

Selection Ensemble Member by Index

Description

This selection ensemble member by index transformation takes the value of the ensemble member that matches its index with the value of a provided time series. Inputs are an ensemble with multiple time series and a time series with indices. Output is one time series.

Some notes as to behaviour:

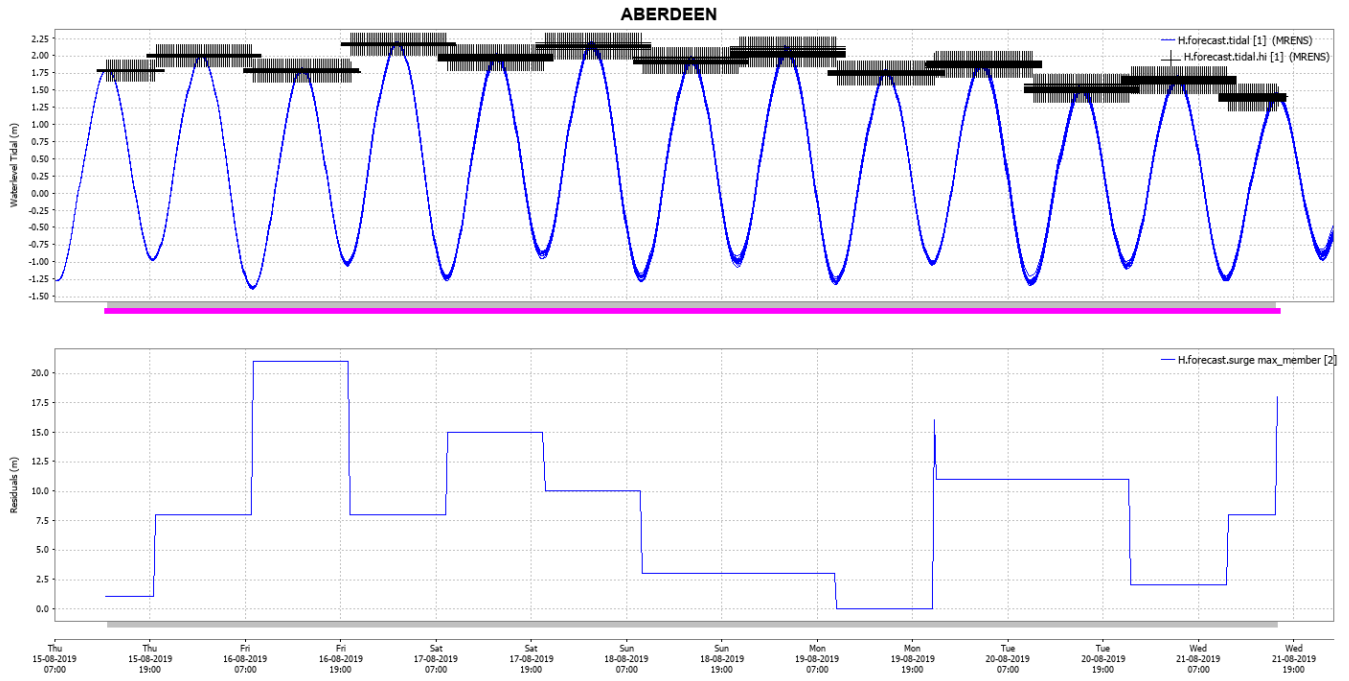
- Missing values in the index time series result in missing values in the output time series.
- Index values for which no matching ensemble member is found result in missing values in the output time series

Example

Statistics Ensemble Member Index Of Max

```
<?xml version="1.0" encoding="UTF-8"?>
<transformationModule version="1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.wldelft.nl/fews"
xsi:schemaLocation="http://www.wldelft.nl/fews http://fews.wldelft.nl/schemas/version1.0
/transformationModule.xsd">
  <variable>
    <variableId>inputMemberIndex</variableId>
    <timeSeriesSet>
      <moduleInstanceId>InputModuleInstance</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>index</parameterId>
      <locationId>H-2001</locationId>
      <timeSeriesType>external forecasting</timeSeriesType>
      <timeStep unit="day"/>
      <relativeViewPeriod unit="day" start="-4" end="0"/>
      <readWriteMode>add originals</readWriteMode>
    </timeSeriesSet>
  </variable>
  <variable>
    <variableId>inputEnsemble</variableId>
    <timeSeriesSet>
      <moduleInstanceId>InputModuleInstance</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>Q.forecast</parameterId>
      <locationId>H-2001</locationId>
      <timeSeriesType>external forecasting</timeSeriesType>
      <timeStep unit="day"/>
      <relativeViewPeriod unit="day" start="-4" end="0"/>
      <readWriteMode>add originals</readWriteMode>
      <ensembleId>EnsembleA</ensembleId>
    </timeSeriesSet>
  </variable>
  <variable>
    <variableId>output</variableId>
    <timeSeriesSet>
      <moduleInstanceId>InputModuleInstance</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>Q.forecast</parameterId>
      <locationId>H-2001</locationId>
      <timeSeriesType>external forecasting</timeSeriesType>
      <timeStep unit="day"/>
      <relativeViewPeriod unit="day" start="-4" end="0"/>
      <readWriteMode>add originals</readWriteMode>
    </timeSeriesSet>
  </variable>
  <transformation id="selectionEnsembleIndex">
    <selection>
      <ensembleMemberByIndex>
        <memberIndex>
          <variableId>inputMemberIndex</variableId>
        </memberIndex>
        <ensemble>
          <variableId>inputEnsemble</variableId>
        </ensemble>
        <outputVariable>
          <variableId>output</variableId>
        </outputVariable>
      </ensembleMemberByIndex>
    </selection>
  </transformation>
</transformationModule>
```

An example of the output is shown in below plot. Note that (1) below plot was not produced with above snippet of code; (2) the somewhat unexpected behaviour in the lower panel is due to the input timeseries.



ComputeCoastalForecasts_MRENS: [1] Compute tidal forecasts (MRENS) Thu 15-08-2019 07:00:00 GMT Current ComputeCoastalRWC: [2] Compute coastal RWC (in development) Thu 15-08-2019 07:00:00 GMT Current