

## Memo

### To

To whom it may concern

### Date

2020-05-25

### Our reference

001

### Number of pages

7

### Contact person

Jan Mooiman

### Direct line

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### E-mail

jan.mooiman@deltares.nl

### Subject

Manual to plot result files of D-Flow FM in QGIS 3.12 (map- and history-files)

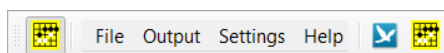
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## 1 Release Notes

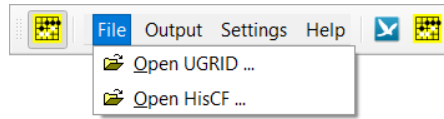
Release	Description
0.00.00	- No information available.

## 2 Menu bar



**Figure 1:** The menu bar of the QGIS\_UMESH plugin

## 2.1 File



**Figure 2:** Menu → File

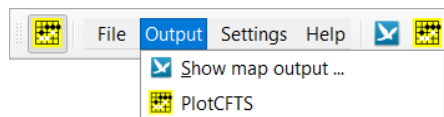
### 2.1.1 Open UGRID

When selecting this option you are able to select netCDF files which are meet the UGRID standard. Example files are the mesh- and map-file of the D-Flow FM program (<\*\_net.nc>, <\*\_map.nc>). Only the map-file could contain time series.

### 2.1.2 Open HisCF

When selecting this option you are able to select netCDF files which are meet the climate and forecast history file standard. Example files are the history output files of the program D-Flow FM (<\*\_his.nc>).

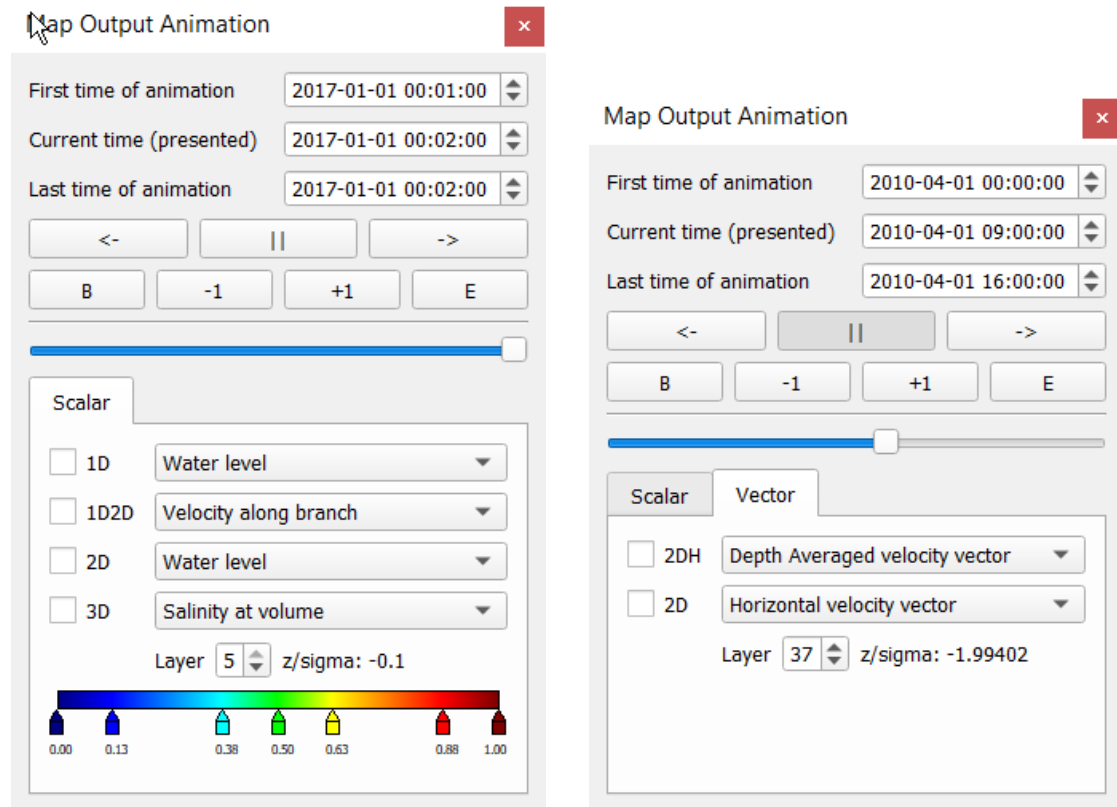
## 2.2 Output



**Figure 3:** Menu → Output

### 2.2.1 Show map output

After selecting *Output*→*Show map output* the window **Map Output Animation** will open, see as example [Figure 4a](#).



