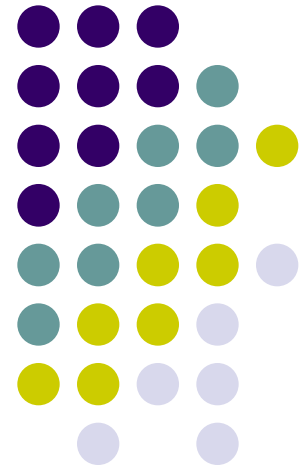


Modul Pelatihan Peta via QGIS

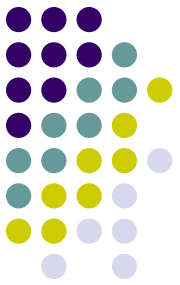
M Sri Harta ST Msc



Skill GIS

1. Membaca Data Spasial (GIS)
2. Membuat Data Spasial
3. Desain Peta
4. Analisis Spasial



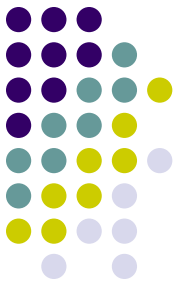


Download & Install QGIS

<https://qgis.org/>

- ✓ Download versi terbaru atau sesuaikan dengan spesifikasi computer anda.
- ✓ Install .
- ✓ Open QGIS anda.

Anda telah berhasil Install dan Membuka QGIS



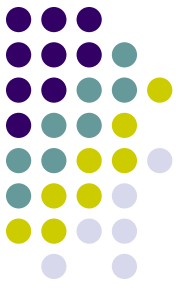
Membuka Data GIS di QGIS

1. Open Aplikasi QGIS anda

The screenshot shows the QGIS interface with the following components and annotations:

- Browser Panel (Left):** Contains a file tree. A red arrow points from the text box "Buka Layer (Data)" to the "Add New Layer" icon (a blue square with a white plus sign) in the Browser panel.
- Layers Panel (Bottom):** A red arrow points from the text box "Layer yang di Buka" to the "Layers" panel at the bottom of the interface.
- Layer Styling Panel (Right):** A red arrow points from the text box "Simbology" to the "Layer Styling" panel on the right side.
- Browser Panel (Left):** A red arrow points from the text box "Label" to the "Labels" icon (a blue square with a white 'L') in the Browser panel.

Untuk Membuka data SHP/GIS/Citra Satelit/ Foto Udara cukup klik 2 x

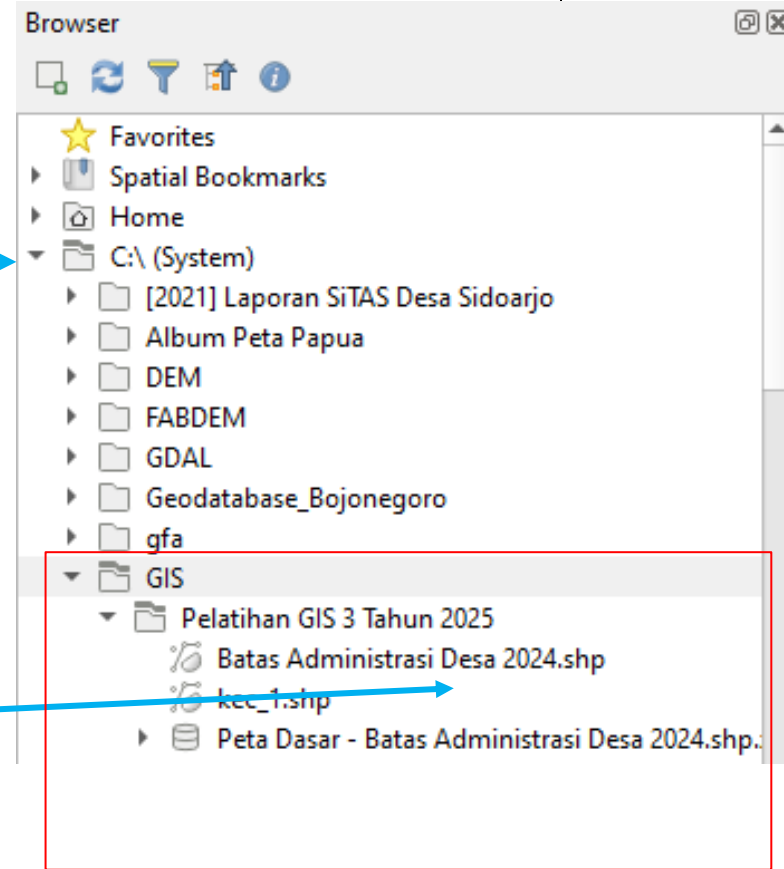


Langkah-langkahnya

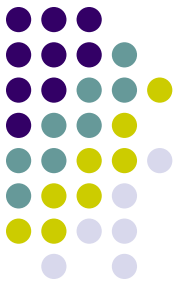
Browse ... > Pilih Folder Data GIS yang akan dibuka.

Misal : C:\GIS\Pelatihan GIS
3 Tahun 2025

1. Data GIS yang akan dibuka Adalah batas Adminsitasi Kabupaten Banyuwangi
2. Klik 2x : **Batas Administrasi Desa 2024**
3. Di Mapview secara otomatis tampil **Peta Adminstrasi Desa**



Anda telah berhasil Membuka data SHP/GIS/Citra Satelit/ Foto Udara



Membuka Data GIS di QGIS

1. Explorasi Mapview (Tampilan Data spasial di QGIS)

The screenshot displays the QGIS interface with the following components and annotations:

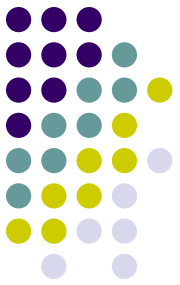
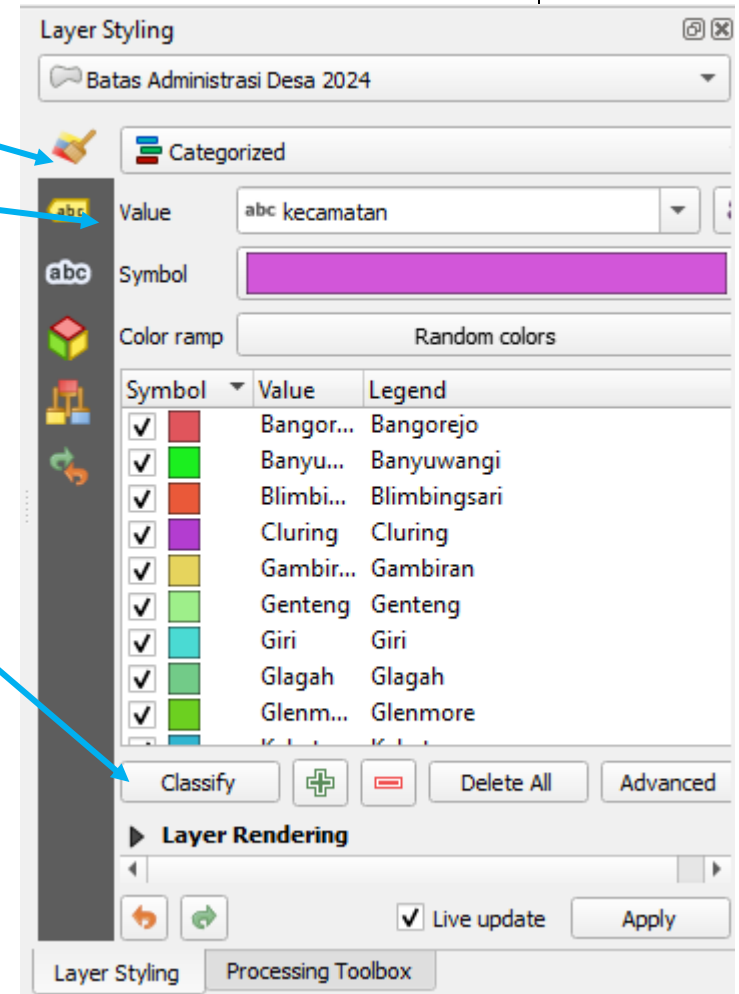
- Layers Panel:** Shows the layer 'Batas Administrasi Desa 2024' selected.
- Layer Styling Panel:** Shows the 'Single Symbol' style with 'Simple Fill' selected.
- Map View:** Displays a map of Indonesia with orange administrative boundaries.
- Annotations:** Four text boxes with red arrows pointing to the corresponding UI elements: 'Layer Style/Symbology', 'Layer yang di Buka', 'Pilih Symbology', and 'Label'.

