

Command Reference: ShiftTimeByInterval()

Shift time series data by one or more time intervals

Version 11.03.00, 2015-06-01

The `ShiftTimeByInterval()` command shifts a time series in time. This command can be used to perform a simple shift (e.g., to shift hourly data because the `Disaggregate()` command did not result in data being set at the desired hours) and to perform simple routing.

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

Edit ShiftTimeByInterval() Command

Shift a time series by factoring time step values (e.g., to lag a streamflow time series).
The shift data consists of interval offset and weight pairs. For example:
-2,1.0
shifts the data from interval i-2 to interval i (no weighting).
The example:
0,.5,1,.5
shifts the data by setting the value at i to .5 its previous value + .5 the i+1 value.
Specify as many pairs as needed. The period is not automatically extended.
The resulting value is set to missing if one or more input values are missing.

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

TSID (for TSList=AllMatchingTSID):

EnsembleID (for TSList=EnsembleID):

Shift offset, weight pairs:

Command:
`ShiftTimeByInterval (TSList=AllMatchingTSID,TSID="08213500.DWR.Streamflow.Day",ShiftData="-1,1")`

ShiftTimeByInterval

ShiftTimeByInterval() Command Editor

The command syntax is as follows:

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

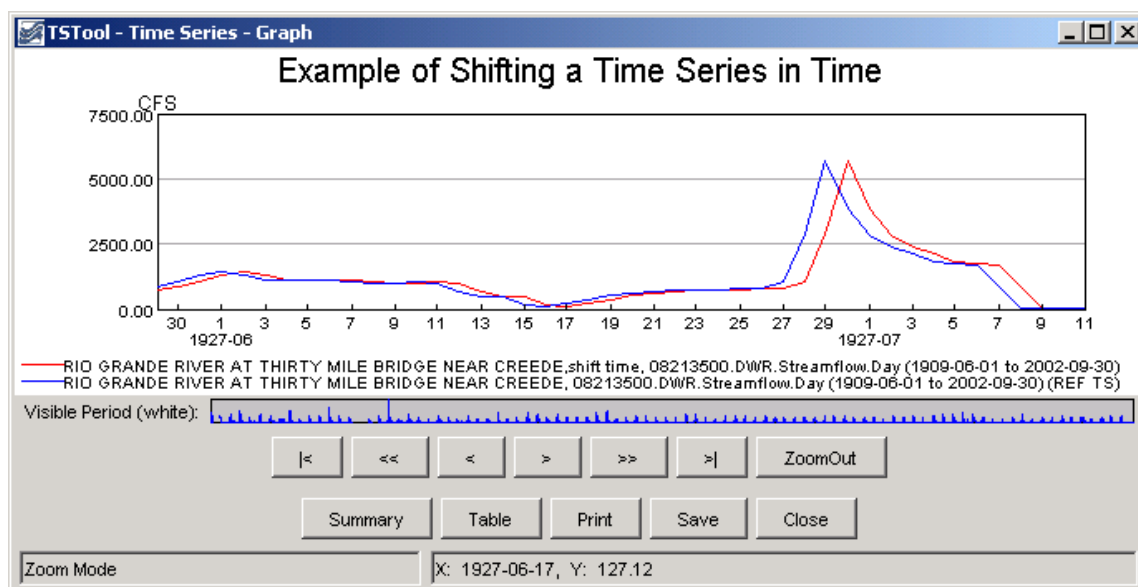
Command Parameters

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 be modified.AllTS – all time series before the command.EnsembleID – all time series in the ensemble will be modified.	AllTS

Parameter	Description	Default
	<ul style="list-style-type: none"> 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 SelectTimeSeries() command. 	
TSID	The time series identifier or alias for the time series to be modified, using the * wildcard character to match multiple time series. Can be specified using processor \${Property}.	TSID or EnsembleID must be specified if identifiers are being matched.
EnsembleID	The ensemble to be modified, if processing an ensemble. Can be specified using processor \${Property}.	TSID or EnsembleID must be specified if identifiers are being matched.
ShiftData	Interval,multiplier tuples to apply to the data to perform the shift. All values should be separated by commas. An interval of -1 indicates that the previous time step should be shifted to the current time step. If the interval is -1 and the multiplier is 1, the previous time step is shifted to the current and multiplied by 1, effectively shifting the time series by one interval.	None – at least 1 value,multiplier tuple must be specified.

A sample command file to shift data from the State of Colorado's HydroBase is as follows:

```
# 08213500 - RIO GRANDE RIVER AT THIRTY MILE BRIDGE NEAR CREEDE
08213500.DWR.Streamflow.Day~HydroBase
ShiftTimeByInterval (TSList=AllMatchingTSID,TSID="08213500.DWR.Streamflow.Day",
  ShiftData="-1,1")
08213500.DWR.Streamflow.Day~HydroBase
```



ShiftTimeByInterval_graph

Results from ShiftTimeByInterval() Command