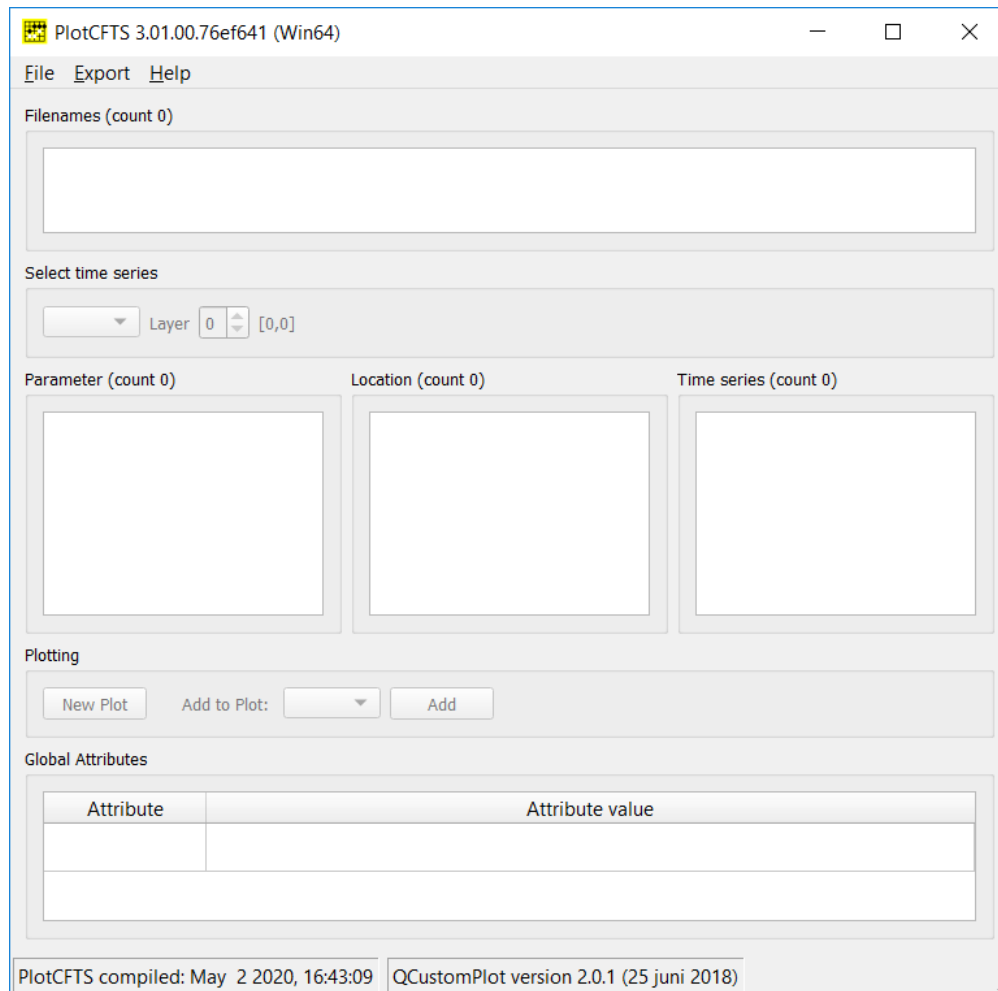
(a) Layout scalar quantities; sigma layer at  $\sigma = -0.1$  (near the surface)

(b) Layout vector quantities; fixed layer at  $z = -1.99402$  (near the surface).

**Figure 4: Map Output Animation window for scalars and vector.**

## 2.2.2 PlotCFTS

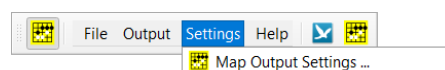
After selecting *Output*→*PlotCFTS* the program PlotCFTS will start, see as example [Figure 5](#). Select from the menubar of the PlotCFTS program menu option *Help*→*User Manual* to open the user manual for the program PlotCFTS.



