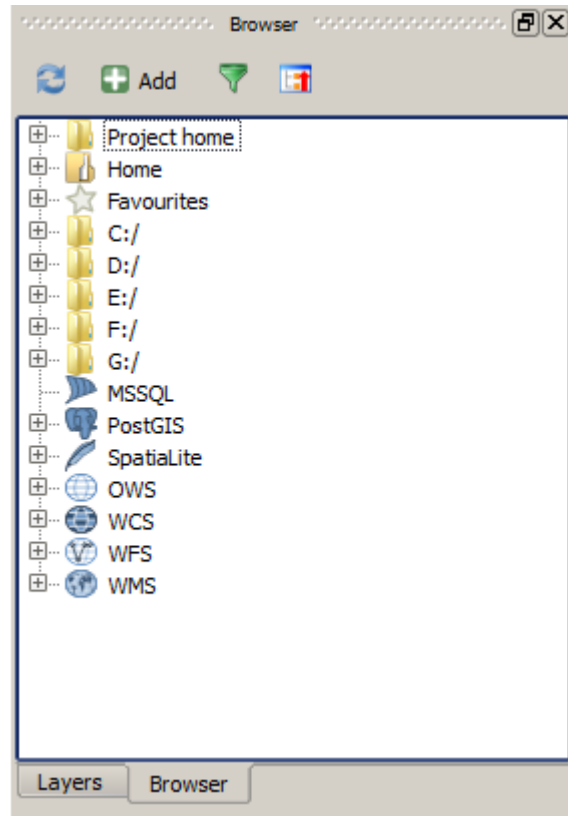
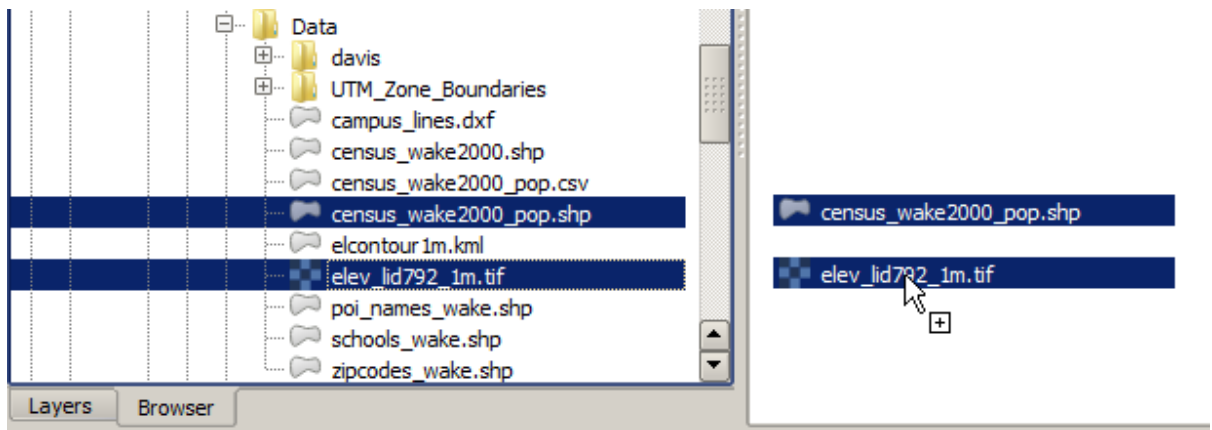
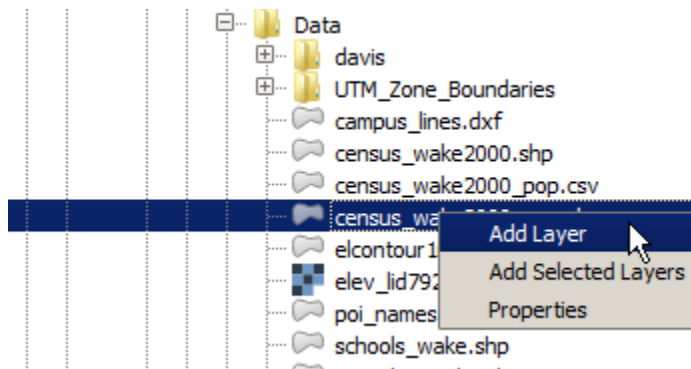
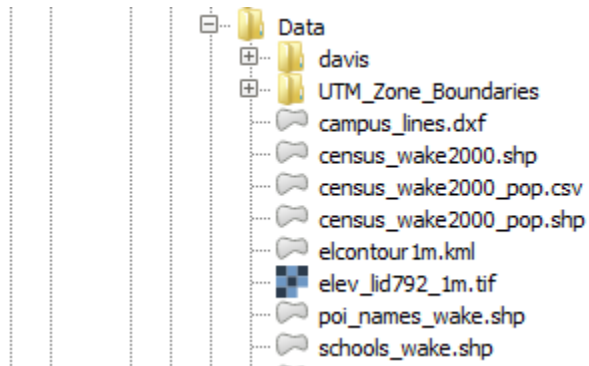


Chapter 1: Data Input and Output





Create a new WMS connection [?] [X]

Connection details

Name

URL

If the service requires basic authentication, enter a user name and optional password

User name

Password

Referer

DPI-Mode ▼

Ignore GetMap/GetTile URI reported in capabilities

Ignore GetFeatureInfo URI reported in capabilities

Ignore axis orientation (WMS 1.3/WMTS)

Invert axis orientation

Smooth pixmap transform

OK Cancel Help

- WCS
- WFS
- WMS
- My connection
 - Countries of the World
 - medford
 - Medford, OR - Bike Lanes
 - Medford, OR - Buildings
 - Medford, OR - City Limits
 - Medford, OR - Digital Elevation
 - Medford, OR - Firestations
 - Medford, OR - Hospitals
 - Medford, OR - Hydro
 - Medford, OR - Libraries
 - Medford, OR - Parks
 - Medford, OR - Police
 - Medford, OR - Schools
 - Medford, OR - Storm Drains
 - Medford, OR - Streets
 - Medford, OR - Taxlots
 - Medford, OR - Wetlands
 - Medford, OR - Zoning
 - States of the USA
 - world
 - World - Borders
 - World - Cities

Layer Properties [?] [X]

Display Name:

Layer Source:

Provider:

Metadata

Driver

GDAL provider
GTiff
GeoTIFF

Dataset Description

D:/cookbook_data/elev_lid792_1m.tif
AREA_OR_POINT=Area

Band 1

STATISTICS_MAXIMUM=131.58999633789
STATISTICS_MEAN=120.93227744511
STATISTICS_MINIMUM=104.60639953613
STATISTICS_STDDEV=6.5412950501457

Dimensions

X: 700 Y: 750 Bands: 1

Origin

638300,220750

Pixel Size

1,-1

[Close]

Layer Properties [?] [X]

Display Name: zipcodes_wake.shp

Layer Source: D:/cookbook_data/zipcodes_wake.shp

Provider: ogr

Metadata

General

Storage type of this layer

ESRI Shapefile

Description of this provider

OGR data provider (compiled against GDAL/OGR library version 1.10.1, running against GDAL/OGR library version 1.10.1)

Source for this layer

D:/cookbook_data/zipcodes_wake.shp

Geometry type of the features in this layer

Polygon

The number of features in this layer

48

Editing capabilities of this layer

Add Features, Delete Features, Change Attribute Values, Add Attributes, Delete Attributes, Create Spatial Index, Fast Access to Features at ID, Change Geometries, Simplify Geometries with topological validation

Extents

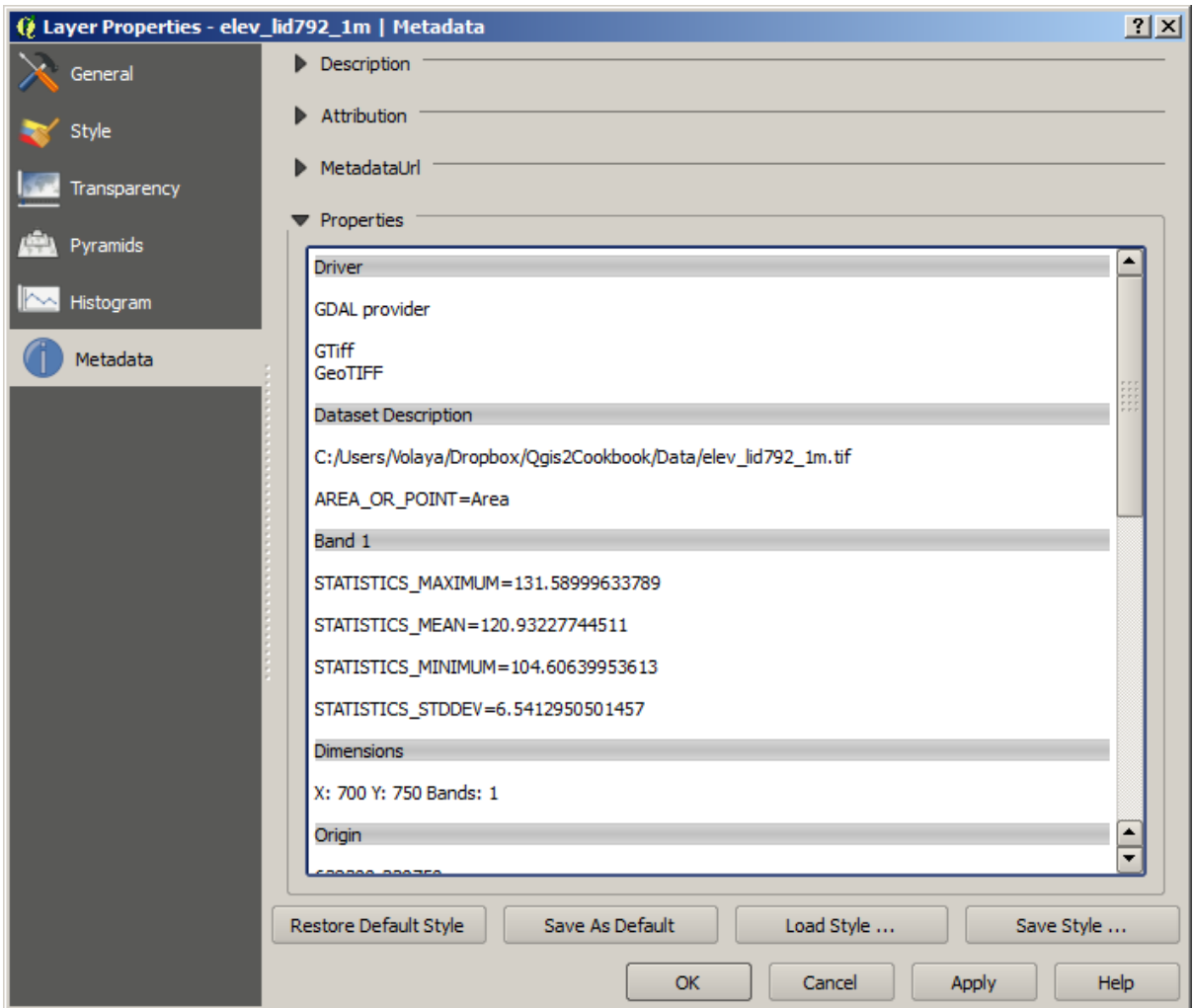
In layer spatial reference system units

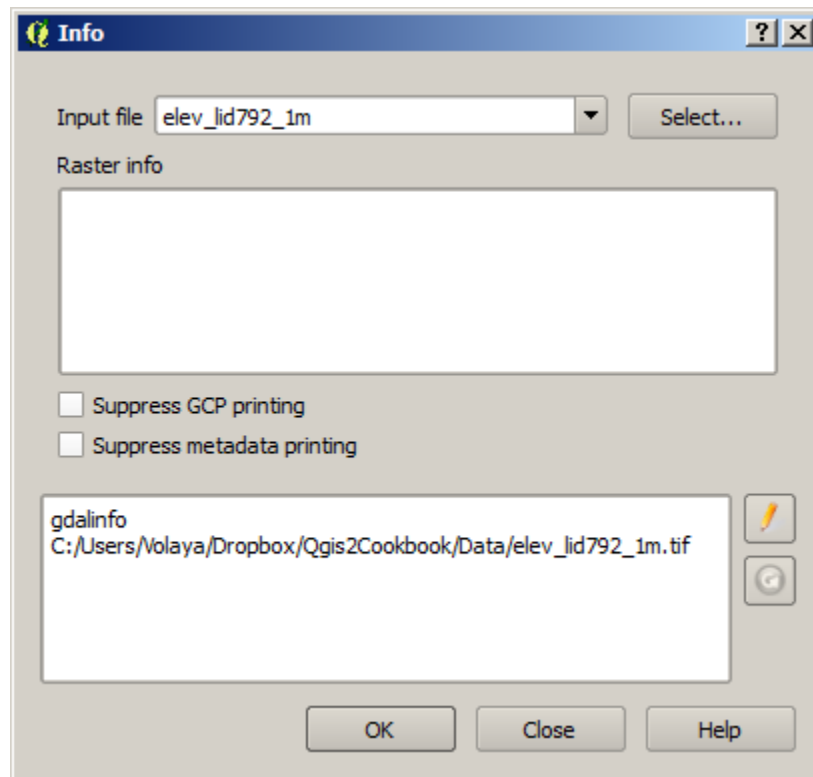
xMin,yMin 610047.87,196327.52 : xMax,yMax 677060.68,258102.57

Layer Spatial Reference System

+proj=lcc +lat_1=36.16666666666666 +lat_2=34.33333333333334 +lat_0=33.75 +lon_0=-79 +x_0=609601.22 +y_0=0
+ellps=GRS80 +towgs84=0,0,0,0,0,0,0 +units=m +no_defs

Close





Create a Layer from a Delimited Text File [?] [X]

File Name Browse...

Layer name Encoding UTF-8

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

Please select an input file

OK Cancel Help

Create a Layer from a Delimited Text File [?] [X]

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

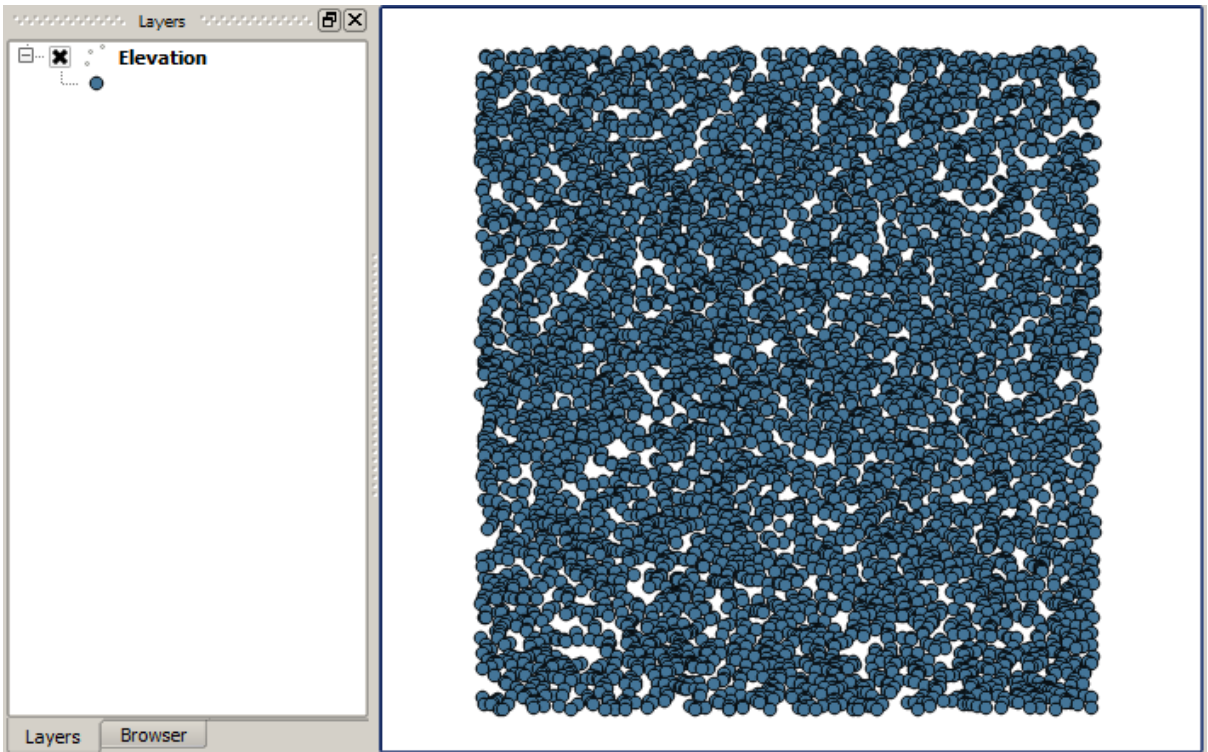
Field options: Trim fields Discard empty fields Decimal separator is comma

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

	X	Y	cat	value
1	638381.5	220749.5	1	129.006621999999990
2	638400.5	220749.5	2	129.591980000000010
3	638403.5	220749.5	3	129.746016999999990
4	638441.5	220749.5	4	131.408081000000010



Coordinate Reference System Selector [?] [X]

Define this layer's coordinate reference system:
 This layer appears to have no projection specification. By default, this layer will now have its projection set to that of the project, but you may override this by selecting a different projection below.

Filter

Recently used coordinate reference systems

Coordinate Reference System	Authority ID
NAD83 / UTM zone 18N	EPSG:26918
* Generated CRS (+proj=lcc +lat_1=40.66666666666666 +lat_2=...	USER:100005
WGS 84 / Pseudo Mercator	EPSG:3857
WGS 84	EPSG:4326
NAD83(HARN) / North Carolina	EPSG:3358
* Generated CRS (+proj=lcc +lat_1=38.33333333333334 +lat_2=...	USER:100009

Coordinate reference systems of the world Hide deprecated CRSs

Coordinate Reference System	Authority ID
WGS 66	EPSG:4760
WGS 72	EPSG:4322
WGS 72BE	EPSG:4324
WGS 84	EPSG:4326
WGS 84	EPSG:4326

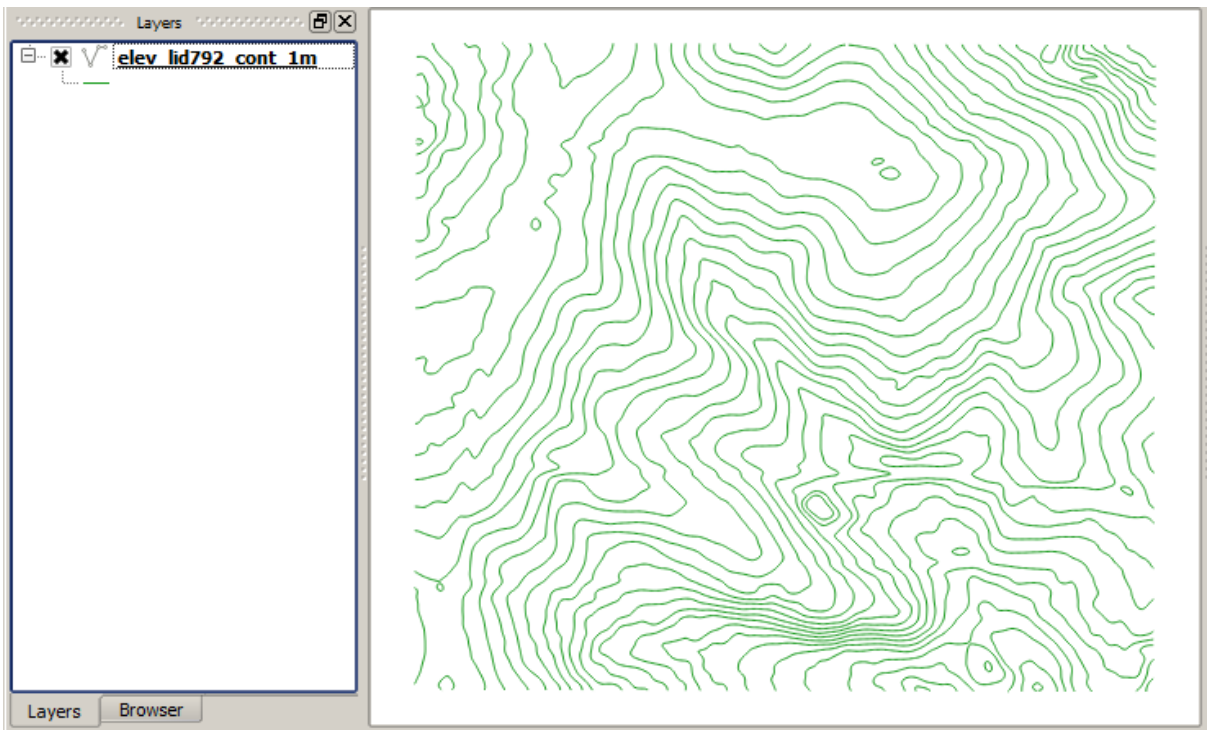
Selected CRS:

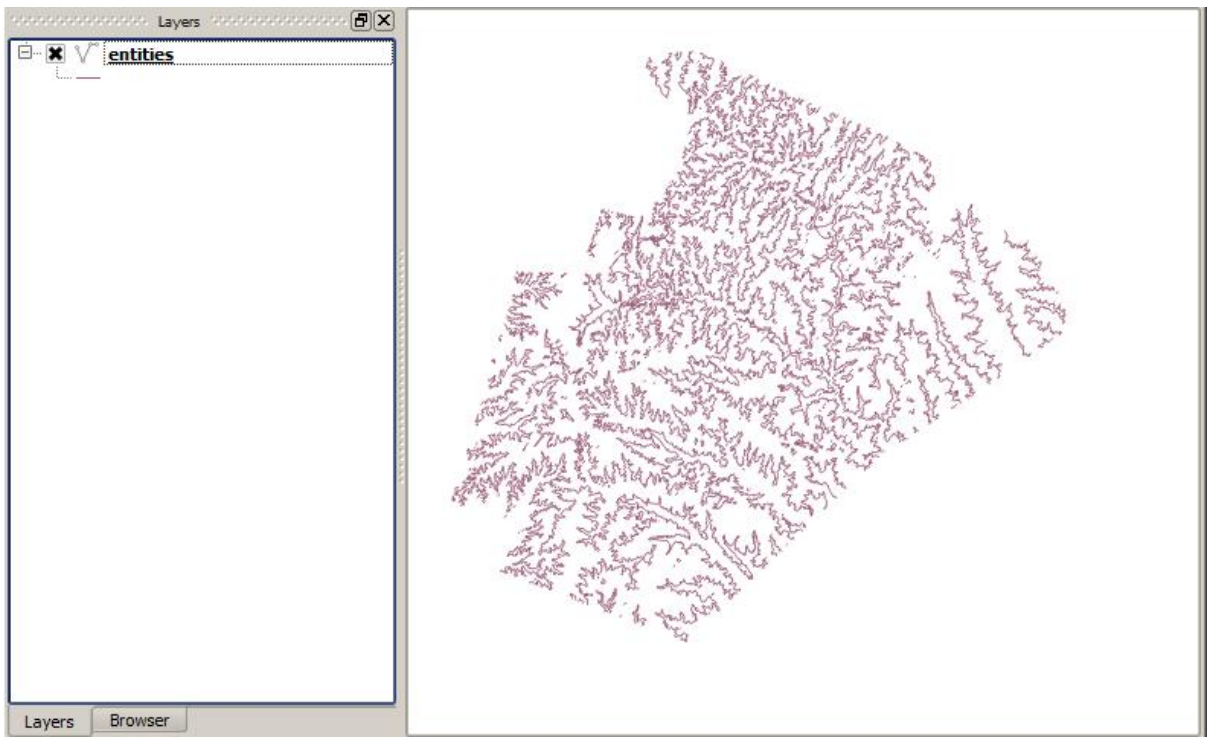
`+proj=longlat +datum=WGS84 +no_defs`

OK Cancel Help

Attribute table - Elevation (6000 Feature(s))

	X	Y	cat	value
0	638381.5	220749.5	1	129.006622
1	638400.5	220749.5	2	129.59198
2	638403.5	220749.5	3	129.746017
3	638441.5	220749.5	4	131.408081
4	638469.5	220749.5	5	131.441025
5	638495.5	220749.5	6	130.65657
6	638535.5	220749.5	7	128.474167
7	638591.5	220749.5	8	124.363976
8	638689.5	220749.5	9	124.692833
9	638752.5	220749.5	10	124.022858
10	638935.5	220749.5	11	112.479012

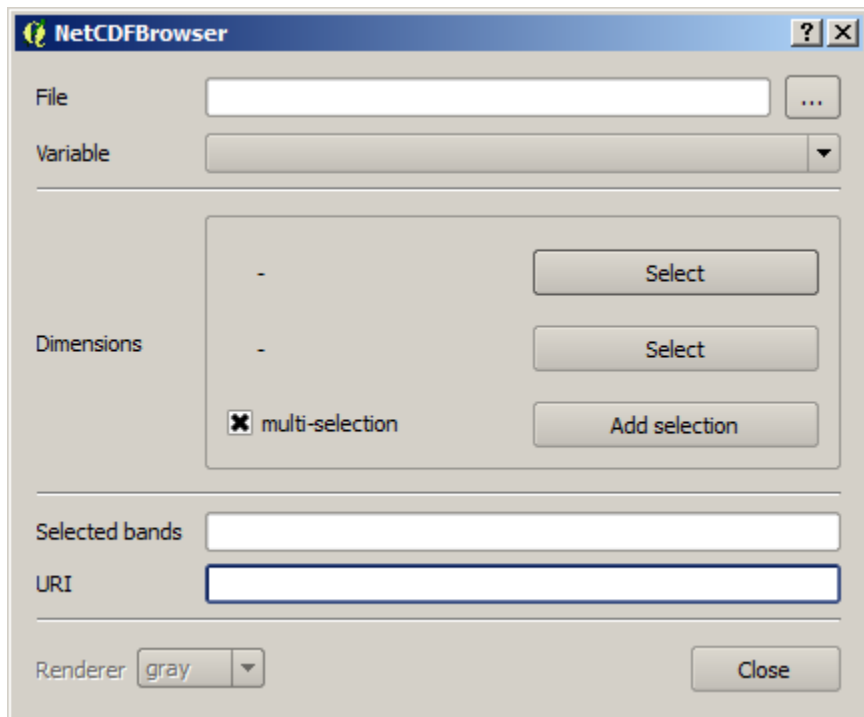




Select vector layers to add...

Layer ID	Layer name	Number of features	Geometry type
0	entities	8145	Point
0	entities	43332	LineString
0	entities	111	Polygon
0	entities	1947	GeometryCollection

OK Select All Cancel



Save vector layer as... [?] [X]

Format: GeoJSON

Save as: [Browse]

Encoding: System

CRS: Layer CRS

[Browse]

Symbology export: No symbology

Scale: 1:50000

Skip attribute creation

Add saved file to map

[More Options >>]

[OK] [Cancel] [Help]

Save raster layer as... [?] [X]

Output mode Raw data Rendered image

Format Create VRT

Save as

CRS

▼ Extent (current: layer)

North
West East
South

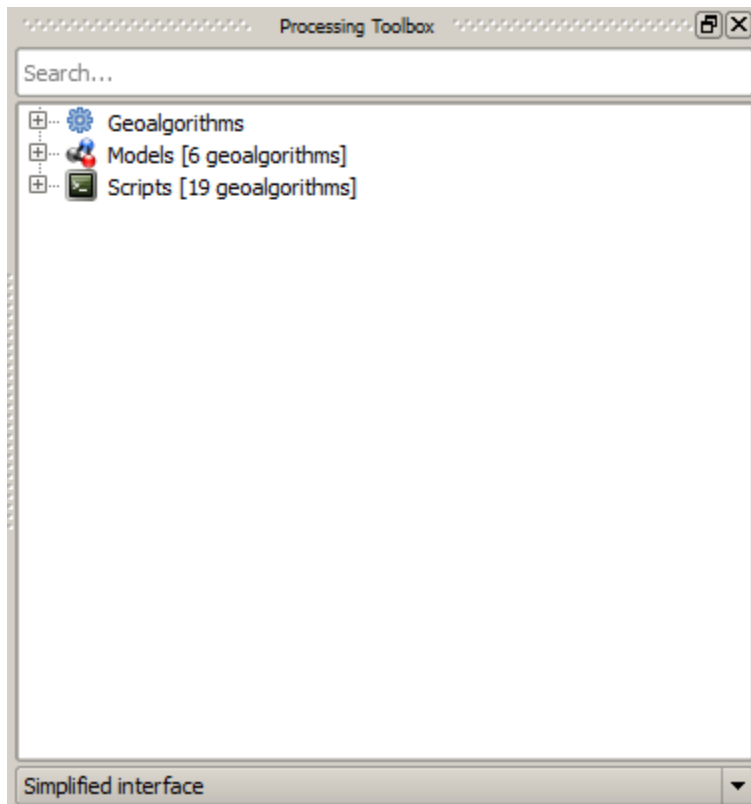
▼ Resolution (current: layer)

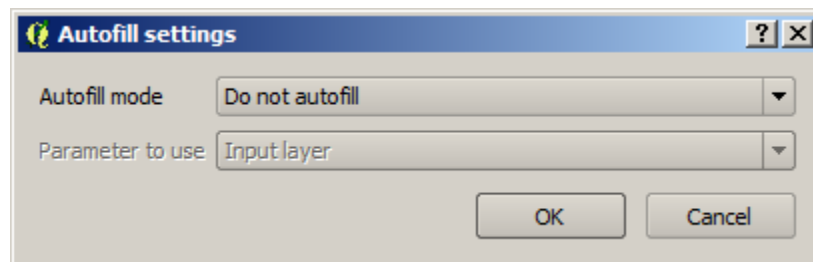
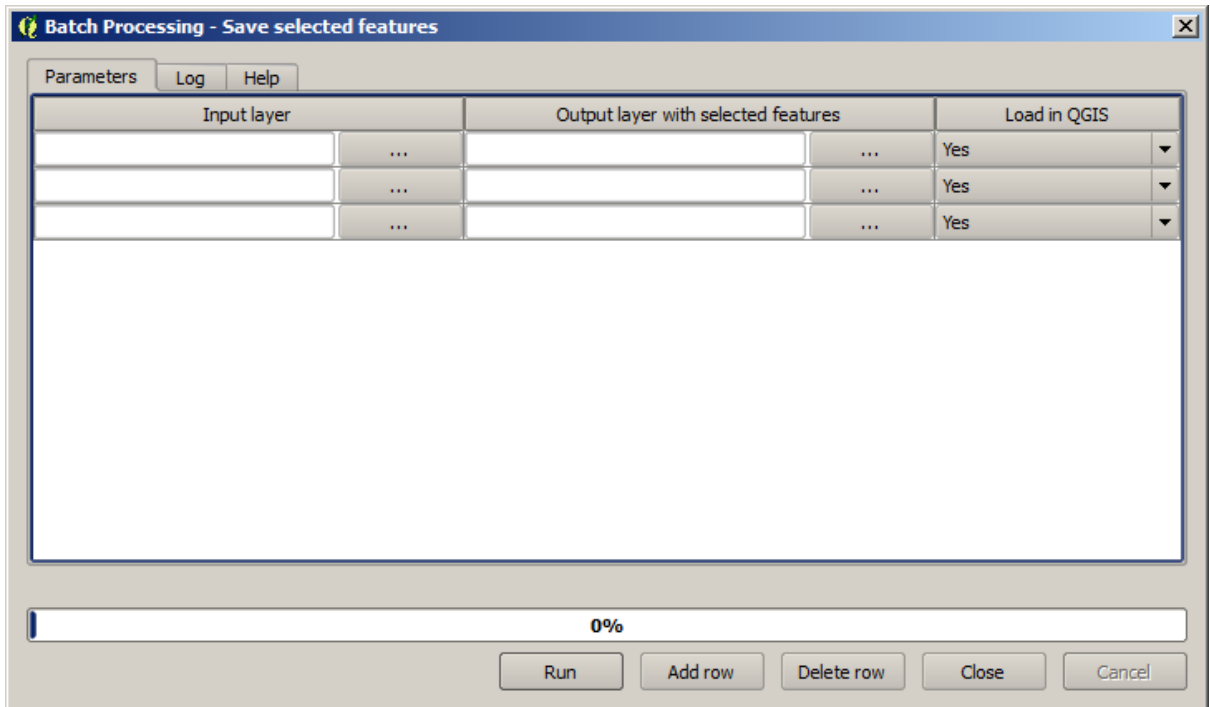
Horizontal Vertical
 Columns Rows

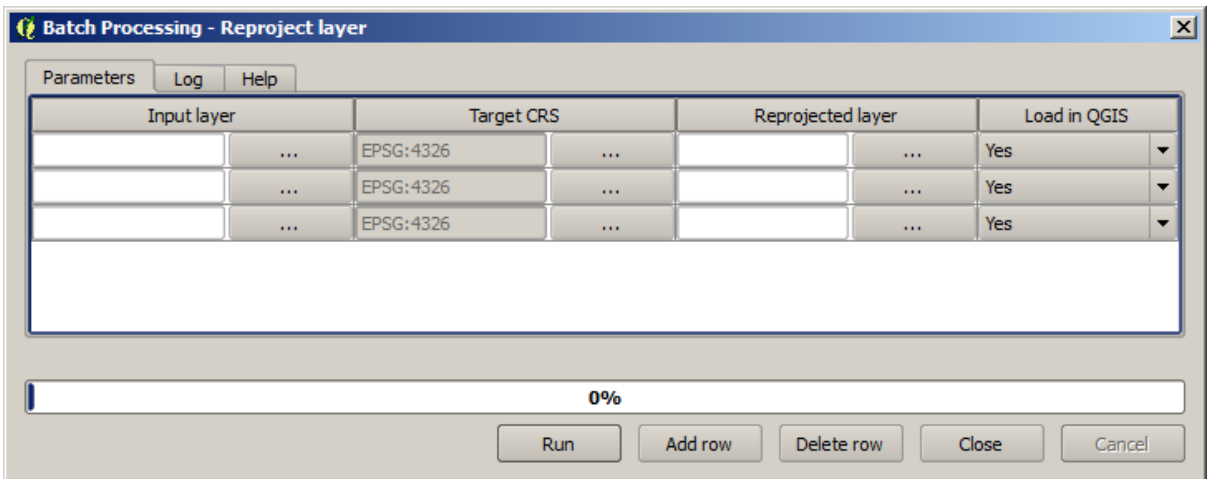
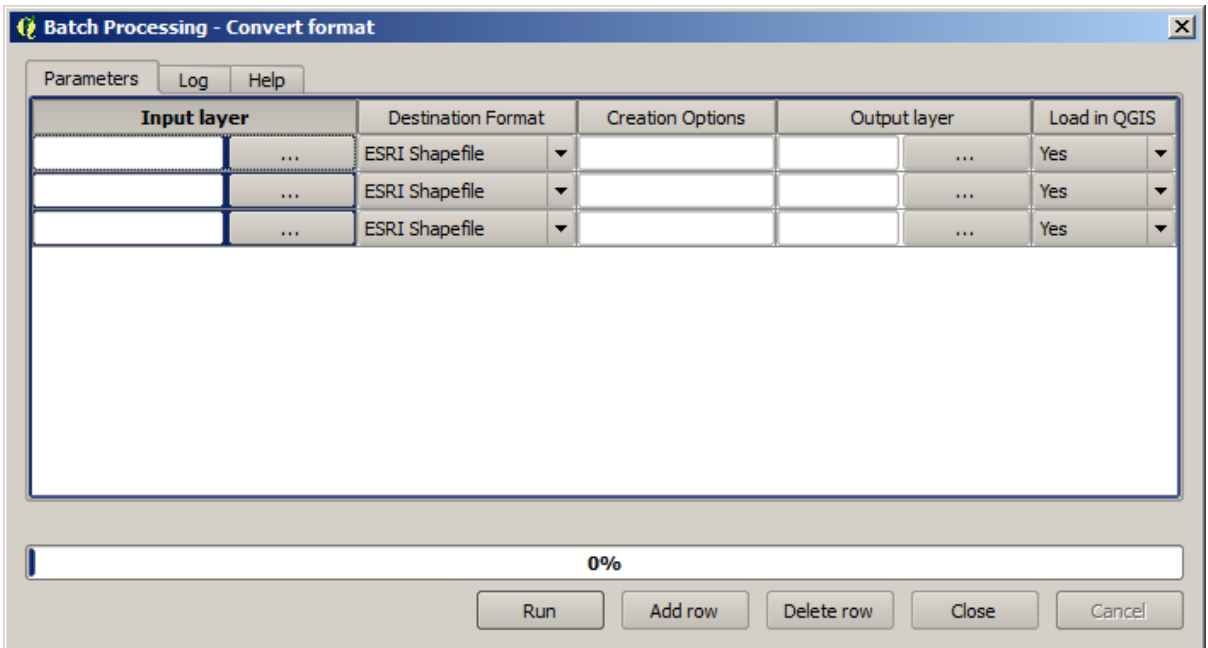
▼ Create Options

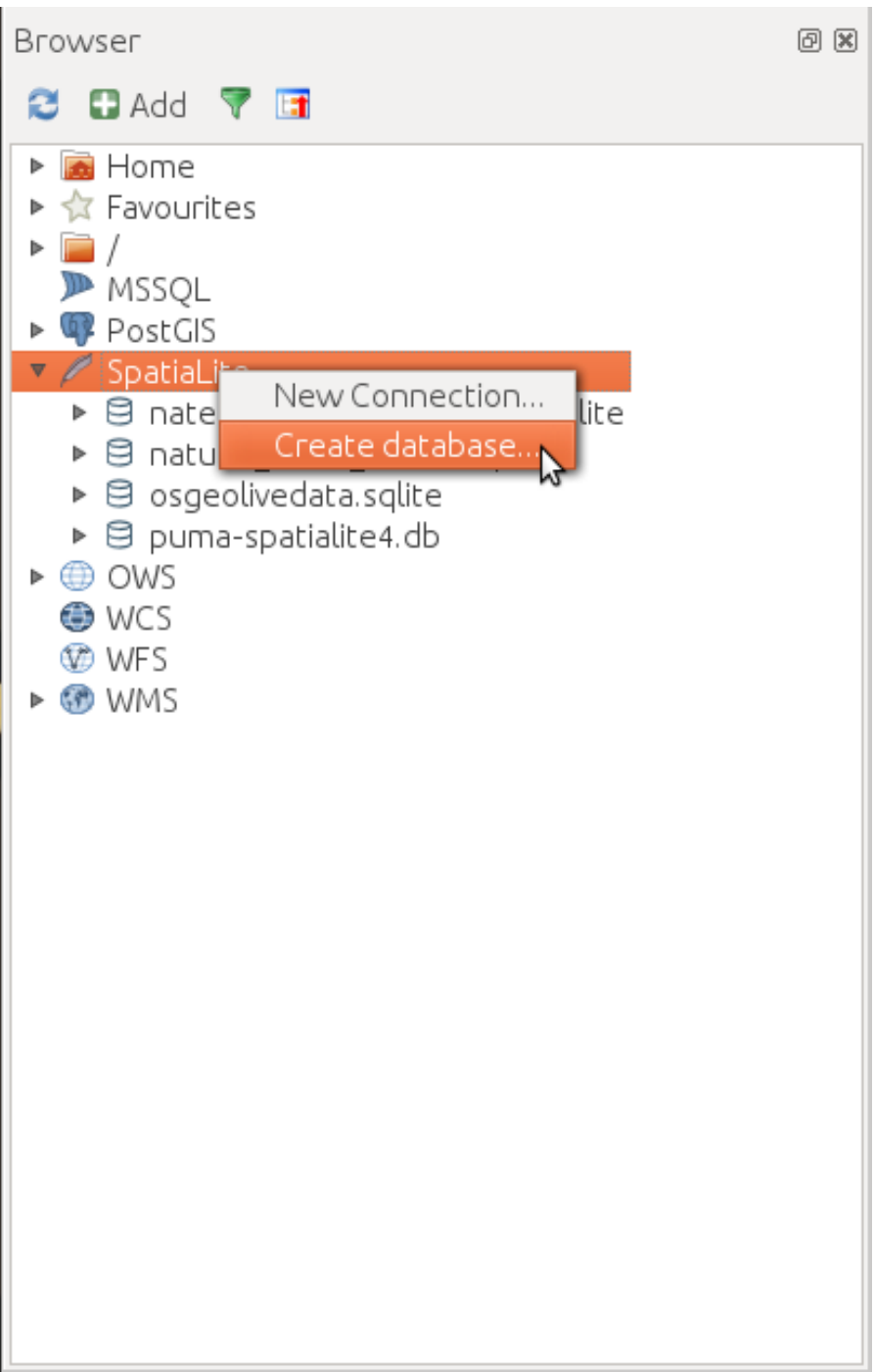
Profile

Name	Value









Import vector layer

Input

Output table

Schema

Table

Action

Create new table

Drop existing one

Append data to table

Options

Primary key

Geometry column

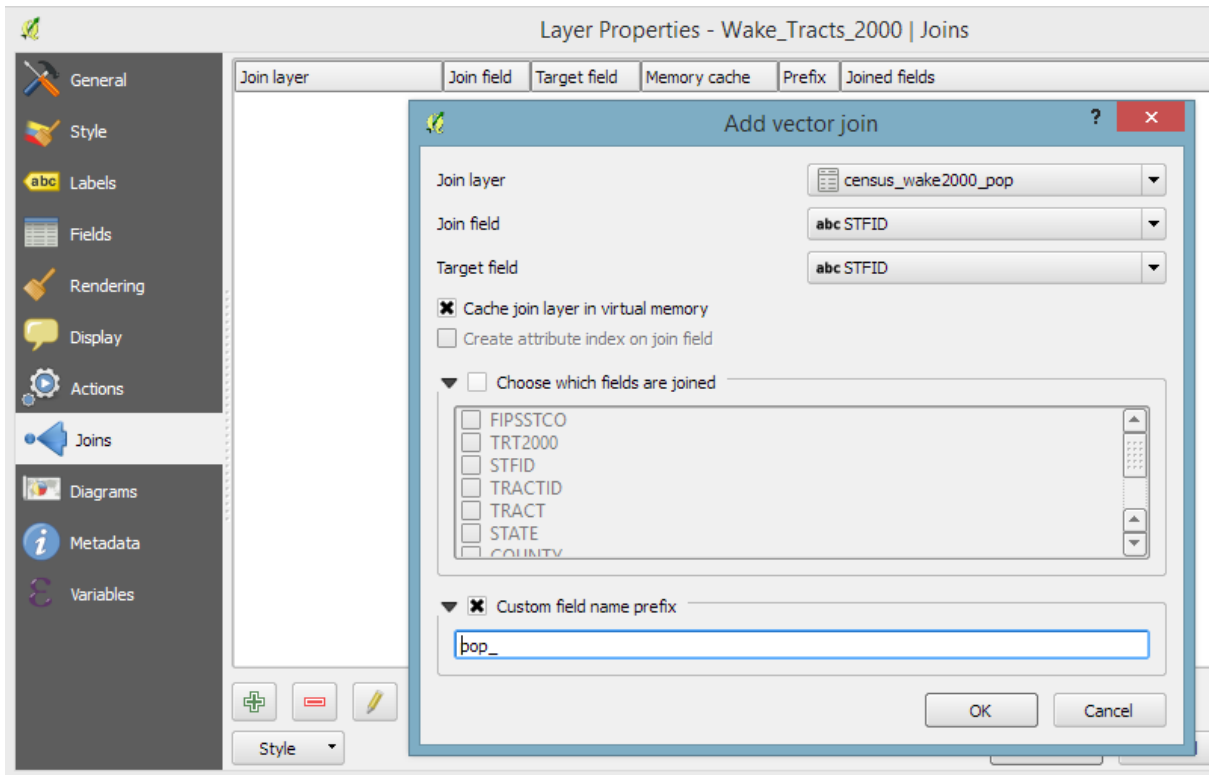
Source SRID Target SRID

Encoding

Create single-part geometries instead of multi-part

Create spatial index

Chapter 2: Data Management



Add relation

Name:

Referencing Layer (Child):

Referencing Field:

Referenced Layer (Parent):

Referenced Field:

Id:

OK Cancel

Attribute table - zipcodes_wake :: Features total: 48, filtered: 48, se...

Expression

- HOLLY SPRINGS
- CREEDMOOR
- YOUNGSVILLE
- RALEIGH
- YOUNGSVILLE
- DURHAM
- RALEIGH
- RALEIGH
- WENDELL
- RALEIGH
- RALEIGH
- KNIGHTDALE

NAME:

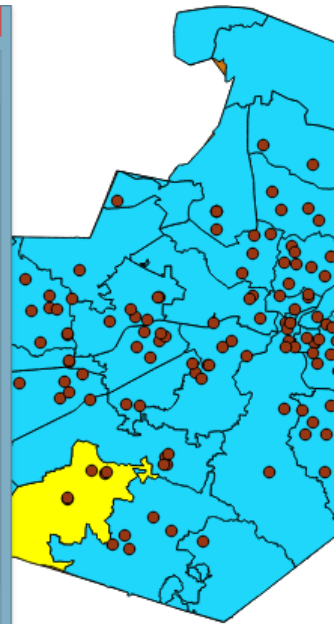
SHAPE_Leng:

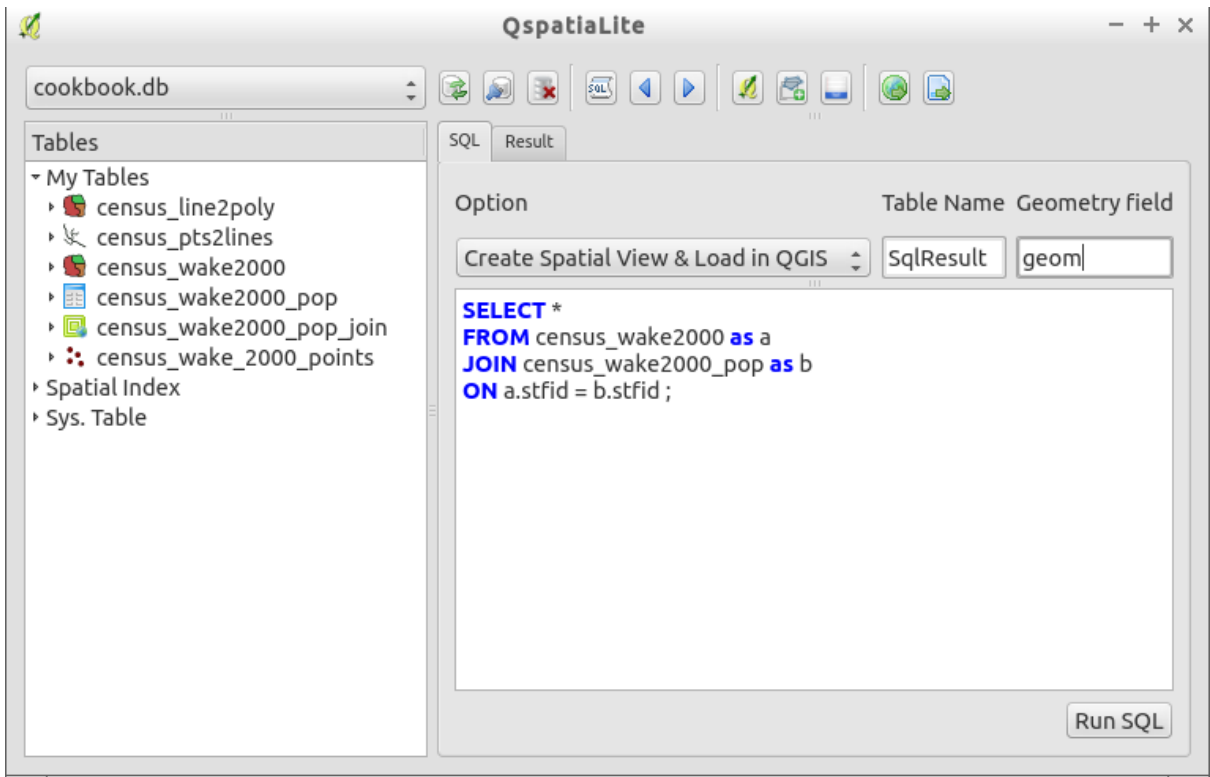
SHAPE_Area:

Schools to ZIP

	cat	TAG	NAMESHORT	NAMELONG	COF
0	103	455	HOLLY SPRINGS	HOLLY SPRINGS ...	943.0
1	152	447	HOLLY SPRINGS	HOLLY SPRINGS ...	563.0
2	154	449	HOLLY RIDGE	HOLLY RIDGE EL...	563.0

Show All Features





SQL window - qgis2cookbook [PostGIS]

SQL query:

```
1 SELECT *
2 FROM census_wake2000 as a
3 JOIN census_wake2000_pop as b
4 ON a.stfid = b."STFID" ;
```

105 rows, 0.0 seconds

Result:

	id_0	geom	cat	area	perimeter	tract_	
1	1	01060000A...	1.0	22972440	19078.578	1	1
2	2	01060000A...	2.0	10661711	15741.2	2	2
3	3	01060000A...	3.0	19210890	19559.209	3	3
4	4	01060000A...	4.0	36977280	29147.926	4	4

Load as new layer

Column with unique integer values: Geometry column:

Layer name (prefix)

Avoid selecting by feature id

 No spatial index defined ([create it](#))

DB Manager

Tree

- PostGIS
 - local
 - qgis2cookbook
 - public
 - census_wake2000
 - census_wake2000_pop
 - geography_columns
 - geometry_columns
 - raster_columns
 - raster_overviews
 - spatial_ref_sys
 - viewtest
 - topology
 - SpatialLite

Info Table Preview

7	tract_id	numeric	
8	rings_ok	Float8	8
9	rings_nok	Float8	8
10	id	Float8	8
11	fipsstco	varchar (80)	
12	trt2000	varchar (80)	
13	stfid	varchar (80)	
14	tractid	varchar (80)	
15	tract	numeric	

Constraints

Name	Type	Col
census_wake2000_pkey	Primary key	id_0

Indexes

Name	Column(s)
sidx_census_wake2000_geom	geom

DB Manager

Tree

- SpatialLite
 - cookbook.db
 - SpatialIndex
 - census_wake2000
 - census_wake2000_pop
 - census_wake2000_pop_join
 - geom_cols_ref_sys
 - geometry_columns
 - geometry_columns_auth
 - geometry_columns_field_infos
 - geometry_columns_statistics
 - geometry_columns_time
 - idx_census_wake2000_geom
 - idx_census_wake2000_geom_node
 - idx_census_wake2000_geom_parent
 - idx_census_wake2000_geom_rowid
 - idx_census_wake2000_pop_geom
 - idx_census_wake2000_pop_geom_nod
 - idx_census_wake2000_pop_geom_pare
 - idx_census_wake2000_pop_geom_row
 - idx_schools_wake_geom
 - idx_schools_wake_geom_node
 - idx_schools_wake_geom_parent
 - idx_schools_wake_geom_rowid

Georeferencer - o38121e7.tif

File Edit View Settings Help

GEOLOGICAL SURVEY

121°52'30" 38°37'30" 99°E 100

15 80 75°N 95

CENTRAL Well


YOLO

Enter map coordinates

Enter X and Y coordinates (DMS (dd mm ss.ss), DD (dd.dd) or projected coordinates (mmmm.mm)) which correspond with the selected point on the image. Alternatively, click the button with icon of a pencil and then click a corresponding point on map canvas of QGIS to fill in coordinates of that point.

X / East: 600000 Y / North: 4275000

Snap to background layers

 From map canvas Cancel OK

on/off	id	srcX	srcY	dstX	dstY	dX[pixels]	dY[pixels]	residual[pixels]
<input checked="" type="checkbox"/>	0	-162101.33	68464.18	599000.00	4275000.00	0.00	0.00	0.00

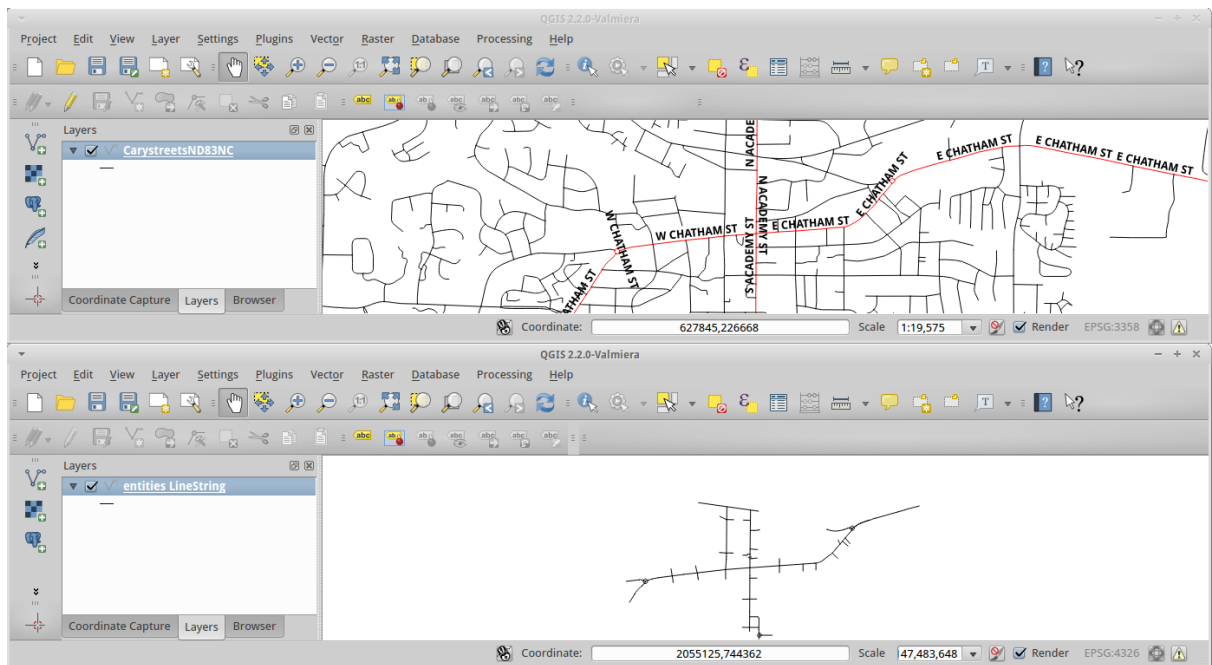
Transform: Not set -161096,68426 USER:10

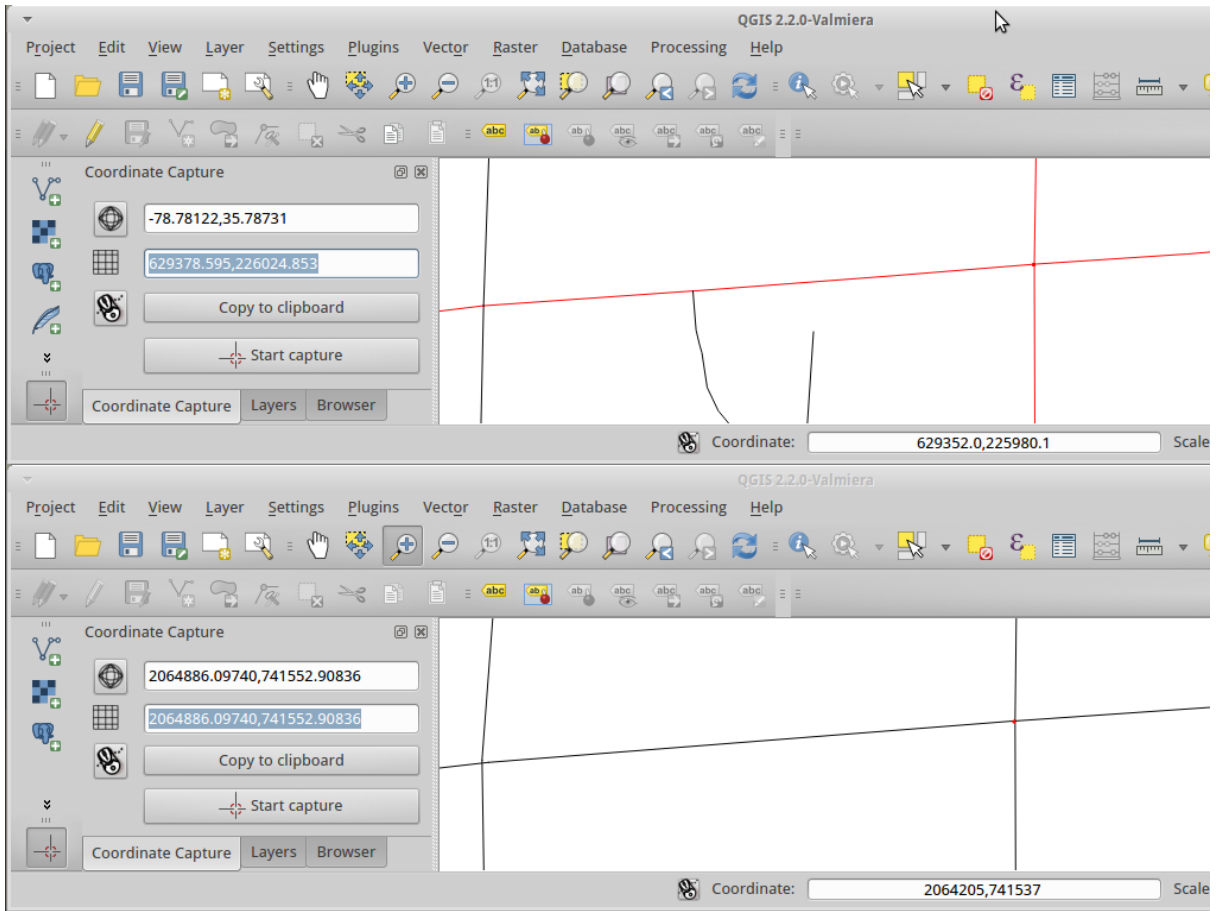
GCP table

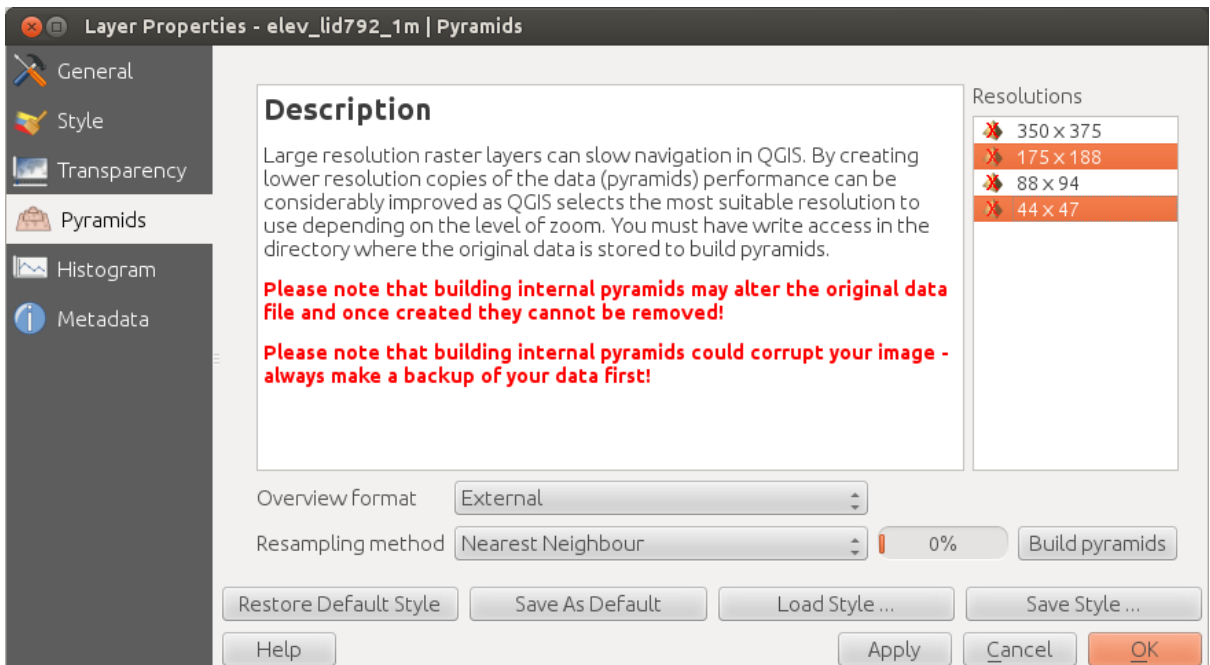
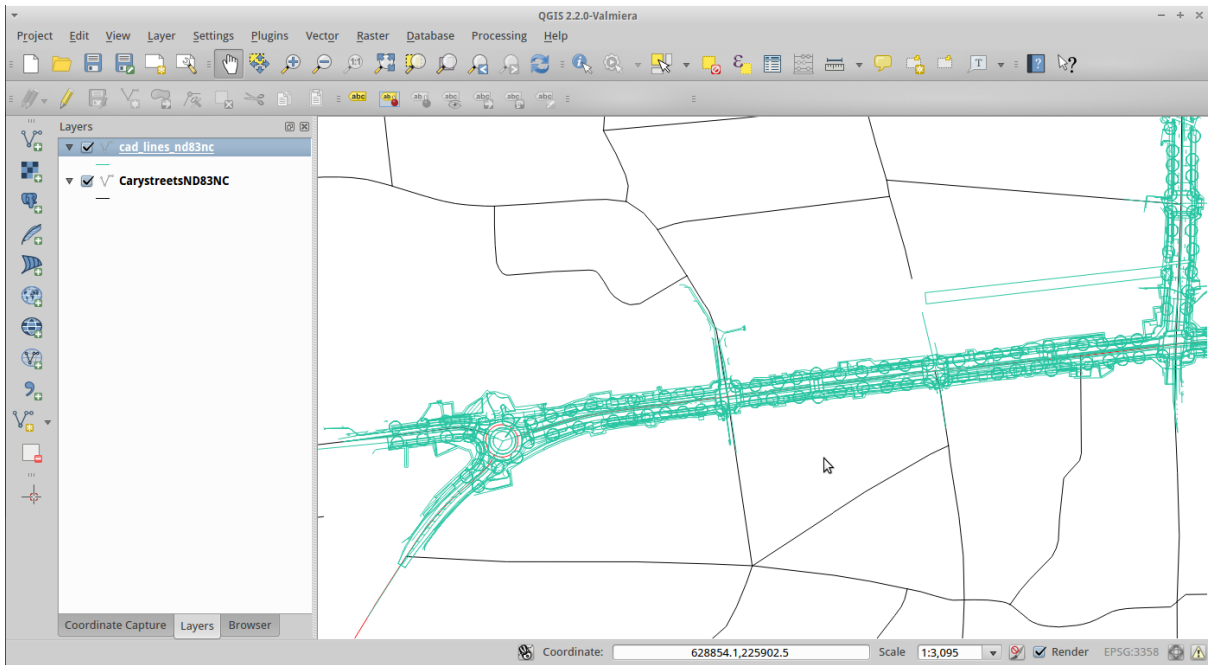
on/off	id	srcX	srcY	dstX	dstY	dX[pixels]	dY[pixels]	residual[pixels]
<input checked="" type="checkbox"/>	0	-162100.01	68464.42	599000.00	4275000.00	-1.27	1.65	2.08
<input checked="" type="checkbox"/>	1	-161099.60	68430.25	600000.00	4275000.00	-2.41	0.22	2.42
<input checked="" type="checkbox"/>	2	-154113.88	68203.95	607000.00	4275000.00	0.76	-1.33	1.53
<input checked="" type="checkbox"/>	3	-161493.07	56413.39	600000.00	4263000.00	1.82	-1.25	2.20
<input checked="" type="checkbox"/>	4	-153496.71	56161.93	608000.00	4263000.00	-2.87	1.67	3.32
<input checked="" type="checkbox"/>	5	-159301.27	62357.43	602000.00	4269000.00	1.16	-0.79	1.40
<input checked="" type="checkbox"/>	6	-156178.82	66267.28	605000.00	4273000.00	2.81	-0.16	2.81