Untuk Memahami sekilas Layer/Data GIS yang dibuka

Mengatur Simbology/Style

Langkahnya:

1. Pilih > **Categorized**
2. Value > **kecamatan**
3. Klik : **Classify**
4. **Apply** (*untuk update symbology yang dipilih*)



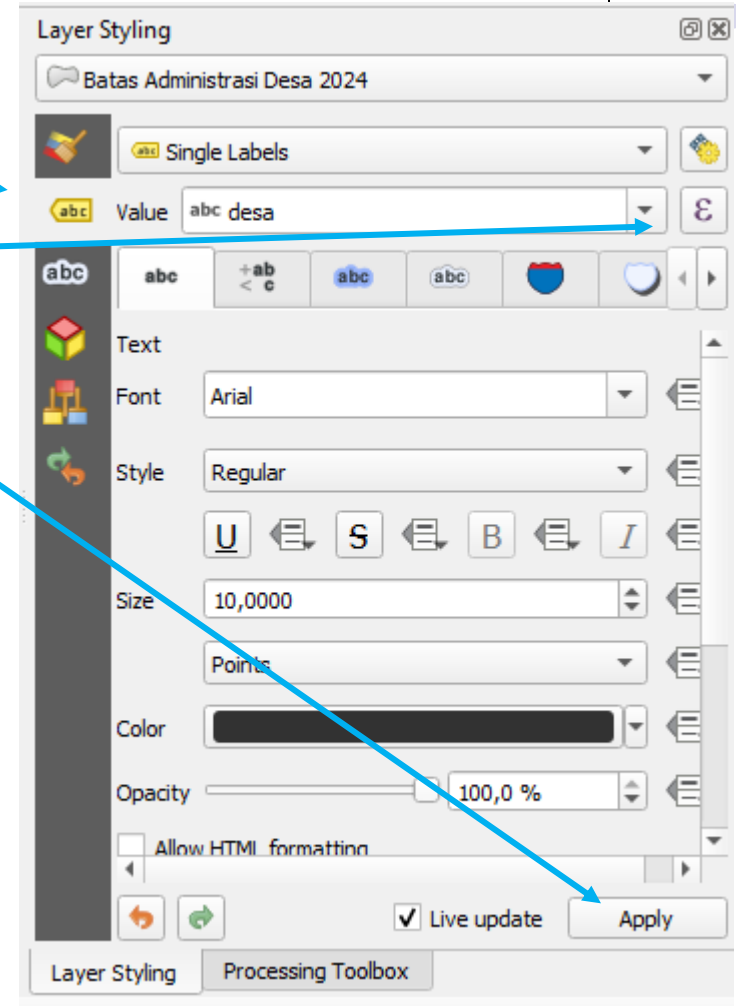
Anda telah berhasil Membuat Simbology Data GIS



Mengatur Simbology : Label

Langkahnya:

1. Pilih > **abc (label)**
2. Value > **desa**
3. **Apply** (untuk update symbology yang dipilih)



Anda telah berhasil Membuat Label

Hasil Symbology



The screenshot displays the QGIS interface with a map of village administrative boundaries. The map is styled using a categorized symbology, where each village is represented by a unique color. The interface includes a menu bar, a toolbar, a Layers panel on the left, and a Layer Styling panel on the right. The Layer Styling panel shows the 'Categorized' style with a legend table.

Symbol	Value	Legend
	Bangor...	Bangorejo
	Banyu...	Banyuwangi
	Blimbi...	Blimbingsari
	Cluring	Cluring
	Gambir...	Gambiran
	Genteng	Genteng
	Giri	Giri
	Glagah	Glagah
	Glenm...	Glenmore

