# **DayMonth Sample**

# Description and usage

Samples a multi-year time series to produce only a single data point per year using the T0 day Month to determine the sampling moment.

#### Example

Input series 1:

multi-year (1975-1977) timeseries with daily time step, values available at 00:00h

Input series 2:

multi-year (1975-1977) timeseries with monthly time step, values available at 1st of the Month, 00:00h

Input series 3:

multi-year (1975-1977) timeseries with daily time step, values available at 12:00h

T0=01-01-2010 00:00h

Output series 1:

non-equidistant timeseries with values at 01-01-1975, 01-01-1976, 01-01-1977 all 00:00h

Output series 2:

non-equidistant timeseries with values at 01-01-1975, 01-01-1976, 01-01-1977 all 00:00h

Output series 3:

non-equidistant timeseries with missing values at 01-01-1975, 01-01-1976, 01-01-1977 all 00:00h

T0=01-01-2010 12:00h

Output series 1:

non-equidistant time series with missing values at 01-01-1975, 01-01-1976, 01-01-1977 all 12:00h

Output series 2:

non-equidistant time series with missing values at 01-01-1975, 01-01-1976, 01-01-1977 all 12:00h

Output series 3:

non-equidistant time series with values at 01-01-1975, 01-01-1976, 01-01-1977 all 12:00h

T0=03-02-2010 00:00h

Output series 1:

non-equidistant time series with values at 03-02-1975, 03-02-1976, 03-02-1977 all 00:00h

Output series 2:

non-equidistant time series with missing values at 03-02-1975, 03-02-1976, 03-02-1977 all 00:00h

Output series 3:

non-equidistant time series with values at 01-01-1975, 01-01-1976, 01-01-1977 all 00:00h

h.5 Input/Output timeseries

Input data are a multi year time series.

Output is a timeseries having values at the dayMonth corresponding to T0. The output has to be non-equidistant time series to accommodate shifting sampling times while T0 is moving over time.

The output timeseries will hold missing values if the input timeseries has missing values at the exact same dayMonth 00:00h.

## Configuration

This function can be used in the transformation module as well as in the TimeseriesDisplay.

Configuration in the transformation module

inputVariable

required element defining the identifier of the input time series with multi-year data. This ID must reference a valid input time series

outputVariable

required element defining the identifier of the output time series with data sampled by the dayMonth of T0. This ID must reference a valid non-equidistant output time series

#### Example

Configuration as a dropdown statistics box in the timeseriesdisplay

### Example

### Remark:

The dayMonthSample sample function was produced for use with the PCA and Regression Transformation to conduct multi-year regression analysis.