

Command Reference: TimeSeriesToTable()

Copy one or more time series into a table

Version 09.05.00, 2009-10-06

The `TimeSeriesToTable()` command copies one or more time series into a table. The time series must be regular interval (no irregular interval time series) and the intervals must match. Currently the command can only be used to create a new table but in the future the command is envisioned to write into an existing table. This command is useful when performing table analysis processing and outputting table formats (e.g., with the `WriteTableToDelimitedFile()` command).

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

Edit TimeSeriesToTable() Command

Copy time series to an existing table (or optionally create a new table).
The date/times and data values will be put in columns of the table.
The time series must have the same data interval.

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

TSID (for TSList=AllMatchingTSID):

EnsembleID (for TSList=EnsembleID):

Table ID: Required - table identifier.

Date/time column in table: Required - column name for date/times.

Column(s) for data: Insert: Required - data column name(s) for 1+ time series.

First row for data: Required - row number (1+) for first data value.

Output start date/time: Optional (default=copy all).

Output end date/time: Optional (default=copy all).

Action if table not found: Optional (default is Warn).

Command:
`TimeSeriesToTable (TableID=TestTable, DateTimeColumn=Year, DataColumn=%L-%T, DataRow=1, IfTableNotFound="Create")`

Cancel OK

TimeSeriesToTable

TimeSeriesToTable() Command Editor

The command syntax is as follows:

`TimeSeriesToTable (Parameter=Value,...)`

Command Parameters

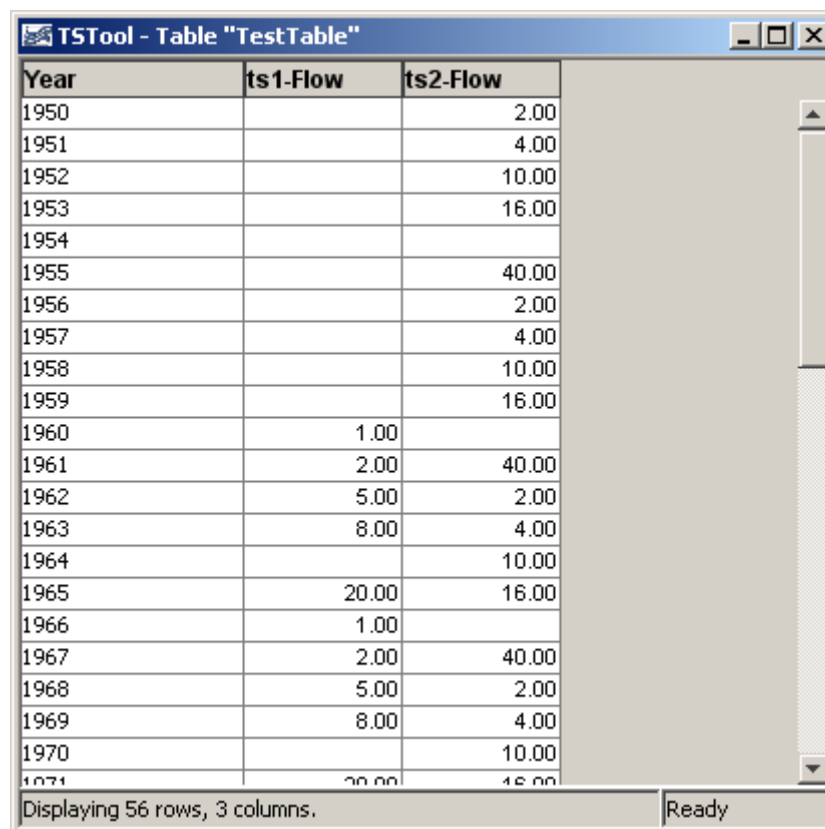
Parameter	Description	Default
TSList	Indicates the list of time series to be processed, one of: <ul style="list-style-type: none">AllMatchingTSID – all time series that match the TSID (single TSID or TSID with wildcards) will	AllTS

