

# Transient

## TRANSIENT

Purpose: The transient program shows the continuous analysis of a sample in real time as it runs through the ICP

### A. Setting up Transient Parameter

1. Start up the instrument and start the Smart Analyzer Vision Software.
  - a. In the Smart Analyzer software open METHOD from the options at the left of the display screen and choose the method needed.
  - b. At the top of the TRANSIENT display screen choose 'Transient' and in the drop down menu pick 'Load Method'. Choose the desired method from the dialog box.
  - c. From the icon at the top of the display screen choose 'Fast Transient'.
  - d. In the dialog box:
    - i. Sample name: What the specific sample should be called
    - ii. Runtime: How long the sample should run in seconds.
    - iii. Sampling Rate: How many samples per second should be run measured in Hertz.
    - iv. Integration Interval
    - v. File name: Give the file a name containing the date and a constant that will be used for all similar samples.

\* It is possible to just run one sample by clicking the 'Method Transient' icon\*

### B. Executing the Transient mode using Smart Triggers

1. Start the Smart Trigger software.
2. In the Smart Trigger METHOD section choose the desired Smart Analyzer method from the drop down menu.
3. Click the TRANSIENT icon
4. In the file dialog box, give the sample a name.
5. Open TRANSIENT from the options at the left of the display screen.
6. Click START
7. The transient will continue to collect data until it times out or until ABORT is clicked
  - a. When a run is aborted there is the risk of losing all of the collected data
  - b. Exporting Data
    - i. Data is written to a net cdf file
    - ii. Manual export (inconsistent with automation) à extracts into an readable excel file