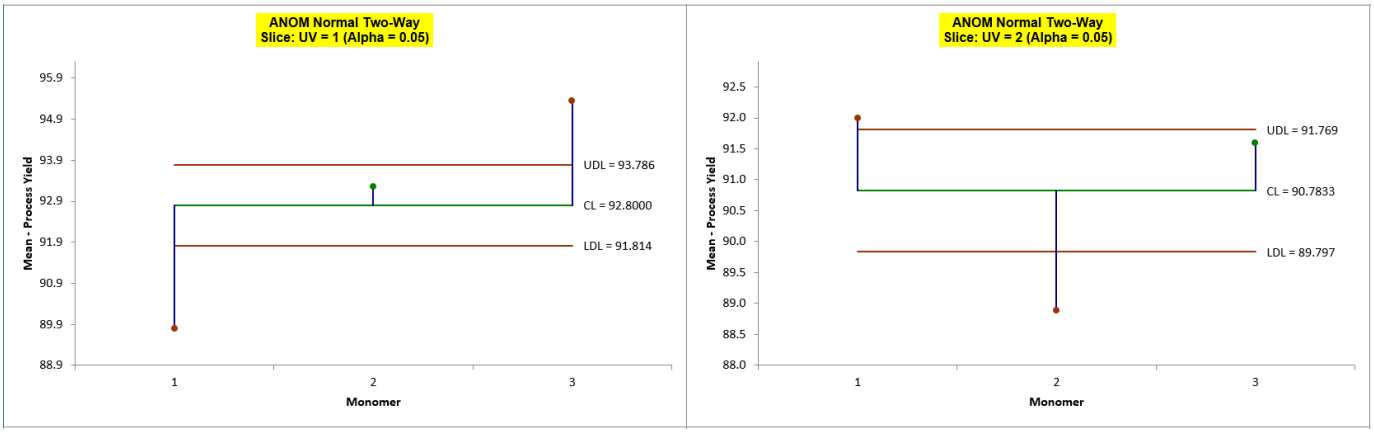
What's New in SigmaXL Version 8.0

Multiple Comparisons Made Easy

- **Templates and Calculators**
  - 1 Sample Z test and Confidence Interval for Mean
  - Normal Exact Tolerance Intervals
  - Equivalence Tests: 1 & 2 Sample Means, 2 Proportions, 2 Poisson Rates
  - Type 1 Gage Study, Gage Bias & Linearity Study

- **Descriptive Statistics**
  - Percentile Report and Percentile Ranges
  - Percentile Confidence and Tolerance Intervals
  - Additional Descriptive Statistics and Normality Tests
  - Outlier and Randomness Tests

- **Analysis of Means (ANOM) Charts**
  - All charts support balanced & unbalanced data
  - Normal, Binomial Proportions and Poisson Rates
    - One-Way
    - Two-Way with Main Effects and Slice Charts
    - Slice Charts are a modified ANOM chart developed by Dr. Peter Wludyka that enables one to easily interpret the effects in the presence of an interaction. In collaboration, Peter Wludyka and John Noguera of SigmaXL extended the Slice Charts to Binomial and Poisson.
    - Yellow highlight automatically recommends Main Effects (if interaction is not significant) or Slice Chart (if interaction is significant).
  - Nonparametric Transformed Ranks
  - Variances & Levene Robust Variances



- **Multiple Comparisons (Post-Hoc)**
  - Easy to read probabilities in matrix format with significant values highlighted in red
  - Appropriate ANOM chart available as a graphical option
  - One-Way ANOVA: Fisher, Tukey, Dunnett with Control
  - Welch ANOVA (Assume Unequal Variance): Welch Pairwise, Games-Howell
  - Bartlett Equal Variance: F-Test, F-Test with Bonferroni Correction
  - Levene Equal Variance: Levene, Tukey ADM (Absolute Deviations from Median)

Pairwise Mean Difference (row - column)	1	2	3
1	0	-0.8117	-0.2476
2		0	0.5641
3			0

Tukey Probabilities	1	2	3
1		0.0000	0.3777
2			0.0044
3			

- **Chi-Square Tests & Table Associations**
  - Adjusted Residuals (significant values highlighted in red)
  - Cell's Contribution to Chi-Square
  - Additional Chi-Square Tests
  - Tests and Measures of Association for Nominal & Ordinal Categories