

Creating Heatmaps

QGIS Tutorials and Tips



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Download the [Surrey data](#).

- ```
1. ##### ##### ##### #####. ##### CSV##### #####. QGIS##### #####
#####(##### ##### :doc: `importing_spreadsheets_csv`##### #####). ##### -->
:menuselection: `Layer --> Add Delimited Text Layer`#####
#####.
```

- ```
2.  police-uk-crime-data-surrey.txt ☐ ☐ ☐ ☐ ☐ :guilabel:`CSV  
(comma separated values)` ☐ ☐ ☐ ☐ ☐ *Easting* ☐ *Northing* ☐ ☐ ☐ ☐ X ☐ Y ☐  
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ :guilabel:`Use spatial index` ☐ ☐ ☐ ☐  
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ :guilabel:`OK` ☐ ☐ ☐ ☐.
```

Create a Layer from a Delimited Text File

File Name:

Layer name: Encoding:

File format: ☒ CSV (comma separated values) ☐ Custom delimiters ☐ Regular expression delimiter

Record options: Number of header lines to discard: ☒ First record has field names

Field options: ☐ Trim fields ☐ Discard empty fields ☐ Decimal separator is comma

Geometry definition: ☒ Point coordinates ☐ Well known text (WKT) ☐ No geometry (attribute only table)

X field: Y field: ☐ DMS coordinates

Layer settings: ☒ Use spatial index ☐ Use subset index ☐ Watch file

	ID	Month	Reported by	Falls within	Easting	Northing	Location	Crime type	Conte
1	480097	2010-12	Surrey Police	Surrey Police	532773.00	156680.00	On or near Addison Road	Burglary	
2	480098	2010-12	Surrey Police	Surrey Police	498361.00	149806.00	On or near The Oval	Burglary	
3	480099	2010-12	Surrey Police	Surrey Police	498205.00	165251.00	On or near Albury Close	Burglary	
4	480100	2010-12	Surrey Police	Surrey Police	507437.00	174069.00	On or near Sanctuary Road	Burglary	
5	480101	2010-12	Surrey Police	Surrey Police	498205.00	165251.00	On or near Albury Close	Burglary	

3. `guiLabel: 'Close'`

Delimited text file errors

Errors in file C:/Users/ujaaval/Downloads/police-uk-crime-data-surrey/police-uk-crime-data-surrey.txt
1969 records discarded due to missing geometry definitions

4. `Coordinate Reference System (CRS)`
British National Grid
1936 / British National Grid
`OSGB`
`OK`

