Command Reference: SetTimeSeriesValuesFromLookupTable()

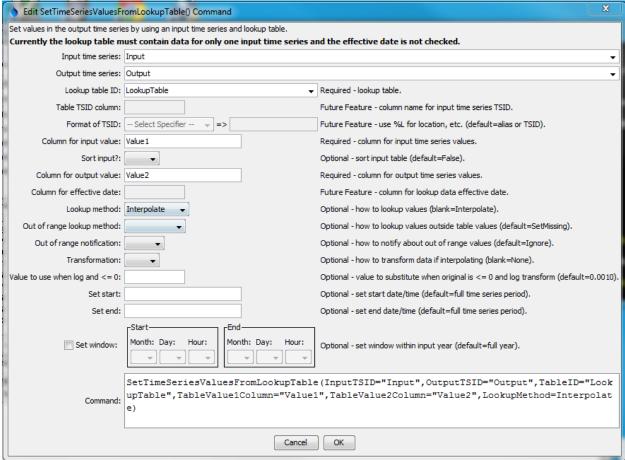
Set time series values by using an input time series and a lookup table

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The SetTimeSeriesValuesFromLookupTable () command uses an input time series and lookup table to set values in the output time series. Examples of using this command include:

- Converting reservoir elevation to storage, surface area, seepage, or other values
- Converting river stage to discharge
- Converting a time series to category values
- Lookup up values from a distribution

In many cases the lookup table will apply throughout the analysis period. The values in the table should be sorted in ascending order prior to lookup. This command currently does not handle rating table shifts; however, this capability may be added in the future. The following dialog is used to edit the command and illustrates the syntax of the command:



SetTimeSeriesValuesFromLookupTable

SetTimeSeriesValuesFromLookupTable() Command Editor

The command syntax is as follows:

SetTimeSeriesValuesFromLookupTable(Parameter=Value,...)

Command Parameters

Parameter	Description	Default
InputTSID	The time series identifier or alias for the time series used as	None – must be
	input.	specified.
OutputTSID	The time series identifier for the time series being modified.	None – must be
	Use the <i>Edit</i> button to edit the time series identifier parts.	specified.
TableID	The lookup table identifier.	None – must be
		specified.
Table	Table column name that is used to match the time series	If not specified,
TSIDColumn	identifier for processing. This parameter currently is not	it is assumed
	supported but will be enabled in the future.	that the entire
		lookup table
		applies.
Table	The specification to format the time series identifier to	Time series
TSIDFormat	match the TableTSIDColumn column. This parameter	alias if
	currently is not supported but will be enabled in the	available, or
	future.	otherwise the
		time series
m 1 1	m11 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	identifier.
Table	Table column name for data values that correspond to the	None – must be
Value1Column	input time series (InputTSID).	specified.
SortInput	Whether to sort the lookup table. The order is checked to	Rely on table
	ensure the data are sorted but forcing the sort when not	being sorted.
m 1 1	needed is a performance hit.	XY 1
Table	Table column name for data values that correspond to the	None – must be
Value2Column	output time series identifier (OutputTSID).	specified.
Effective	Table column name for the effective date. This parameter	The lookup data
DateColumn	currently is not supported but will be enabled in the	apply to the
T 1 26 + 1 1	future.	entire period.
LookupMethod	Indicate how to select the value to use for output:	Interpolate
	• Interpolate – interpolate between points if input	
	values do not exactly align with table values; if	
	Transformation=Log, then interpolation will use	
	the transformed values	
	• PreviousValue – pick the previous (lower) value in	
	the table (exact matches use the lookup table value)	
	• NextValue – pick the next (higher) value in the table	
	(exact matches use the lookup table value)	
OutOfRange	Indicate the value to use when estimating values that are	SetMissing
LookupMethod	outside the range of the rating table:	
	• Extrapolate – use the two known values at the end	
	of the table to extrapolate; if	
	Transformation=Log, then extrapolation will use	
	the transformed values	

Parameter	Description	Default
	• SetMissing – set output to missing	
	• UseEndValue – use the data value on the end	
OutOfRange	Indicate the notification to generate when a value is outside	Ignore
Notification	the range of the lookup table:	
	• Ignore – do not generate warning or failure message	
	• Warn – generate a warning message	
	• Fail – generate a failure message	
Transformation	Indicates how to transform the data before interpolation,	None (no
	used when LookupMethod=Interpolate and	transformation).
	OutOfRangeMethod=Extrapolate). Specify as	
	None to compare raw values or Log (for log10) to	
	transform values before interpolation and extrapolation. If	
	the Log option is used, zero and negative values are	
	replaced with the value specified by the	
	LEZeroLogValue parameter value for analysis (missing	
	data values are ignored in the analysis).	
LEZero	Value to use for data values less than or equal to zero when	.0010
LogValue	using a log transformation.	
SetStart	The date/time to start setting values.	Set the full
0 1 7 1		period.
SetEnd	The date/time to end setting values.	Set the full period.
SetWindowStart	The calendar date/time for the set start within each year.	Output the full
Setwindowstart	Specify using the format MM, MM-DD, MM-DD hh, or MM-	year.
	DD hh: mm, consistent with the time series interval	year.
	precision. A year of 2000 will be used internally to parse	
	the date/time. Use this parameter to limit data processing	
	within the year, for example to output only a single month	
	or a season.	
SetWindowEnd	Specify date/time for the output end within each year. See	Output the full
	SetWindowStart for details.	year.

TSTool Documentation

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