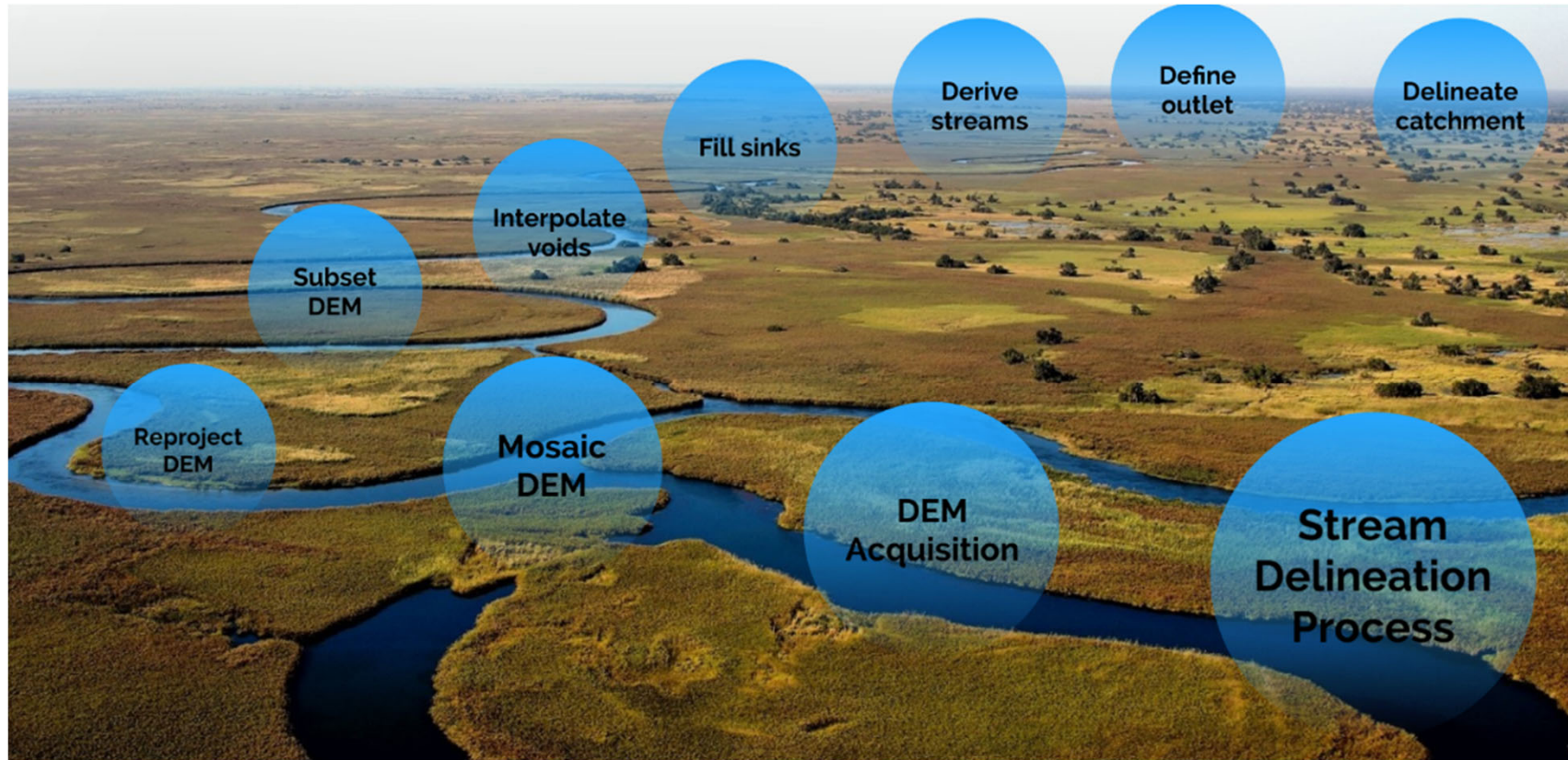


# Hans van der Kwast

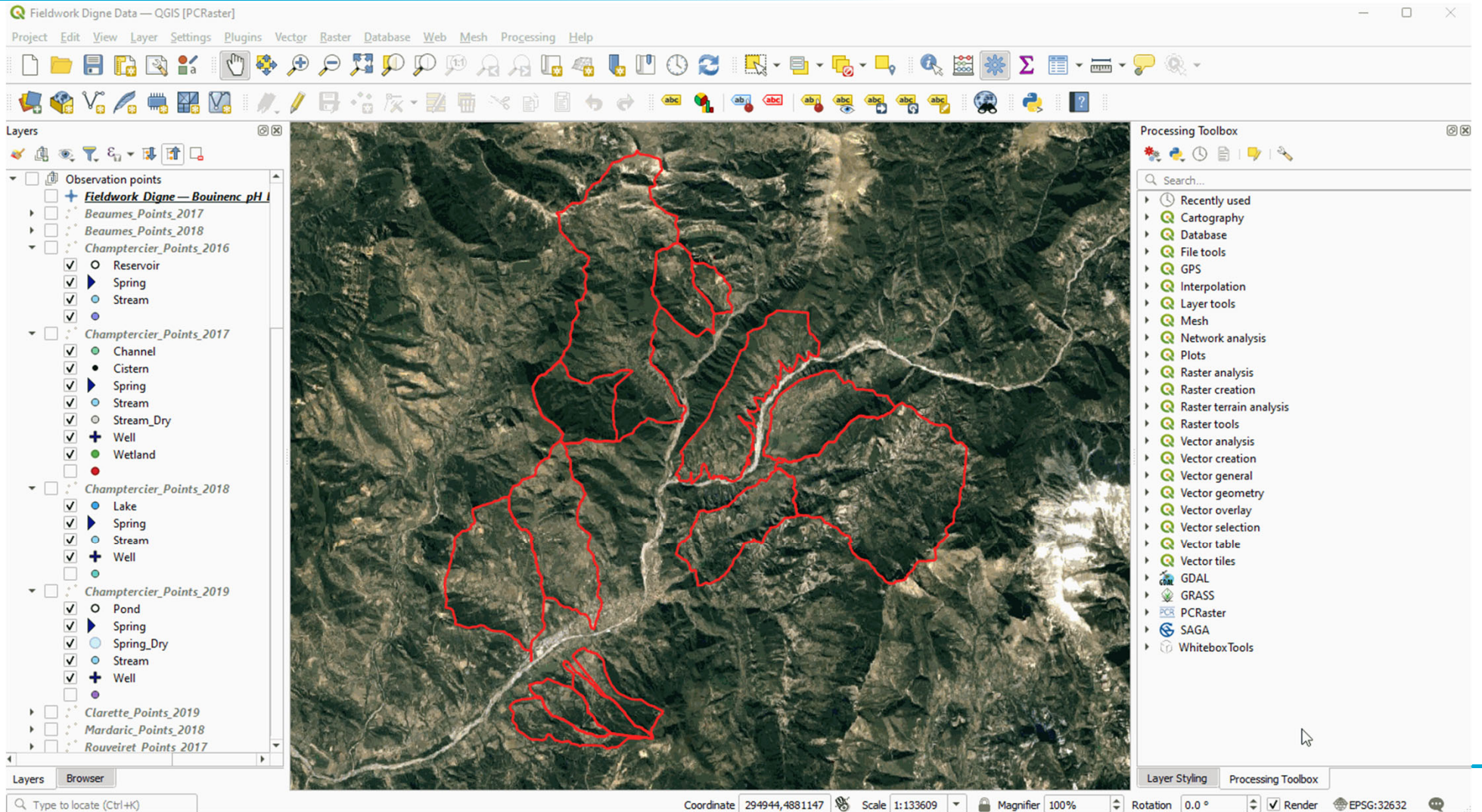
- Physical Geographer, Associate Professor of Open Science and Digital Innovation at IHE Delft
- MSc, PhD at Utrecht University, the Netherlands
- Researcher at the Flemish Institute for Technological Research (VITO, Belgium)
- Board member of Dutch QGIS User Group
- Owner of QWAST-GIS and member of QCooperative
- Co-author of QGIS for Hydrological Applications with Kurt Menke (Septima)
- Interests:
  - Open source GIS and modelling (QGIS certified instructor)
  - Remote sensing for hydrology
  - Spatial data infrastructures (SDI) / Open Data
  - Fieldwork



