Metric Interquartile

Overview

The **Metric Interquartile** command is used to find the range of the middle 50% of datapoints within a set. A quartile is a statistical measure that divides a data set into four equal parts, with each part representing 25% of the observations. There are three quartile values: the first quartile (Q1), which marks the 25th percentile; the second quartile (Q2), which is the median; and the third quartile (Q3), which marks the 75th percentile. The **interquartile range** can be defined as Q3-Q1 and can be helpful when analyzing the variability of data and/or identifying outliers.

Read more here.

Pipeline Command

The command can be found in the **Pipeline Workshop** under **Metric** as so:

```
Metric_Interquartile
! /RESULT_METRIC_FOLDER=PROCESSED
/RESULT_METRIC_NAME=
! /APPLY_AS_SUFFIX_TO_SIGNAL_NAME=FALSE
/SIGNAL_TYPES=
! /SIGNAL_FOLDER=ORIGINAL
! /SIGNAL_NAMES=
! /COMPONENT_SEQUENCE=
/EVENT_SEQUENCE=
/EXCLUDE_EVENTS=
! /GENERATE_MEAN_AND_STDDEV=TRUE
! /GENERATE_MEAN_AND_STDDEV_ACROSS_SUBJECTS=FALSE
! /APPEND_TO_EXISTING_VALUES=FALSE
;
```

Command Parameters

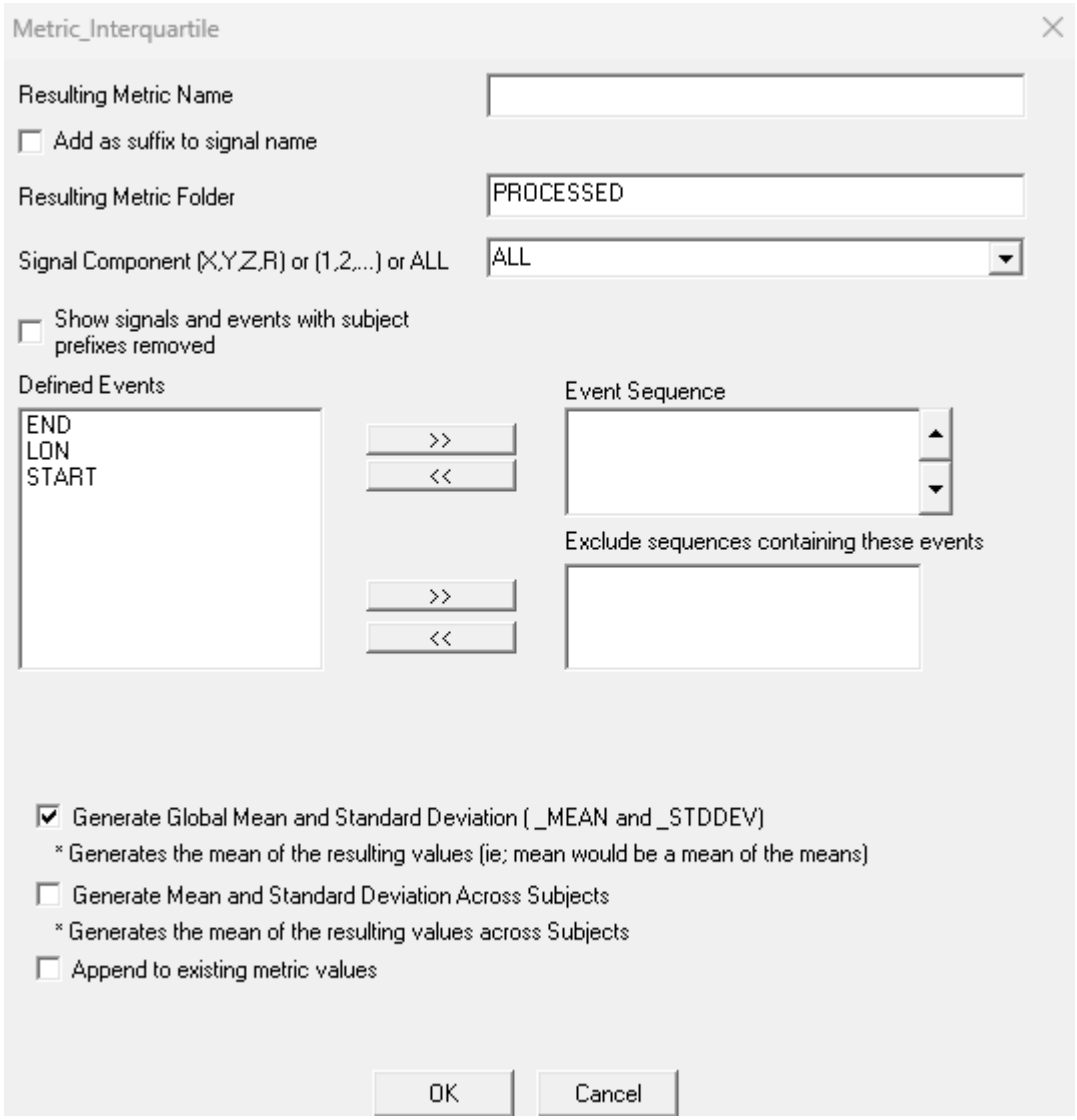
The following table shows the command parameters seen above and their descriptions:

RESULT_METRIC_FOLDER	**The name of the result signal folder**
RESULT_METRIC_NAME	**The name of the result signal**
APPLY_AS_SUFFIX_TO_SIGNAL_NAME	**Specify the metric name to be the ORIGINAL signal plus a SUFFIX**
SIGNAL_TYPES	**Specify the signal type**
SIGNAL_FOLDER	**Specify the origin folder**
SIGNAL_NAMES	**Specify the Signal to be used**

COMPONENT_SEQUENCE	**Specify the Signal components to be used (e.g. X + Y + Z or 0 + 1 + 2 etc)**
EVENT_SEQUENCE	**A list of events (separated by "+" signs). For example, LHS+RTO**
EXCLUDE_EVENTS	**If this event occurs before the first and last event, do not computed a metric**
GENERATE_MEAN_AND_STDDEV	**Generate the mean and standard deviation of this metric**
GENERATE_MEAN_AND_STDDEV_ACROSS_SUBJECTS	**Generate the mean and standard deviation of this metric across ranges and files**
APPEND_TO_EXISTING_VALUES	**Add these metric values to an existing metric**

Dialog

The command can be edited in a text editor or in a dialog form. To edit in the dialog pop up form either click on the **Edit** button in the pipeline workshop or double-click on the pipeline command. The dialog is shown below



The dialog box allows you to assign values to the command parameters outlined above.

Example: Finding typical bat speed range(s)