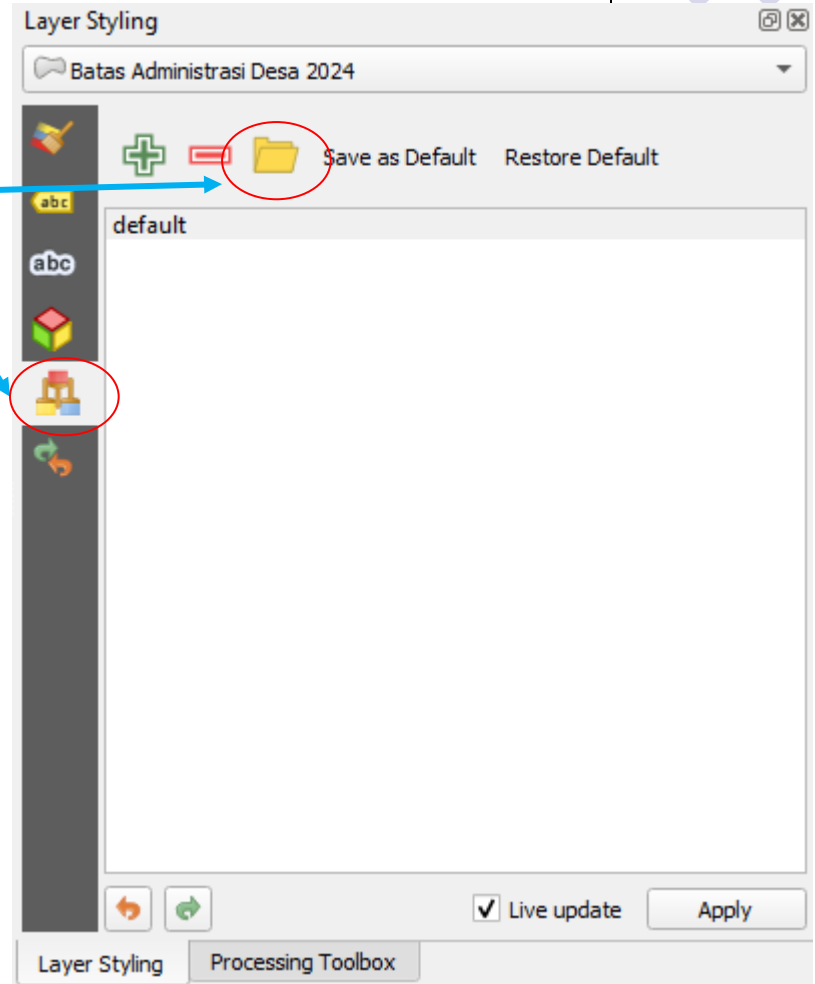
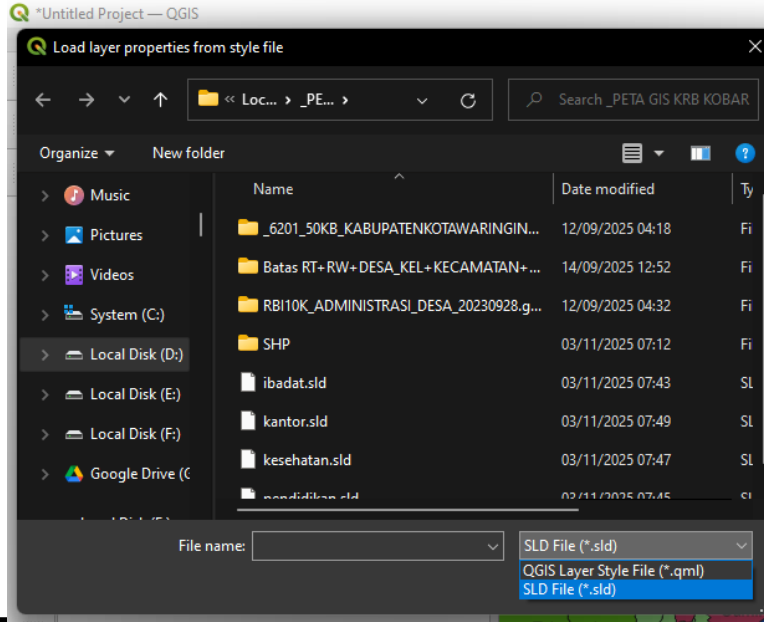
At the bottom of the interface, the status bar shows the coordinate as -8,556 114,478, a scale of 1:767164, a magnifier of 100%, a rotation of 0,0°, and the EPSG:9518 projection.



Menyimpan Simbology/Style ke SLD

Langkahnya:

1. Pilih > **Style Manager**
2. Value > **Load Styler**
3. Pilih: ***sld (dan simpan Namanya)**



Anda telah berhasil Menyimpan Simbology Data GIS ke SLD

Mengatur Simbology/Style

Langkahnya:

1. Pilih layer yang akan disimbology, Klik kanan > Properties

2. Pilih : **Symbology**

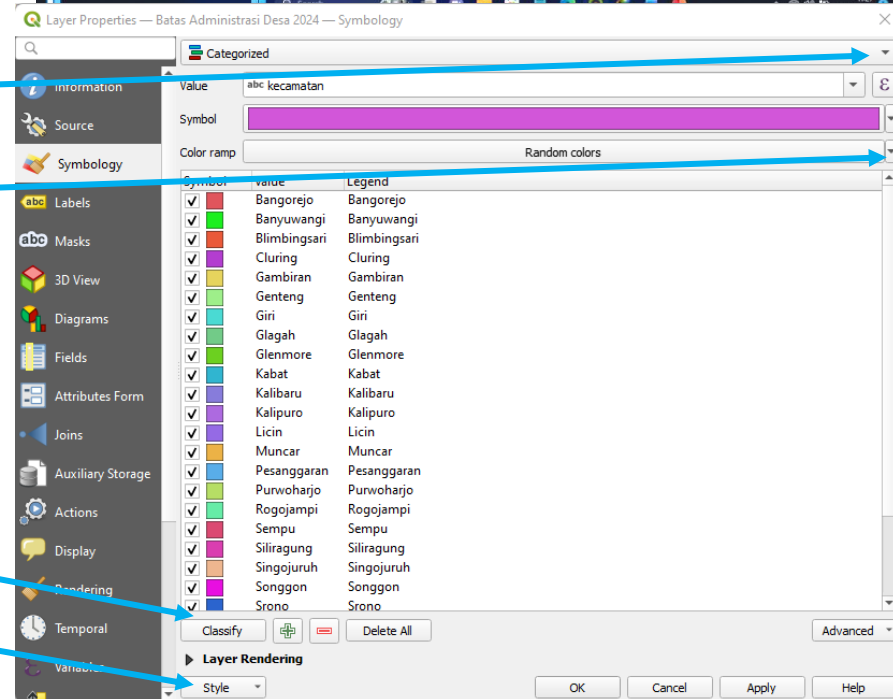
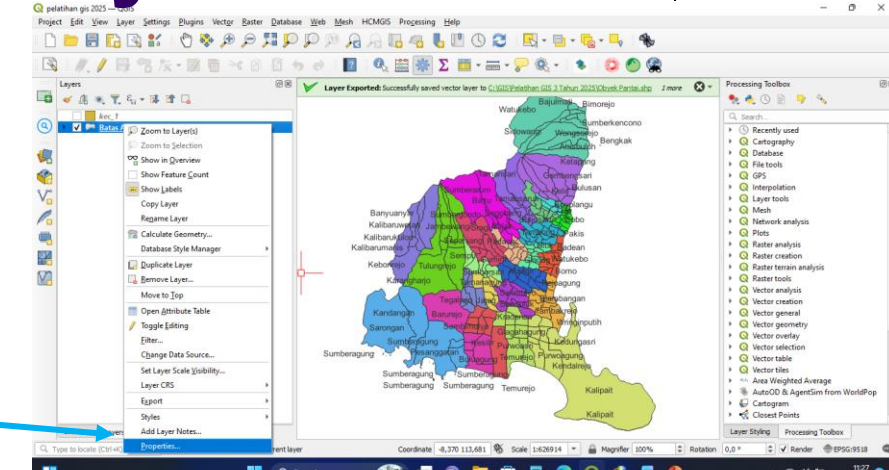
3. Pilih : **Categorized**

4. **Value : Apply** (untuk update symbology yang dipilih)