# Stream and catchment delineation

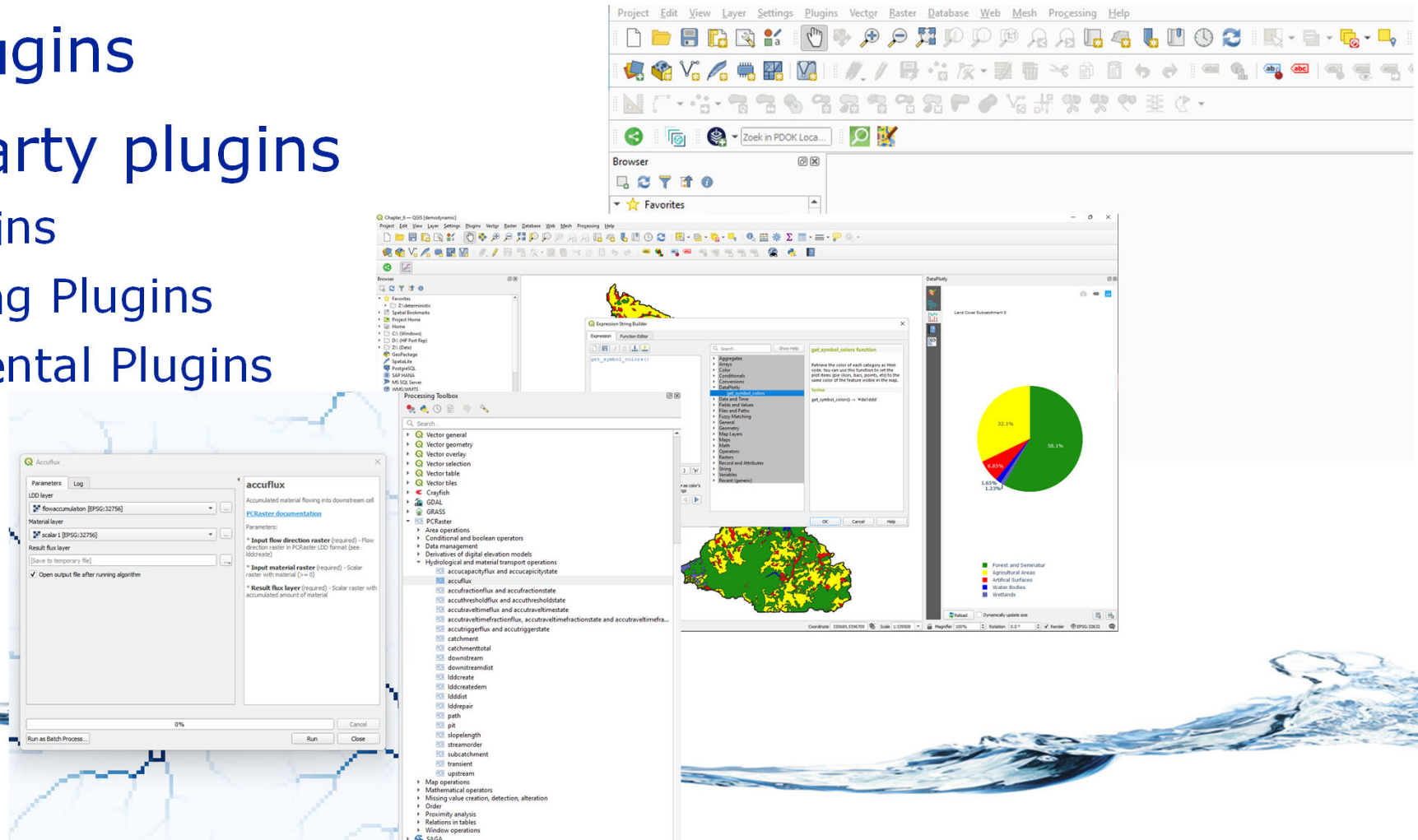


# QGIS as integrator of tools



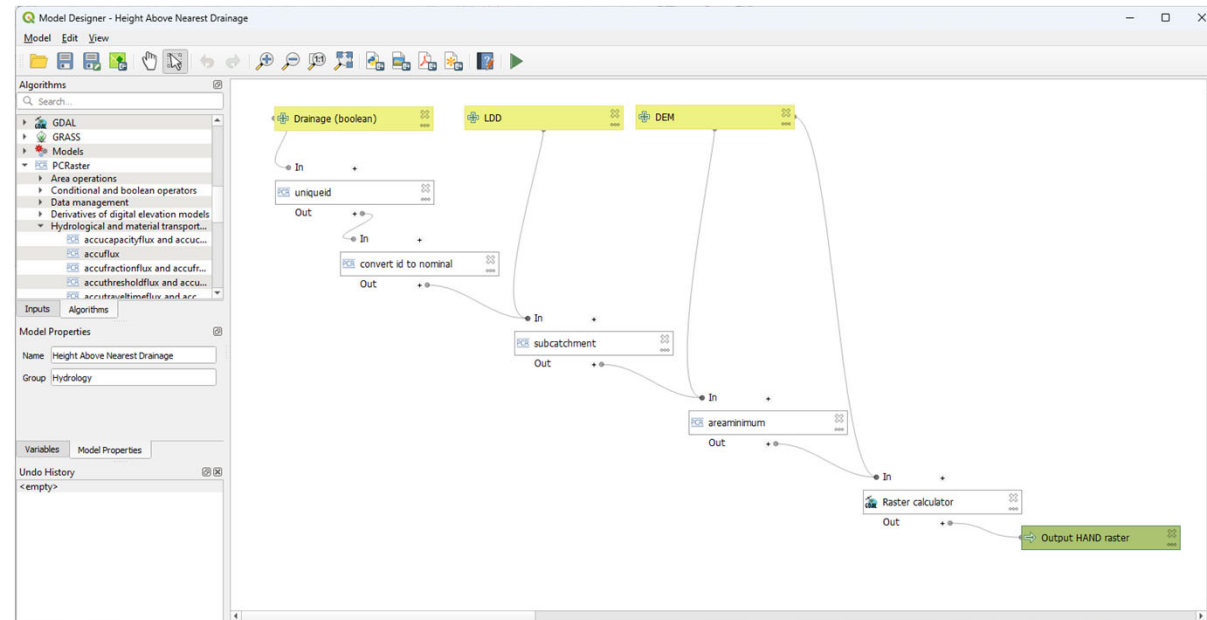
# QGIS plugins

- Core plugins
- Third-party plugins
  - GUI Plugins
  - Processing Plugins
  - Experimental Plugins



# Processing Provider Plugins

- Add new algorithms (tools) to the Processing Toolbox of QGIS
- Can be used in the model builder (graphical models)
- Batch processing
- Python classes
- Can also add menus



# Processing Provider Plugins

## QEP #230

Officially drop support for the SAGA provider (without removing it), show warning to all users when running SAGA tools #230

New issue

Open nyalldawson opened this issue on 8 Aug · 7 comments



nyalldawson commented on 8 Aug · edited

### QGIS Enhancement: Officially drop support for the SAGA provider (without removing it), show warning to all users when running SAGA tools

Date 2021/08/08

Author Nyalldawson (@nyalldawson)

