
QGIS Update

5. Juni 2022
Marco Bernasocchi - OPENGIS.ch





Marco Bernasocchi

OPENGIS.ch CEO

QGIS.org Chair

OSGeo.org Board of directors

OPENGIS.ch

MOBILE · QGIS · POSTGIS

**Open source Geo-spatial Experts at your doorsteps in
your language**

What do we do?

- **QGIS** → Core developers, PSC Chair
 - **QGIS Plugins** → Core developers and maintainers of various large plugins
 - **QField (Android QGIS)** → Creators
 - **PostGIS** → Experts
 - **GeoData Infrastructure** → Planning and deployment experts
 - **Interlis** → contributors
- 



Follow us:

@OPENGISch

@QFieldForQGIS

opengis.ch/blog

#QgisOnTheRoad



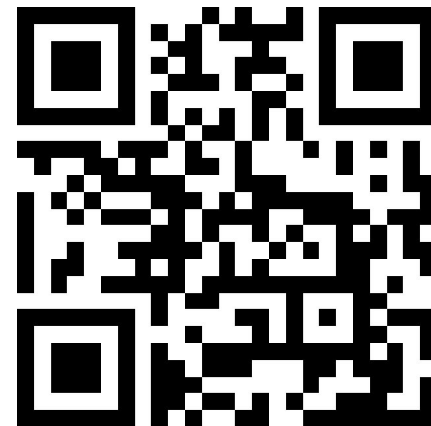
So what makes QGIS a success?

It's the people!

It's you as a user and
you as a contributor!

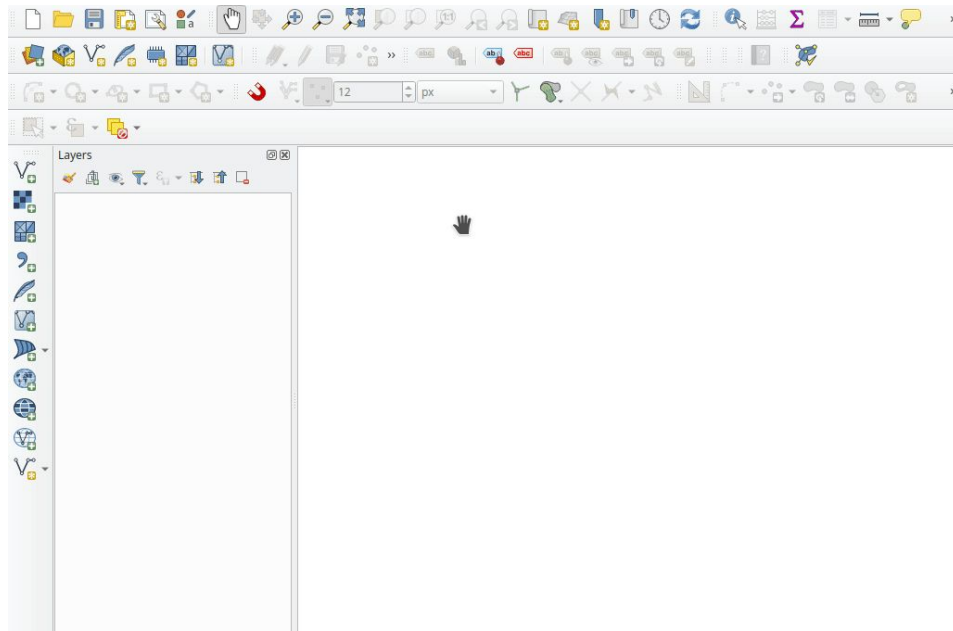
20 Years and counting!

