Avances en la integración de GGL2 con gvSIG y QGIS

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Guión

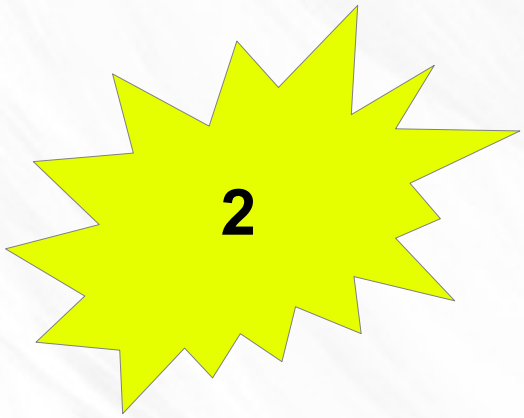
- ¿Qué es GGL2?
- Avances en el lenguaje
  - *Join*
  - Librerías
  - Integración con gvSIG y Quantum GIS
- Trabajo futuro

¿Qué es GGL2?

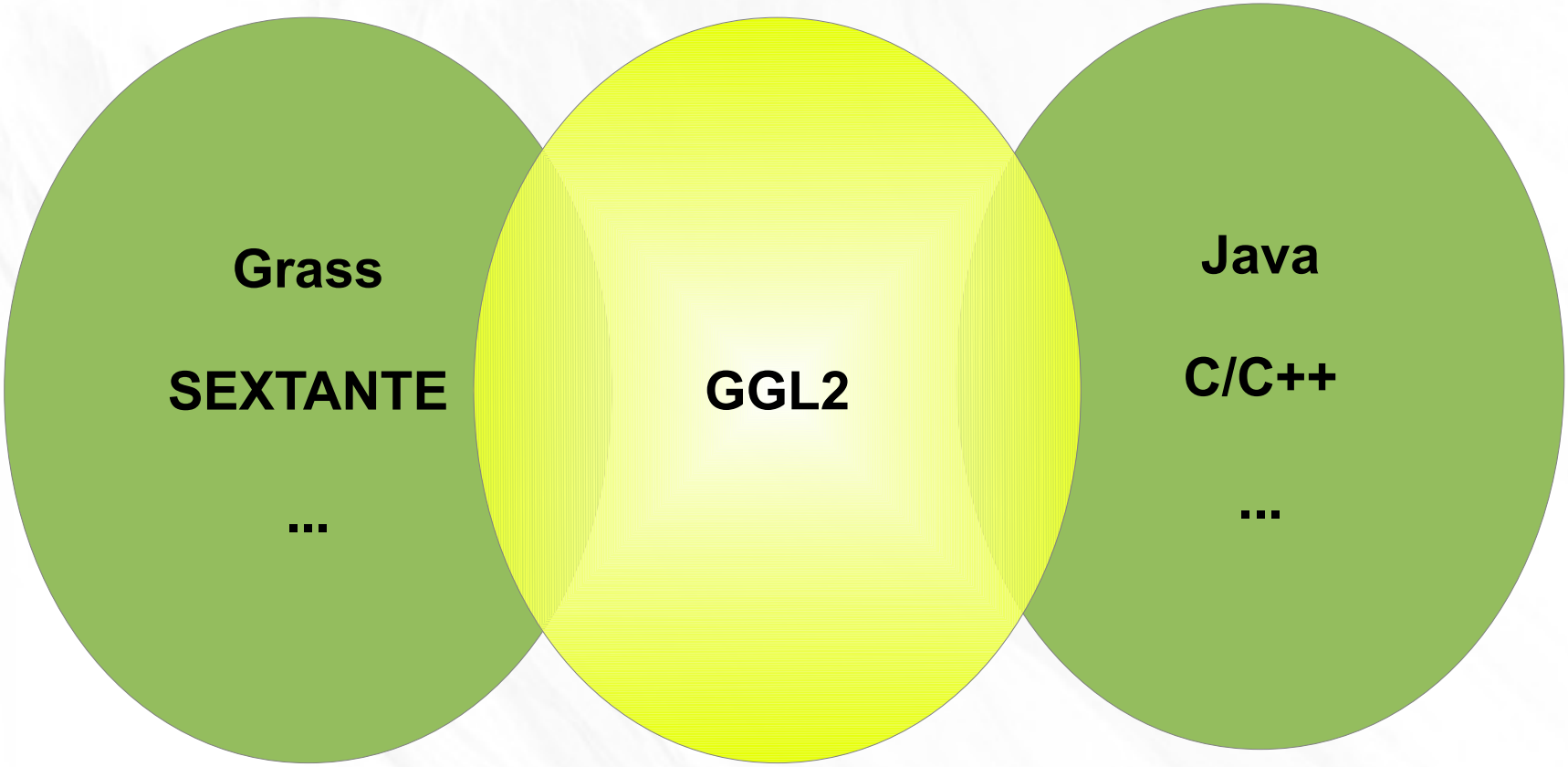
Gearscape

Geoprocessing

Language



¿Qué es GGL2?



Join

Join

```
result = vias as v join municipios as m on
    (ST_Intersects(v/the_geom, m/the_geom));