Contact nyalldawson at gmail dot com

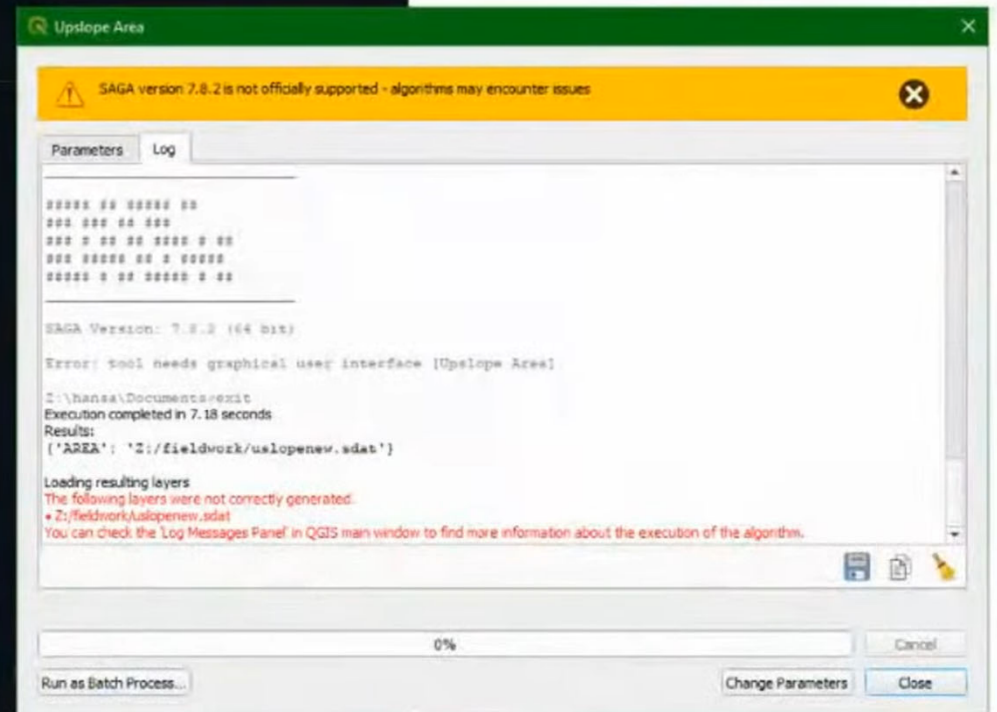
Version QGIS 3.22

#### Summary

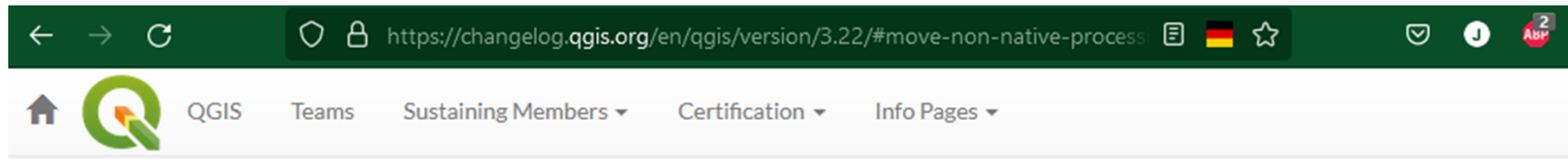
The SAGA Processing provider has been a constant source of conflict since it was introduced in QGIS 2.x. Despite our best efforts, we CAN'T offer users a first class, well supported experience with this provider.

Recent QGIS versions officially support only SAGA 2.3 LTR, and show a user-facing warning whenever users try to run SAGA tools with SAGA 7.

I propose that we extend this warning and show it regardless of the SAGA version, advising users that the provider is now officially unsupported by QGIS and will be moved to a 3rd party plugin in QGIS 4.0.



# Processing Provider Plugins



## Feature: Move non-native processing providers into independent plugins

In line with the discussion in [QEP 226](#), the SAGA, GRASS, and OTB providers have been separated into independent plugins.

This should prevent issues with the loading of the Processing plugin in cases where any one of these providers is broken. It will also make it easier to convert them into third-party plugins in the future.

The SAGA and GRASS plugins are enabled by default, leaving the UX unchanged. The OTB provider can be enabled in the Plugin Manager if necessary, however, the enabling or disabling of any of these providers is now performed via the Plugin Manager as with any other plugin.

This is mostly an internal change, with the only visible change on the part of end-users being that the Plugin Manager is used to activate or deactivate the SAGA, GRASS, and OTB providers.

This feature was developed by [Alexander Bruy](#)