<https://tinyurl.com/qgis-history>

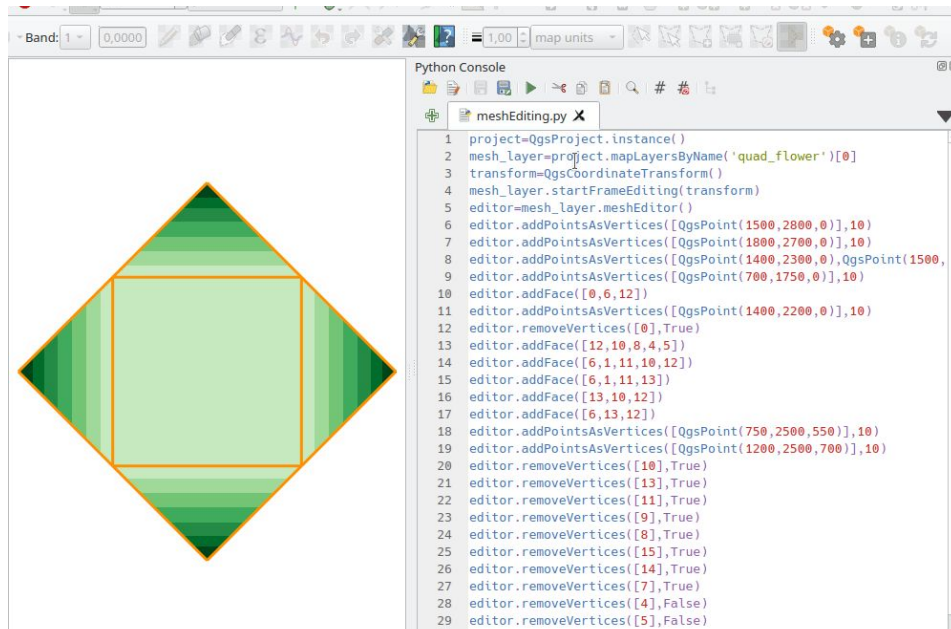


3.22

Create new mesh layer



Mesh frame editing

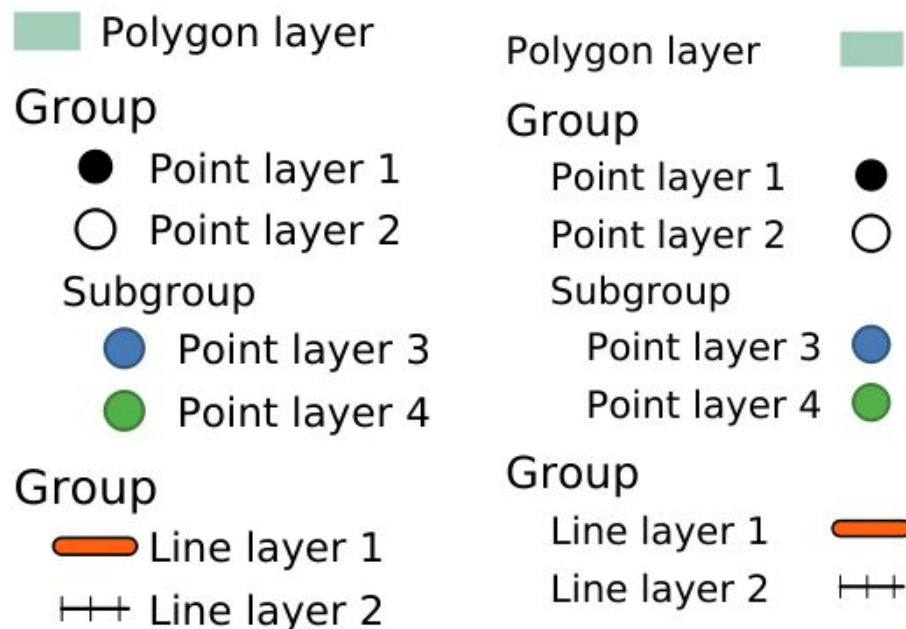


The screenshot shows the QGIS interface with a map canvas on the left and a Python Console on the right. The map canvas displays a diamond-shaped mesh frame with a green-to-yellow gradient fill and an orange border. The Python Console shows the following code:

```

1 project=QgsProject.instance()
2 mesh_layer=project.mapLayersByName('quad_flower')[0]
3 transform=QgsCoordinateTransform()
4 mesh_layer.startFrameEditing(transform)
5 editor=mesh_layer.meshEditor()
6 editor.addPointsAsVertices([QgsPoint(1500,2800,0)],10)
7 editor.addPointsAsVertices([QgsPoint(1800,2700,0)],10)
8 editor.addPointsAsVertices([QgsPoint(1400,2300,0),QgsPoint(1500,
9 editor.addPointsAsVertices([QgsPoint(700,1750,0)],10)
10 editor.addFace([0,6,12])
11 editor.addPointsAsVertices([QgsPoint(1400,2200,0)],10)
12 editor.removeVertices([0],True)
13 editor.addFace([12,10,8,4,5])
14 editor.addFace([6,1,11,10,12])
15 editor.addFace([6,1,11,13])
16 editor.addFace([13,10,12])
17 editor.addFace([6,13,12])
18 editor.addPointsAsVertices([QgsPoint(750,2500,550)],10)
19 editor.addPointsAsVertices([QgsPoint(1200,2500,700)],10)
20 editor.removeVertices([10],True)
21 editor.removeVertices([13],True)
22 editor.removeVertices([11],True)
23 editor.removeVertices([9],True)
24 editor.removeVertices([8],True)
25 editor.removeVertices([15],True)
26 editor.removeVertices([14],True)
27 editor.removeVertices([7],True)
28 editor.removeVertices([4],False)
29 editor.removeVertices([5],False)
  
