

# Command Reference: TableTimeSeriesMath()

## Perform simple math operation on time series using table input

Version 09.08.01, 2010-09-15

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.

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.

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

**Edit TableTimeSeriesMath() Command**

Perform a simple math operation on time series using matching input from a table.  
For example, multiply values in a time series by a value from a table.  
The table value is determined from a row with a matching time series identifier (TSID) and by specifying the column from which to get a value.

TS list:  Optional - indicates the time series to process (default=AllTS).

TSID (for TSList=AllMatchingTSID):

EnsembleID (for TSList=EnsembleID):

Math operator:  Required - math calculation to perform on input.

Table ID:  Required - table to process.

Table TSID column:  Required - column name for TSID.

Format of TSID:  Insert:  Optional - use %L for location, etc. (default=alias or TSID).

Table input column:  Required - column name for table input.

Command:  

```
TableTimeSeriesMath(TSList=AllMatchingTSID, TSID="ts1", Operator="*",  
TableID="Table1", TableTSIDColumn="TSID", TableTSIDFormat="%L", TableI  
nputColumn="DataValue")
```

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: <ul style="list-style-type: none"> <li>AllMatchingTSID – all time series that match the TSID (single TSID or TSID with wildcards).</li> <li>AllTS – all time series before the command.</li> <li>EnsembleID – all time series in the ensemble.</li> <li>FirstMatchingTSID – the first time series that matches the TSID (single TSID or TSID with wildcards).</li> <li>LastMatchingTSID – the last time series that matches the TSID (single TSID or TSID with wildcards).</li> <li>SelectedTS – the time series selected with the <code>SelectTimeSeries()</code> command.</li> </ul>	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.

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
```