# Examples



Whitebox Geospatial<sup>TM</sup>



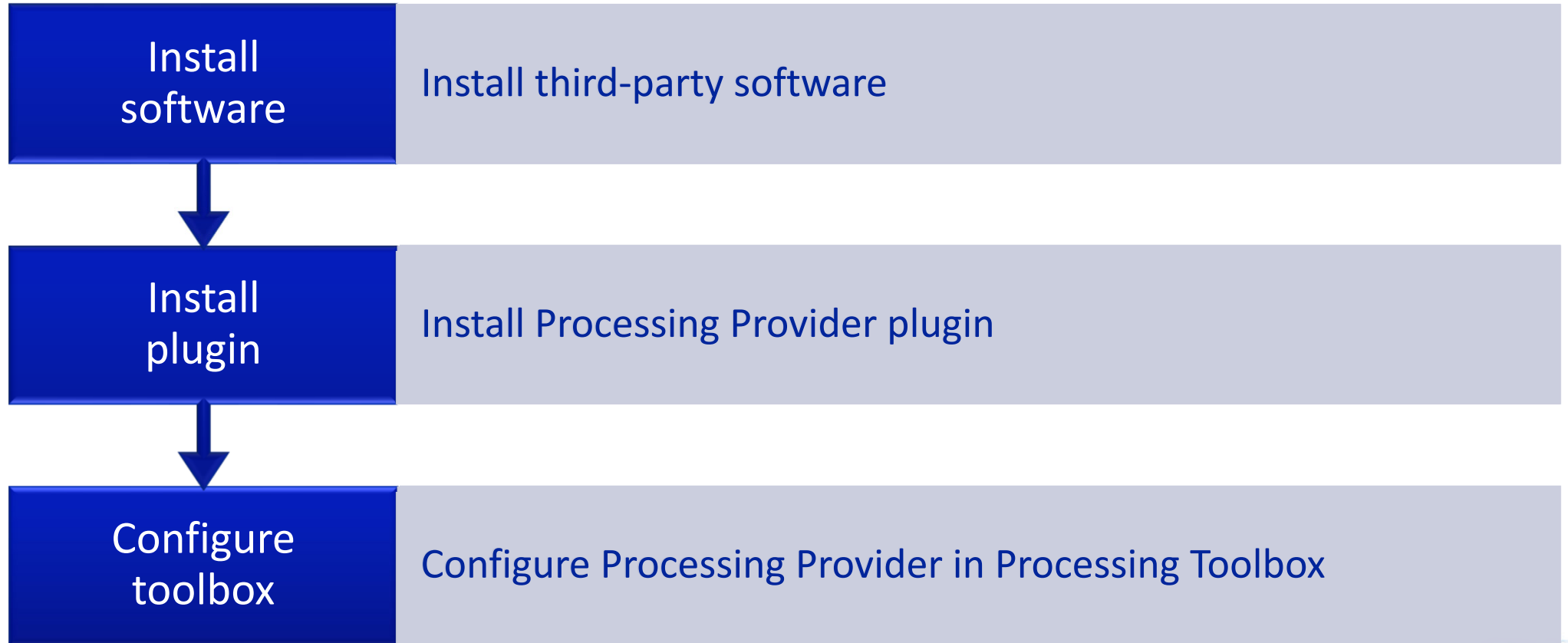
PCRaster