Parameter	Description	Default
	<p>be modified.</p> <ul style="list-style-type: none"> AllTS – all time series before the command. EnsembleID – all time series in the ensemble will be modified. FirstMatchingTSID – the first time series that matches the TSID (single TSID or TSID with wildcards) will be modified. LastMatchingTSID – the last time series that matches the TSID (single TSID or TSID with wildcards) will be modified. SelectedTS – the time series are those selected with the <code>SelectTimeSeries()</code> command. 	
TSID	The time series identifier or alias for the time series to be modified, using the * wildcard character to match multiple time series.	Required when <code>TSList=*TSID</code>
EnsembleID	The ensemble to be modified, if processing an ensemble.	Required when <code>TSList=EnsembleID</code> .
TableID	The identifier for the table to copy data into (or the identifier for the new table to create if <code>IfTableNotFound=Create</code>).	None – must be specified.
DateTimeColumn	The table column name to receive date/time information.	None – must be specified.
DataColumn	The data column name(s) to receive time series data. This parameter may in the future allow multiple names separated by a delimiter. However, multiple names are currently supported by using time series property format specifiers, available in a list of choices. These specifiers are consistent with other commands and the legend formatter in the graphing tool.	None – must be specified.
DataRow1	First table row for data (1+), where the row number is data only (column names are not considered a data row).	None – must be specified.
OutputStart	The starting date/time for the copy.	Available period.
OutputEnd	The ending date/time for the copy.	Available period.
IfTableNotFound	<p>Indicate action if the table identifier is not matched, one of:</p> <ul style="list-style-type: none"> Create – create a new table Warn – warn that the table was not matched 	Warn

A sample command file is as follows (this command file is used to verify the command during testing):

```
# Test copying annual time series to a table, and also create the table
StartLog(LogFile="Results/Test_TimeSeriesToTable_Year_Create.TSTool.log")
RemoveFile(InputFile="Results/Test_TimeSeriesToTable_Year_Create_out.csv",
  IfNotFound=Ignore)
TS ts1 = NewPatternTimeSeries(NewTSID="ts1..Flow.Year",SetStart="1960",
  SetEnd="2000",Units="ACFT",PatternValues="1,2,5,8,,20")
TS ts2 = NewPatternTimeSeries(NewTSID="ts2..Flow.Year",SetStart="1950",
  SetEnd="2005",Units="ACFT",PatternValues="2,4,10,16,,40")
TimeSeriesToTable(TableID=TestTable,DateTimeColumn=Year,DataColumn=%L-%T,
  DataRow=1,IfTableNotFound="Create")
# Generate the results.
WriteTableToDelimitedFile(TableID="TestTable",
  OutputFile="Results\Test_TimeSeriesToTable_Year_Create_out.csv")
# Uncomment the following to recreate expected results
# WriteTableToDelimitedFile(TableID="TestTable",
#   OutputFile="ExpectedResults\Test_TimeSeriesToTable_Year_Create_out.csv")
CompareFiles(InputFile1="ExpectedResults/Test_TimeSeriesToTable_out.csv",
  InputFile2="Results/Test_TimeSeriesToTable_Year_Create_out.csv",IfDifferent=Warn)
```

The resulting table will be listed in the **Tables** area of the TSTool interface and clicking on the TestTable identifier will display the table similar to the following:



Year	ts1-Flow	ts2-Flow
1950		2.00
1951		4.00
1952		10.00
1953		16.00
1954		
1955		40.00
1956		2.00
1957		4.00
1958		10.00
1959		16.00
1960	1.00	
1961	2.00	40.00
1962	5.00	2.00
1963	8.00	4.00
1964		10.00
1965	20.00	16.00
1966	1.00	
1967	2.00	40.00
1968	5.00	2.00
1969	8.00	4.00
1970		10.00
1971	20.00	16.00

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