

Metropolis

A modern beamer theme

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Outline

1. Well modeling and batch automation
2. Statistical analysis
3. Network Analysis

Well modeling and batch automation



Why automating well modeling?

- Modeling takes a long time
- It is laborious to calibrate and modify each model
- It is easy for ten wells
- But very hard on 25, 50, 100, 200+ wells
- And when you finish the first batch of well tests ...
- ... it comes another ...
- One production optimization cycle could take months

Statistical analysis

Statistical Analysis makes a difference

- All wells data get into a tabular format: dataframe
- Every well is a row (observation)
- Well parameters become columns or variables
- Tables make easier to spot problems with the data
- Well scanning can be done on a directory or drive
- Well variables (columns) are selectable

Network Analysis



In the network optimizer

- Retrieve all the solver variables
- Put the variables in a dataframe
- Calculate new variables as KPIs
- Statistically compare the KPIs
- Arrange the wells by best and worst KPI
- Run additional scenarios

KPI: Key Performance Indicators