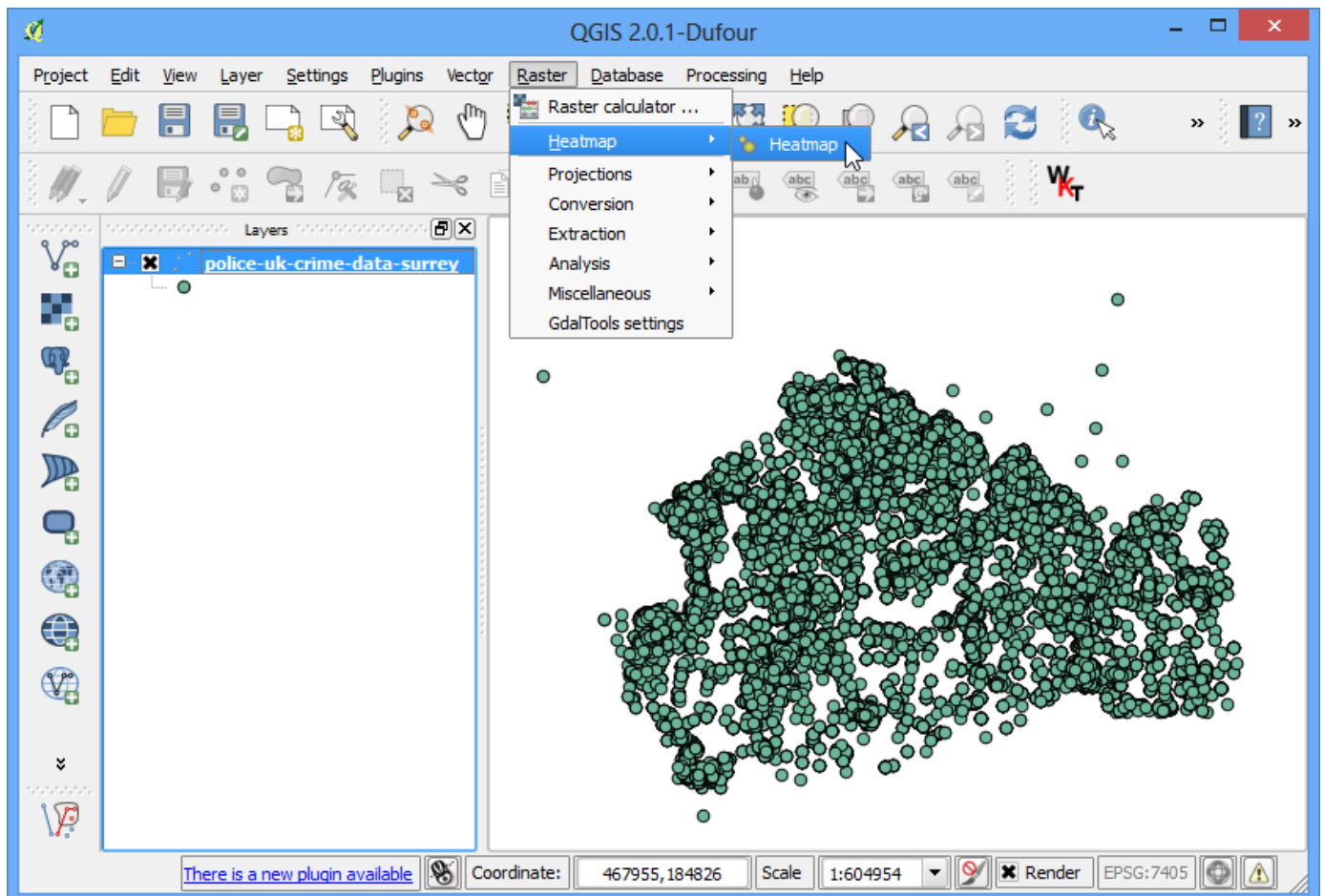


5. □□ QGIS □ □□□ □□□□□ □ □ □□□.

7. To create the heatmap, you need to enable a core plugin named *Heatmap*. See [this post](#) to know how to enable built-in plugins. Once you have enabled the plugin, go to Raster › Heatmap › Heatmap.