5. Pilih : **Color (warna)**

6. Pilih : **Classify**

7. Pilih **Style** untuk Menyimpan Style : SLD



Anda telah berhasil Membuat Simbology Data GIS: Cara 2

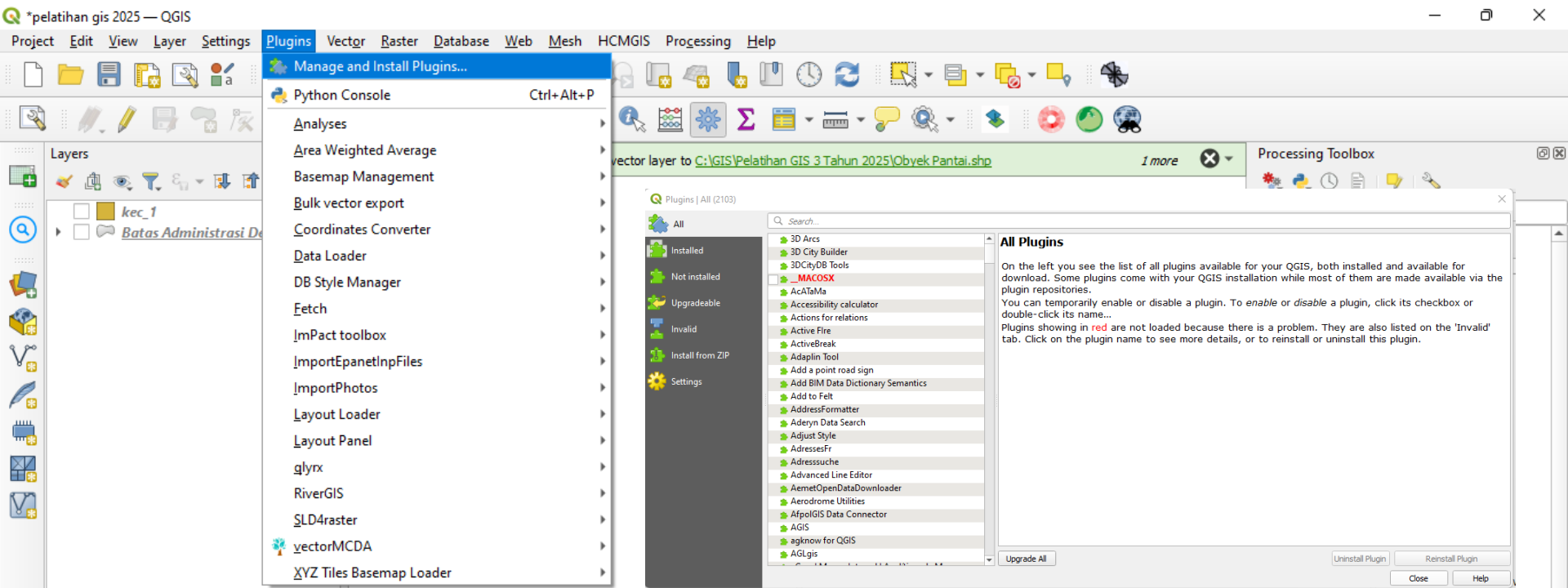


Mengenal dan Install Plugins

Install Plugins : **Spreadsheet Layers** Excell

Install Plugins : **HCMGIS** Basemap

Install Plugins : **NextGIS EasyQuery**



Explore Data Spasial & Plugins

Basemap Online

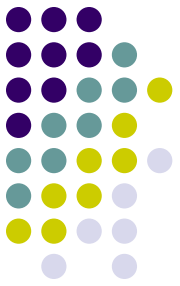


1. Add Layer Batas Desa Banyuwangi
2. Add Basemap > Citra Satelit
3. Atur Transparansi Layer Batas Desa Banyuwangi.> **Opacity**

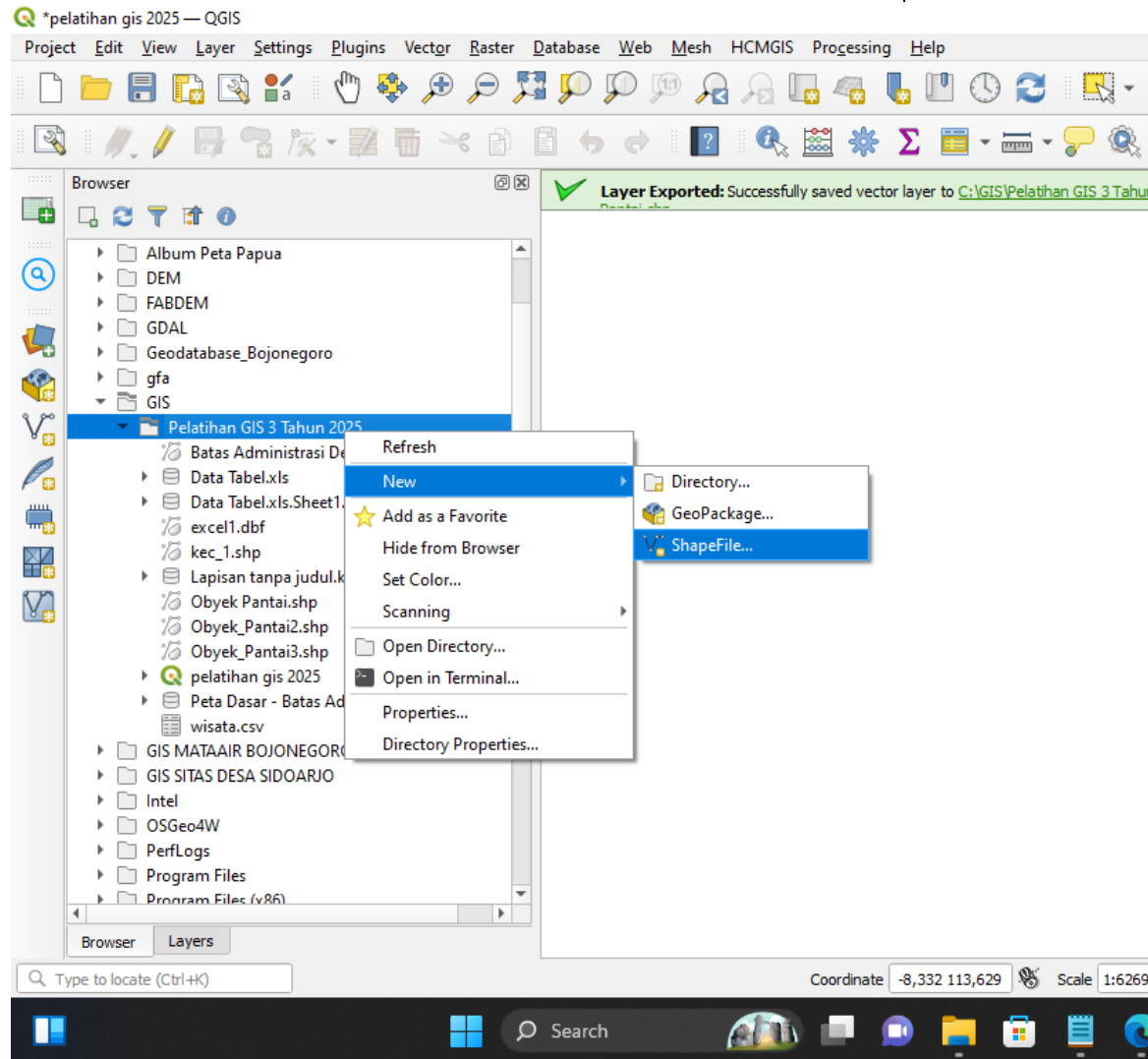
The screenshot displays the QGIS software interface. The top-left window shows a map of Banyuwangi with administrative boundaries. The 'Processing' menu is open, and the 'Basemaps' sub-menu is selected, showing a list of basemap options including Google Satellite, Google Satellite Hybrid, Google Terrain Hybrid, and Bing Virtual Earth. A blue arrow points from the 'Opacity' label in the list to the 'Opacity' slider in the 'Layer Styling' panel on the right. The 'Layer Styling' panel shows the 'Batas Administrasi Desa 2024' layer selected, with a categorized legend and an opacity slider set to 65.3%.