```

```
result = vias as v prefix 'v_' join municipios as m on
    (ST_Intersects(v/v_the_geom, m/the_geom));
```

```
joined = vias as v prefix 'v_' join municipios as m on
    (ST_Intersects(v/v_the_geom, m/the_geom));
result = joined select(...);
```

Join

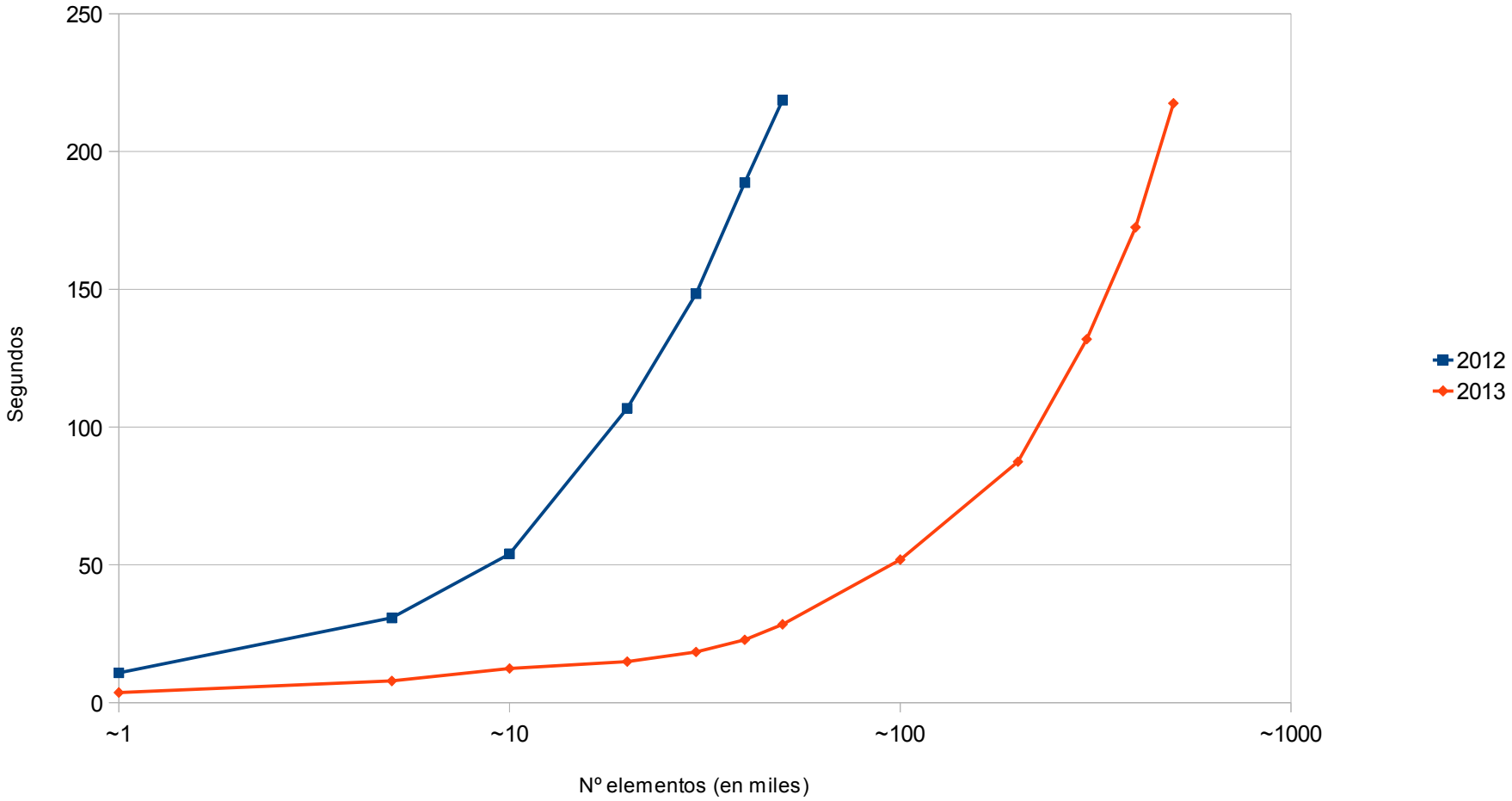
```
result = vias join municipios (v,m | on
    (ST_Intersects(v/the_geom, m/the_geom) include ...);
```

```
result = vias join municipios (v,m | ...);
```

