
Command Reference:

fillDayTSFrom2MonthTSAnd1DayTS()

Fill Daily Time Series from Monthly Volumes and Daily Pattern

Version 06.08.02, 2004-07-29, Color, Acrobat Distiller

The `fillDayTSFrom2MonthTSAnd1DayTS()` command fills a daily time series using the following relationship:

$$D1_i = D2_i * (M1_i / M2_i)$$

where:

i = interval

D1 is the daily data at point1

M1 is the monthly data at point1

D2 is the daily data at point2

M2 is the monthly data at point2

This fill method assumes the monthly time series are filled and reasonably correlated and that the daily pattern D2 can be applied at D1. For example, use this command to fill daily streamflow where filled monthly data are available at nearby locations and filled daily data is available at the independent (D2) station. There is currently no way to limit the fill operation to a period (the entire time series is filled).

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

Edit fillDayTSFrom2MonthTSAnd1DayTS() Command

Fill a daily time series using the relationship $D1[i] = D2[i] * M1[i] / M2[i]$.

The monthly values give an average estimate of the volume ratio and d2 provides an estimate of the daily pattern.

Daily Time Series to Fill (D1):

Associated Monthly Time Series (M1):

Monthly Time Series for Total (M2):

Daily Time Series for Distribution (D2):

Command:

fillDayTSFrom2MonthTSAnd1DayTS

fillDayTSFrom2MonthTSAnd1DayTS() Command Editor

The command syntax is as follows:

```
fillDayTSFrom2MonthTSAnd1DayTS (TSID_D1,TSID_M1,TSID_M2,TSID_D2)
```

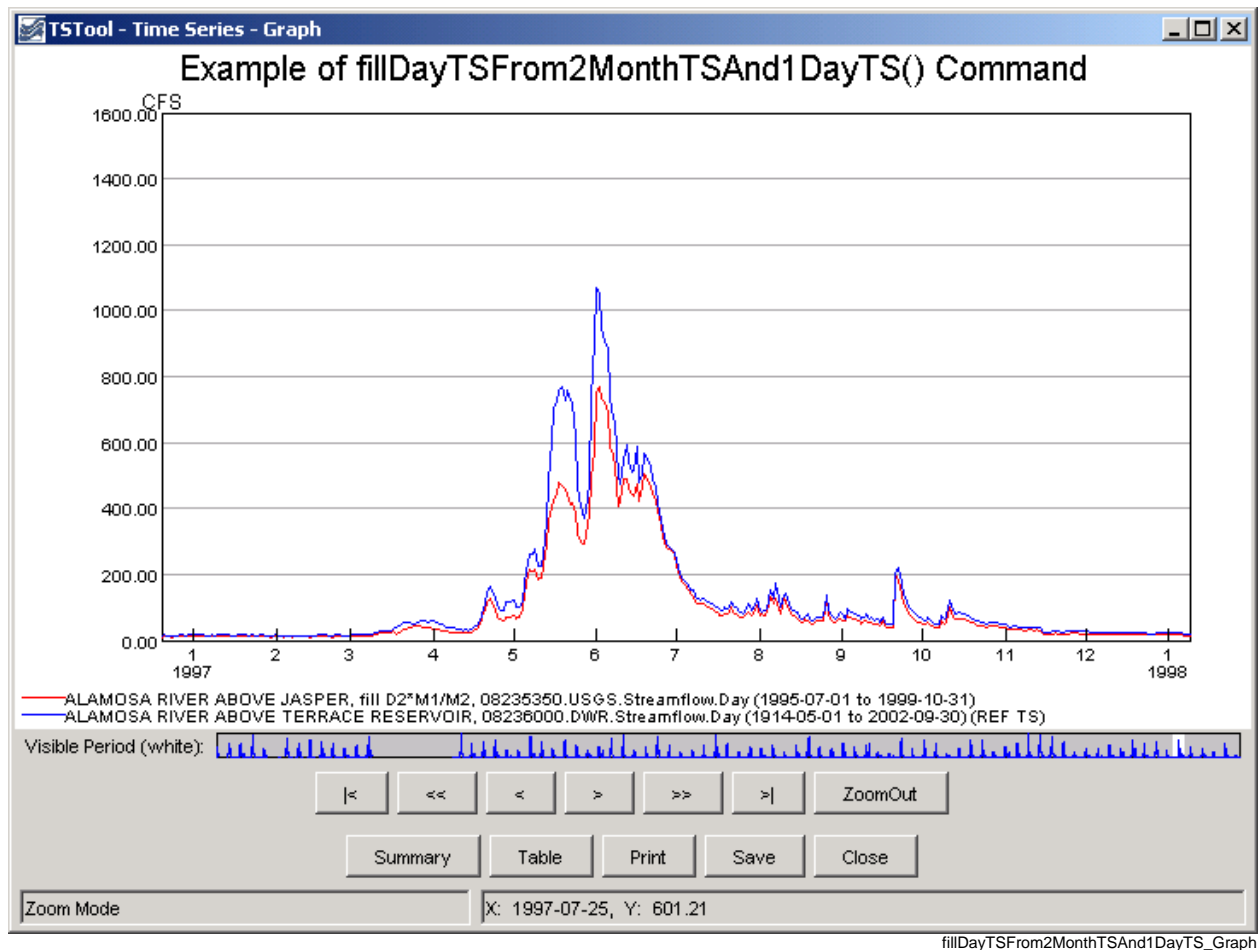
Command Parameters

Parameter	Description	Default
TSID_D1	The time series identifier or alias for the daily time series to be filled.	None – must be specified.
TSID_M1	The time series identifier or alias for the monthly time series, corresponding to TSID_D1, to supply the monthly values to be distributed to daily.	None – must be specified.
TSID_M2	The time series identifier or alias for the independent monthly time series.	None – must be specified.
TSID_D2	The time series identifier or alias for the independent daily time series, corresponding to TSID_M2.	None – must be specified.

An example commands file is shown below with the resulting graph of daily time series.

```
#
# Test fillDayTSFrom2MonthTSAnd1DayTS:  D1 = D2*M1/M2
#
# SAM, RTi, 2001-02-25
#
# The following is D1:
# (1995-1998) ALAMOSA RIVER ABOVE JASPER, CO  USGS  Streamflow
Daily
08235350.USGS.Streamflow.Day~HydroBase
# The following is M1:
# (1995-1998) ALAMOSA RIVER ABOVE JASPER, CO  USGS  Streamflow
Monthly
08235350.USGS.Streamflow.Month~HydroBase
# The following is D2:
# (1914-1998) ALAMOSA RIVER ABOVE TERRACE RESERVOIR, CO.  DWR
Streamflow  Daily
08236000.DWR.Streamflow.Day~HydroBase
# The following is M2:
# (1914-1998) ALAMOSA RIVER ABOVE TERRACE RESERVOIR, CO.  DWR
Streamflow  Monthly
08236000.DWR.Streamflow.Month~HydroBase
fillRegression(08235350.USGS.Streamflow.Month,08236000.DWR.Stream
flow.Month,OneEquation,Linear,*,*,*,*)
fillDayTSFrom2MonthTSAnd1DayTS(08235350.USGS.Streamflow.Day,
08235350.USGS.Streamflow.Month,08236000.DWR.Streamflow.Month,
08236000.DWR.Streamflow.Day)
```

The following graph shows the two daily time series used in the command (zoomed in). Note that the shape of the filled time series is similar to the other time series.



Example of Filled Data