

Creating Heatmaps

QGIS Tutorials and Tips



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Translations by

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cluster analysis and hotspot analysis.



2011 Surrey

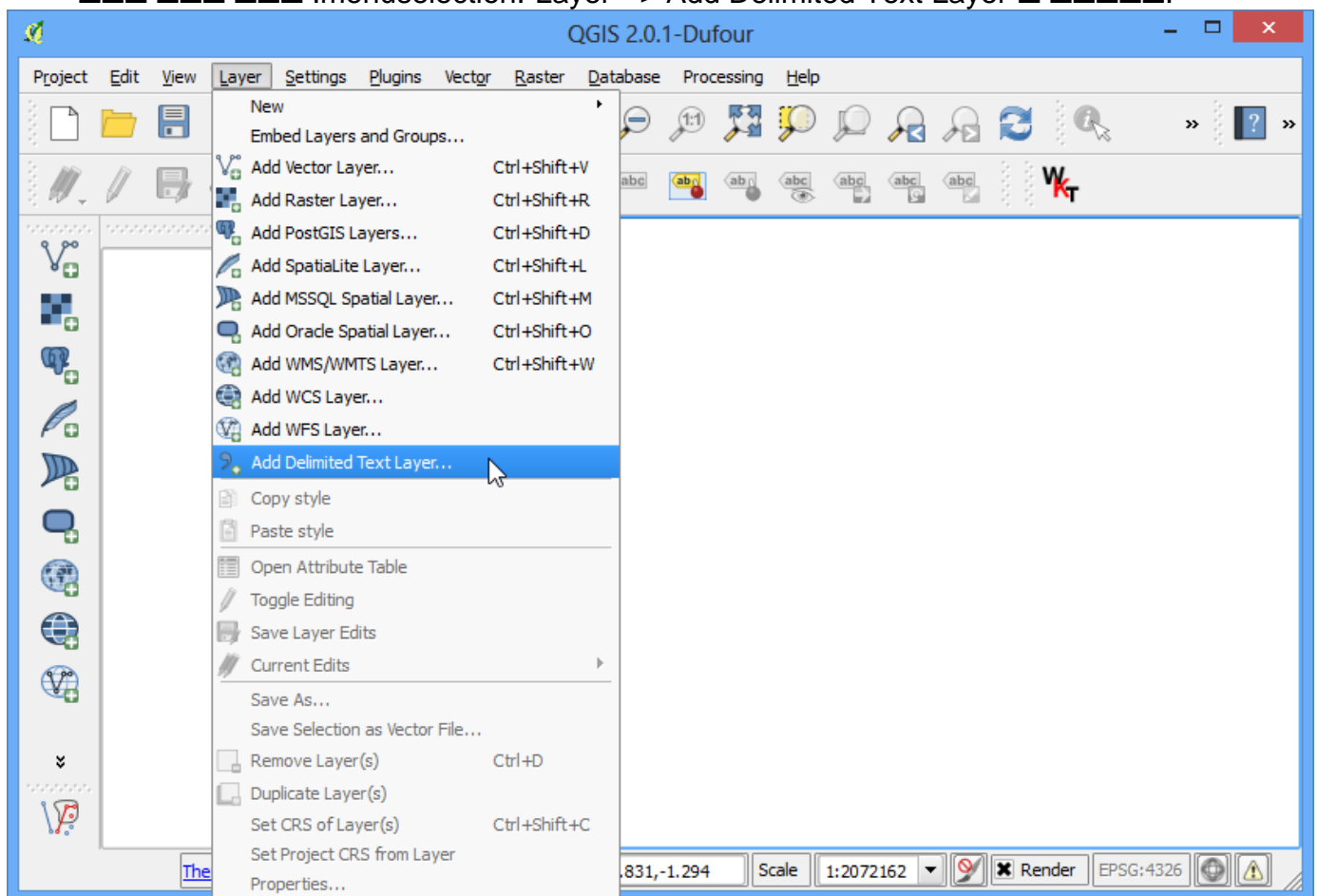


raw data from the Police.uk crime mapping website <<http://data.london.gov.uk/datastore/package/policeuk-crime-data>>

Download the Surrey data.