Symbol	Value	Legend
<input checked="" type="checkbox"/>	Bangorejo	Bangorejo
<input checked="" type="checkbox"/>	Banyuwangi	Banyuwangi
<input checked="" type="checkbox"/>	Blimbingsari	Blimbingsari
<input checked="" type="checkbox"/>	Cluring	Cluring

Membuat Peta: Digitasi on Screen di QGIS



1. Pilih Folder :
Pelatihan 3 GIS
2. Klik kanan > **New**
3. Pilih : **Shapefile**
4. Akan Tampil
Menubar





New Shapefile /Membuat Layer Baru

New Shapefile Layer

File name: C:/GIS/Pelatihan GIS 3 Tahun 2025/new_layer.shp **Nama Layer**

File encoding: UTF-8

Geometry type: **Pilih Point/Line/Polygon**

Additional dimensions: None Z (+M values) M values

EPSG:4326 - WGS 84 **Pilih Sistem Proyeksi Peta**

New Field

Name: **Field Atribute : Colom 1; Colom 2**

Type: abc Text (string) **Pilih Jenis Data : Text atau Number (Angka)**

Length: 80 Precision:

Jangan lupa Add to List

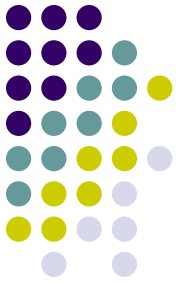
Klik "OK"

Remove Field

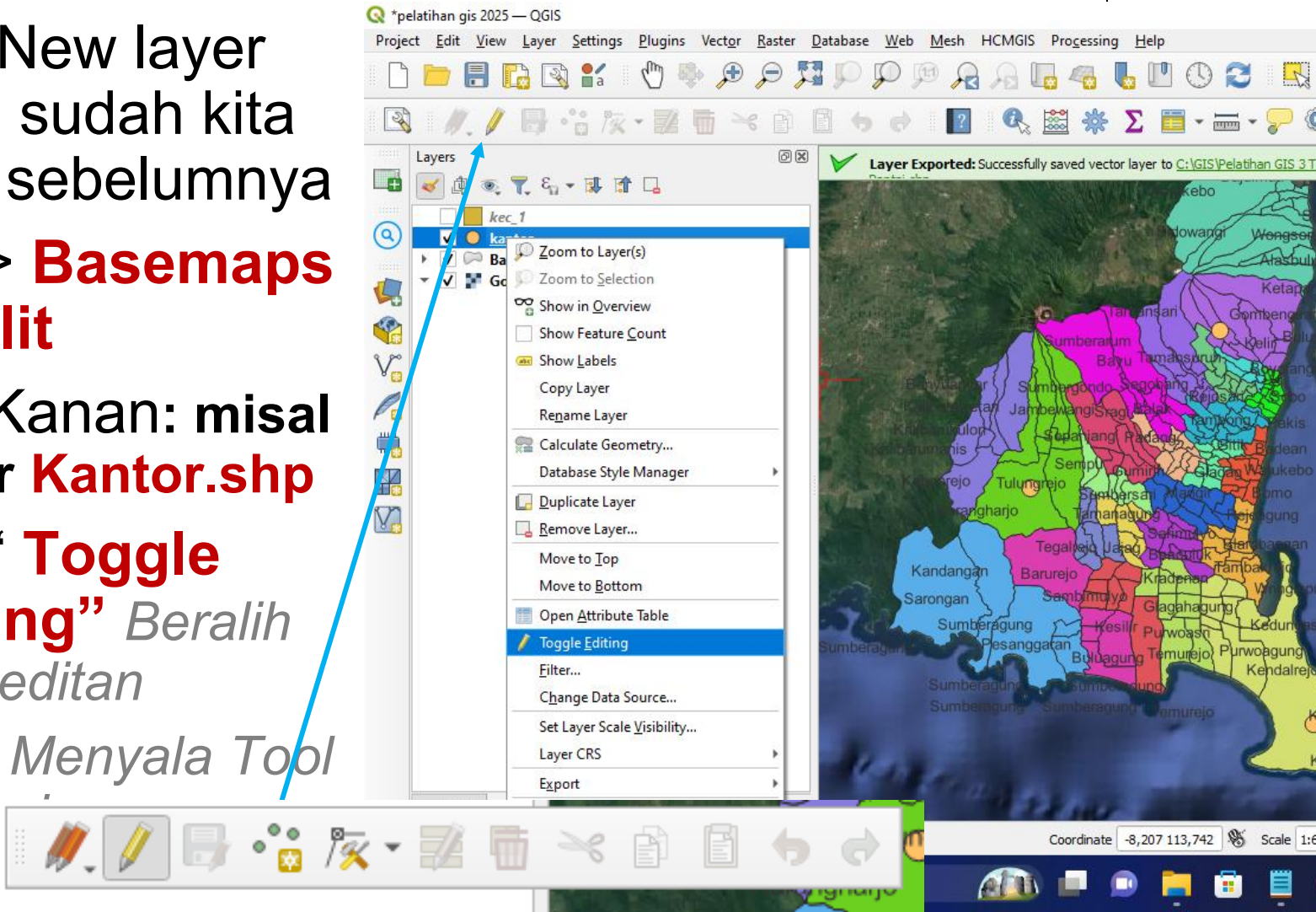
OK Cancel Help

Name	Type	Length	Precision
id	Integer	10	

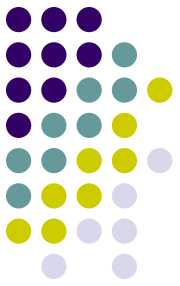
Memulai Membuat Peta: Digitasi on Screen di QGIS



1. Add New layer yang sudah kita buat sebelumnya
2. Add > **Basemaps**
Satelit
3. Klik Kanan: misal Layer **Kantor.shp**
4. Klik “**Toggle Editing**” *Beralih Peneditan*
5. Akan Menyala Tool *Digitasi*



