
Command Reference: SplitTableRow()

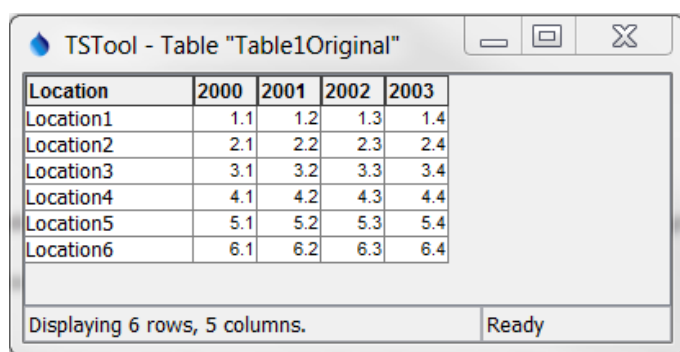
Split a table row into multiple rows

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The `SplitTableRow()` command uses information from a table row to create a sequence of new table rows. The new rows are inserted after the original row, which optionally can be deleted from the table after processing. The table rows can be split using either “tuple” or “measure” approach as described below:

Tuple Split

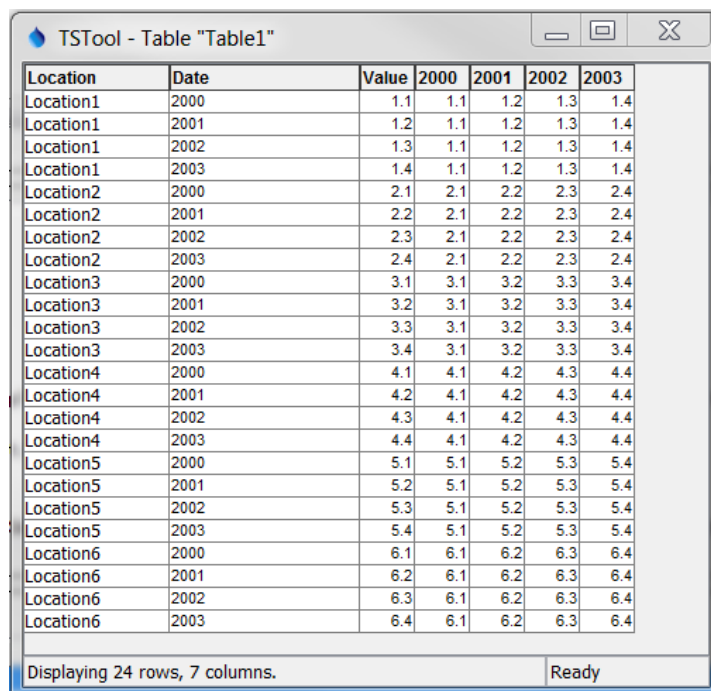
A “tuple” is a sequence of related values and contain 1 or more grouped values. For example, the following figure illustrates annual time series values listed horizontally in each row.



Location	2000	2001	2002	2003
Location1	1.1	1.2	1.3	1.4
Location2	2.1	2.2	2.3	2.4
Location3	3.1	3.2	3.3	3.4
Location4	4.1	4.2	4.3	4.4
Location5	5.1	5.2	5.3	5.4
Location6	6.1	6.2	6.3	6.4

SplitTableRow_TupleInput

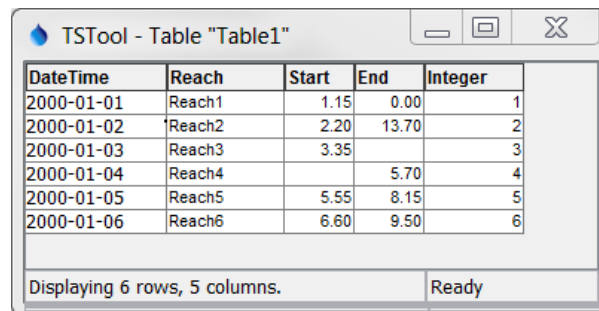
This command can split the data into the following representation, which is more conducive to time series processing (for example use the `TableToTimeSeries()` command to convert the results to time series that can be processed in TSTool).