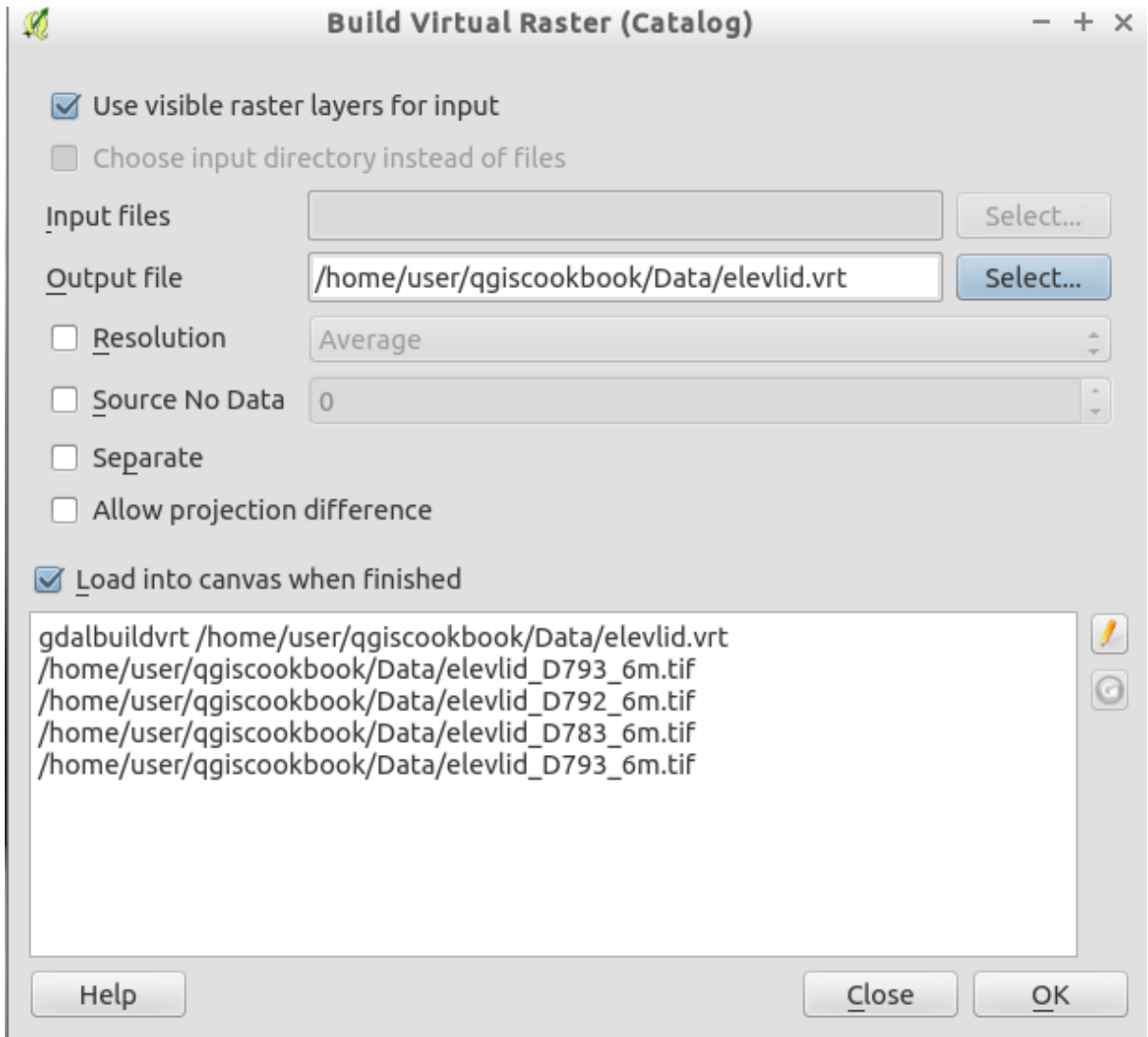
GCP table

on/off	id	srcX	srcY	dstX	dstY	dX[pixels]	dY[pixels]	residual[pixels]
<input checked="" type="checkbox"/>	0	-162100.01	68464.42	599000.00	4275000.00	0.79	0.36	0.87
<input checked="" type="checkbox"/>	1	-161099.60	68430.25	600000.00	4275000.00	-0.96	-0.43	1.05
<input checked="" type="checkbox"/>	2	-154113.88	68203.95	607000.00	4275000.00	-0.58	-0.26	0.63
<input checked="" type="checkbox"/>	3	-161493.07	56413.39	600000.00	4263000.00	0.19	0.09	0.21
<input checked="" type="checkbox"/>	4	-153496.71	56161.93	608000.00	4263000.00	-0.05	-0.02	0.05
<input checked="" type="checkbox"/>	5	-159301.27	62357.43	602000.00	4269000.00	-0.74	-0.33	0.81
<input checked="" type="checkbox"/>	6	-156178.82	66267.28	605000.00	4273000.00	1.34	0.60	1.46

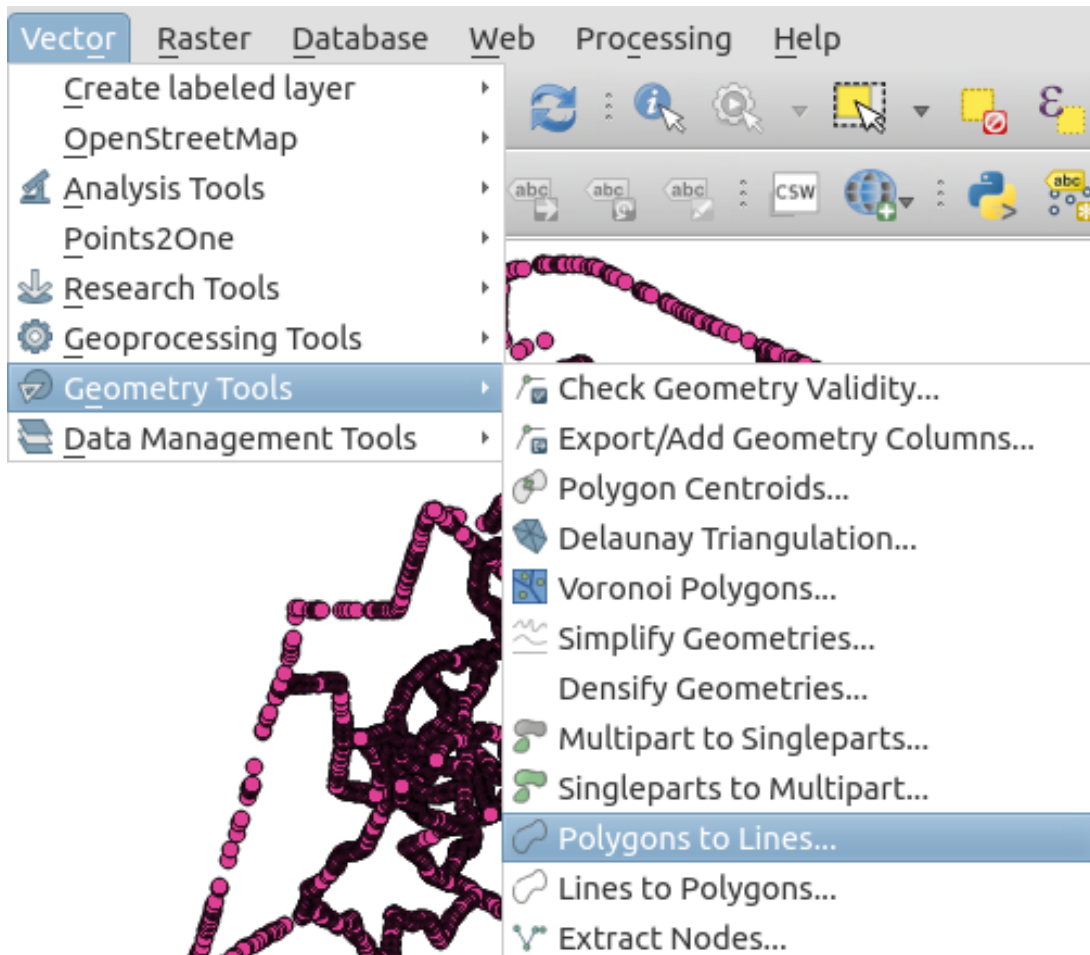









Chapter 3: Common Data Preprocessing Steps



 **Points2One** - + x

Input vector layer

Create polygons Create lines Closed

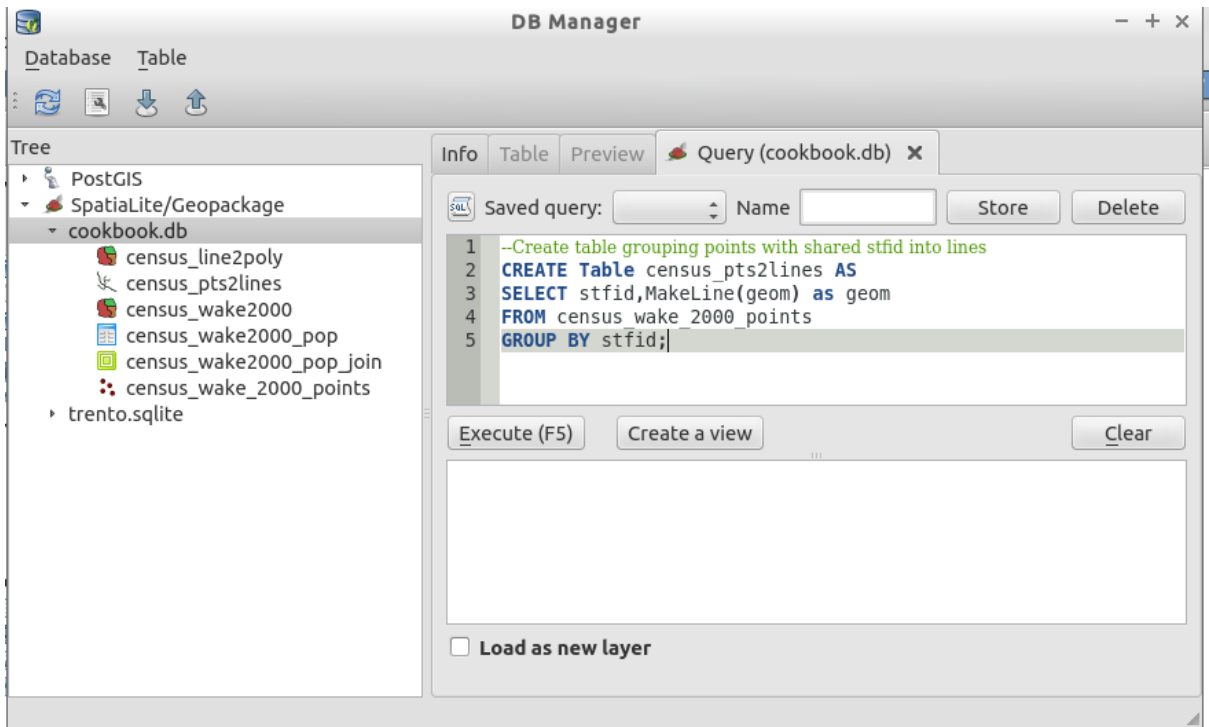
Group features by

Sort vertices by

Then by

Output shapefile

Encoding Add result to canvas



Info Table Preview Query (cookbook.db) x

Saved query: Name Store Delete

```
1 --Create table grouping points with shared stfid into lines
2 CREATE Table census_pts2lines AS
3 SELECT stfid,MakeLine(geom) as geom
4 FROM census_wake_2000_points
5 GROUP BY stfid;
```

Execute (F5)

Create a view

Clear

Load as new layer

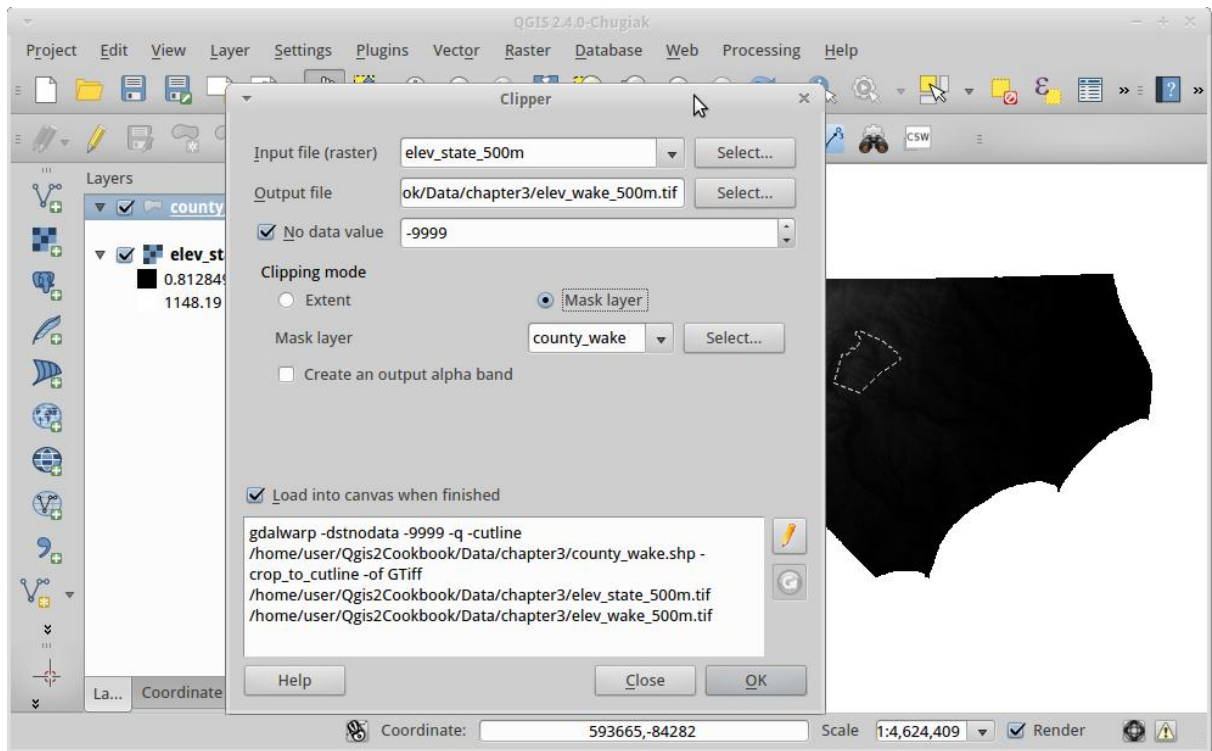
SQL window - qgis2cookbook [PostGIS]

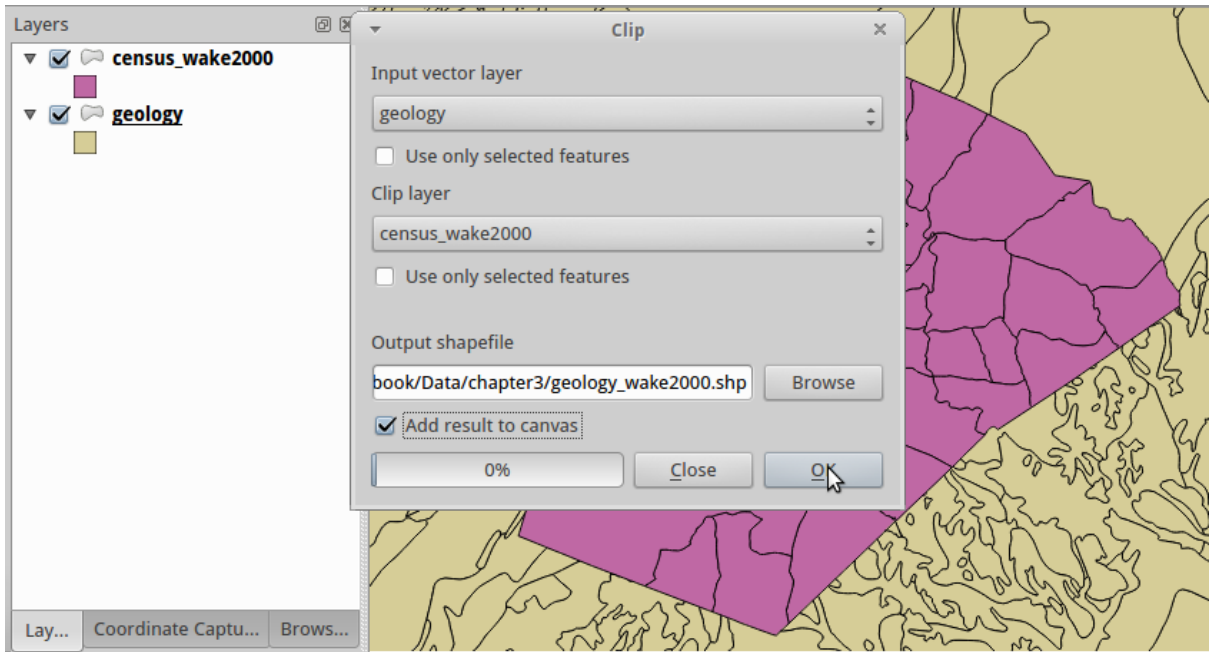
SQL query:

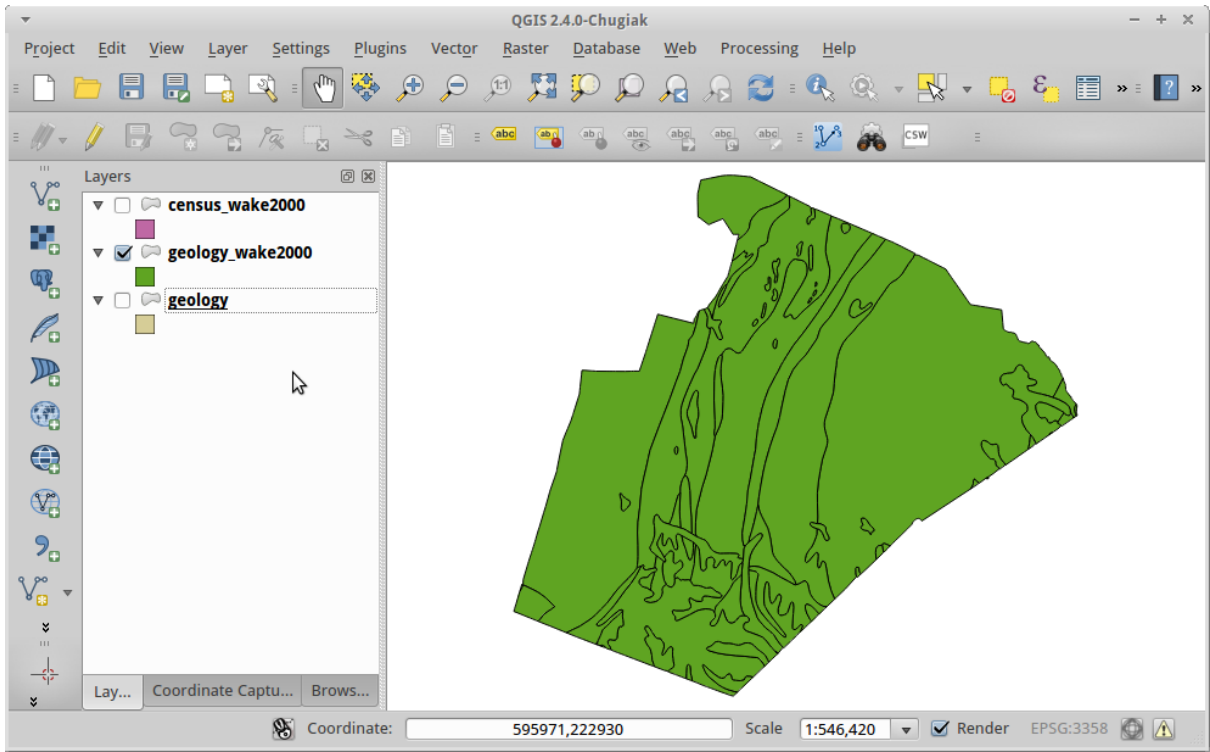
```
1 CREATE VIEW pts2line AS
2 SELECT ROW_NUMBER() over (order by census_wake_2000_points .stfid) as id,
   stfid, ST_MakeLine(geom) as geom
3 FROM census_wake_2000_points
4 GROUP BY stfid;
```

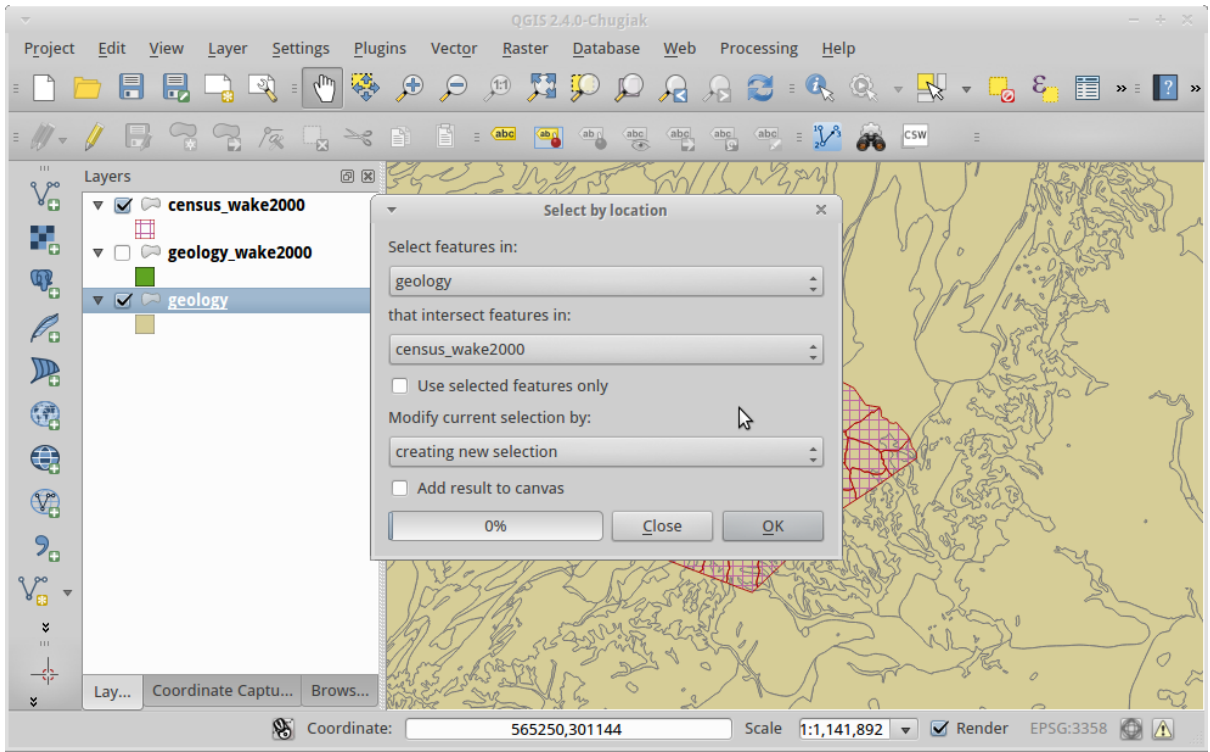
Result:

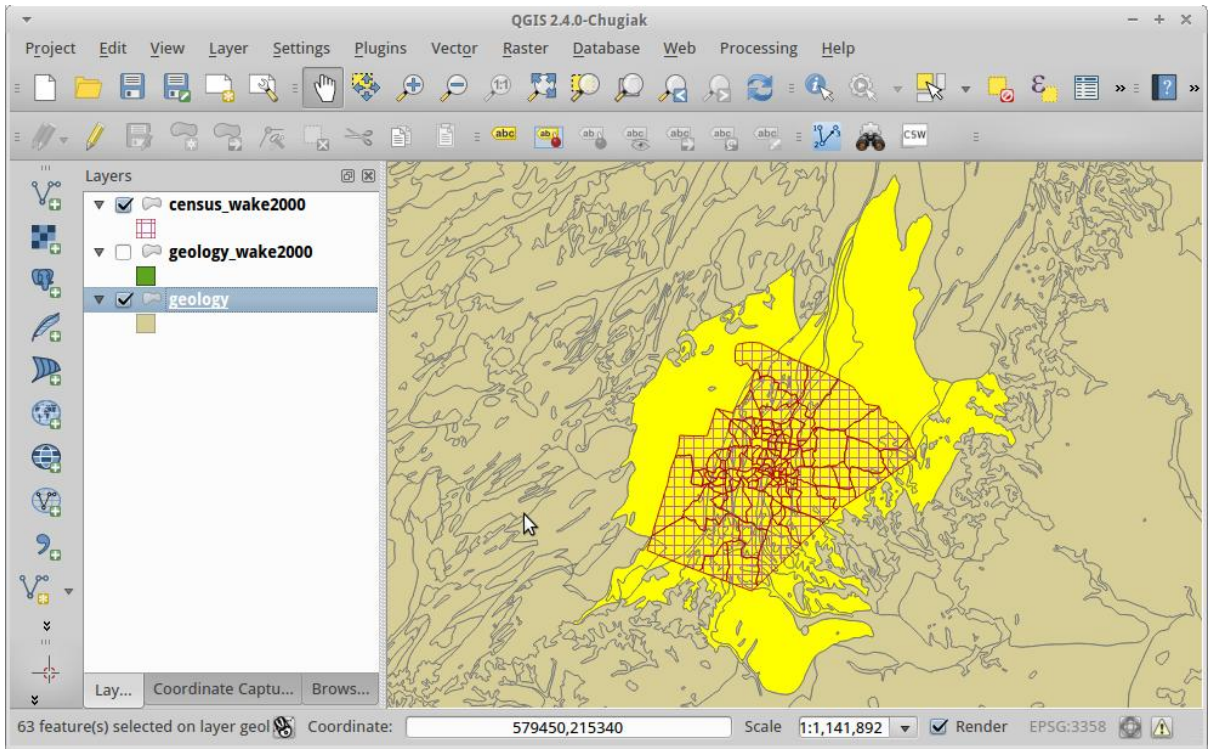
Load as new layer

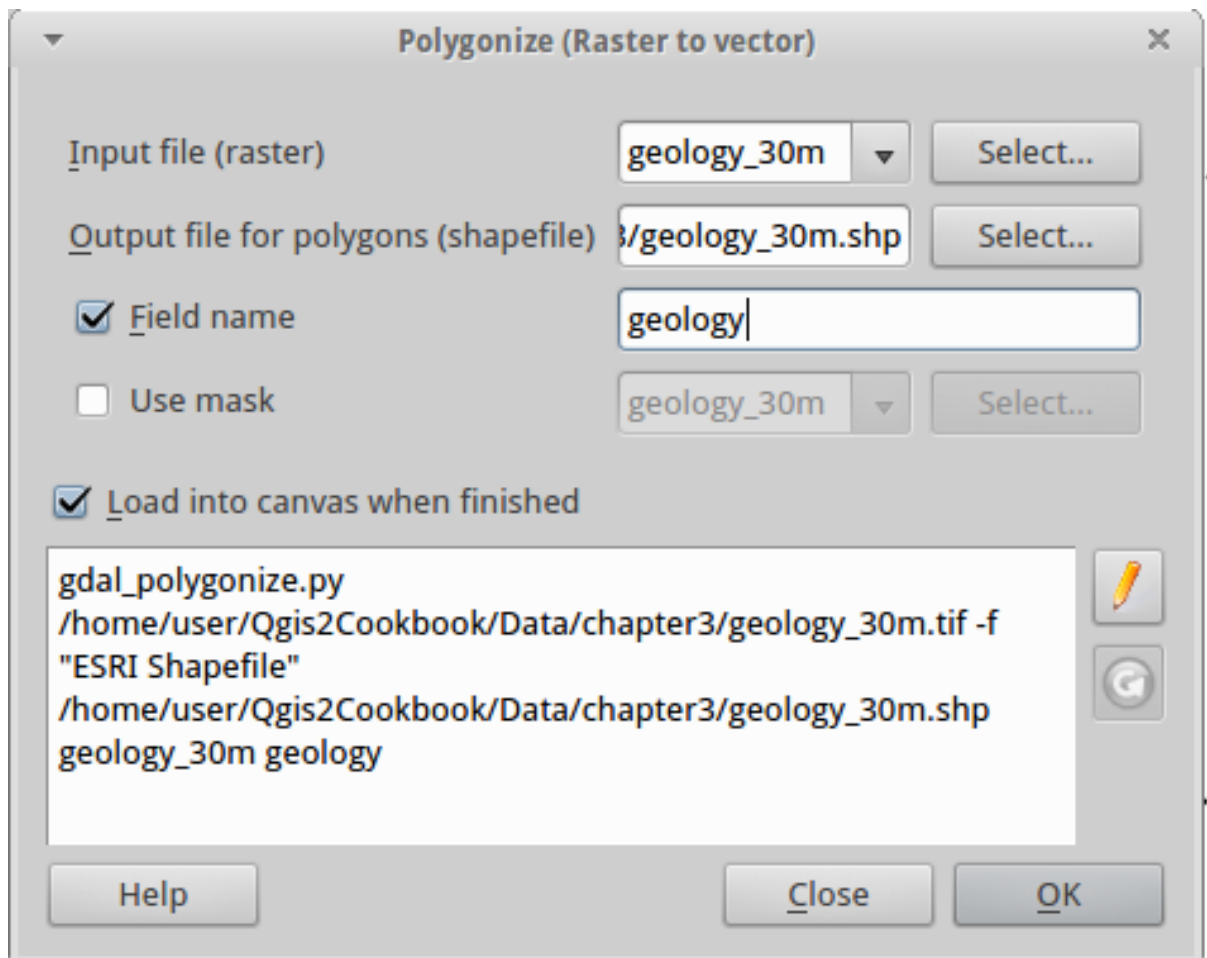










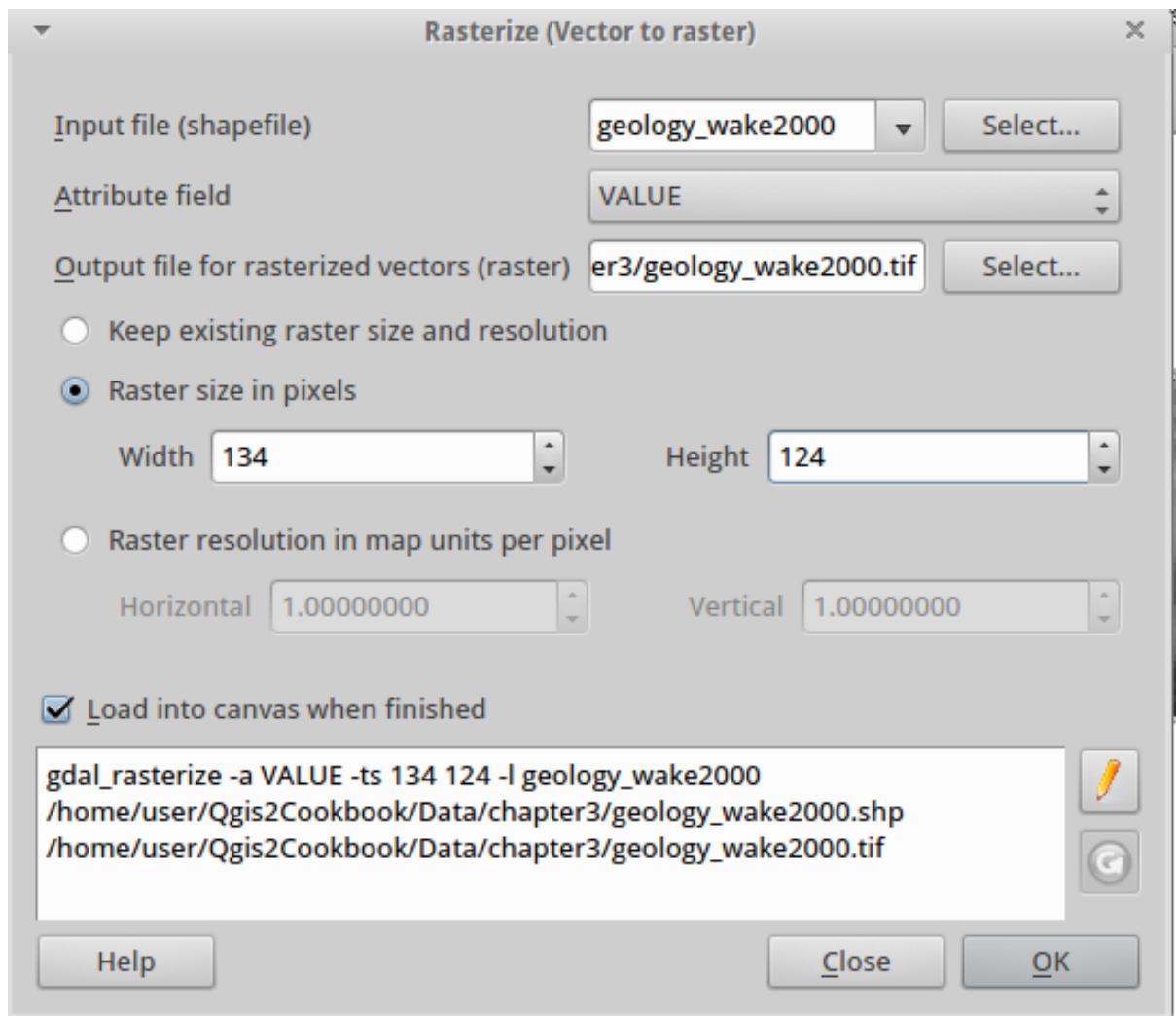


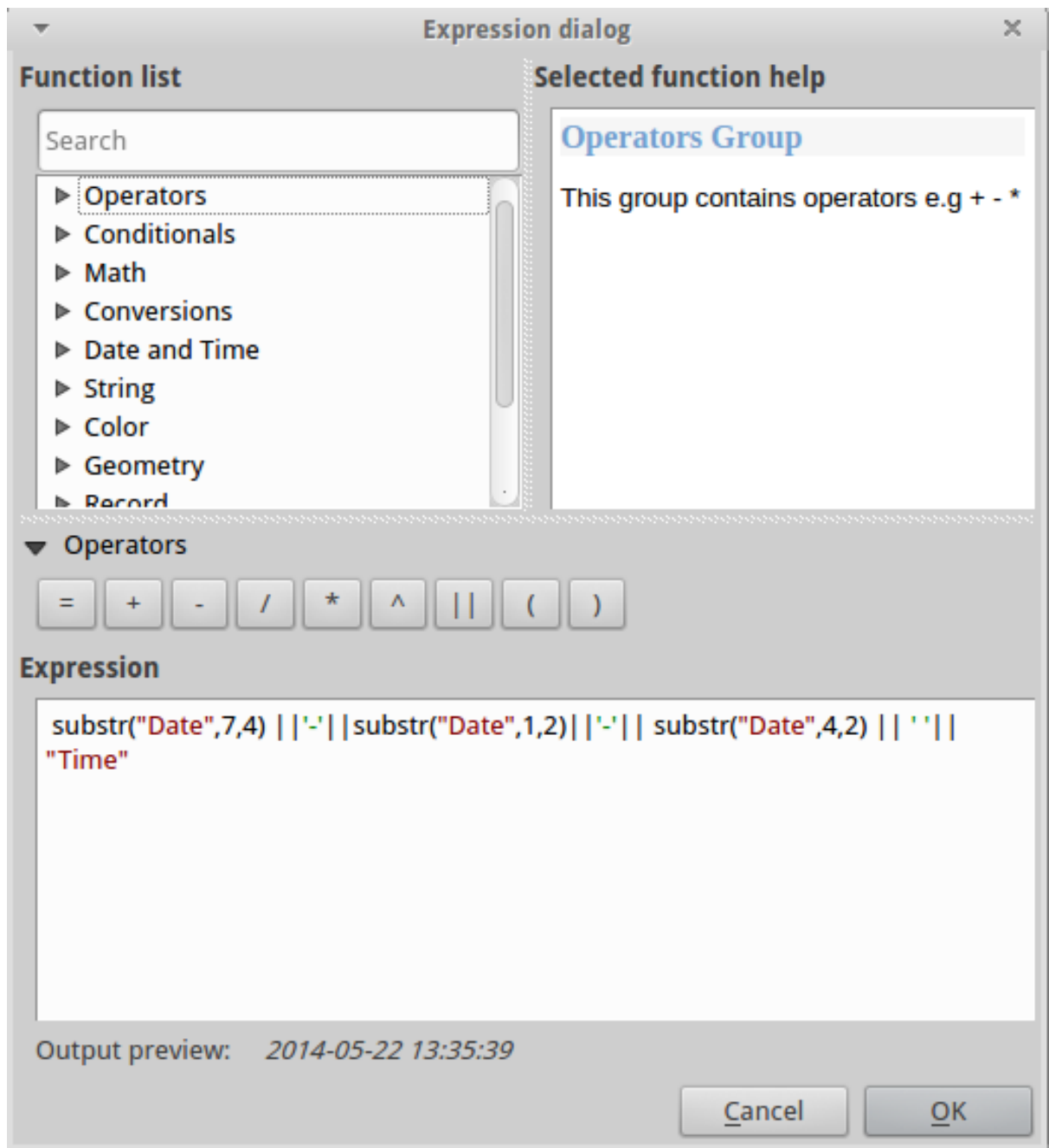
Vector

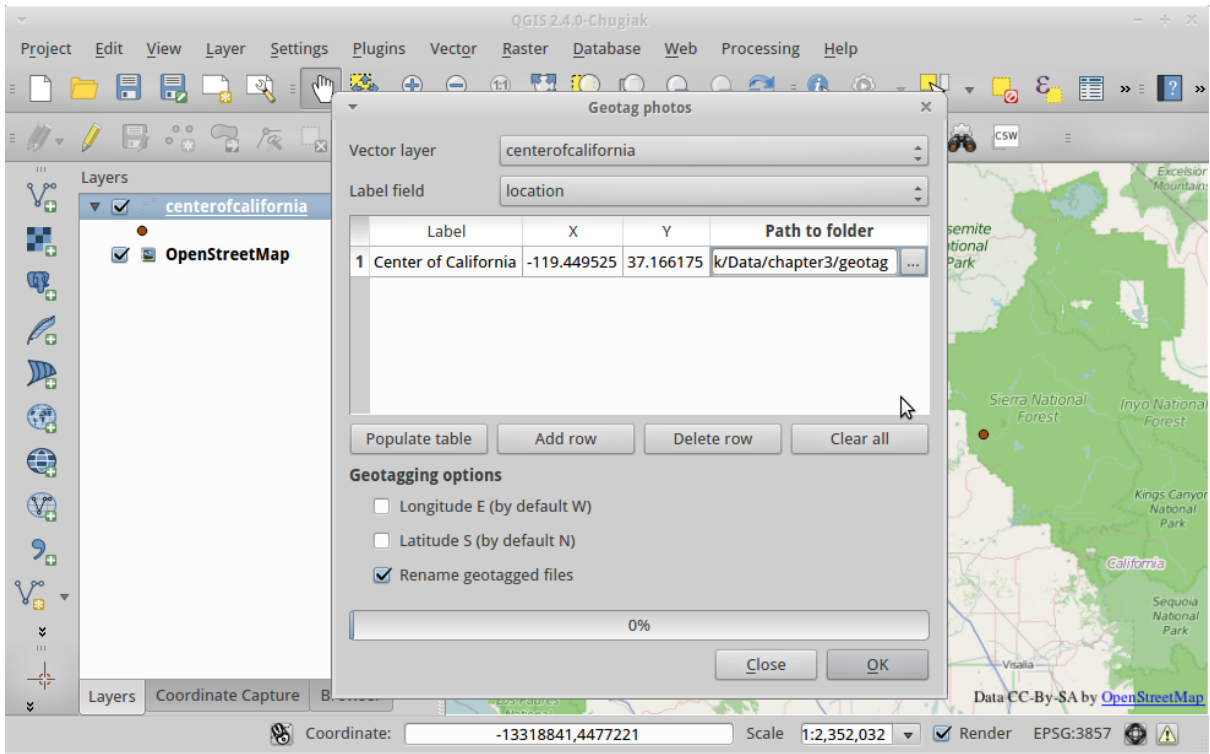


Raster

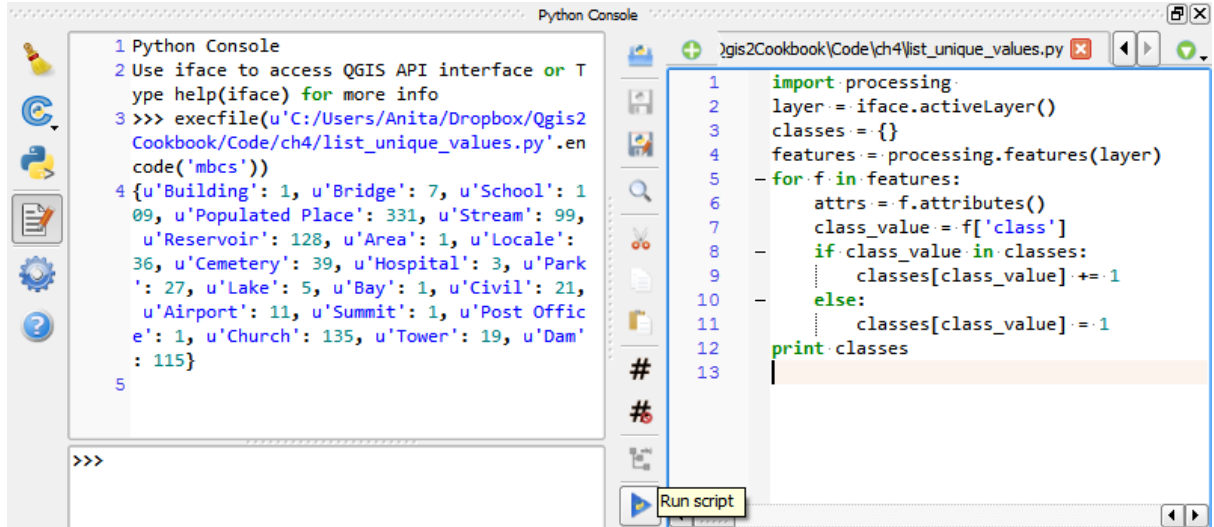








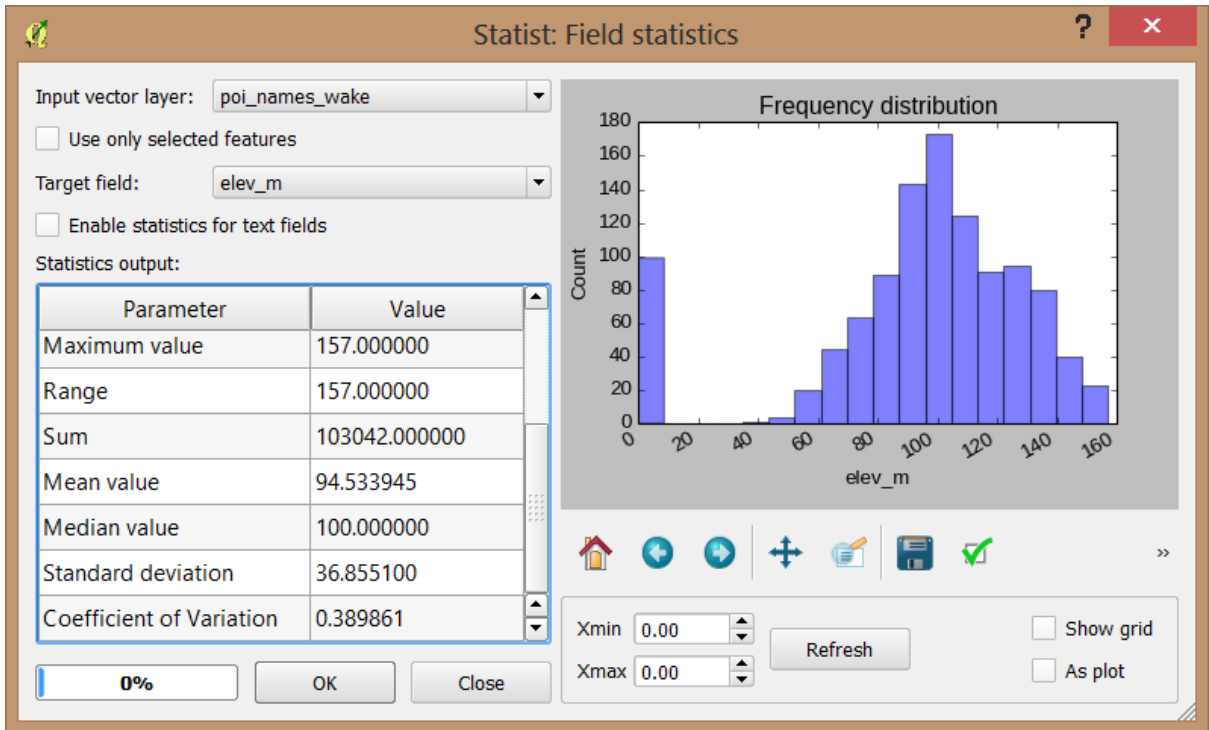
Chapter 4: Data Exploration

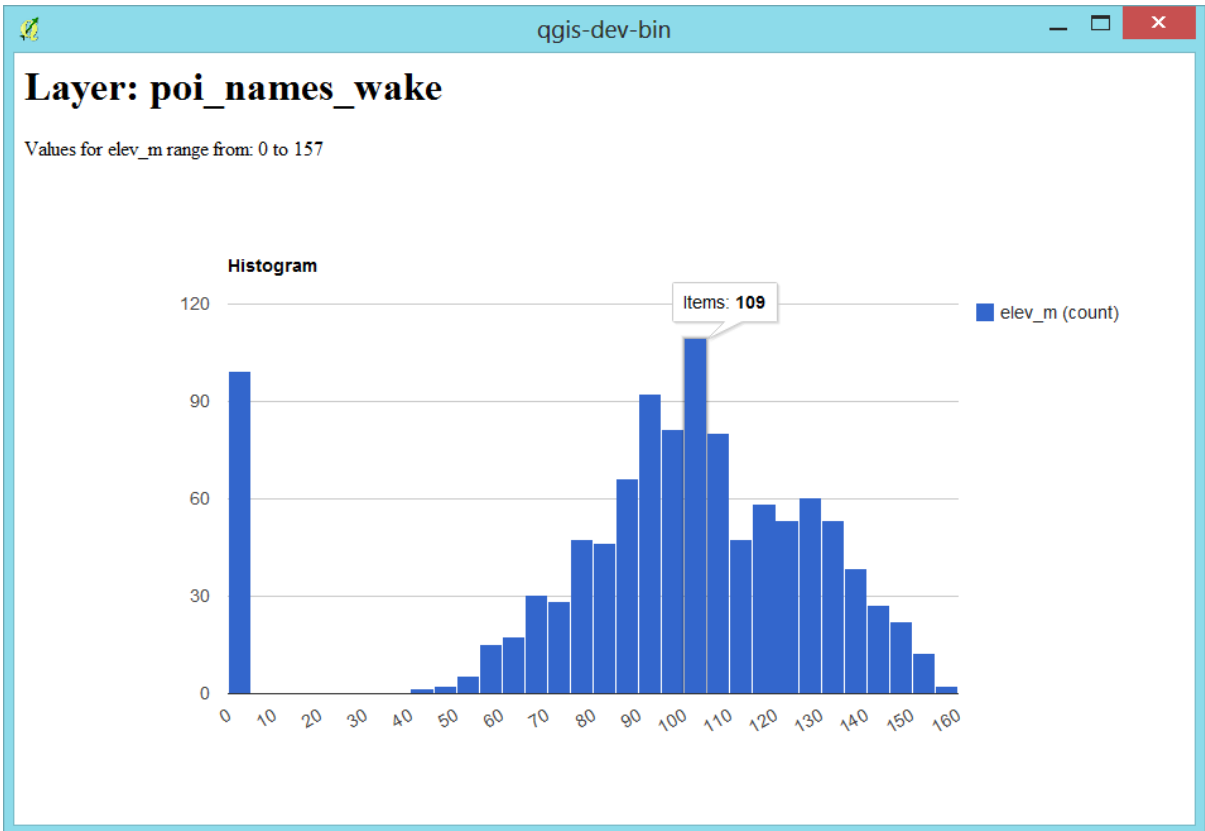


The image shows a Python Console window with two panes. The left pane displays the output of a script execution, and the right pane shows the source code of the script.

```
1 Python Console
2 Use iface to access QGIS API interface or T
  ype help(iface) for more info
3 >>> execfile(u'C:/Users/Anita/Dropbox/Qgis2
  Cookbook/Code/ch4/list_unique_values.py'.en
  code('mbscs'))
4 {u'Building': 1, u'Bridge': 7, u'School': 1
  09, u'Populated Place': 331, u'Stream': 99,
  u'Reservoir': 128, u'Area': 1, u'Locale':
  36, u'Cemetery': 39, u'Hospital': 3, u'Park
  ': 27, u'Lake': 5, u'Bay': 1, u'Civil': 21,
  u'Airport': 11, u'Summit': 1, u'Post Offic
  e': 1, u'Church': 135, u'Tower': 19, u'Dam'
  : 115}
5
>>>
```

```
1 import processing
2 layer = iface.activeLayer()
3 classes = {}
4 features = processing.features(layer)
5 for f in features:
6     attrs = f.attributes()
7     class_value = f['class']
8     if class_value in classes:
9         classes[class_value] += 1
10    else:
11        classes[class_value] = 1
12 print classes
13
```





Time manager settings
?
✕

Layers:

Layer name	Start	End (optional)	Enabled	Index	Time format	Offset	Interpolati
1	ACLED_africa_f...	EVENT_DATE	<input checked="" type="checkbox"/>	ACLED_africa_f...	%Y-%m-%d	0	<input type="checkbox"/>

◀
▶▶

Add layer

Add raster

Remove layer

Animation Options:

Show frame for milliseconds

Play animation backwards
 Looping animation

Do not export empty frames in time managed layers


Display frame start time on map

Time Manager
⊞
✕

Time frame start:
Time frame size:
minutes

⏪⏩

▶ not set
not set



2013

microseconds
milliseconds
seconds
minutes
hours
days
weeks
months
years

Time Manager

Settings Export Video Time frame start: 2013-12-01 00:00:00.000 Time frame size: 1

2013-12-01 00:00:00 2013-12-31 00:00:00

Info

Image sequence from current position onwards is being saved to C:\temp\afrika.
Please wait until the process is finished.

OK

Info

The export finished successfully!

OK

2014-01-05 00:00:00

Time Manager

Settings Export Video Time frame start: 2014-01-05 00:00:00.000 Time frame size: 1 days

2013-12-01 00:00:00 2013-12-31 00:00:00

Expression string builder

Expression Function Editor

= + - / * ^ || () '\n'

```
color_hsla(
0,
scale_linear(
  day(age(todatetime(animation_datetime()),
todatetime("EVENT_DATE"))),
0,31,
100,0
),
50,
128
)
```

Search

- Date and Time
 - age
 - day
 - day_of_week
 - hour
 - minute
 - month
 - now
 - second
 - week
 - year
- Fields and Values
- Fuzzy Matching
- General
- Geometry
- Math
- Operators
- Record
- String
- TimeManager
- Variables
- Recent (generic)

function age

Returns the difference between two dates or datetimes. The difference is returned as a **Interval** and needs to be used with one of the following functions in order to extract useful information:

- year
- month
- week
- day
- hour
- minute
- second

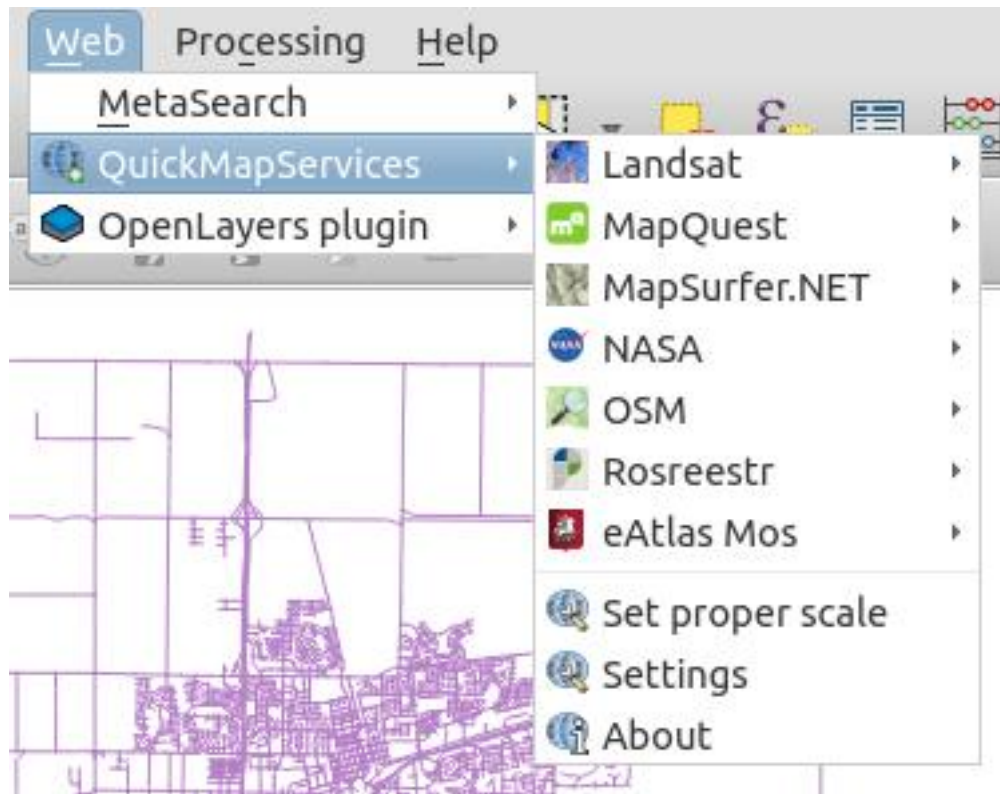
Syntax

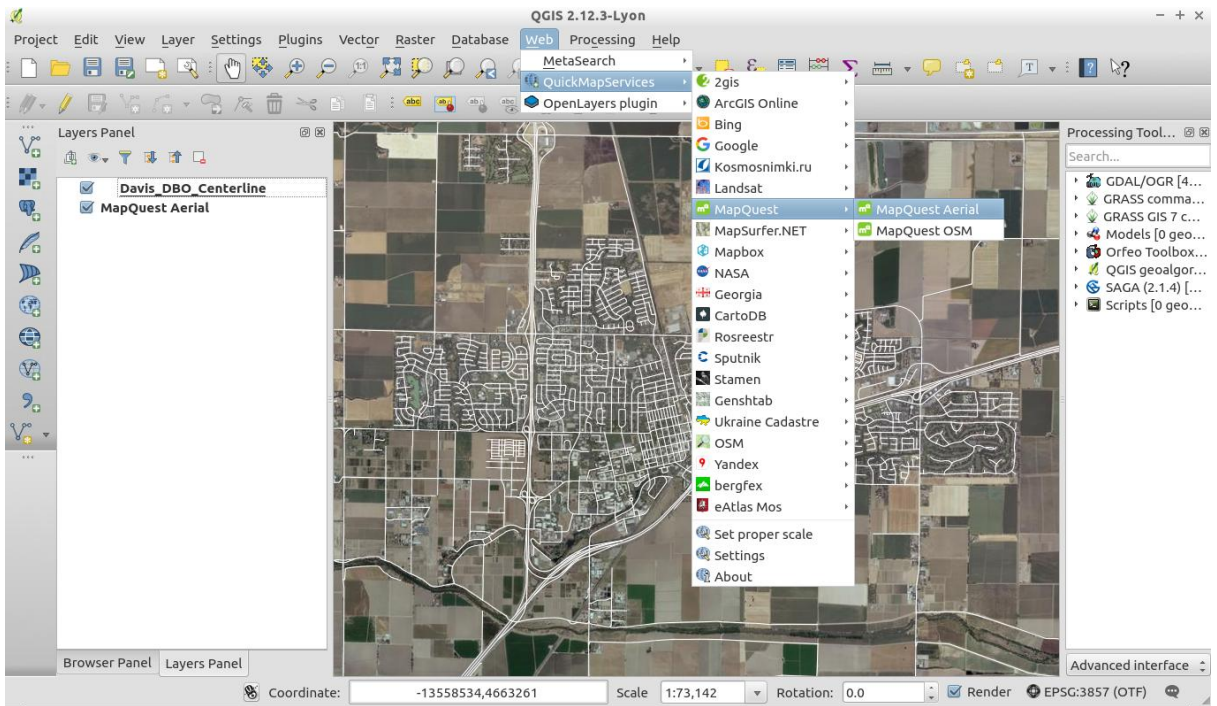
```
age(datetime1, datetime2)
```

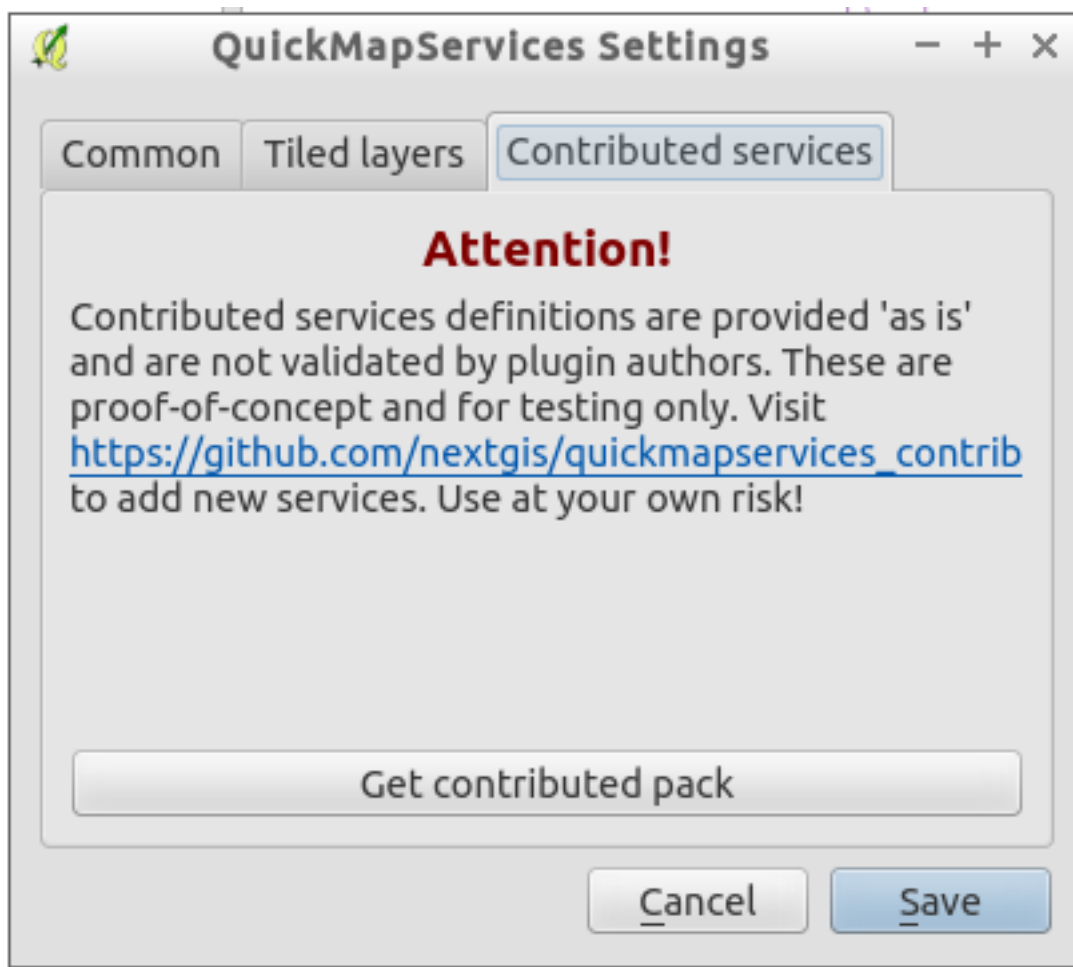
Arguments

Output preview: '226,29,29,128'

OK Cancel







QuickMapServices Settings

Common

Tiled layers

Contributed services

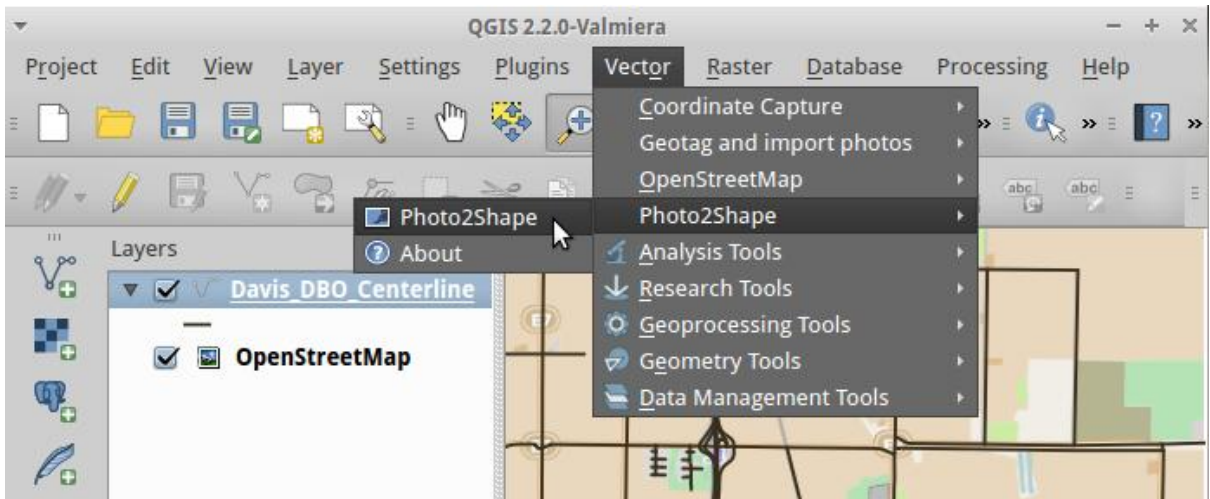
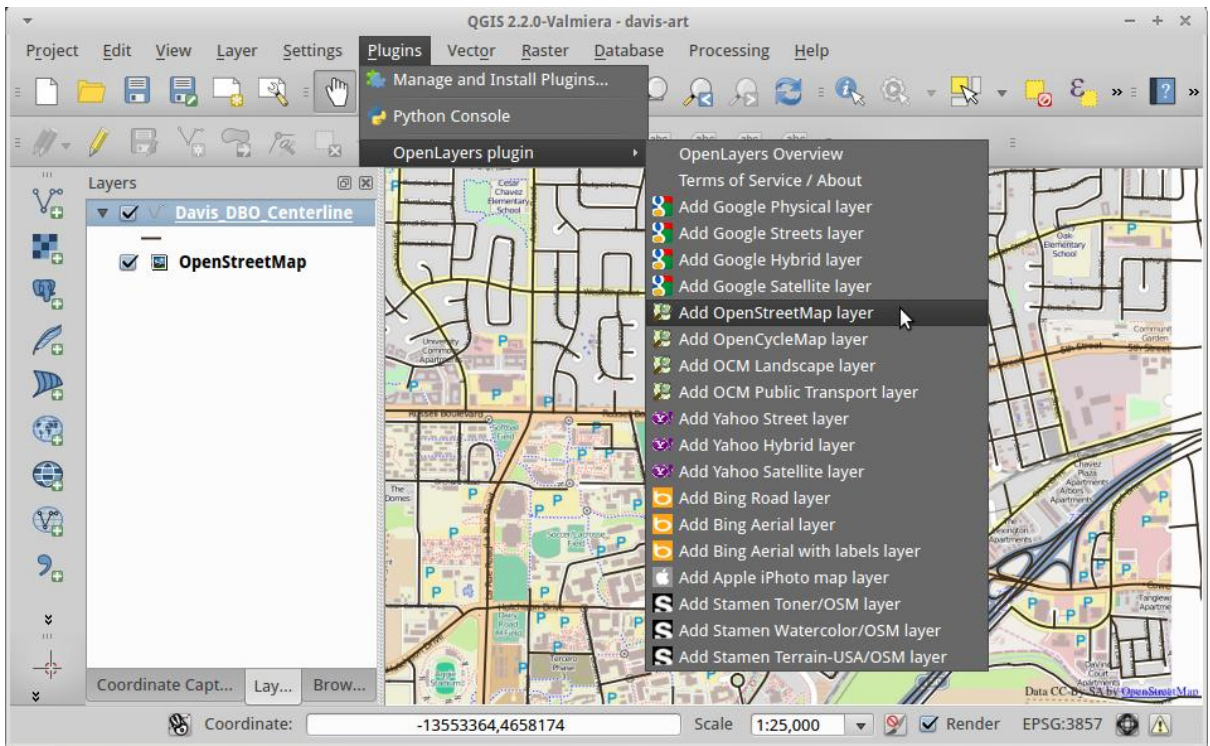
Attention!