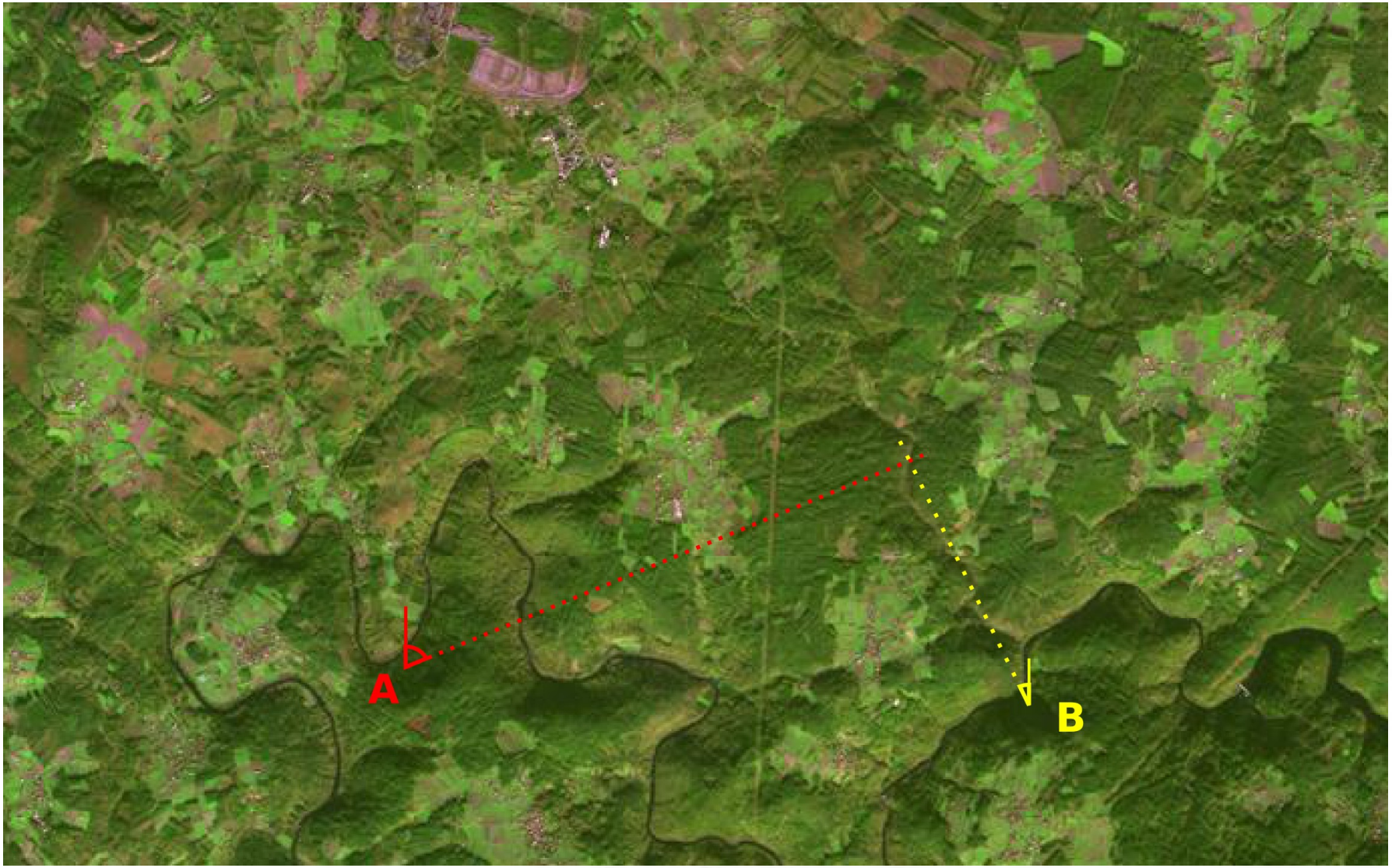
```
result = vias select (v | ...);
```

```
result = vias filter (v | ...);
```