Warning

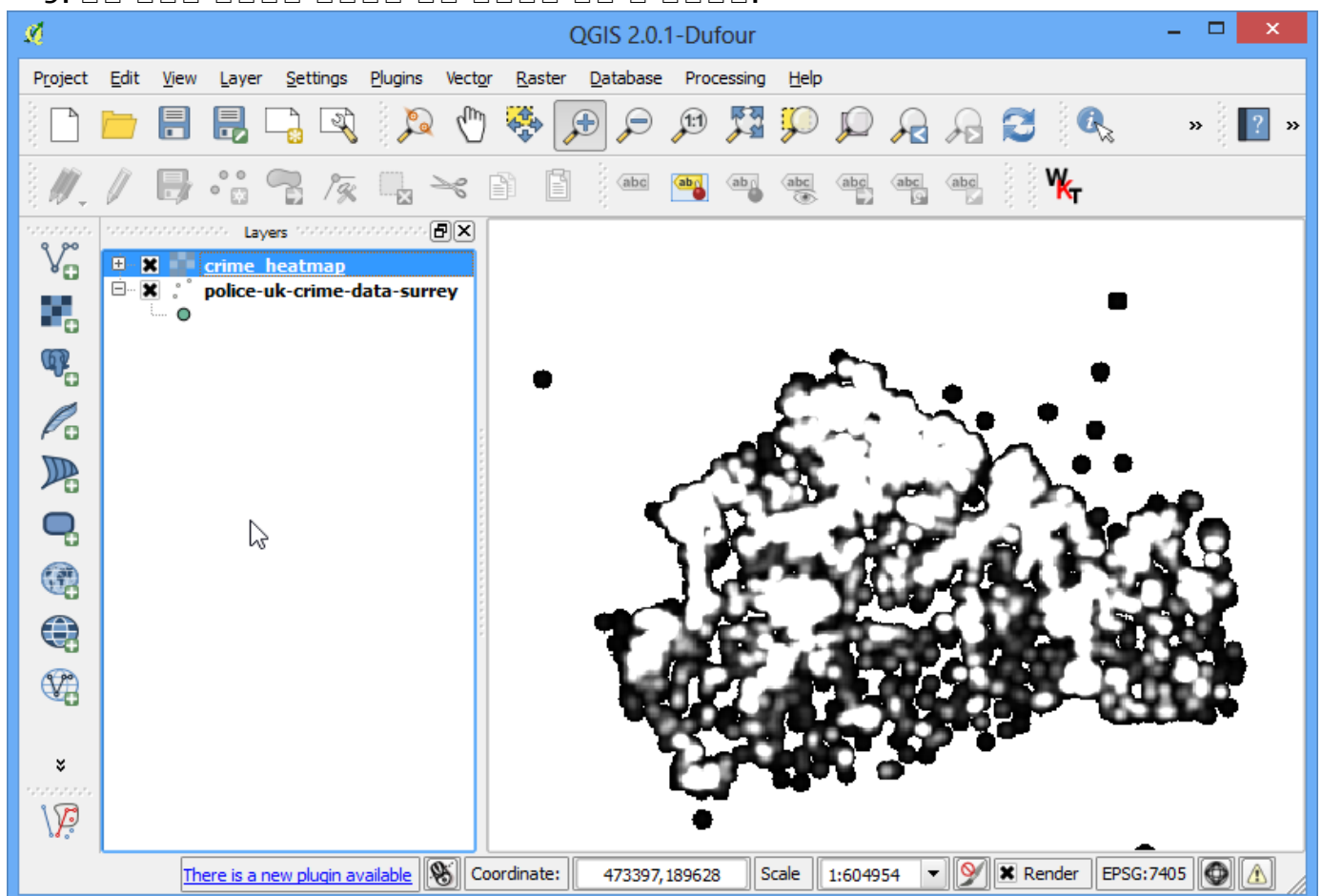
The Heatmap plugin has a bug in QGIS 2.8.1. See [this post](#) for workarounds.