Contributed services definitions are provided 'as is' and are not validated by plugin authors. These are proof-of-concept and for testing only. Visit https://github.com/nextgis/quickmapservices_contrib to add new services. Use at your own risk!

Get contributed pack

Cancel

Save



The screenshot shows a GIS application interface. The top part displays a map of Davis, CA, with several layers visible in the 'Layers' panel: 'davis-art-photos', 'Davis_DBO_Centerline', and 'OpenStreetMap'. The map shows 'Davis Stadium 5' and a yellow parking area labeled 'P'. Below the map is an 'Attribute table' window titled 'Attribute table - davis-art-photos :: Features total: 11, filtered: 11, selected: 1'. The table contains the following data:

	filepath	filename	longitude	latitude	altitude	north	directi
0	/home/user/...	davis-art-1.jpg	-121.7390938...	38.54708910...	0.000000000...	NULL	0.000000
1	/home/user/...	davis-art-10.jpg	-121.7390951...	38.54503809...	0.000000000...	NULL	0.000000
2	/home/user/...	davis-art-11.jpg	-121.7390920...	38.54504870...	0.000000000...	NULL	0.000000
3	/home/user/...	davis-art-2.jpg	-121.7397275...	38.54651090...	0.000000000...	NULL	0.000000
4	/home/user/...	davis-art-3.jpg	-121.7398194...	38.54639850...	0.000000000...	NULL	0.000000
5	/home/user/...	davis-art-4.jpg	-121.7396274...	38.54535529...	0.000000000...	NULL	0.000000

QGIS 2.2.0-Valmiera

Project Edit View Layer Settings Plugins Vector Raster Database Processing Help

Layers

- davis-art-photos
 - Davis_DBO_Centerline
 - OpenStreetMap

Coordinate Capt... La... Brow...


1 feature(s) selected on layer davis-art-photos.

Event Browser - Displaying records 02 of 09

Display Options Configure External Applications

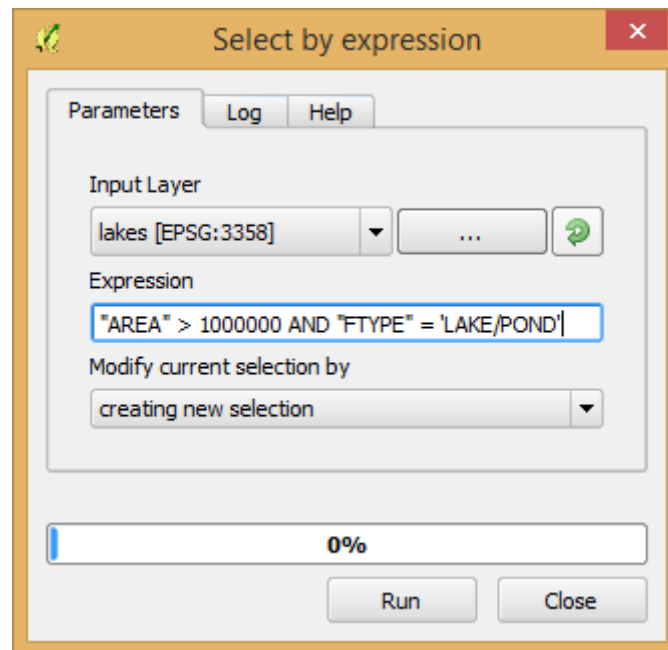
Previous Next

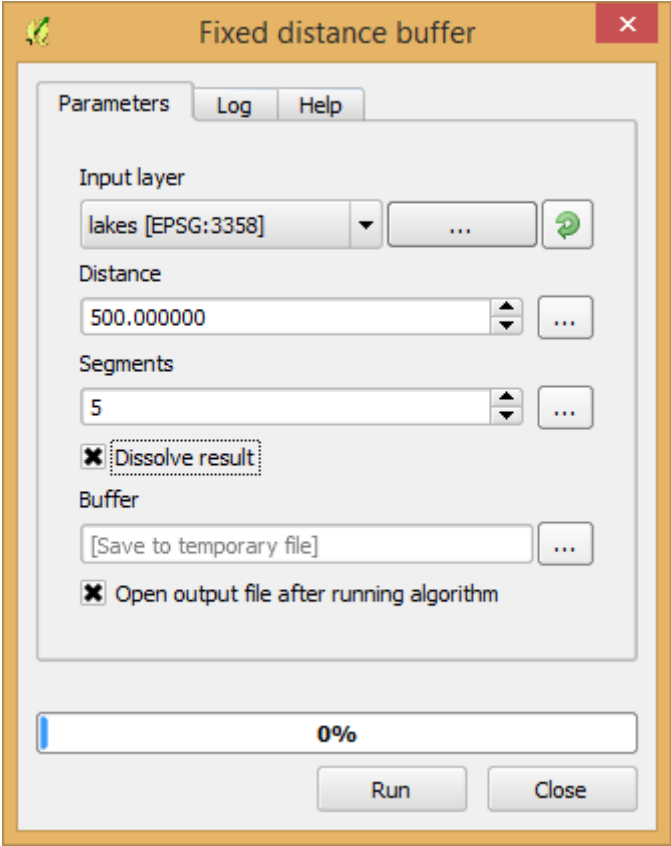
Field	Value
filepath	/home/user/Qgis2Cookbook/Data/davis/davis-art/davis-art-2.jpg
filename	davis-art-2.jpg
longitude	-121.7397275
latitude	38.5465109
altitude	0

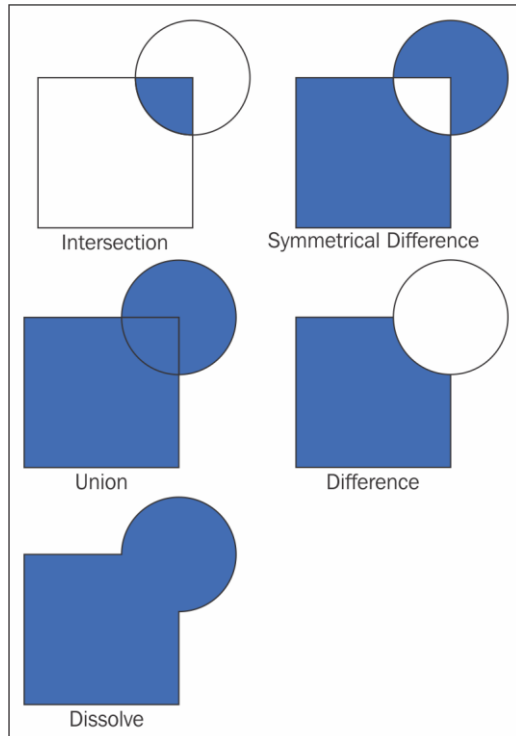
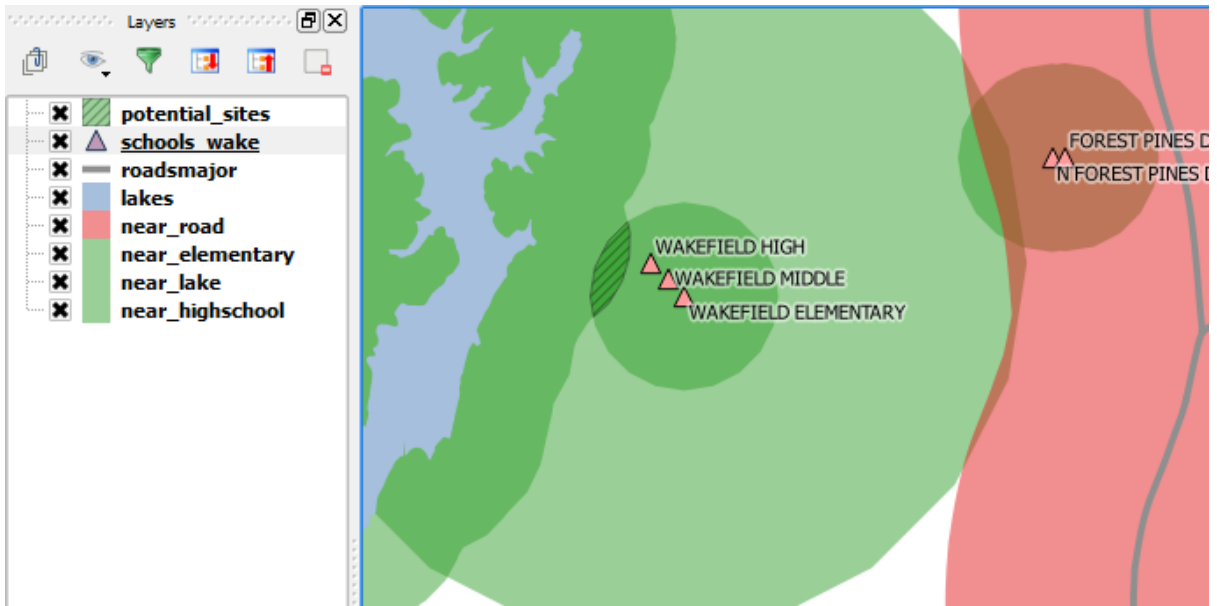


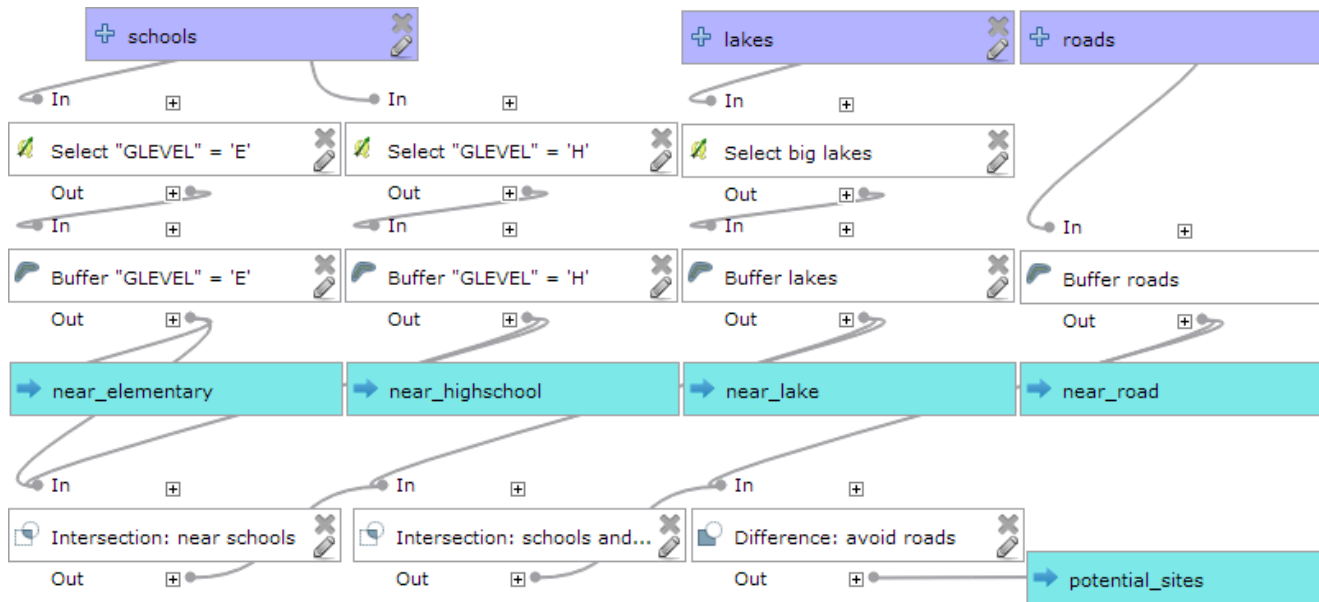
Coordinate: -13551842.7,4656946.1 Scale: 1:2,014 Render EPSG:3857

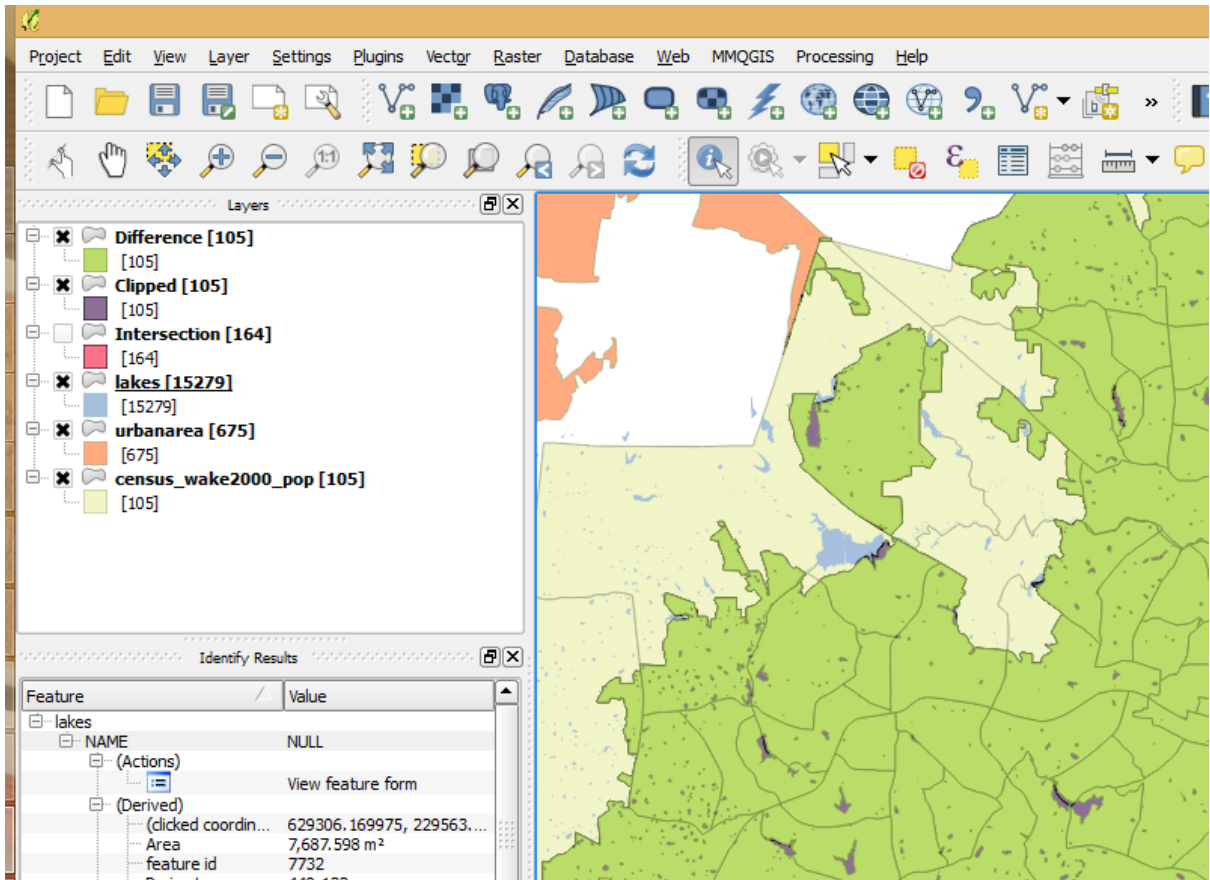
Chapter 5: Classic Vector Analysis

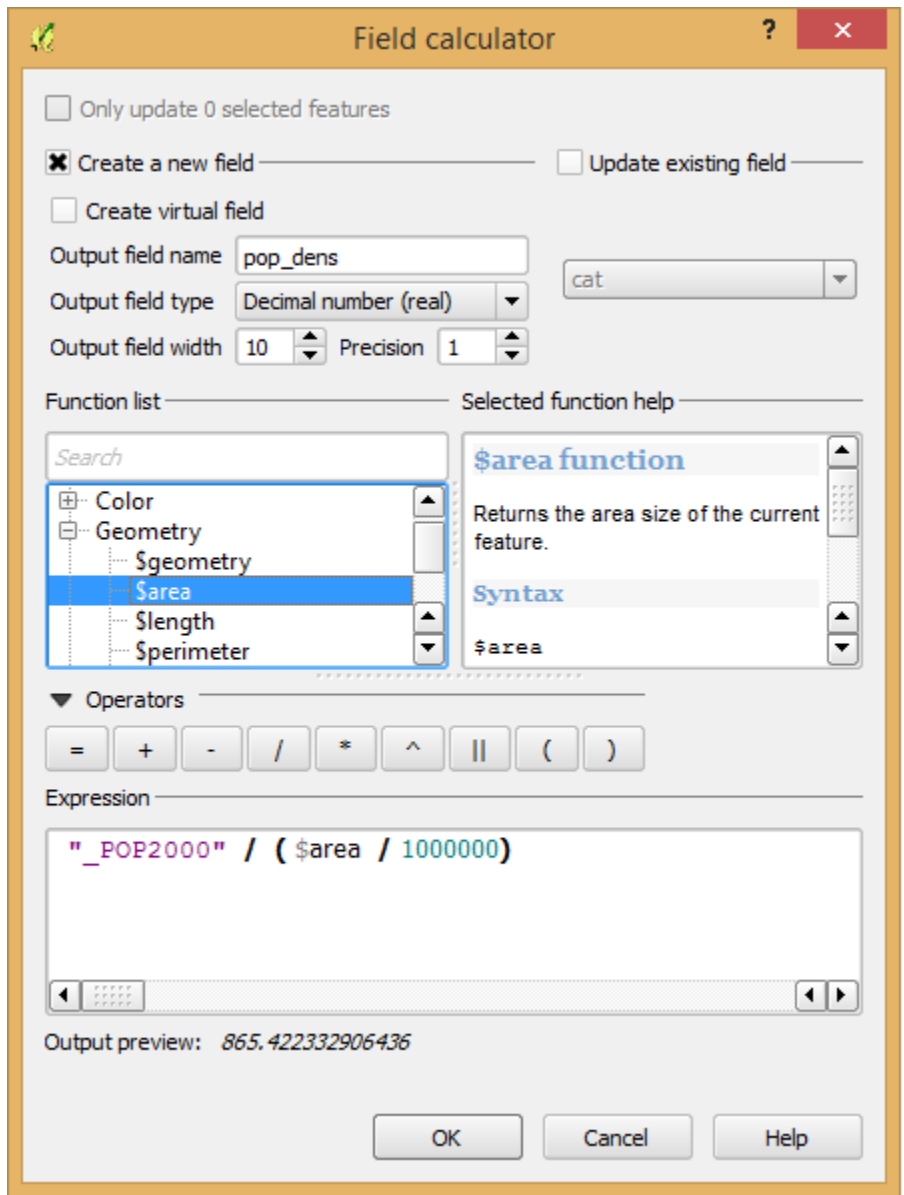


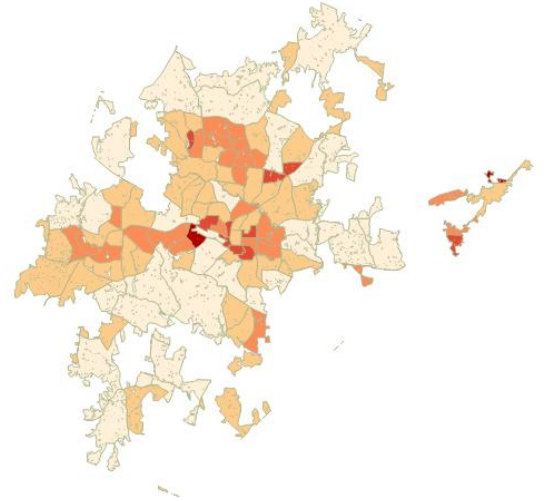
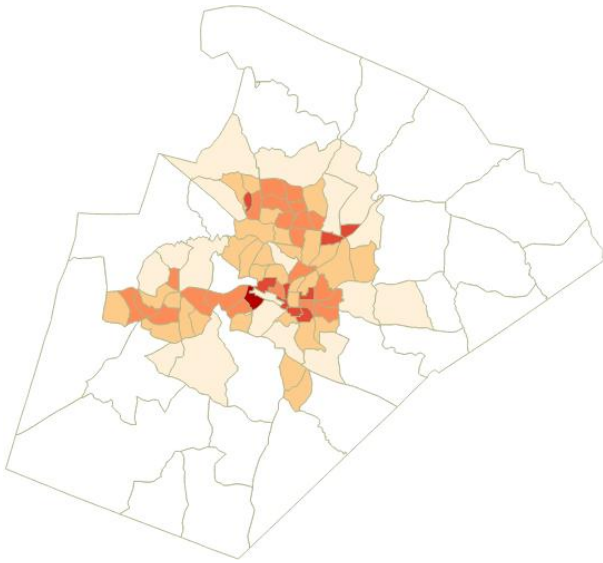












Group Stats

Data Features Window Help

	1	2	3	4	5	6	7	8
1	GEO_NAME	CZam	CZbg	CZfg	CZfv	CZg	CZig	CZlg
2	ZIPCODE							
3	ANGIER 27501							
4	APEX 27502							
5	APEX 27523							
6	APEX 27539	2.25695e+06	9.54722e+06	1.36121e+07		1.66033e+06		
7	CARY 27511	340260	8.39705e+06					
8	CARY 27513		5.05787e+06			3.58185e+06		
9	CARY 27518	4.71252e+06	8.13433e+06	3.15672e+06				
10	CARY 27519							
11	CLAYTON 27520							
12	CREEDMOOR 27522							
13	DURHAM 27703							
14	DURHAM 27713							
15	FUQUAY VARINA 27526	82704.8	1.06644e+07	1.12995e+07		2.57714e+06		
16	GARNER 27529		1.04762e+06				4.60104e+07	
17	HOLLY SPRINGS 27540		6.36218e+06			2.16107e+07		
18	KNIGHTDALE 27545							

Control panel

Layers
Intersection

Fields
GEO_NAME
NAME
ZIPCODE
ZIPNAME
ZIPNUM
Area
Perimeter
average
count
max
median
min

Filter

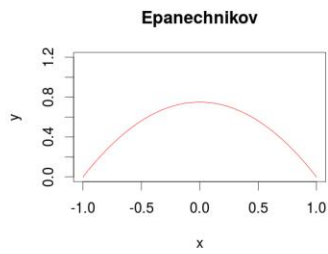
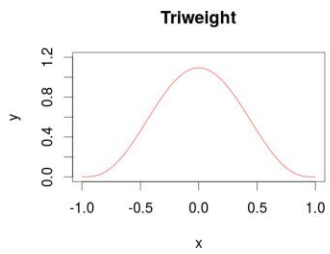
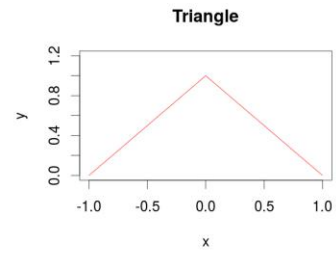
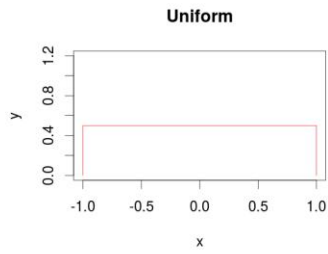
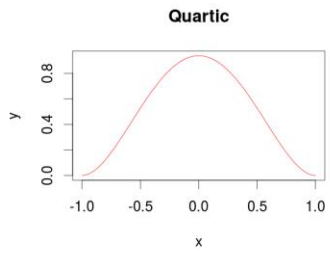
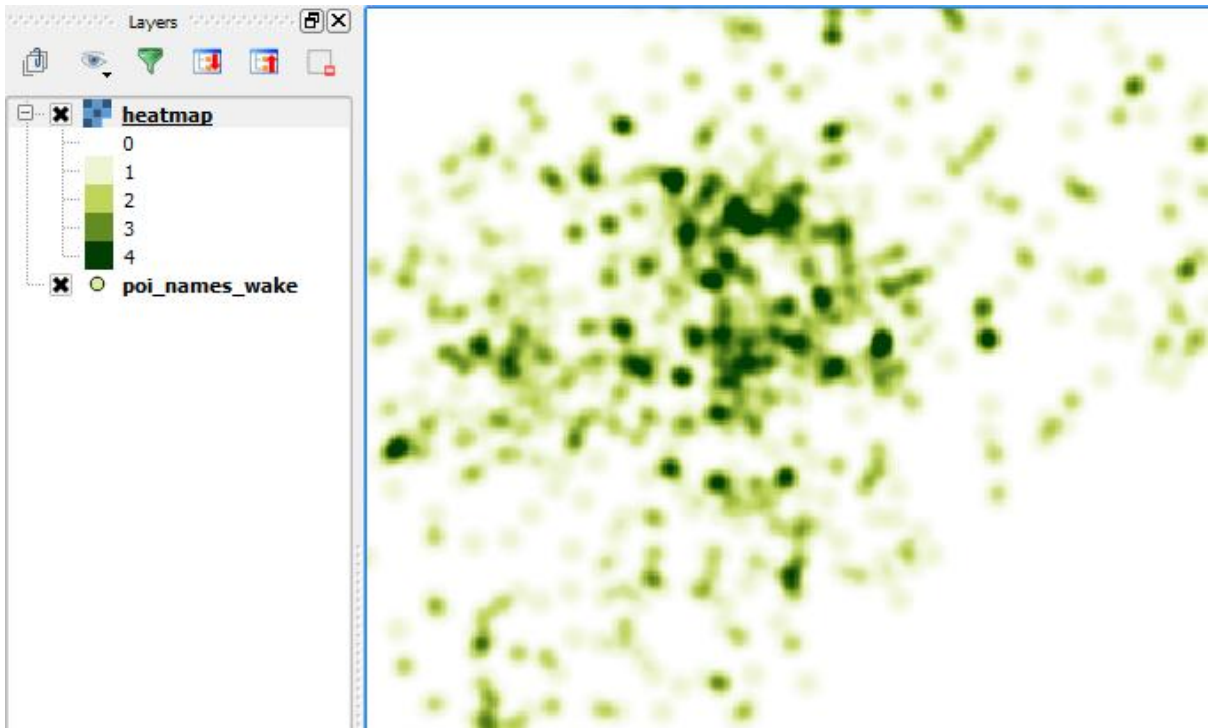
Columns
GEO_NAME

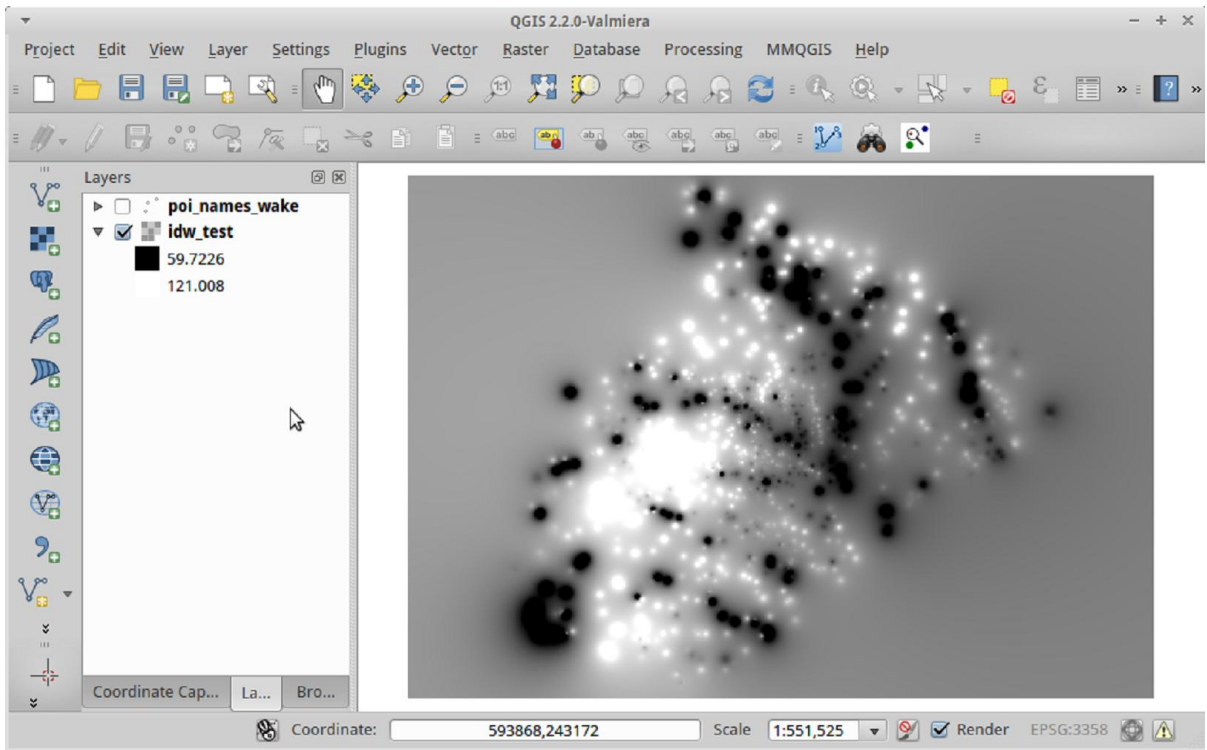
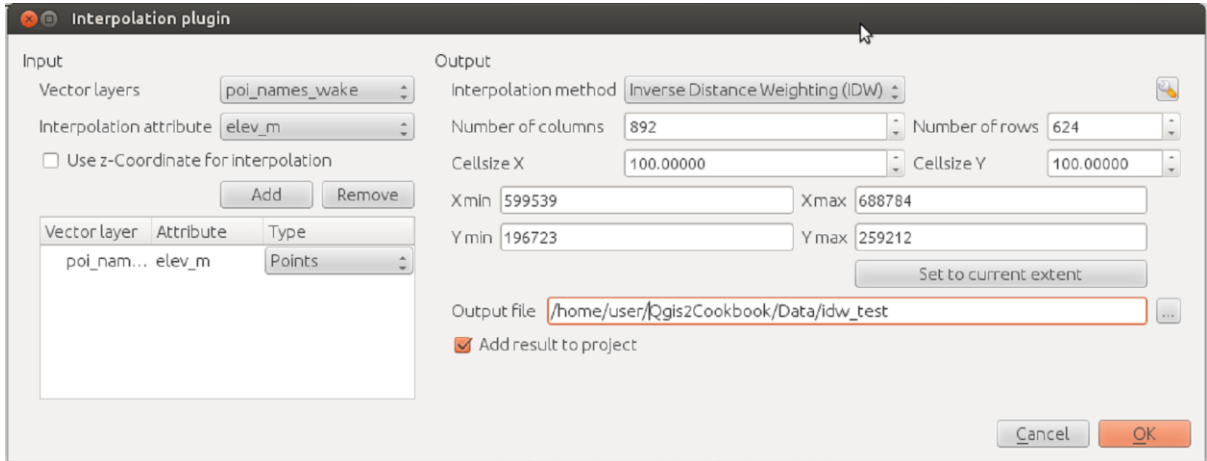
Rows
ZIPCODE
Area
sum

Value use NULL values

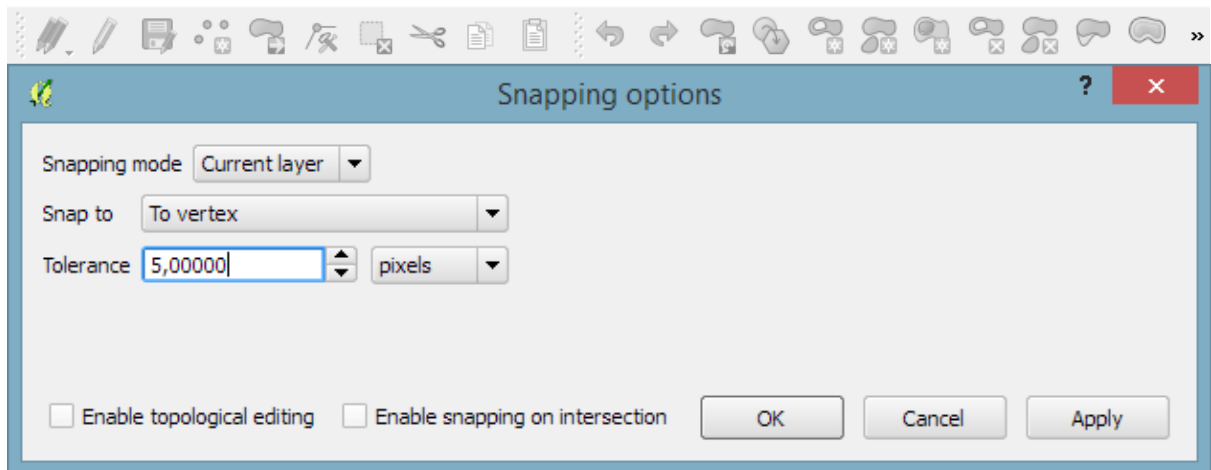
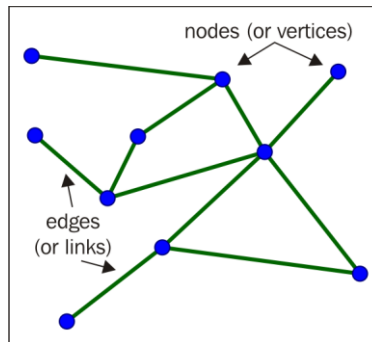
Use only selected features Clear

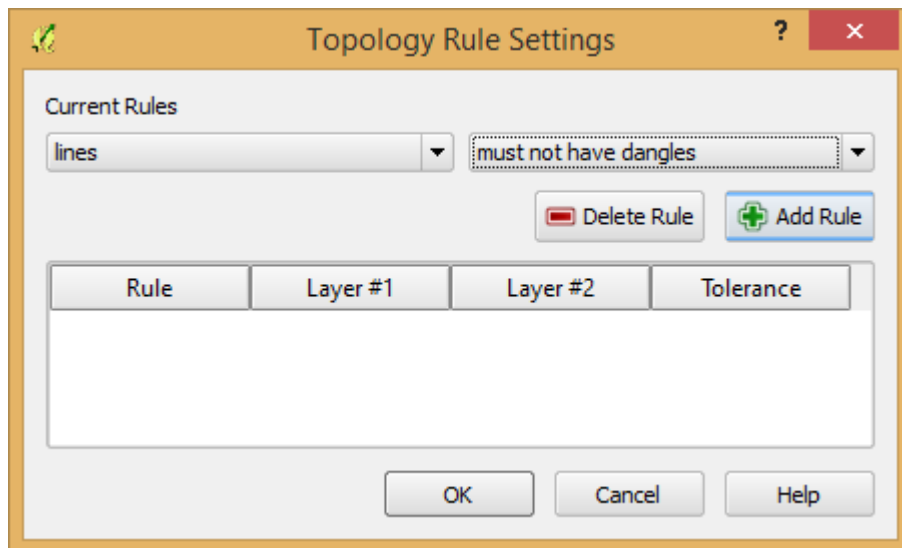
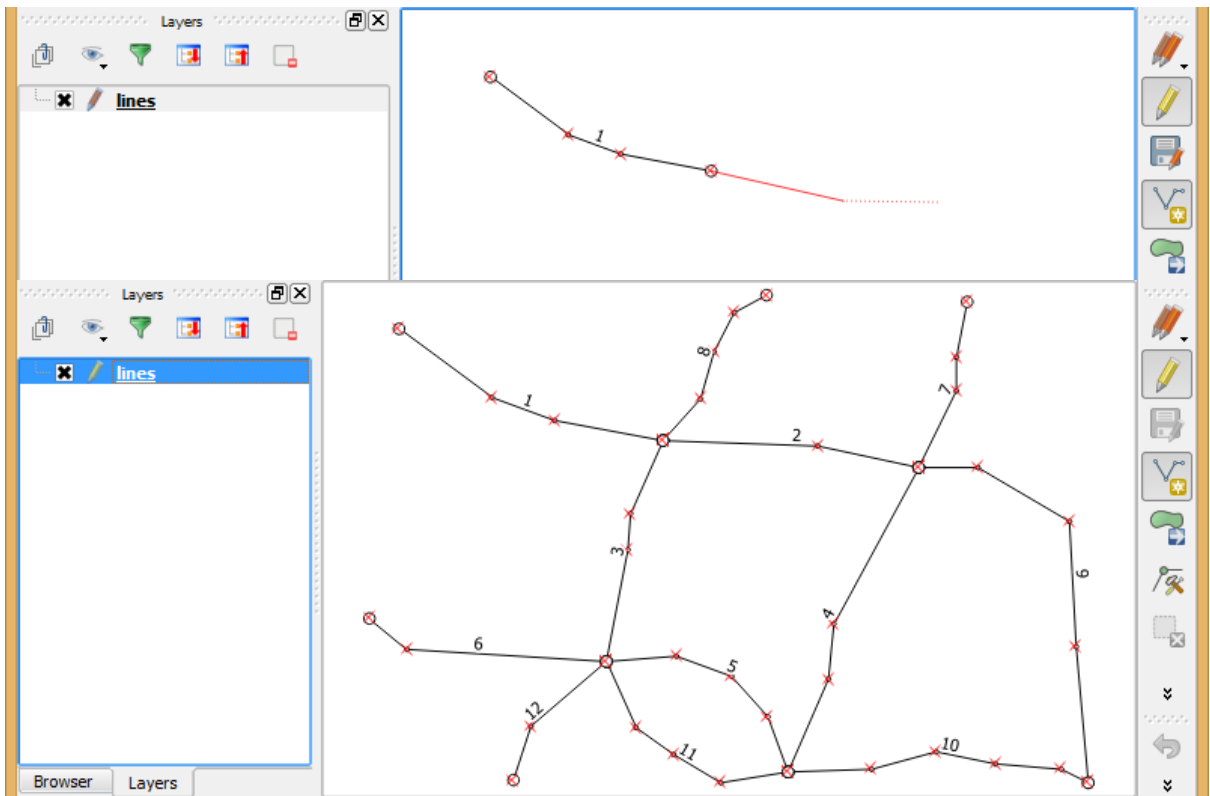
Calculate

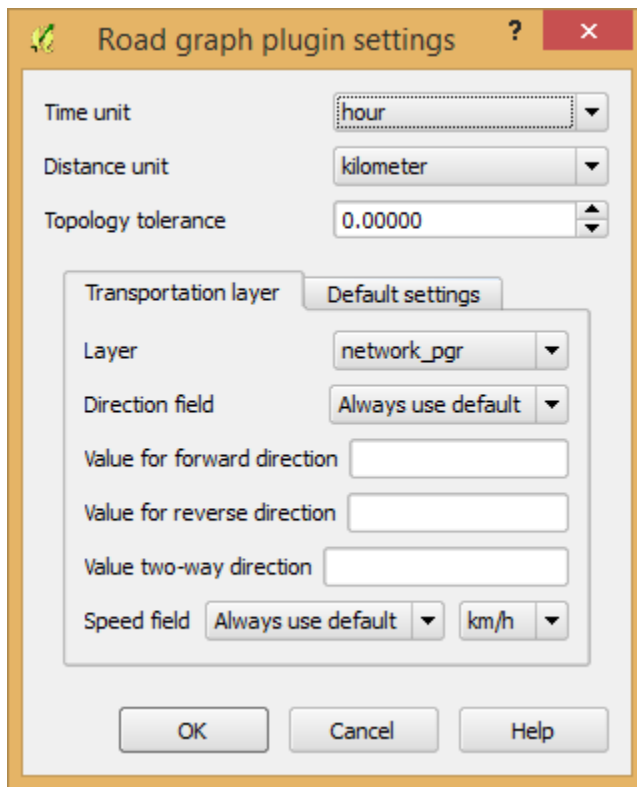
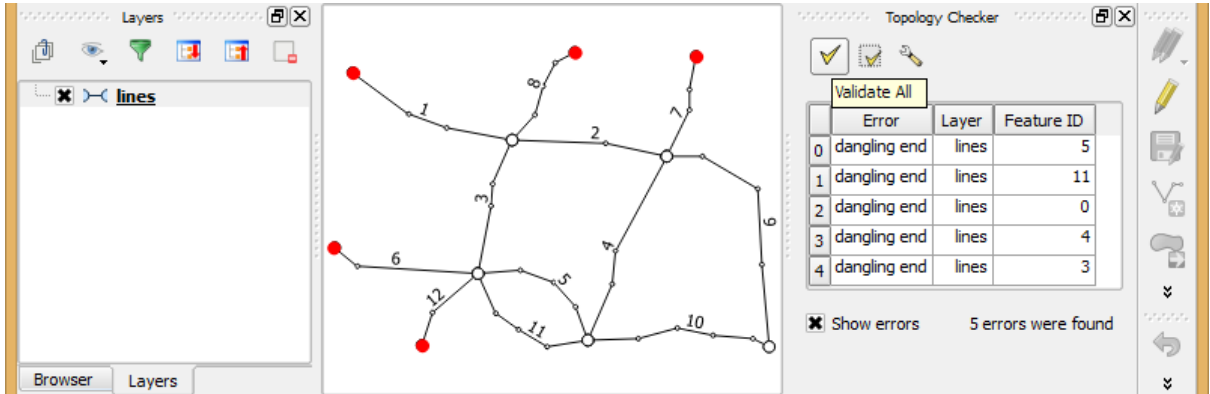


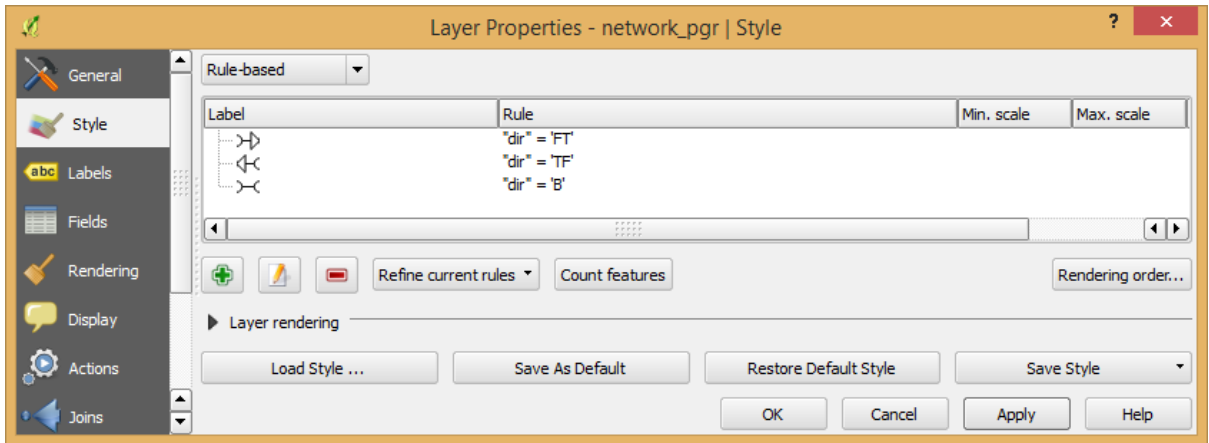
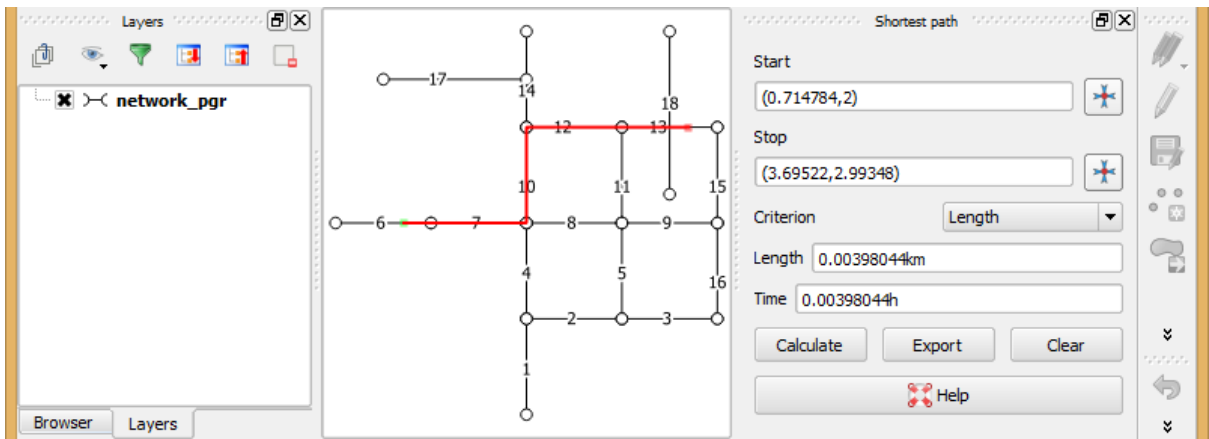


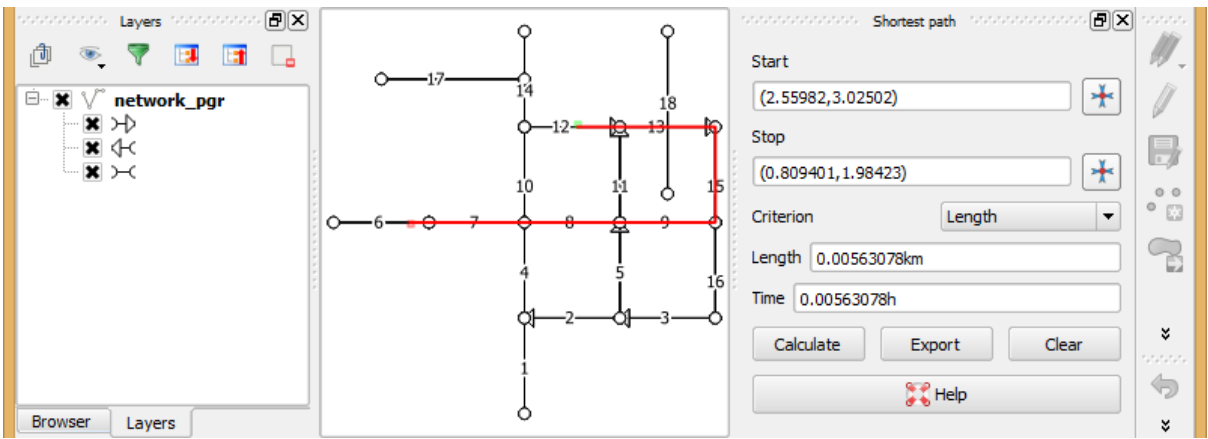
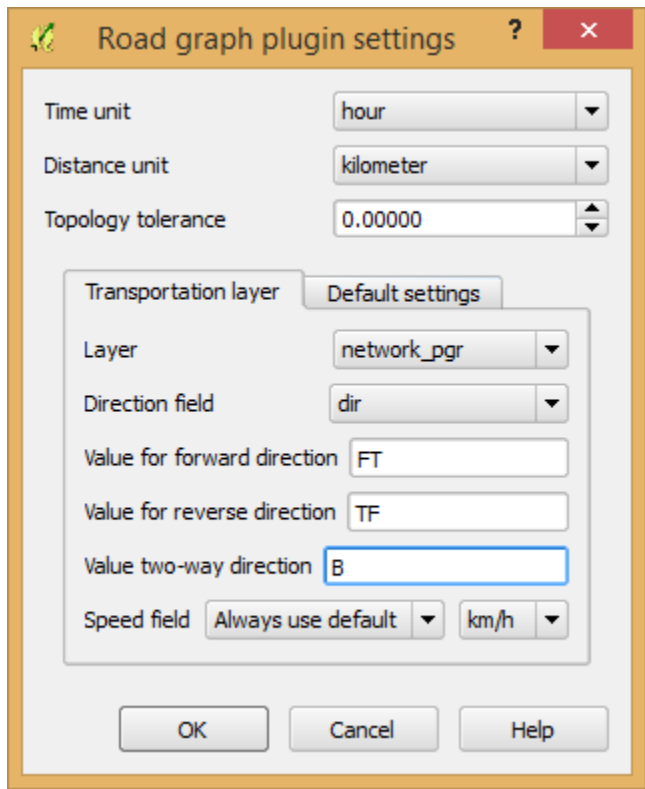
Chapter 6: Network Analysis











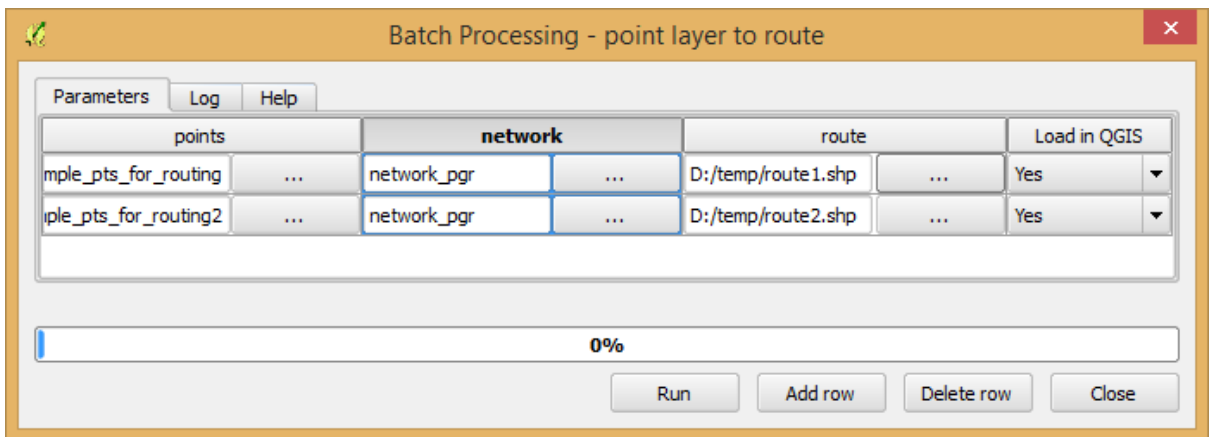
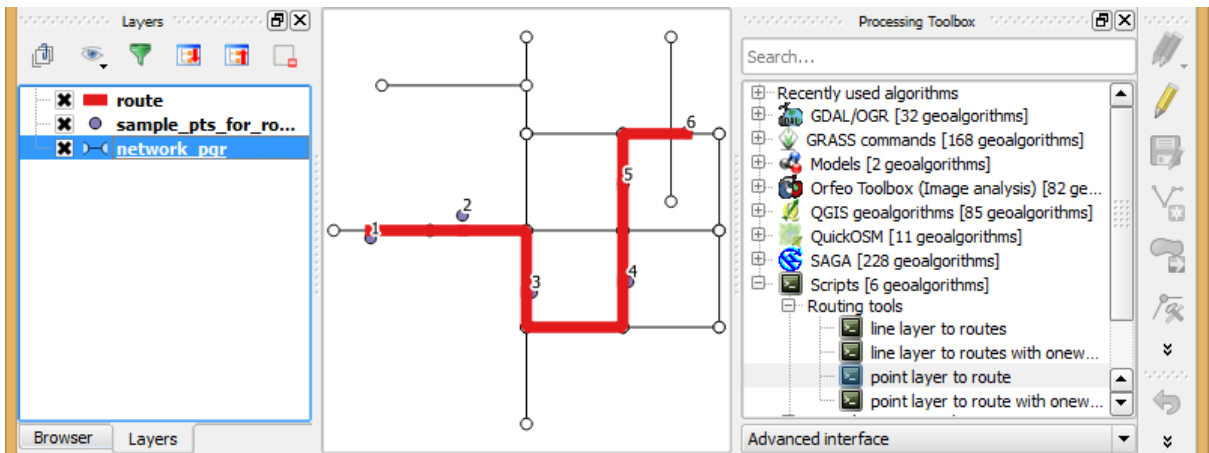
Layers Panel

- route.shp
- network_pgr

Python Console

```
\Dropbox\Qgis2Cookbook\Code\ch6\network_analysis_library_shortest_path.py
```

```
23 - while (curPos != from_id):
24     in_vertex = graph.arc(tree[curPos]).inVertex()
25     route_points.append(graph.vertex(in_vertex).point())
26     curPos = graph.arc(tree[curPos]).outVertex()
27     route_points.append(from_point)
28
29 # write the results to a Shapefile
30 result = 'C:\\temp\\route.shp'
31 writer = VectorWriter(result, None, [], 2, layer.crs())
32 fet = QgsFeature()
33 fet.setGeometry(QgsGeometry.fromPolyline(route_points))
34 writer.addFeature(fet)
35
36 del writer
37 processing.load(result)
38
```



Import vector layer

Input: network_pgr

Import only selected features Update options

Output table

Schema: public

Table: network_pgr

Options

- Primary key: id
- Geometry column: the_geom
- Source SRID: Target SRID:
- Encoding: UTF-8
- Replace destination table (if exists)
- Create single-part geometries instead of multi-part
- Create spatial index

OK Cancel

DB Manager

Database Schema Table

Tree

- Oracle ...
- PostGIS
- Local GI...
- SpatialLi...

Info Table Preview Query (Local GIS DB) x

Saved query: Name Store Delete

```

SELECT seq, id1 AS node, id2 AS edge, di.cost, the_geom
FROM pgr_dijkstra(
  'SELECT id, source, target, cost FROM network_pgr',
  16, 9, false, false
) as di
JOIN network_pgr as net
ON di.id2 = net.id

```

Execute (F5) 5 rows, 0.0 seconds Create a view Clear

	seq	node	edge	cost	the_geom
1	0	16	6	1.0	0105000020E61...
2	1	17	7	1.0	0105000020E61...
3	2	5	8	1.0	0105000020E61...
4	3	6	9	1.0	0105000020E61...
5	4	11	15	1.0	0105000020E61...

Load as new layer

Column(s) with unique values Geometry column

Retrieve columns

Layer name (prefix)

Avoid selecting by feature id

Set filter Load now!