**Figure 5:** Main window of the PlotCFTS program.

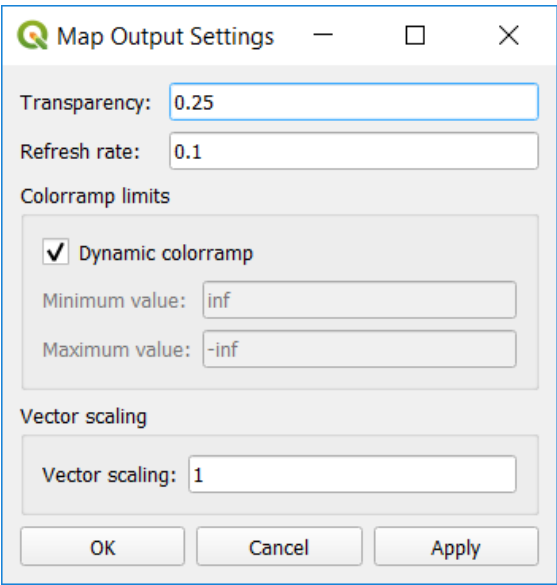
## 2.3 Settings

Settings for the presentation of scalars and vectors.



**Figure 6:** Menu → Settings

When selecting this option some settings for the presentation of the variables via the window **Map Output Animation** can be set. This window will also pop up when using the right mouse button within the window **Map Output Animation**.

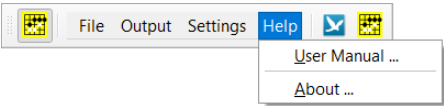


**Figure 7:** Window *Map Output Settings*

The following quantities can be specified in the window presented by [Figure 7](#):

Transparency	Specify the transparency of the iso patches for the scalars.
Refresh rate	Specify the refresh rate, in seconds, of the images during animation.
<b>Colormap limits</b>	
<i>Dynamic colormap</i>	
<u>checked</u>	Colormap limits are determined by the minimum and maximum value of the scalar. These values reach their extreme values after all timestep are visualised.
<u>unchecked</u>	Minimum value: specify the minimum value for the scalar. Maximum value: specify the maximum value for the scalar.
<b>Vector scaling</b>	
Vector scaling	The vector of length 1 (ex. $1\text{ m s}^{-1}$ ) is scaled with this factor. The drawing length is based on the averaged cell size.

**2.4 Help**



**Figure 8:** Menu → *Help*

## 2.4.1 User Manual

Shows the user manual

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Deltares

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Manual to plot result files of D-Flow FM in QGIS 3.12 (map- and history-files)

Figure 9: QGIS\_UMESH user manual

## 2.4.2 About

Shows the about box.

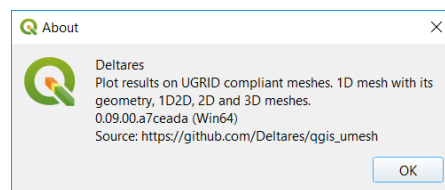


Figure 10: About box

## 3 QGIS panels

Some QGIS panels are shown after reading a netCDF map-file.

### 3.1 Layer panel

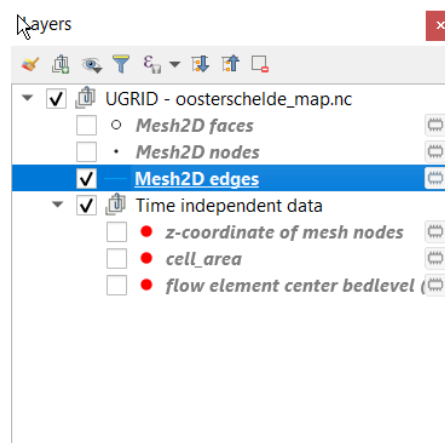
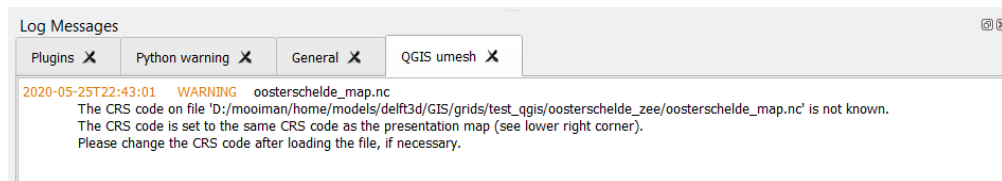


Figure 11: The QGIS layer panel after reading a netCDF map-file.

## 3.2 Log messages panel



**Figure 12:** The QGIS layer panel after reading a netCDF map-file.)

## 4 Source

The source code is available on GitHub:

[https://github.com/Deltares/qgis\\_umesh](https://github.com/Deltares/qgis_umesh)