

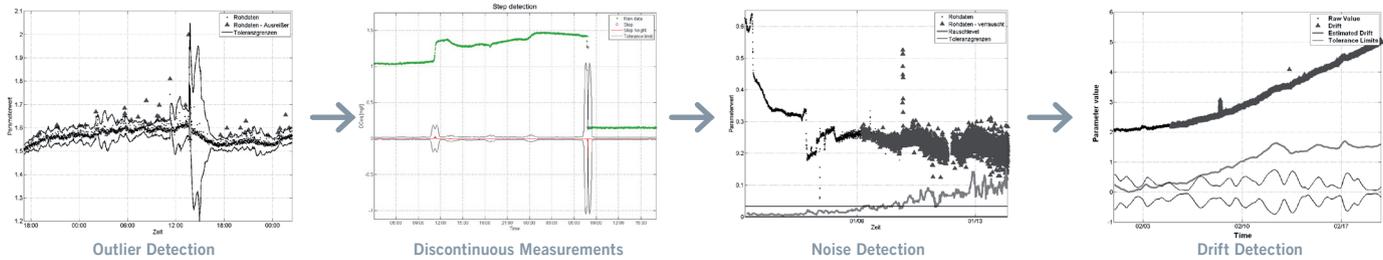
vali::tool™
ana::tool™



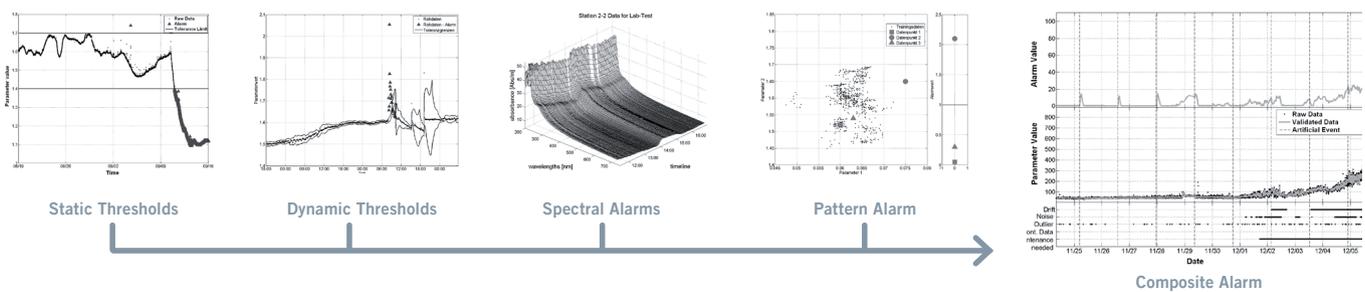
Unmatched event detection tools
for real-time event detection

s::can
Intelligent. Optical. Online.

vali::tool: The sensor and parameter validation tool



ana::tool: The event detection tool



Start-up

- » vali::tool and ana::tool are installed with application specific default settings
- » vali::tool is active from the start and needs no configuration
- » ana::tool requires training before it can generate alarms
- » ana::tool automatically starts data collection and indicates when it is ready to be trained

Training

- » ana::tool can train itself continuously, or be manually trained
- » manual training is simple using the moni::tool graphical user interface
- » a static time window is used for manual training
- » a moving time window can be used for automatic training
- » events are recognised automatically and can be removed; the remaining data represent "normality"
- » ana::tool weighs single parameters and establishes alarm thresholds that optimise sensitivity and minimise the false alarm rate

Adaptation to slow changes

- » ana::tool detects events as well as gradual - e.g. seasonal - changes
- » accumulating historical data; multiple composition patterns can be stored. ana::tool will recognize water matching these patterns and sensitivity will not be compromised during changes between known compositions
- » automatic training on moving time window; system adapts to slow matrix changes. During periods of composition change, the alarm system has a reduced sensitivity. Actual sensitivity is displayed

Output

- » ana::tool produces a single binary alarm value
- » the value indicates how far the current water composition deviates from normality
- » additional single alarms can be defined, e.g. single parameter static thresholds
- » ana::tool requires operator-confirmation of communicated events
- » the alarm value can be used to trigger various actions and responses

Unique features

- » open interface to all types of sensors and analysers of any make, and other sources of data
- » online and real time data validation before event detection greatly reduces false alarms
- » graphical design allows assessing status of complete station at a single glance
- » web based interface, accessible at anytime from anywhere
- » designed to fully exploit the wealth of spectral data
- » includes an indicator of the actual alarm sensitivity
- » can calculate contribution of water sources A, B, C, ... to a mixture