Layers Panel

- QueryLayer
- network_pgr

Attribute table - QueryLayer :: Features total: 5, filtered: 5, sele...

	uid	seq	node	edge	cost
0	1	0	16	6	1
1	2	1	17	7	1
2	3	2	5	8	1
3	4	3	6	9	1
4	5	4	11	15	1

Show All Features

Layers

- dijkstra - from 10 to 4
- network_pgr

pgRouting Layer

Database: cookbook
Function: dijkstra

sql

```

edge_table network_pgr
geometry the_geom
source source
target target
cost cost
reverse_cost reverse_cost

```

source_id: 10
target_id: 4

directed has_reverse_cost

Run Export Clear

Layers

- network_pgr

pgRouting Layer

Database:

Function:

sql

edge_table:

geometry:

id:

source:

target:

cost:

source_id:

distance:

directed has_reverse_cost

Layers

- wake_2po_4pgr

pgRouting Layer

Database:

Function:

sql

edge_table:

geometry:

id:

source:

target:

cost:

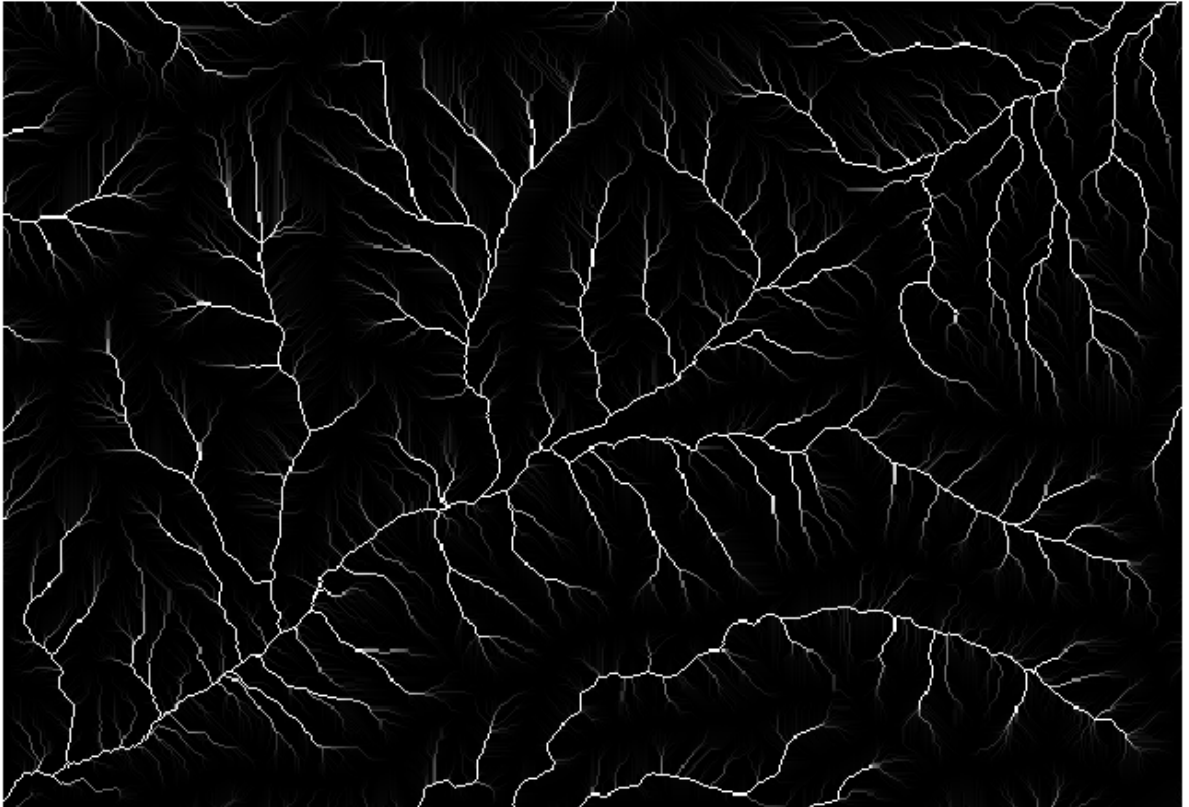
reverse_cost:

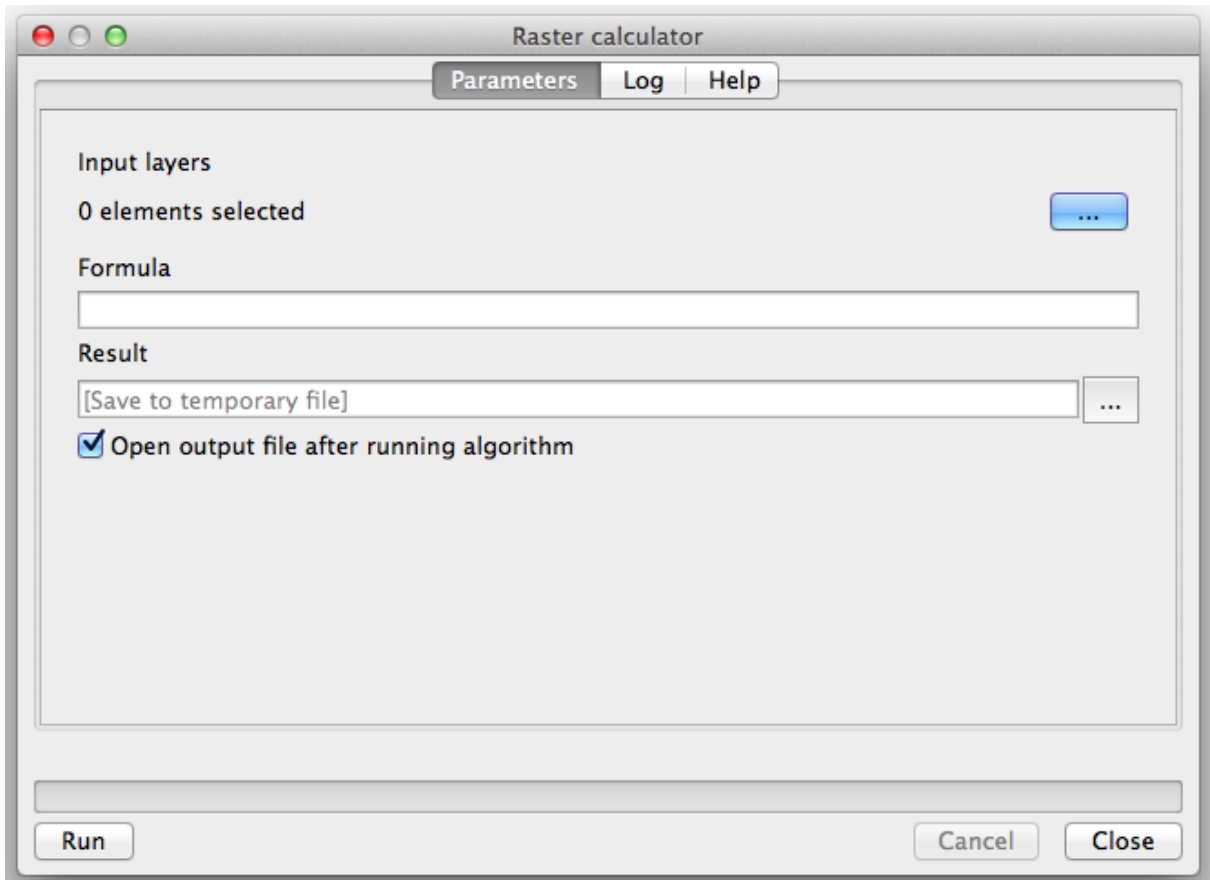
source_id:

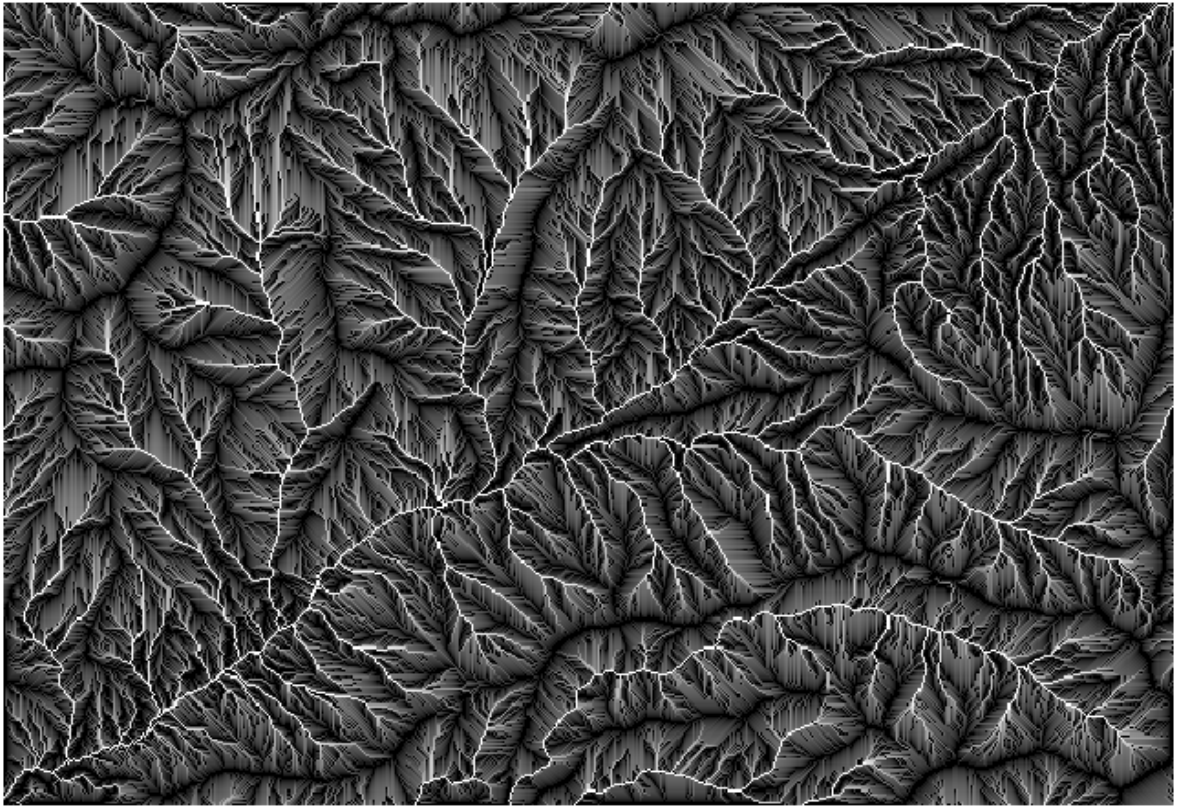
distance:

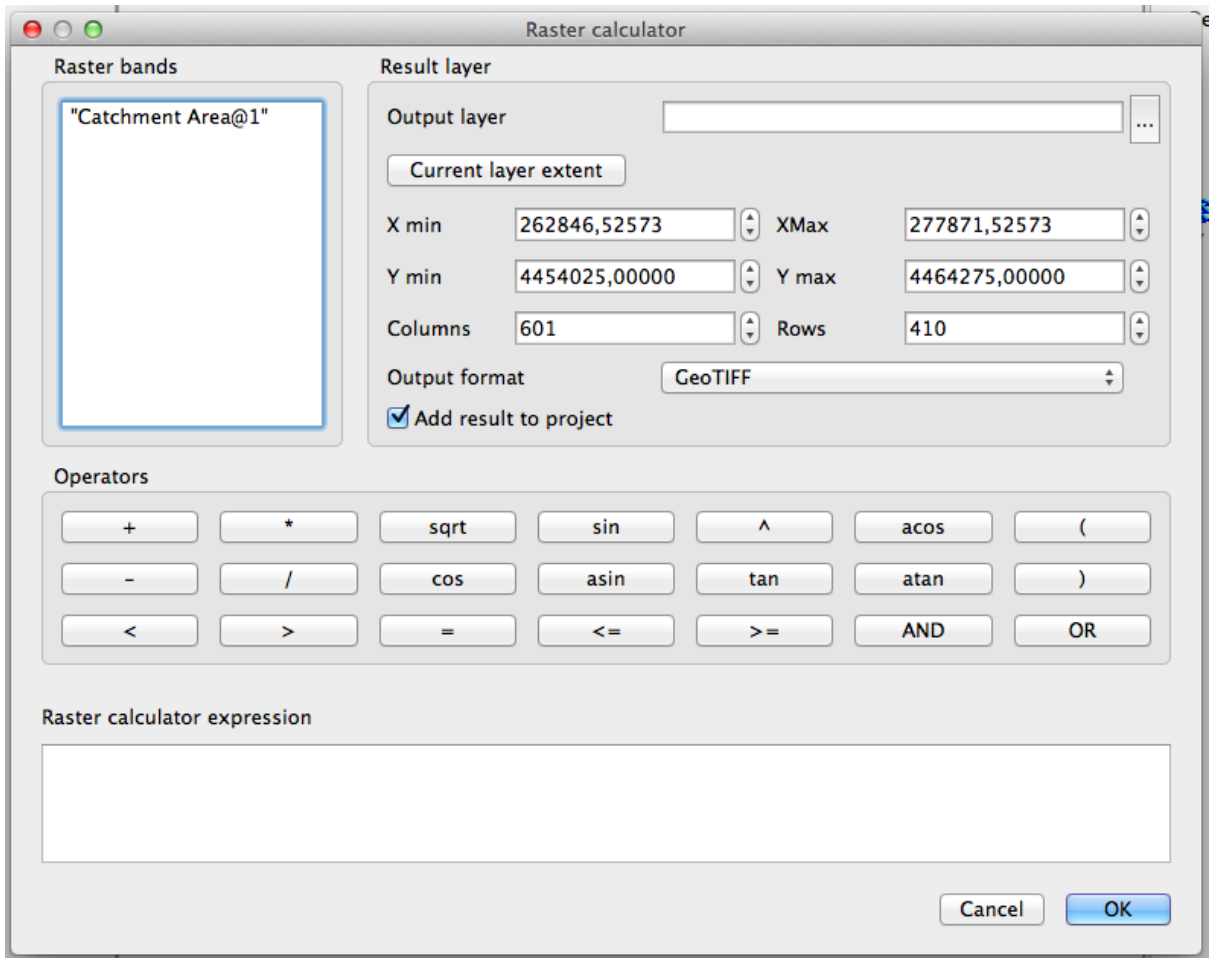
directed has_reverse_cost

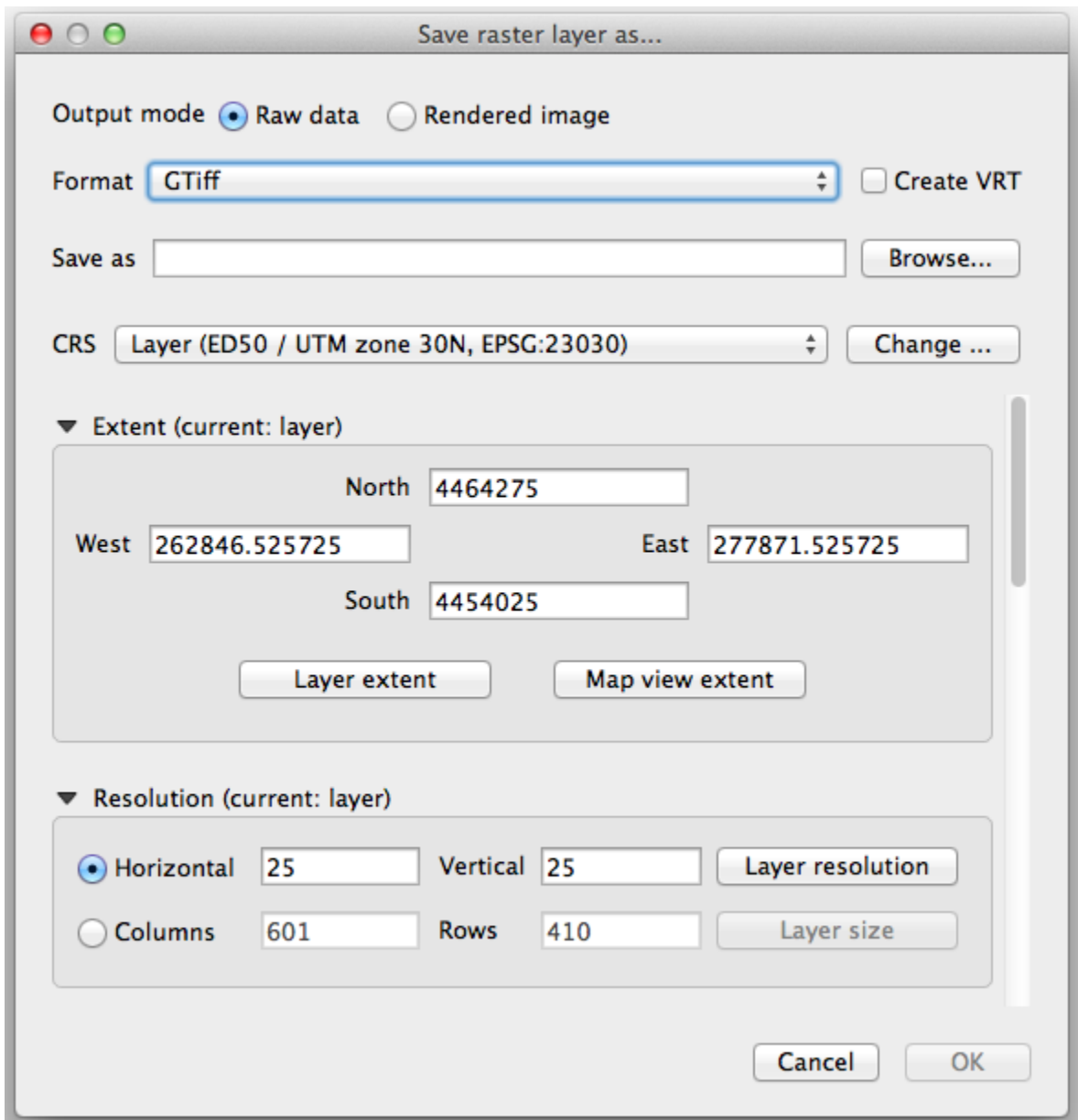
Chapter 7: Raster Analysis

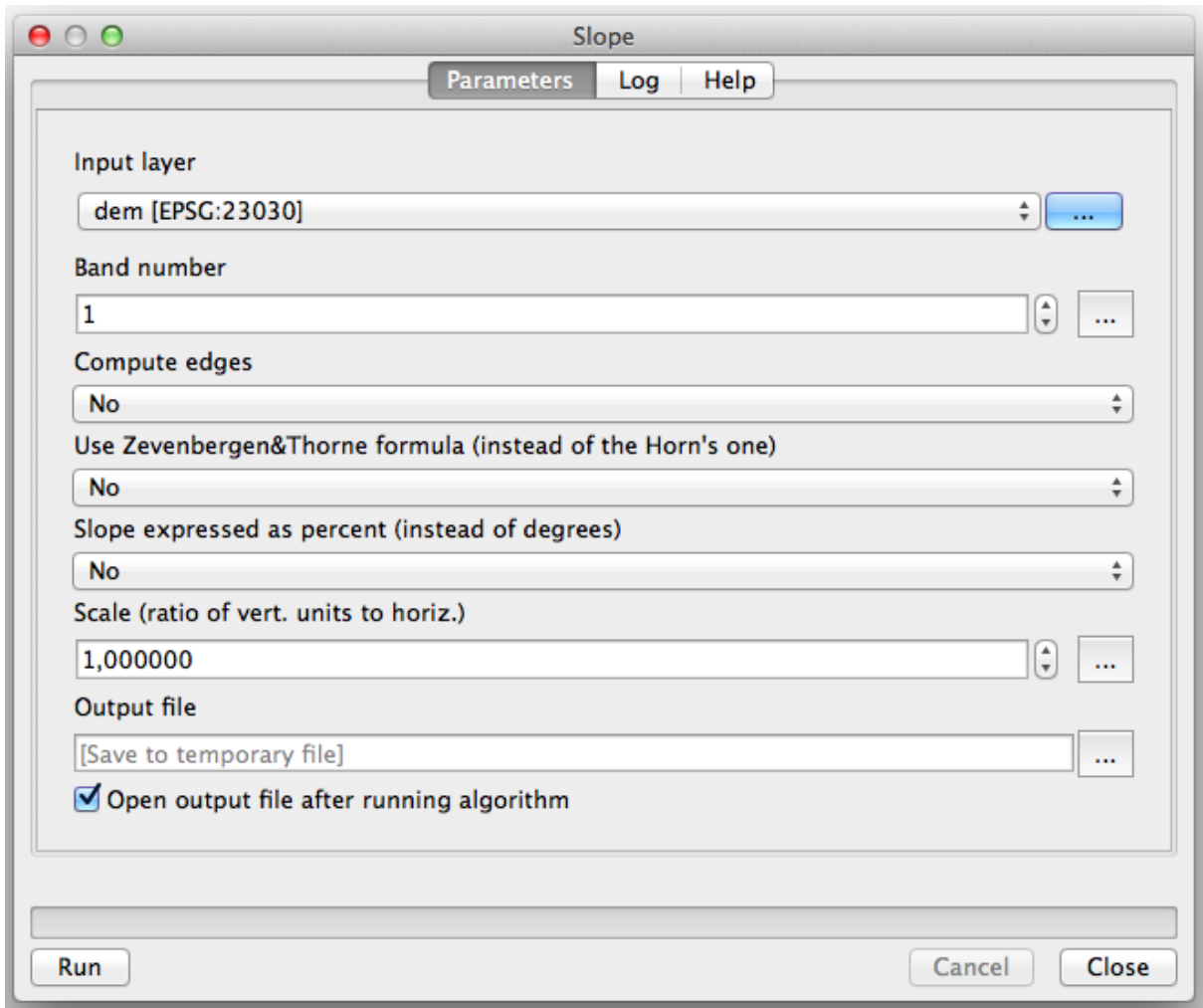


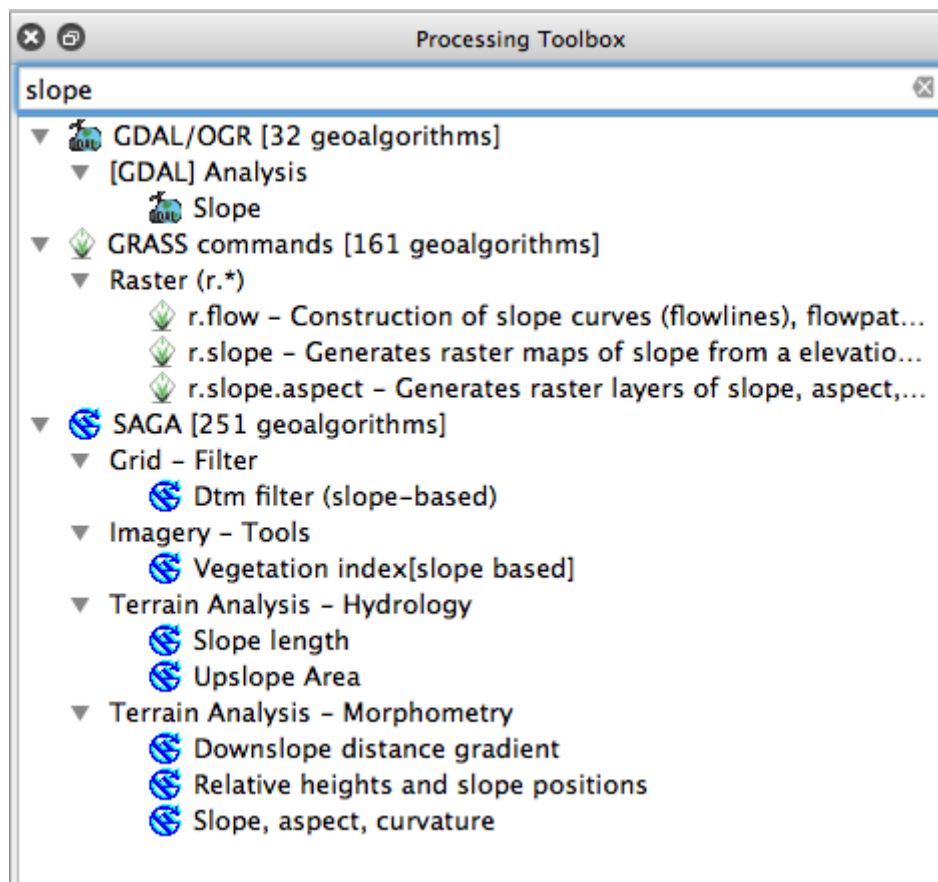


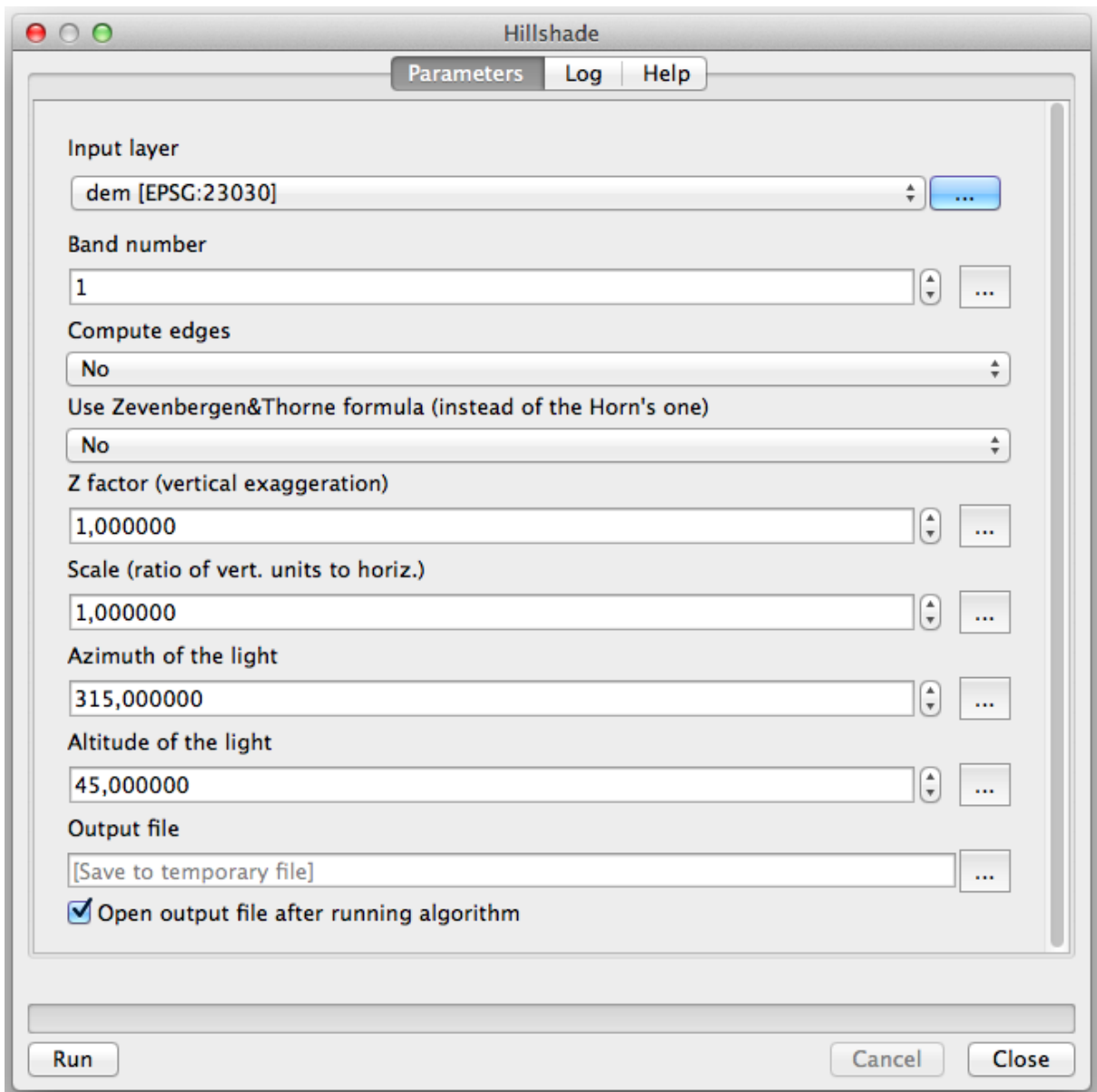


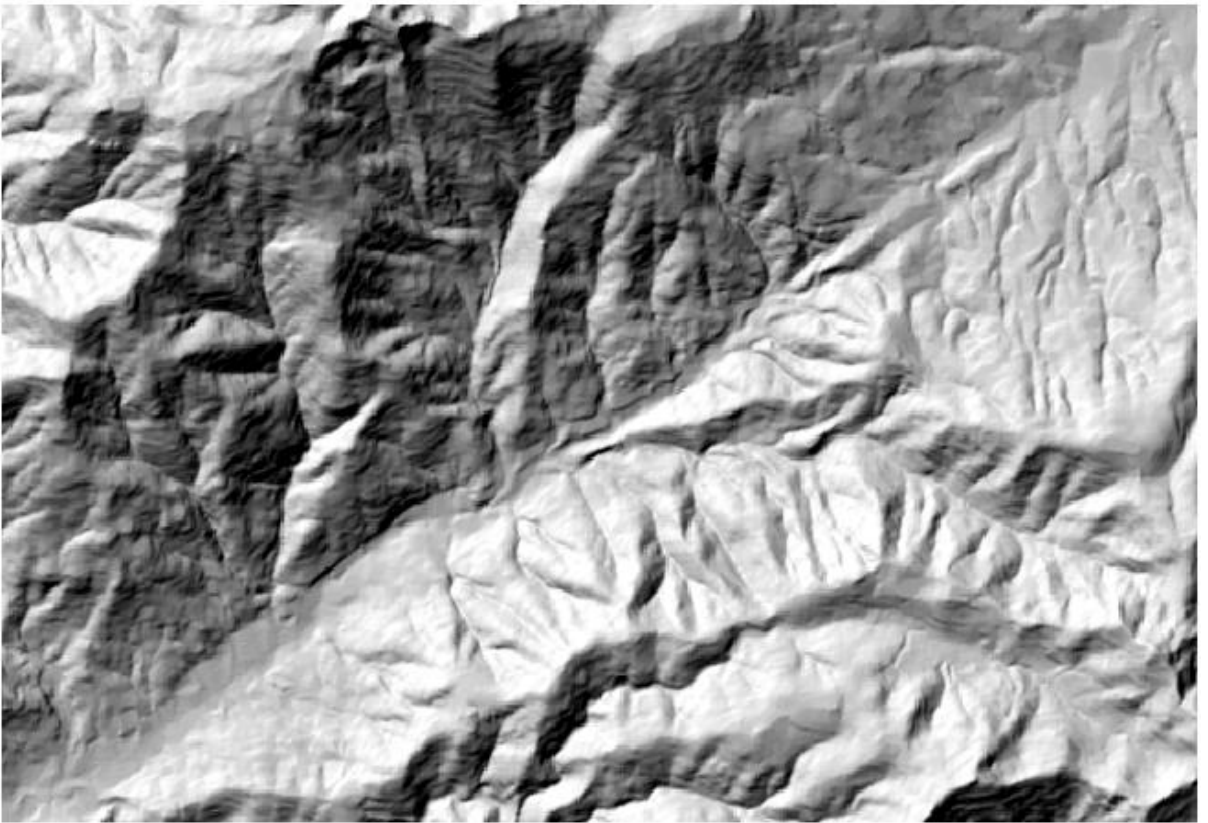


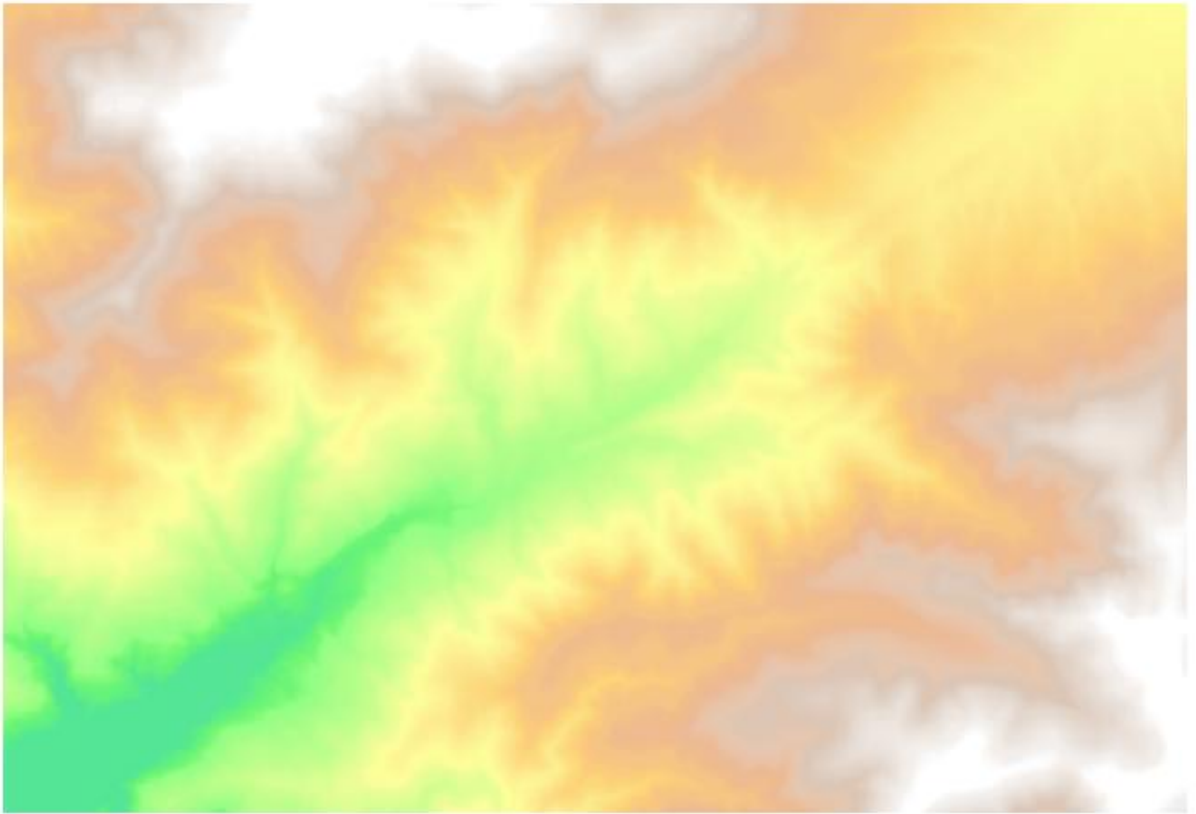


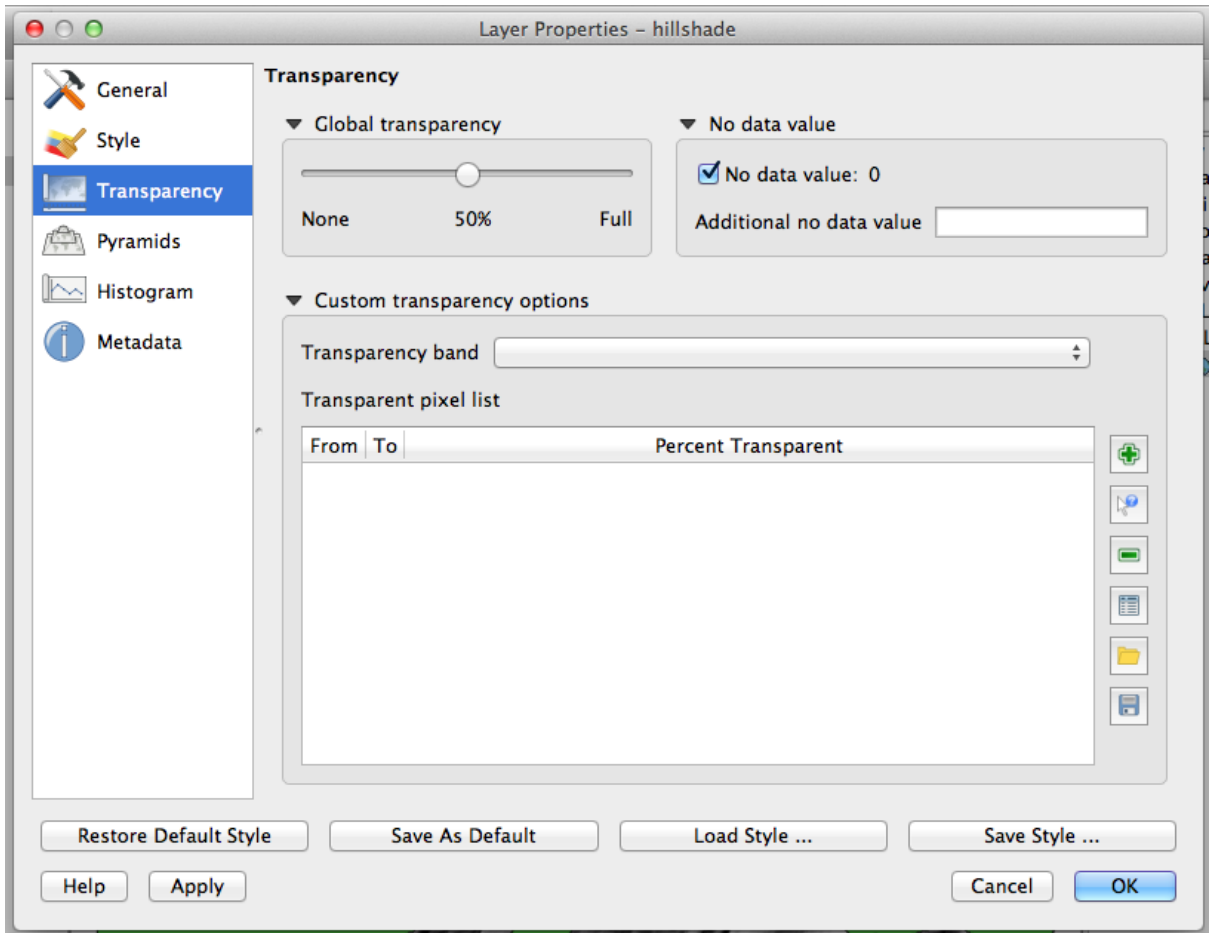


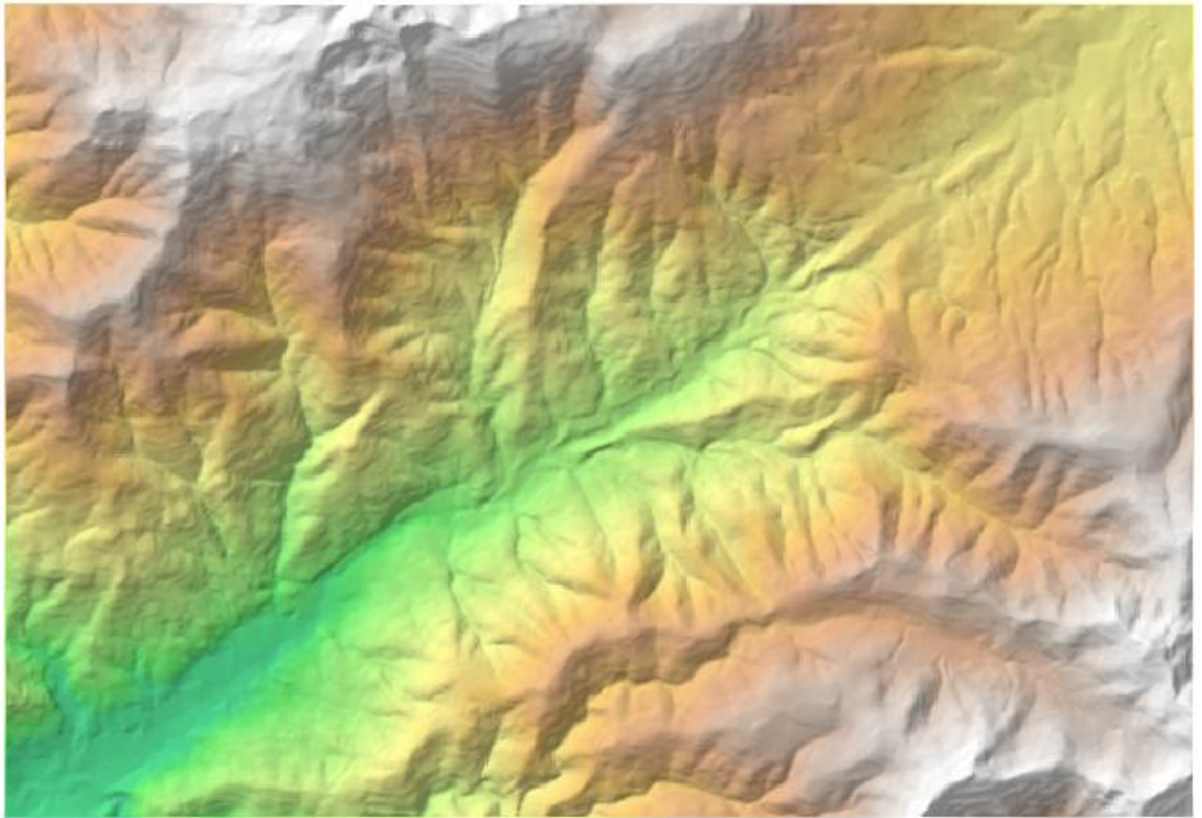


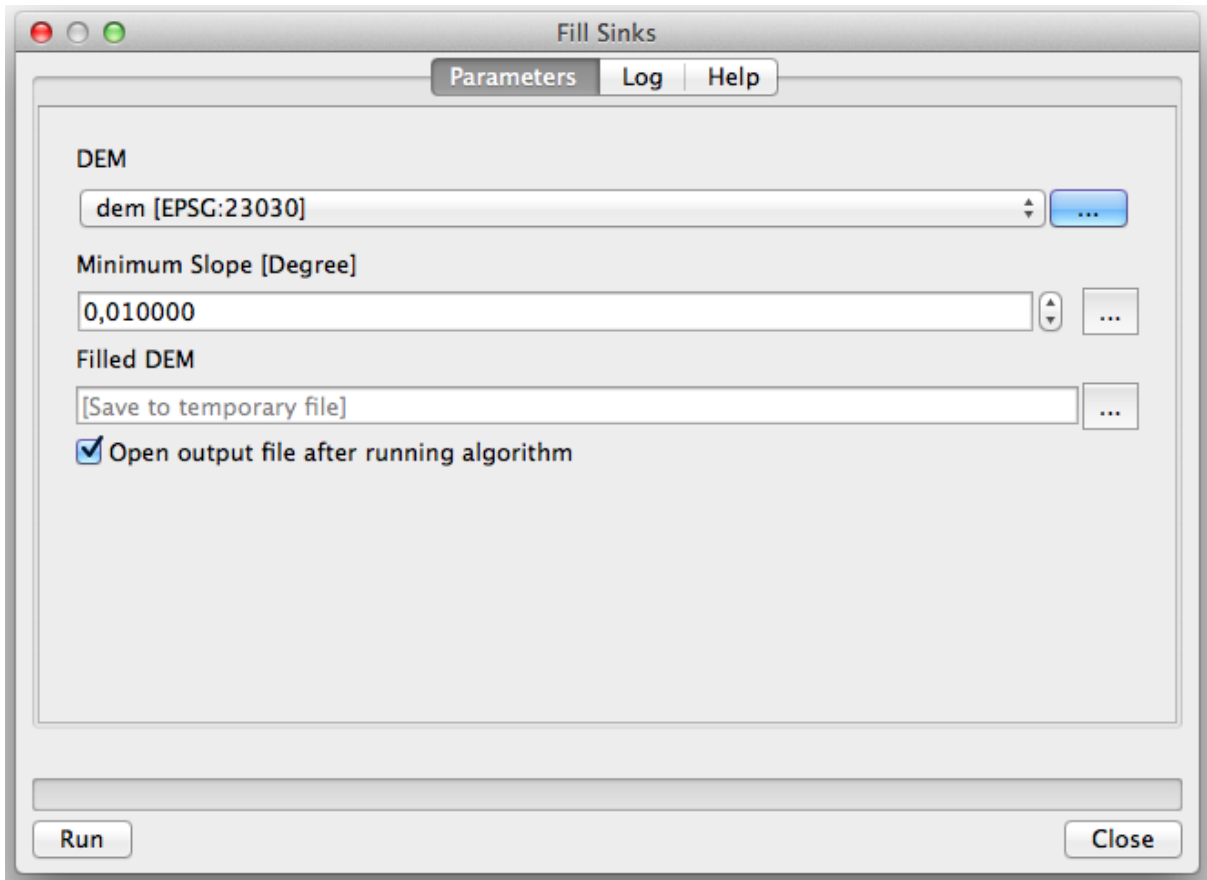


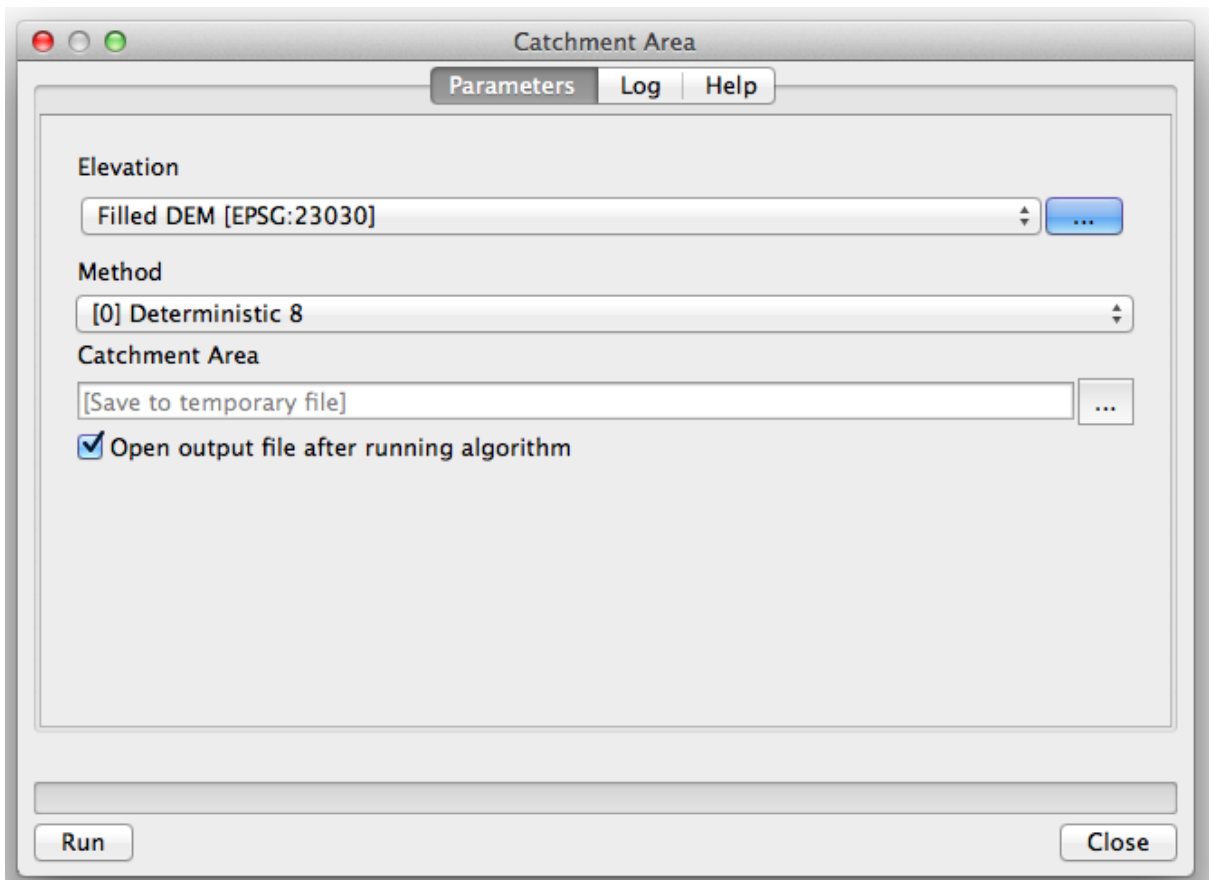


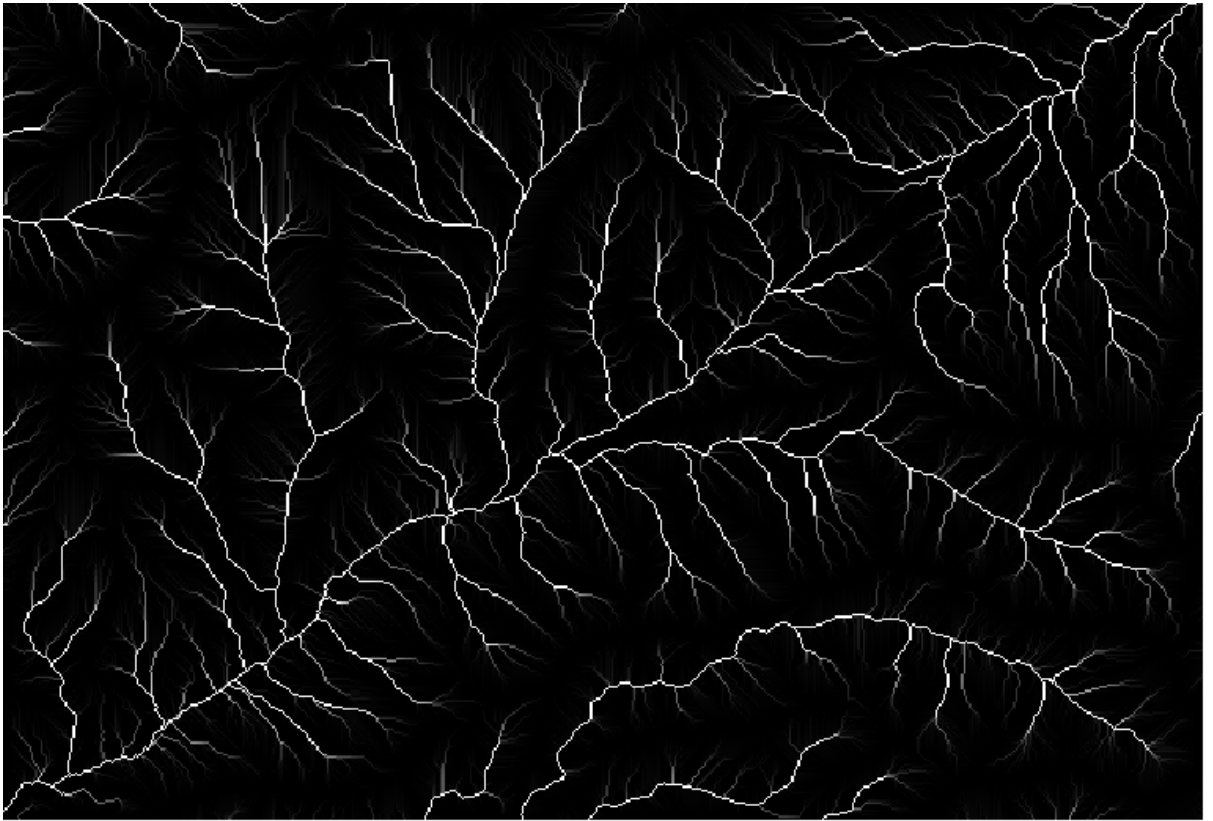












Channel network

Parameters Log Help

Elevation
Filled DEM [EPSG:23030] ...

Flow Direction
[Not selected] ...

Initiation Grid
Catchment Area [EPSG:23030] ...

Initiation Type
[2] Greater than

Initiation Threshold
10000000 ...

Divergence
[Not selected] ...

Tracing: Max. Divergence
10 ...

Tracing: Weight
[Not selected] ...

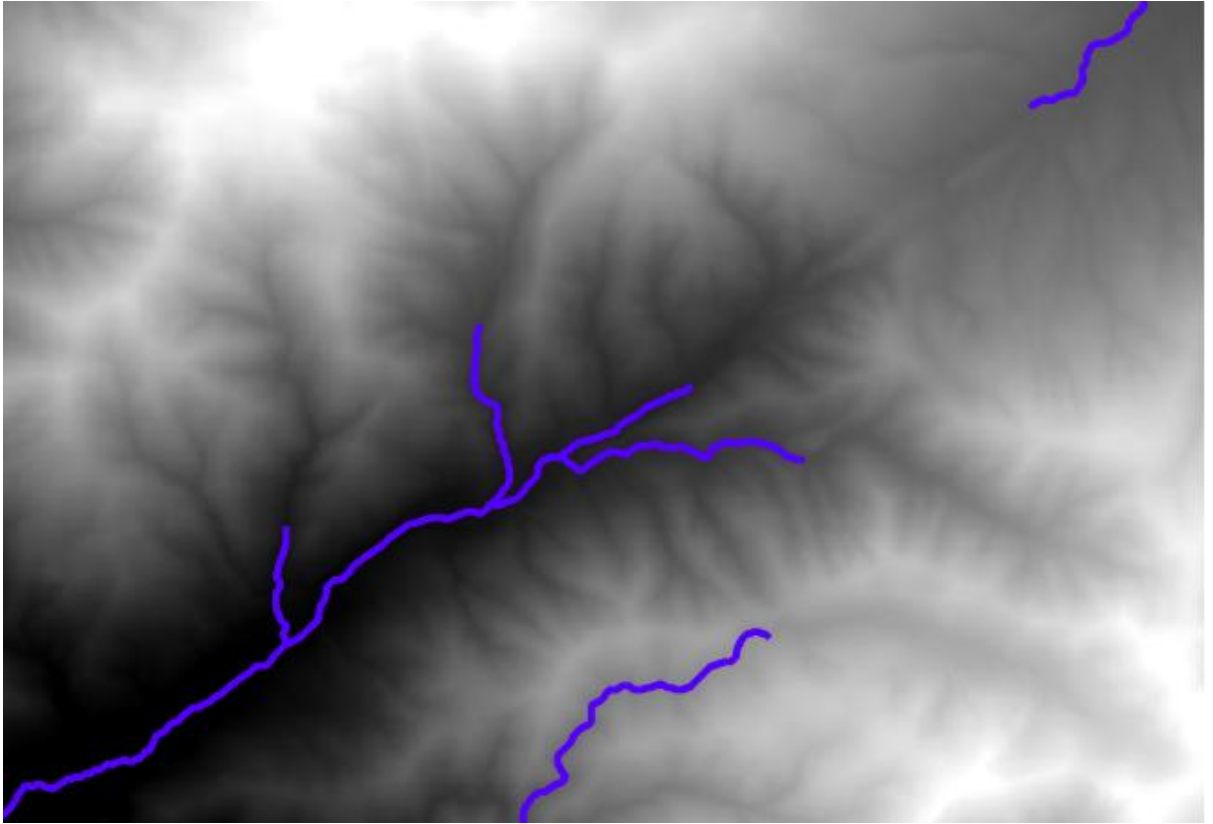
Min. Segment Length
10 ...

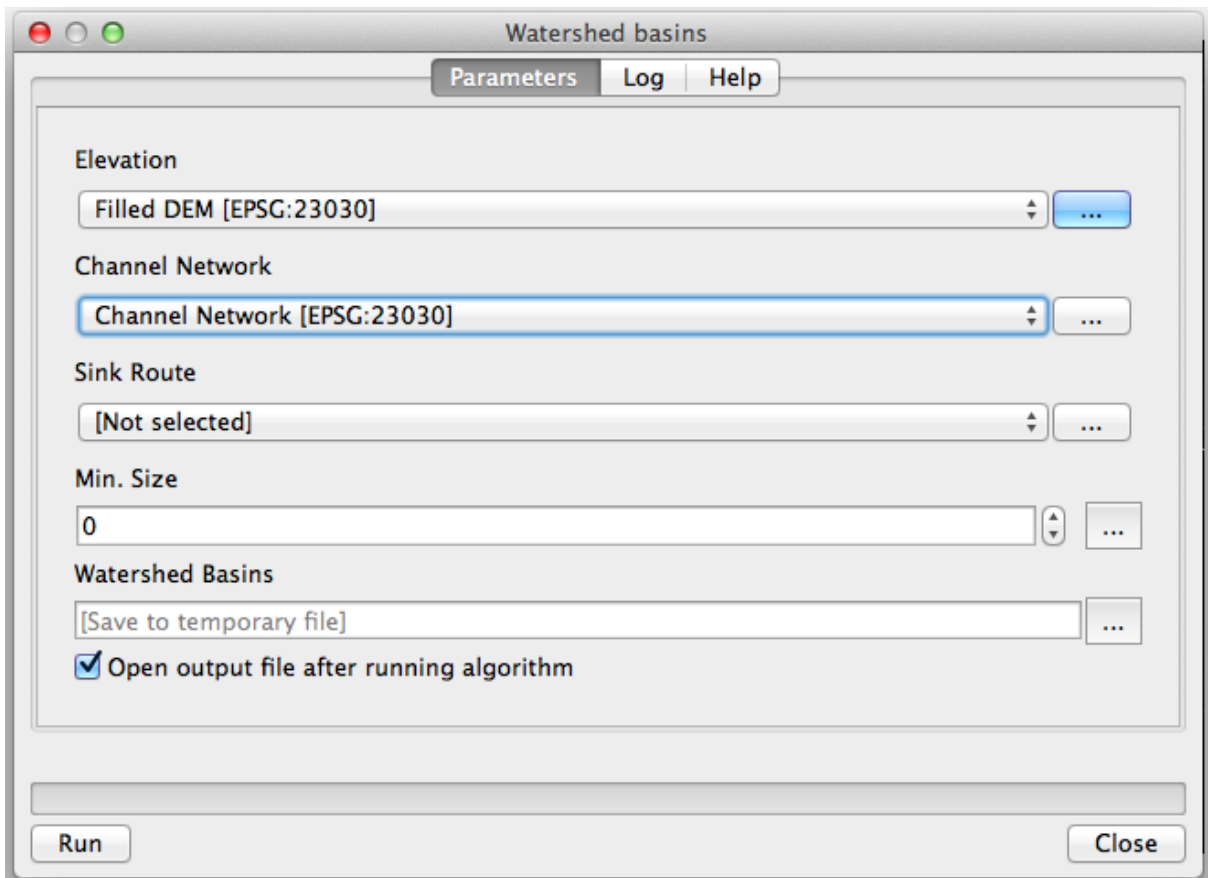
Channel Network
[Save to temporary file] ...
 Open output file after running algorithm

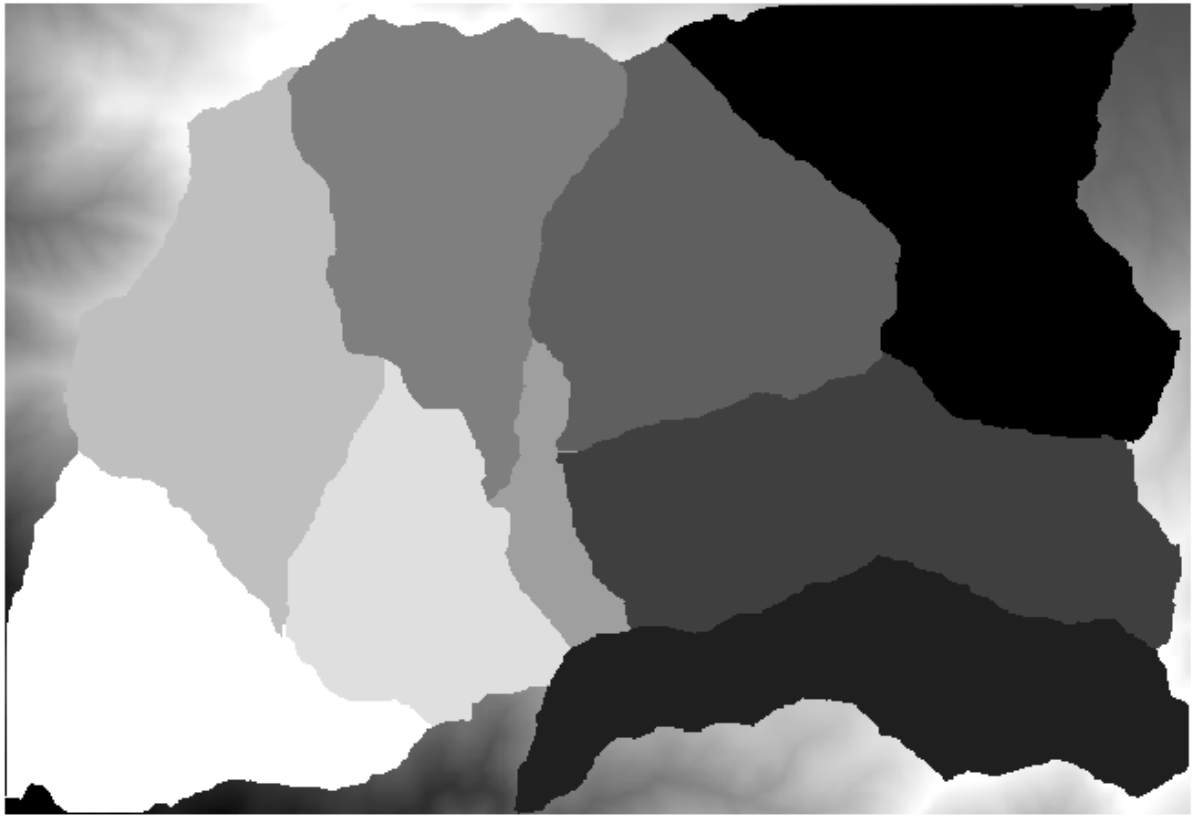
Channel Direction
[Save to temporary file] ...
 Open output file after running algorithm

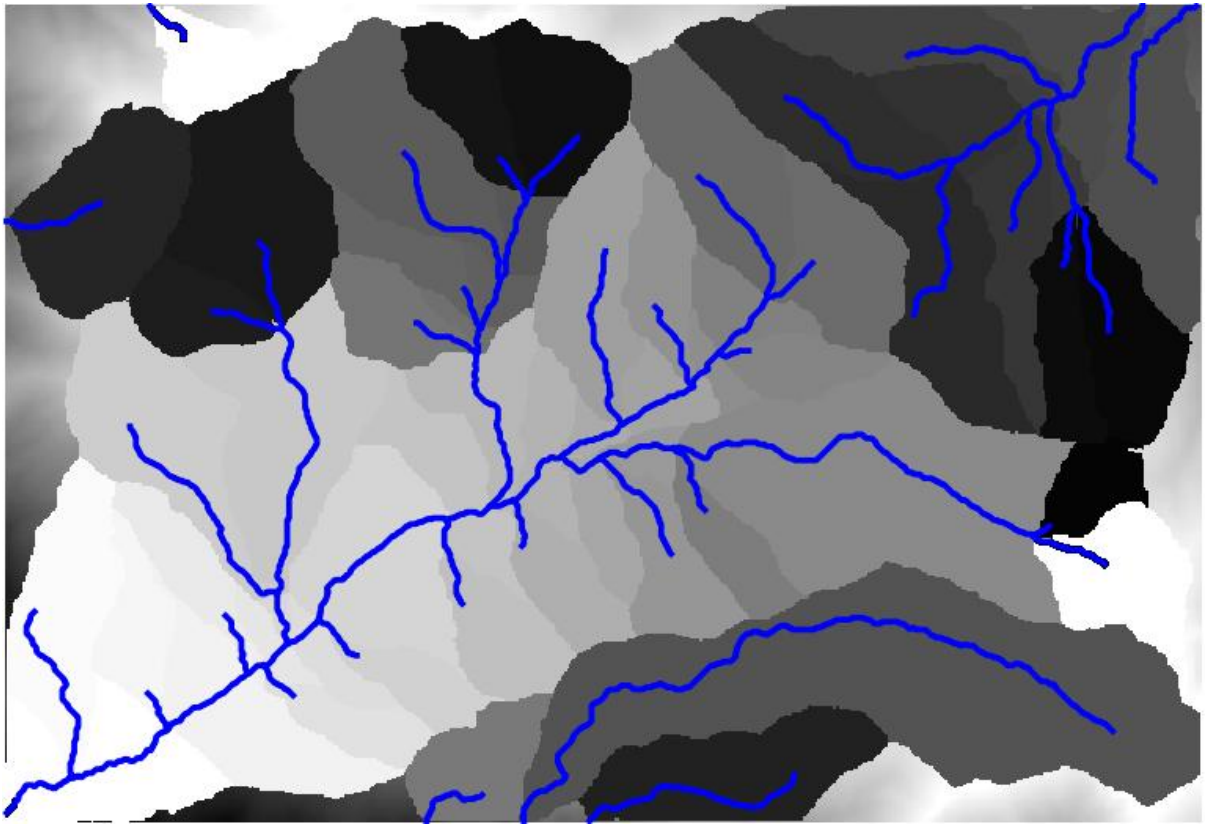
Channel Network
[Save to temporary file] ...
 Open output file after running algorithm

