Tutorial to work with VisualAIM 2.0

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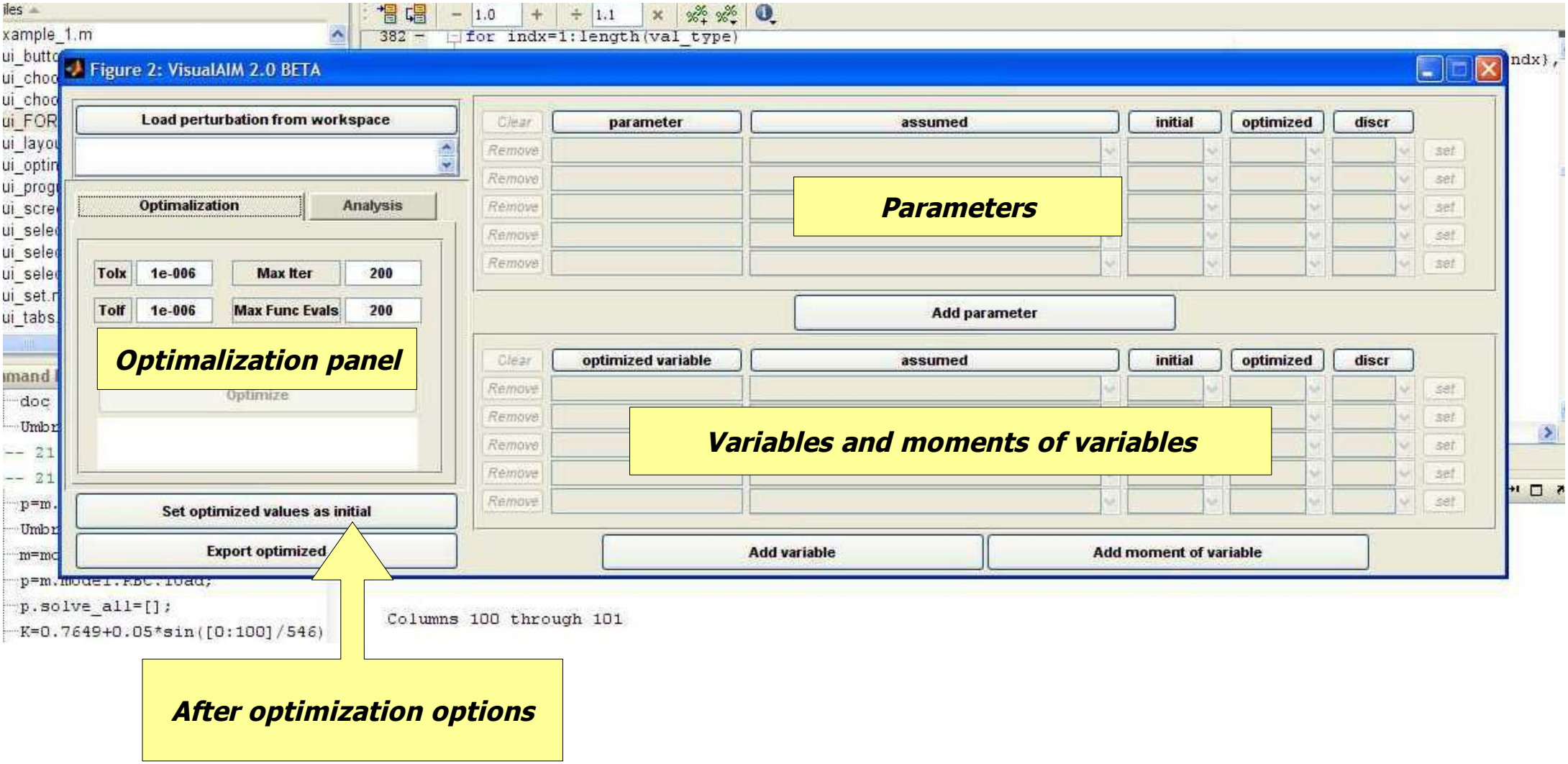