```

Indentation of legend groups and subgroups

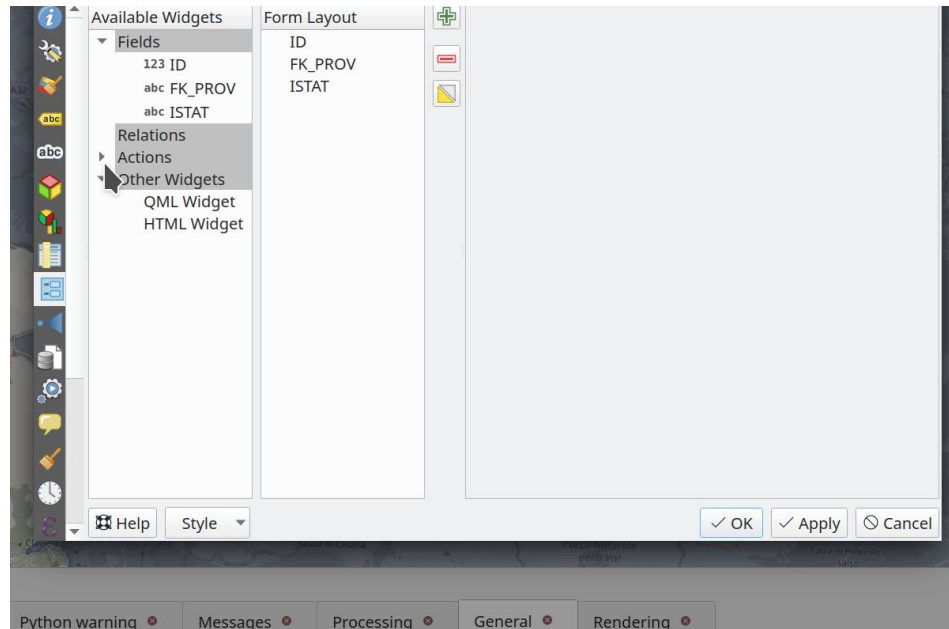


Convert to curve with vertex tool

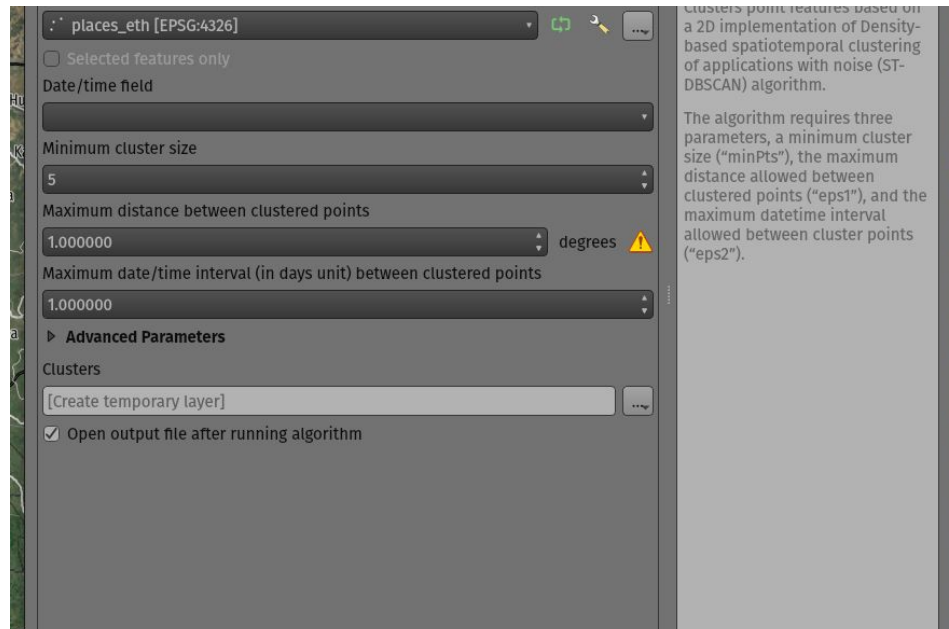


Rename files in QGIS Browser

Drag & Drop designer form actions



Spatiotemporal ST-DBSCAN clustering algorithm

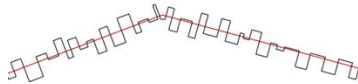
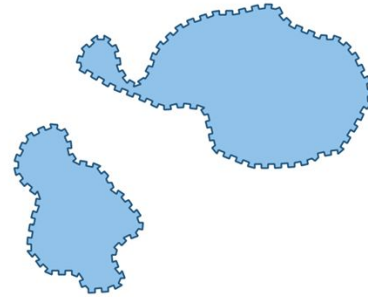
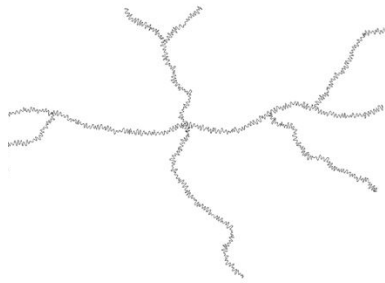


Move non-native processing providers into independent plugins

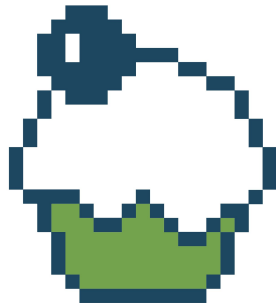
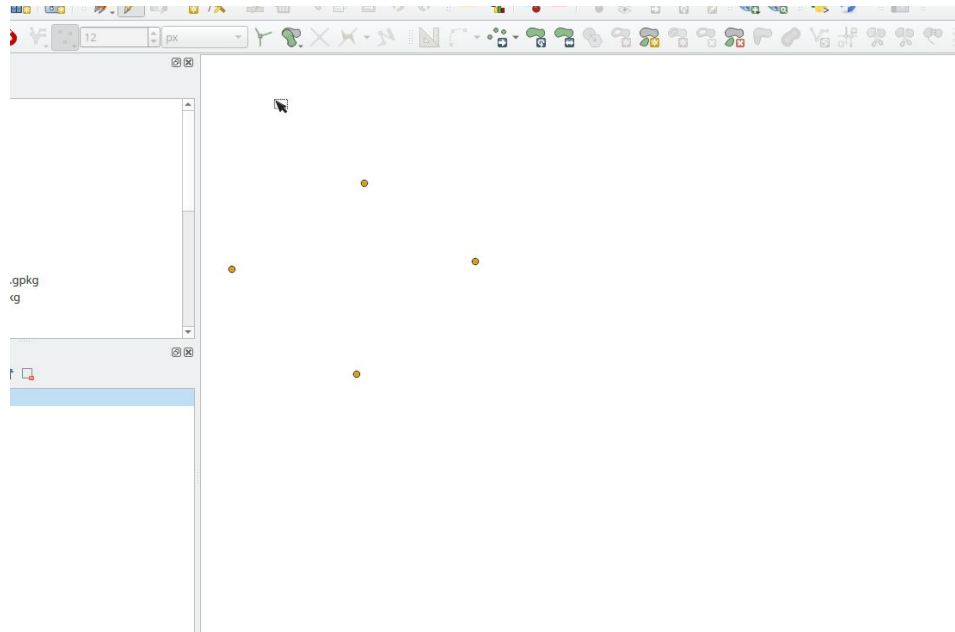
- SAGA
- GRASS
- OTB