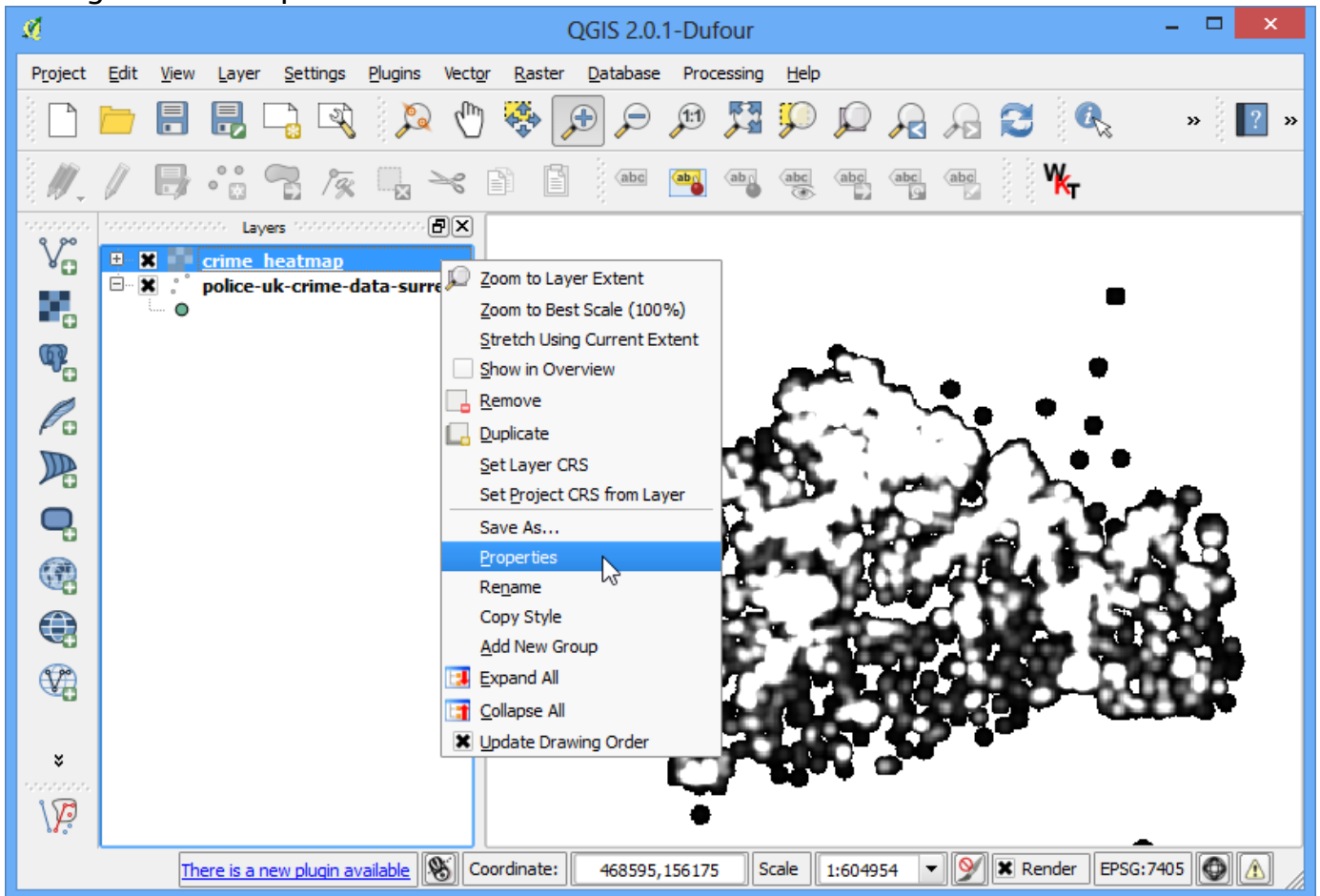
8. `guiabel: Heatmap Plugin` `guiabel: Output raster` `crime_heatmap` `guiabel: Radius` `1000` `heat` `guiabel: Advanced` `guiabel: Cell Size X` `Cell Size Y` `100` `guiabel: OK`



9. □□ □□□ □□□□ □□□□ □□ □□□□ □□ □ □□□□.