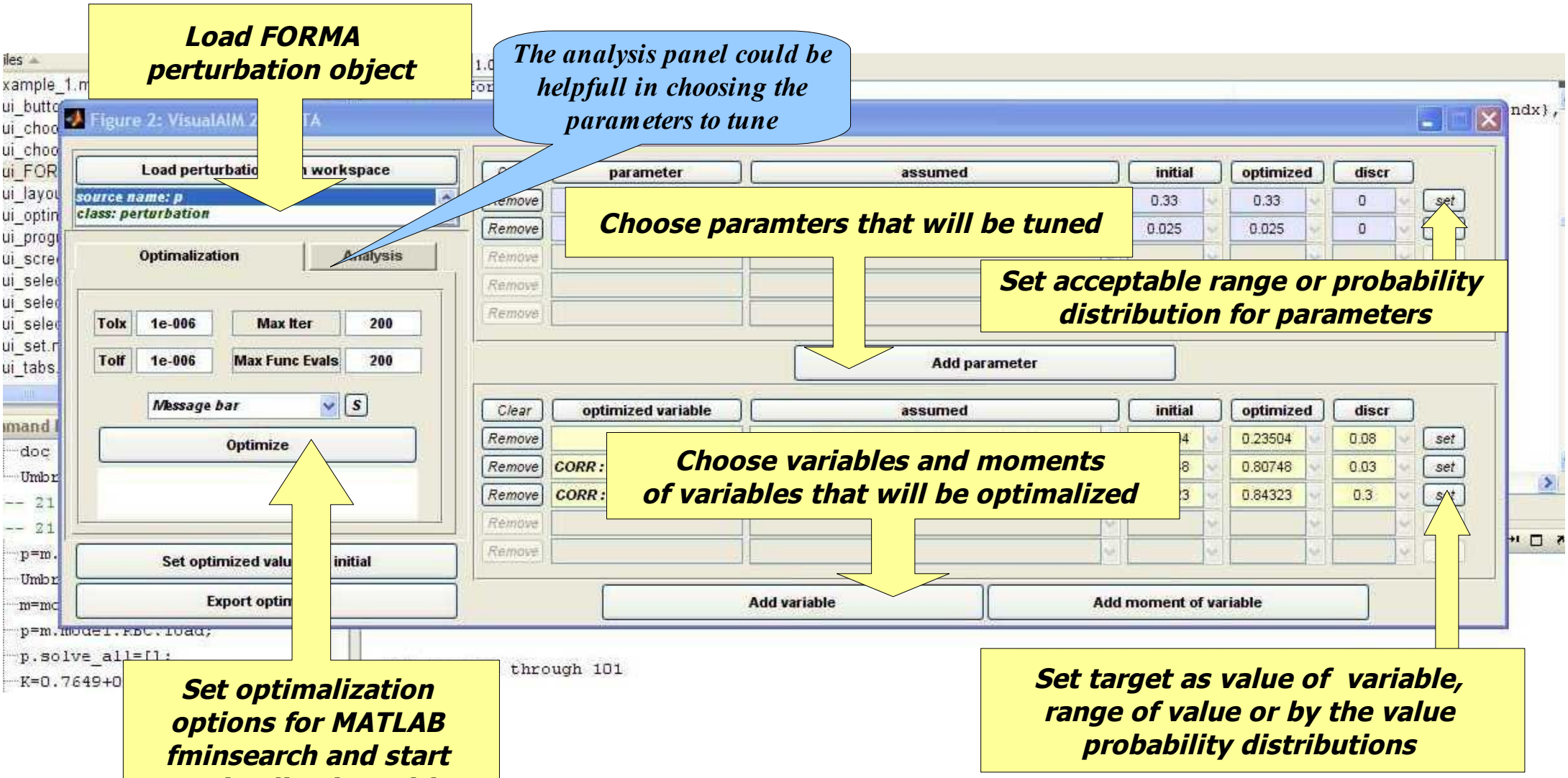
VisualAIM2.0 is a MATLAB tool for simple investigations and calibration of parameters impact on models solutions in FORMA 24