1. CSV QGIS



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

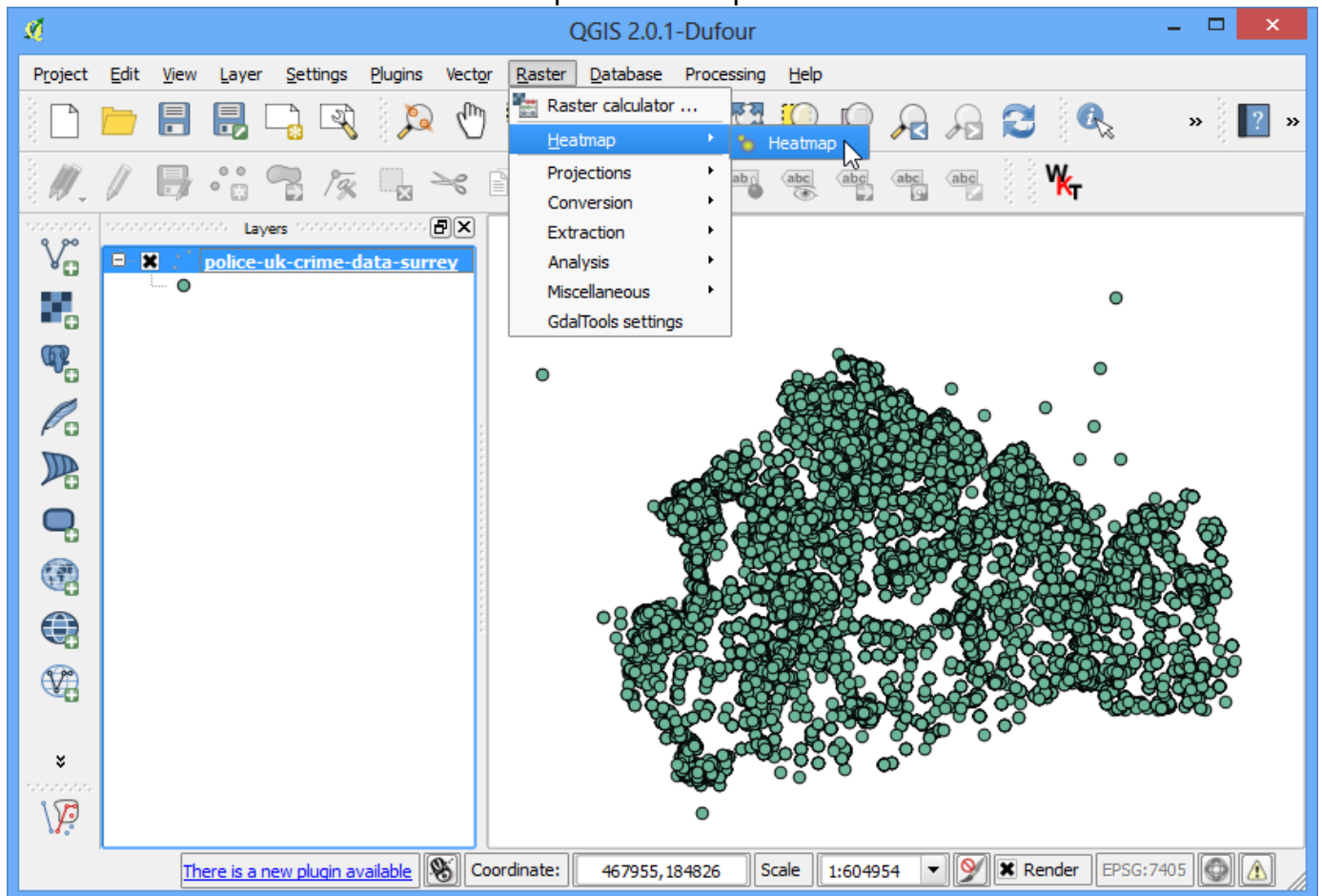
3. `guiLabel: 'Close'`

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

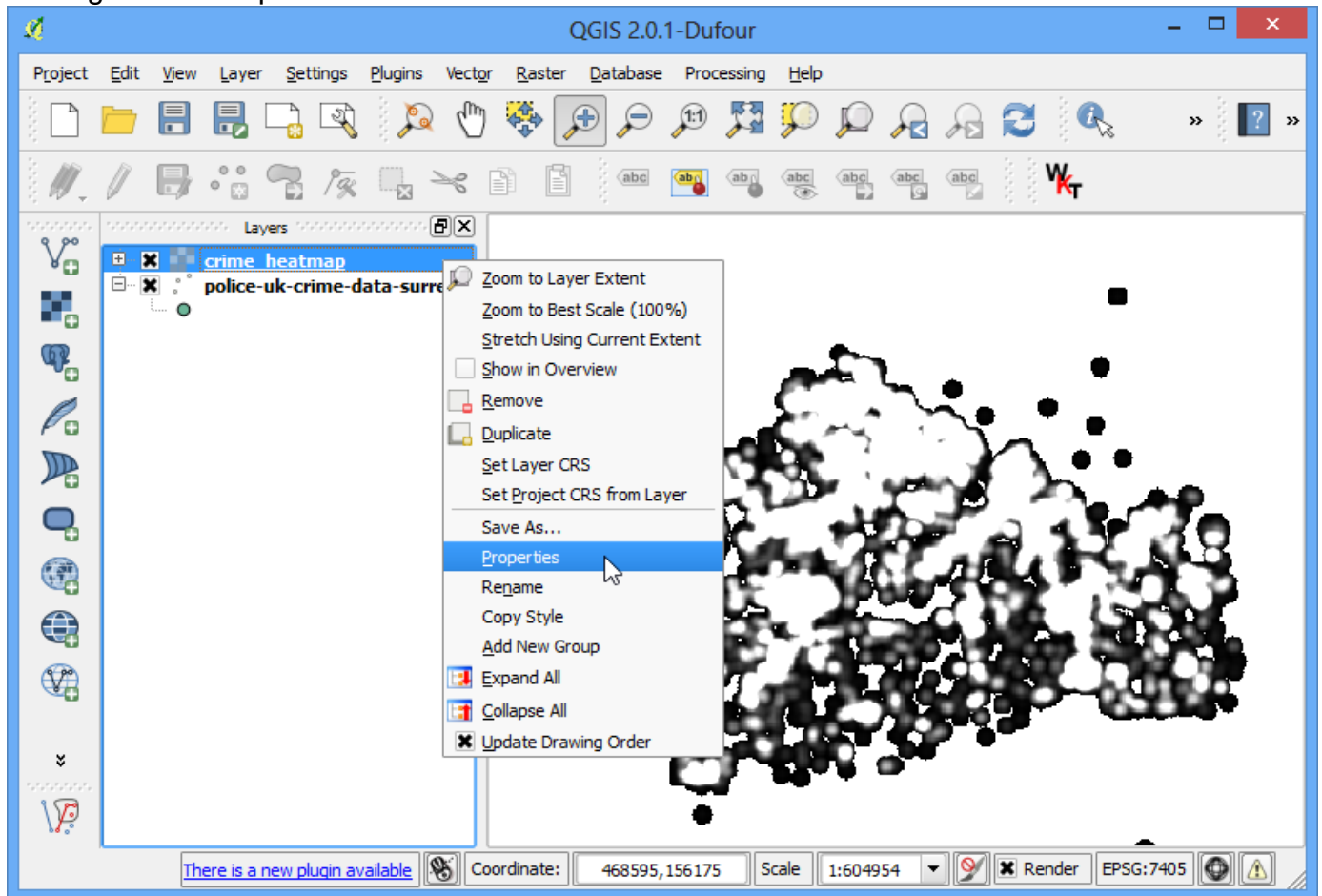
4. `Coordinate Reference System (CRS)`
`British National Grid`
`CRS`
`OSGB 1936 / British National Grid`
`OK`

7. `Heatmap`. `doc:using_plugins`. `menuselection: Raster --> Heatmap --> Heatmap`.