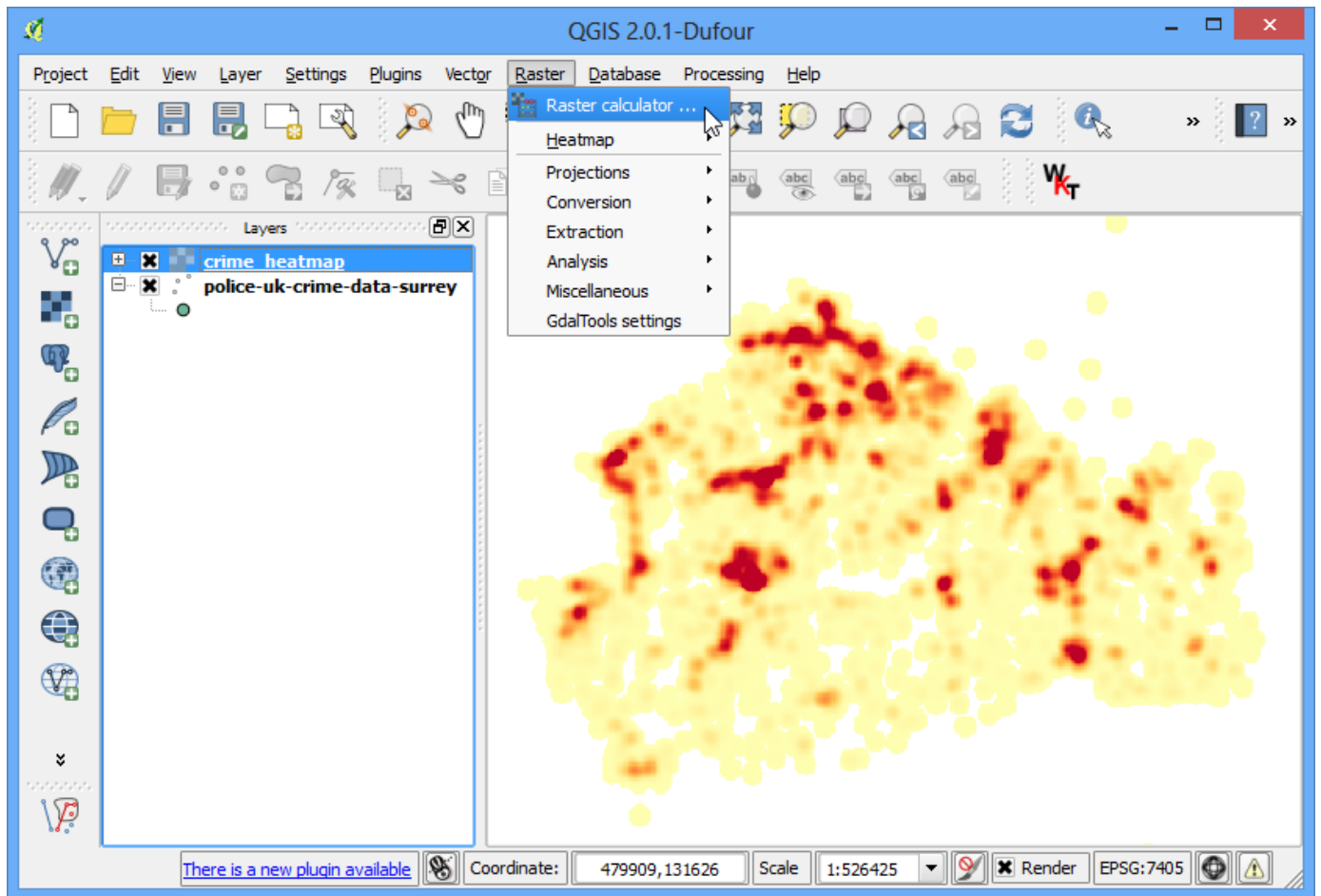
10. Click on the 'Properties' button in the context menu.



11. Click on the 'Render' button in the 'Properties' dialog box.



13. □□ □□□□ □□□□□□. □□□ □□□ □□□ □□□□□. □□□ □□□ □ □□□ □□□□□□ □□□□ □□□□. □□□ □□ □□ □□□ □ □ **hotspots** □ □□□□□ □□□□□. □ □□□□ □□□ **hotspots** □ □□□□□ □□□□□□. □□ □□□ --> □□□ □□□ :menuselection: Raster --> Raster Calculator` □ □□□□.



14. `crime_hotspots` Raster calculator `crime_hotspots` `crime_heatmap@1` Raster calculator expression `"crime_heatmap@1" > 5` `Add result to project` `OK`