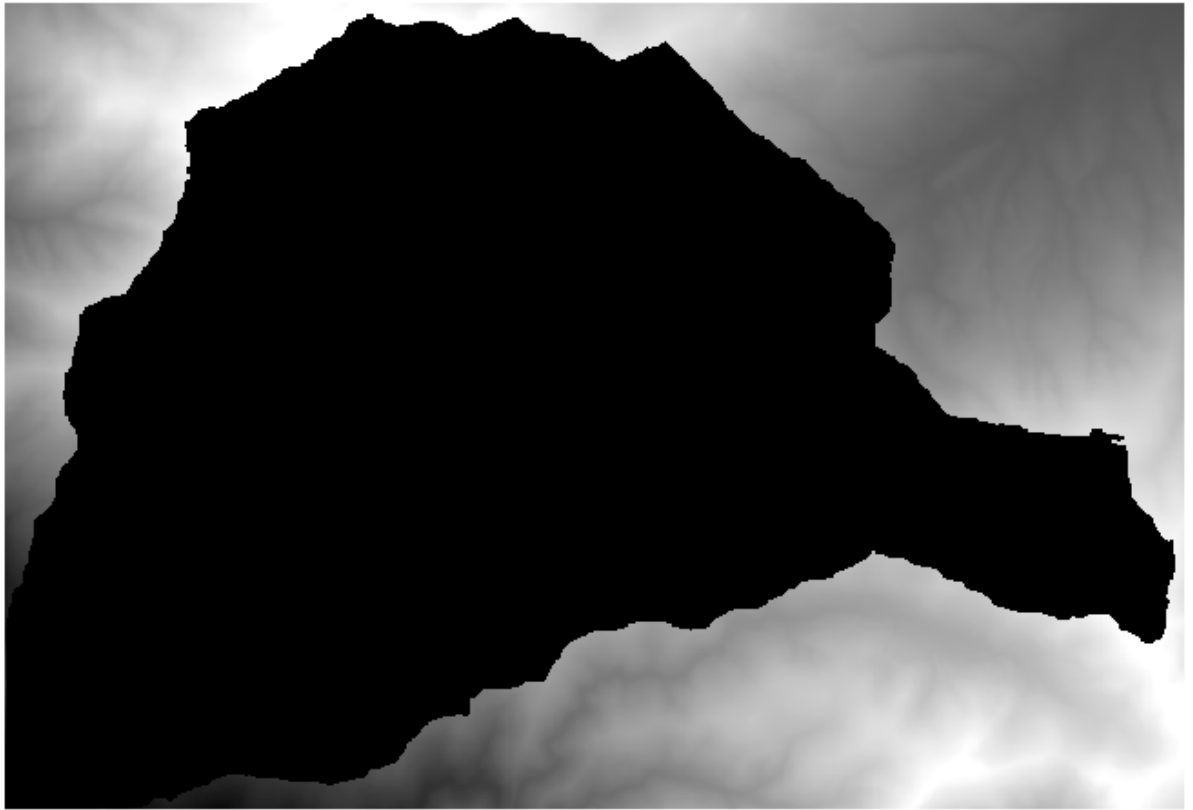
Run Close

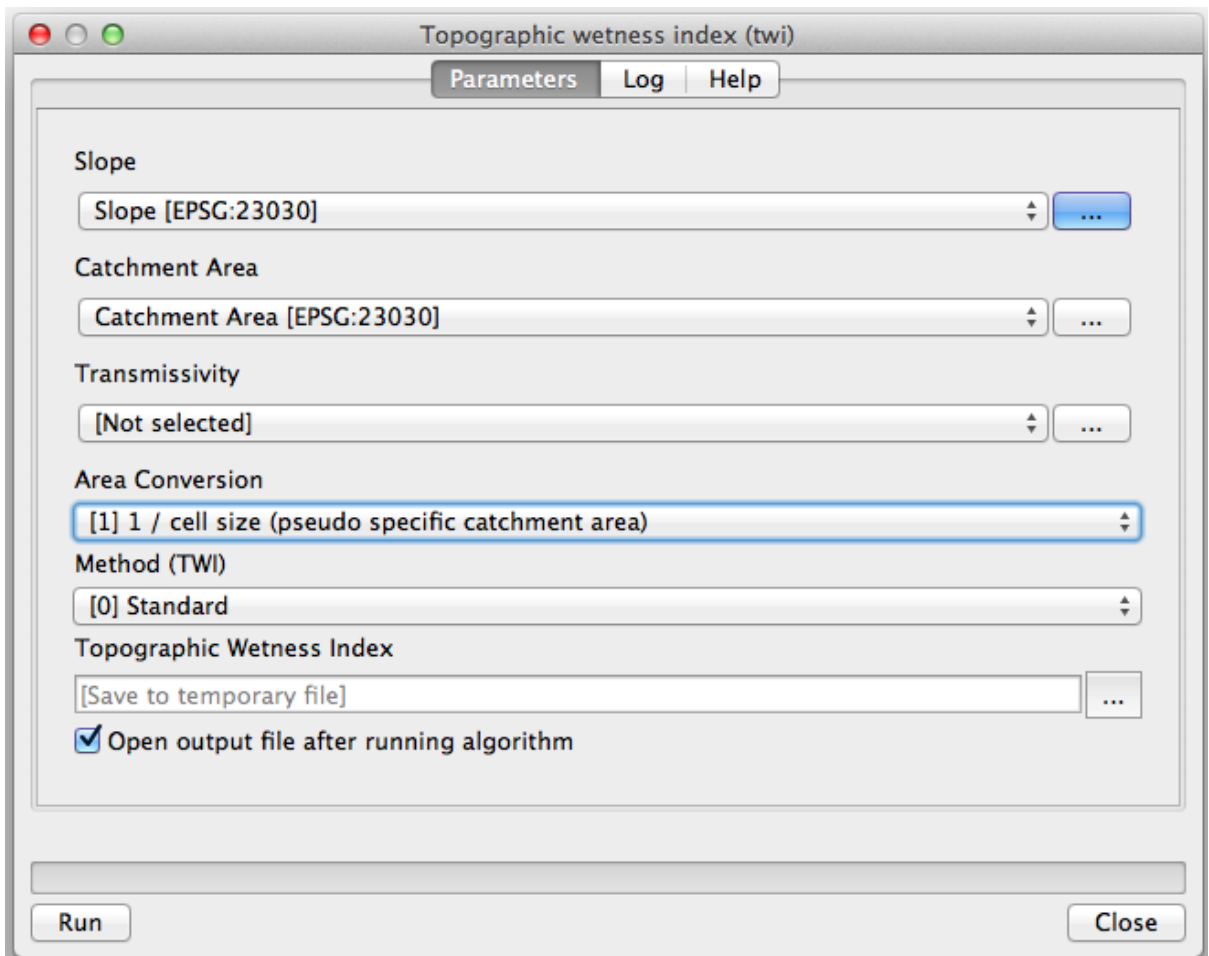


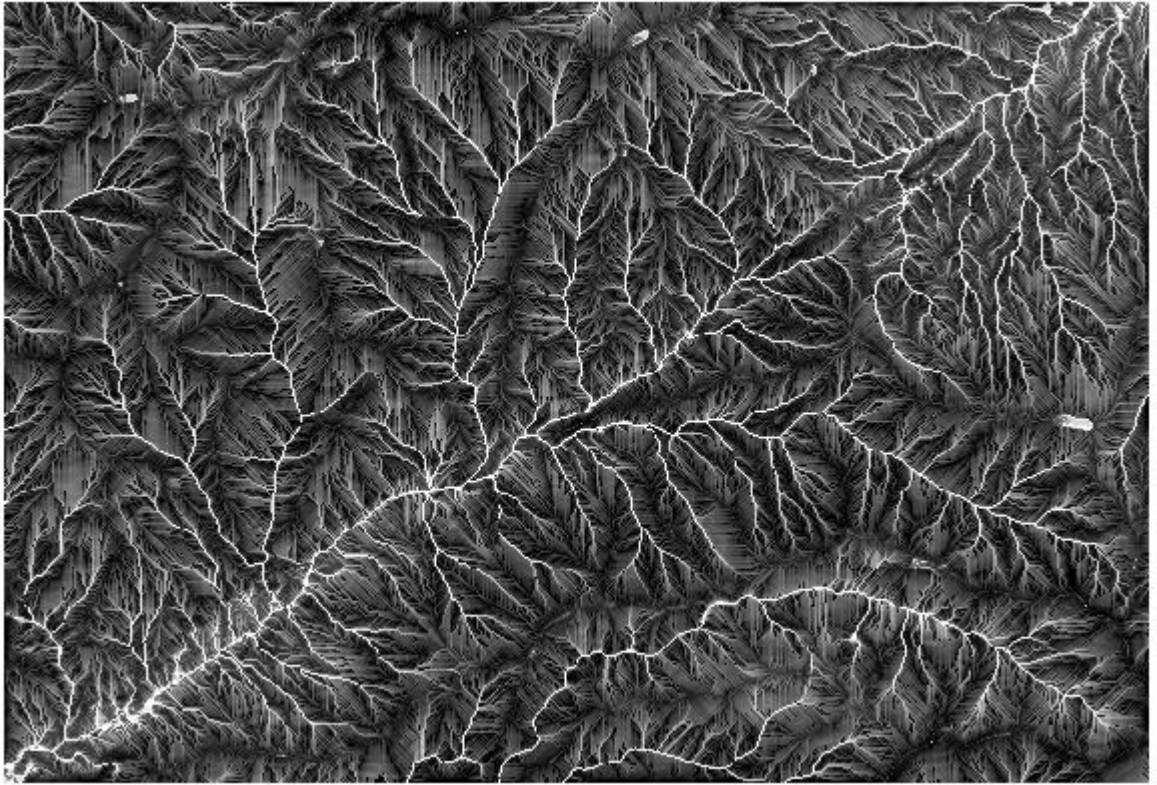


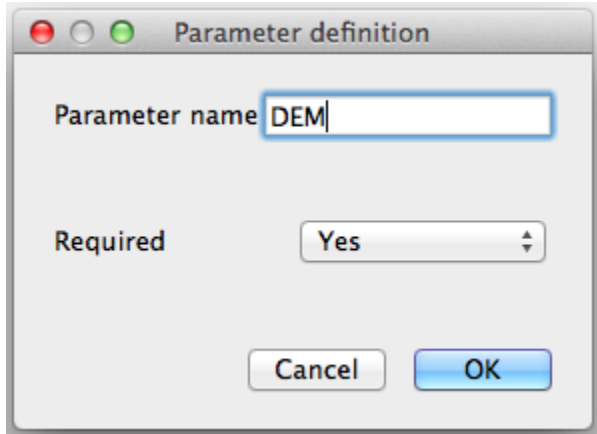
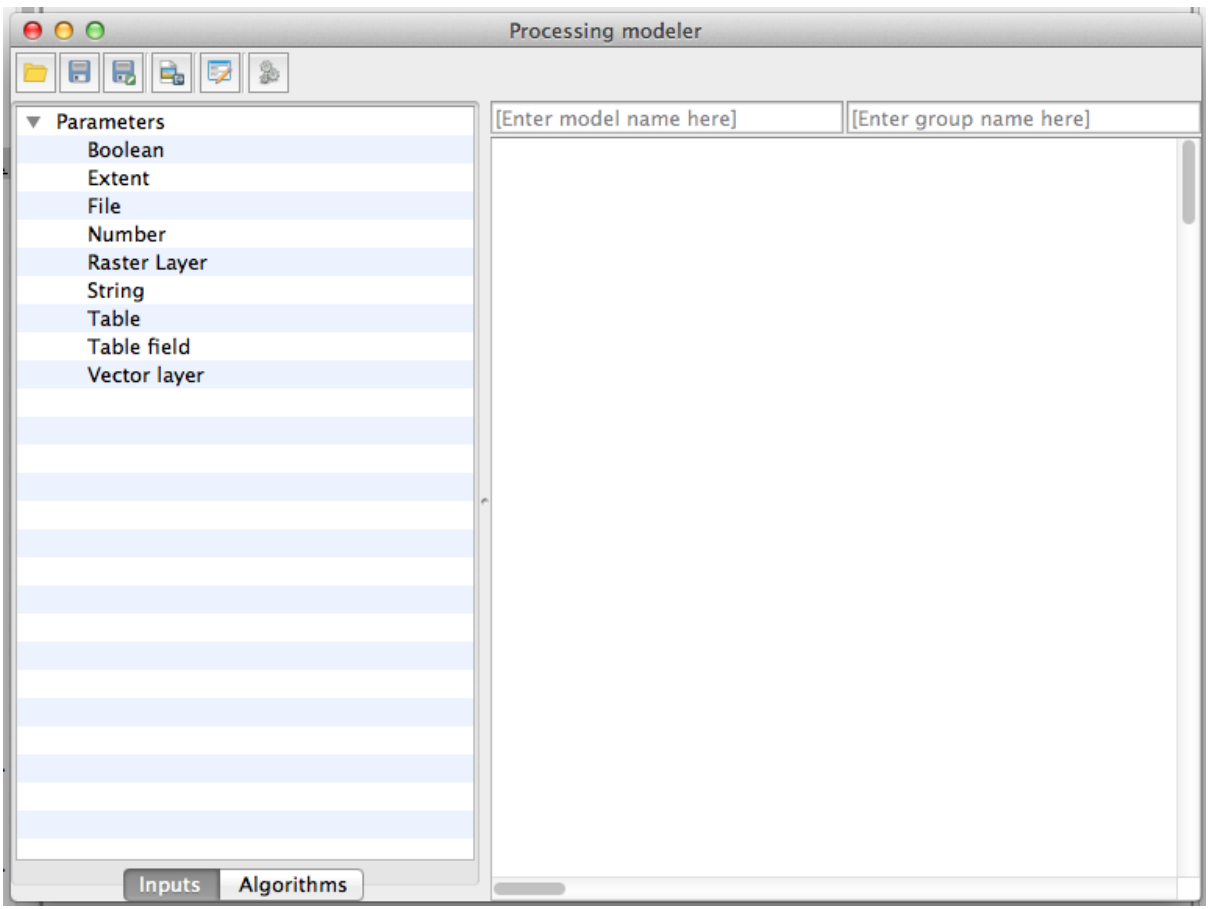


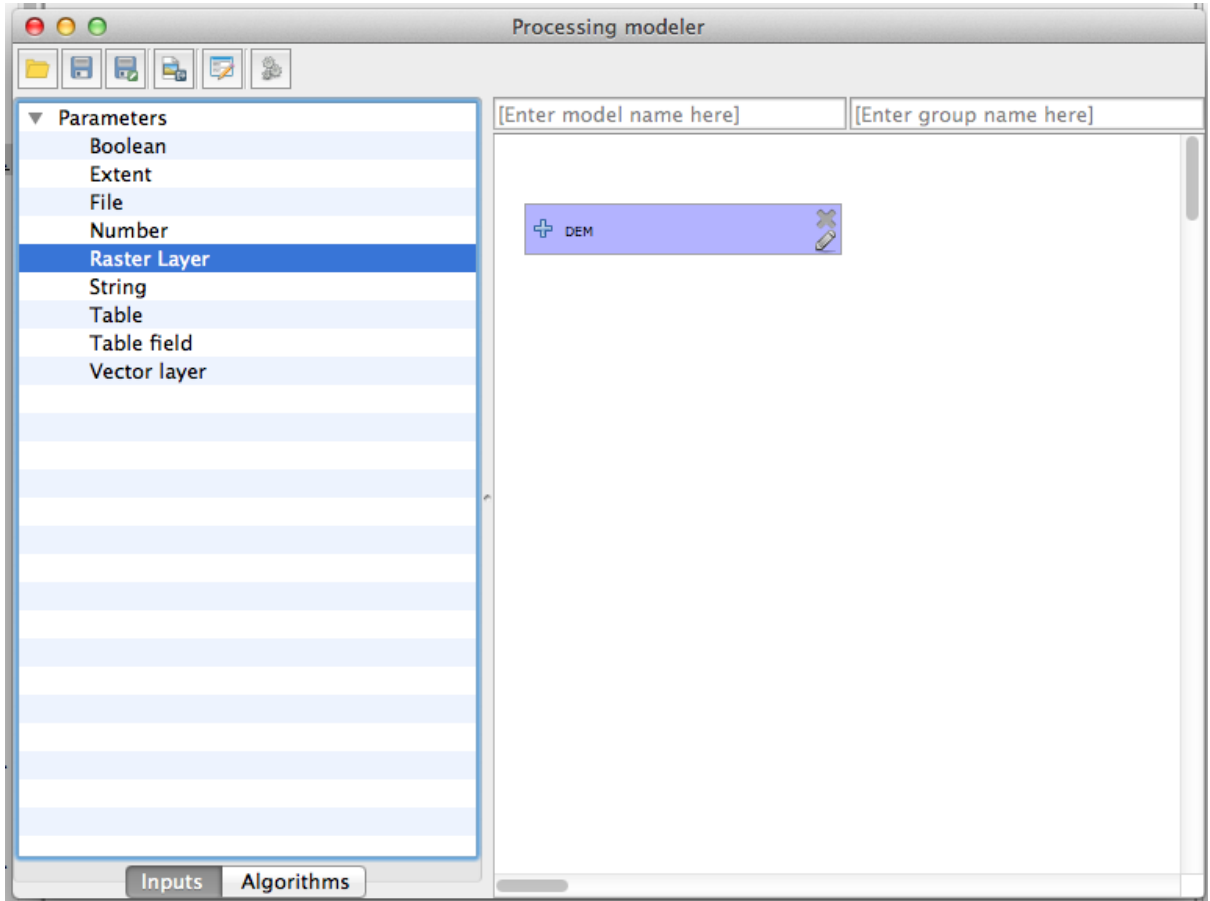


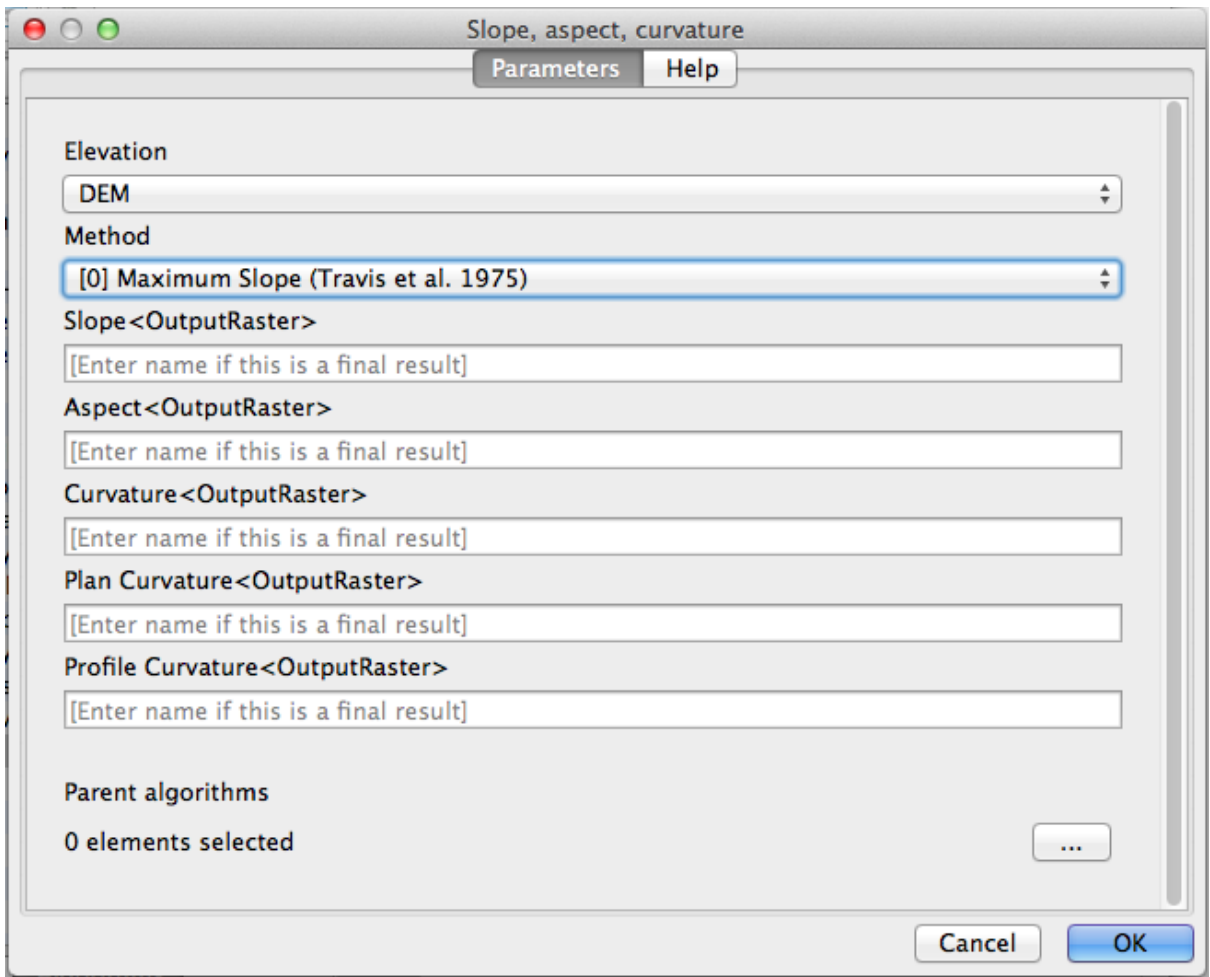


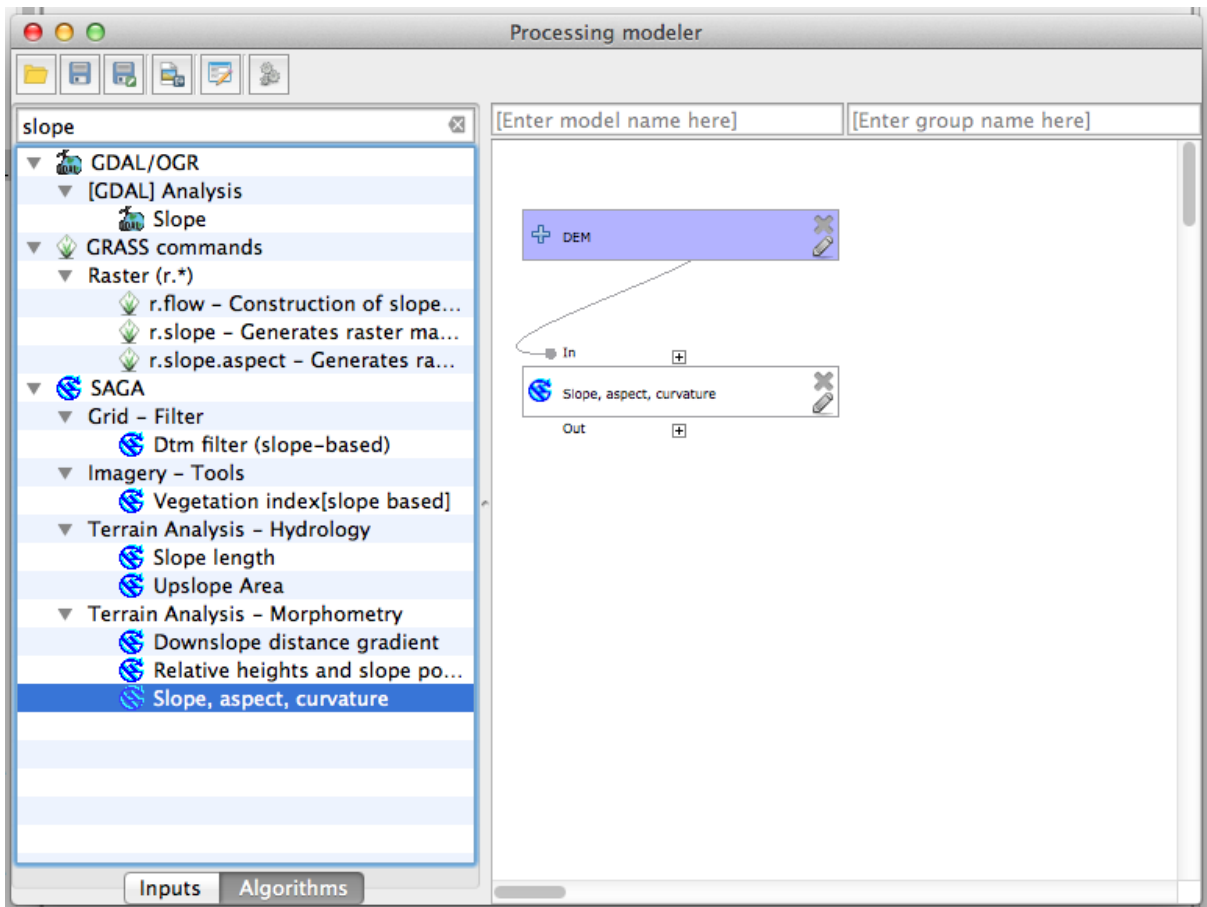


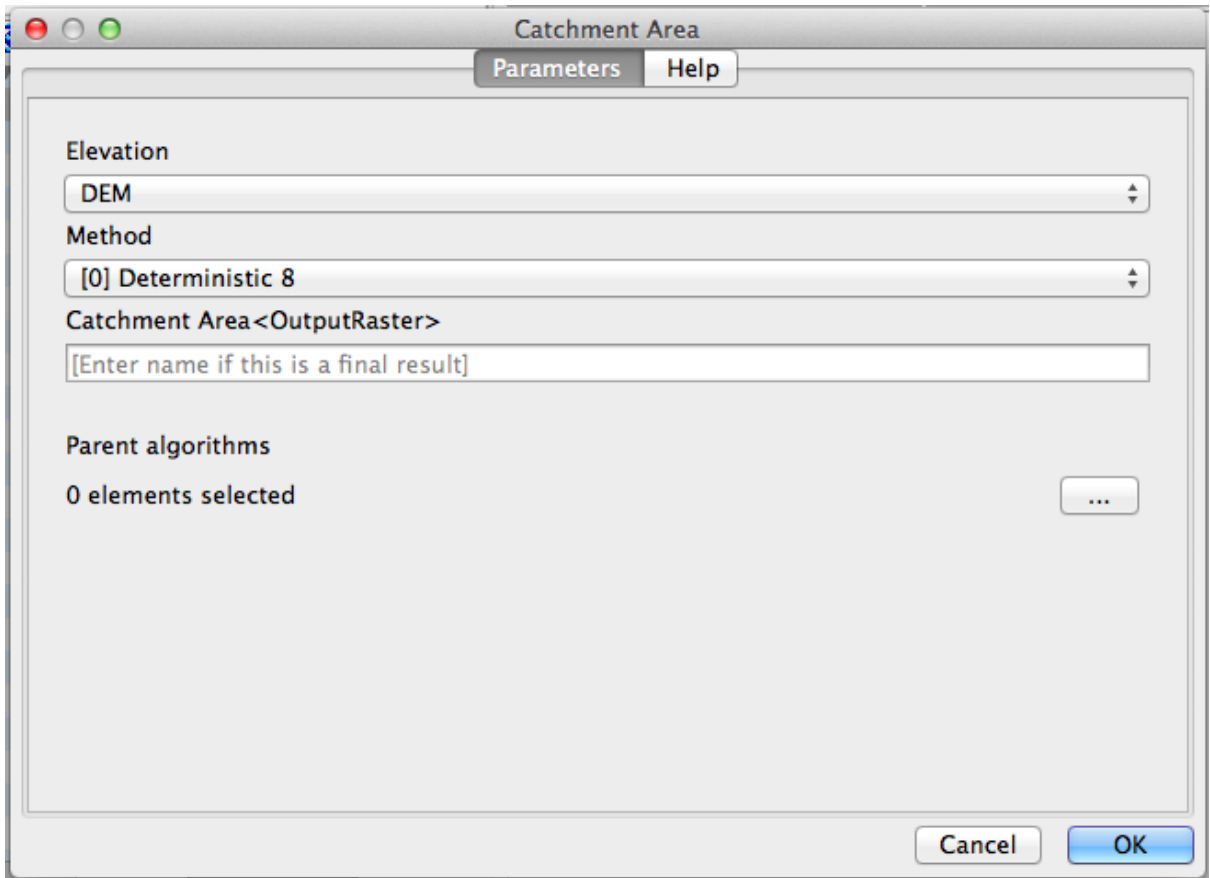


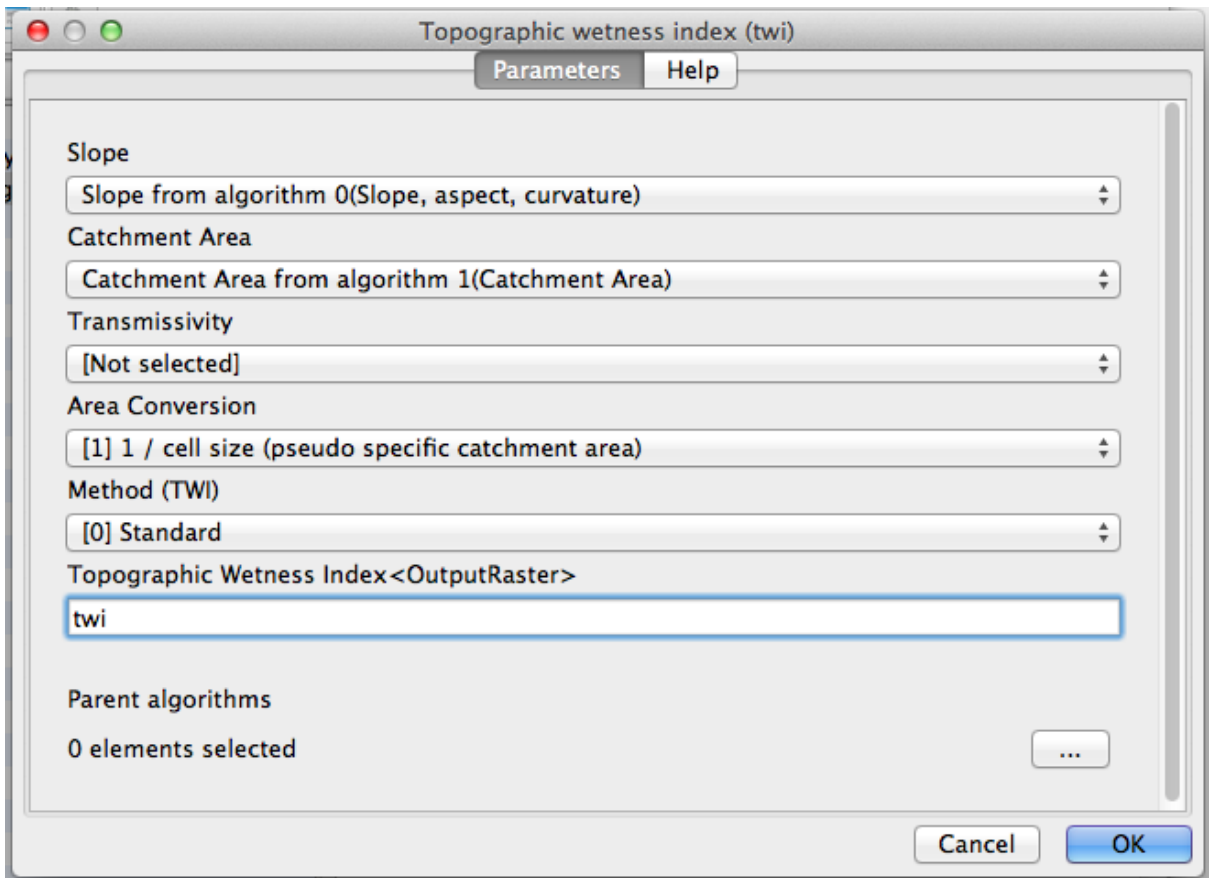


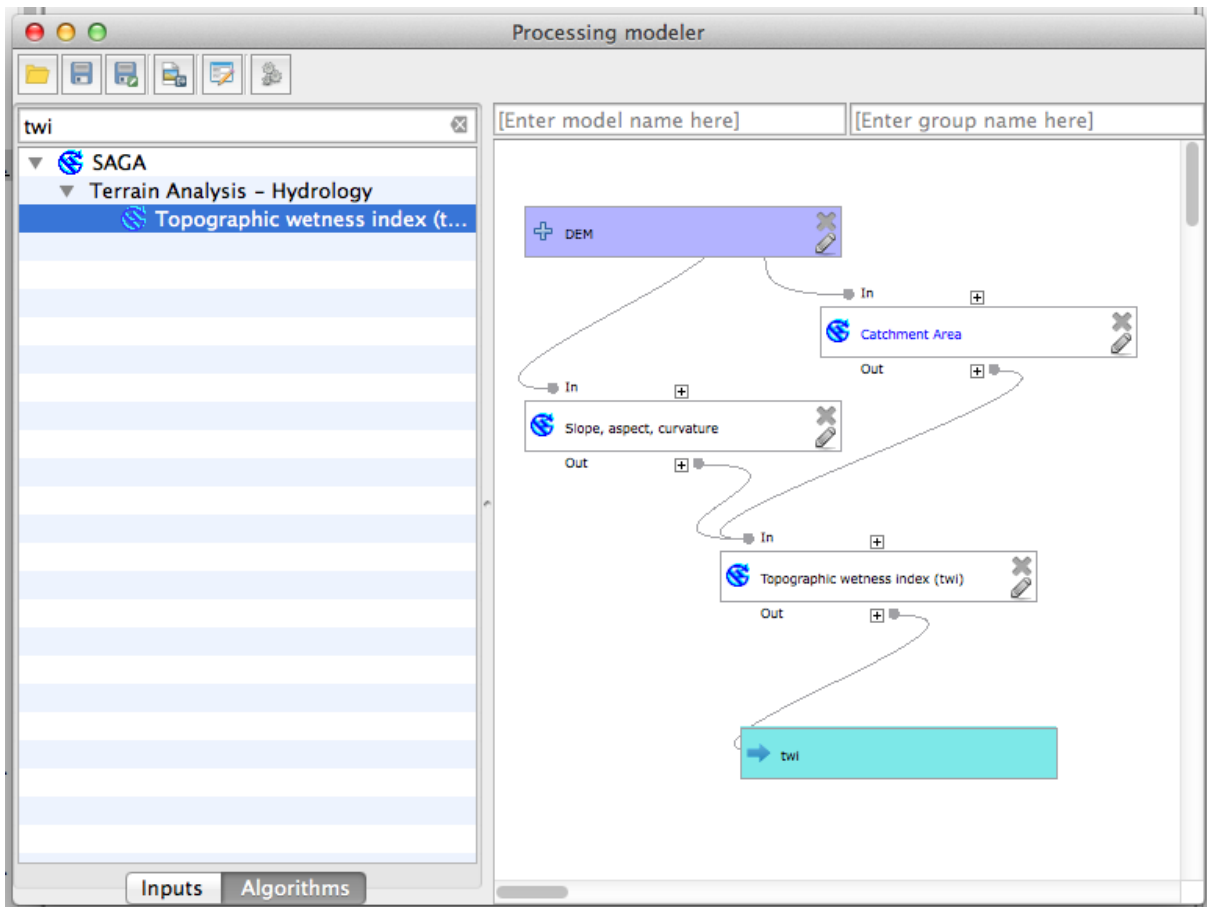






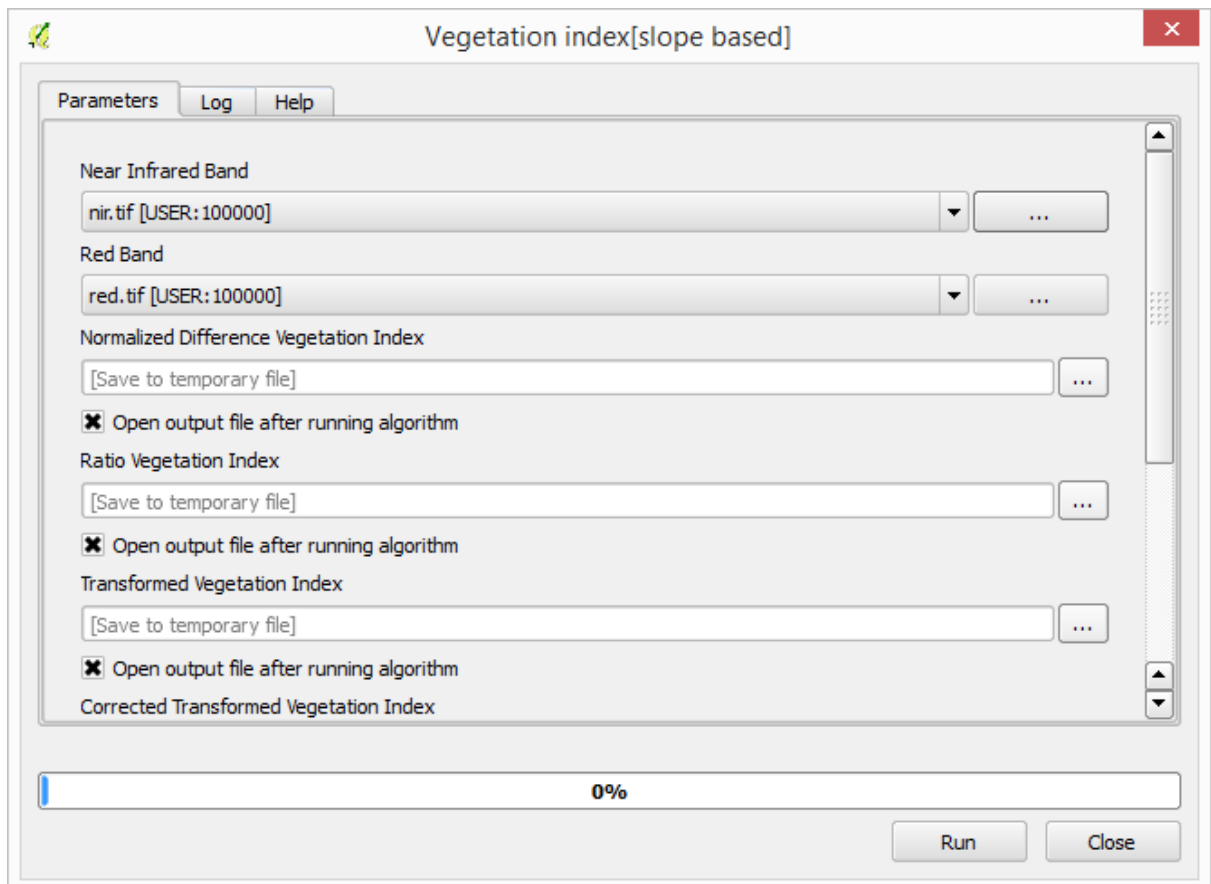






- ▼ Models [4 ge algorithms]
 - ▶ [Example models]
 - ▼ QGIS Cookbook
 - TWI from DEM
 - ▼ Tools
 - Create new model
 - Add model from file

Chapter 8: Raster Analysis





▼ Operators

+	*	sqrt	sin	^	acos	(
-	/	cos	asin	tan	atan)
<	>	=	<=	>=	AND	OR

Raster calculator expression

```
("nir.tif@1" - "red.tif@1") / ("nir.tif@1" + "red.tif@1")
```

Expression valid

Translate (convert format)

Parameters Log Help

Input layer
landsat [USER: 100000] ...

Set the size of the output file (In pixels or %)
100 ...

Output size is a percentage of input size
Yes

Nodata value, leave as none to take the nodata value from input
none

Expand
none

Output projection for output file [leave blank to use input projection]
...

Subset based on georeferenced coordinates (xmin, xmax, ymin, ymax)
[Leave blank to use min covering extent] ...

Copy all subdatasets of this file to individual output files
No

Additional creation parameters [optional]
-b 4

Output layer
[Save to temporary file] ...

Open output file after running algorithm

0%

Run Close

Translate (convert format)

Parameters Log Help

Input layer
landsat [USER: 100000] ...

Set the size of the output file (In pixels or %)
100 ...

Output size is a percentage of input size
Yes

Nodata value, leave as none to take the nodata value from input
none

Expand
none

Output projection for output file [leave blank to use input projection]
...

Subset based on georeferenced coordinates (xmin, xmax, ymin, ymax)
[Leave blank to use min covering extent] ...

Copy all subdatasets of this file to individual output files
No

Additional creation parameters [optional]
-b 3

Output layer
[Save to temporary file] ...

Open output file after running algorithm








0%

Run Close

Identify Results ✕

View Tree ▾

Feature	Value
0	watershed.tif
└─ watershed.tif	
└─ (Derived)	
└─ Band 1	no data

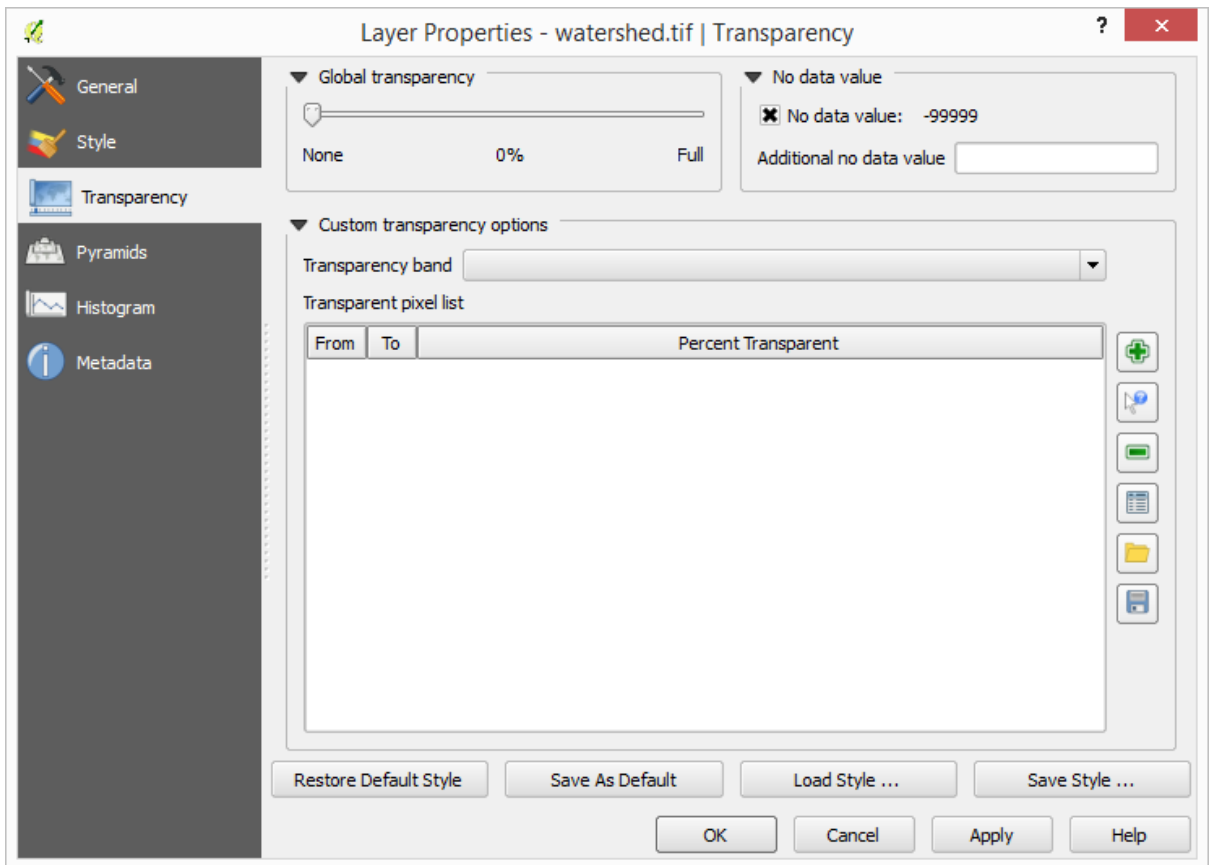
       Help

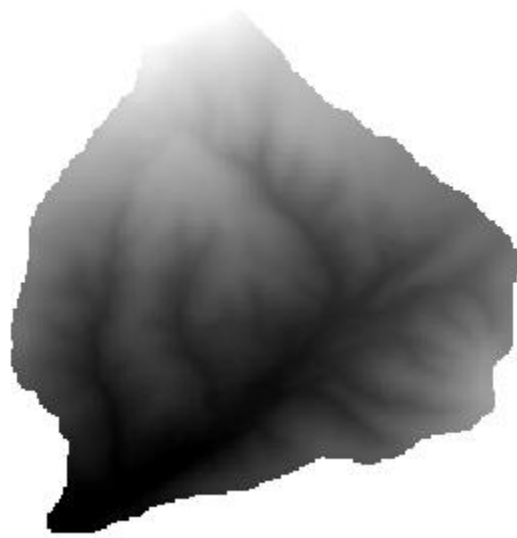
Mode Current layer ▾ Auto open form

The image shows a software window titled "Results" with a standard Windows-style title bar (minimize, maximize, close buttons). The window is divided into two main sections. On the left is a tree view containing two items, both labeled "Statistics". On the right is a text area displaying the following statistical summary:

- Valid cells: 24162
- No-data cells: 222248
- Minimum value: 1.0
- Maximum value: 1.0
- Sum: 24162.0
- Mean value: 1.0
- Standard deviation: 0.0

A "Close" button is located in the bottom right corner of the window.

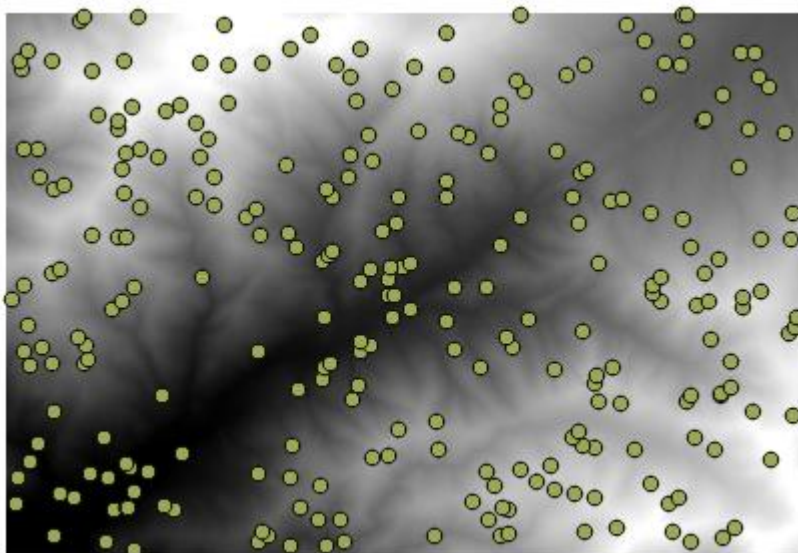
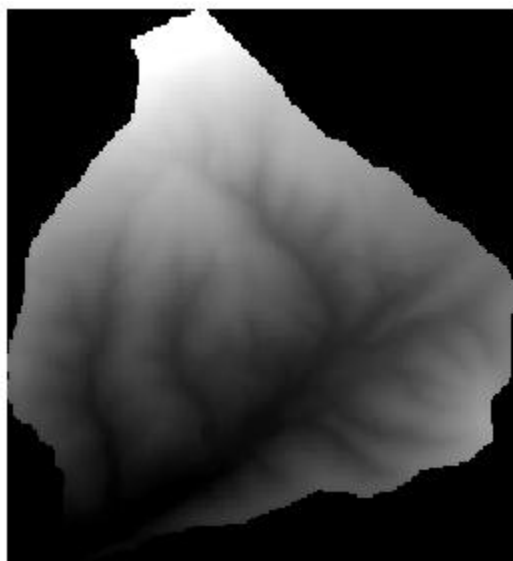


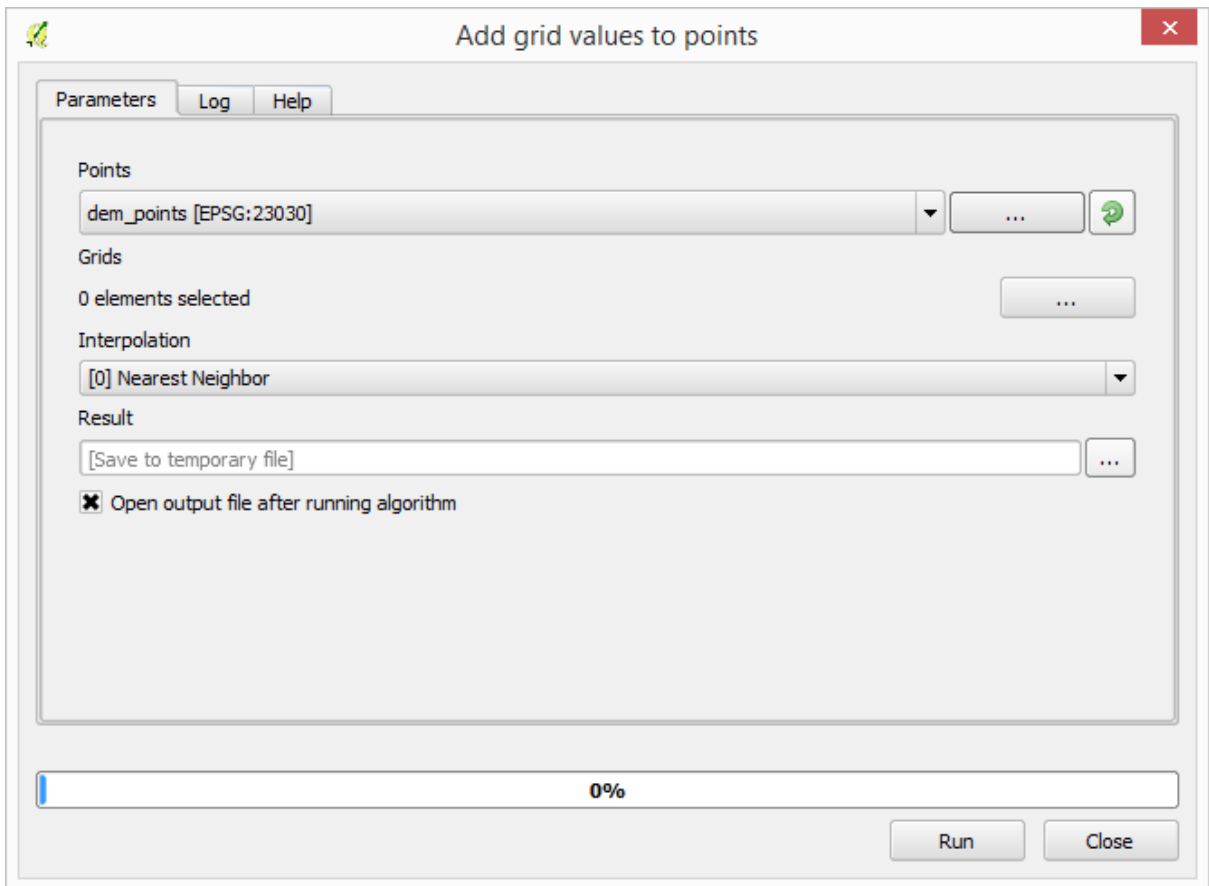


The image shows a software window titled "Results" with a standard Windows-style title bar (minimize, maximize, close buttons) and a help icon. On the left side, there is a vertical list of three items, each with a small icon and the text "Statistics". The bottom item is highlighted in blue. The main area of the window displays the following statistical results:

- Valid cells: 25416
- No-data cells: 220994
- Minimum value: 769.0
- Maximum value: 2086.0
- Sum: 31620679.5969
- Mean value: 1244.1249448
- Standard deviation: 276.622827767

A "Close" button is located in the bottom right corner of the window.





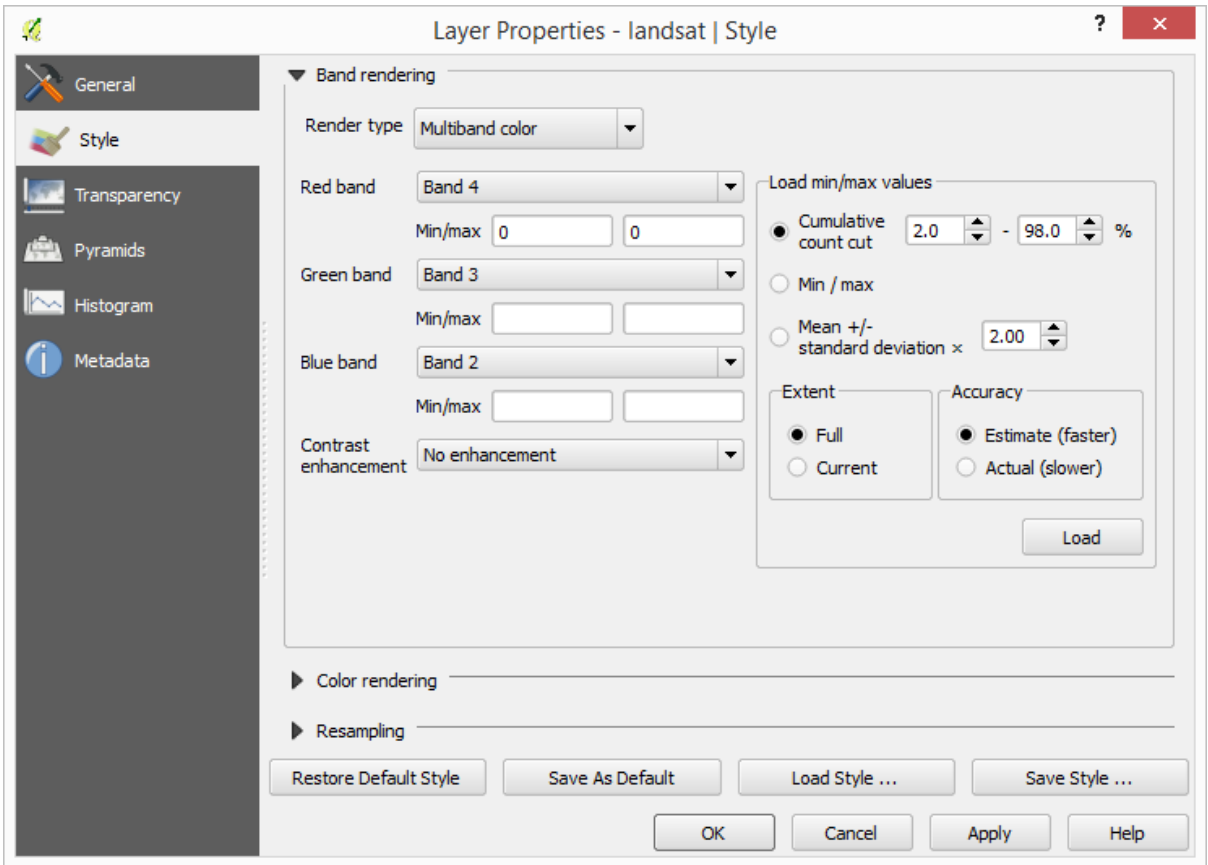
Attribute table - RESULT.shp :: Features total: 265, filtered: 2...

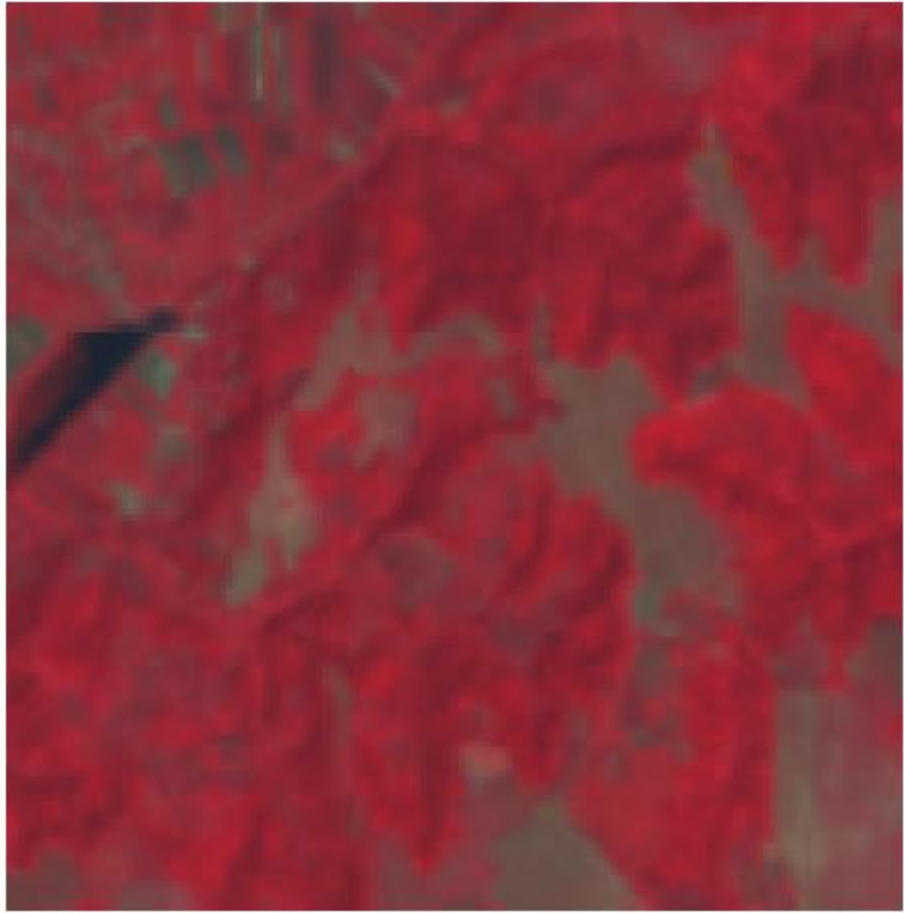
dem = dem Update All

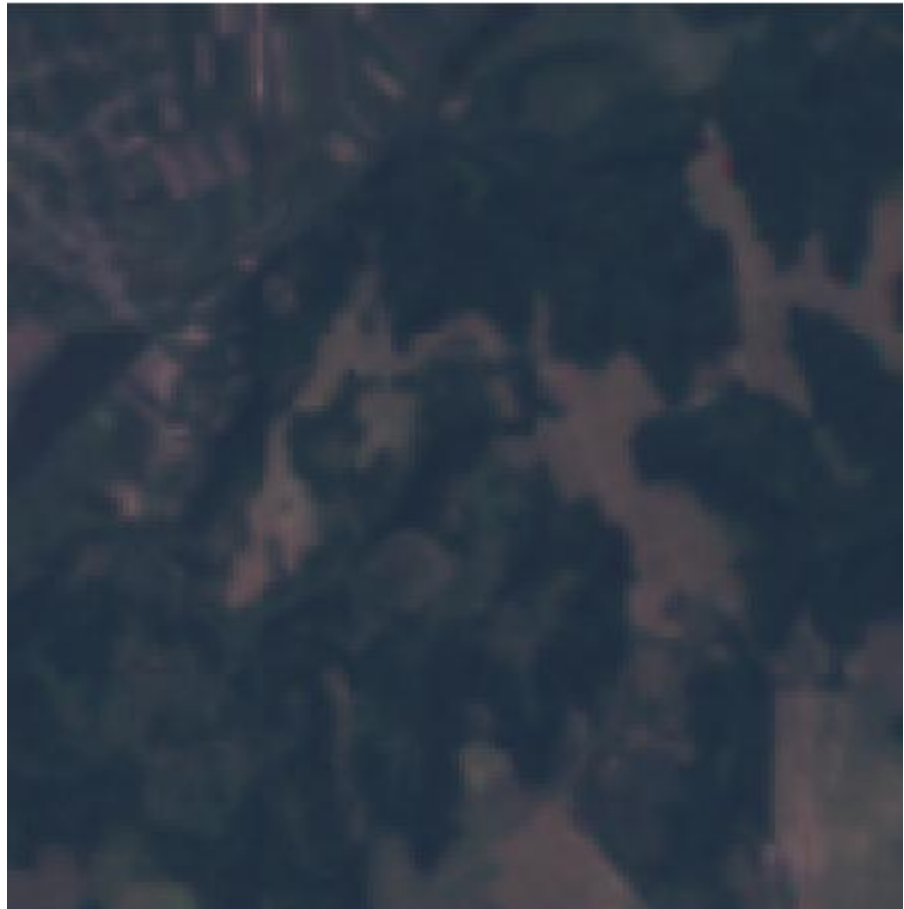
	ID	dem
0	1	764.0000000000
1	2	908.0000000000
2	3	1036.0000000000
3	4	733.0000000000
4	5	1019.0000000000
5	6	1083.0000000000
6	7	1989.0000000000
7	8	1947.0000000000
8	9	538.0000000000
9	10	1079.0000000000
10	11	1609.0000000000
11	12	1383.0000000000
12	13	1631.0000000000
13	14	1111.0000000000
14	15	1867.0000000000
15	16	2178.0000000000
16	17	2081.0000000000

Show All Features







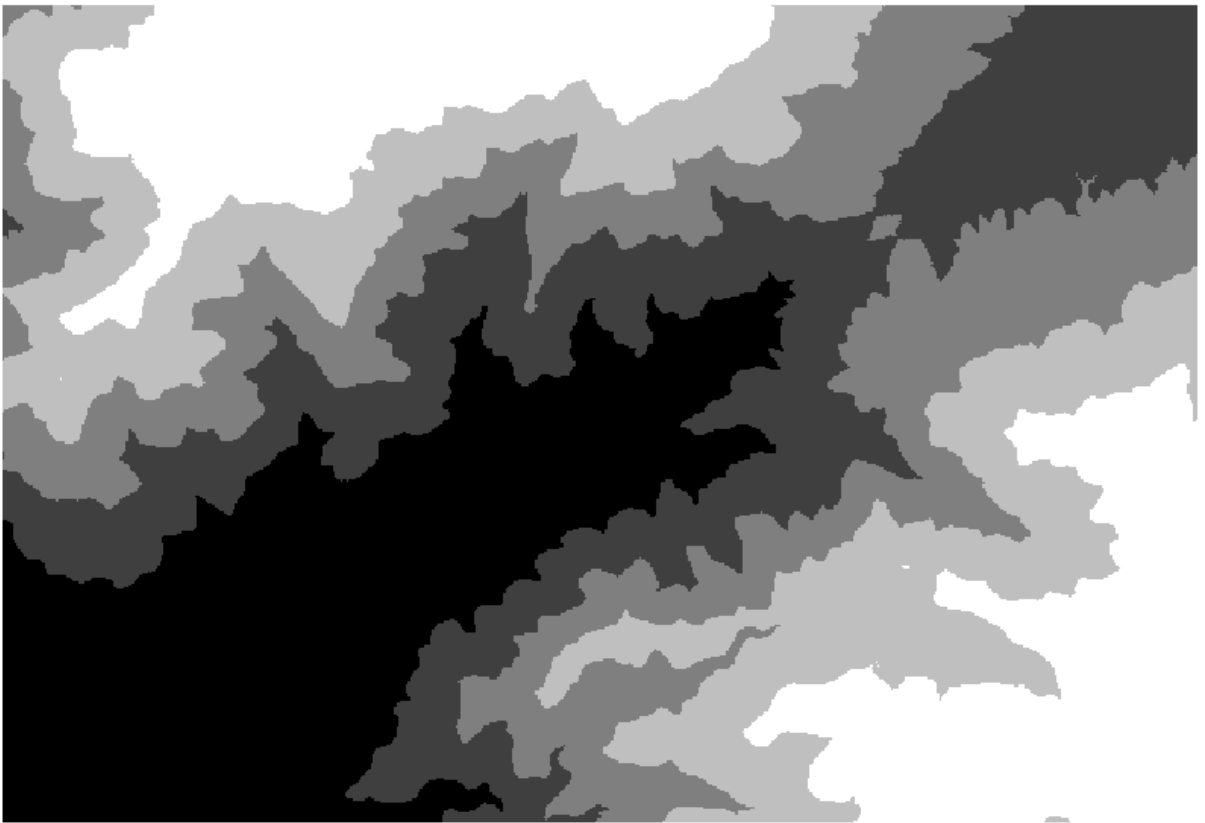


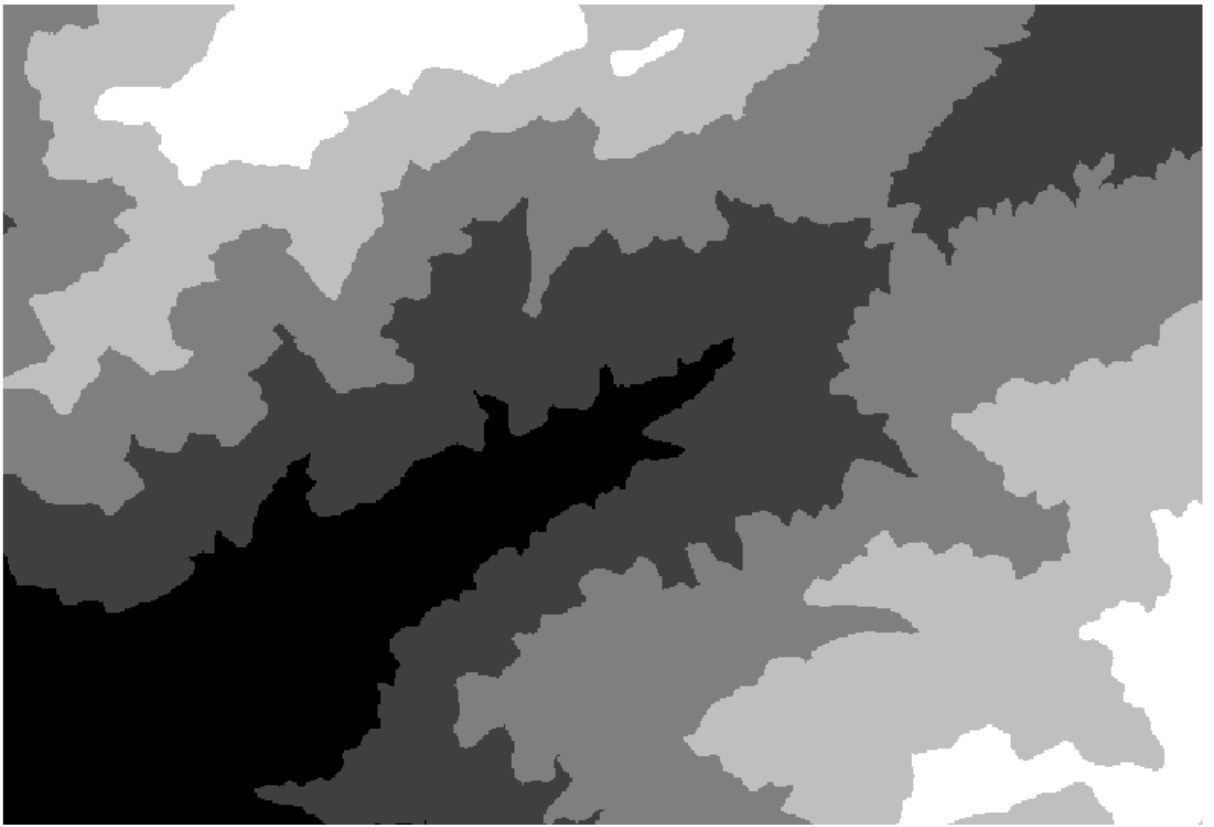
Fixed Table

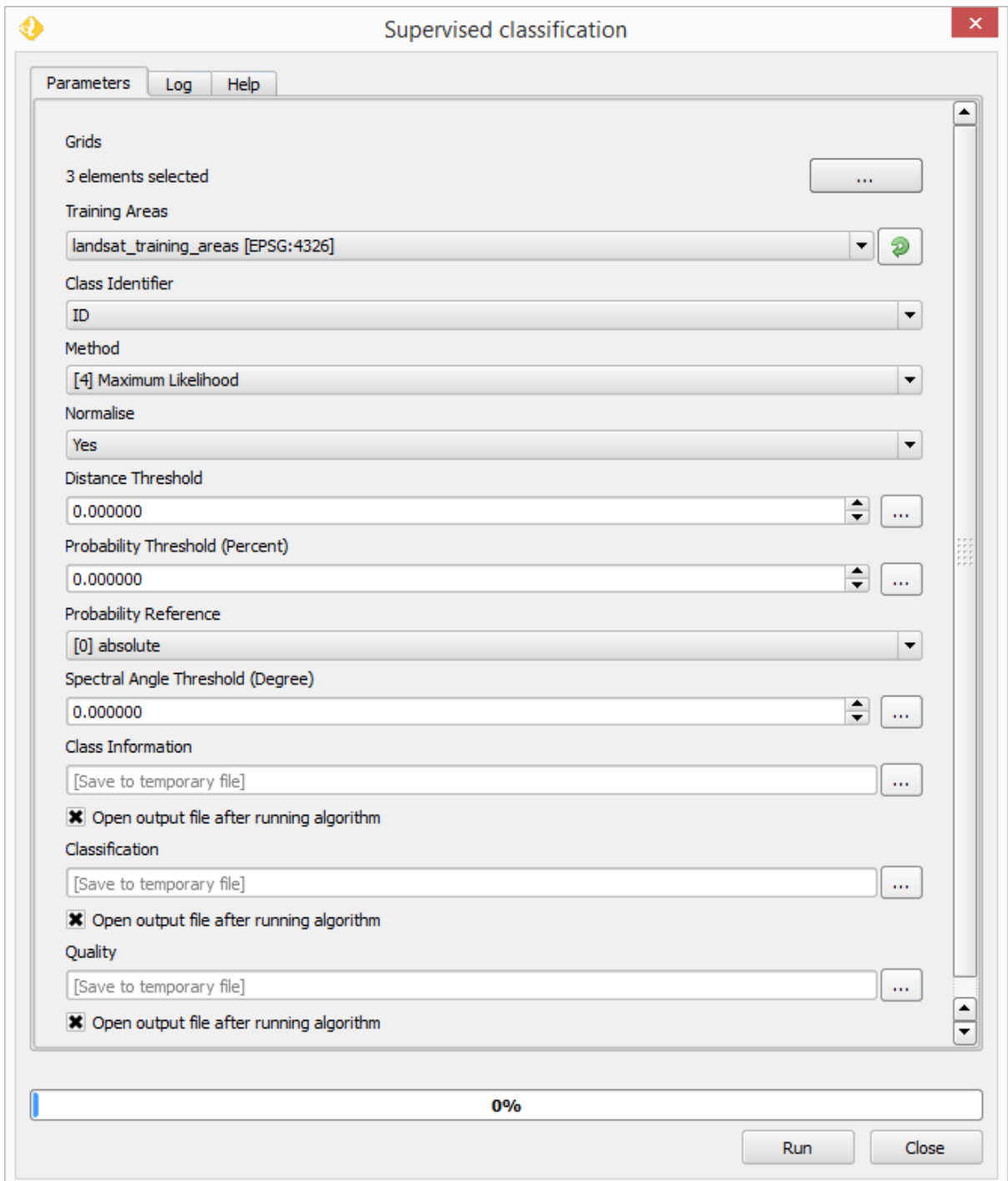
Low Value	High Value	Replace with
0	1000	1
1000	2000	2
2000	3000	3

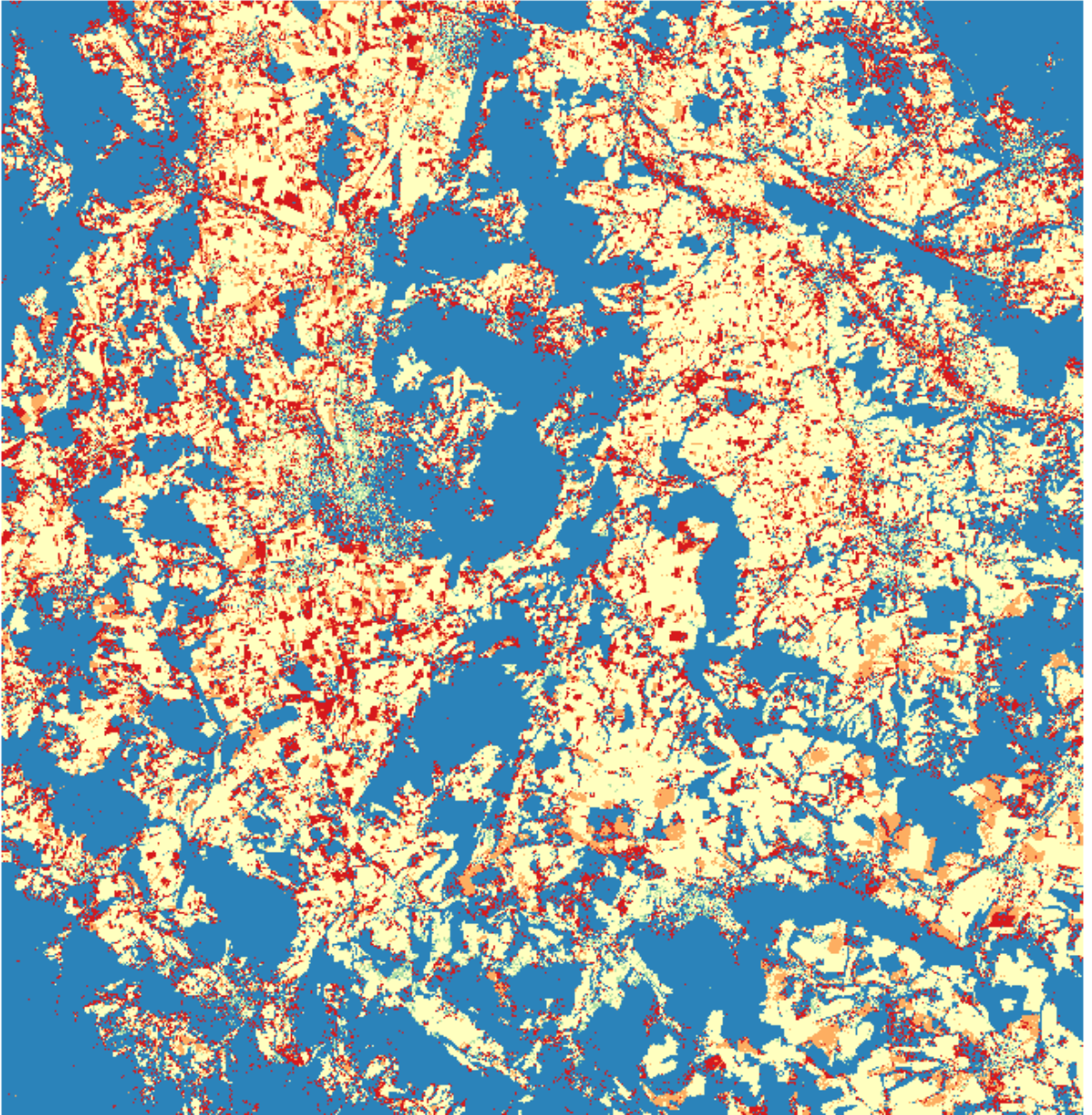
Buttons: Add row, Remove row, OK, Cancel












	ID	BOTYP
0	1	Forest
1	2	Wheat
2	3	Urban
3	4	Crop
4	5	Crop-clear

- Orfeo Toolbox (Image analysis) [82 geocalgorithms]
 - Calibration
 - Feature Extraction
 - Geometry
 - Image Filtering
 - Image Manipulation
 - Learning
 - Classification Map Regularization
 - Compute Images second order statistics
 - ComputeConfusionMatrix (raster)
 - ComputeConfusionMatrix (vector)
 - FusionOfClassifications (dempstershafer)
 - FusionOfClassifications (majorityvoting)
 - Image Classification
 - SOM Classification
 - TrainImagesClassifier (ann)
 - TrainImagesClassifier (bayes)
 - TrainImagesClassifier (boost)
 - TrainImagesClassifier (dt)
 - TrainImagesClassifier (gbt)
 - TrainImagesClassifier (knn)
 - TrainImagesClassifier (libsvm)
 - TrainImagesClassifier (rf)
 - Unsupervised KMeans image classification
 - Miscellaneous

Chapter 9: QGIS and the Web



The screenshot shows a dialog box titled "Create a new WFS connection" with a globe icon in the title bar. The dialog is divided into sections for connection details and authentication.

