

# 01 Locations

What	Locations.xml
Required	yes
Description	Definitions of all locations
schema location	<a href="https://fewsdocs.deltares.nl/schemas/version1.0/locations.xsd">https://fewsdocs.deltares.nl/schemas/version1.0/locations.xsd</a>

DELFT-FEWS is a location oriented system. All time series data must be referenced to a (geographic) location. This location must be identified by its geographic coordinates within the coordinate system used. When available on the file system, the name of the XML file is for example:

Locations 1.00 default.xml

Locations	Fixed file name for the locations configuration
1.00	Version number
default	Flag to indicate the version is the default configuration (otherwise omitted)

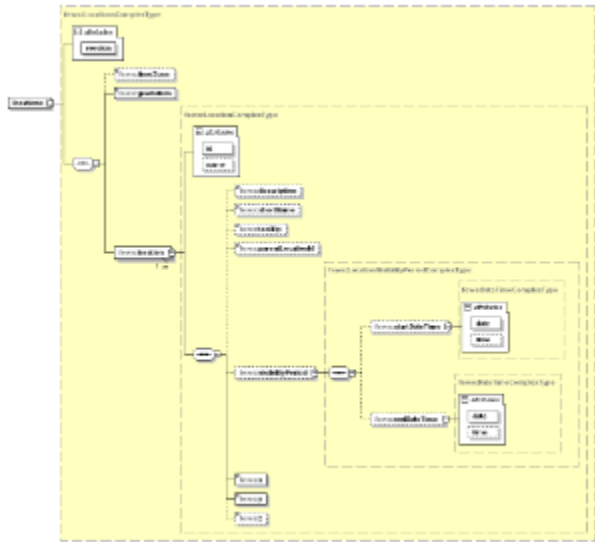


Figure 23 Elements in the Locations configuration

## timeZone (available since build 25437)

Optional time zone for dates and times defined in the locations configuration file. If no time zone is defined, then dates and times are in GMT.

## geoDatum

Definition of the geoDatum used in defining the locations. This may be different than the geoDatum used in the displays. For enumeration of geoDatums, see Appendix B.

## location

Root element for the definition of each individual location. Multiple entries may be defined.

Attributes;

- **id**: id of the location. This must be unique
- **name**: name of the location used in displays and reports

## description

Optional description of the location. This description will appear as a tool-tip when hovering over the location in the map display.

## shortName

Optional short name for the location. This string when available will replace the name in the time series display legend.

## label

optional element to customize the location label in the main map display.

You can use the following tags:

%ID%, %NAME%, %DESCRIPTION%, %LAST\_VALUE%, %LAST\_VALUE\_TIME%,  
%FORECAST\_START\_TIME%, %MAXIMUM\_VALUE%, %MAXIMUM\_VALUE\_TIME%, %MINIMUM\_VALUE%, %MINIMUM\_VALUE\_TIME%

An example:

```
<label>%NAME%    %LAST_VALUE%    %LAST_VALUE_TIME%</label>
```

or

```
<label>%NAME%    max:%MAXIMUM_VALUE%    min: %MINIMUM_VALUE% </label>
```

## toolTip

optional element to customize the tooltip shown when hovering over a location in the main map display.

You can use use \n or CDATA or HTML when you need multiple lines. Beside tags defined in the global.properties file you can use the following tags:

%ID%, %NAME%, %DESCRIPTION%, %LAST\_VALUE%, %LAST\_VALUE\_TIME%,  
%FORECAST\_START\_TIME%, %MAXIMUM\_VALUE%, %MAXIMUM\_VALUE\_TIME%, %MINIMUM\_VALUE%, %MINIMUM\_VALUE\_TIME%

The tooltip supports html including images and hyperlinks. The url in the hyperlink can be an internet url, an executable file, a document file, or a folder. Use the CDATA xml tag to include html in a xml file. Check the available HTML functionalities [here](#).



### Opening tooltip hyperlinks in Web Browser Display

Delft-FEWS' [Web Browser Display](#) is the internal web browser of Delft-FEWS which is opened as a tab just like any other display in Delft-FEWS. You can set this browser as being the default and once whitelisted, all URLs specified in e.g. the topology or in tooltips will be opened in the Web browser display tab. For more details, visit the [Web Browser Display](#) pages.

By default (if not defined) the following tool tip is used.

```
Name: %NAME%\nDesc: %DESCRIPTION%\nLast value \[%LAST_VALUE%\] Time \[%LAST_VALUE_TIME%\]\nForecast Start Time \[%FORECAST_START_TIME%\]\nMaximum \[%MAXIMUM_VALUE%\] Time \[%MAXIMUM_VALUE_TIME%\]
```

A more advanced example is, using HTML (use the <BR> tag to start new line):

```

<toolTip><![CDATA[<html>
  <table id="details">
    <tr>
      <td width="50" valign="top">ID</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">%ID%</td>
    </tr>
    <tr>
      <td width="50" valign="top">Naam</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">%NAME%</td>
    </tr>
    <tr>
      <td width="50" valign="top">Type</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">%DESCRIPTION%</td>
    </tr>
    <tr>
      <td width="50" valign="top">Foto</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">
        <a href="file:/$FOTOSDIR$/%ID%.jpg" >
          
        </a>
      </td>
    </tr>
    <tr>
      <td width="50" valign="top">Documentatie</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">
        <a href="file:/$PDFDIR$/%ID%.pdf">%ID%.pdf</a>
      </td>
    </tr>
  </table>
</html>
]]></toolTip>