Location	Date	Value	2000	2001	2002	2003
Location1	2000	1.1	1.1	1.2	1.3	1.4
Location1	2001	1.2	1.1	1.2	1.3	1.4
Location1	2002	1.3	1.1	1.2	1.3	1.4
Location1	2003	1.4	1.1	1.2	1.3	1.4
Location2	2000	2.1	2.1	2.2	2.3	2.4
Location2	2001	2.2	2.1	2.2	2.3	2.4
Location2	2002	2.3	2.1	2.2	2.3	2.4
Location2	2003	2.4	2.1	2.2	2.3	2.4
Location3	2000	3.1	3.1	3.2	3.3	3.4
Location3	2001	3.2	3.1	3.2	3.3	3.4
Location3	2002	3.3	3.1	3.2	3.3	3.4
Location3	2003	3.4	3.1	3.2	3.3	3.4
Location4	2000	4.1	4.1	4.2	4.3	4.4
Location4	2001	4.2	4.1	4.2	4.3	4.4
Location4	2002	4.3	4.1	4.2	4.3	4.4
Location4	2003	4.4	4.1	4.2	4.3	4.4
Location5	2000	5.1	5.1	5.2	5.3	5.4
Location5	2001	5.2	5.1	5.2	5.3	5.4
Location5	2002	5.3	5.1	5.2	5.3	5.4
Location5	2003	5.4	5.1	5.2	5.3	5.4
Location6	2000	6.1	6.1	6.2	6.3	6.4
Location6	2001	6.2	6.1	6.2	6.3	6.4
Location6	2002	6.3	6.1	6.2	6.3	6.4
Location6	2003	6.4	6.1	6.2	6.3	6.4

Measure Split

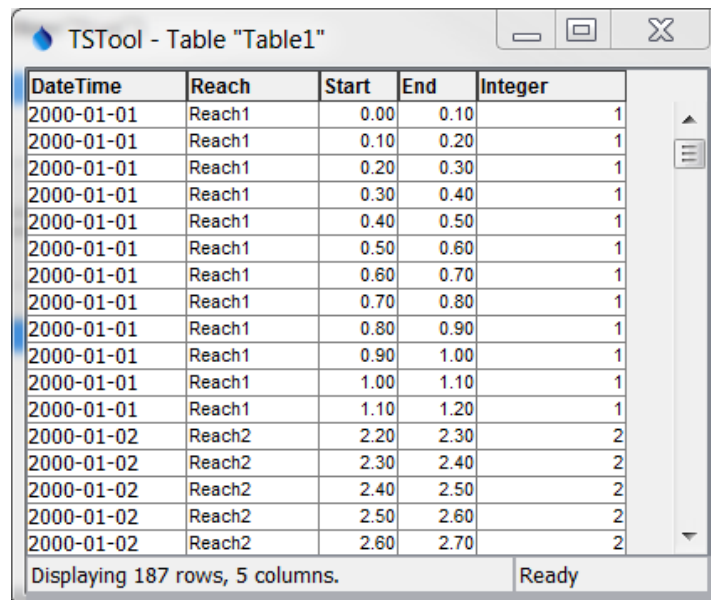
A measure split is used to split a longer distance into shorter segments. Start and end values in the row are used to create segmented row distances. For example, this can be used to break a streamflow reach into segments of equal length, for example “stream mile” segments as shown in the following example. The first table illustrates input and the second the table after modification (original rows are deleted). The start and end columns can be specified in any order but the output is always with the smaller value as the start.



TSTool - Table "Table1"

DateTime	Reach	Start	End	Integer
2000-01-01	Reach1	1.15	0.00	1
2000-01-02	Reach2	2.20	13.70	2
2000-01-03	Reach3	3.35		3
2000-01-04	Reach4		5.70	4
2000-01-05	Reach5	5.55	8.15	5
2000-01-06	Reach6	6.60	9.50	6

Displaying 6 rows, 5 columns. Ready



TSTool - Table "Table1"

DateTime	Reach	Start	End	Integer
2000-01-01	Reach1	0.00	0.10	1
2000-01-01	Reach1	0.10	0.20	1
2000-01-01	Reach1	0.20	0.30	1
2000-01-01	Reach1	0.30	0.40	1
2000-01-01	Reach1	0.40	0.50	1
2000-01-01	Reach1	0.50	0.60	1
2000-01-01	Reach1	0.60	0.70	1
2000-01-01	Reach1	0.70	0.80	1
2000-01-01	Reach1	0.80	0.90	1
2000-01-01	Reach1	0.90	1.00	1
2000-01-01	Reach1	1.00	1.10	1
2000-01-01	Reach1	1.10	1.20	1
2000-01-02	Reach2	2.20	2.30	2
2000-01-02	Reach2	2.30	2.40	2
2000-01-02	Reach2	2.40	2.50	2
2000-01-02	Reach2	2.50	2.60	2
2000-01-02	Reach2	2.60	2.70	2

Displaying 187 rows, 5 columns. Ready

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

Edit SplitTableRow() Command

This command takes information from a single table row and creates a sequence of rows, depending on approach.

