

Simplifying Progress

What's new in MODDE® 12

June 2020



MODDE 12 Top Priorities

One-click analysis

Simplify and speed up the analysis procedure

New design; Generalized Subset Designs

 A generalized fractional factorial for generation of an optimal sequence of subset designs

New Design; Definitive Screening Design

Available for 4 to 30 factors

Rebranding and other GUI improvements

Connection to SIMCA

Design Space calculation updates

Updates with new functions

MODDE-Q updated functionality

Align with MODDE 12 functionality

(MODDE Go and Pro)

(MODDE Pro)

(MODDE Go and Pro)

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(MODDE Pro)



One-Click Analysis

- What
 - Can run the analysis wizard almost automatically
 - Interactive advisor functionality that is situational aware
- Why
 - Make the user more confident in getting the correct model
 - Create the foundation for an automated workflow (MODDE-Q)

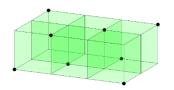
Generalized Subset Designs

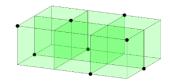
What

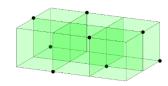
- This unique design setup generates a sequence of reduced design sets that will add up to a full design of all possible combinations.
- The design sets are as orthogonal, equal and balanced as possible.

Why

- Solves a problem for generation efficient stability studies (30 50% more efficient)
- Solves DOE problem within Multivariate calibration
- Introduces a sequential approach in screening DOE





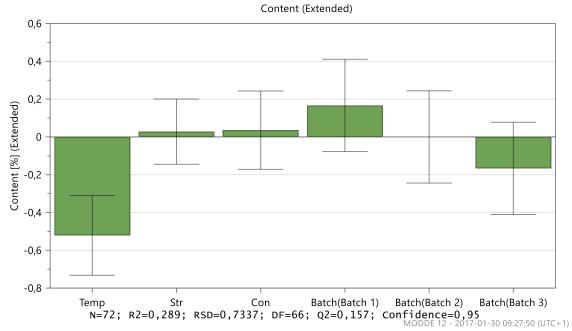




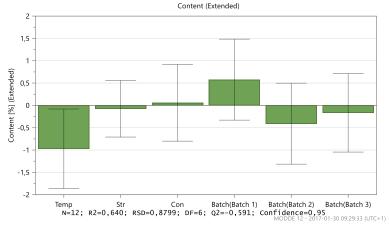
Generalized Subset Designs

All 72 experiments

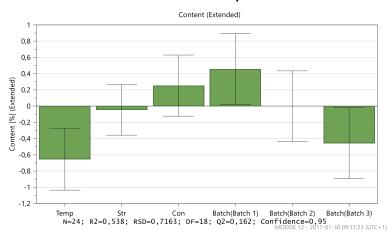
Coefficients (scaled and centered) - MODDE 12 GSD 3 2 4 3 red 6 (MLR)



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12+12 exp





Definitive screening design

- What
 - A new screening design with the of 2k+1 experiments (k factors)
 - Optimized for linear and square terms, all confoundings are set in the interaction part
 - Implemented for 4 to 30 factors
- Why
 - An efficient design for initial screening of 5 or more factors
 - Can detect specific non-linear factor effects



Connection to SIMCA

- What
 - Export the worksheet to SIMCA
 - Open SIMCA with data if installed
- Why
 - Easy to continue the analysis in SIMCA and merge the DOE setup with other type of big data tables as Spectroscopy raw data or process data.



GUI improvements

- Better advisor functionality
- Streamlined terminology in the probability presentations
- RED-MUP matrix result coloring
- New installation wizard
- Possibility to return the license activate again on another computer
- Branding update



Design space calculation

• Extended the DS calculation functionality with a possibility to include response correlation effects

