

# Mumbai

Mesurer la croissance urbaine

# Une ressource sur le web

The screenshot shows the homepage of the Lincoln Institute of Land Policy. At the top, there is a navigation bar with the logo, a search box, and links for "Quick Links" and "Departments & Programs". Below this is a secondary navigation bar with tabs for "About", "News & Events", "Education & Research", "Publications & Multimedia", and "Resources & Tools". The main content area features a large banner for "Conservation Catalysts" with a photo of a building and a text box stating: "The Lincoln Institute of Land Policy is the leading resource for key issues concerning the use, regulation, and taxation of land. Providing high quality education and research, the Lincoln Institute strives to improve public dialogue and decisions about land policy. About >>". Below the banner is a "News & Recent Publications" section with three items: "REPORT Governing Cities", "BOOK Use-Value Assessment", and "BOOK Education, Land and Location". On the right side, there are social media icons for Twitter, Facebook, LinkedIn, YouTube, and Google+.

The screenshot shows the "Atlas of Urban Expansion" page. The header includes the Lincoln Institute of Land Policy logo, a search box, and navigation links. The main content area is titled "Atlas of Urban Expansion" and features a large map of the United States with a color-coded density scale. To the left of the map is a sidebar with the following sections: "Atlas of Urban Expansion Home", "The Organization of the Atlas", "Understanding and Measuring Urban Expansion", "Four Key Attributes of Urban Expansion Metrics", "Area Metrics", "Density, Fragmentation and Compactness Metrics", and a list of sections: "Section 1: The Global Sample of 120 Cities, 1990-2000", "Section 2: A Representative Sample of 30 Cities, 1800-2000", "Section 3: Urban and National Data", and "Section 4: Geographic Information System (GIS) Data". To the right of the map is a text box with the following text: "Massive urbanization, accompanied by the rapid expansion of cities and metropolitan regions and the sprawling growth of megacities the world over, is one of the most important transformations of our planet. Much of this explosive growth has been unplanned. Cities in developing countries have been unprepared for absorbing the many millions of the rural poor that are still crowding into informal settlements. These cities are now scheduled to double their urban population in the next thirty years, and possibly triple the land area. And while in industrialized countries the great transformation into an urban society is largely completed, there are growing concerns about continuing low-density sprawl and its deleterious environmental consequences - the effects on carbon emissions, energy use, and the loss of prime agricultural lands. Urban expansion, in short, is now a global concern." Below this text is another paragraph: "The Atlas of Urban Expansion provides the geographic and quantitative dimensions of urban expansion and its key attributes in cities the world over. The data and images are available for free downloading, for scholars, public officials, planners, those engaged in international development, and concerned citizens. The global empirical evidence presented here is critical for an intelligent discussion of plans and policies to manage urban expansion everywhere." At the bottom, there is a final paragraph: "The Atlas of Urban Expansion accompanies the Policy Focus Report *Making Room for a Planet of Cities*, a comprehensive and original analysis of the quantitative dimensions of past, present, and future global urban land cover, culminating in a proposed new paradigm for preparing for explosive growth in cities the world over. Further detail of that analysis is available in three working papers available for downloading: *The Persistent Decline in Urban Densities*, *The Fragmentation of Urban Footprints*, and *A Planet of Cities: Country Estimates and Projections of Urban Land Cover*."

Source <http://www.lincolnst.edu/>

## Atlas of Urban Expansion

Atlas of Urban Expansion  
Home

The Organization of the  
Atlas

Understanding and  
Measuring Urban  
Expansion

Four Key Attributes of  
Urban Expansion

Metrics

Area Metrics

Density, Fragmentation  
and Compactness  
Metrics

Section 1: The Global  
Sample of 120 Cities,  
1990-2000

Section 2: A  
Representative Sample of  
30 Cities, 1800-2000

Section 3: Urban and  
National Data

**Section 4: Geographic  
Information System (GIS)**

### Section 4: Geographic Information System (GIS) Data for Cities

The GIS data used in the analysis and in making the maps can be downloaded from the table below. GIS software, such as ArcGIS, is required to view these data.

For each city in the 120 city sample, these data include:

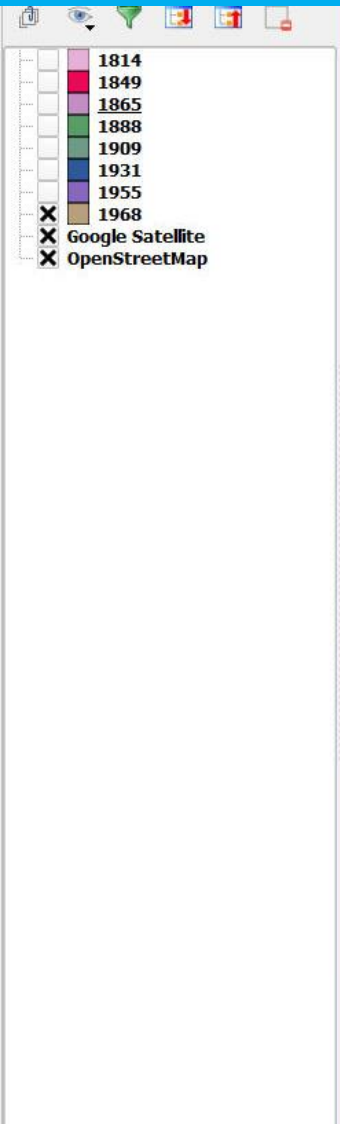
1. two urban land cover maps, one circa 1990 and one circa 2000;
2. the administrative boundary shapefile;
3. two maps of the urban landscape categories, one circa 1990 and one circa 2000;
4. the map of new development categories (infill, extension, leapfrog).