3.24

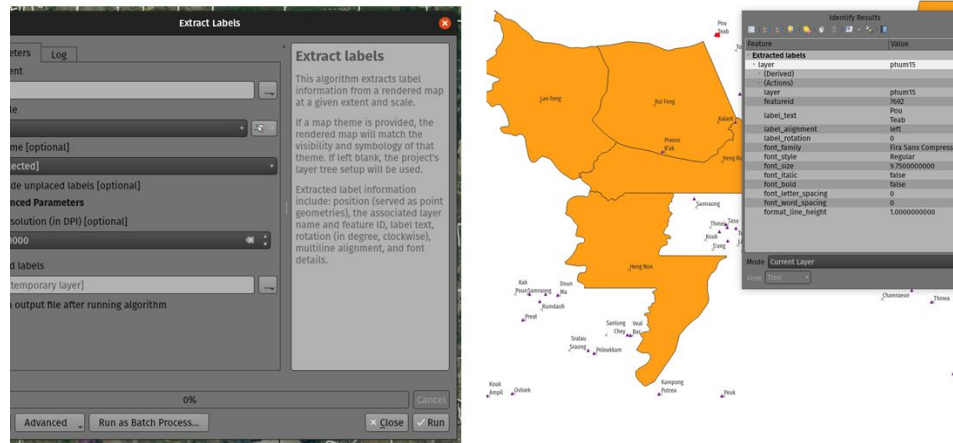
Wavy lines with expressions



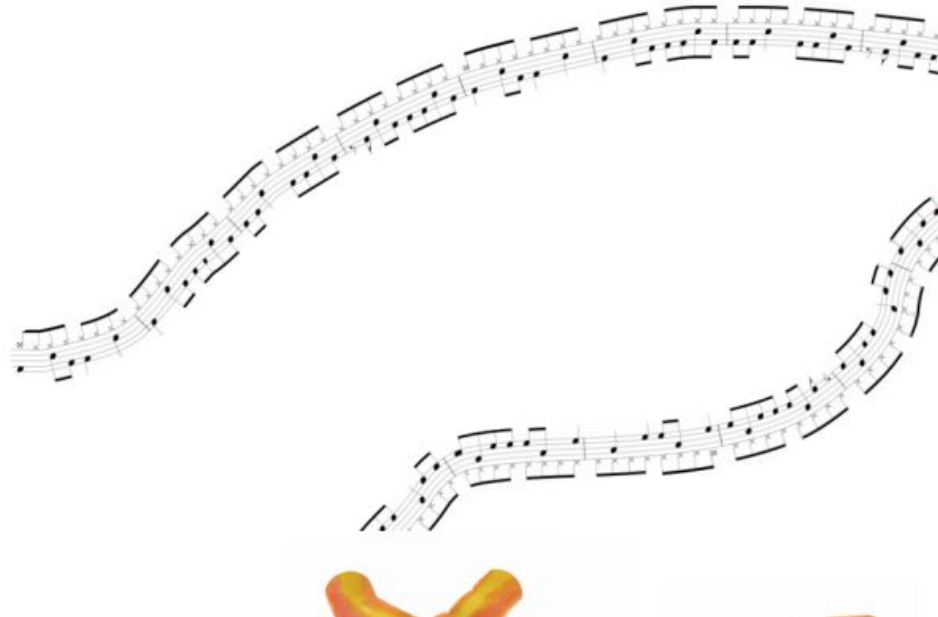
Multiedit support for relation editor



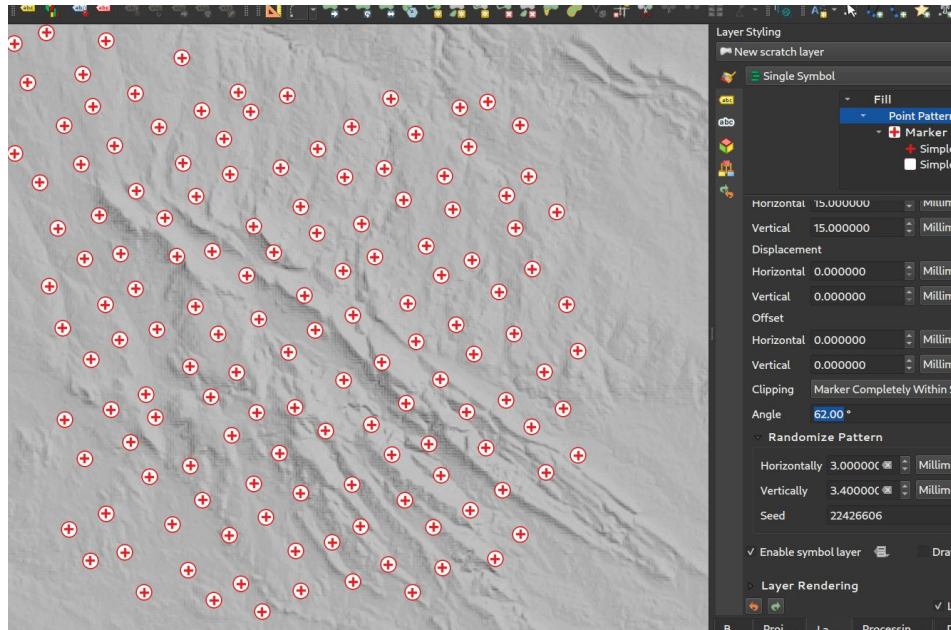
Extract labels algorithm



Cartographic improvements like "Raster Line"

