## Adaptive Systems Measurement Toolset 1.12

Find and measure influences among variables

This toolset reduces a large number of variables to those that influence the user's variable of interest. The resulting influence network is in manyto-one configuration. Influence weights quantify relationships between variables and additional combining summarizes all positive and all negative influences.

Individual influence weights from the variable of interest on other variables is in one-to-many configuration and additional combining summarizes all positive and negative outfluences.



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## Adaptive Systems Measurement Toolset 1.12

### Description

#### Overview

Complex systems react or adapt through a change in large number of variables. The Adaptive Systems Measurement toolset analyzes systems where tens or hundreds of variables may interact. ASM quantifies complex or otherwise intractable influences in mechanical structures, metabolite interactions in human body, or influences among economic, financial and open market variables.

ASM enables the user to focus on the most relevant influencing variables to understand system behavior and improve system performance through variables that are under user's control.

#### **Key Features**

- □ Single window environment
- Graphical user interface for data import with source data preview
- Gray-locked options after exclusive action
- Preservation of variable names links source to report
- Info on many screen objects appears on mouse cursor
- □ Auto-generated report filename and header can be customized
- □ Analysis of all samples or multiple and specific periods
- □ Select single or multiple variables as variable(s) of interest
- Calculation of per-sample influence among variables during last ten samples
- Automated repeated analysis with new source data [plan for real-time analysis]]

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# **Adaptive Systems Measurement Toolset 1.12**

### **Function List**

### **Graphical User Interface Functions for Data Input**

Open source file – Standard Windows<sub>TM</sub> icon loads source data from a single file Inspect source data – Standard text box with scroll

### **Graphical User Interface Functions for Preprocessing**

Variables are columnar (or rows) – Check box

Variables have names – Check box

View variables names - Command button to optionally view and select variable of interest

Pass over constants – Check box

Specify variable of interest or a file containing multiple variables – Input text box Specify file containing multiple periods – Input text box for optional use Slicer processing option – Check box for specific treatment of multiple periods Juicer processing option – Check box for specific treatment of a single period Customize report filename, Customize report header – Text boxes

**Graphical User Interface Functions for Runtime** 

Process - Command button

Processing status – Text box

### **Graphical User Interface Functions for Miscellaneous**

Info C:, ReStart, Start Excel, Close - Command buttons