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

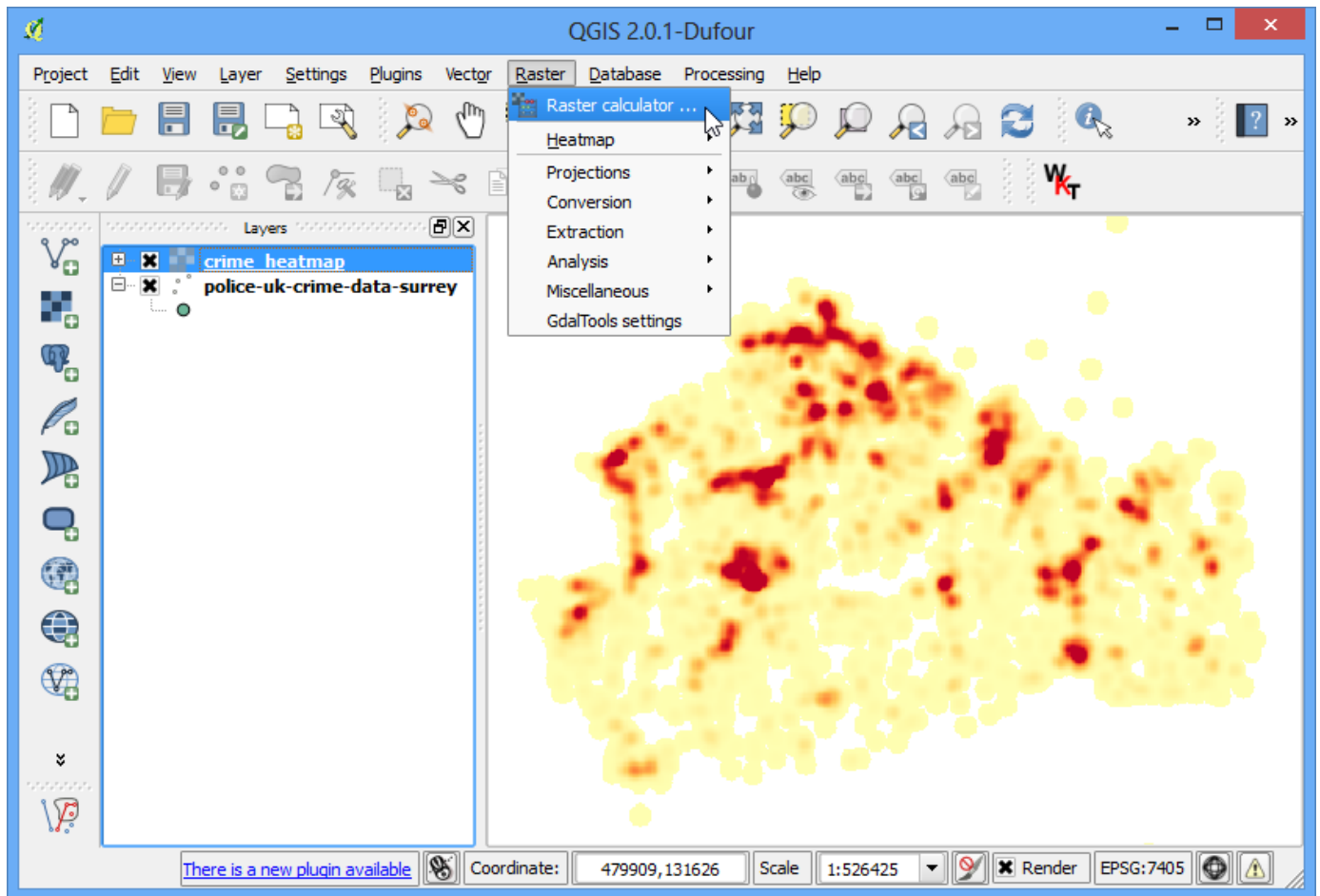
10. `guiabel: Properties``



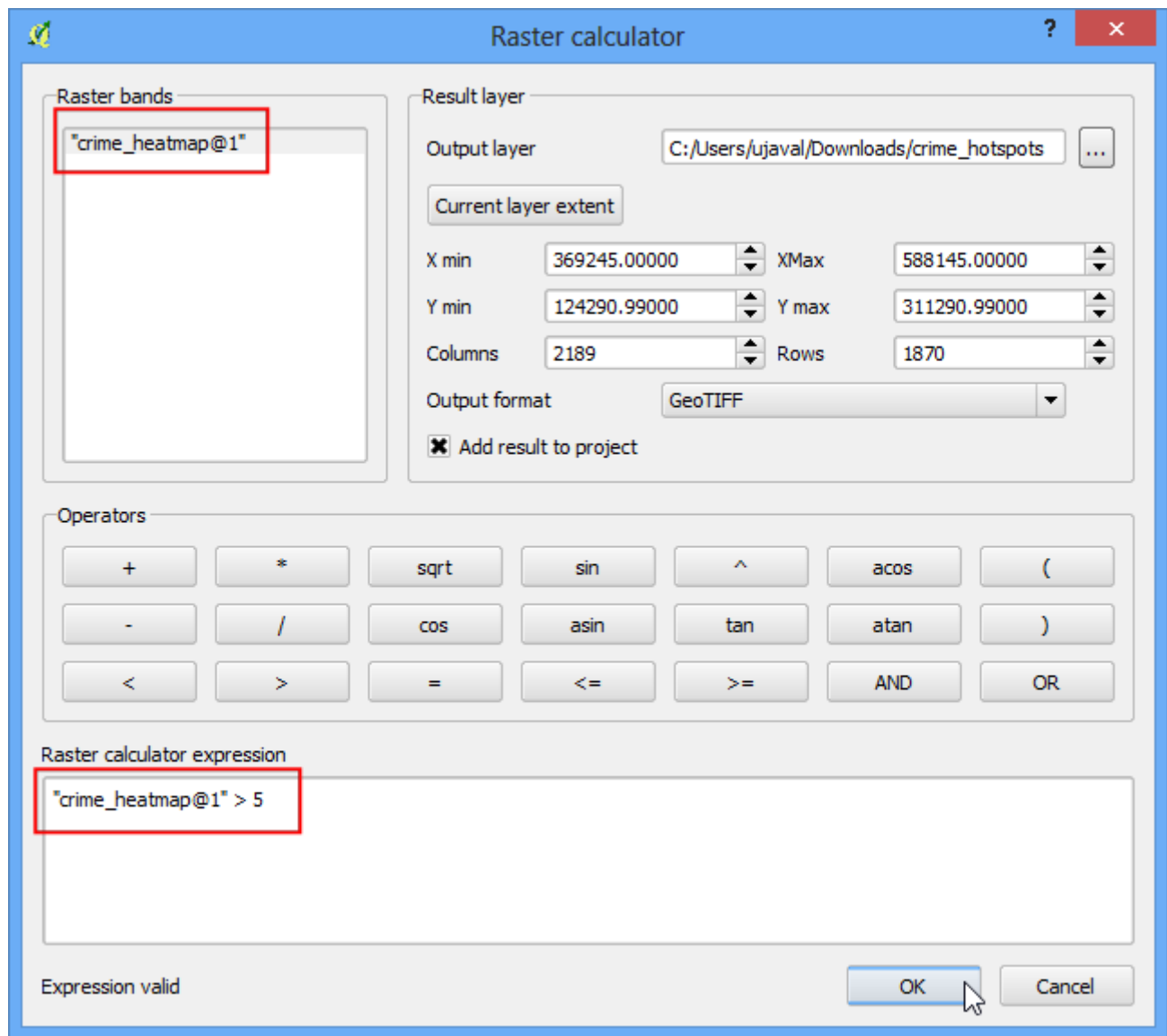
11. `Style`Render type`Singleband pseudocolor`Load min/max values`Accuracy`Actual (slower)`Load`Generate new color map`YlOrRd (Yellow-Orange-Red)`Classify`OK``



