Command Reference: TableTimeSeriesMath()

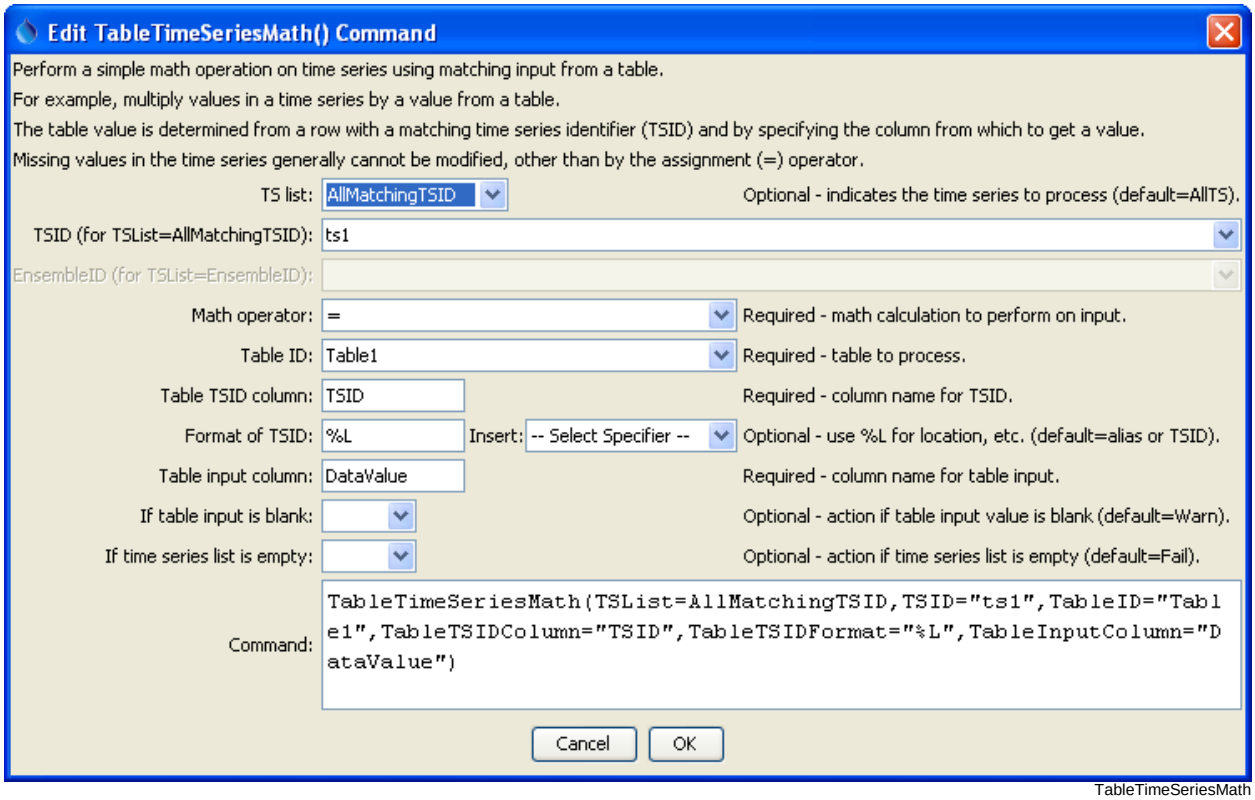
Perform simple math operation on time series using table input

Version 10.04.00, 2012-01-13

The `TableTimeSeriesMath()` command performs a simple math operation on time series using values from a table. For example, a table that is populated by the `CalculateTimeSeriesStatistic()` command or `ReadTableFromDelimitedFile()` could be used to modify time series data. See also the `TableMath()` command, which performs math on a table.

The table value is determined by matching the time series identifier (formatted according to the `TableTSIDFormat` parameter) with the TSID value in the table column specified by the `TableTSIDColumn` parameter. If necessary, use the `ManipulateTableString()` command to generate an identifier column in the table that allows that match. Missing values in the time series generally will not be updated, although the assignment (=) operator will do so.

The following dialog is used to edit the command and illustrates the syntax of the command.



TableTimeSeriesMath

TableTimeSeriesMath() Command Editor

The command syntax is as follows:

```
TableTimeSeriesMath(Parameter=Value,…)
```

Command Parameters

Parameter	Description	Default
`TSList`	Indicates the list of time series to be processed, one of: • `AllMatchingTSID` – all time series that match the `TSID` (single TSID or TSID with wildcards). • `AllTS` – all time series before the command. • `EnsembleID` – all time series in the ensemble. • `FirstMatchingTSID` – the first time series that matches the `TSID` (single TSID or TSID with wildcards). • `LastMatchingTSID` – the last time series that matches the `TSID` (single TSID or TSID with wildcards). • `SelectedTS` – the time series selected with the `SelectTimeSeries()` command.	`AllTS`
`TSID`	The time series identifier or alias for the time series to be processed, using the `*` wildcard character to match multiple time series.	Required if `TSList=*TSID`.
`EnsembleID`	The ensemble to be processed, if processing an ensemble.	Required if `TSList=EnsembleID`.
`Operator`	The operator to be applied to the time series and table input.	None – must be specified.
`TableID`	Identifier for table that provides input.	None – must be specified.
`TableTSIDColumn`	Table column name that is used to match the time series identifier for processing.	None – must be specified.
`TableTSIDFormat`	The specification to format the time series identifier to match the TSID column. Use the format choices and other characters to define a unique identifier.	Time series alias if available, or otherwise the time series identifier.
`TableInput Column`	Table column name to retrieve the table value.	None – must be specified.
`IfTableInputIsBlank`	Action if time table input is blank during processing (no value to operate on).	`Warn`
`IfTSListIsEmpty`	Action if time series list is empty.	`Fail`

The delimited file corresponding to that used in the above dialog example is shown below. In this example, the time series identifiers have location parts with values `ts1` and `ts2`.

```
# Simple test data
"TSID","DataValue"
ts1,2
ts2,3
```