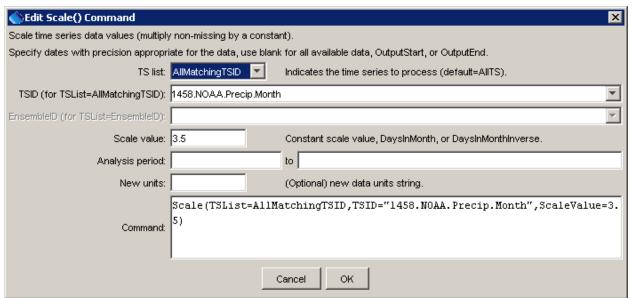# Command Reference: Scale()

Scale time series data values by a constant value

Version 08.15.00, 2008-05-11

The `Scale()` command scales each non-missing value in the specified time series.

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

Scale() Command Editor

The command syntax is as follows:

    Scale(Parameter=Value,…)

Command Parameters

Parameter	Description	Default
TSList	Indicates the list of time series to be processed, one of: • `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. • `LastMatchingTSID` – the last time series that matches the `TSID` (single TSID or TSID with wildcards) will be modified. • `SelectedTS` – the time series are those	`AllTS`

Parameter	Description	Default
	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.	`TSID` or `EnsembleID` must be specified if identifiers are being matched.
EnsembleID	The ensemble to be modified, if processing an ensemble.	`TSID` or `EnsembleID` must be specified if identifiers are being matched.
ScaleValue	One of the following: • The numerical value to scale to the time series. • `DaysInMonth` to indicate a scale of the number of days in the month. • `DaysInMonthInverse` to indicate a scale of the inverse of the number of days in the month.	None – must be specified.
AnalysisStart	The date/time to start analyzing data.	Full period is analyzed.
AnalysisEnd	The date/time to end analyzing data.	Full period is analyzed.
NewUnits	New data units for the resulting time series.	Do not change the units.

The following example scales a precipitation time series from the State of Colorado's HydroBase by a factor of 3.5:

```
# 1458 – CENTER 4 SSW
1458.NOAA.Precip.Month~HydroBase
Scale(TSList=AllMatchingTSID,TSID="1458.NOAA.Precip.Month",ScaleValue=3.5)
```

The following example scales a monthly streamflow time series with units of ACFT (volume per month) in order to convert the data to average CFS flow values (note that two scale commands are required because the `DaysInMonthInverse` value cannot currently be combined with a numerical value in one command). See also the `ConvertDataUnits()` command for simple units conversions.

```
# 06754000 – SOUTH PLATTE RIVER NEAR KERSEY
06754000.DWR.Streamflow.Month~HydroBase
Scale(TSList=AllMatchingTSID,TSID="06754000.DWR.Streamflow.Month",
  ScaleValue=.5042)
Scale(TSList=AllMatchingTSID,TSID="06754000.DWR.Streamflow.Month",
  ScaleValue=DaysInMonthInverse,NewUnits="CFS")
06754000.DWR.Streamflow.Month~HydroBase
```