```

Please find below another example of a html tooltip containing a hyperlink. This hyperlink consists of a fixed and a dynamic part. The dynamic part is filled in with location attributes

```

<toolTip><![CDATA[<html>
  <table id="details">
    <tr>
      <td width="160" valign="top">Peilbuis</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">%ID%</td>
    </tr>
    <tr>
      <td width="160" valign="top">Naam</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">%REGION% - %ID%</td>
    </tr>
    <tr>
      <td width="160" valign="top">Regio</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">%REGION%</td>
    </tr>
    <tr>
      <td width="160" valign="top">XY</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">(%X%, %Y%)</td>
    </tr>
    <tr>
      <td width="160" valign="top">Ellitrack serienummer</td>
      <td width="5" valign="top">:</td>
      <td width="200" valign="top">%IMPORT_ID%</td>
    </tr>
  </table>
</html>
]]></toolTip>

```

```

        <tr>
        <td width="160" valign="top">BRO GMN ID</td>
        <td width="5" valign="top">:</td>
        <td width="200" valign="top">onbekend</td>
        </tr>
        <tr>
        <td width="160" valign="top">BRO GMW ID</td>
        <td width="5" valign="top">:</td>
        <td width="200" valign="top"><b><a href="https://www.broloket.nl/ondergrondgegevens?bro-id=%BRO_GMW_ID%
>%BRO_GMW_ID%</a></b></td>
        </tr>
        <tr>
        <td width="160" valign="top">BRO GLD ID</td>
        <td width="5" valign="top">:</td>
        <td width="200" valign="top">%BRO_GLD_ID%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Hoogte bk peilbuis [m NAP]</td>
        <td width="5" valign="top">:</td>
        <td width="200" valign="top">%H_BK_PEILBUIS%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Hoogte bk staaf [m NAP]</td>
        <td width="5" valign="
top">:</td>
        <td width="200" valign="top">%H_BK_STAAF%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Hoogte groef t.o.v. bk staaf [m]</td>
        <td width="5"
valign="top">:</td>
        <td width="200" valign="top">%H_GROEF_TOV_STAAF%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Hoogte groef [m NAP]</td>
        <td width="5" valign="top">:
</td>
        <td width="200" valign="top">%H_GROEF%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Hoogte maaiveld [m NAP]</td>
        <td width="5" valign="
top">:</td>
        <td width="200" valign="top">%H_MAAIVELD%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Kabel-lengte [m]</td>
        <td width="5" valign="top">:<
/td>
        <td width="200" valign="top">%KABEL LENGTE%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Filter-diepte [m-mv]</td>
        <td width="5" valign="top">:
</td>
        <td width="200" valign="top">%FILTER_DIEPTE%</td>
        </tr>
        <tr>
        <td width="160" valign="top">Diepte stalen fundering [m-mv]</td>
        <td width="5"
valign="top">:</td>
        <td width="200" valign="top">%DIEPTE_STALEN_FUNDERING%</td>
        </tr>

        <tr>
        <td width="160" valign="top">Opmerking</td>
        <td width="5" valign="top">:</td>
        <td width="200" valign="top">%OPMERKING%</td>
        </tr>
    </table>
</html>
]]</toolTip>

```

## parentLocationId

Optional Id of a location that functions as a parent. In the filters child locations (locations that refer to a parent) are normally invisible. However, they are displayed in the graphs whenever a parent is selected.

## visibilityPeriod (available since build 25437)

Optional. This is the period for which a location is visible in the user interface. The start and the end of the period are inclusive. If no visibilityPeriod is defined for a location, then the location is visible for all times. Currently the visibility period is used in the map (explorer) window, the time series display and the spatial display.

- **startDateTime**: the date and time of the start of the visibility period. The start of the period is inclusive. If startDateTime is not defined, then the location is visible for all times before endDateTime.
- **endDateTime**: the date and time of the end of the visibility period. The end of the period is inclusive. If endDateTime is not defined, then the location is visible for all times after startDateTime.

Remark: the datetime pattern should be added to the locationSet definition! This (optional) dateTimePattern tag is used to define the pattern for the dateTimes defined in the DBF file. If dateTimePattern is not specified, then the default pattern "yyyyMMdd" is used, which is the internal format that a DBF file uses for columns of type 'D' (date columns).

x

Geographic coordinate of the location (Easting)

y

Geographic coordinate of the location (Northing)

z

Optional elevation of the location above the global reference.



The elevation defined will be used for converting a parameter supporting local and/or global datum. By convention the data stored in the DELFT-FEWS database is at the local datum. The elevation defined here is added when displaying/converting to a global datum.

The value defined for the elevation should be the gauge zero for river gauges where an exact level is important.

When using transformations and the datum needs to be converted and also a multiplier, divider and/or incrementer are defined in the time series set of the data, then the following equations are used.

When reading data from the database the calculation is:

$$\text{value} = (\text{stored\_value} + z) * \text{multiplier} / \text{divider} + \text{incrementer}$$

When writing data to the database the multiplier, divider and incrementer of the time series set are not used, so the calculation is:

$$\text{stored\_value} = \text{value} - z$$



All time series data in DELFT-FEWS must be referenced to a location. This is the case for all data types (scalar, longitudinal, grids & polygons).

For Grids and Longitudinal profiles, additional information may be required and defined in the grids and branches configurations respectively.

For scalar and polygon time series no additional information is required.