

KNMI SYNOP

Overview

Imports time series data with observed hourly values from the KNMI that is delivered to the Dutch waterboards. The files are in a kind of CSV format with file extension (*.txt), where not a comma but a ";" is used as separator. See for a detailed contents and definition of the file the [KNMI site](#).

Notice that the parameters are not listed in the file. The parameters are hard coded in the import routines as defined at the [KNMI site](#). Notice also that text fields like "cloudy" are not imported. Only parameters that contain values should be read, like rainfall (RhRhRh).

Configuration (Example)

A complete import module configuration consists of an ID Mapping file and a Import Module Instance file. To convert the rainfall in a proper unit (from 0.1 mm/hr to mm/hr for example) it is also required to configure a Unit Conversion file.

ModuleConfigFiles

The following example of an Import Module Instance will import the time series as equidistant series for timezone GMT with a time step of 6 hours.

ImportKNMI.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<timeSeriesImportRun .....>
  <import>
    <!--SYNOP (1h)-->
    <general>
      <importType>KNMISYNOPS</importType>
      <folder>$IMPORT_FOLDER_KNMI_SYNOPS$</folder>
      <failedFolder>$IMPORT_FAILED_FOLDER_KNMI_SYNOPS$</failedFolder>
      <backupFolder>$IMPORT_BACKUP_FOLDER_KNMI_SYNOPS$</backupFolder>
      <idMapId>IdImportSYNOPS</idMapId>
      <unitConversionsId>ImportKNMIUnits</unitConversionsId>
      <importTimeZone>
        <timeZoneOffset>+00:00</timeZoneOffset>
      </importTimeZone>
      <dataFeedId>KNMI-SYNOPS</dataFeedId>
    </general>
    <timeSeriesSet>
      <moduleInstanceId>ImportKNMI</moduleInstanceId>
      <valueType>scalar</valueType>
      <parameterId>P.meting</parameterId>
      <locationSetId>KNMI-SYNOPS</locationSetId>
      <timeSeriesType>external historical</timeSeriesType>
      <timeStep unit="hour" multiplier="1"/>
      <readWriteMode>add originals</readWriteMode>
      <synchLevel>1</synchLevel>
    </timeSeriesSet>
    <externUnit parameterId="P.meting" unit="0.1 mm/hr"/>
  </import>
</timeSeriesImportRun>
```

IdMapFiles

 Defines mappings between KNMI and FEWS parameters and locations.

sample of IdImportEPS.xml

```
<idMap version="1.1" . . . . .>
  <map internalParameter="P.meting" internalLocation="KNMI_370" externalParameter="RhRhRh" externalLocation="06370"/>
  <map internalParameter="P.meting" internalLocation="KNMI_479" externalParameter="RhRhRh" externalLocation="06479"/>
</idMap>
```

Important in this configuration is that the externalParameter are as defined at the [KNMI site](#). They are not listed in the import files and therefore hard coded in the import routines.

UnitConversionFile

 Defines the conversion of the units that should be applied.

sample of ImportKNMIPrecipitation.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<unitConversions . . . . . >
    <unitConversion>
        <inputUnitType>0.1 mm/hr</inputUnitType>
        <outputUnitType>mm hr</outputUnitType>
        <multiplier>0.1</multiplier>
        <incrementer>0</incrementer>
    </unitConversion> . . . .
    . . . .
</unitConversions>
```

Example file

 Defines the conversion of the units that should be applied.

sample of 2007102503_decoded_synops_NL.txt

Example Files

See attached files

h3 Java source Code

[KnmiSynopsTimeSeriesParser.java](#)