Join

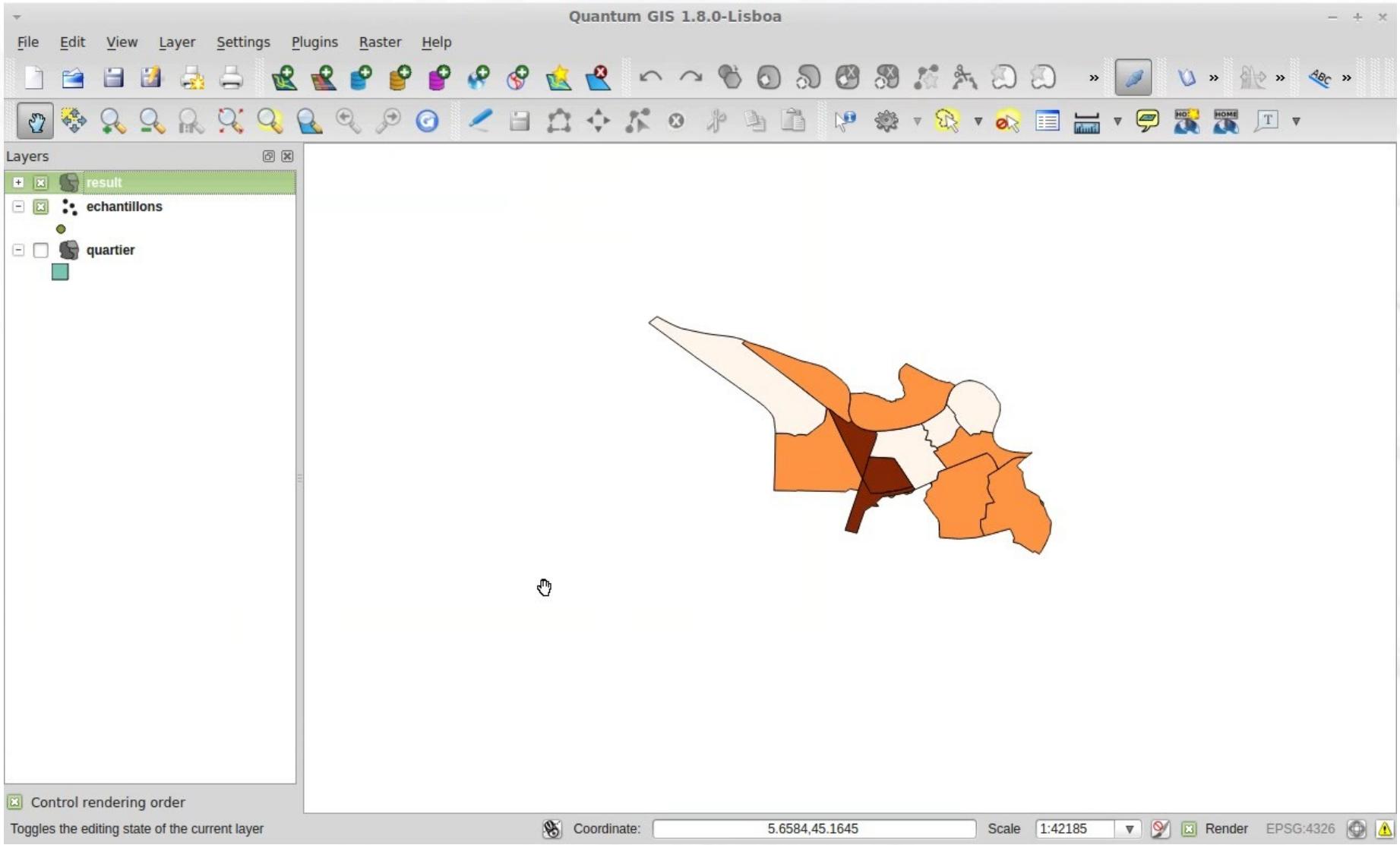

250
200
150
100
50
0
Segundos
~1
~10
~100
~1000
Nº elementos (en miles)
2012
2013

Librerías



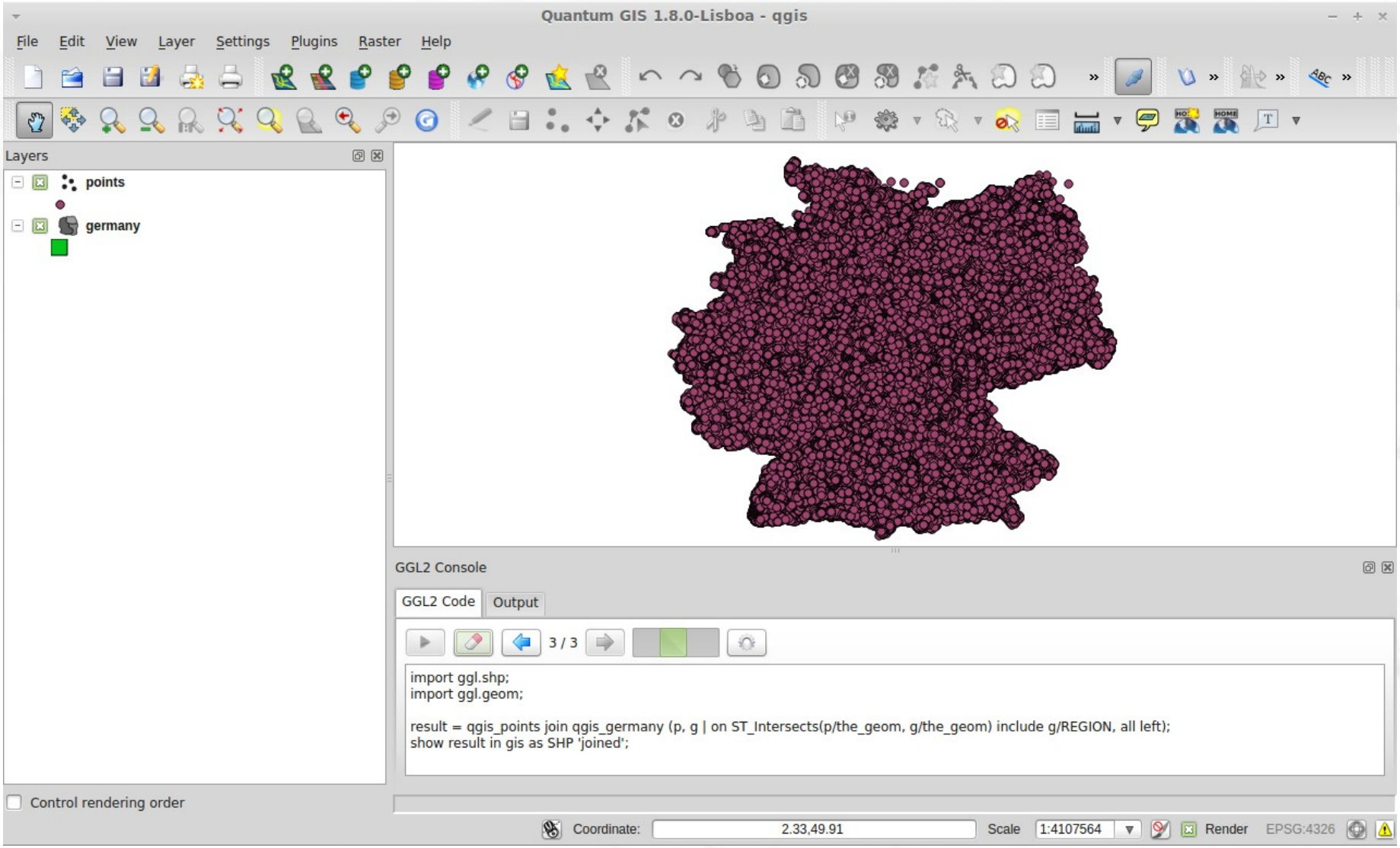
```
alg buildUnitVector2D(double angle) returns sequenceof double {
      return [cos(angle), sin(angle)];
}
alg buildVector2D(geometry p1, geometry p2) returns sequenceof double {
      return [ST_X(p2) - ST_X(p1), ST_Y(p2) - ST_Y(p1)];
}
alg unitVector(sequenceof double vector) returns sequenceof double {
      module = sqrt(pow(vector[0], 2) + pow(vector[1], 2));
      return [vector[0] : module, vector[1] : module];
}
alg applyVector(sequenceof double unitVector, geometry origin, double distance)
returns geometry {
      x = ST_X(origin) + unitVector[0] * distance;
      y = ST_Y(origin) + unitVector[1] * distance;
      return POINT(x y);
}
```