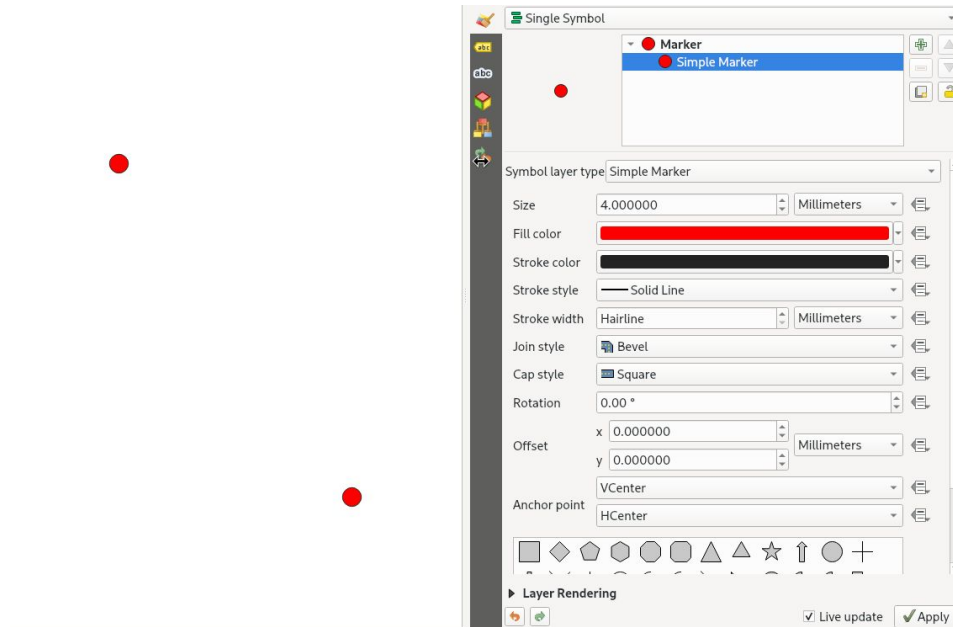


More cartography improvements in point patterns



3.26

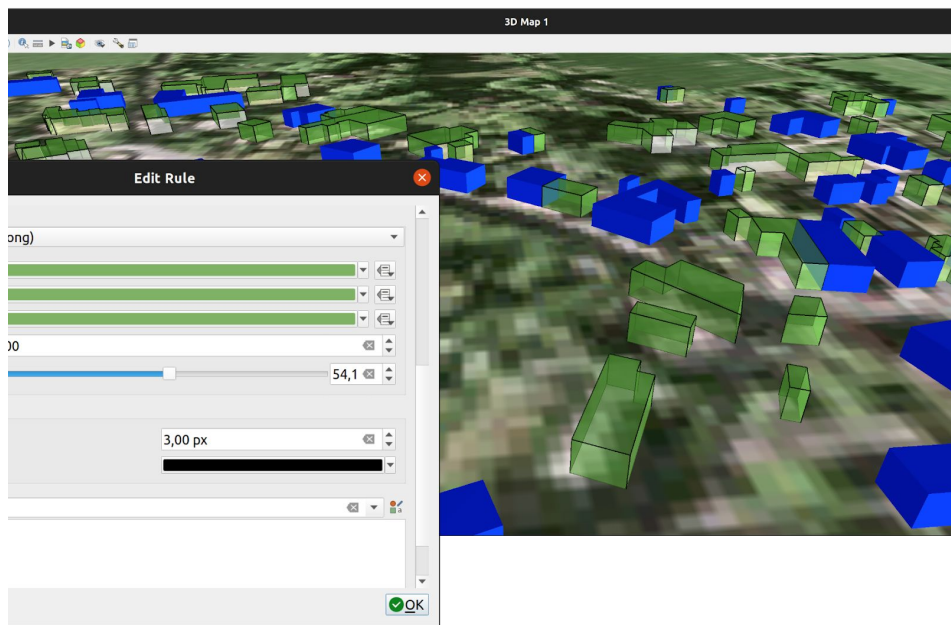
"Animated Marker" symbol type



Selective masking vectorization

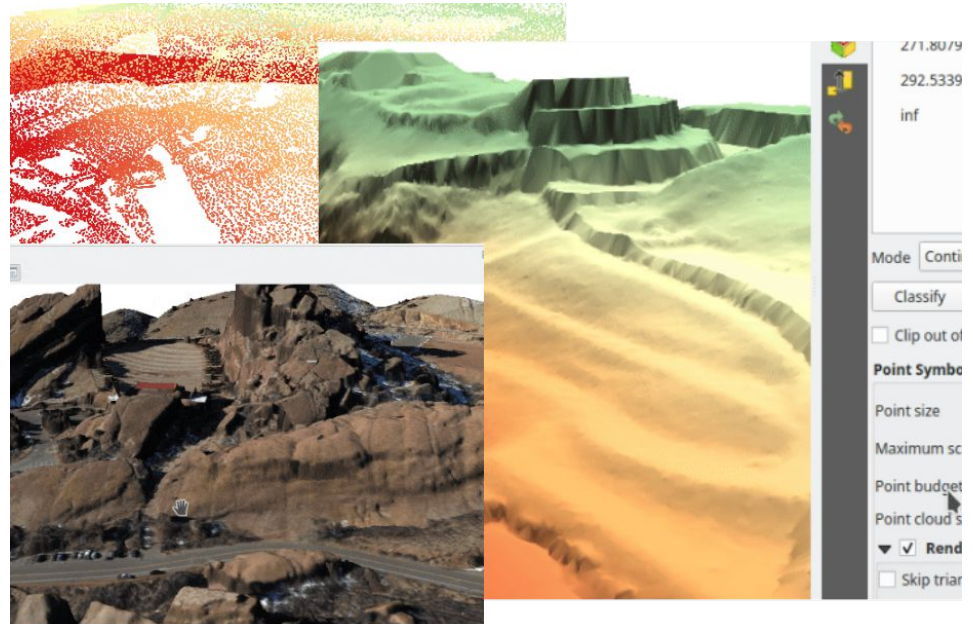


Transparency support for 3D Phong material



Point Cloud Improvements

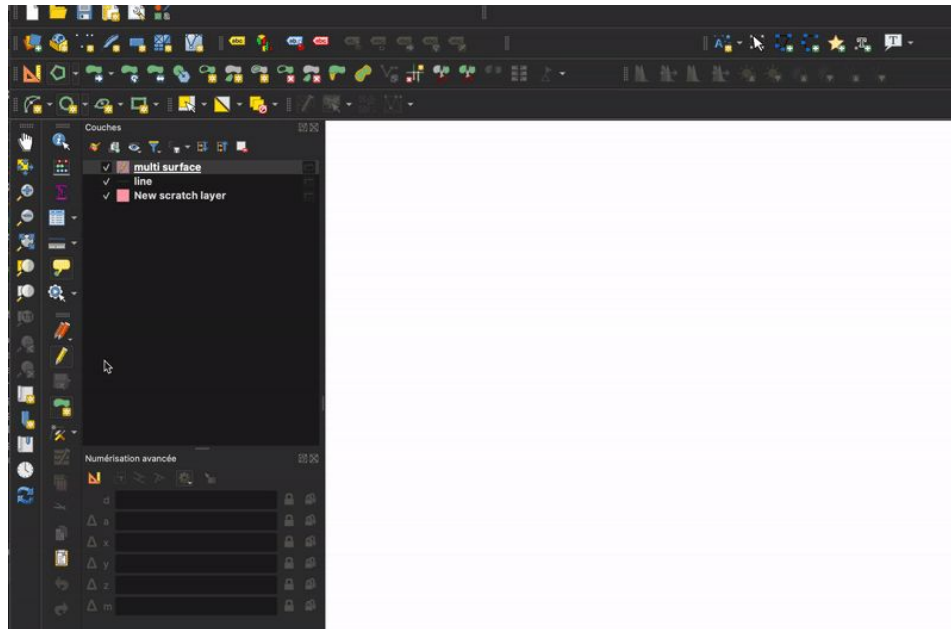
- Pointcloud triangulation in 3D views
- Cloud Optimized Point Clouds (COPC) support
- Pointcloud filtering



Expressions

- Performance improvements for aggregate expressions using @parent
- Support for BETWEEN and NOT BETWEEN