LasTools<sup>®</sup>

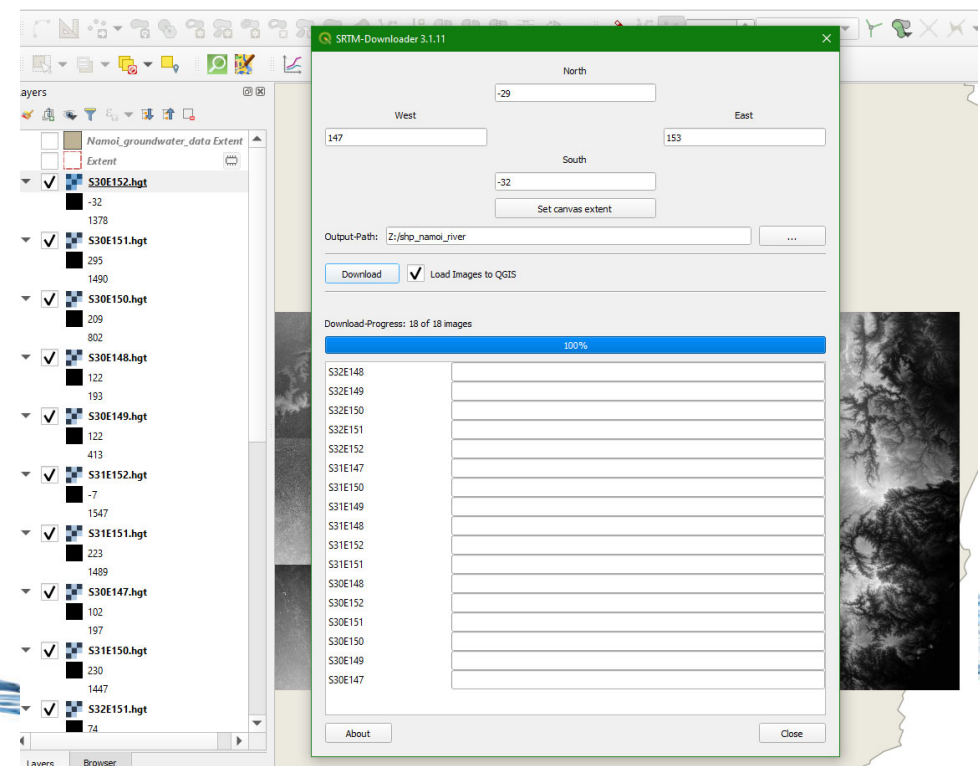
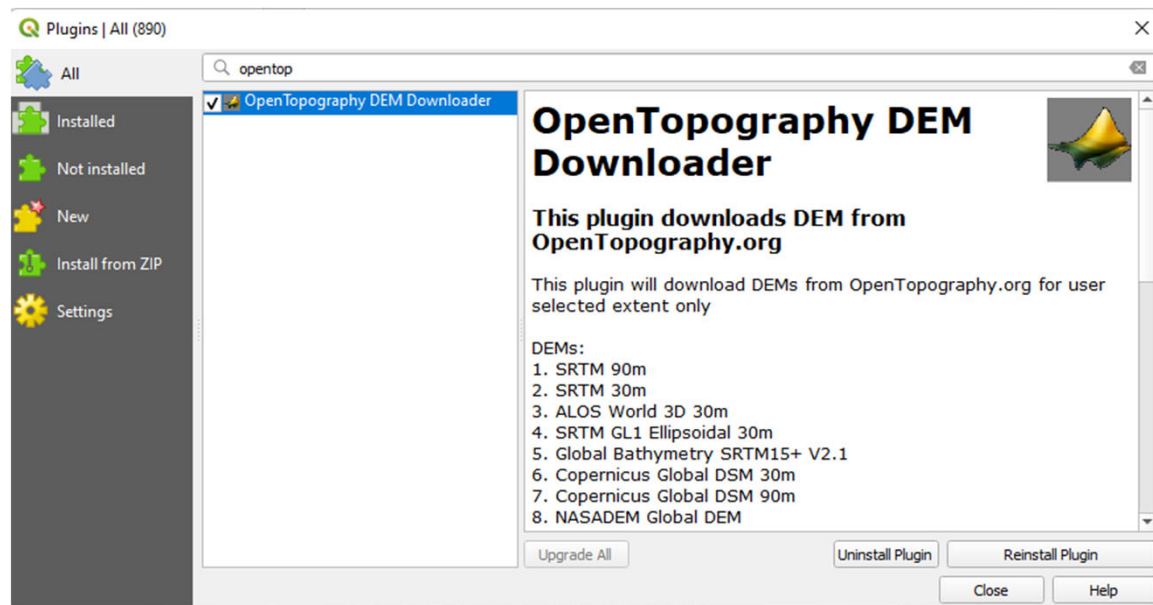