Librerías

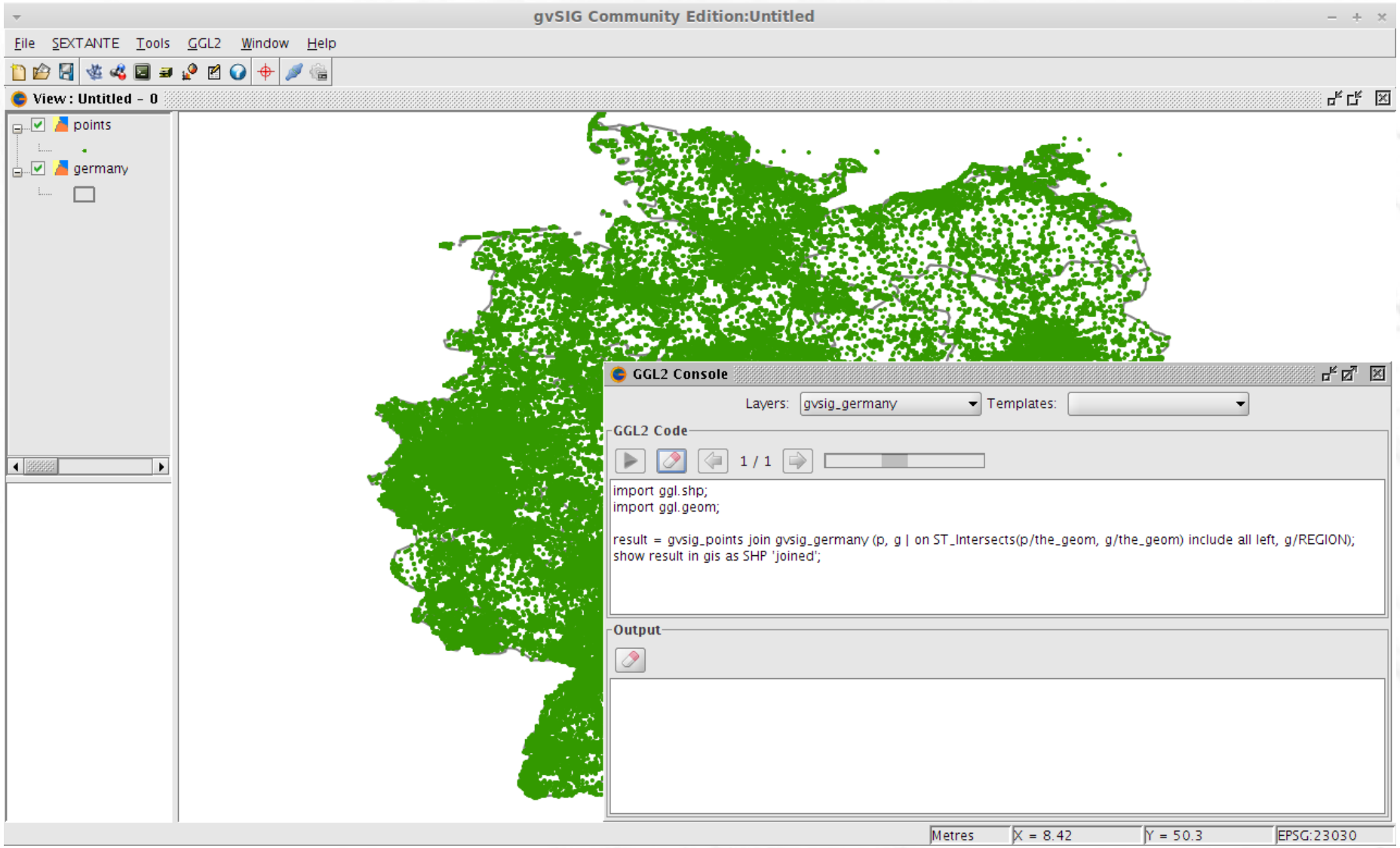

Quantum GIS 1.8.0-Lisboa
File
Edit
View
Layer
Settings
Plugins
Raster
Help
Layers
result
echantillons
quartier
Control rendering order
Toggles the editing state of the current layer
Coordinate:
5.6584,45.1645
Scale
1:42185
Render
EPSG:4326

```
alg mean(sequenceof double values) returns double maps to
      org.gearscape.ggl.Statistics::mean;


alg variance(sequenceof double values, double expected) returns double {
      acum = 0.0;
      foreach value in values {