Integrate shape map tools in feature digitizing



User defined field names in export

Layer name

CRS

Encoding

Save only selected features

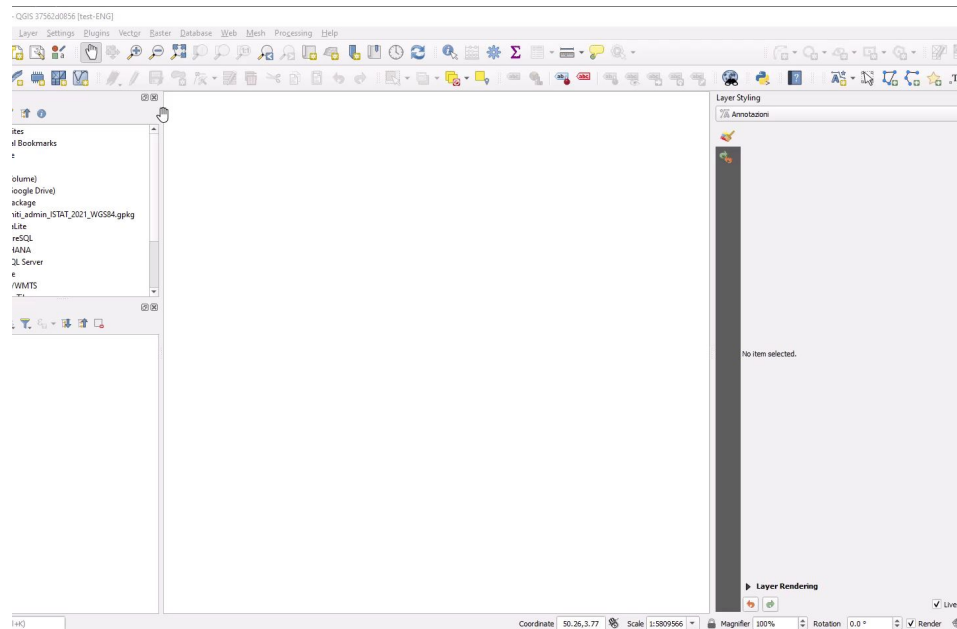
▼ Select fields to export and their export options

Name	Export name	Type	Replace with displayed values
<input checked="" type="checkbox"/> fid	fid	Integer64	
<input checked="" type="checkbox"/> nbr_of_boxes	nbr_of_boxes	Integer	<input type="checkbox"/> Use Range
<input checked="" type="checkbox"/> bee_species	bee_species	String	<input type="checkbox"/> Use Value Map
<input checked="" type="checkbox"/> bee_amount	bee_amount	String	<input type="checkbox"/> Use Value Map
<input checked="" type="checkbox"/> uuid	uuid	String	
<input checked="" type="checkbox"/> owner_uuid	owner_uuid	String	<input type="checkbox"/> Use Relation Reference

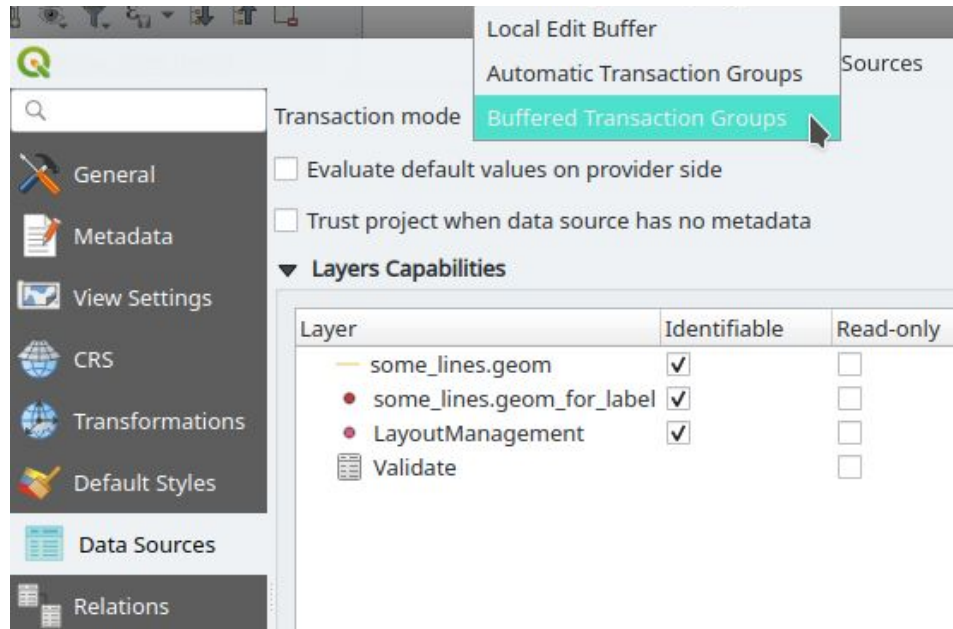
Use aliases for exported name



Georeferencing vector layers in georeferencer



Buffered Transactional Editing

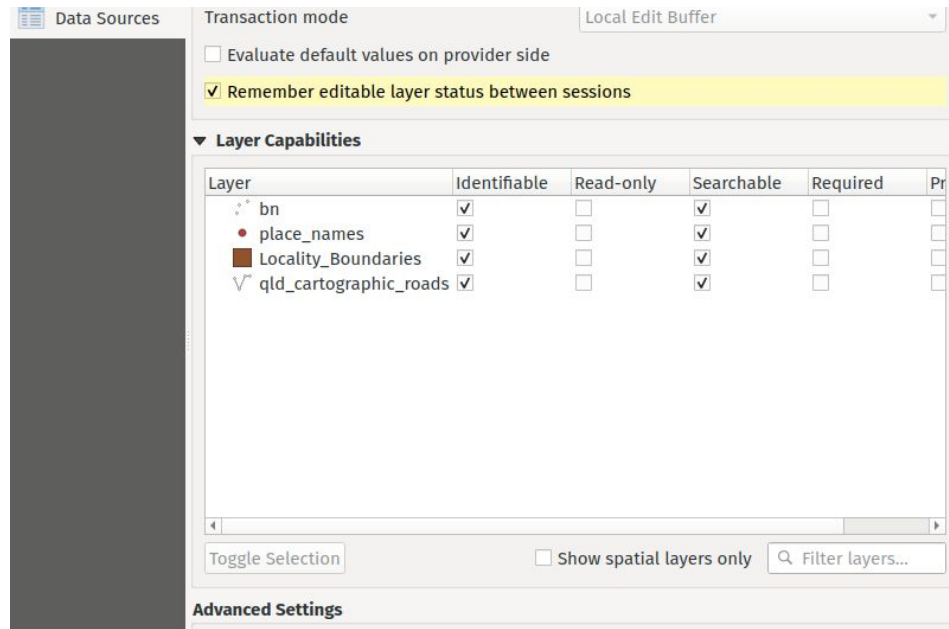


The screenshot shows the QGIS settings dialog box. The 'Transaction mode' dropdown menu is open, with 'Buffered Transaction Groups' selected. Below the dropdown, there are two unchecked checkboxes: 'Evaluate default values on provider side' and 'Trust project when data source has no metadata'. Under the 'Layers Capabilities' section, there is a table with the following data:

