ForBio course: Introduction to GPS and GIS

Oct 13, 2014 - Oct 14, 2014, Natural History Museum, University of Oslo

Exercise 3: Open Street Map

In this exercise you will work with the GPS coordinates you collected in exercise 1 yesterday to plot on a map using QGIS and data from Open Street Map (OSM).

1) Plot point coordinates for the benches using QGIS.
2) Download and load Open Street Map as background map.
3) Make a map including title, legend and scale-bar.

[1] Load all of the point data for the waypoints for the jubilee benches from exercise 1 yesterday to QGIS. You may want to combine all the points from all groups and color by the location identifier.

[2] Download vector data from Open Street Map for the neighborhood around the botanical garden. You may e.g. use the bounding box: xmin = 10.760, xmax = 10.780, ymin=59.912, ymax=59.925. Use this vector data as background for your map.

[3] Use the map composer in QGIS to make a final map with a title, legend and scale-bar.
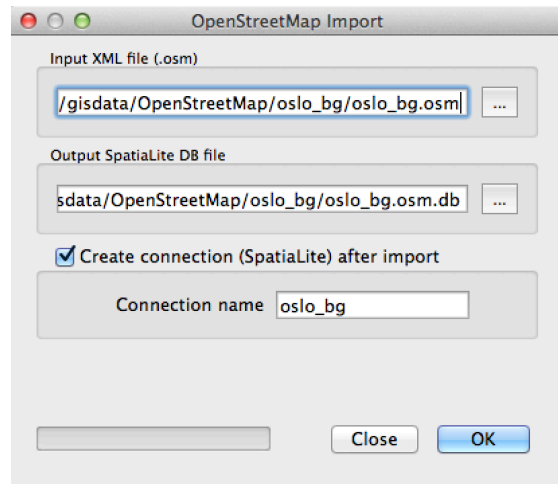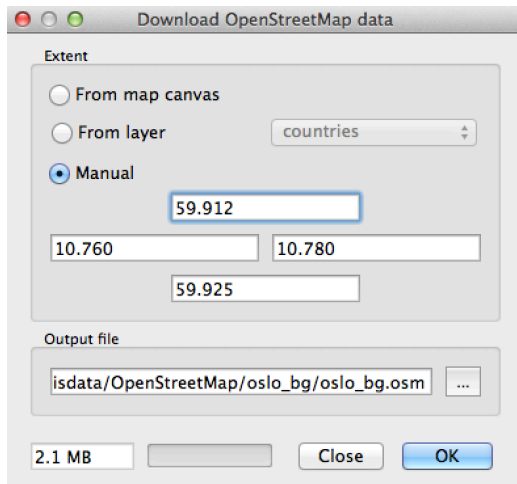
[1] QGIS toolbox for download of Open Street Map (OSM) data.

[2] QGIS toolbox for importing downloaded OSM data Spatial Lite DB.
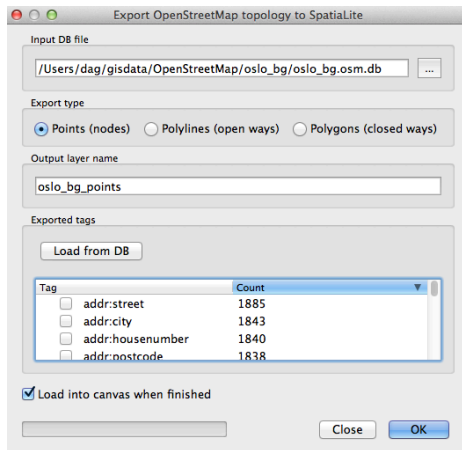
[3] QGIS toolbox for importing Spatial Lite DB to QGIS. NB! Repeat for points, polylines and polygons. Use "Load from DB" button between each type.

[4] Example of result, OSM data imported and displayed in QGIS.

Tips: Your GPS coordinate data are probably in CRS = unprojected WGS84 (epsg: 4326). Rendering the map as unprojected WGS84 will cause severe distortions for locations on high latitudes such as Norway. The scale-bar will also make little sense for this rendering. Oslo is in UTM zone 32V (epsg: 32632) and rendering your map in this CRS will cause much less distortions.