Connection details

Name:

URL:

If the service requires basic authentication, enter a user name and optional password

User name:

Password:

Buttons: Help, Cancel, OK

Add WFS Layer from a Server - + x

Server connections

Mapserver Demo

Connect New Edit Delete Load Save

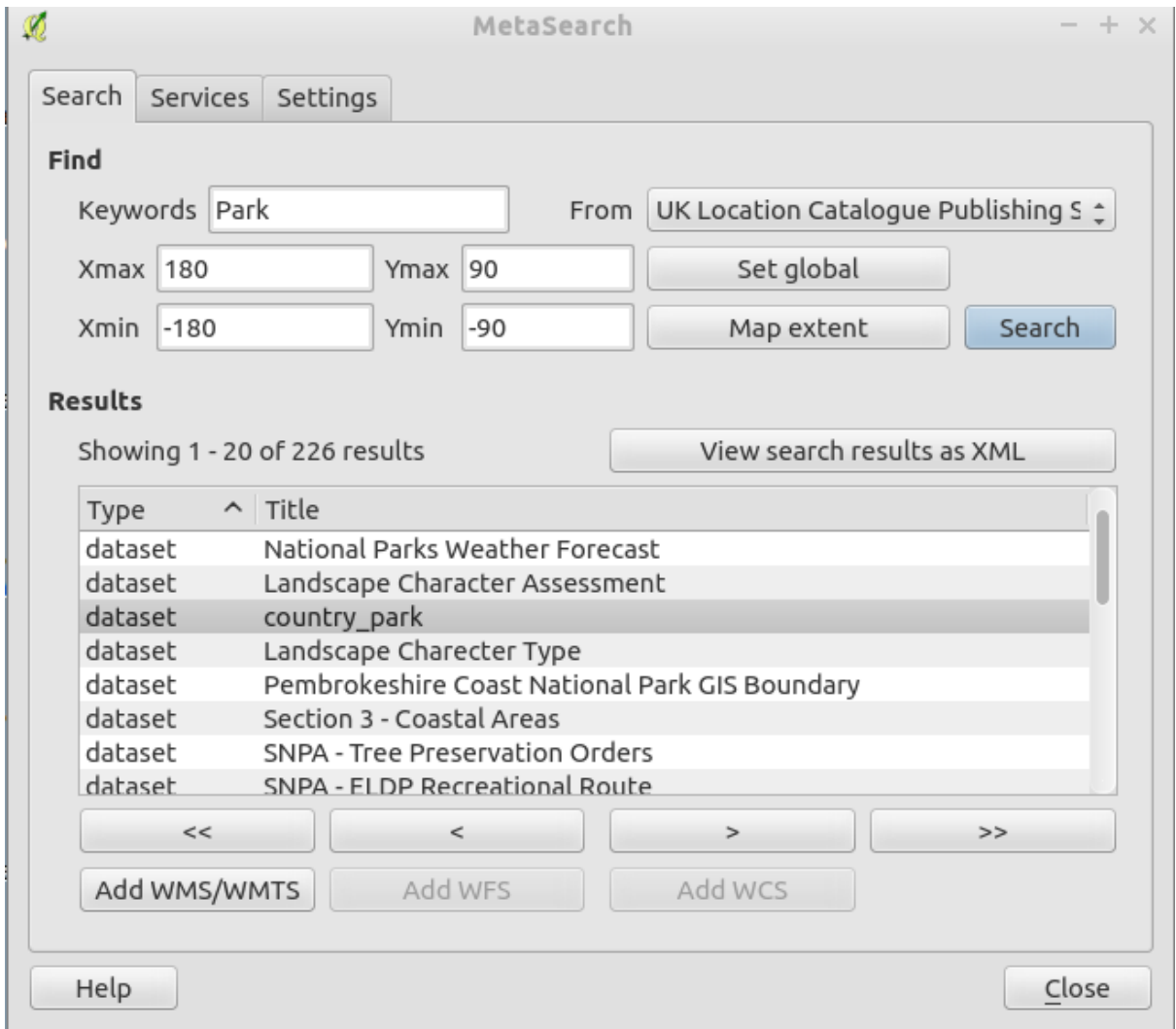
Filter:

Title	Name	Abstract	Cache Feature	Filter
World contine...	continents		<input checked="" type="checkbox"/>	
World cities	cities		<input checked="" type="checkbox"/>	

Use title for layer name

Coordinate reference system
EPSG:4326 Change...

Help Add Build query Close



Create a new WMS connection - + x

Connection details

Name

URL

If the service requires basic authentication, enter a user name and optional password

User name

Password

Referer

DPI-Mode

- Ignore GetMap/GetTile URI reported in capabilities
- Ignore GetFeatureInfo URI reported in capabilities
- Ignore axis orientation (WMS 1.3/WMTS)
- Invert axis orientation
- Smooth pixmap transform

Add Layer(s) from a WM(T)S Server - + x

Layers | Layer Order | Tilesets | Server Search

Geoserver WMS Demo

ID	Name	Title	Abstract
- 0		OpenGeo D...	
1	maps:dark	Dark Base ...	Layer-Group type layer: maps:dark
2	ne:ne	Natural Ear...	Base map composed of data from http://www.naturearthdata.com.
3	osm:osm	osm:osm	Layer-Group type layer: osm:osm
4	topp:tasma...	Tasmania B...	Base map consisting of layers from Tasmania, taken from the vanilla GeoServer configurat...
5	nurc:Ima_S...	North Ame...	

Image encoding
 PNG
 PNG8
 JPEG
 GIF
 TIFF
 SVG

Coordinate Reference System (4957 available)

Tile size

Feature limit for GetFeatureInfo

WGS 84

Layer name

2 Layer(s) selected


Add Layer(s) from a WM(T)S Server - + x

Layers | Layer Order | **Tilesets** | Server Search

Layer	Format	Title	Style
maps:dark	image/jpeg	Dark Base Map	Gc
maps:dark	image/png	Dark Base Map	Gc
maps:dark	image/png	Dark Base Map	EP
maps:dark	image/jpeg	Dark Base Map	EP
maps:parks	image/jpeg	parks	EP
maps:parks	image/jpeg	parks	EP
maps:parks	image/png	parks	EP
maps:parks	image/png	parks	EP
nasa:bluemarble	image/jpeg	bluemarble	EP
nasa:bluemarble	image/png	bluemarble	EP
nasa:bluemarble	image/png	bluemarble	EP
nasa:bluemarble	image/jpeg	bluemarble	EP

Layer name

Select layer(s) or a tileset

 **Create a new WCS connection** - + x

Connection details

Name

URL

If the service requires basic authentication, enter a user name and optional password

User name

Password

Ignore GetCoverage URI reported in capabilities

Ignore axis orientation

Invert axis orientation

Smooth pixmap transform

Add Layer(s) from a WCS Server - + x

Layers

OpenGeo ↑ ↓

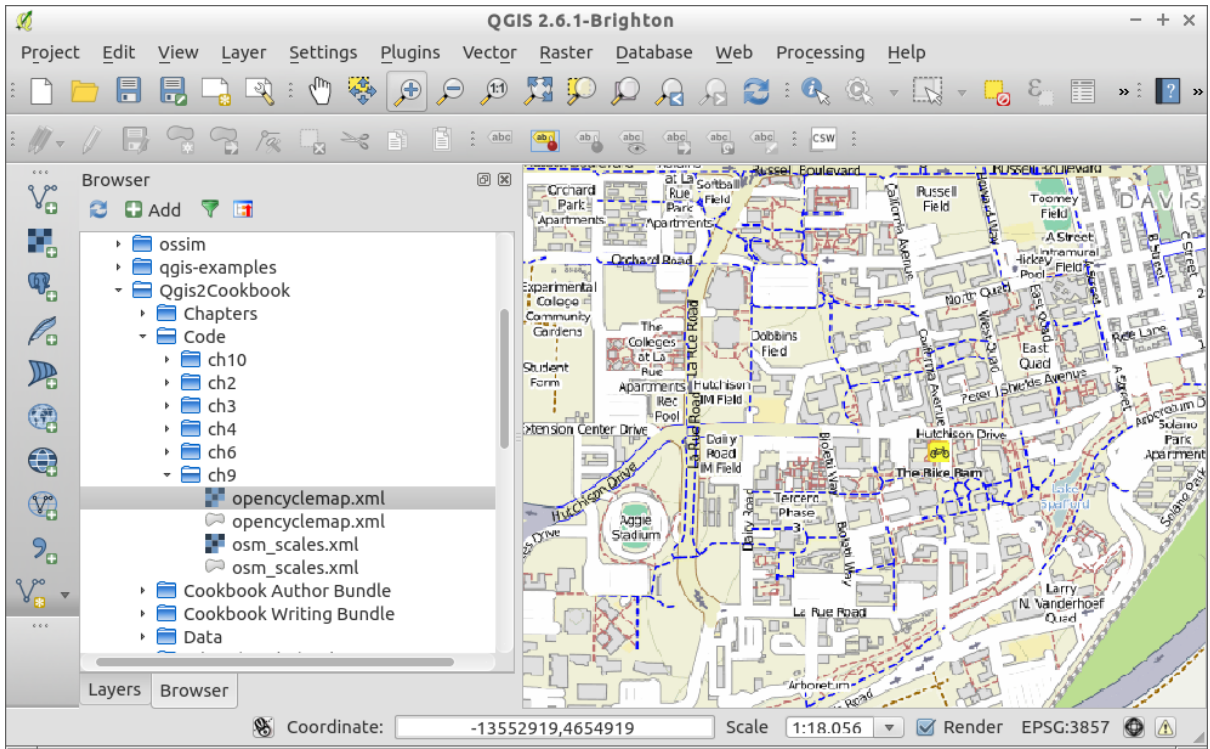
ID	Name	Title	Abstract
0	usgs:ned	National Elevation Dataset	Generated from GeoTIFF
1	usgs:nlcd	National Landcover Dataset	Generated from WorldImage
2	ne:NE1_HR_LC_SR_W_DR	Natural Earth 1	Generated from GeoTIFF
3	nurc:img_Sample	North America sample imagery	A very rough imagery of North America
4	maps:OB_LR_ti_ov	OB_LR_ti_ov	Generated from GeoTIFF
5	nasa:bluemarble	bluemarble	Generated from GeoTIFF
6	ne:wps4623406955417507685tiff15...	wps4623406955417507685tiff156922...	Generated from GeoTIFF
7	ne:wps4693812227741231645tiff16...	wps4693812227741231645tiff164814...	Generated from GeoTIFF
8	ne:wps5380428517378077718tiff62...	wps5380428517378077718tiff628977...	Generated from GeoTIFF

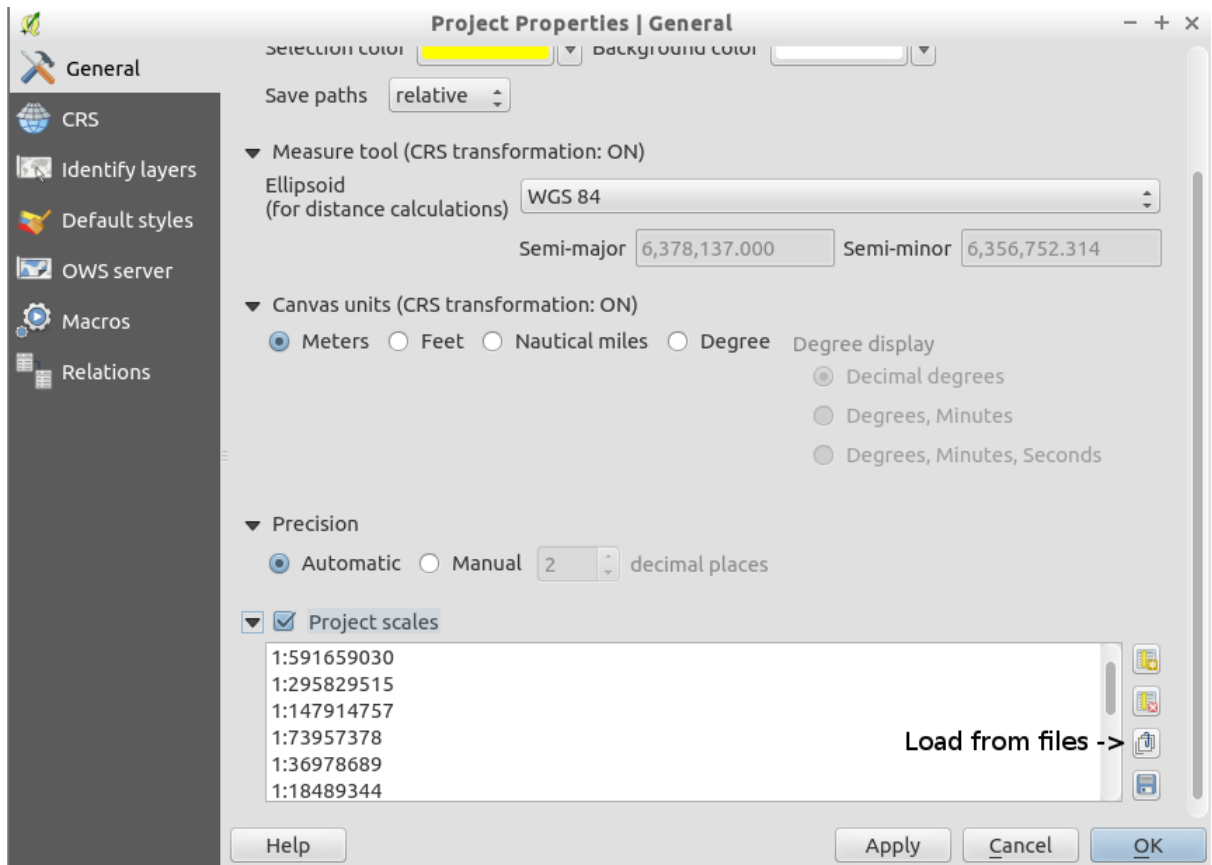
Time ↑ ↓

Coordinate Reference System (1 available): WGS 84

Format ↑ ↓

Cache ↑ ↓





Project Properties | OWS server - + x

Service capabilities

Title:

Organization:

Online resource:

Person:

E-Mail:

Phone:

Abstract:

Fees:

Access constraints:

Keyword list:

▶ WMS capabilities

▶ WFS capabilities

▶ WCS capabilities

Help Apply Cancel **OK**

General

CRS

Identify layers

Default styles

OWS server

Macros

Relations

Project Properties | OWS server

General

CRS

Identify layers

Default styles

OWS server

Macros

Relations

Service capabilities

▼ **WMS capabilities**

▼ Advertised extent

Min. X

Min. Y

Max. X

Max. Y

▼ CRS restrictions

EPSG:4326
EPSG:3785

Exclude composers

Exclude layers

ne_10m_land

Use layer ids as names

Add geometry to feature response

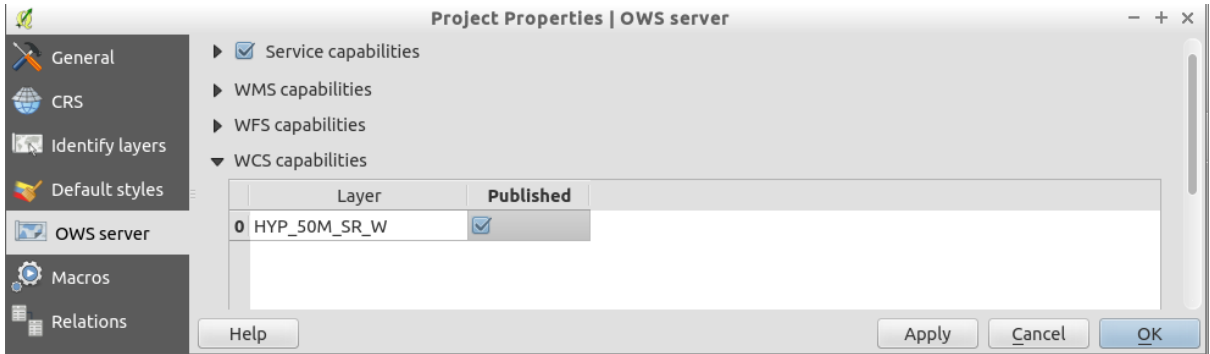
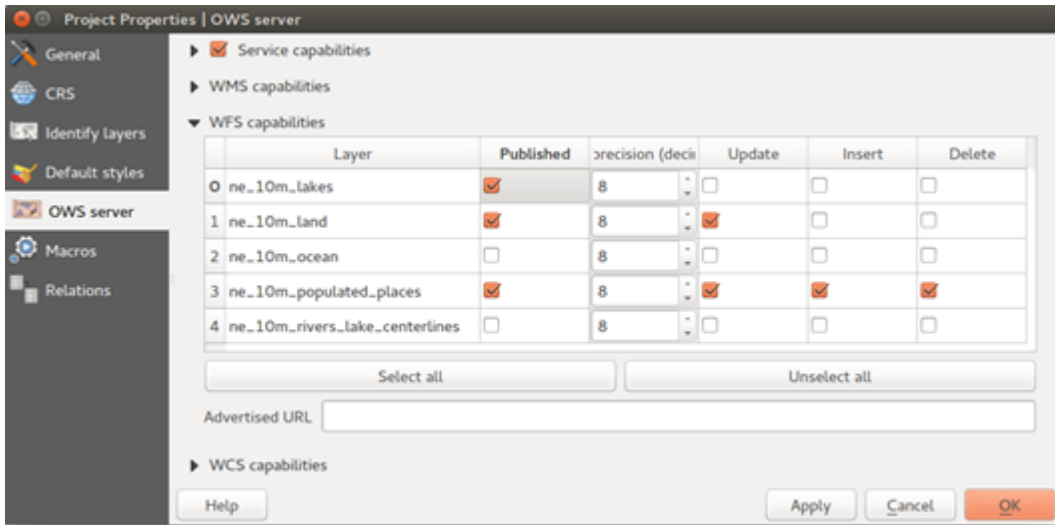
GetFeatureInfo geometry precision (decimal places)

Advertised URL

Maximums for GetMap request

Width Height

Quality for JPEG images (10 : smaller image - 100 : best quality)





Rule properties

Label:

Filter: ... Test

Description:

Scale range

Minimum (exclusive): Maximum (inclusive):

Symbol

Unit:

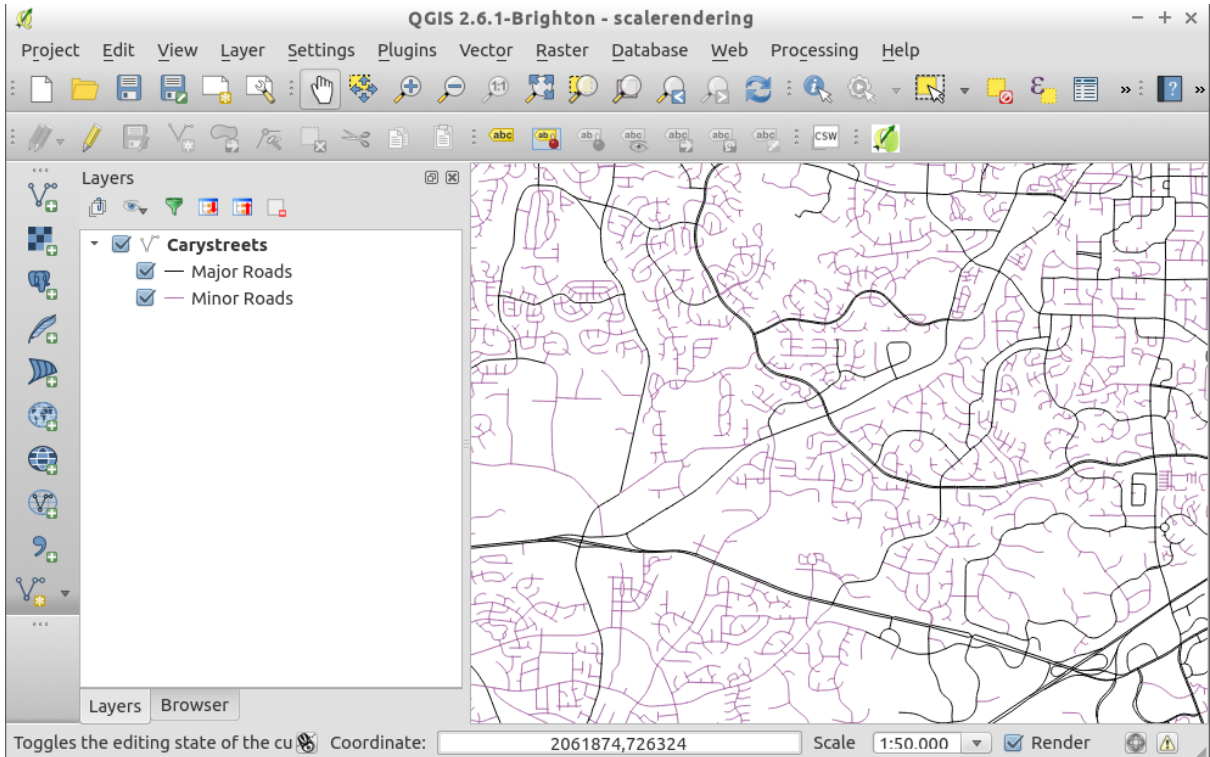
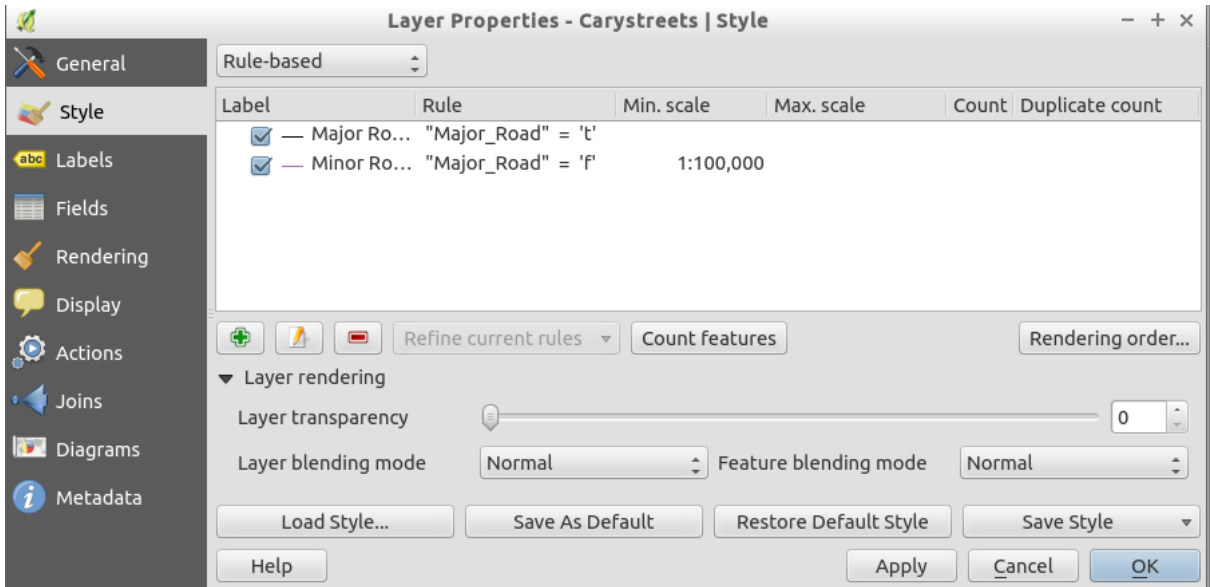
Transparency 0% Width:

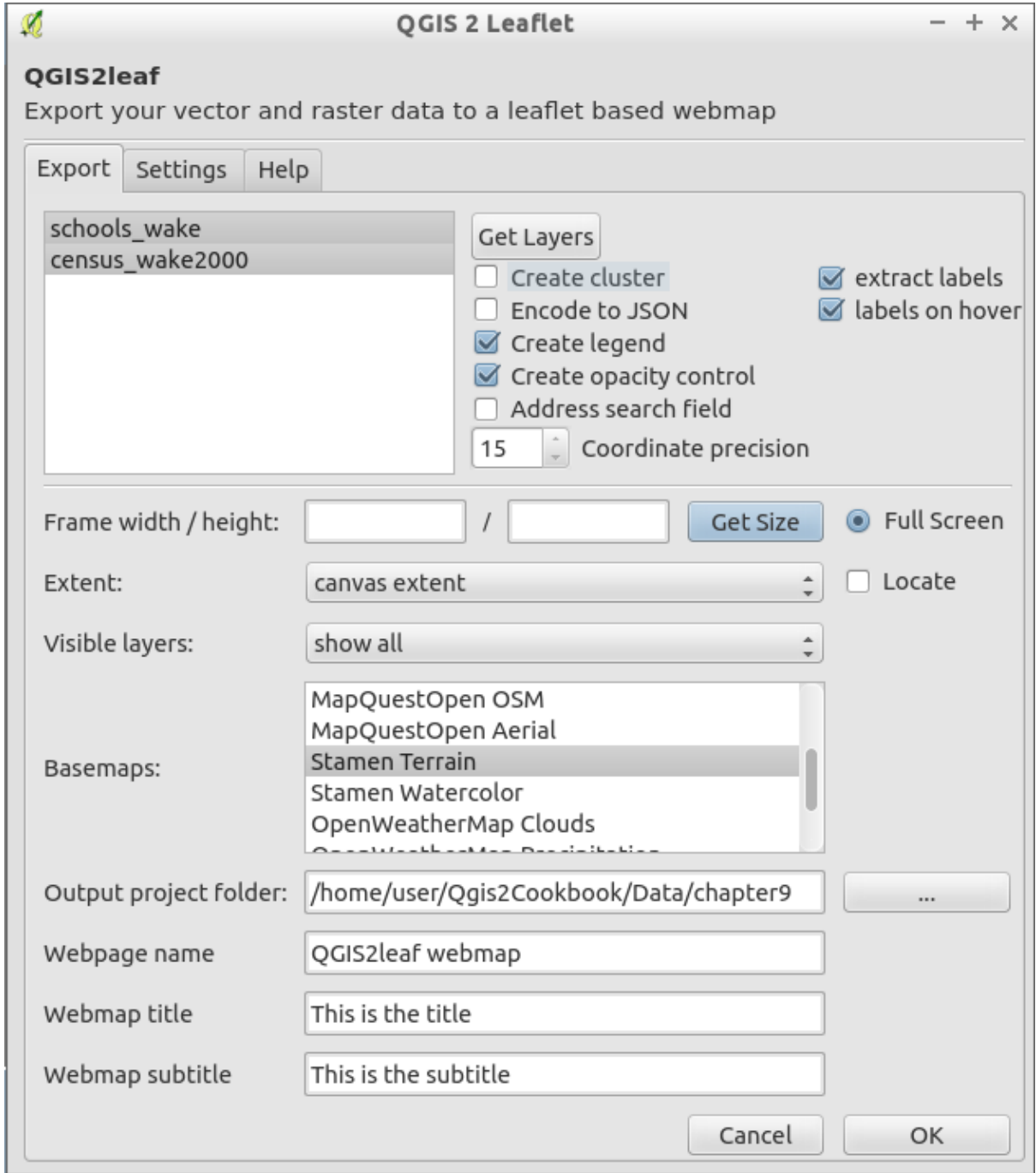
Color:

Symbols in group: Open Library

Simple line

Bridlewa: Canal Canal ri Construc Crossing Cycle p





QGIS2leaf webmap - Mozilla Firefox

QGIS2leaf webmap

file:///home/user/Qgis2Cookbook/Data/chapter9/ Search

cat	102
AREA	1011816384
PERIMETER	143929.063
TRACT_	102
TRACT_ID	102
RINGS_OK	1
RINGS_NOK	0
ID	102
FIPSSTCO	37183
TRT2000	054301
STFID	37183054301
TRACTID	543.01
TRACT	543.01

This is the title
This is the subtitle

- Stamen Terrain
- censuswake2000
- schoolswake

Legend

10 km
5 mi

Leaflet | created w. qgis2leaf by Geolicious & contributors
Map tiles by Stamen Design, CC BY 3.0 — Map data: © OpenStreetMap contributors, CC-BY-SA



QGIS 2 Leaflet



QGIS2leaf

Export your vector and raster data to a leaflet based webmap

Export Settings Help

- schools_wake
- census_wake2000
- USGS_EROS_Ortho_NAIP

Get Layers

- Create cluster
- Encode to JSON
- Create legend
- Create opacity control
- Address search field

- extract labels
- labels on hover

15 Coordinate precision

Frame width / height: / Full Screen

Extent: Locate

Visible layers:

- Basemaps:
- MapQuestOpen OSM
 - MapQuestOpen Aerial
 - Stamen Terrain
 - Stamen Watercolor
 - OpenWeatherMap Clouds
 - OpenWeatherMap Precipitation

Output project folder:

Webpage name

Webmap title

Webmap subtitle

Catalog definition ? X

GeoServer Connection parameters

Catalog name: mycatalog

URL: http://localhost:8080/geoserver/

Authentication

Basic

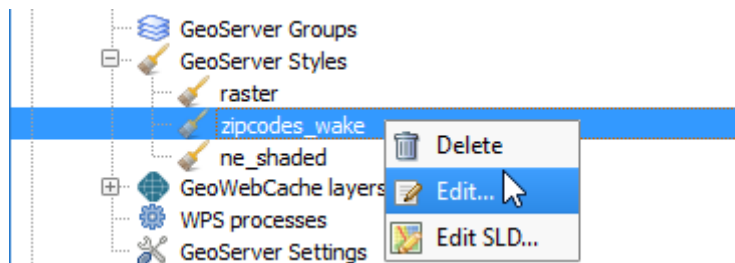
User name: admin

Password: ●●●●●●●●

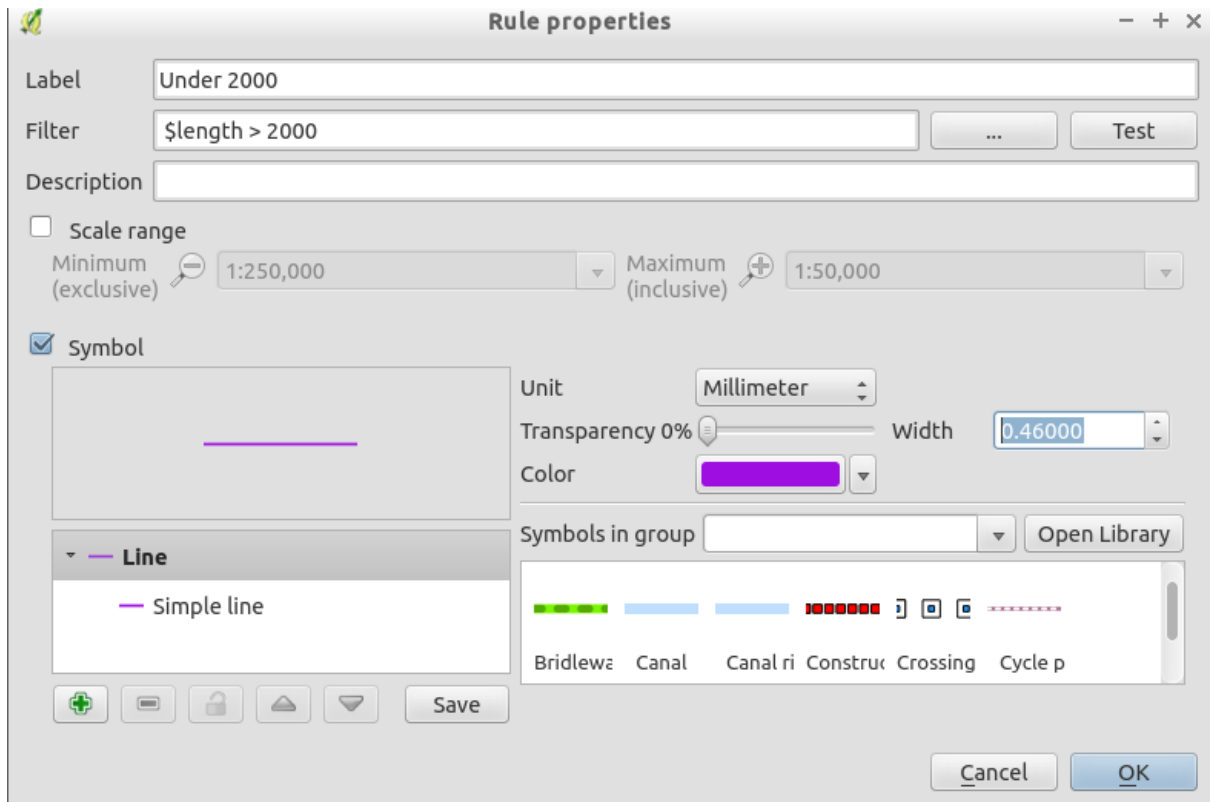
GeoNode Connection parameters (Optional)

URL:

OK Close



Chapter 10: Cartography Tips



Layer Properties - busroutesall | Style

Rule-based

Label	Rule	Min. scale	Max
<input checked="" type="checkbox"/> Under 2000	\$length > 2000		
<input checked="" type="checkbox"/>	\$length < 2000		

Refine current rules | Count features | Rendering order...

Layer rendering: Add scales to rule, Add categories to rule, Add ranges to rule

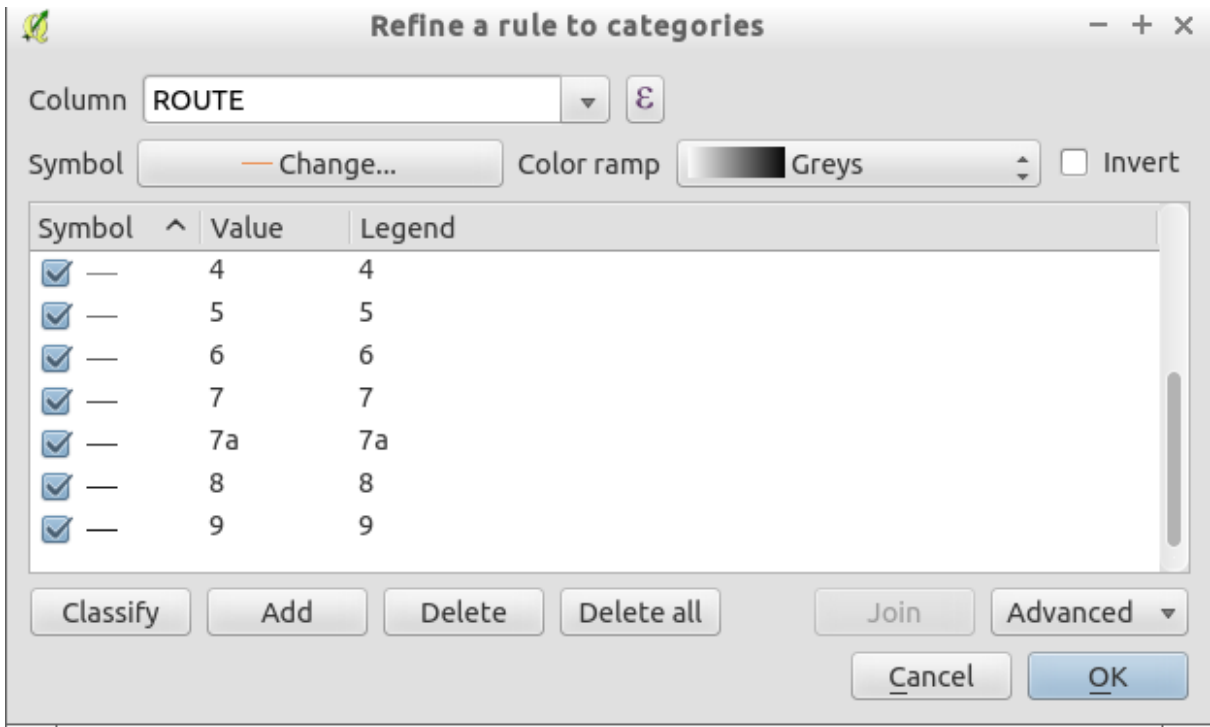
Layer transparency: 0

Layer blending mode: Normal | Feature blending mode: Normal

Buttons: Load Style..., Save As Default, Restore Default Style, Save Style, Help, Apply, Cancel, OK

Layers | Browser

Toggles the editing state of the layer | Coordinate: 635007,225121 | Scale: 1:30.373 | Render | EPSG:3358



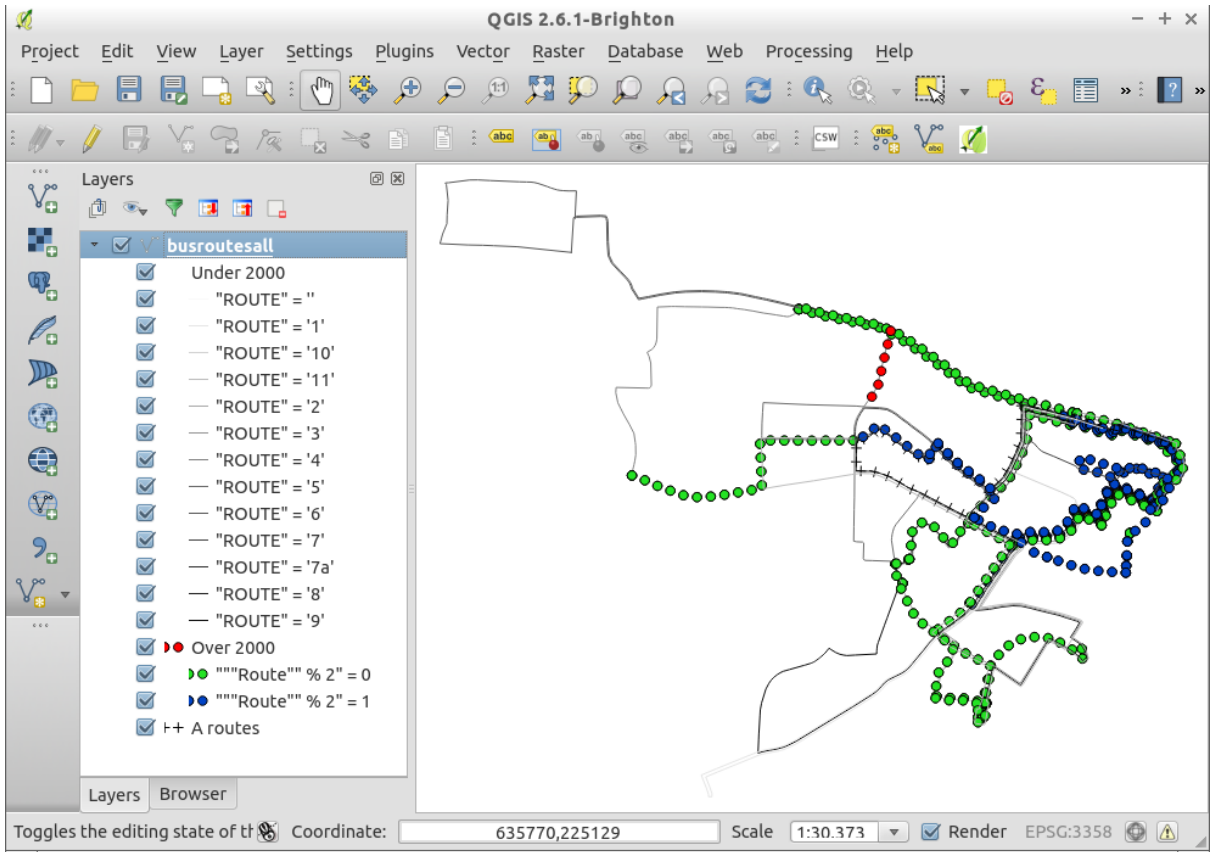
Layer Properties - busroutesall | Style

General Style Labels Fields Rendering Display Actions Joins Diagrams Metadata

Rule-based

Label	Rule
<input checked="" type="checkbox"/> Under 2000	\$length > 2000
<input checked="" type="checkbox"/> "ROUTE" = "	"ROUTE" = "
<input checked="" type="checkbox"/> "ROUTE" = '1'	"ROUTE" = '1'
<input checked="" type="checkbox"/> "ROUTE" = '10'	"ROUTE" = '10'
<input checked="" type="checkbox"/> "ROUTE" = '11'	"ROUTE" = '11'
<input checked="" type="checkbox"/> "ROUTE" = '2'	"ROUTE" = '2'
<input checked="" type="checkbox"/> "ROUTE" = '3'	"ROUTE" = '3'
<input checked="" type="checkbox"/> "ROUTE" = '4'	"ROUTE" = '4'
<input checked="" type="checkbox"/> "ROUTE" = '5'	"ROUTE" = '5'
<input checked="" type="checkbox"/> "ROUTE" = '6'	"ROUTE" = '6'
<input checked="" type="checkbox"/> "ROUTE" = '7'	"ROUTE" = '7'
<input checked="" type="checkbox"/> "ROUTE" = '7a'	"ROUTE" = '7a'
<input checked="" type="checkbox"/> "ROUTE" = '8'	"ROUTE" = '8'
<input checked="" type="checkbox"/> "ROUTE" = '9'	"ROUTE" = '9'
<input checked="" type="checkbox"/> Over 2000	\$length < 2000
<input checked="" type="checkbox"/> ""Route"" % 2 = 0	"ROUTE" % 2 = 0
<input checked="" type="checkbox"/> ""Route"" % 2 = 1	"ROUTE" % 2 = 1
<input checked="" type="checkbox"/> ++	"ROUTE" like '%a'

Layer rendering
 Layer transparency
 Layer blending mode
 Feature blending mode



Layer Properties - lakes | Style

General | **Style** | Labels | Fields | Rendering | Display | Actions | Joins | Diagrams | Metadata

Single Symbol

Unit: Millimeter
Transparency: 50%
Color: Blue

Symbols in group: [Dropdown] Open Library

Fill: Simple fill

corners diagonal dotted green land water wine

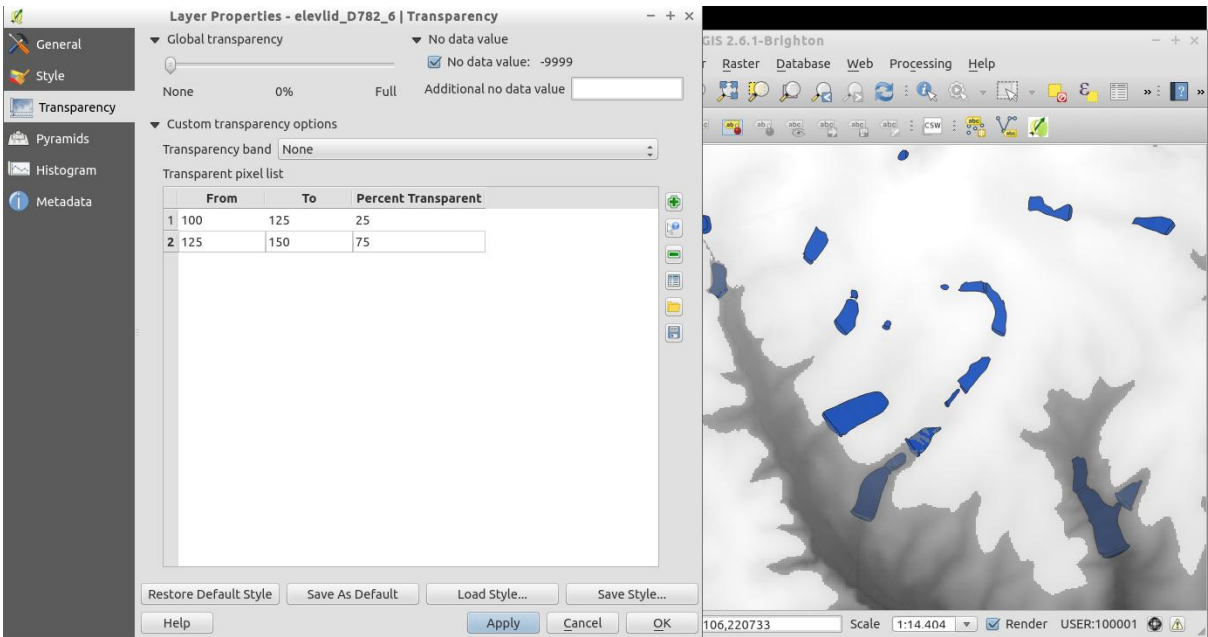
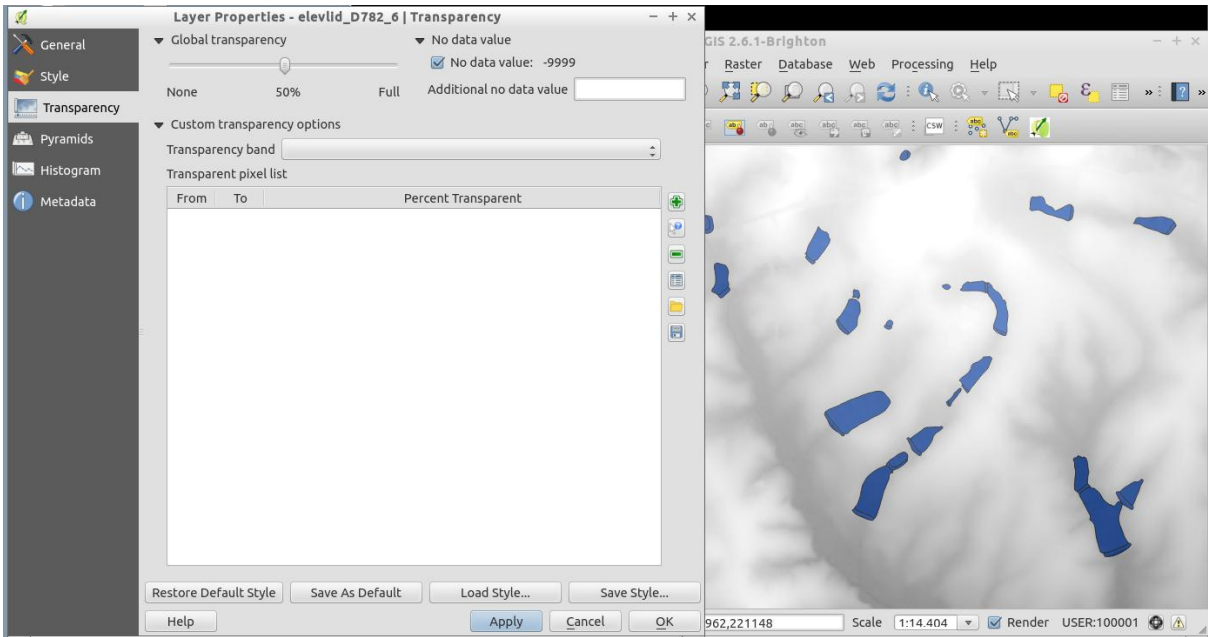
Layer rendering
Layer transparency: 0
Layer blending mode: Normal
Feature blending mode: Normal

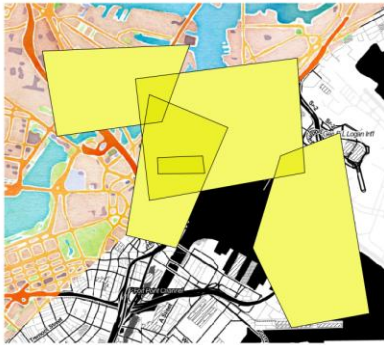
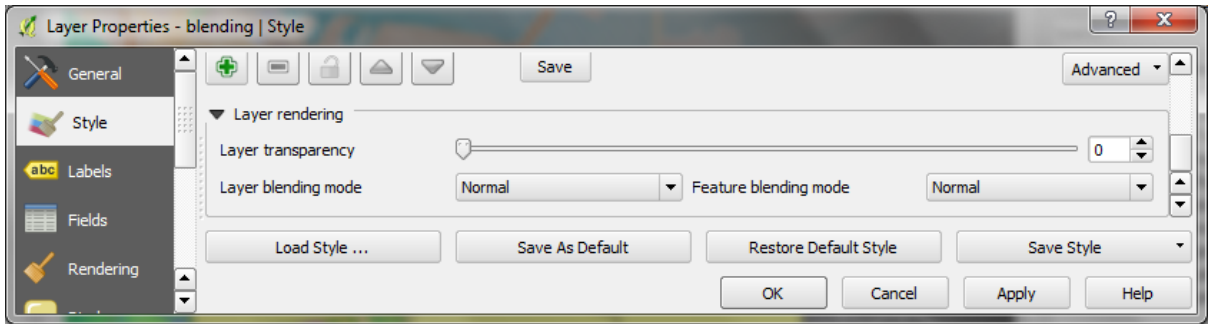
Load Style... Save As Default Restore Default Style Save Style

Help Apply Cancel OK

Layers Browser

Toggles the editing state of [Icon] Coordinate: 635078,221935 Scale: 1:16.345 Render USER:100001





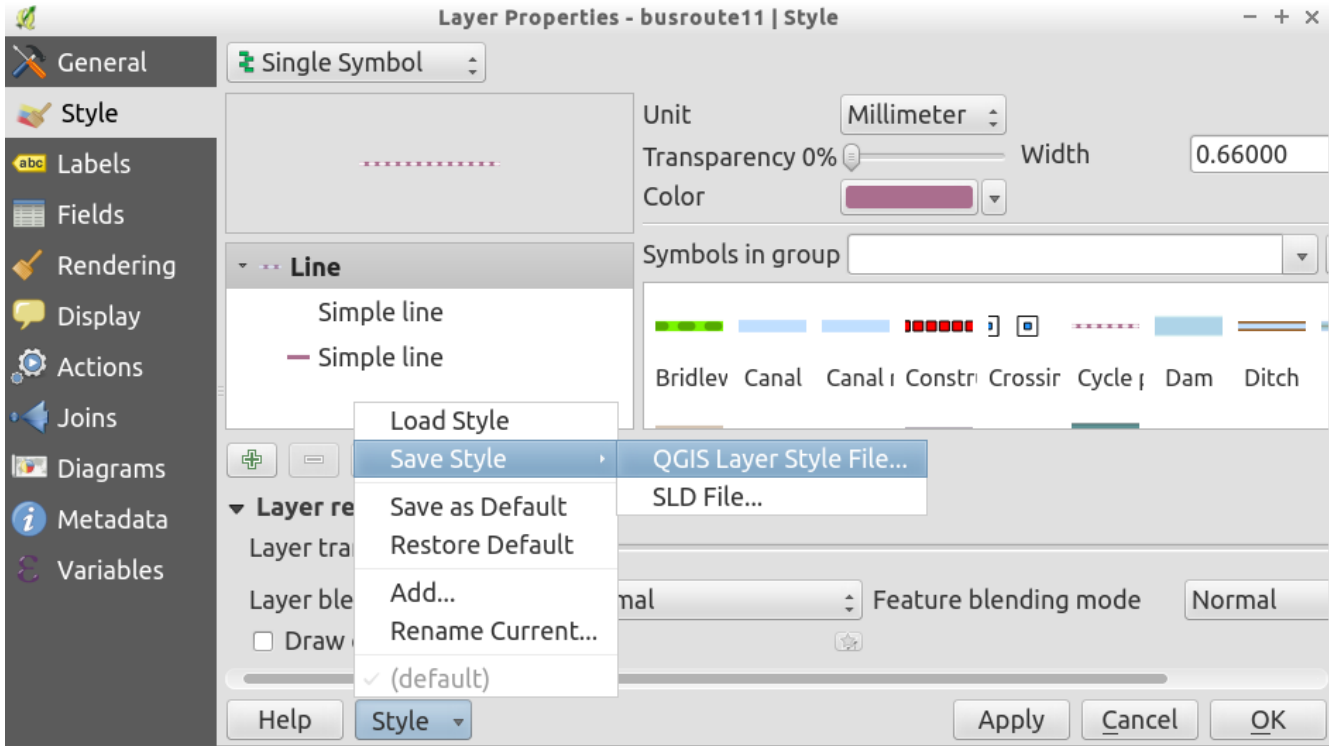
Layers Panel

- busroutesall
- busroute6
- ▶ elevlid_D783_6m
- ▶ elevlid_D782_6
- busroute11
- busro
- busro

Context menu for 'busro':

- Zoom to Layer
- Show in Overview
- Remove
- Duplicate
- Set Layer Scale Visibility
- Set Layer CRS
- Set Project CRS from Layer
- Styles
 - Copy Style
 - Paste Style
 - Add...
 - Rename Current...
 - (default)
- Open Attribute Table
- Toggle Editing
- Save As...
- Save As Layer Definition File...
- Filter...
- Show Feature Count
- Properties
- Rename

Layers Panel | Browser Panel



Layer Properties - elevlid_D783_6m | Style

General

Style

Transparency

Pyramids

Histogram

Metadata

Band rendering

Render type: Singleband pseudocolor

Band: Band 1 (Gray)

Color interpolation: Linear

Generate new color map

Mode: Continuous

Classes: 5

Export color map to file: 87.6681

Max: 146.77

Value	Color	Color
87.668...		87.668100
94.235...		94.235867
100.80...		100.803633
107.37...		107.371400
113.93...		113.939167
120.50...		120.506933
127.07...		127.074700
133.64...		133.642467
140.21...		140.210233
146.77...		146.778000

Classify

Min / max origin: Exact min / max of full extent.

