

# extrapolateBase

## Extrapolate base

### Input

- inputVariable

### Options

- maxGapLength

### Base value

- baseValue

### Window

- window

### Output

- outputVariable

### Description

This transformation will extrapolate by adding future values that start at the last data value and linearly approach a given base value. Optional maxGapLength is in number of time steps. Gaps equal to or smaller than maxGapLength will be filled with interpolated values. Gaps larger than maxGapLength will not be filled. If maxGapLength is not defined, then all gaps will be filled with interpolated values.

### Configuration example

```

<?xml version="1.0" encoding="UTF-8"?>
<transformationModule version="1.0" xmlns="http://www.wldelft.nl/fews" xmlns:xsi="http://www.w3.org/2001
/XMLSchema-instance" xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0
/transformationModule.xsd">
    <!--Input time series-->
    <variable>
        <variableId>Input</variableId>
        <timeSeriesSet>
            <moduleId>ImportDatabase</moduleId>
            <valueType>scalar</valueType>
            <parameterId>P.obs.6</parameterId>
            <locationSetId>RainGauges_HuangChuan</locationSetId>
            <timeSeriesType>external historical</timeSeriesType>
            <timeStep unit="hour" multiplier="6"/>
            <relativeViewPeriod unit="day" start="-16" end="0"/>
            <readWriteMode>add originals</readWriteMode>
        </timeSeriesSet>
    </variable>
    <!--Output time series-->
    <variable>
        <variableId>Output</variableId>
        <timeSeriesSet>
            <moduleId>HuangChuan_Update_Pre</moduleId>
            <valueType>scalar</valueType>
            <parameterId>P.obs.6</parameterId>
            <locationSetId>RainGauges_HuangChuan</locationSetId>
            <timeSeriesType>external historical</timeSeriesType>
            <timeStep unit="hour" multiplier="6"/>
            <relativeViewPeriod unit="day" start="-16" end="0"/>
            <readWriteMode>add originals</readWriteMode>
        </timeSeriesSet>
    </variable>
    <!--Transformations-->
    <transformation id="extrapolateBase">
        <interpolationSerial>
            <extrapolateBase>
                <inputVariable>
                    <variableId>Input</variableId>
                </inputVariable>
                <maxGapLength>10</maxGapLength>
                <baseValue>6</baseValue>
                <window unit="day" multiplier="2"/>
                <outputVariable>
                    <variableId>Output</variableId>
                </outputVariable>
            </extrapolateBase>
        </interpolationSerial>
    </transformation>
</transformationModule>

```