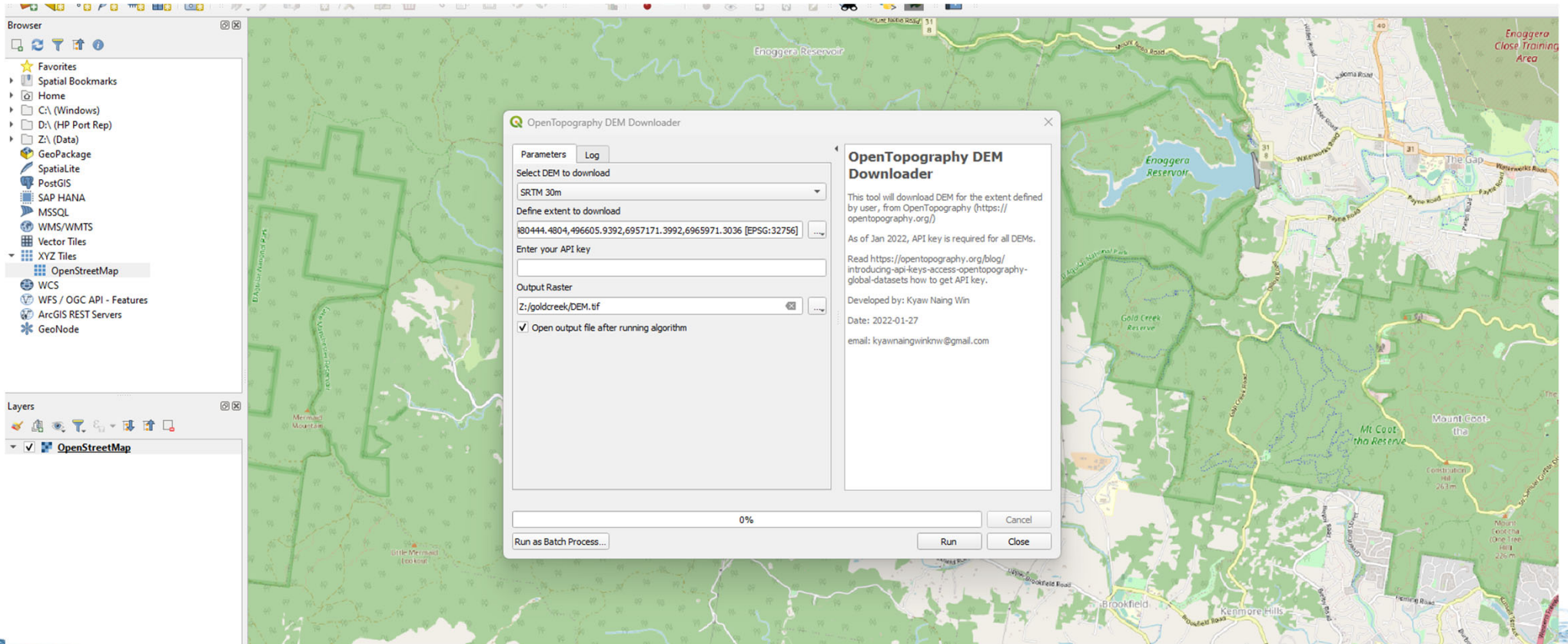
# Installing Processing Provider Plugins