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



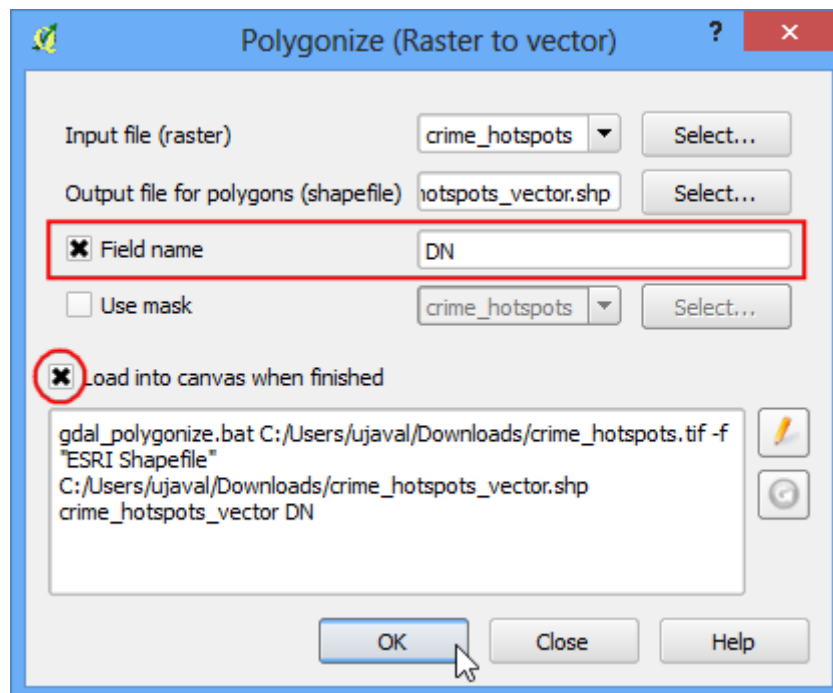
14. ■■■■■ ■■■■■ ■■■■■ ■■■■■. ■■■■■ ■■ ■■ ■■■■■ ■■■■■ ■■■■■ ■■■■■. ■ ■■■■■■■■ 5■
 ■■■■■ ■■■■■. ■■■■ ■■■■ *Raster calculator* ■■■■ ■■ ■■■■■ *`crime_hotspots`* ■■■■■
 ■■■■■. ■■■■■ ■■■■■ *:guilabel:`Raster bands`* ■■■■■ *:guilabel:`crime_heatmap@1`* ■■■■■
 ■■■■■ ■■■■ ■■ ■■■■ *Raster calculator expression* ■■■■ ■■■■ ■■■■ ■■■■■.
"crime_heatmap@1" > 5 ■■■■■ ■■■■■. ■■■■ ■■■■■ ■■■■ *:guilabel:`Add result to project`* ■■■■ ■■■■■ *:guilabel:`OK`* ■■■■■.



15. QGIS ■■■■ ■■■■ ■■■■ ■■■■. ■■■■ ■■■■ ■■■■ 0 ■■ 1 ■■ ■■■■. ■■■■ 5 ■■ ■■■■ ■■ ■■■■ 1 ■■ ■■ ■■ ■■■■ 0 ■■ ■■■■. ■■ ■■■■ --> ■■ --> ■■■■ /■■■■ ■■■■ :menuselection: Raster --> Conversion --> Polygonize (Raster to Vector) ■■■■.