Table ID: Required - table to process.

Delete original row: Optional - delete original row (default=False).

Column Tuples:

Tuples are groups of related columns that can be reorganized into more general column names.
For example, specify column tuples as Column1,ColumnA;Column2,ColumnB;Column3,ColumnC
and specify new column tuples as NewColumn1,NewColumnA.
Column1, Column2, and Column3 values will then be aligned under new NewColumn1
and ColumnA, ColumnB, and ColumnC values will be aligned under new NewColumnA.
If transposing multiple columns into a single column the TupleColumns will list original columns and the NewTupleColumns will list the single new column.

Tuple columns: Required - names of columns in each input tuple.

Tuple date/times: Optional - date/times for each input tuple.

New tuple columns: Required - names of columns in new general tuple.

New tuple date/time column: Optional - name of general column to add for tuple date/time.

Column to insert before: Optional - column to insert before (default=insert at end).

Command:

```
SplitTableRow(TableID="Table1", TupleColumns="2000;2001;2002;2003", TupleDateTimes="2000,2001,2002,2003", NewTupleColumns="Value", NewTupleDateTimeColumn="Date", InsertBeforeColumn="2000", DeleteOriginalRow="True")
```

SplitTableRow_Tuple

SplitTableRow() Command Editor for Tuple Split

Edit SplitTableRow() Command

This command takes information from a single table row and creates a sequence of rows, depending on approach.

Table ID: Required - table to process.

Delete original row: Optional - delete original row (default=False).

Column Tuples:

Create the row sequence by using an input row with start and end measure, for example stream reach endpoint distances.
The output will be a sequence of rows, each with start and end measures that are increments of the full reach length.
The other column values from the original row are duplicated in the new rows.

Measure start column: Required - name of column containing measure.

Measure end column: Required - name of column containing measure.

Measure increment: Required - measure increment.

Minimum start segment length: Optional - minimum segment length (default=include start segment).

Minimum end segment length: Optional - minimum segment length (default=include end segment).

Command:

```
SplitTableRow(TableID="Table1", MeasureStartColumn="Start", MeasureEndColumn="End", MeasureIncrement=.1, MinimumStartSegmentLength=".049", MinimumEndSegmentLength=".049", DeleteOriginalRow="True")
```

SplitTableRow

SplitTableRow() Command Editor for Measure Split

The command syntax is as follows:

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

Command Parameters

Parameter	Description	Default
TableID	The identifier for the table.	None – must be specified.
DeleteOriginalRow	Indicate whether the original table row should be deleted as False or True. Specify True if the generated sequence of rows should replace the original row.	False
TupleColumns	The names of columns in each tuple, where the tuple groups are separated by semi-colons and the columns within the tuple are separated by commas. For a 1-tuple: Column1;Column;Column3 For a 2-tuple: Column1a,Column1b;Column2a,Column2b	None – must be specified for tuple approach.
TupleDateTimes	The date/times corresponding to each tuple, which will be matched with values inserted into the NewTupleDateTimeColumn.	No date/time is associated with tuples.
NewTupleColumns	The output columns to be used when splitting the tuples. For a 1-tuple: NewColumn1 For a 2-tuple: NewColumn1,NewColumn2	None – must be specified for tuple approach.
NewTupleDateTimeColumn	If TupleDateTimes is specified, this column will be filled with a data/time corresponding to each input tuple.	No date/time output.
InsertBeforeColumn	Indicate the name of the column before which to insert new columns. Currently this is used only with tuples.	Append at end.
MeasureStartColumn	The name of the table column for the starting measure.	None – must be specified.
MeasureEndColumn	The name of the table column for the ending measure.	None – must be specified.
MeasureIncrement	The measure increment used to split the original distance into segments (e.g., .1).	None – must be specified.
MinimumStartSegmentLength	The minimum length of the starting segment to include.	Include start segment.
MinimumEndSegmentLength	The minimum length of the ending segment to include.	Include end segment.