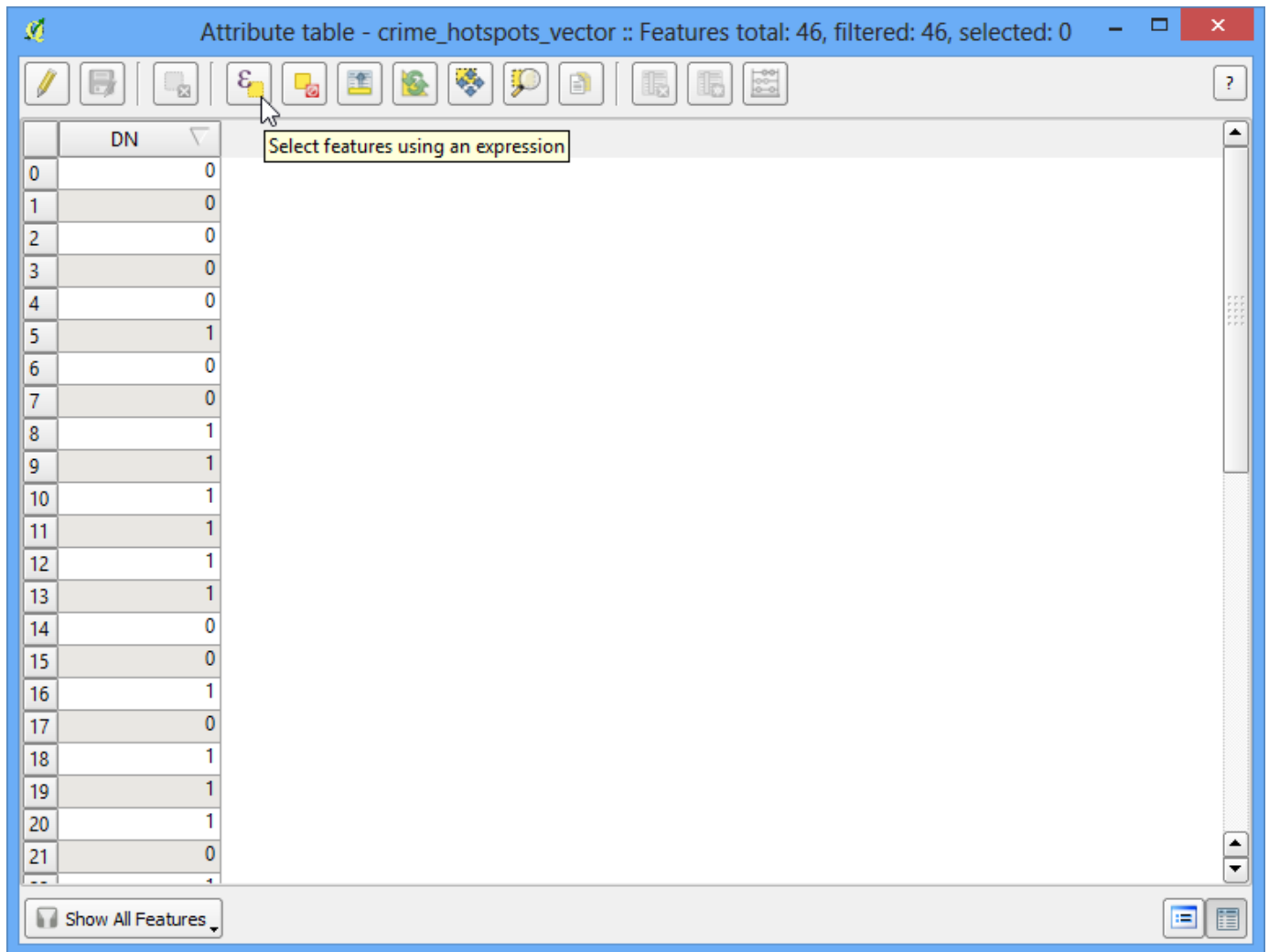
16. Click on crime_hotspots_vector` in the Layers panel. Click on :guilabel:`Field name` in the Polygonize dialog. Click on :guilabel:`Load into canvas when finished` in the Polygonize dialog. Click on :guilabel:`OK` in the Polygonize dialog.



