ASCII Grid Export

Introduction

Export a grid frame to ESRI ASCII grid format.

The ASCII Grid format is a plain text format that was first implemented in Arc/Info and is documented by ESRI.

The ID of this serializer is 'asciigrid'.

Example module configuration

```
<timeSeriesExportRun 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/timeSeriesExportRun.
xsd">
        <export>
                <general>
                        <exportType>asciigrid</exportType>
                        <folder>$EXPORT_FOLDER$</folder>
                        <exportFileName>
                                <name>PQPF_GRIB2.ASC</name>
                                <prefix>
                                        <currentTimeFormattingString>yyyyMMddHHmmss<
/currentTimeFormattingString>
                                </prefix>
                        </exportFileName>
                        <exportMissingValue>-999</exportMissingValue>
                </general>
                        <properties>
                           <bool key="DxDySupported" value="true"></bool>
                        </properties>
                <timeSeriesSet>
                        <moduleInstanceId>ImportGrids_PQPF</moduleInstanceId>
                        <valueType>grid</valueType>
                        <parameterId>QPF</parameterId>
                        <qualifierId>PQPF50</qualifierId>
                        <locationId>PQPF_GRIB2</locationId>
                        <timeSeriesType>external forecasting</timeSeriesType>
                        <timeStep multiplier="6" unit="hour"/>
                        <relativeViewPeriod end="6" start="6" unit="hour"/>
                        <readWriteMode>read only</readWriteMode>
                </timeSeriesSet>
        </export>
</timeSeriesExportRun>
```

Notes:

1) The 'asciigrid' serializer can only output one time step so in case the grid is part of a timeseries the relativeViewperiod needs to be set to select a range of which only the first timestep will be used.

2) A prefix or suffix can be added to the filename using a time formatting string as in the given example using either the <currentTimeFormattingString> or <timeZeroFormattingString>.

3) The exportMissingValue can be used to replace the missing values by given number to indicate that there is no valid data, this option is required to use the resulting files with ArcGIS as the default setting using 'NaN' to represent missing values is not supported by ArcGIS.

4) The DxDySupported property shown in the above example can be used to export a grid with cells that are not exactly square. The ESRI ASCII grid format definition only supports a single CELLSIZE property that is the same for X and Y axes. If the cell width and height are not equal and you set the DxDySupported property to true, a DX and DY value will be written, this is conform the GDAL extension to the ASCII grid definition but unfortunately not supported by ArcGIS.