Overview of basic Visual AIM interface elements



Before optimization



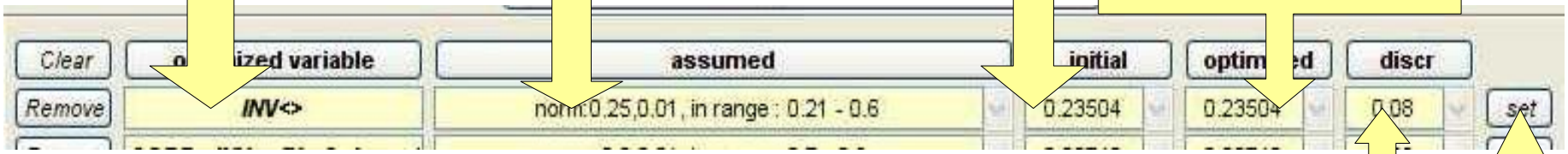
Setting parameters and variables

The name of variable or paramter

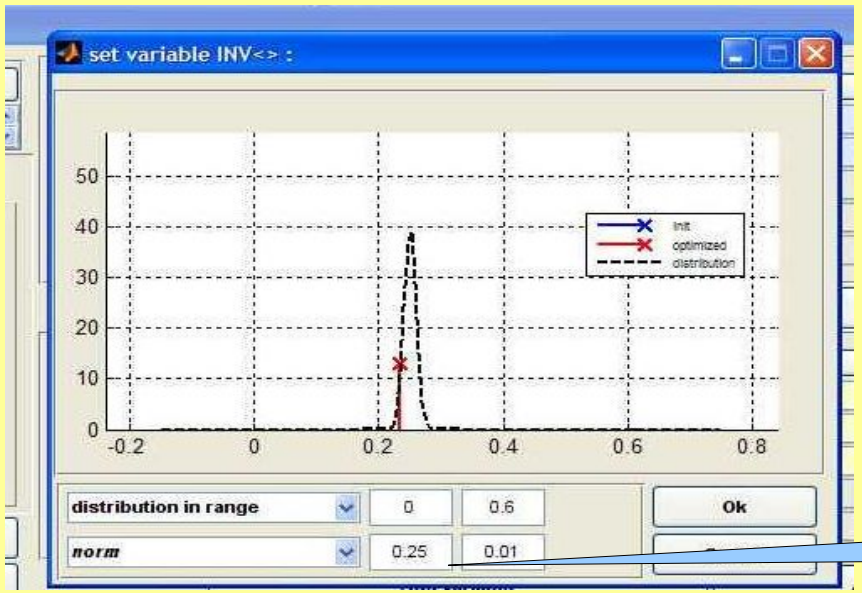
The initial (recent) value

Limits on variable/paramater

Value obtained in last optimization



Discrepancy calculated as distance of optimized value from target or as the inverse of value probablity for assumed distribution



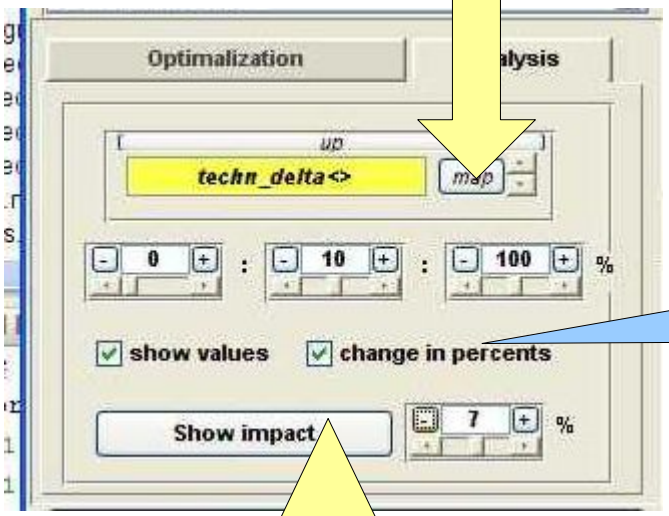
Parameter could be set by value, range of values or probablity distribution of values using MATLAB pdf function