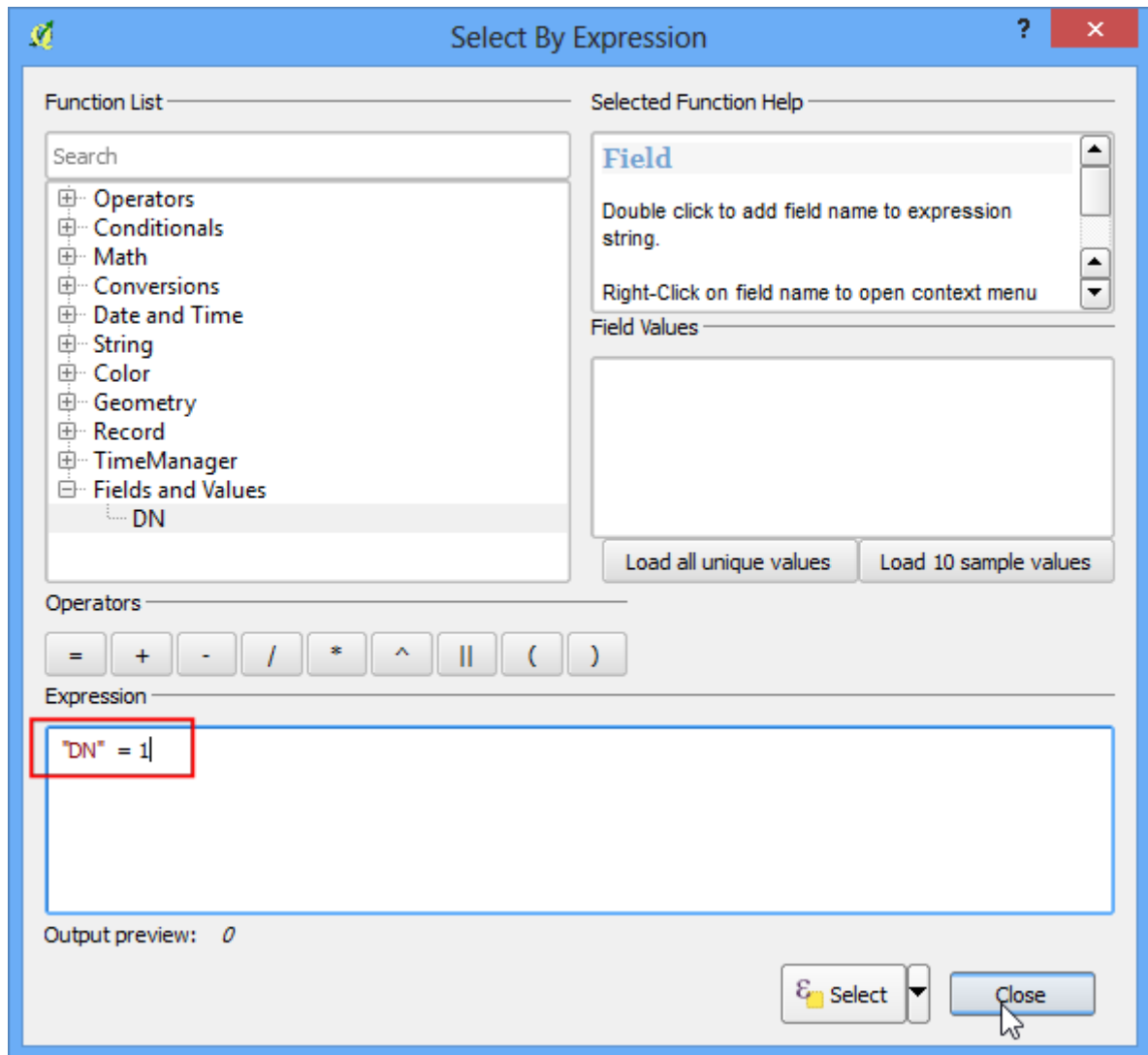
17. Click on the 'crime_hotspots_vector' layer in the Layers panel. Click on the 'Open Attribute Table' button in the Layers panel. Click on the '0' button in the Attribute Table. Click on the '1' button in the Attribute Table. Click on the '0' button in the Attribute Table. Click on the 'Open Attribute Table' button in the Layers panel.