Memulai Membuat Peta: Digitasi on Screen di QGIS



6. Persiapan Mulai digitasi on screen

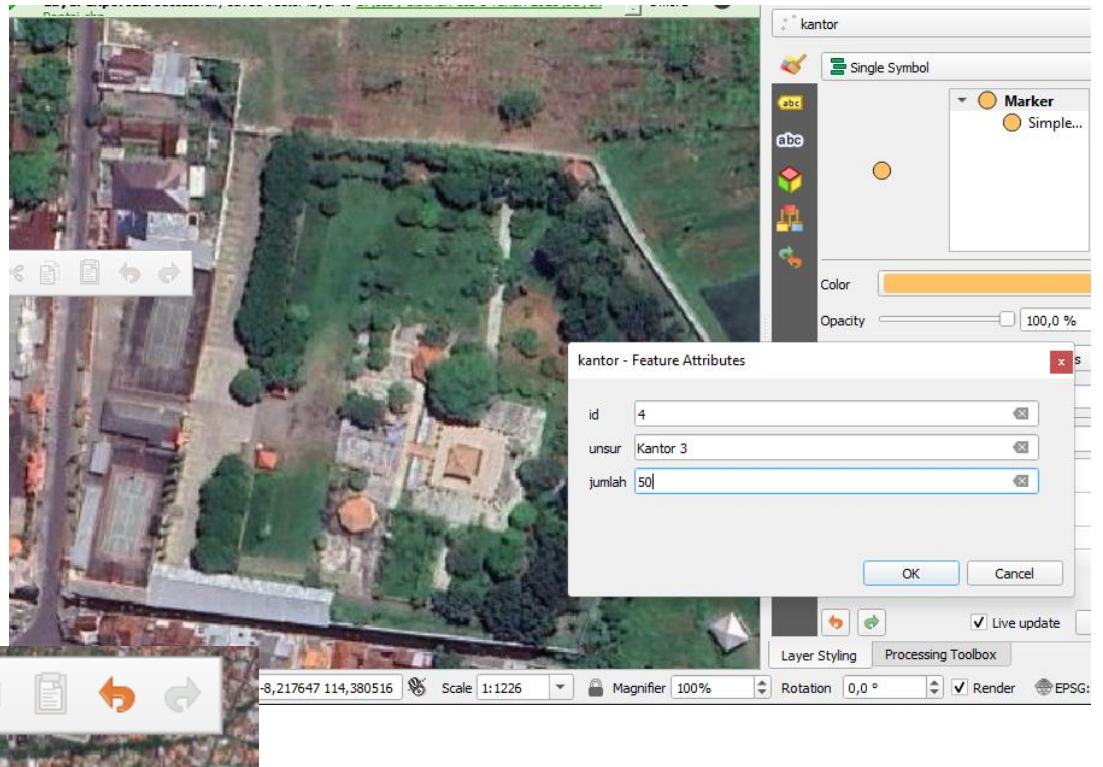
7. Klik **“Add Point Feature”**

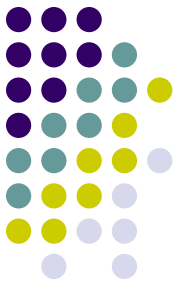
8. Zoom pada basemap terhadap obyek yang akan di digitasi

9. *Isikan attribute nya*

10. Klik **“OK”**

11. *Klik Save dan Klik “pensil” untuk Mengakhiri Editing*





Konversi Data Excel ke SHP/GIS

6. Persiapan Mulai excell yang akan dikonversi

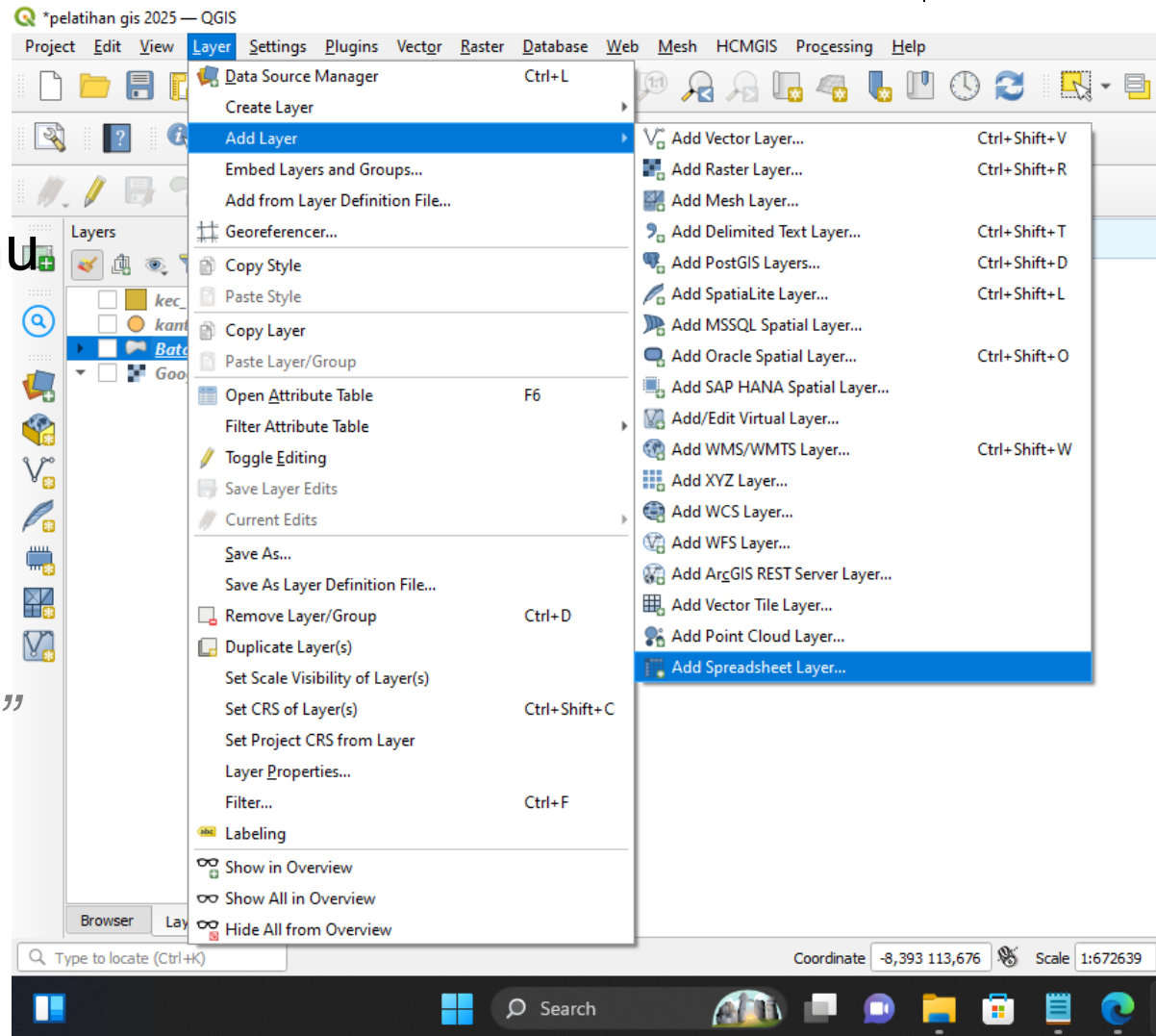
7. Klik menu di menu utama “**Layer**”

8. Pilih **Add Layer** > **Add Spreadsheets Layer**

9. Browse data excell-nya

10. **Geometry** di “v” dicentang

11. Klik OK



Konversi Data Excel ke SHP/GIS (2)



6. Secara otomatis akan tampil di layer
7. Data yang ditambahkan belum tersimpan sebagai data shp di directory, selanjutnya “export data to shapfile”

