Statistics Related Locations

You can compute some statistics on related locations. This transformation is available since 2013.01.

For example: you have catchments and rain gauges. The rain gauges have a relation to the catchments, called CATCHMENT.
Now you can compute the statistics per catchments of all the gauges for that catchment.
Therefore you define (in this example) as output locations the catchments and as input locations the rain gauges. You define a locationRelationId the id CATCHMENT.

Another example: you want to aggregate all your upstream laterals into one inflow. Therefore you define at every lateral the outflow point as locationRelation, e.g. named OUTFLOW. As an outflow point may have multiple laterals as inflow, you now want to sum the laterals per inflow point. Therefore you use as output locations (or locationSet) the inflow points, as input locations the catchments and as locationRelationId OUTFLOW.

It is possible to have the Location relation for either the input or the output locations. Relation points from input to output or from output to input. When the relation is available in both directions a config error is logged.

The possible statistics are:

- count
- kurtosis
- max
- mean
- median
- min
- percentileExceedence (with % value)
- percentileNonExceedence (with % value)
- quartile (with quartile value)
- rootMeanSquareError
- rsquared
- skewness
- standardDeviation
- sum
- variance

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</statisticsRelatedLocations>
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