Grid to Polygons

Since 2022.01

Converts a rectangular grid to polygons. One or more class breaks can be configured. The generated polygons can be displayed in the spatial display and exported with the Grid to ESRI Shapefile Export

example

```
<?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">
        <transformation id="gridToPolygon">
                <interpolationSpatial>
                        <gridToPolygons>
                                <inputVariable>
                                        <timeSeriesSet>
                                                <moduleInstanceId>SpatialInterpolationGridToPolygonsTest<
/moduleInstanceId>

                                        <valueType>grid</valueType>
                                                <parameterId>T.historical</parameterId>
                                                <locationId>ECMWF</locationId>
                                                <timeSeriesType>external historical</timeSeriesType>
                                                <timeStep unit="day"/>
                                                <relativeViewPeriod unit="day" start="0" end="0"/>
                                                <readWriteMode>add originals</readWriteMode>
                                        </timeSeriesSet>
                                </inputVariable>
                                <polygonValue>-10</polygonValue>
                                <polygonValue>-5</polygonValue>
                                <polygonValue>0</polygonValue>
                                <outputVariable>
                                        <timeSeriesSet>
                                                <moduleInstanceId>SpatialInterpolationGridToPolygonsTest<
/moduleInstanceId>
                                                <valueType>polygon</valueType>
                                                <parameterId>T.historical</parameterId>
                                                <locationId>polygonLocation2</locationId>
                                                <timeSeriesType>external historical</timeSeriesType>
                                                <timeStep unit="day"/>
                                                <relativeViewPeriod unit="day" start="0" end="10"/>
                                                <readWriteMode>add originals</readWriteMode>
                                        </timeSeriesSet>
                                </outputVariable>
                        </gridToPolygons>
                </interpolationSpatial>
        </transformation>
</transformationModule>
```

Since the 2022.02 you can configure a localDatumCoverageTileArchiveFile and zoomLevel. The grid is first converted to a temporary grid that matches the configured zoom level. Every grid cell in this temporary grid contains the height from the cta and the global water level from the original grid. A bilinear interpolation is applied to the global water level of the original grid. This is the same as in the spatial display.

```
?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">
   <transformation id="gridToPolygon">
      <interpolationSpatial>
         <gridToPolygons>
            <inputVariable>
               <timeSeriesSet>
                  <moduleInstanceId>SpatialInterpolationGridToPolygonsCtaTest</moduleInstanceId>
                  <valueType>grid</valueType>
                  <parameterId>T.historical</parameterId>
                  <locationId>ECMWF</locationId>
                  <timeSeriesType>external historical</timeSeriesType>
                  <timeStep unit="day"/>
                  <relativeViewPeriod unit="day" start="0" end="0"/>
                  <readWriteMode>add originals</readWriteMode>
               </timeSeriesSet>
            </inputVariable>
            <polygonValue>7</polygonValue>
            <polygonValue>8</polygonValue>
            <polygonValue>9</polygonValue>
            <areaOfInterestLocationId>triangle</areaOfInterestLocationId>
            <localDatumCoverageTileArchiveFile>dem.cta</localDatumCoverageTileArchiveFile>
            <zoomLevel>5</zoomLevel>
            <outputVariable>
               <timeSeriesSet>
                  <moduleInstanceId>SpatialInterpolationGridToPolygonsCtaTest</moduleInstanceId>
                  <valueType>polygon</valueType>
                  <parameterId>T.historical</parameterId>
                  <locationId>polygonLocation2</locationId>
                  <timeSeriesType>external historical</timeSeriesType>
                  <timeStep unit="day"/>
                  <relativeViewPeriod unit="day" start="0" end="10"/>
                  <readWriteMode>add originals</readWriteMode>
               </timeSeriesSet>
            </outputVariable>
         </gridToPolygons>
      </interpolationSpatial>
   </transformation>
</transformationModule>
```