Create a Layer from a Spreadsheet File **Browse data excell atau tabular yang akan di konversi**

File Name: C:/GIS/Pelatihan GIS 3 Tahun 2025/Data Tabel.xls **Browse...**

Sheet: Sheet1

Layer name: Data Tabel-Sheet1

Rows: Number of lines to ignore: 0 Header at first line End of file detection

Geometry **Di Centang**

Encoding: PointFromColumns

Field: X field: x Y field: y Show fields in attribute table

Reference system: EPSG:4326 - WGS 84

	Name	descriptio	x	y
	String	String	Real	Real
1	Pantai Wedi Ireng	NULL	113.9898977	-8.5991335
2	Pantai Bandealit	NULL	113.7117613	-8.4815329
3	Pantai Watu Ulo	NULL	113.561897	-8.425297
4	Pantai Payangan	NULL	113.581299	-8.436409
5	Pantai Pancur	NULL	114.3729084	-8.6779017
6	Pantai Cemara ...	NULL	114.3543526	-8.4572907
7	Pantai Rajegwe...	NULL	113.9374598	-8.5587133
8	Pantai Boom	NULL	114.3852098	-8.2119989
9	Pantai ...	NULL	114.2826076	8.1000740

Pastikan sudah tampil X dan Y atau Longitude dan Latitude nya

Help OK Cancel

Konversi Data Excel ke SHP/GIS

(3)



6. Klik Kanan di Data Tabular
7. Pilih “ Export > Save Feature As....
8. Save jadi file shp/GIS

The screenshot displays the QGIS software interface. On the left, the 'Layers' panel shows a list of layers: 'kec_1', 'kantoran', 'Data Tabular', 'Batas Administrasi', and 'Google Earth'. The 'Data Tabular' layer is selected. A right-click context menu is open over this layer, listing various actions such as 'Zoom to Layer(s)', 'Show in Overview', 'Copy Layer', and 'Export'. The 'Export' option is highlighted in blue. To the right, the 'Save Features As...' dialog box is open. It shows the 'Format' set to 'ESRI Shapefile', 'File name' as 'ddadadsa', and 'CRS' as 'EPSG:4326 - WGS 84'. The 'Encoding' is set to 'UTF-8'. Under 'Select fields to export and their export options', 'Persist layer metadata' is checked. The 'Geometry' section has 'Geometry type' set to 'Automatic'. The 'Layer Options' section shows 'RESIZE' set to 'NO' and 'SHPT' set to 'SHP'. At the bottom, there are buttons for 'OK', 'Cancel', and 'Help', along with a checkbox for 'Add saved file to map'.



Explorasi Query Data Spasial

6. Klik “ NextGIS Query

7. Klik “**Add Conditional**”

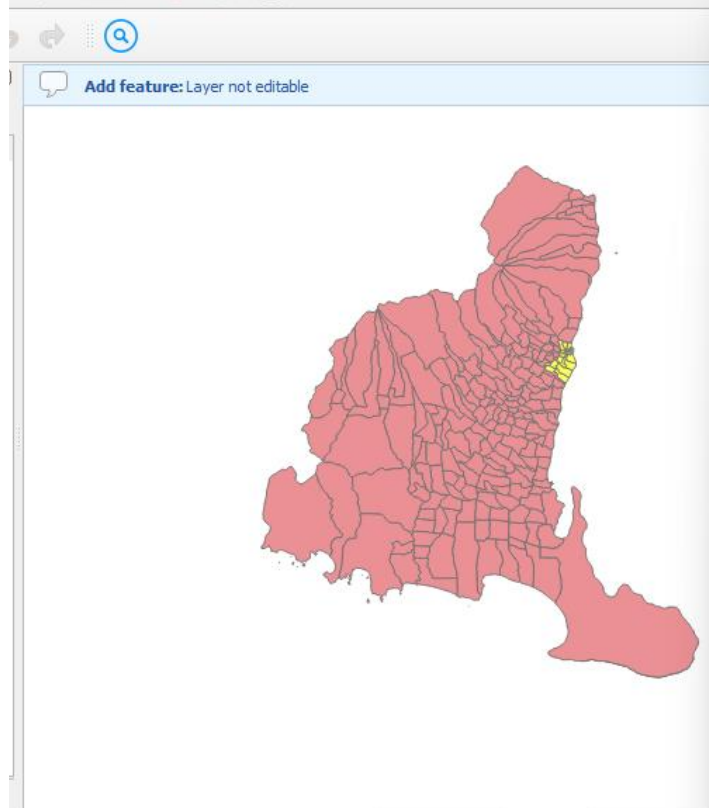
8. *Pilih **Field** > **Kecamatan/Desa/ ...***

9. ***Zoom** di “v” dicentang*

10. ***5.Execute***

*pelatihan gis 2025 — QGIS

Project Edit View Layer Settings Plugins Vector Raster Database Web Mesh HCMGIS Processing Help