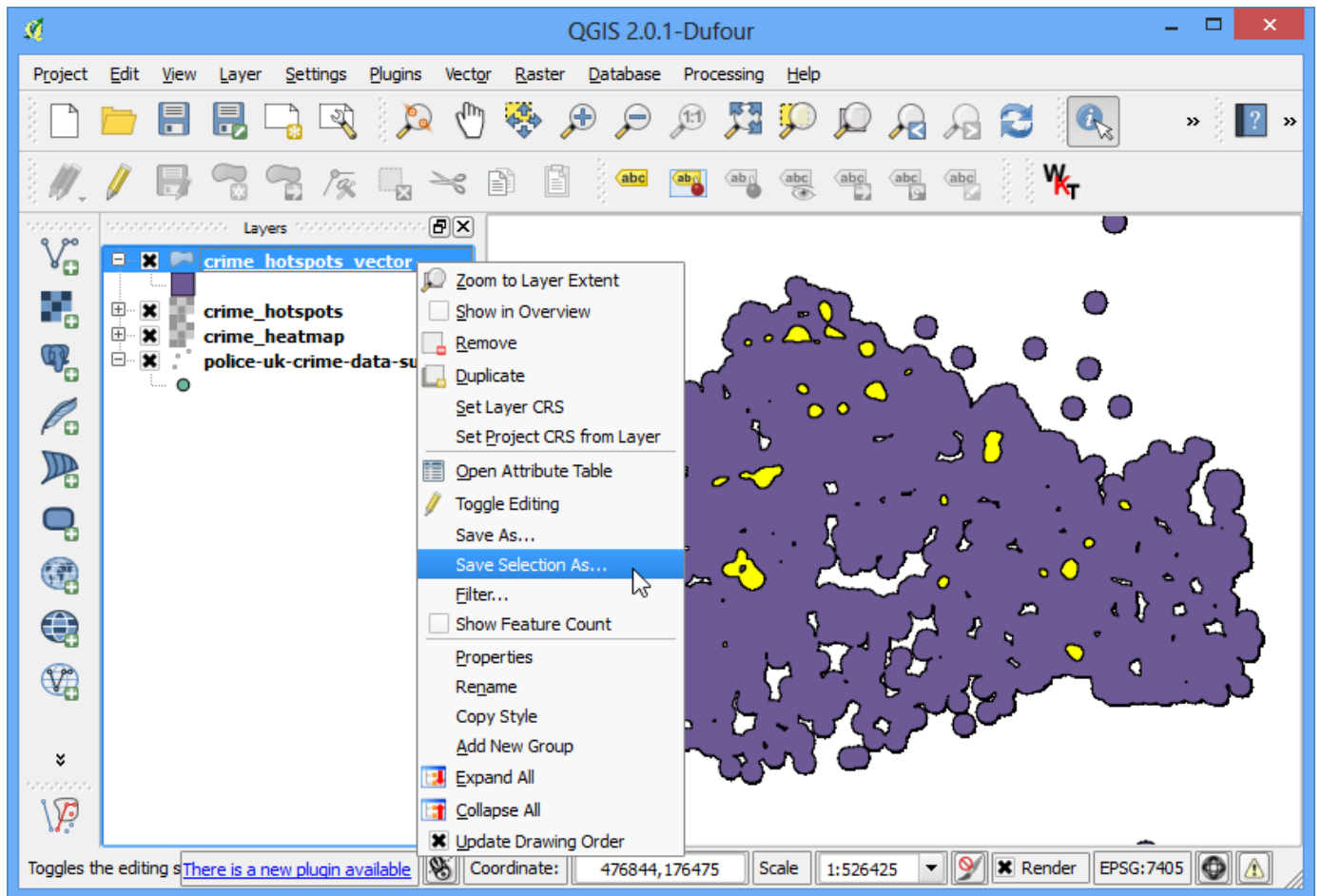
18. `guiabel: `Attribute table`` `guiabel: `Select feature using an expression``



19. `int DN = 1;` `int` `DN` `:``guiLabel``:` `Select` `:``guiLabel``:` `Close` `:``guiLabel``:`



20. QGIS の「Select By Expression」ダイアログボックスのスクリーンショット。左側の「Function List」で「Fields and Values」が選択されており、その下に「DN」がリストアップされている。中央の「Expression」フィールドには「"DN" = 1」と入力されている。右側の「Selected Function Help」パネルには「Field」関数の説明が表示されている。下部には「Output preview」があり、0 と表示されている。右下には「Select」と「Close」のボタンがある。



21. `crime_clusters` `:guilabel: 'Add saved file to map'` `:guilabel: 'OK'`

