



Contribution ID: 250

Type: **Panelist (Panel Session)**

## Interactive data visualization techniques in the statistical analysis of multi-source data

*Wednesday, 7 November 2018 11:00 (20 minutes)*

Interactive data visualization techniques in the statistical analysis of multi-source data

Matthias Auer, Scott Fertig, Sidney Hellman, Oleksii Povkh, Oleksandr Sukhotski, and Serhiy Vasilyev, Instrumental Software Technologies, Inc., USA (m.auer@isti.com, s.fertig@isti.com, s.hellman@isti.com, o.povkh@isti.com, oleksandrsukhotski@isti.com, s.vasilyev@isti.com)

Significant challenges present themselves to evaluators of bulk handling facilities under safeguards. Evaluations require the accurate matching of inspector and operator provided data, variation across time and space of the packaging of materials within a facility, multiple strata, and sophisticated statistical tests that often need to be applied in an investigative and iterative fashion. We present a number of data visualization techniques and charts integrated into an evaluator workbench. These techniques support the iterative and multi-actor collaborative evaluation process. In addition to the use of charts as visualization tools, charts that support “drag-and-drop” grouping, and then reflect those changes back into the dataset underlying an evaluation, will be demonstrated.

### Which “Key Question” does your Abstract address?

TEC2.1

### Which alternative “Key Question” does your Abstract address? (if any)

TEC2.5

### Topics

TEC2

**Primary author:** Dr AUER, Matthias (Instrumental Software Technologies, Inc.)

**Co-authors:** Mr POVKH, Oleksii (Instrumental Software Technologies, Inc.); FERTIG, Scott (Instrumental Software Technologies); Mr VASILYEV, Serhiy (Instrumental Software Technologies, Inc.); Mr HELLMAN, Sidney (Instrumental Software Technologies, Inc.); Mr SUKHOTSKIY, oleksandr (Instrumental Software Technologies, Inc.)

**Presenter:** Dr AUER, Matthias (Instrumental Software Technologies, Inc.)

**Session Classification:** [TEC] Visualization for Information Integration

**Track Classification:** Leveraging technological advancements for safeguards applications (TEC)