NextGIS EasyQuery

1. Select a layer for query:
Batas Administrasi Desa 2024

2. Configure conditions for query:

	Field	Operator	Value
1	abc kecamatan	=	Banyuwangi

Add condition

3. Select query mode:
All conditions should be met

4. Select type of result:
Feature selection

5.Execute

Zoom to selected features

About

Coordinate -9,007 114,766

Scale 1:934128

Magnifier 100%

Rotation 0,0 °

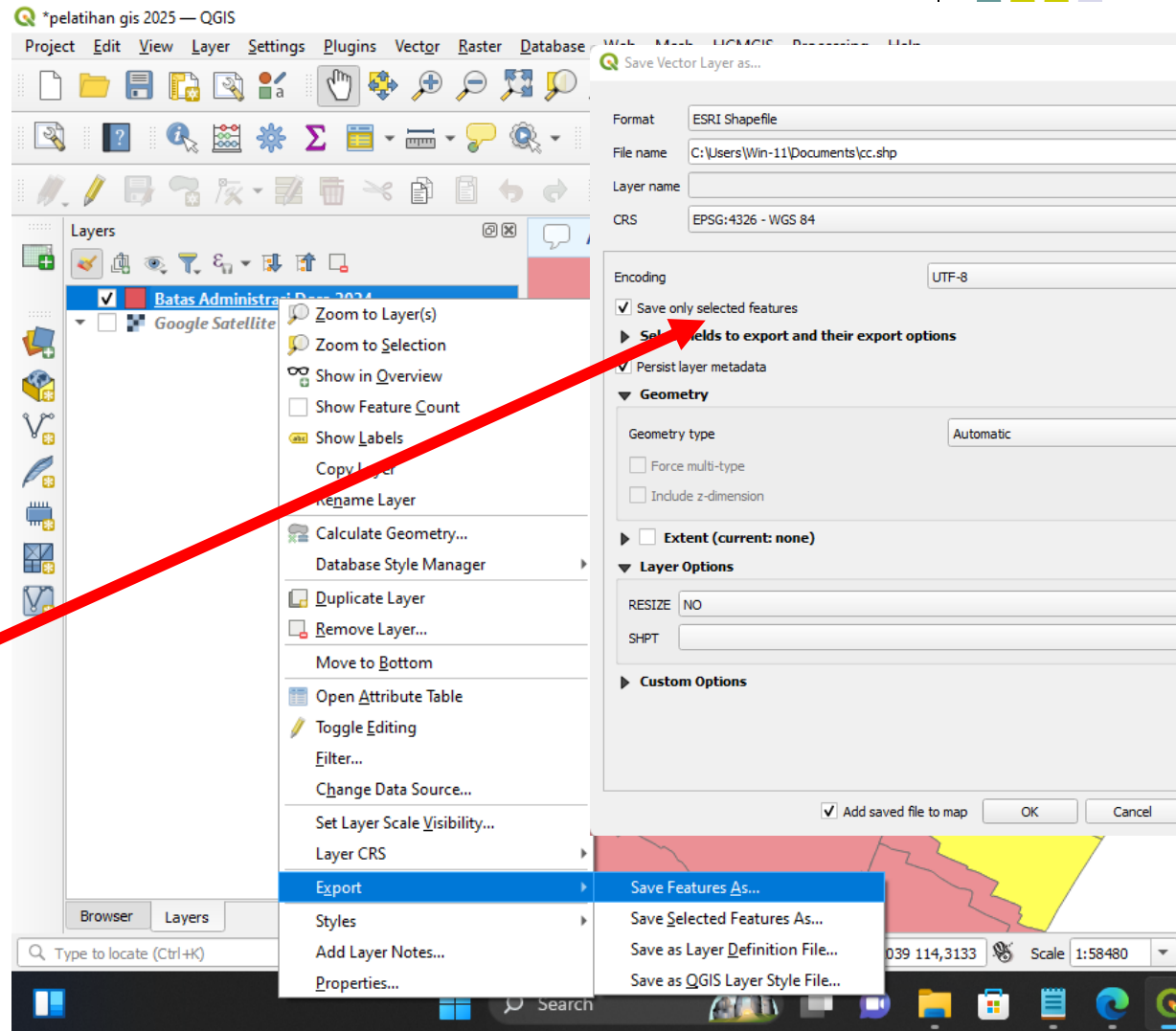
Search

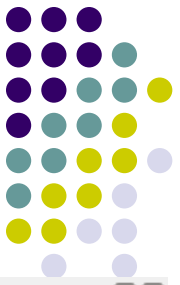


Memindahkan Jadi Data Baru dari Query



6. Klik kanan layernya
7. **Export > SaveFeatures As..**
8. *Simpan jadi layer baru*
9. *Jangan lupa centang pada : **Save Only Selected Feature..***

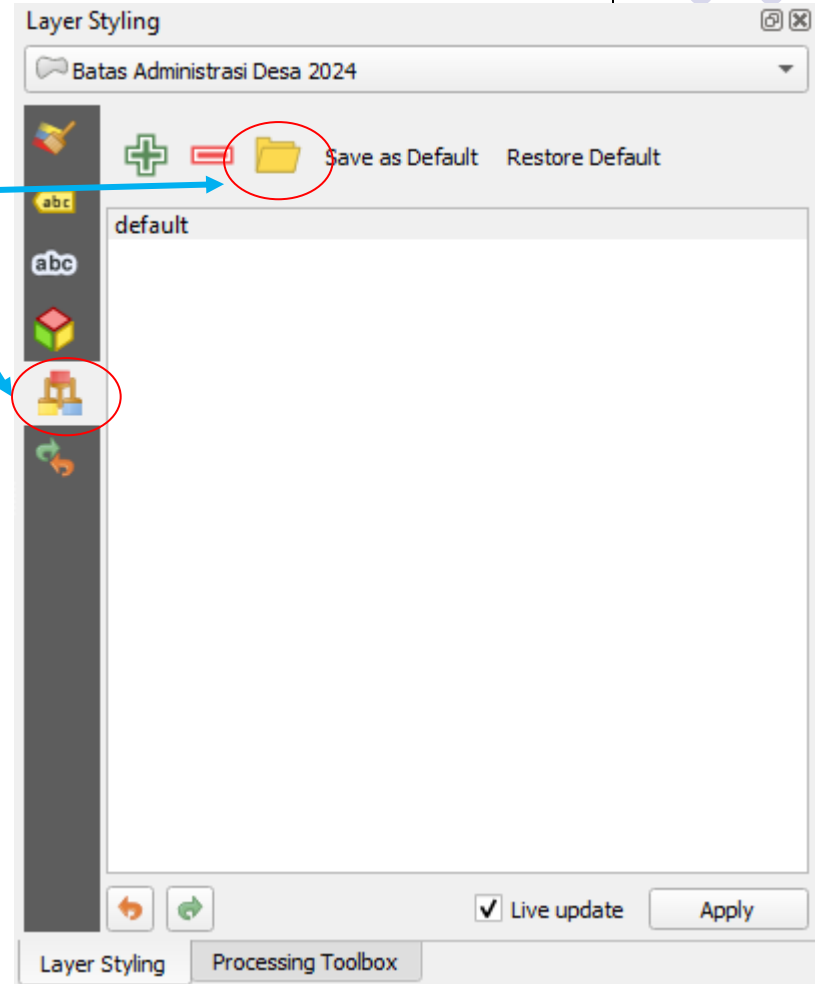
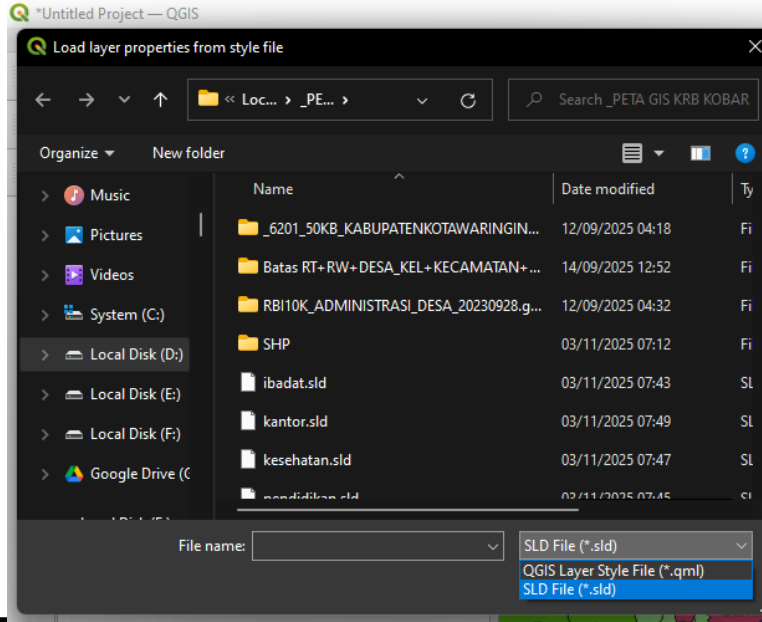




Menyimpan Simbology/Style ke SLD

Langkahnya:

1. Pilih > **Style Manager**
2. Value > **Load Styler**
3. Pilih: ***sld (dan simpan Namanya)**



Anda telah berhasil Menyimpan Simbology Data GIS ke SLD