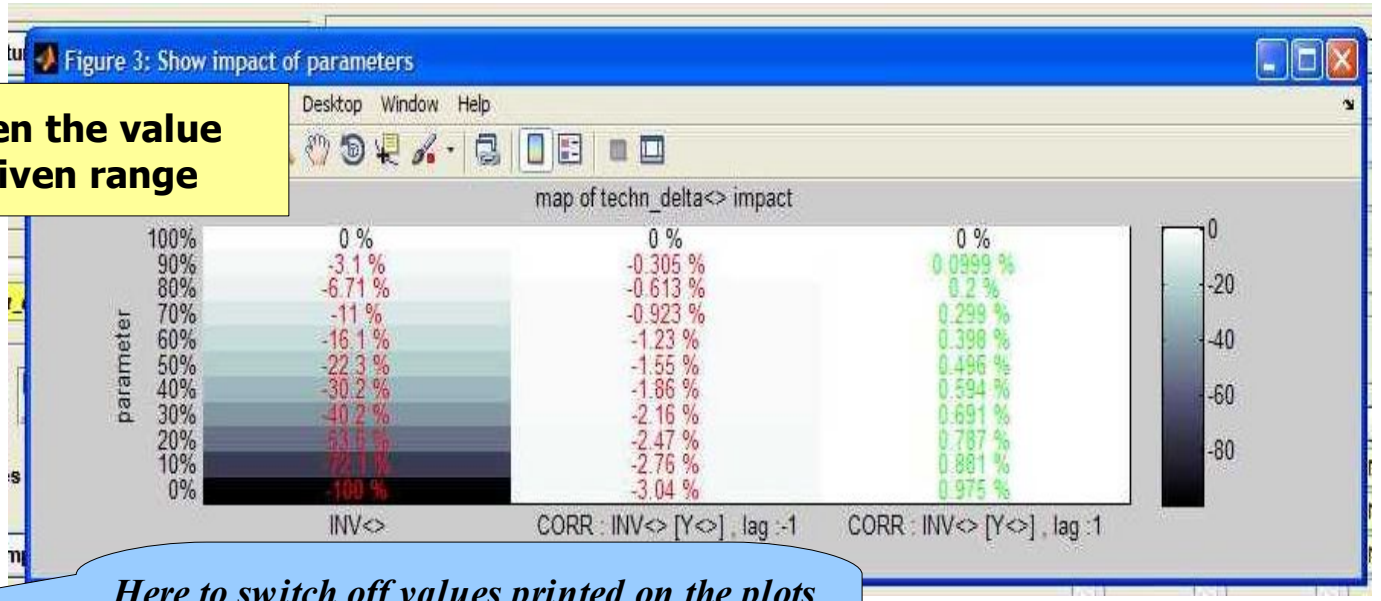
Variable could be left free to set by FORMA solution or could have assumed target value target range of values or target probablity distribution of values using MATLAB pdf function

Parameters here are the arguments for MATLAB pdf function

Analysis panel

Shows the change of variables when the value of choosen paramater varies in given range





Here to switch off values printed on the plots and plot variables values instead change in percents

Shows the change of variables when given plus and minus percent change is made to single parameter of set

A significant impact of chosen paramaters on chosen variables is the key to sucesfull optimalization

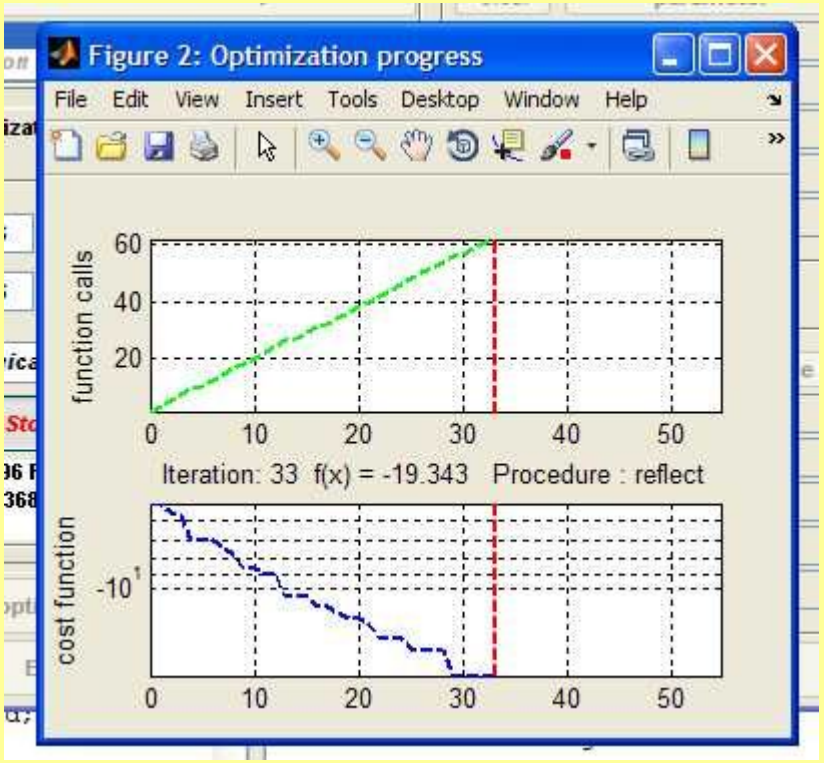
Optimization and aftermath

This button starts optimization and stops it on user demand

Sets optimized values of parameters and variables as initial ones

Exports results to .mat MATLAB file

The optimization progress could be presented as plots of function evaluations an discrepancy function value



End of Tutorial