            acum = acum + pow(value - expected, 2);
      }
      return acum : values/@length;
}


alg standardDeviation(sequenceof double values, double expected) returns double {
      return sqrt(variance(values, expected));
}


alg variationCoef(sequenceof double values, double value) returns double {
      return standardDeviation(values, value) : mean(values);
}
```

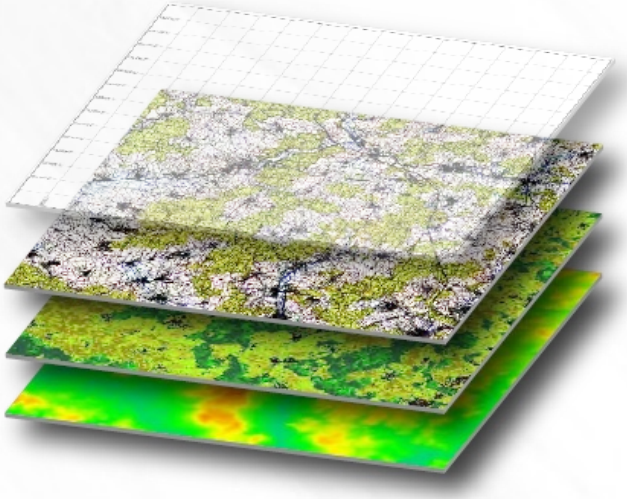
Integración Quantum GIS



Integración gvSIG



Trabajo futuro



Gracias

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http://www.gearscape.org