Layer	Identifiable	Read-only
some_lines.geom	<input checked="" type="checkbox"/>	<input type="checkbox"/>
some_lines.geom_for_label	<input checked="" type="checkbox"/>	<input type="checkbox"/>
LayoutManagement	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Validate		<input type="checkbox"/>



Store layer edit state in projects

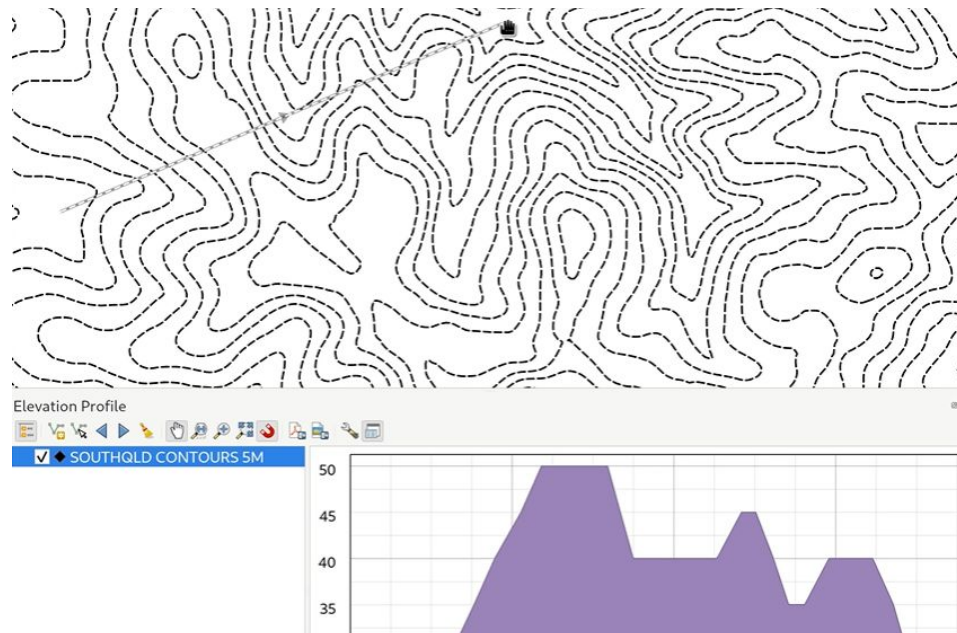


Temporal properties support for WMS Server

SQL Logging in the Development panel

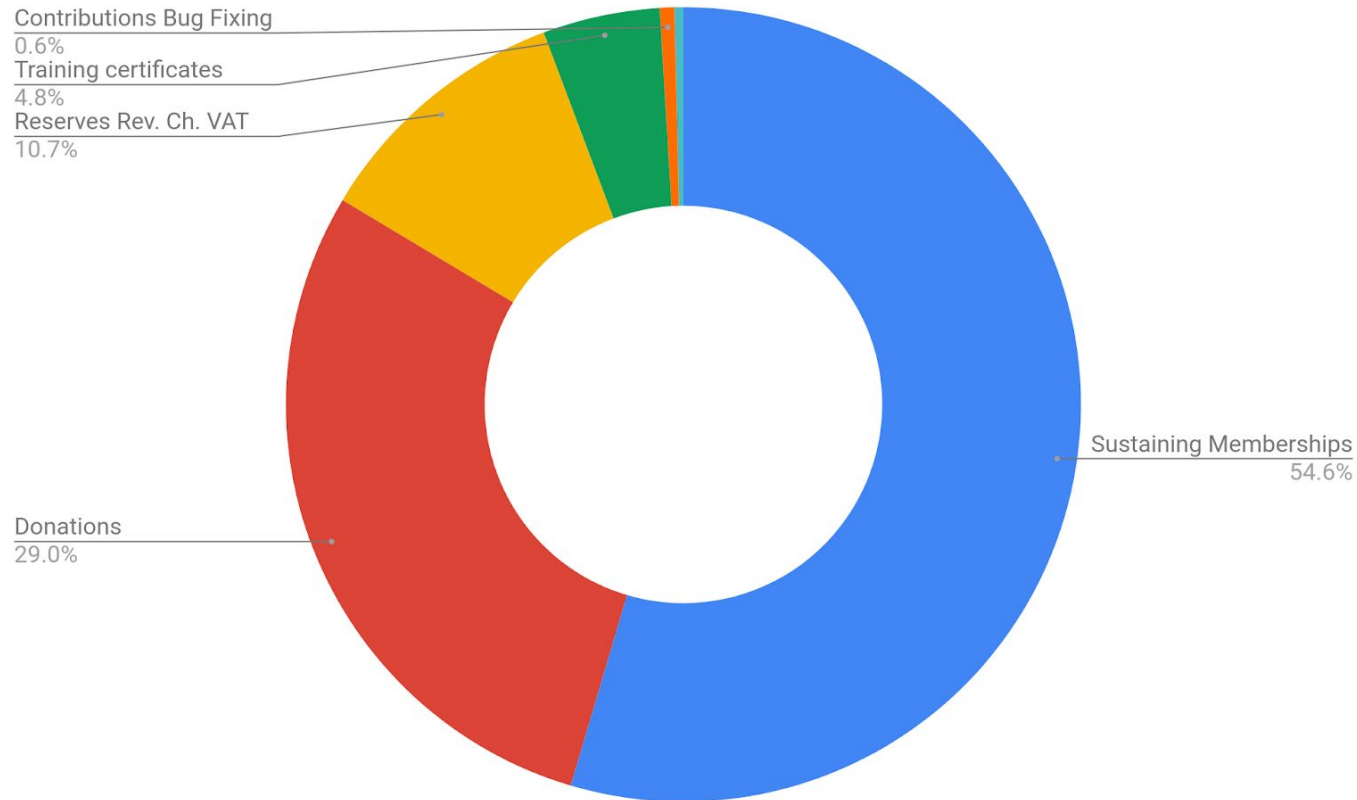
```
▶ 29 SELECT typtype FROM pg_type WHERE typename='int8'
▶ 30 SELECT domain_name, domain_schema FROM information_schem...
▶ 31 SELECT typtype FROM pg_type WHERE typename='numeric'
▶ 32 SELECT domain_name, domain_schema FROM information_schem...
▶ 33 SELECT typtype FROM pg_type WHERE typename='varchar'
▶ 34 SELECT domain_name, domain_schema FROM information_schem...
▶ 35 SELECT typtype FROM pg_type WHERE typename='varchar'
▶ 36 SELECT domain_name, domain_schema FROM information_schem...
▶ 37 SELECT postgis_version()
▶ 38 SELECT postgis_geos_version(), postgis_proj_version()
▶ 39 SELECT has_schema_privilege(n.oid, 'usage') AND has_tabl...
▶ 40 SELECT has_table_privilege(c.oid, 'select') AND has_tabl...
▶ 41 SELECT has_table_privilege(c.oid, 'select') FROM pg_clas...
▶ 42 SET application_name='QGIS'
▶ 43 SET extra_float_digits=3
▶ 44 BEGIN READ ONLY;DECLARE qgis_1 BINARY CURSOR FOR SELECT ...
▼ 45 FETCH FORWARD 2000 FROM qgis_1
Provider : postgres
```