16. `crime_hotspots_vector` `:` `Field name` `:` `Load into canvas when finished` `:` `OK`



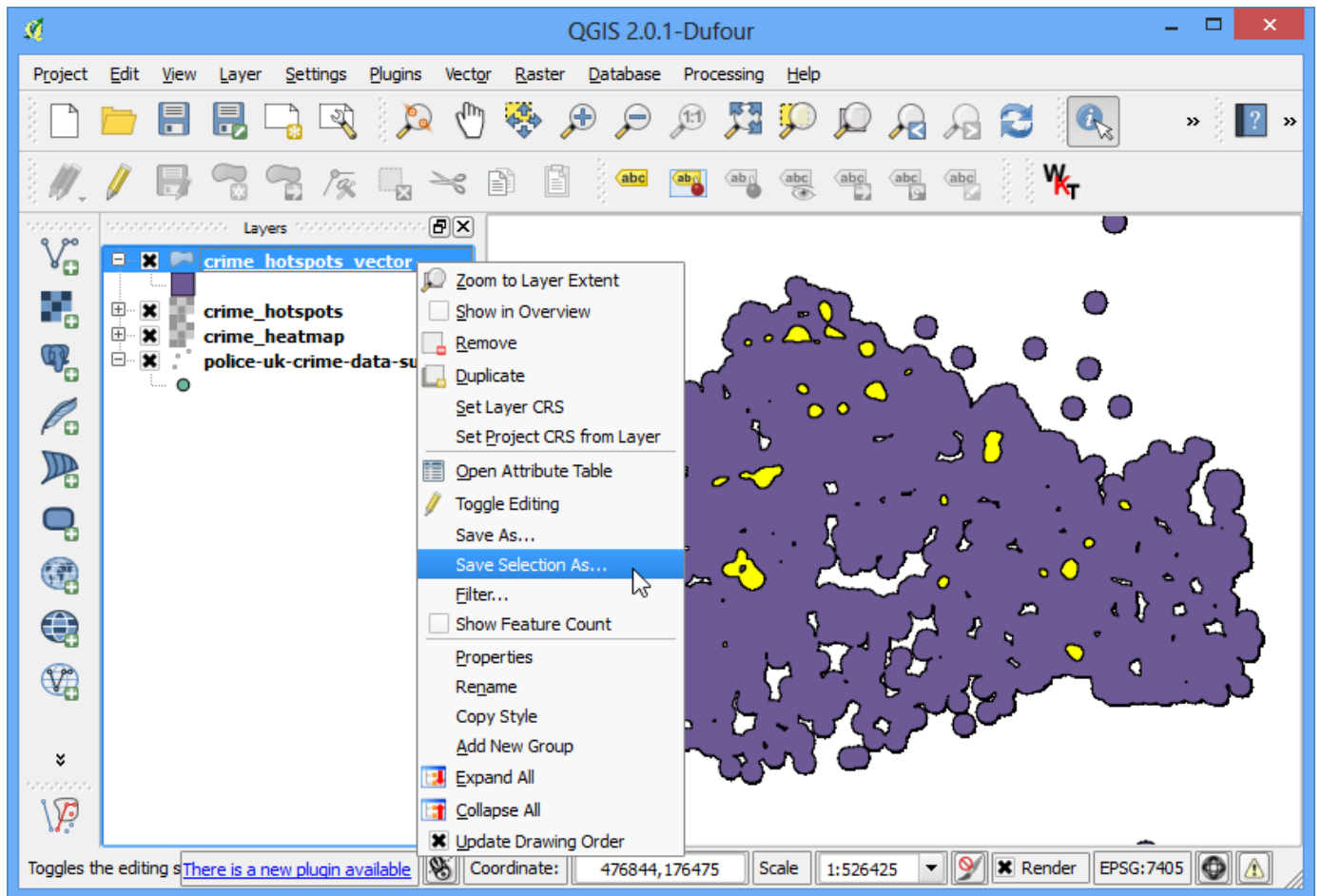
17. `QGIS` `:` `Open Attribute Table`



18. ■■■ ■■■■ :guilabel:`Attribute table` ■■■ ■■■■ ■■■ ■■■ ■■■ :guilabel:`Select feature using an expression` ■■■■■■.



20. QGIS 中的“选择表达式”对话框。在“函数列表”中，选择“字段和值”，并选择“DN”。在“表达式”框中输入“"DN" = 1”。在“选择函数帮助”面板中，双击“字段”名称以将其添加到表达式字符串。单击“选择”按钮以应用表达式并选择符合条件的记录。单击“关闭”按钮以关闭对话框。



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