Load min/max values

Cumulative count cut: 2.0 - 98.0

Min / max

Mean +/- standard deviation x: 2.00

Extent Accuracy

Help Style Apply Cancel OK


Layer to labeled layer

Note: This plug-in modifies your selected layer. (Adds new attributes for the data-defined settings)

Label field: STFID


Cancel OK

Attribute table - census_wake2000_label ::...atures total: 105, filtered: 105, selected: 0 - + x



	LblSize	LblColor	LblBold	LblItalic	LblUnderl	LblStrike	LblFont
0	NULL	NULL	NULL	NULL	NULL	NULL	NULL
1	NULL	NULL	NULL	NULL	NULL	NULL	NULL
2	NULL	NULL	NULL	NULL	NULL	NULL	NULL
3	NULL	NULL	NULL	NULL	NULL	NULL	NULL
4	NULL	NULL	NULL	NULL	NULL	NULL	NULL
5	NULL	NULL	NULL	NULL	NULL	NULL	NULL
6	NULL	NULL	NULL	NULL	NULL	NULL	NULL
7	NULL	NULL	NULL	NULL	NULL	NULL	NULL
8	NULL	NULL	NULL	NULL	NULL	NULL	NULL
9	NULL	NULL	NULL	NULL	NULL	NULL	NULL
10	NULL	NULL	NULL	NULL	NULL	NULL	NULL
11	NULL	NULL	NULL	NULL	NULL	NULL	NULL
12	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Show All Features




Layer labeling settings - + x

Label this layer with

▼ Text/Buffer sample

Text

- Formatting
- Buffer
- Background
- Shadow
- Placement
- Rendering

Text style

Font:

'Arial' not found. Default substituted.

Style:

Size:

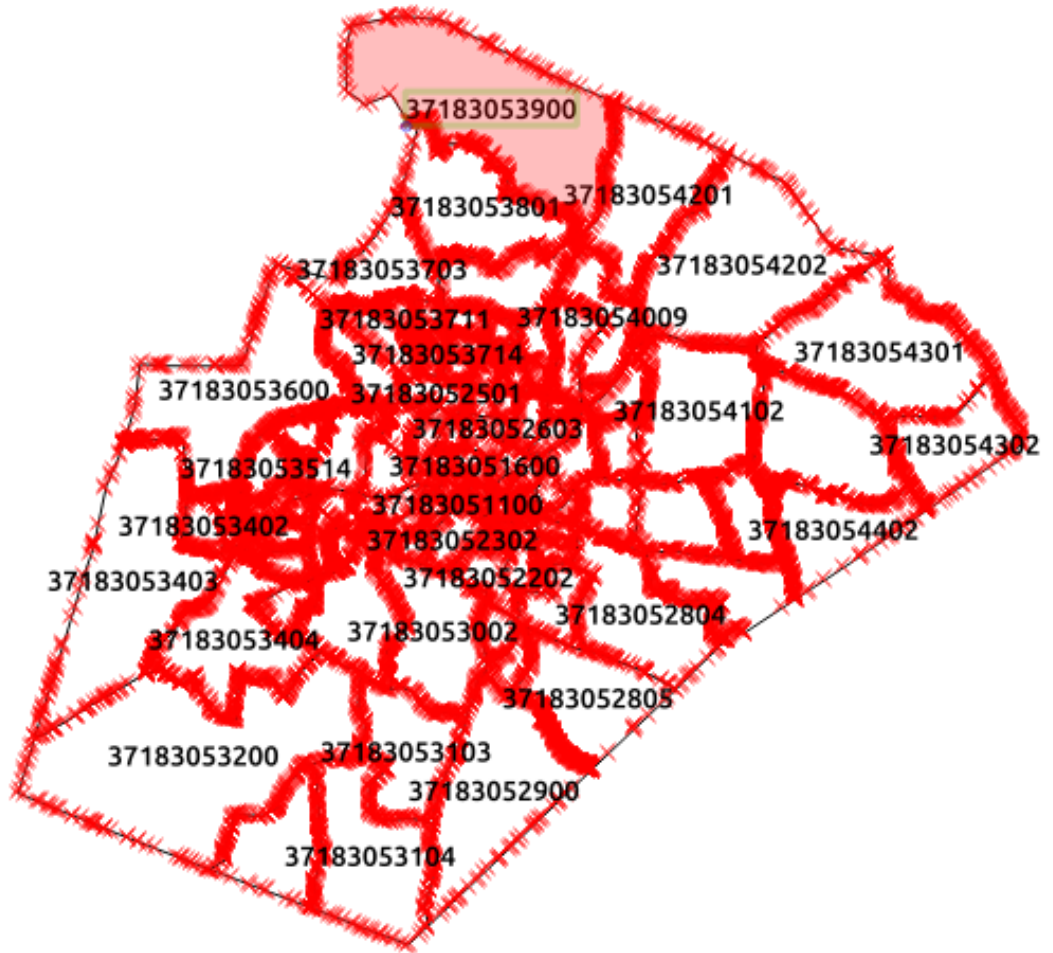
Color:

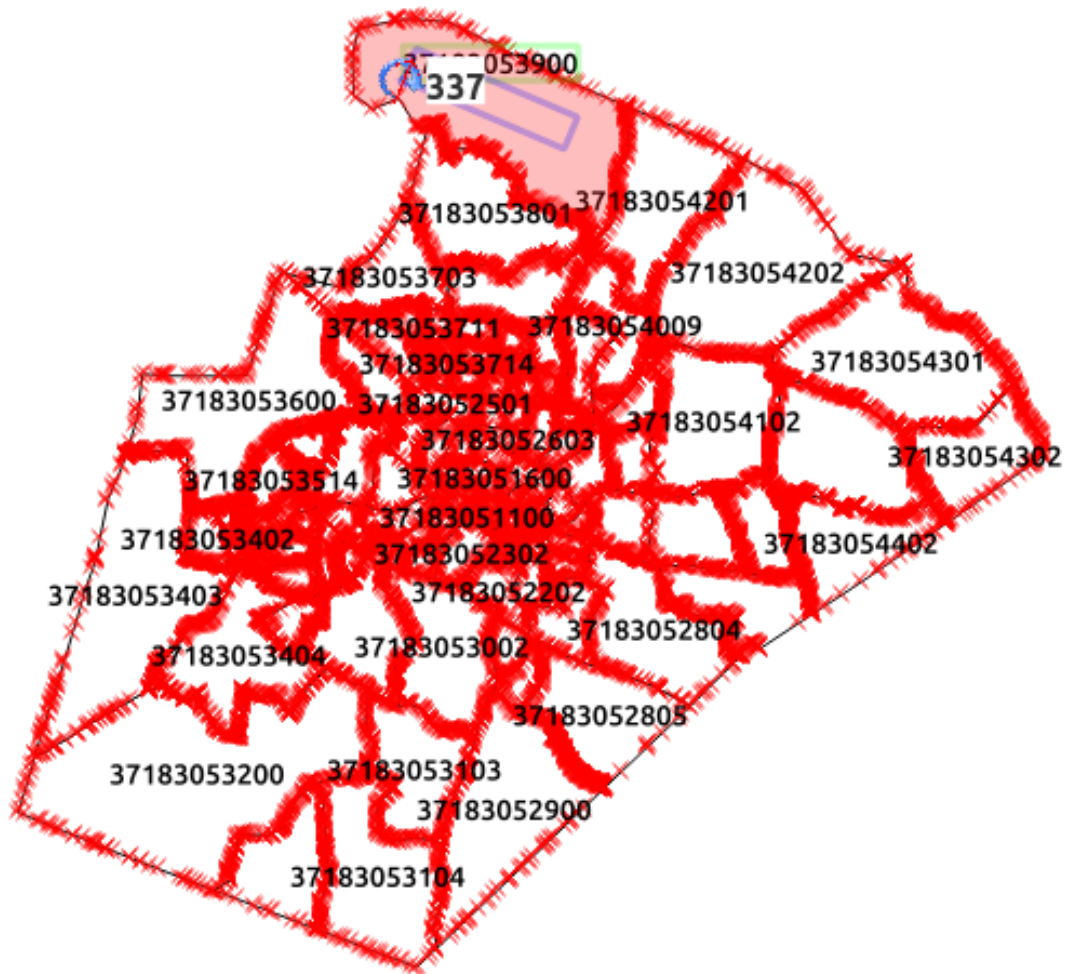
Transparency:

Type case:

Spacing:







Layer Properties - dem_points | Style

Single Symbol

General

Style

Labels

Fields

Display

Actions

Joins

Diagrams

Metadata

Marker

SVG marker

Symbol layer type: SVG marker

Size: 4.000000 Millimeter

Angle: 0.00

Colors: Fill (Blue), Border (Red)

Border width: 30.000000 Millimeter

Offset X,Y: 0.000000, 0.000000 Millimeter

Anchor point: HCenter, VCenter

Data defined properties...

SVG Groups: App Symbols, accommod..., amenity, arrows

SVG Image: /media/sf_Qgis2Cookbook/Data/chapter10/blackredsquare.svg

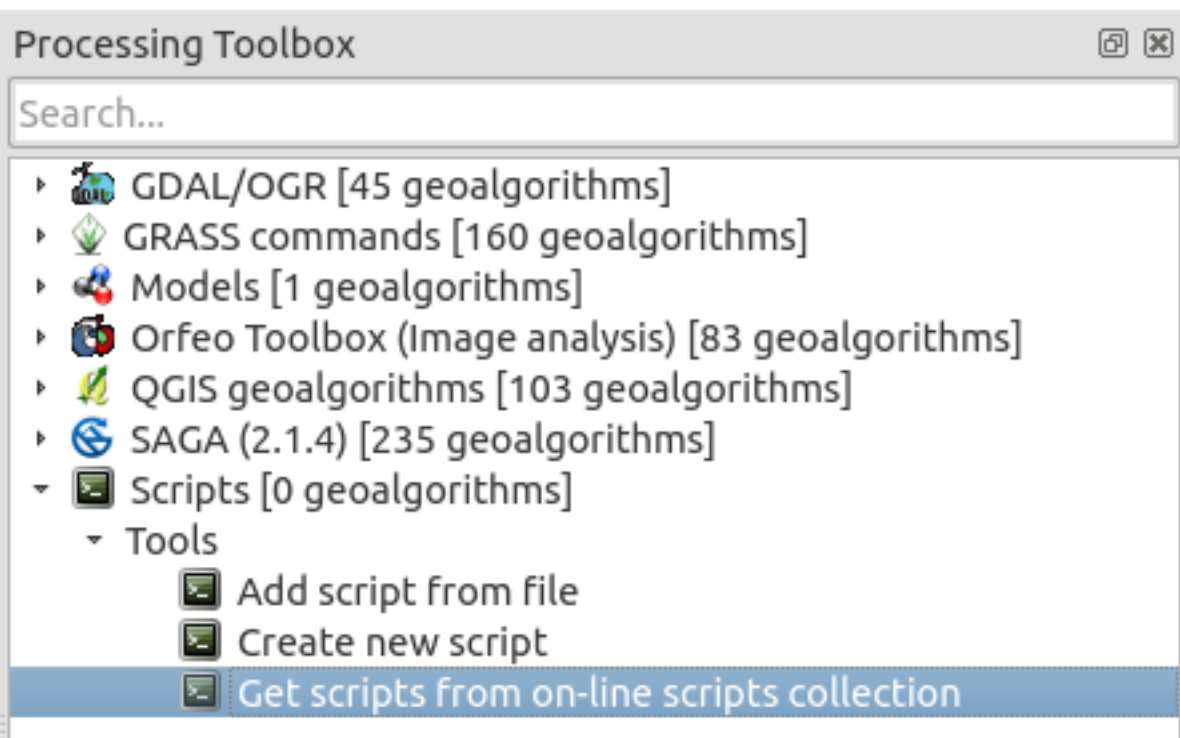
Layer rendering

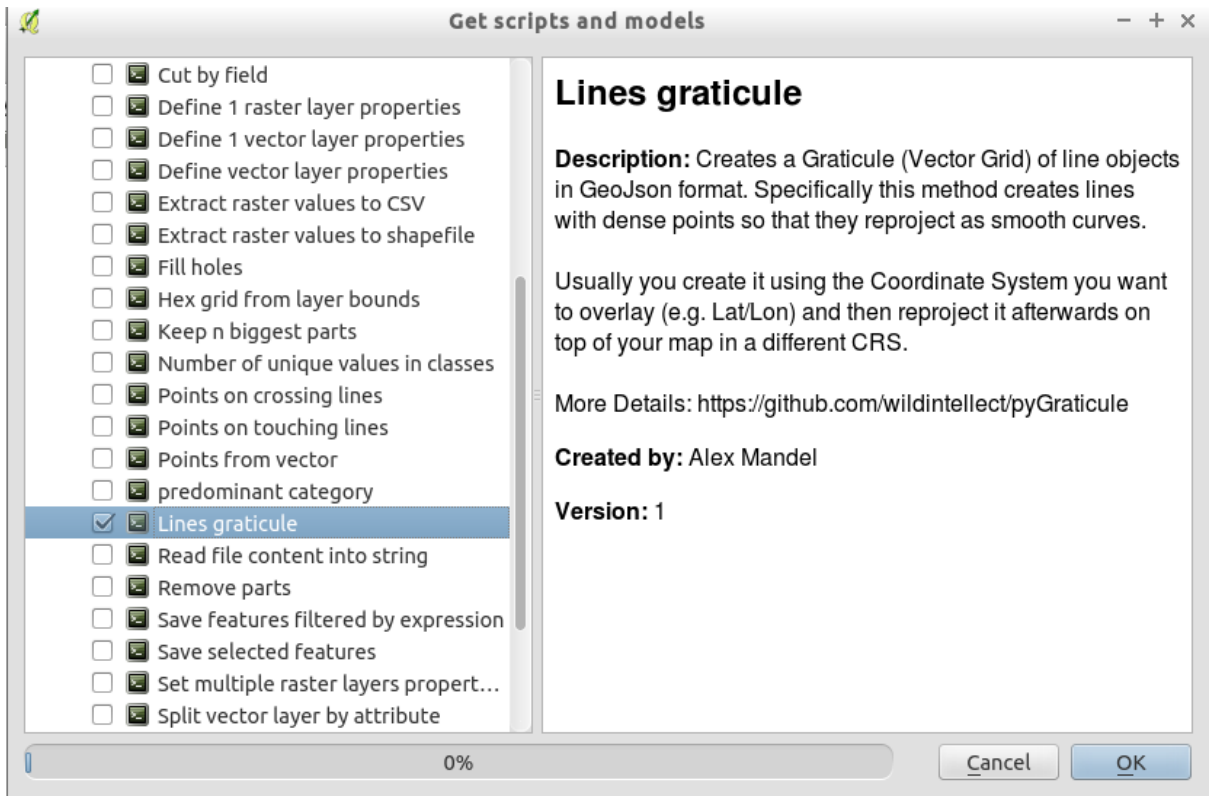
Layer transparency: 0

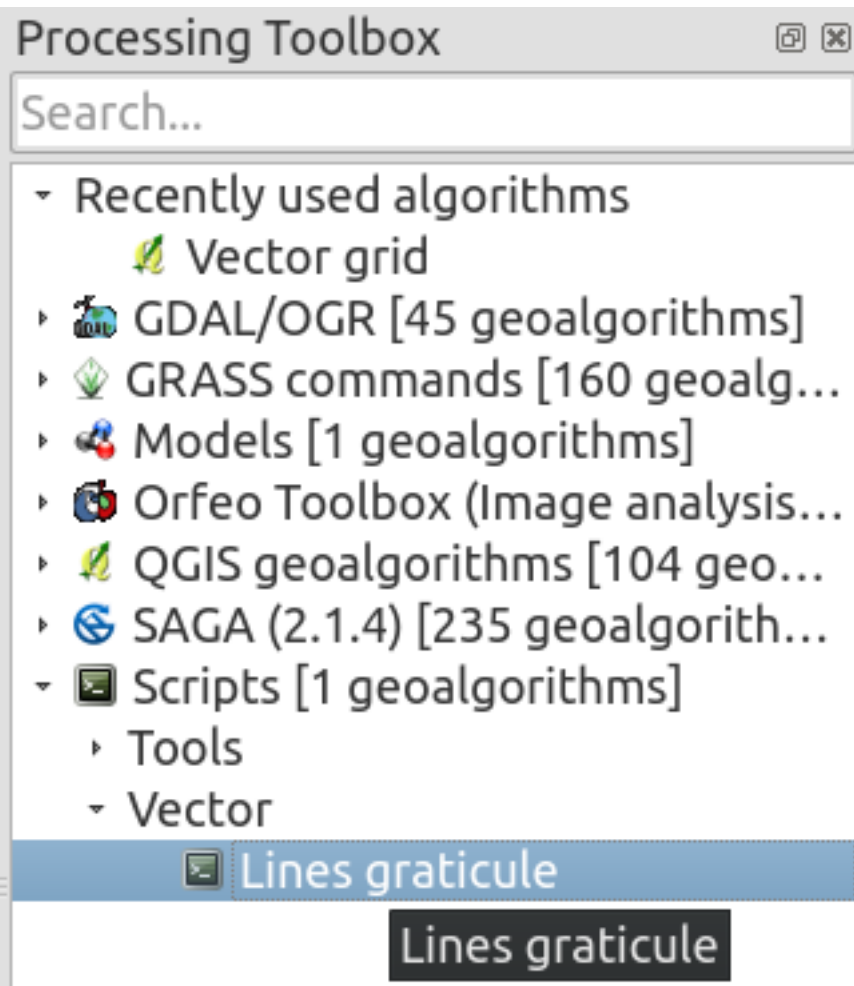
Buttons: Load Style..., Save As Default, Restore Default Style, Save Style, Help, Apply, Cancel, OK

Layers Browser

Coordinate: 262779,4463390 Scale: 1:91.455 Render EPSG:23030







Lines graticule - + x

Parameters Log Help Run as batch process...

xmin
-180

xmax
180

ymin
-90

ymax
90

spacing
10

density
1

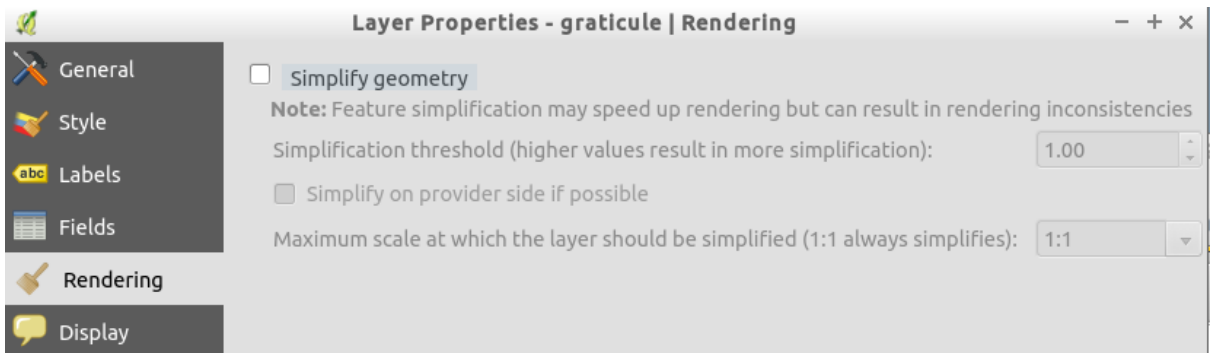
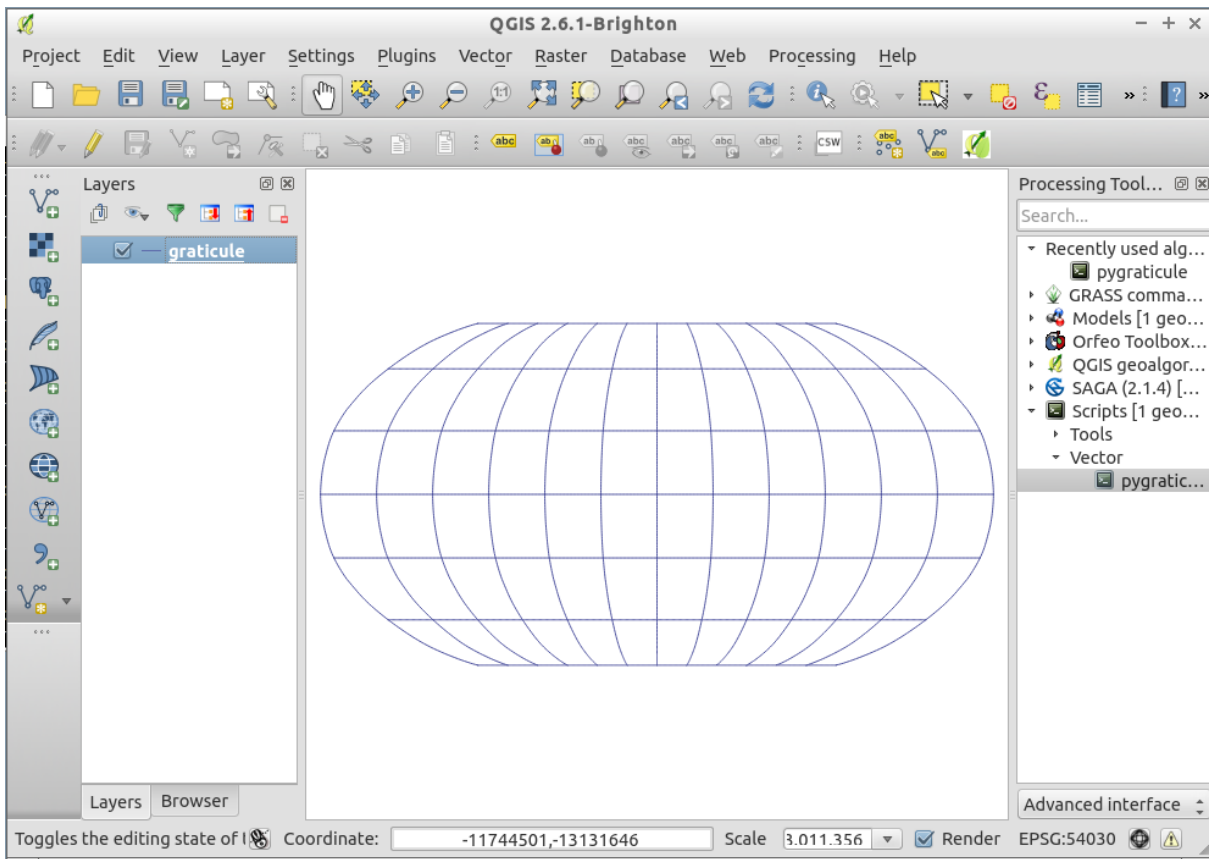
outfile
grid.json

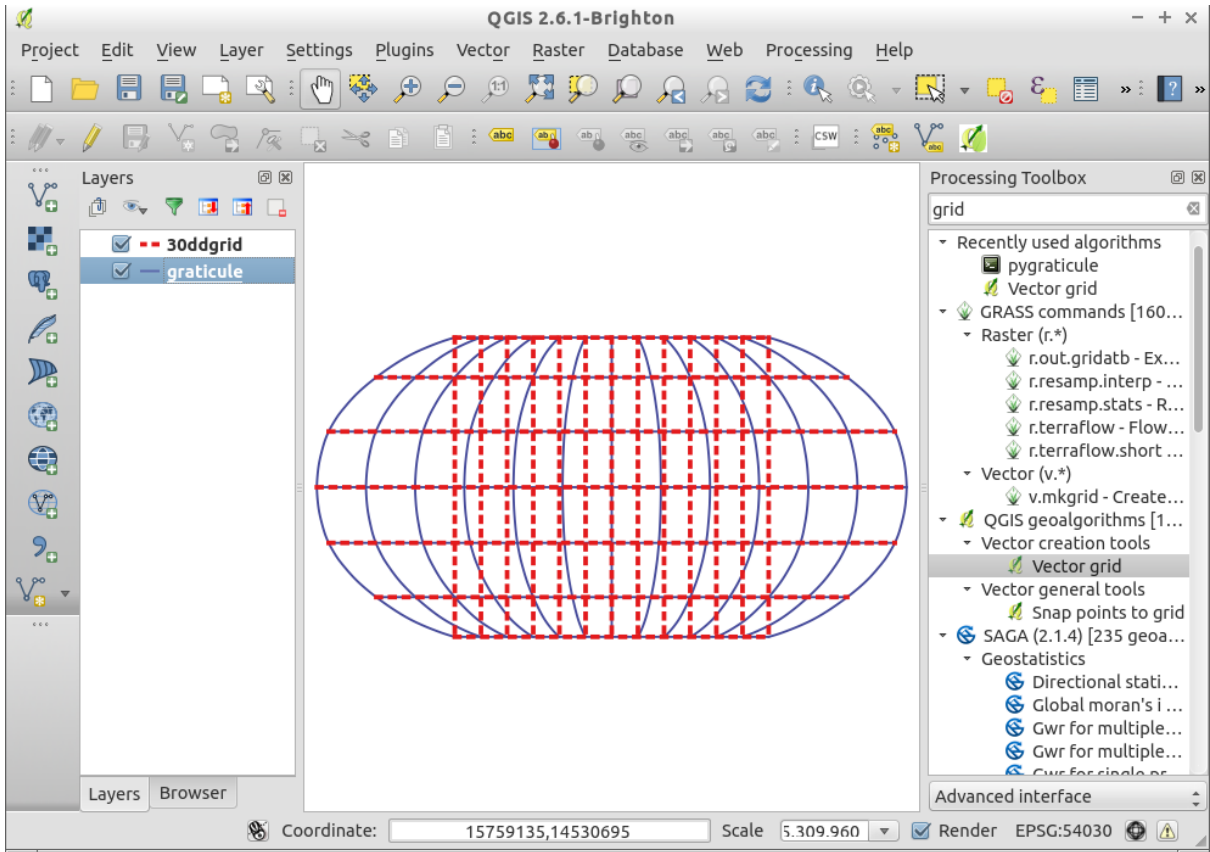
graticule
[Save to temporary file]

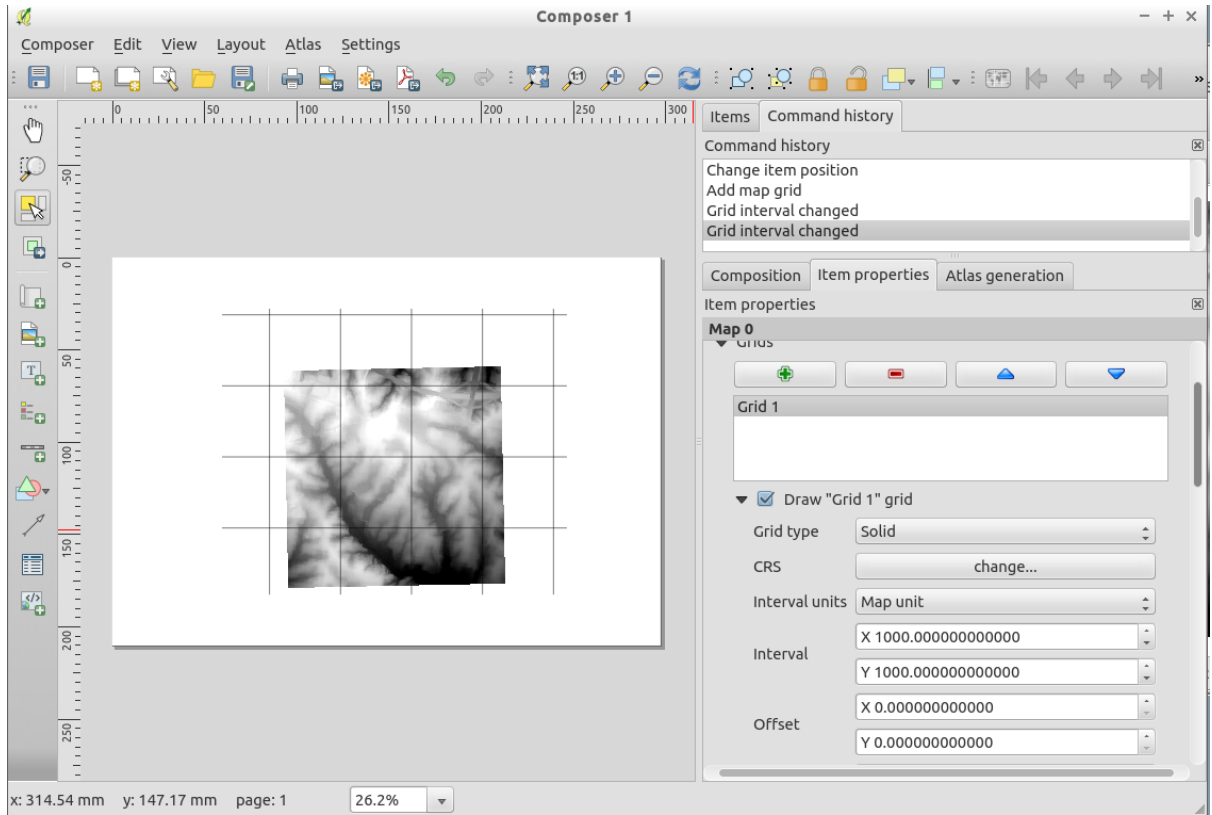
Open output file after running algorithm

0%

Close Run







Composer 1

Composer Edit View Layout Atlas Settings

0 50 100 150 200 250 300

-50 0 50 100 150 200 250

3959000.000 705000.000 706000.000 707000.000 708000.000 709000.000

3958000.000 3957000.000 3956000.000

705000.000 706000.000 707000.000 708000.000 709000.000

Items Command history

Command history

- Item frame toggled
- Changed annotation direction
- Changed annotation direction
- Changed annotation direction

Composition Item properties Atlas generation

Item properties

Map 0

Blend mode Normal

Grid frame

Draw coordinates

Format Decimal

Left Outside frame

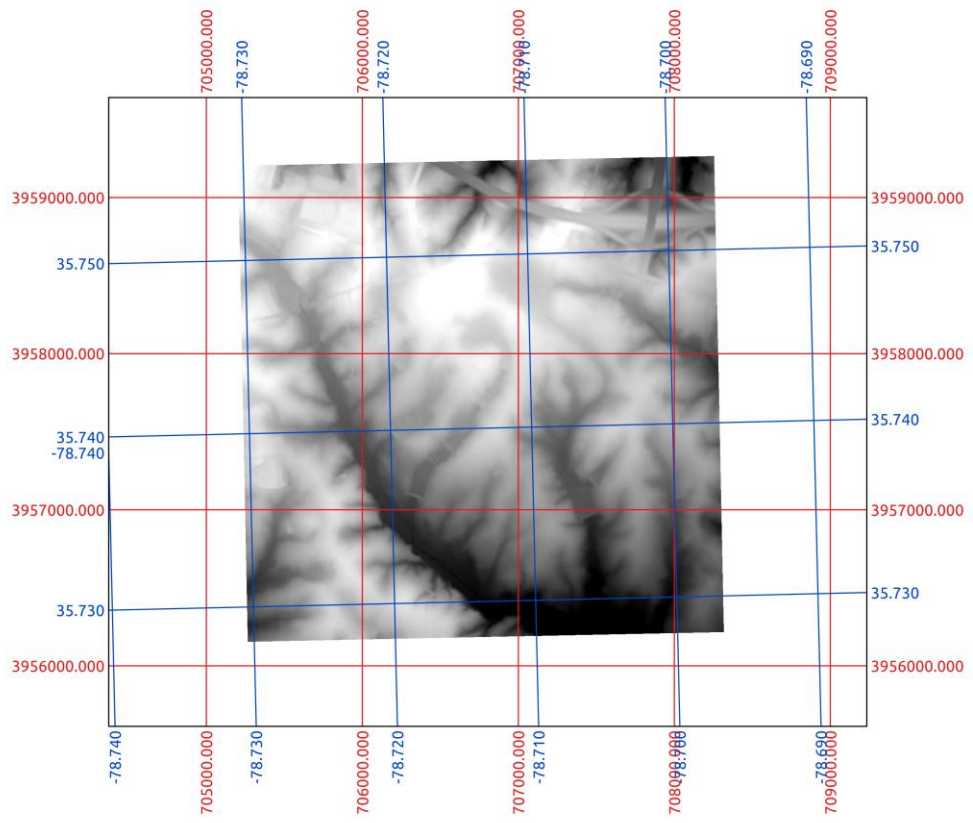
Right Outside frame

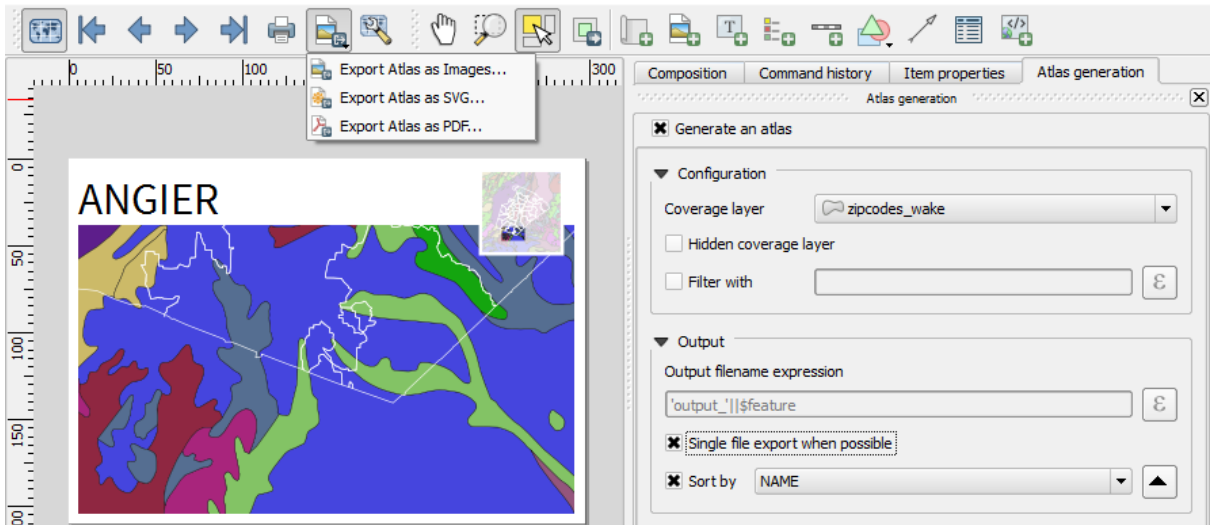
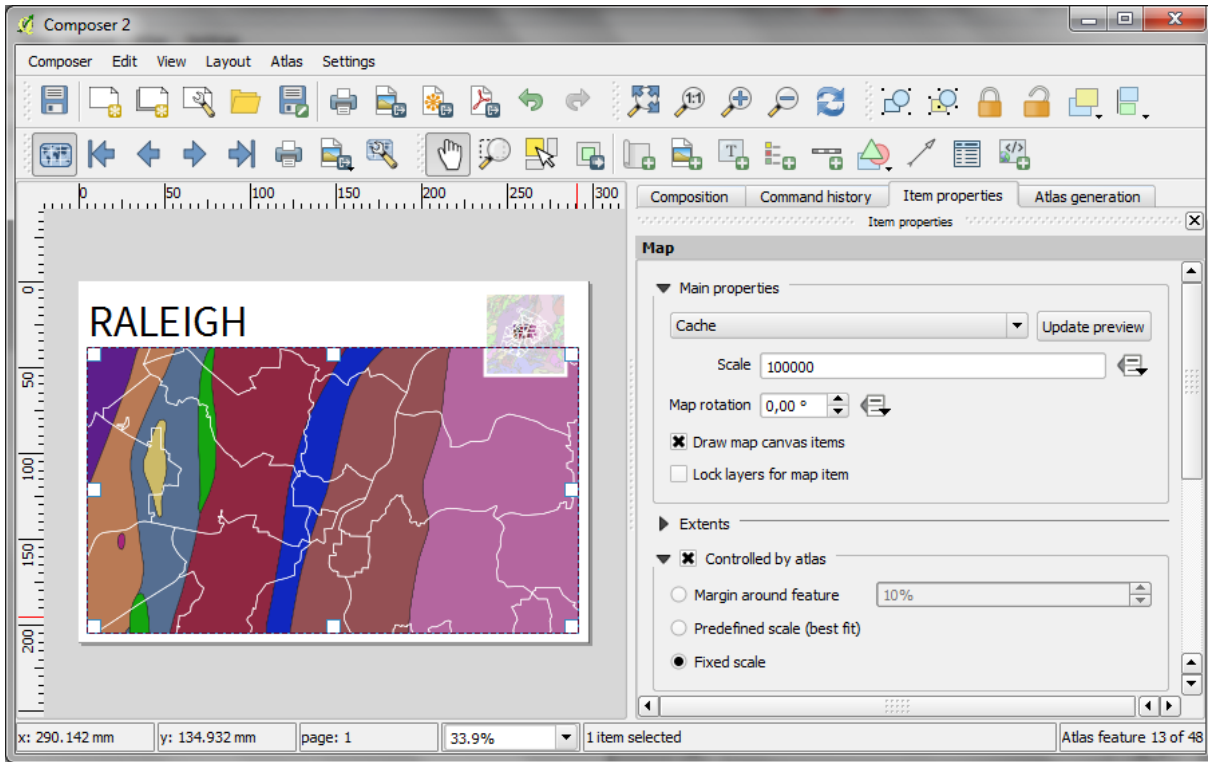
Top Outside frame

Bottom Outside frame

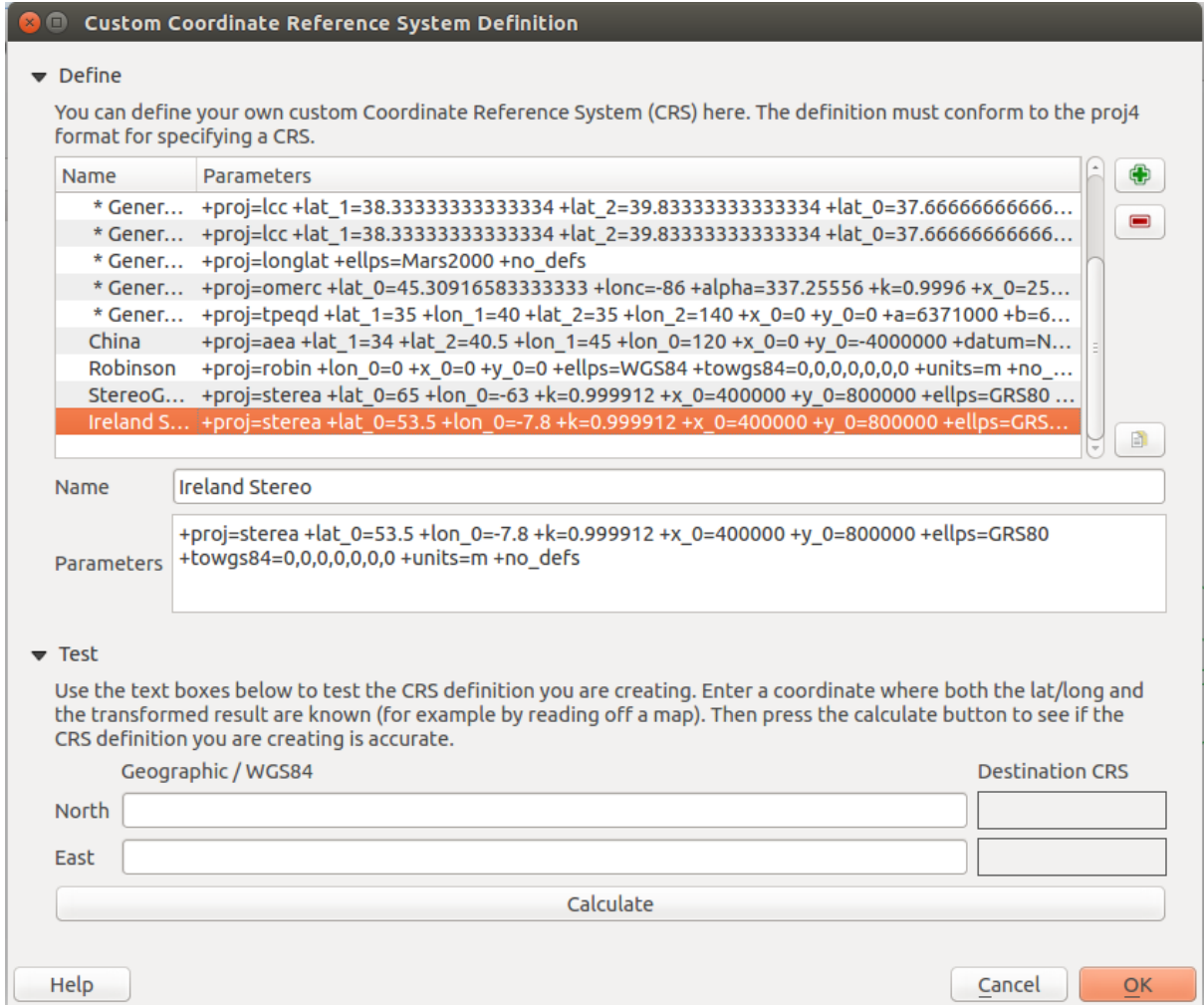
Font Font...

x: 310.5 mm y: 43.8625 mm page: 1 26.2%





Chapter 11: Extending QGIS



Project Properties | CRS

General

CRS

Identify layers

Default styles

OWS server

Macros

Relations

Enable 'on the fly' CRS transformation

Filter

Recently used coordinate reference systems

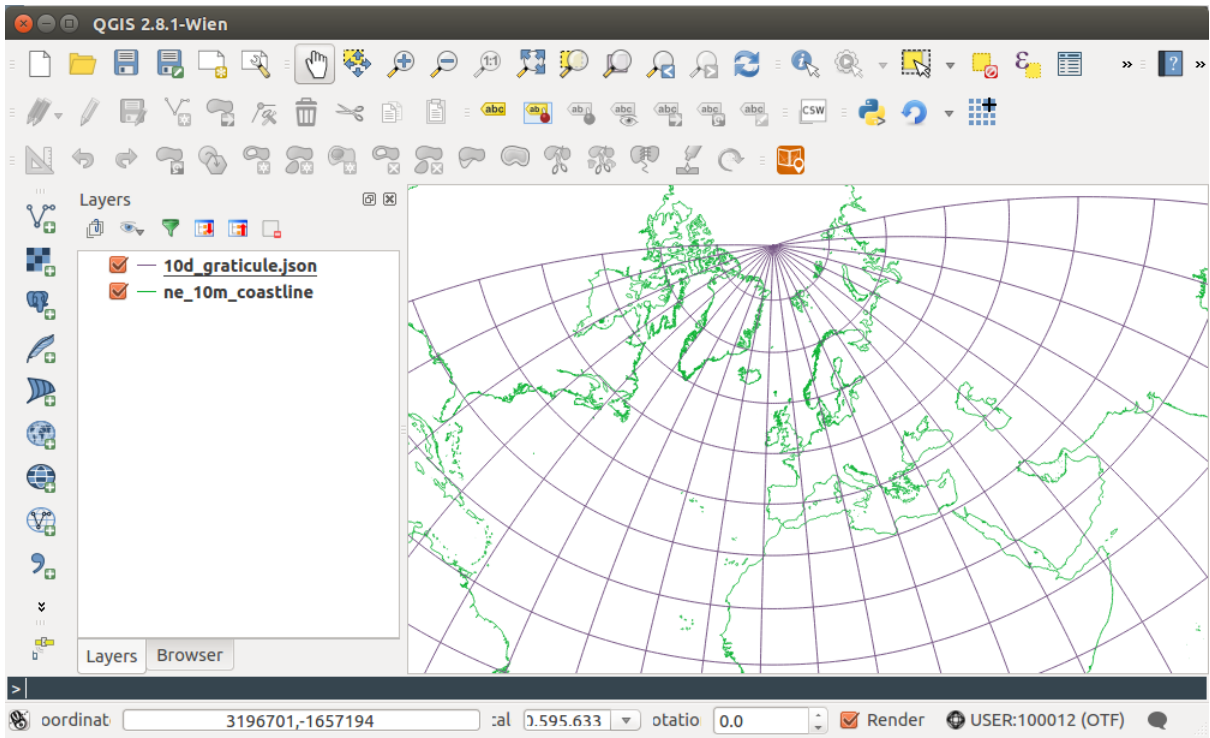
Coordinate Reference System	Authority ID
StereoGraphic Random	USER:100010
World_Robinson	EPSG:54030
World_Stereographic	EPSG:54026
* Generated CRS (+proj=aea +lat_1=34 +lat_2=40.5 +la...	USER:100001
* Generated CRS (+proj=tpeqd +lat_1=35 +lon_1=40 +l...	USER:100002
Ireland Stereographic	USER:100006
China	USER:100011
Sphere_Gall_Stereographic	EPSG:53016

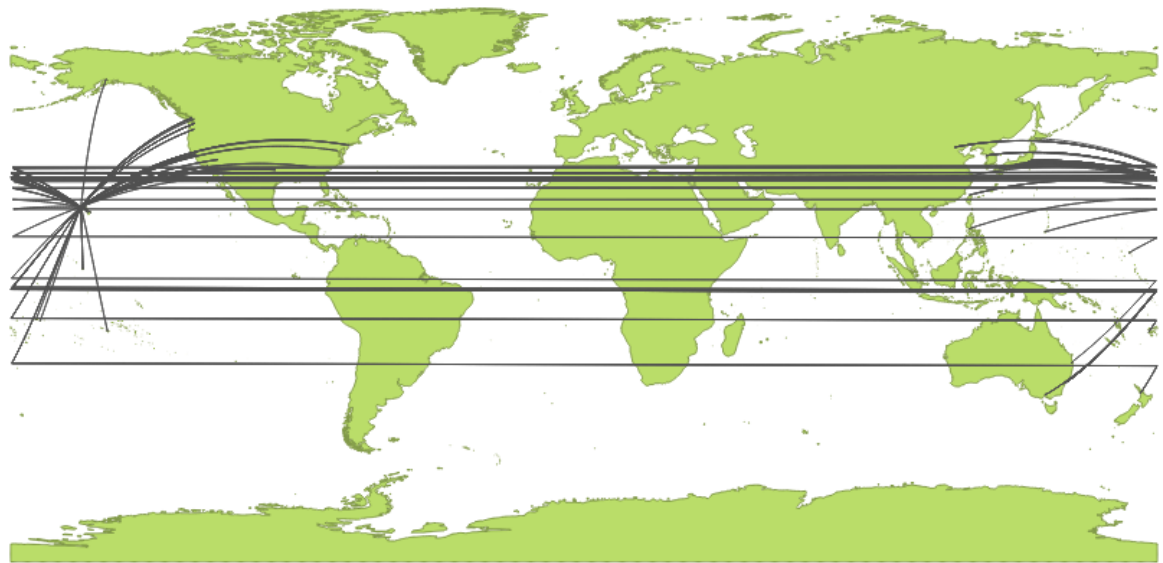
Coordinate reference systems of the world Hide deprecated CRSs

Coordinate Reference System	Authority ID
▶ Geographic Coordinate Systems	
▶ Projected Coordinate Systems	
▶ User Defined Coordinate Systems	

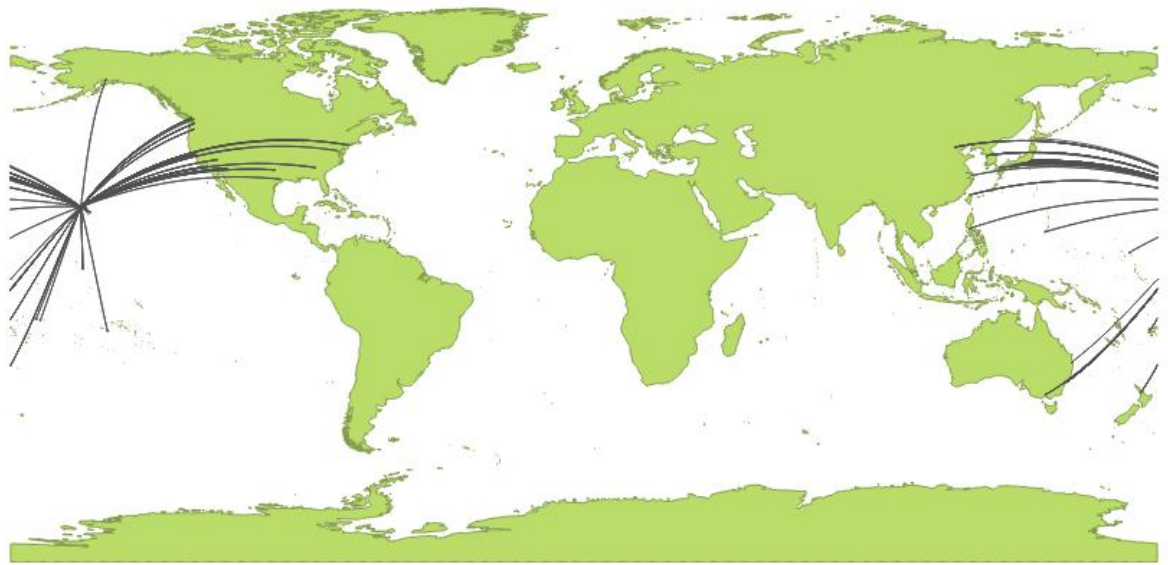
Selected CRS:

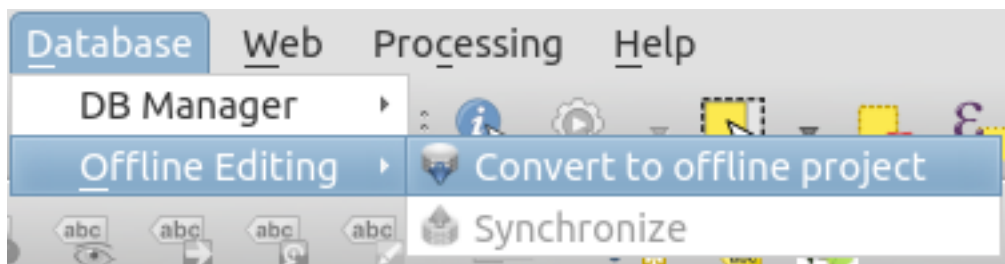
Help Apply Cancel **OK**

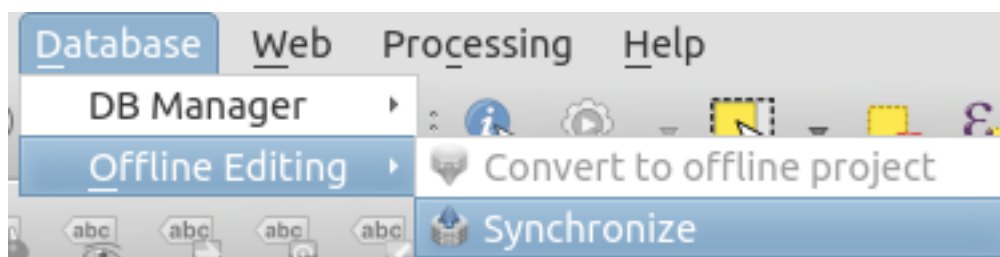
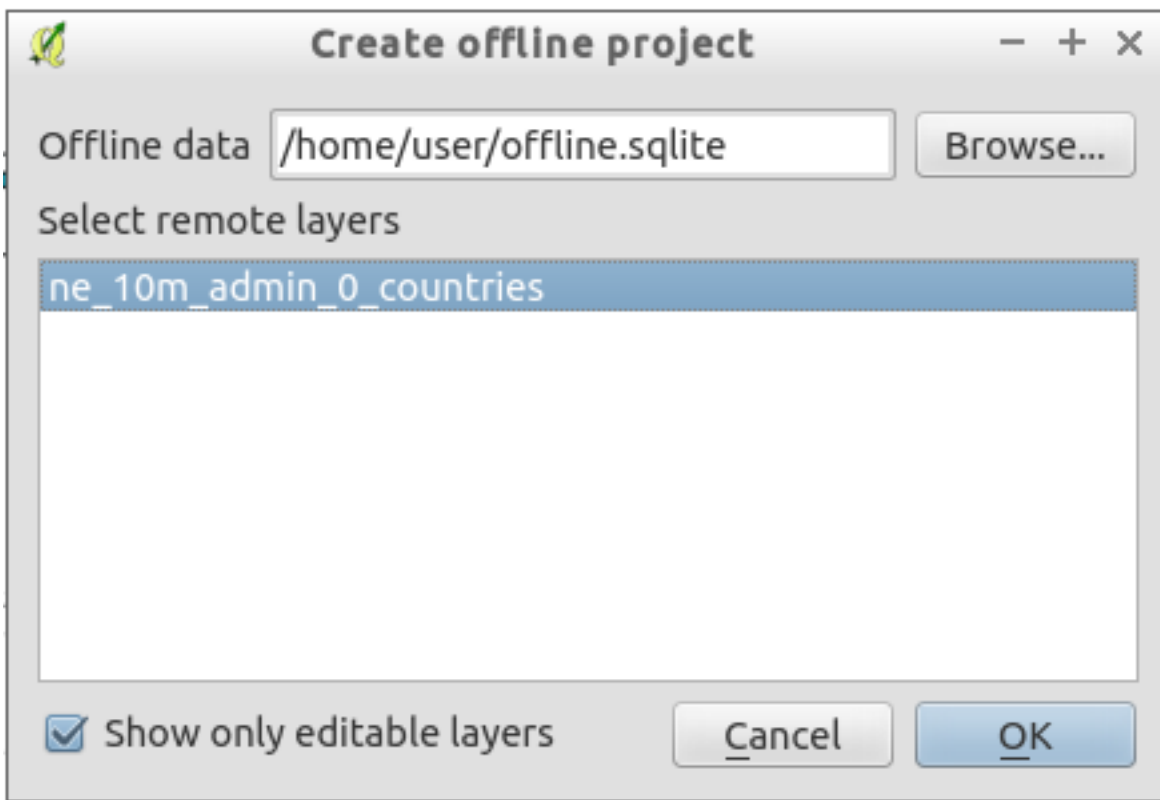


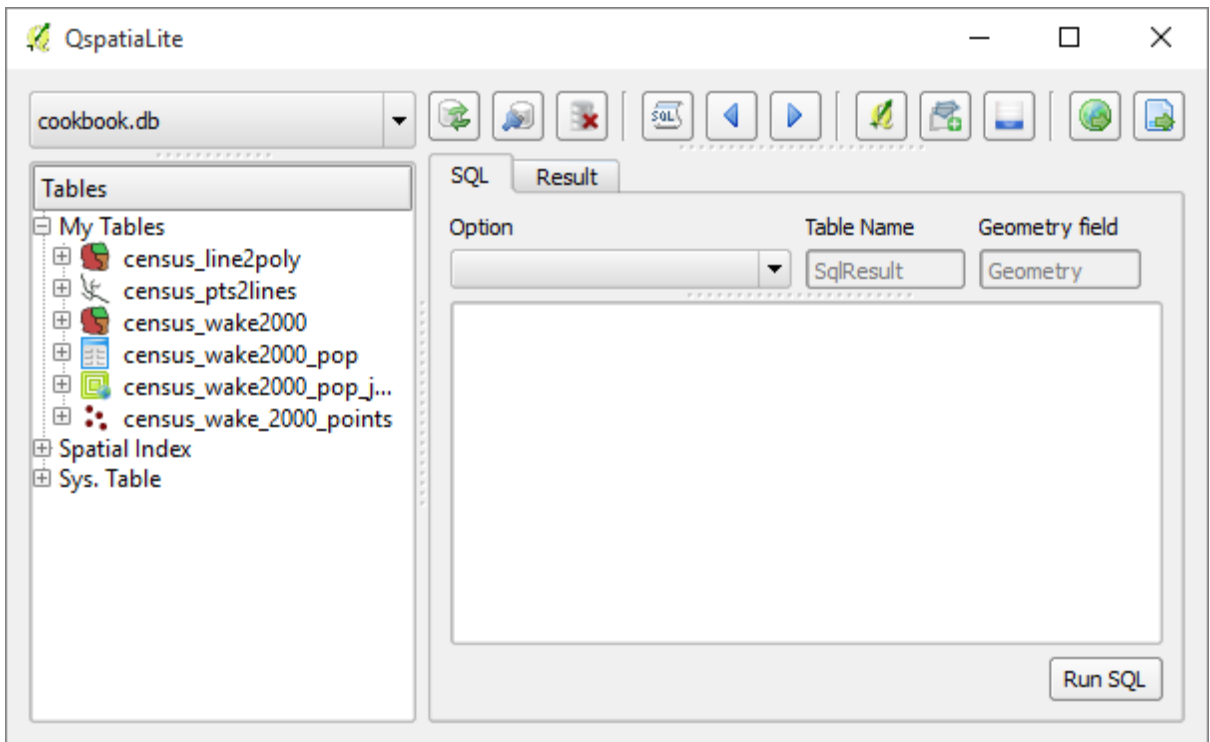


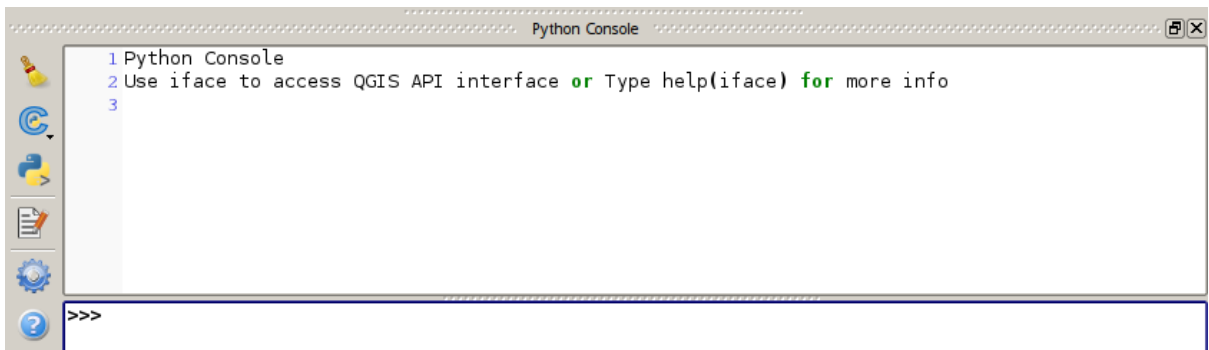
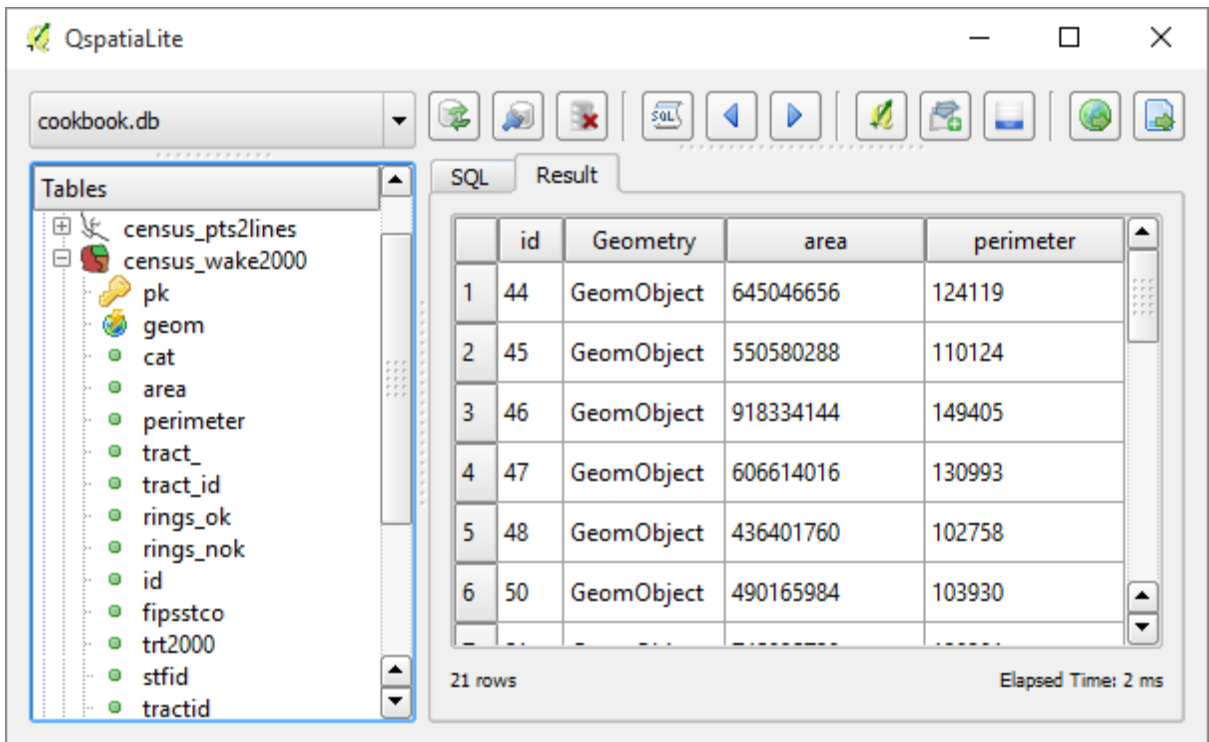