Profile Plots -> Presentation later

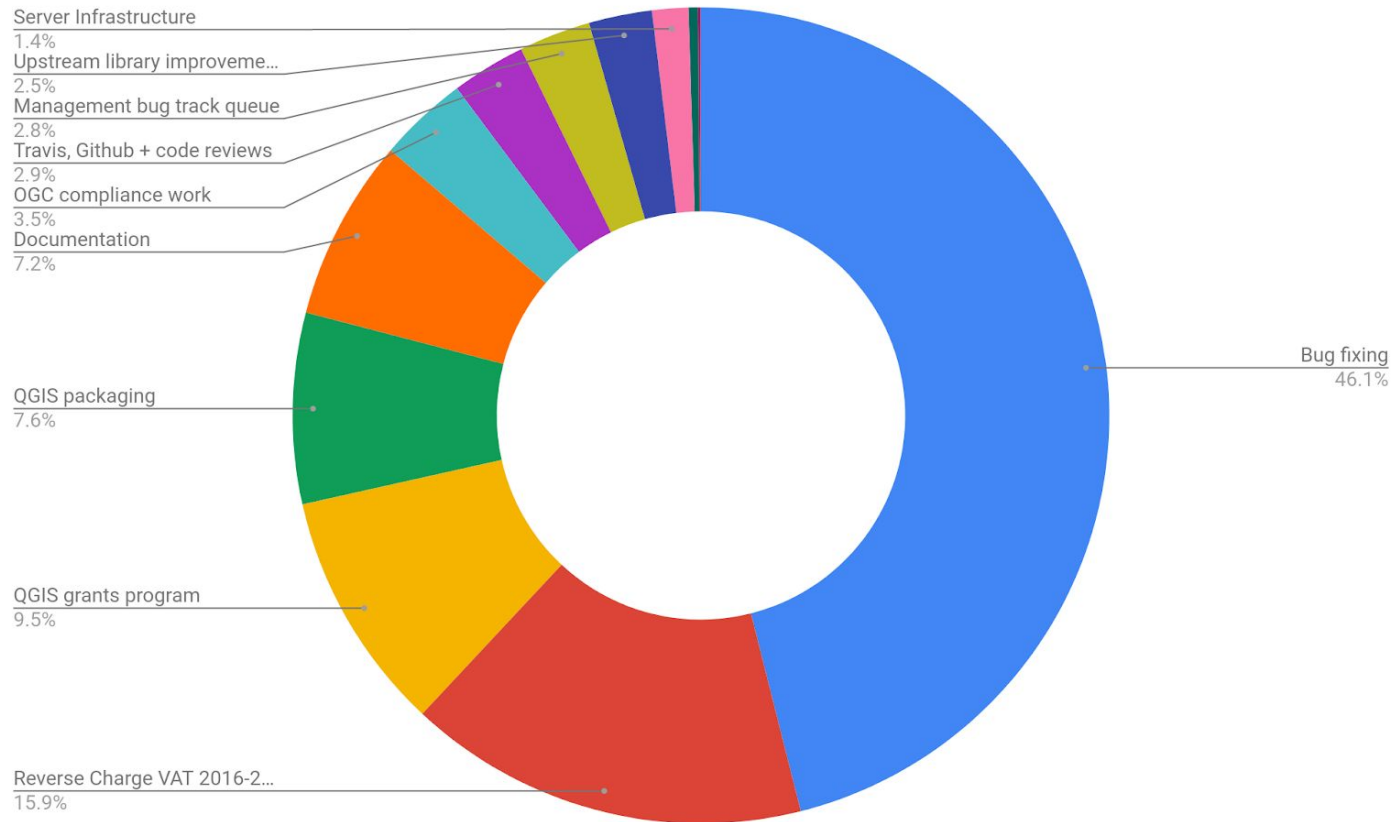


Want to contribute?

- translating QGIS, docs & website
- documenting, creating training material
- testing & submitting bug reports
- developing new features
- fixing bugs & issues
- maintaining the QGIS IT infrastructure
- maintaining Github PR
- maintaining CI (continuous integration)
- maintaining issues (bugs & feature requests)
- releasing QGIS & packaging
- teaching QGIS, creating courses
- reviewing training material and certificates
- writing plugins
- managing plugin submissions
- donating & sponsoring
- accounting, sponsor mgmt
- running user groups
- organizing local events &
- organizing dev meetings
- helping users on stackexchange & mail
- social media & PR
- tutoring new contributors



200'800 €
Income 2021



211'600 €
Expenses 2021

Sustain us

Sustaining membership

- 27,000+ € / Year Flagship Member
 - e.g. for companies larger than 100 employees, federal governmental organizations
- 9,000+ € / Year Large Member
 - e.g. for larger cities, provinces or companies up to 100 employees
- 3,000+ € / Year Medium Member
 - e.g. for universities, medium size cities or companies up to 50 employees
- 500+ € / Year Small Member
 - e.g. for smaller cities or companies up to 10 employees

Sustain us

Donations

- Any amounts
- Tax-deductible in some countries

Workforce

- Commit employees work-time for maintenance (PR, Bug fixes, documentation, translation, ...)
- Body lease a developer to the project

Follow QGIS

- On Twitter: <https://twitter.com/QGIS>
- On Github: <https://github.com/qgis>

→ or better be a part of QGIS!

What will you contribute?



Grazie mille!

marco@opengis.ch

@mbernasocchi