## Command Reference: NewTimeSeries()

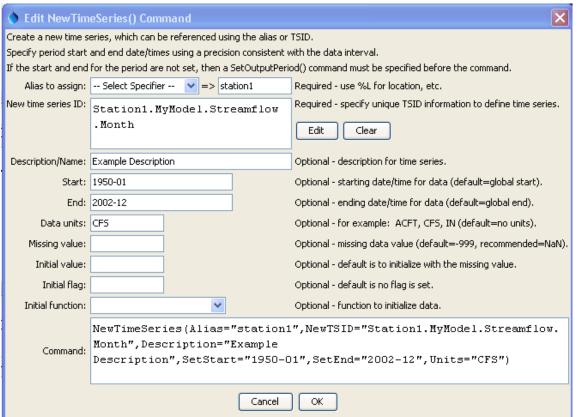
## Create a new time series

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The NewTimeSeries () command creates a new time series and assigns it an alias. The command is useful, for example, to create a new time series to receive the results of a series of manipulations, rather than having the results accumulate in the first time series. See also the

NewPatternTimeSeries () command, which initializes a time series with a repeating pattern of values. Subsequent manipulation of the time series may require use of the

SetTimeSeriesProperty() and other commands to ensure that the new time series properties are as desired. The following dialog is used to edit the command and illustrates the syntax for the command. The new time series identifier, which provides critical information including the data interval, is edited by pressing the *Edit* button.



NewTimeSeries() Command Editor

NewTimeSeries

The command syntax is as follows:

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

The following older command syntax is updated to the above syntax when a command file is read:

```
TS Alias = NewTimeSeries(Parameter=Value,...)
```

## **Command Parameters**

Parameter	Description	Default
Alias	The alias to assign to the time series, as a literal string or	None – must be specified.
	using the special formatting characters listed by the	1
	command editor. The alias is a short identifier used by	
	other commands to locate time series for processing, as an	
	alternative to the time series identifier (TSID). Can be	
	specified using processor \${Property}.	
NewTSID	The time series identifier of the new time series. The	None – must be specified with at
	editor dialog formats the identifier from its parts. Can be	least minimal information
	specified using processor \${Property}.	(location, data type, and interval).
Description	The description for the time series, used in output. Can be	Blank.
	specified using processor \${Property}.	
SetStart	The start of the time series data period. Can be specified	Use the start from
	using processor \${Property}.	SetOutputPeriod().
SetEnd	The end of the time series data period. Can be specified	Use the end from
	using processor \${Property}.	SetOutputPeriod().
Units	Data units for the time series. Can be specified using	Blank.
	<pre>processor \${Property}.</pre>	
MissingValue	Value for missing data values999 is the default for	-999
	historical reasons; however, NaN (not a number) is being	
	phased in and should be specified if possible. Can be	
	specified using processor \${Property}.	
InitialValue	The value to initialize the time series. Can be specified	Initialize the time series to
	using processor \${Property}.	missing data.
InitialFlag	The initial flag value to initialize the time series. Can be	No flag is set.
	specified using processor \${Property}.	
Initial	The function to use to initialize time series data values.	Initialize the time series to
Function	This parameter can be used to generate data for testing to	missing data.
	simplify visual inspection of results.	
	• DATE_YYYY – 4-digit year	
	• DATE_YYYYMM – and month	
	DATE YYYYMMDD – year, month, and day	
	• DATE YYYYMMDD hh – year, month, and day, with	
	decimal as hour	
	• DATE YYYYMMDD hhmm – year, month, and day,	
	with decimal as hour and minute	
	• RANDOM 0 1 – random number $\geq$ 0 and < 1	
	• RANDOM 0 1000 – random number $\geq$ 0 and $<$ 1000	

The example command file shown below creates a new time series and initializes it to a constant of 20 CFS. Uncommenting the first command would allow the SetStart and SetEnd parameters to be removed from the NewTimeSeries () command.

#SetOutputPeriod(OutputStart="1950-01",OutputEnd="2002-12")
NewTimeSeries(Alias="station1",NewTSID="Station1.MyModel.Streamflow.Month",
 Description="Example Description",SetStart="1950-01",
 SetEnd="2002-12",Units="CFS",InitialValue=20)