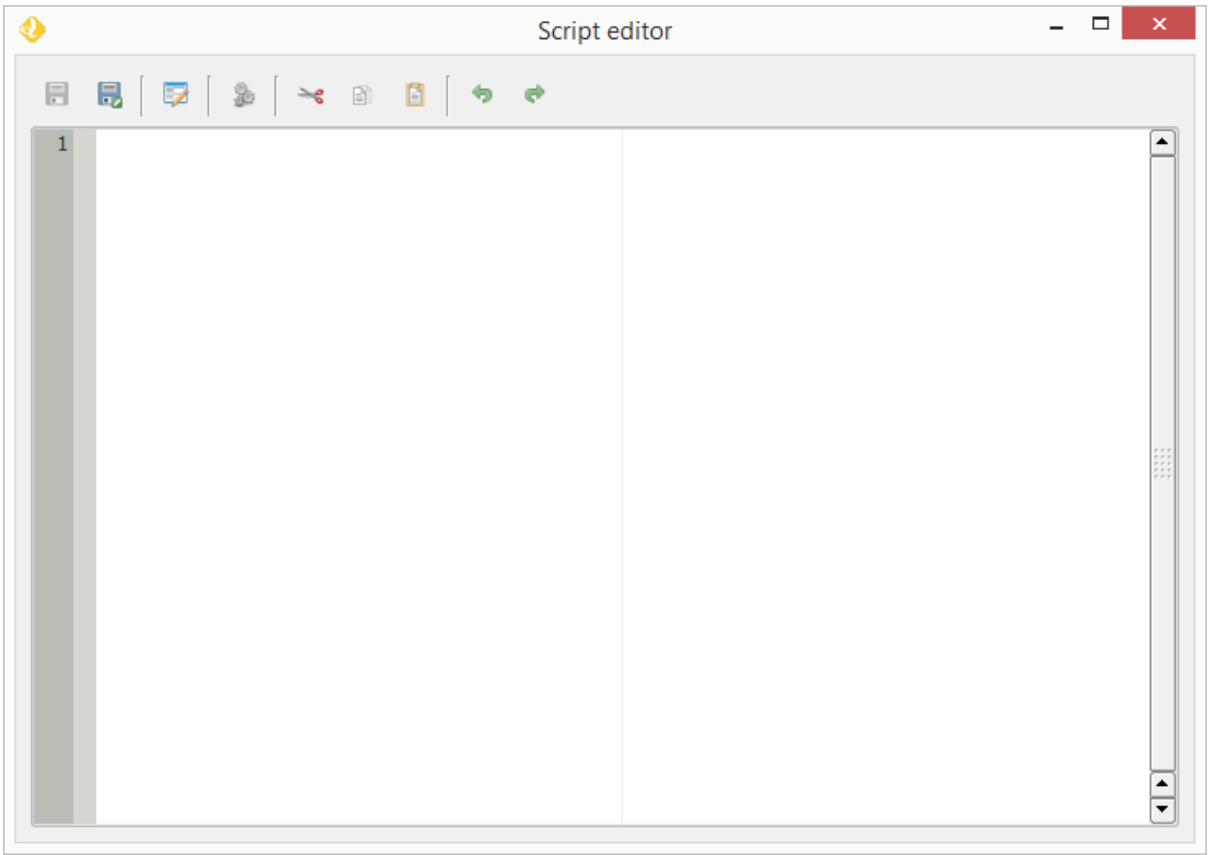


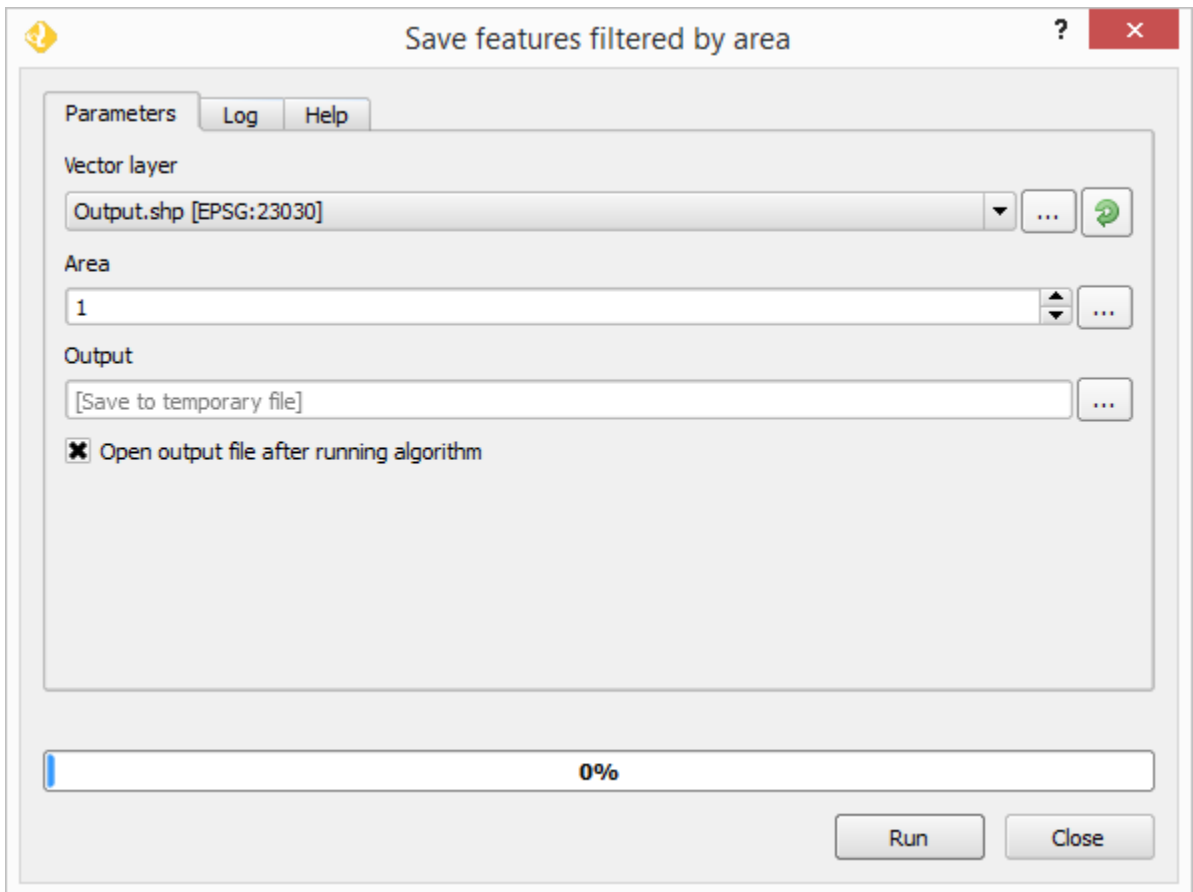


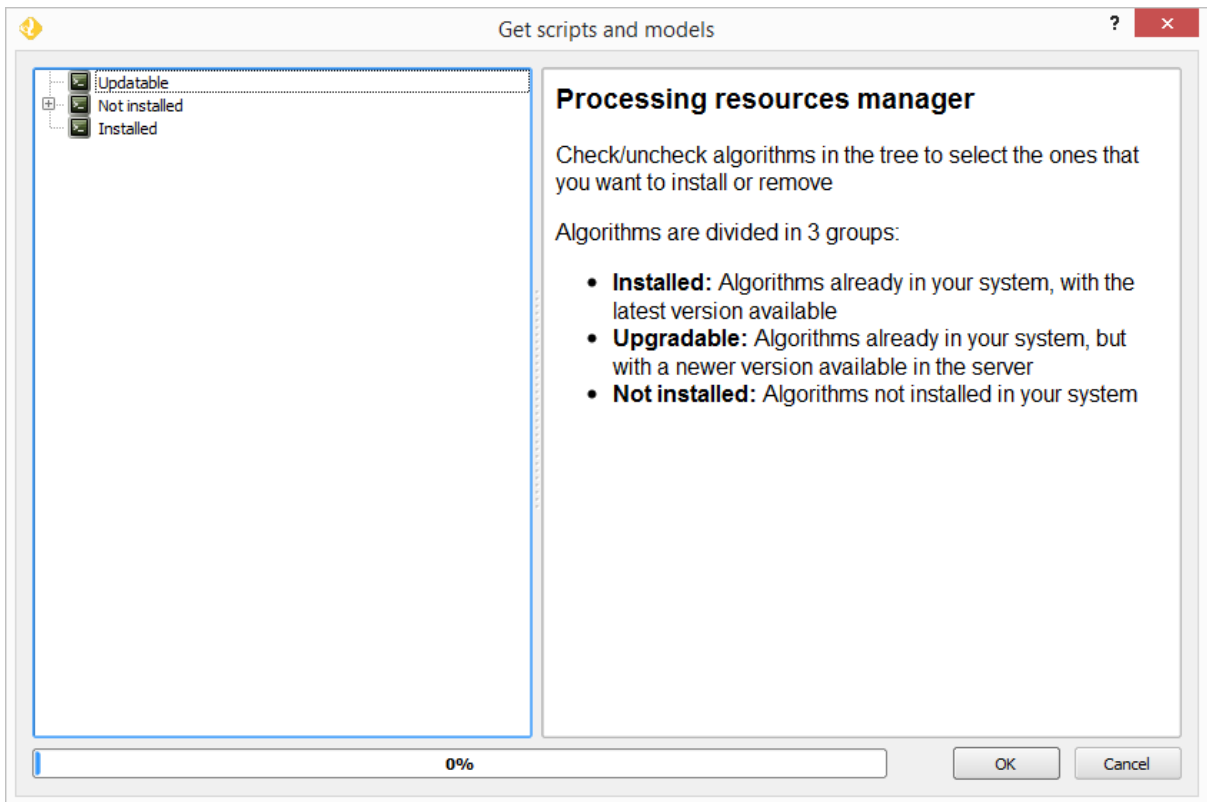












QGIS Plugin Builder - Version 2.6.0

QGIS Plugin Builder

Class name: LayerInfoPlugin

Plugin name: Layer Info

Description: Prints out detailed layer info

Module name: layerinfo

Version number: 0.1

Minimum QGIS version: 2.0

Text for the menu item: Print layer info

Author/Company: author

Email address: email@author.com

Optional Items

Bug tracker:

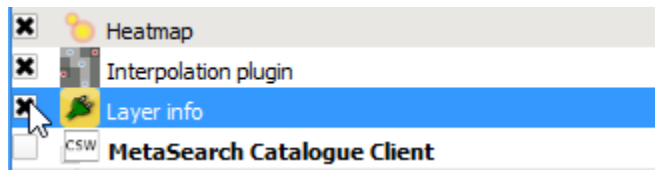
Home page:

Repository:

Tags:

Flag the plugin as experimental

OK Cancel Help



```
Python Console  
1 Python Console  
2 Use iface to access QGIS API interface or Type help(iface) for more info  
3 ---LAYERS INFO---  
4 Layer name: polygons  
5 Layer source d:\gisdata\polygons.shp  
6 Extent: 270811.90074728656327352 4458911.36209587845951319, 270869.14394386007916182 4458997.23617605771869421  
7  
8  
>>> |
```

spatialite_gui [a GUI tool for SQLite/Spatialite]

Files

/home/alex/Dropbox/Cookbook/

- User Data
 - census_line2poly
 - census_pts2lines
 - census_wake2000
 - census_wake2000_
 - census_wake2000_
 - census_wake_2000
 - idx_census_wake2
 - idx_census_wake2
 - idx_census_wake2
 - idx_census_wake2
- ISO / INSPIRE Metadata
- Styling (SLD/SE)
- Topologies
- Metadata
- Internal Data
- Spatial Index

```

SELECT ROWID, "pk", "geom", "cat", "area", "perimeter", "tract_",
FROM "census_wake2000"
ORDER BY ROWID

```

	ROWID	pk	geom	cat	area	perimeter
1	1	1	BLOB sz=1525 GEOMETRY	1.000000	22972440	19078.578000
2	2	2	BLOB sz=1045 GEOMETRY	2.000000	10661711	15741.200000
3	3	3	BLOB sz=1261 GEOMETRY	3.000000	19210890	19559.209000
4	4	4	BLOB sz=1693 GEOMETRY	4.000000	36977280	29147.926000
5	5	5	BLOB sz=1525 GEOMETRY	5.000000	17838696	22942.080000
6	6	6	BLOB sz=1525 GEOMETRY	6.000000	21057876	23591.533000
7	7	7	BLOB sz=1213 GEOMETRY	7.000000	23840844	23395.316000
8	8	8	BLOB sz=1525 GEOMETRY	8.000000	16212101	17587.387000

current block: 1 / 105 [105 rows] [fetched in 00:00:00.020]

Current SQLite DB: /home/alex/Dropbox/Qgis2Cookbook/Data/cookbook.db

Filename

Format ▾

Compress Ratio

Encoding ▾

Rolename ▾

Format Custom or tar

Filename /home/alex/topology-test.backup

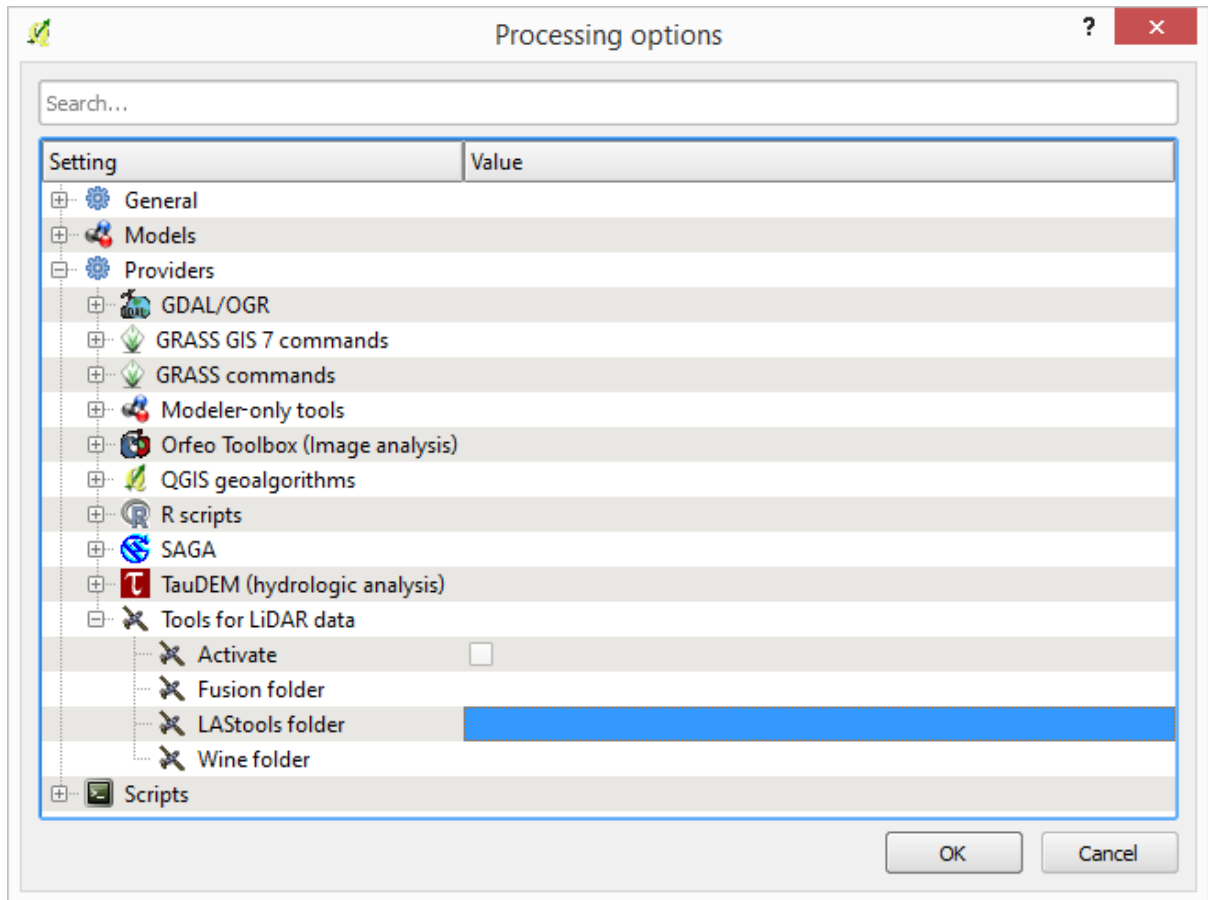
Number Of Jobs 2

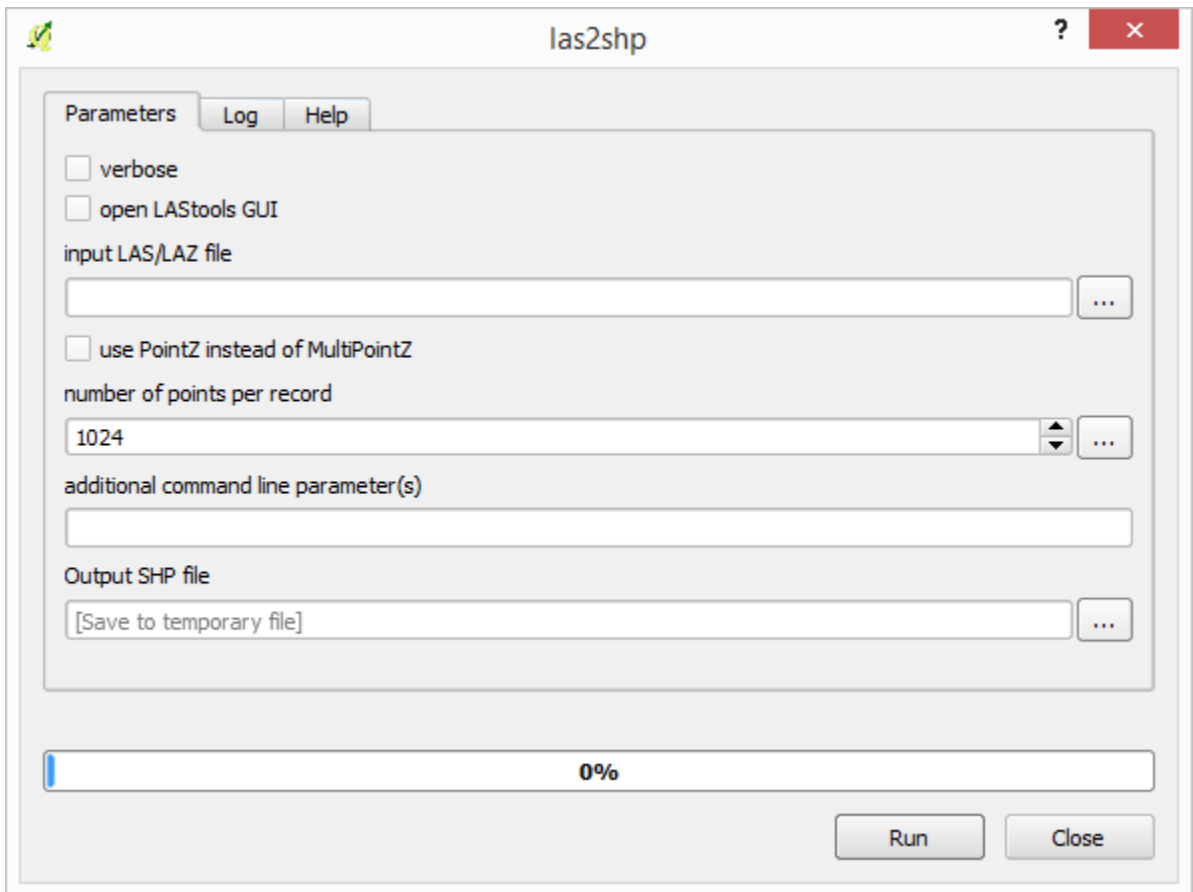
Rolename postgres

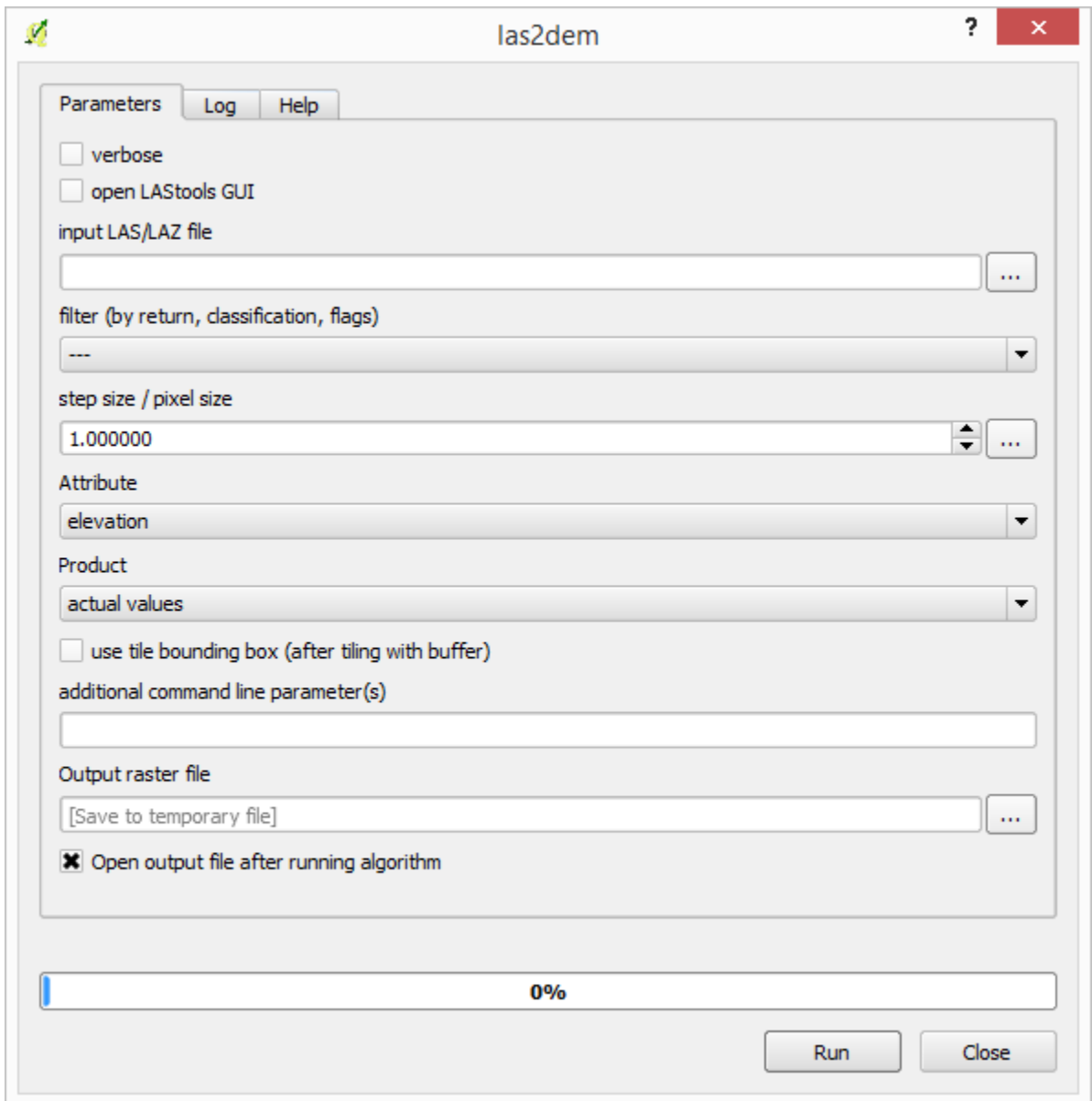
File Options Restore Options #1 Restore Options #2 Objects Messages

Help Display objects Restore Cancel

Chapter 12: Up and Coming







Add vector layer

Source type

File
 Directory
 Database
 Protocol

Encoding: System

Source

Type: OpenFileGDB

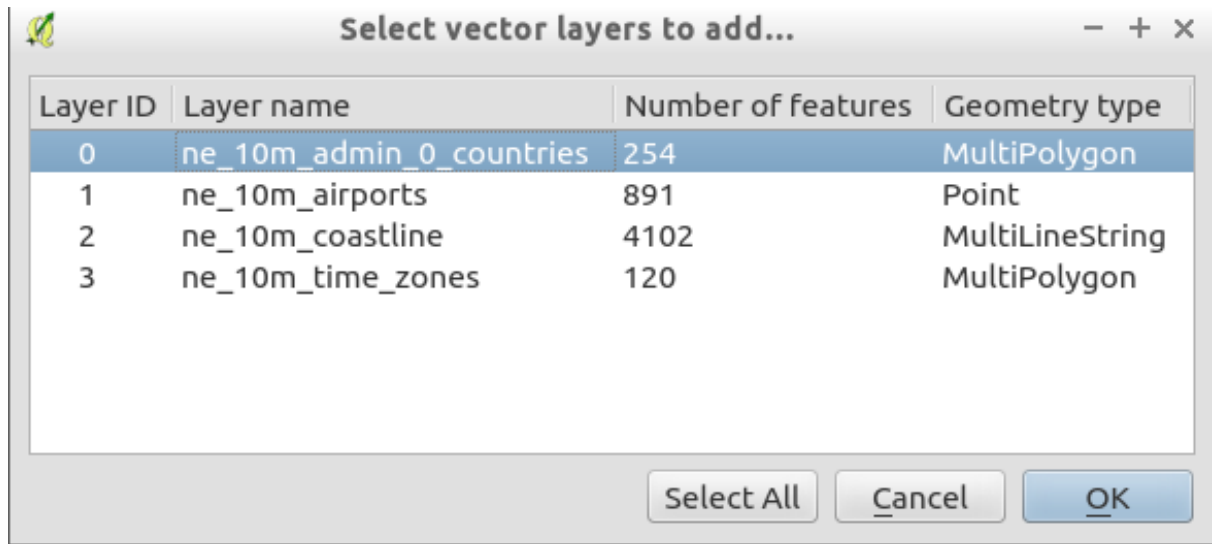
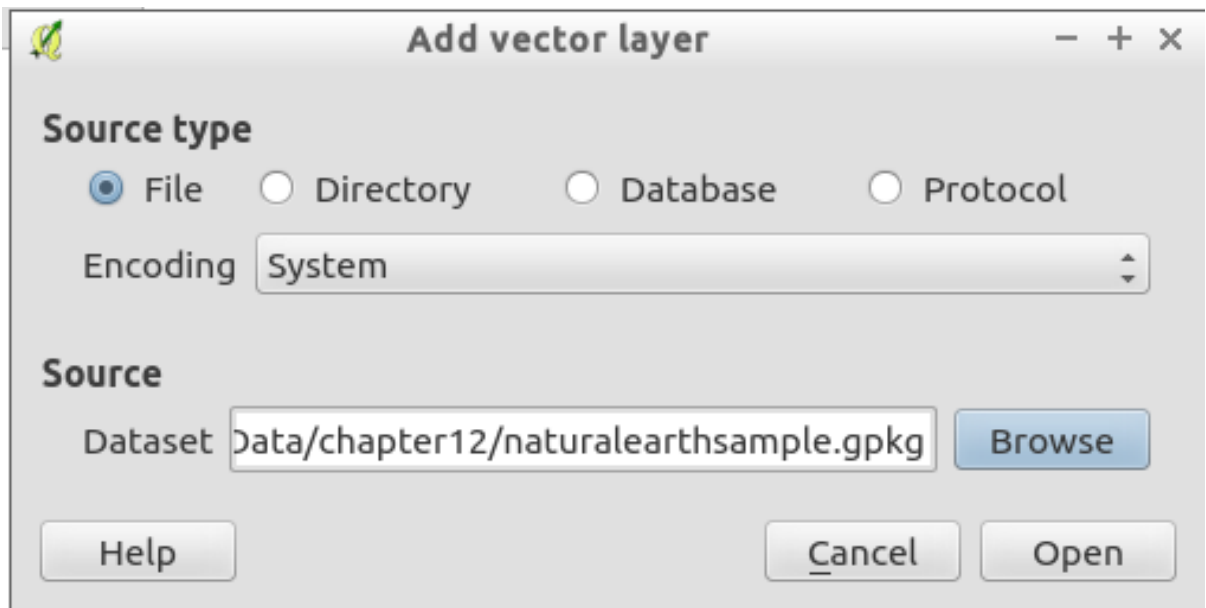
Dataset: /Data/chapter12/naturalearthsample.gdb Browse

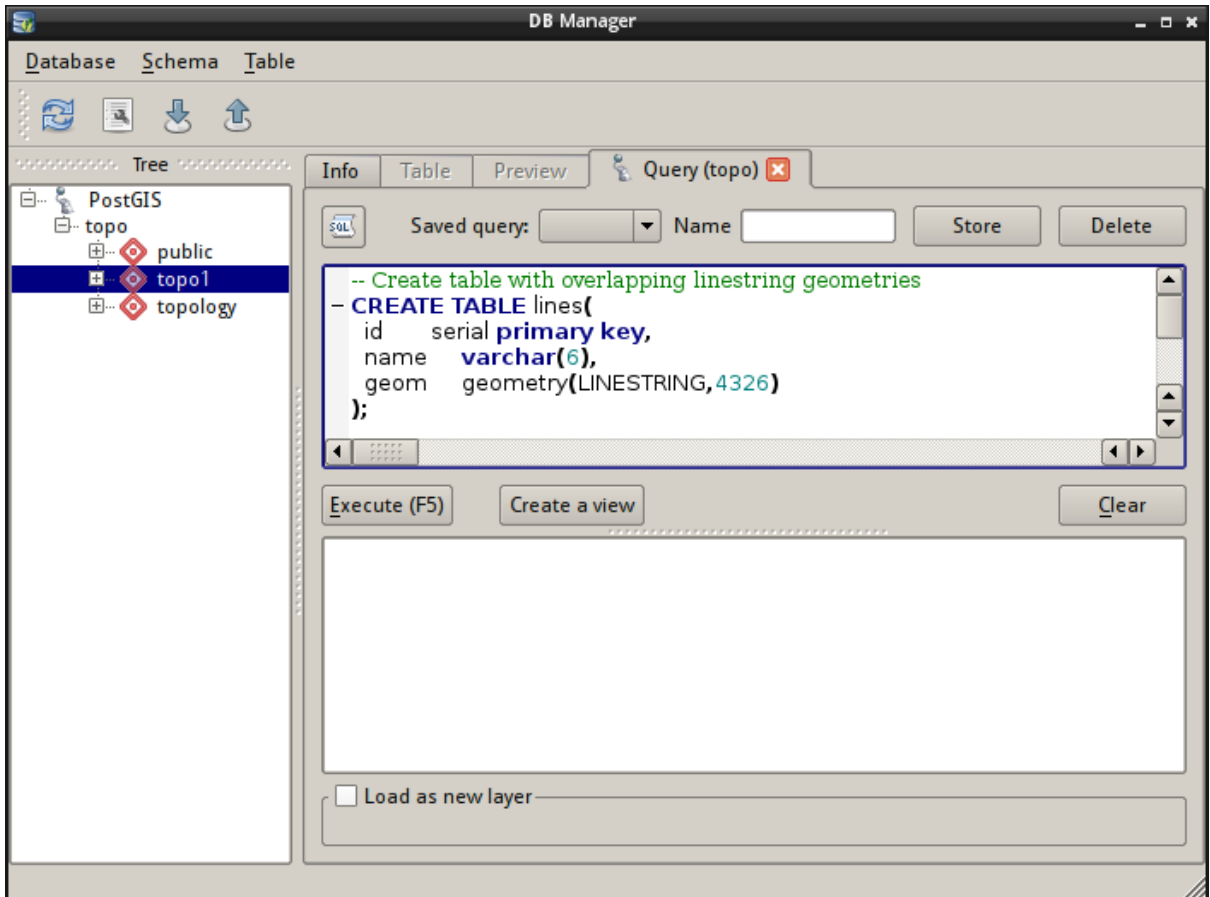
Help
Cancel
Open

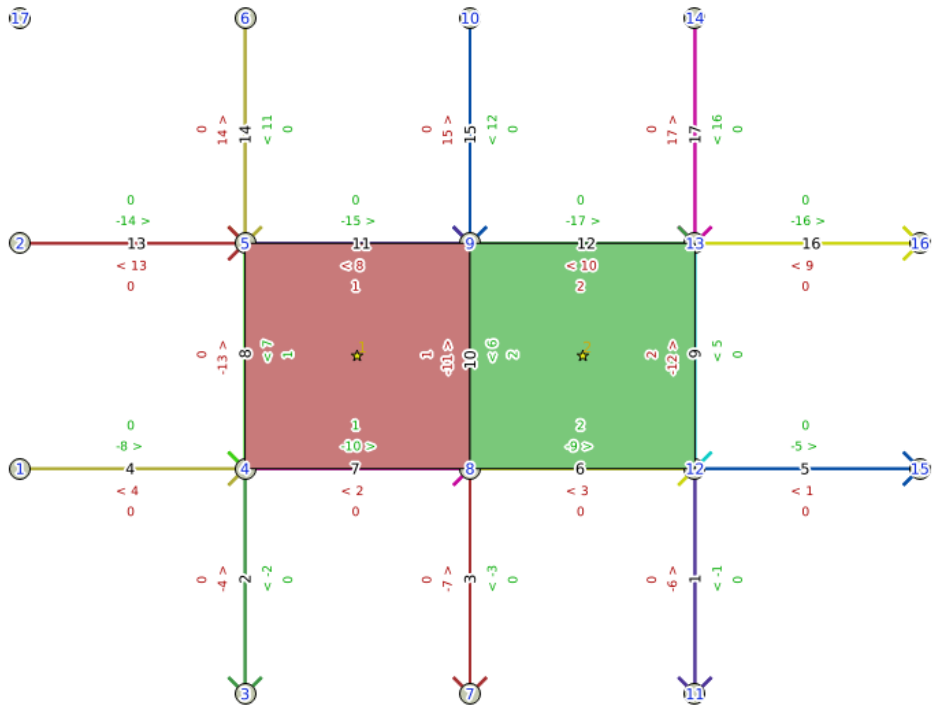
Select vector layers to add...

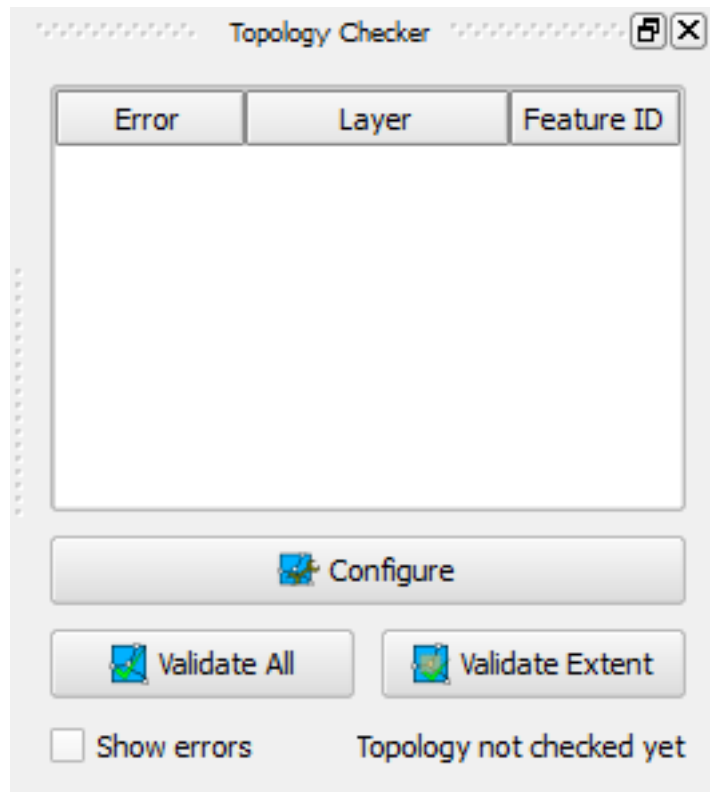
Layer ID	Layer name	Number of features	Geometry type
0	ne_10m_admin_0_countries	254	MultiPolygon
1	ne_10m_airports	891	Point
2	ne_10m_coastline	4102	MultiLineString
3	ne_10m_time_zones	120	MultiPolygon

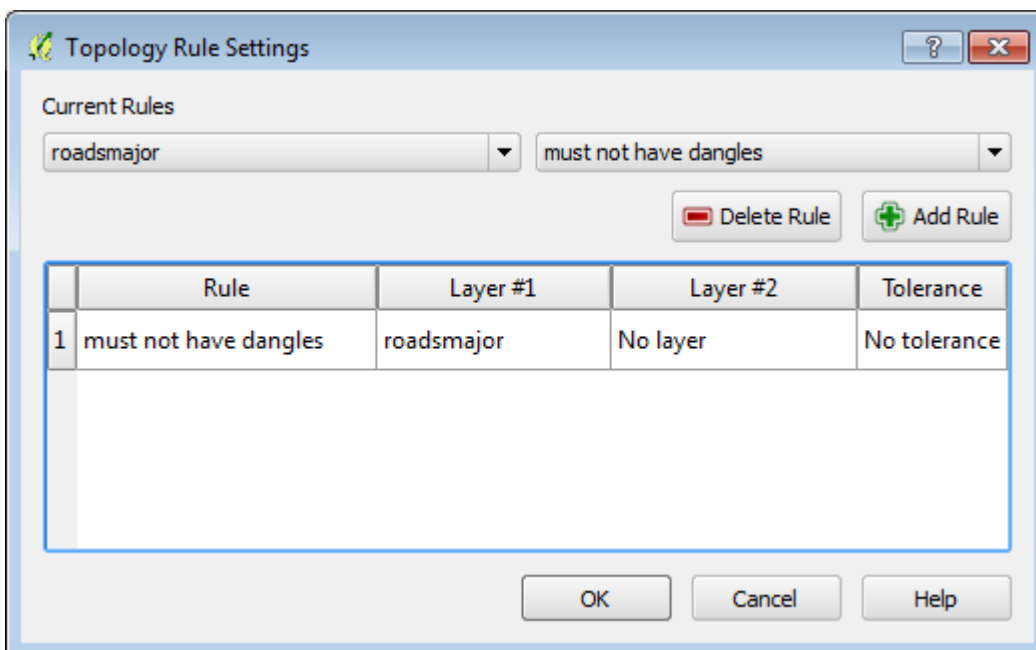
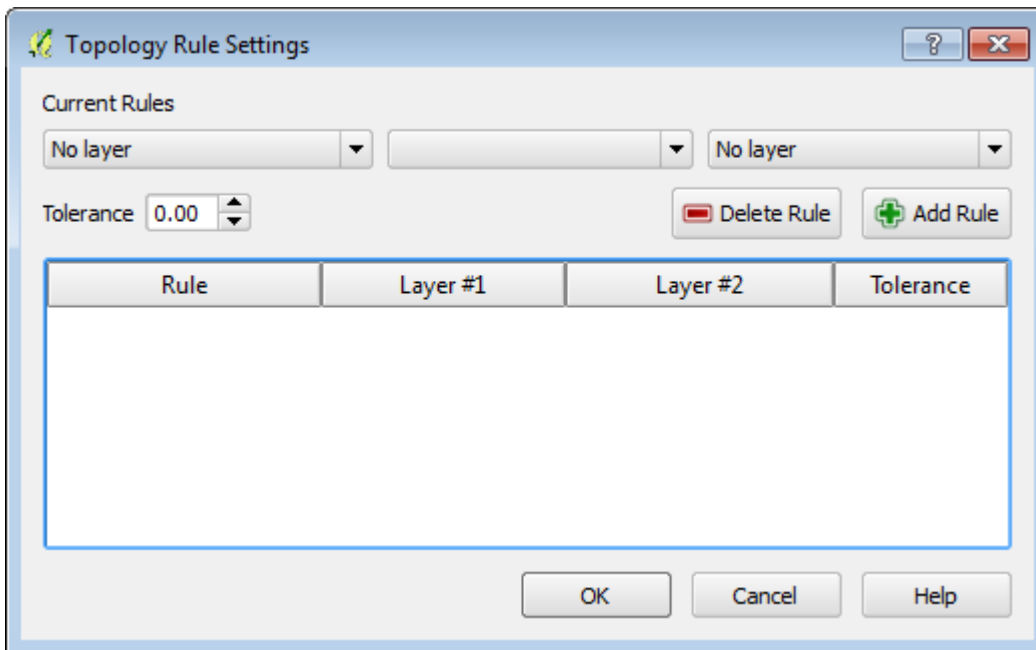
Select All
Cancel
OK

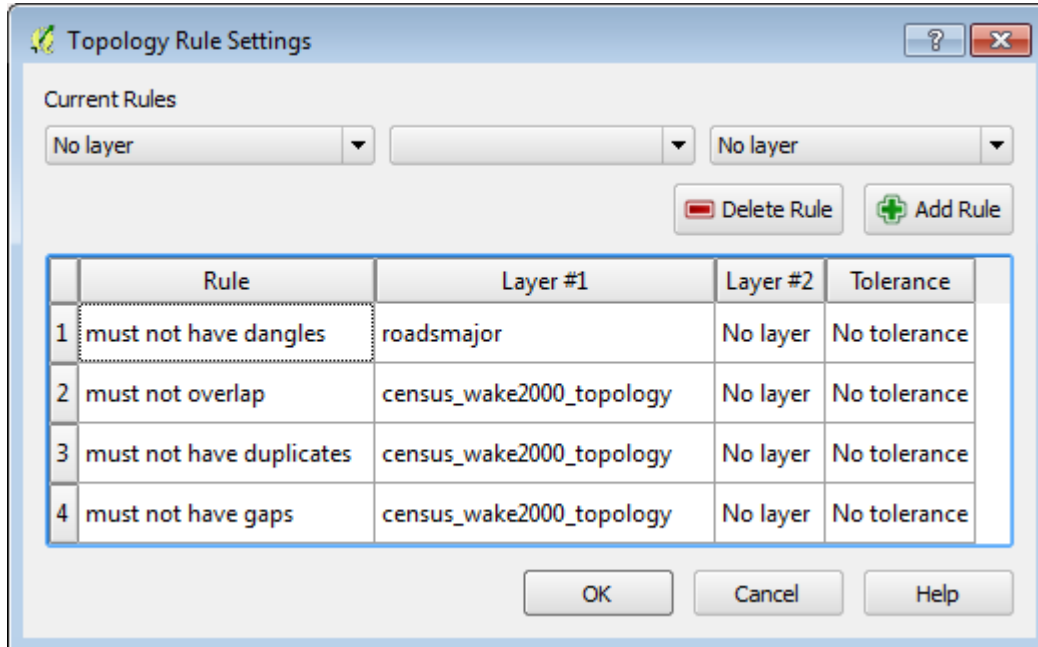















Topology Checker

	Error	Layer	Feature ID
37	dangling end	roadsmajor	156
38	dangling end	roadsmajor	84
39	dangling end	roadsmajor	130
40	overlaps	census_wake2000_topology	79
41	overlaps	census_wake2000_topology	84
42	overlaps	census_wake2000_topology	85
43	duplicate geometry	census_wake2000_topology	37
44	duplicate geometry	census_wake2000_topology	56
45	gaps	census_wake2000_topology	0
46	gaps	census_wake2000_topology	0
47	gaps	census_wake2000_topology	0
48	gaps	census_wake2000_topology	0

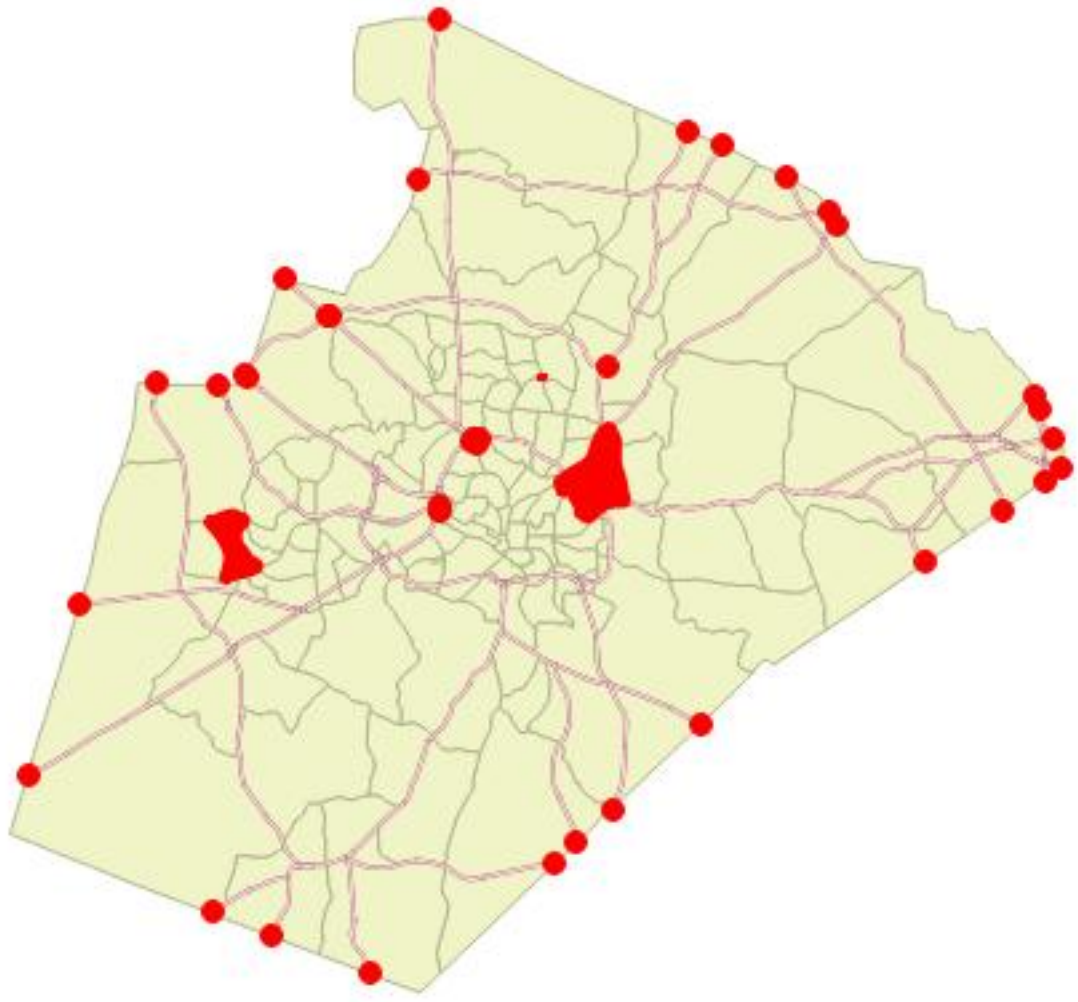
 Configure

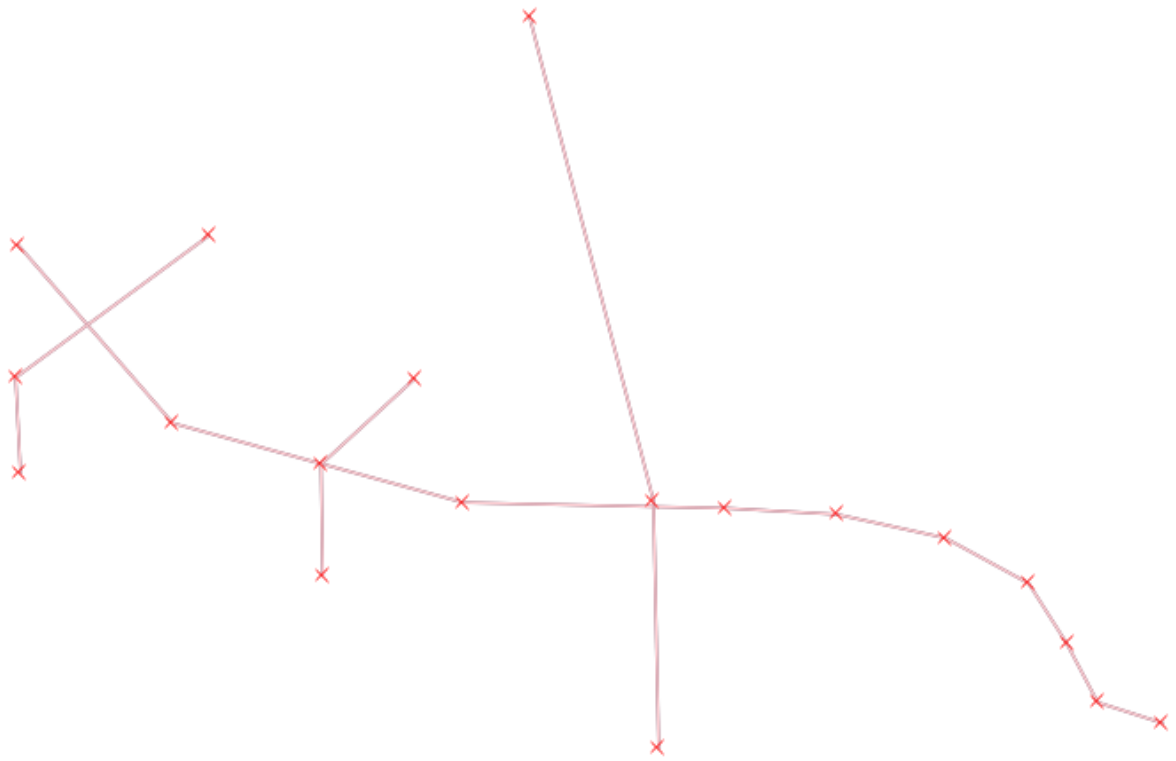
 Validate All

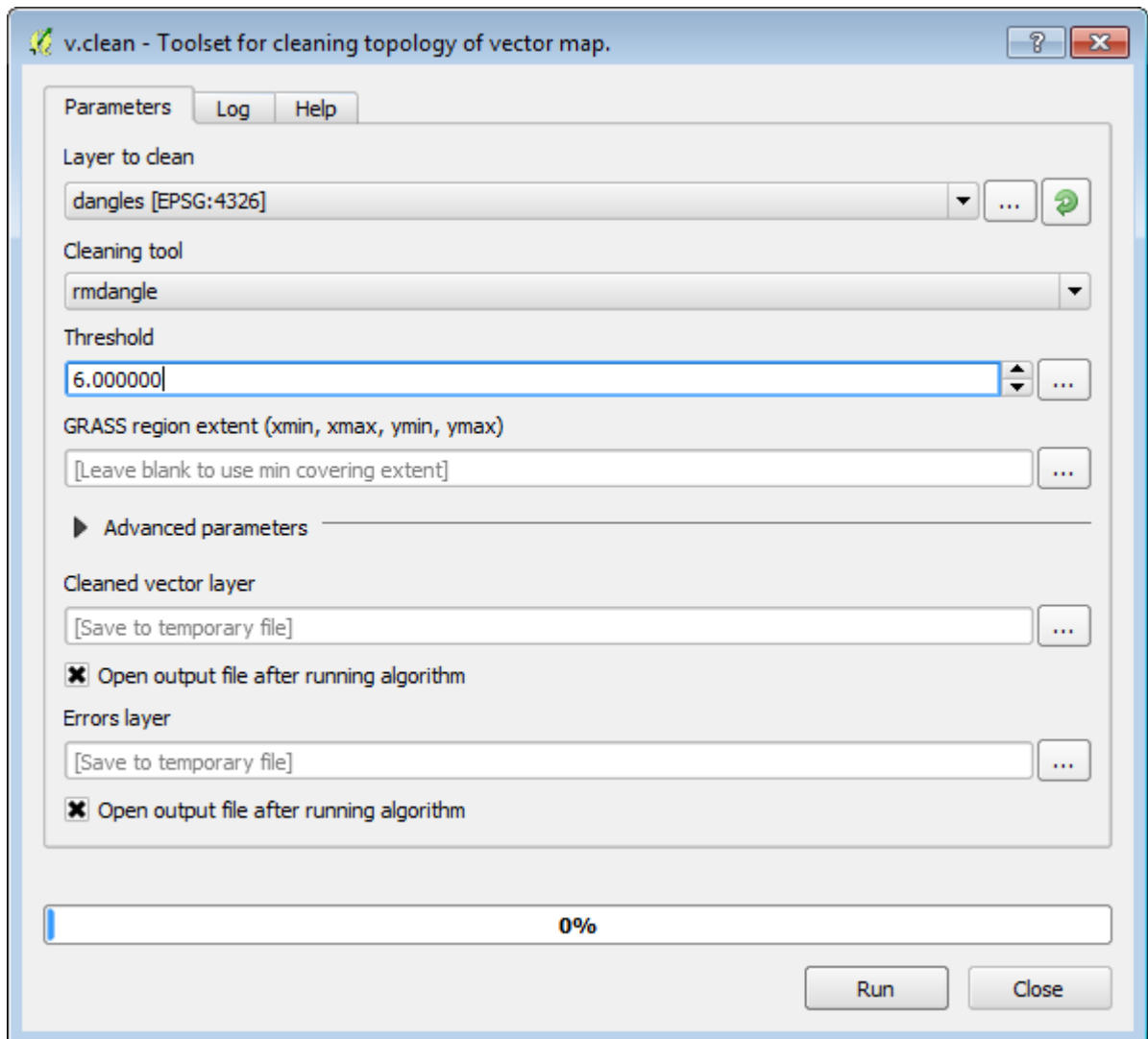
 Validate Extent

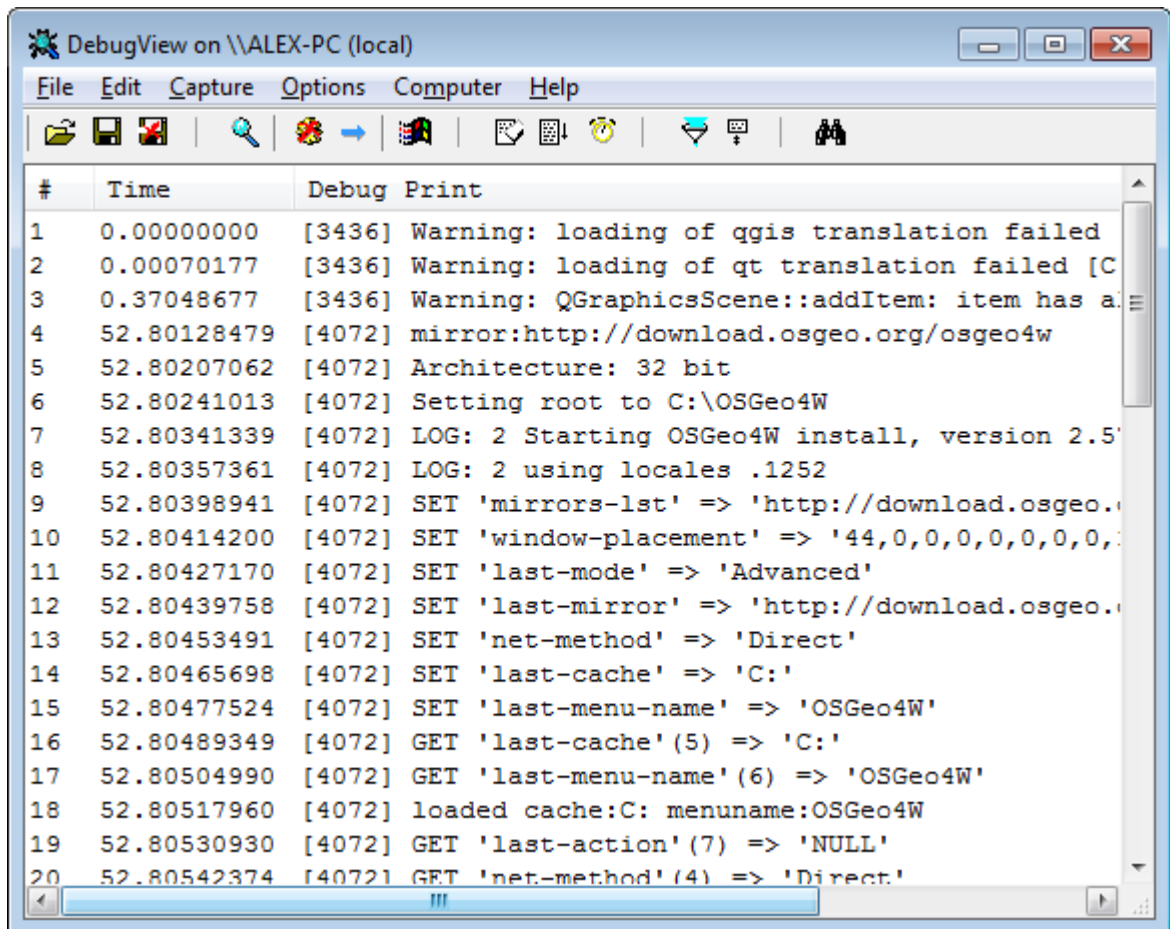
Show errors

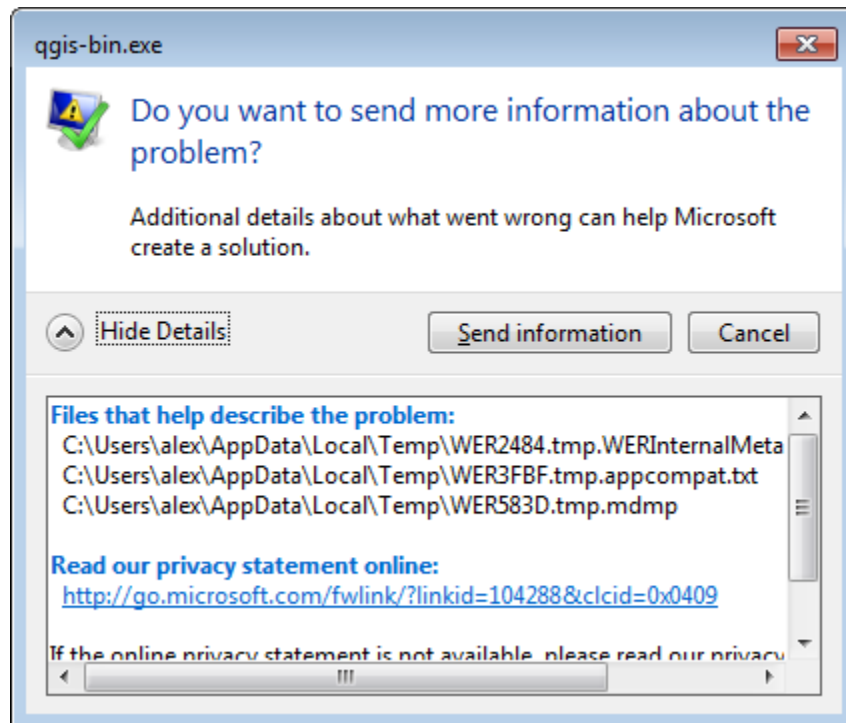
49 errors were found











Issues

Filters

Status

Subject

Options

Apply Clear Save

#	Tracker	Status	Priority	Subject	Assigned to	Updated
<input type="checkbox"/> 12485	Bug report	Open	Normal	Modeler calculator error	Victor Olaya	04/01/2015 01:47 pm
<input type="checkbox"/> 11374	Bug report	Open	Normal	Error while launching a model from the modeler	Victor Olaya	05/22/2015 10:57 am
<input type="checkbox"/> 10794	Bug report	Feedback	Normal	Processing: Lines disappearing in Modeler	Victor Olaya	06/04/2015 09:11 am
<input type="checkbox"/> 9402	Feature request	Open	Normal	Make the new Field Calculator tool available in the Modeler	Alexander Bruy	10/04/2014 10:17 pm
<input type="checkbox"/> 9317	Bug report	Open	Normal	OTB Band Math error with Processing (sextante) modeler	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 8853	Bug report	Open	High	Parameter "-GRIDS" is not passed in SAGA "Grid Calculator", but just in the modeler	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 8783	Feature request	Open	Normal	Create different paths / choices in Modeler	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 8772	Bug report	Open	High	Deactivating a module in Modeler has no effect after the save and close of the model	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 7967	Bug report	Open	High	Modeler: Output of a tool is not graphically used as the input of the next tool	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 6885	Feature request	Feedback	Normal	Modeler - retain parameter values when editing	Victor Olaya	05/22/2015 10:20 am
<input type="checkbox"/> 6377	Feature request	Open	Normal	r.reclass path to reclass rules within modeler	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 5479	Feature request	Open	Normal	Support copy/paste of objects in modeler	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 5471	Feature request	Open	Normal	Add support for undo/redo actions, such as deleting an object in modeler	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 5453	Feature request	Open	Normal	Add "Select by rectangle" in modeler	Victor Olaya	10/04/2014 10:17 pm
<input type="checkbox"/> 5449	Feature request	Open	Normal	Define files in the modeler	Victor Olaya	10/04/2014 10:17 pm

(1-15/15) | Per page: 25, 50, 100

Issues

View all issues
Summary

Custom queries





- Active Tickets assigned to me
- Active Tickets by category
- Active Tickets Future Release - High Priority
- Active Tickets Future Release - Lower Priority
- Active Tickets reported by me
- All tickets assigned to me
- Blocking grouped
- Blocking issues
- Easy Issues (Issues to get started on if you're new)
- Open Features
- Outstanding issues
- Patch supplied
- Processing grouped
- Processing issues
- This weeks updates
- Watched tickets

Search

All words Search titles only

Issues Changesets Wiki pages

Results (18)

-  **Bug report #12767 (Open):** Different results from single commands and **modeler**
Running the twi modelling exercise [0] result ... et/source/docs/training_manual/exercise_data/processing/modeller_twi 05/19/2015 10:42 am
-  **Bug report #12509 (Closed):** QGIS crashes if change settings of OTB algorithm
*1. Processing - Graphical **modeler** 2. Add 2 Raster Layer 3. Algorithms - Orfe ... 0x0000000020fabd0 *** </pre> 04/05/2015 01:18 pm*
-  **Bug report #12485 (Open):** Modeler calculator error
*When adding a sample calculation in the **Modeler** calculation (e+2^h), I get Traceback (... : File 'home/paolo/qgis2/python/plugins/processing/modeller/ModelerDialog.py', line 401, in addA ...) File 'home/paolo/qgis2/python/plugins/processing/modeller/ModelerDialog.py', line 420, in add ...) File 'home/paolo/qgis2/python/plugins/processing/modeller/ModelerDialog.py', line 350, in repa ...) File 'home/paolo/qgis2/python/plugins/processing/modeller/ModelerScene.py', line 89, in paintM ...) File 'home/paolo/qgis2/python/plugins/processing/modeller/ModelerGraphicItem.py', line 57, in ...) File 'home/paolo/qgis2/python/plugins/processing/modeller/ModelerAlgorithm.py', line 105, in a ... Versione di QGIS: 2.8.1-Wien Wien, exported 04/01/2015 01:43 pm*
-  **Feature request #11781 (Open):** Add missing input parameters to **modeler**
Currently, scripts support more parameters th ... //docs.qgis.org/testing/en/docs/user_manual/processing/scripts.html) e.g. CRS or folders It wo ... d support the same parameters as scripts do. 12/03/2014 12:26 pm

New issue

Tracker *	<input type="text" value="Bug report"/>
Subject *	<input type="text" value="Python error when running some algorithms"/>
Parent task	<input type="text"/>
Description	<div style="border: 1px solid #ccc; padding: 5px;"><p>Using the GRASS r.drain module I'm getting (master and 2.8.2, Windows and Linux) the following python error that does not seem specific to the GRASS backend, but also I'm not able (at the moment) to trigger it within other modules. The error show regardless the CRS of the layers used. It was not an issue until 2.4.</p><pre><pre> Traceback (most recent call last): File "C:/OSGeo4W/apps/qgis/.python/plugins/processing/gui/AlgorithmDialog.py", line 148, in accept if checkCRS and not self.alg.checkInputCRS(): File "C:/OSGeo4W/apps/qgis/.python/plugins/processing/core/GeoAlgorithm.py", line 410, in checkInputCRS crs = dataobjects.getObject(item).crs() AttributeError: 'NoneType' object has no attribute 'crs'</pre></div>
Status *	<input type="text" value="Open"/>
Priority *	<input type="text" value="Normal"/>
Assigned to	<input type="text" value="Victor Olaya"/>
Category	<input type="text" value="Processing (SEXTANTE)/GRASS"/>
Target version	<input type="text" value="Future Release - Nice to have"/>
Platform	<input type="text" value="all"/>
Platform version	<input type="text"/>
Status info	<input type="text"/>
Resolution	<input type="text"/>
Start Date	<input type="text" value="2015-06-05"/>
Due date	<input type="text"/>
Estimated time	<input type="text"/> Hours
% Done	<input type="text" value="0 %"/>
Patch supplied	<input type="checkbox"/>
Affected version *	<input type="text" value="master"/>
Causes crash or corruption	<input type="checkbox"/>
Tag	<input type="text"/>
Files	<input type="button" value="Обзор..."/> Файл не выбран.
Optional description	<input type="text"/>