# DEM Open Data



# Download DEM



# Projection

The screenshot displays the QGIS interface with a Digital Elevation Model (DEM) layer named 'DEM.tif' loaded. The layer is styled using a 'Singleband pseudocolor' style. The 'Min / Max Value Settings' are configured with a minimum value of 5 and a maximum value of 437. The 'Interpolation' is set to 'Linear', and the 'Color ramp' is a continuous gradient from blue to red. The 'Label unit suffix' is empty, and the 'Label precision' is set to 0. The 'Mode' is set to 'Continuous', and there are 49 classes. The 'Layer Rendering' section is visible at the bottom right, with 'Live update' checked and 'Apply' button.

Browser

- Favorites
- Spatial Bookmarks
- Home
- C:\ (Windows)
- D:\ (HP Port Rep)
- Z:\ (Data)
- GeoPackage
- Spatialite
- PostGIS
- SAP HANA
- MSSQL
- WMS/WMTS
- Vector Tiles
- XYZ Tiles
- OpenStreetMap
- WCS

Layers

- DEM.tif
- OpenStreetMap

Layer Styling

DEM.tif

Singleband pseudocolor

Band: Band 1 (Gray)

Min: 5 Max: 437

Min / Max Value Settings

Interpolation: Linear

Color ramp: [Color ramp]

Label unit suffix: [Label unit suffix]

Label precision: 0

Value	Color	Label
5	[Color]	5
14	[Color]	14
23	[Color]	23
32	[Color]	32
41	[Color]	41

Mode: Continuous Classes: 49

Classify [Buttons]

Legend Settings...

Clip out of range values:

Layer Rendering

Live update:  Apply

Coordinate: 484366 6961775 Scale: 1:42732 Magnifier: 100% Rotation: 0,0° Render:  EPSG:32756

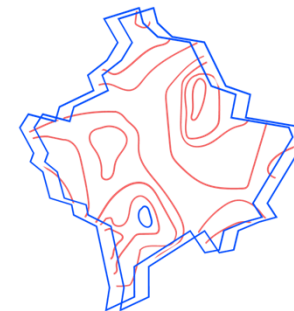
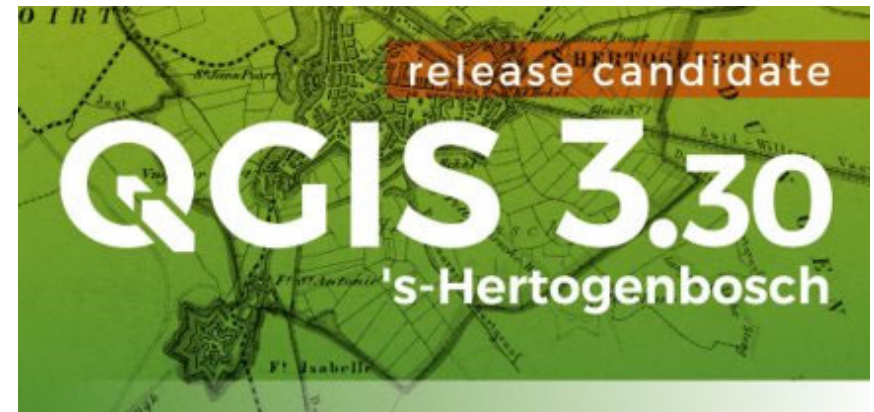
# Demo

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# #Shamelessplugs

- QGIS User Conference & Contributor Meeting, 18 – 23 April, 's-Hertogenbosch, NL
- FOSS4G Prizren, Kosovo, 26 June – 2 July
- FOSS4G NL, 13 – 14 September, Middelburg



**FOSS4G**

Prizren, 2023