For each city in the 30 city historical sample, these data include the urbanized area shapefiles for each time period.

City	Country	Region	120 city GIS Data	30 city GIS Data
Accra	Ghana	Sub-Saharan Africa	<a href="#">Download</a>	<a href="#">Download</a>
Addis Ababa	Ethiopia	Sub-Saharan Africa	<a href="#">Download</a>	n/a
Ahvaz	Iran	South & Central Asia	<a href="#">Download</a>	n/a
Akashi	Japan	Europe & Japan	<a href="#">Download</a>	n/a

Pour chaque métropole, on peut télécharger des fichiers shapefile à ouvrir dans qgis par exemple





# La tâche urbaine

Mesurée en 1968 Source Lincoln Insitute

Image de fond: google satellite

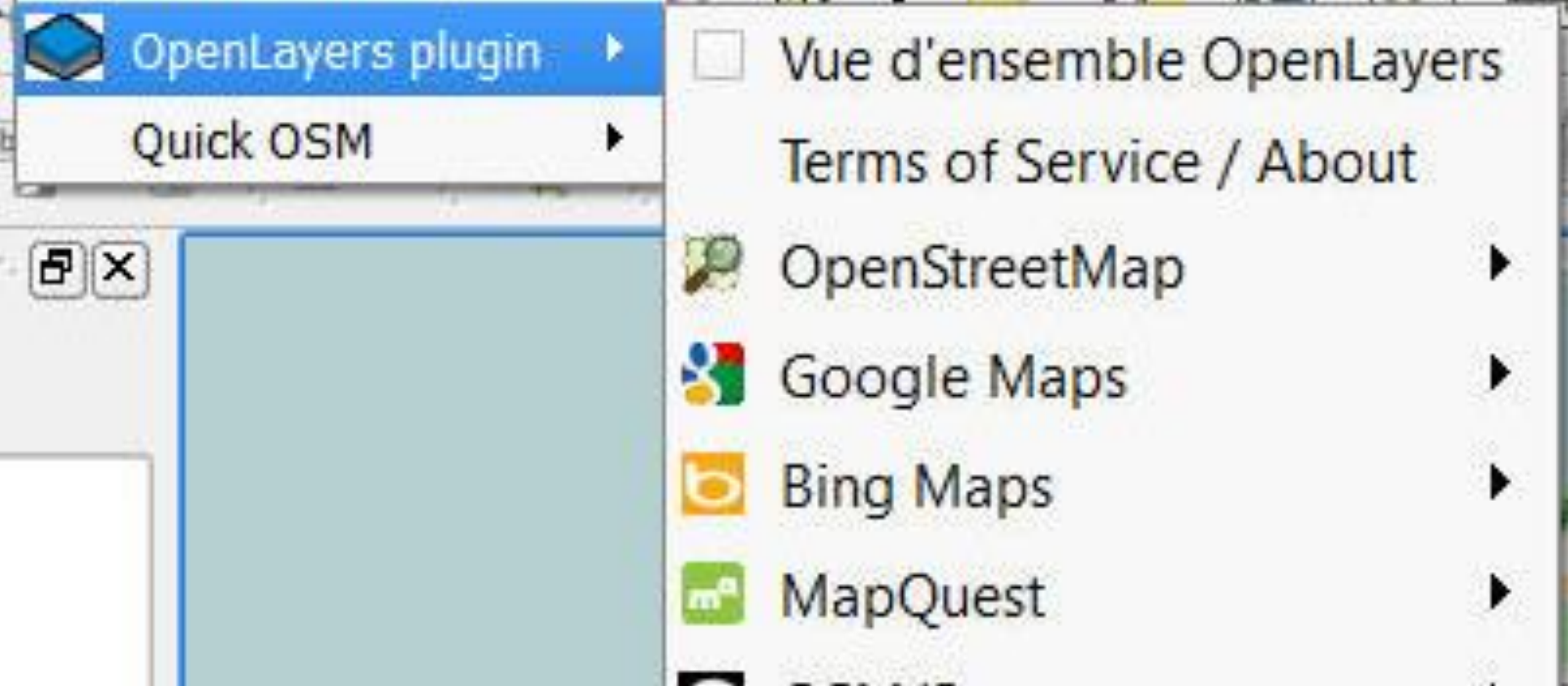


# Evolution de la tâche urbaine entre 1814 et 1968

Source : Lincoln Institute

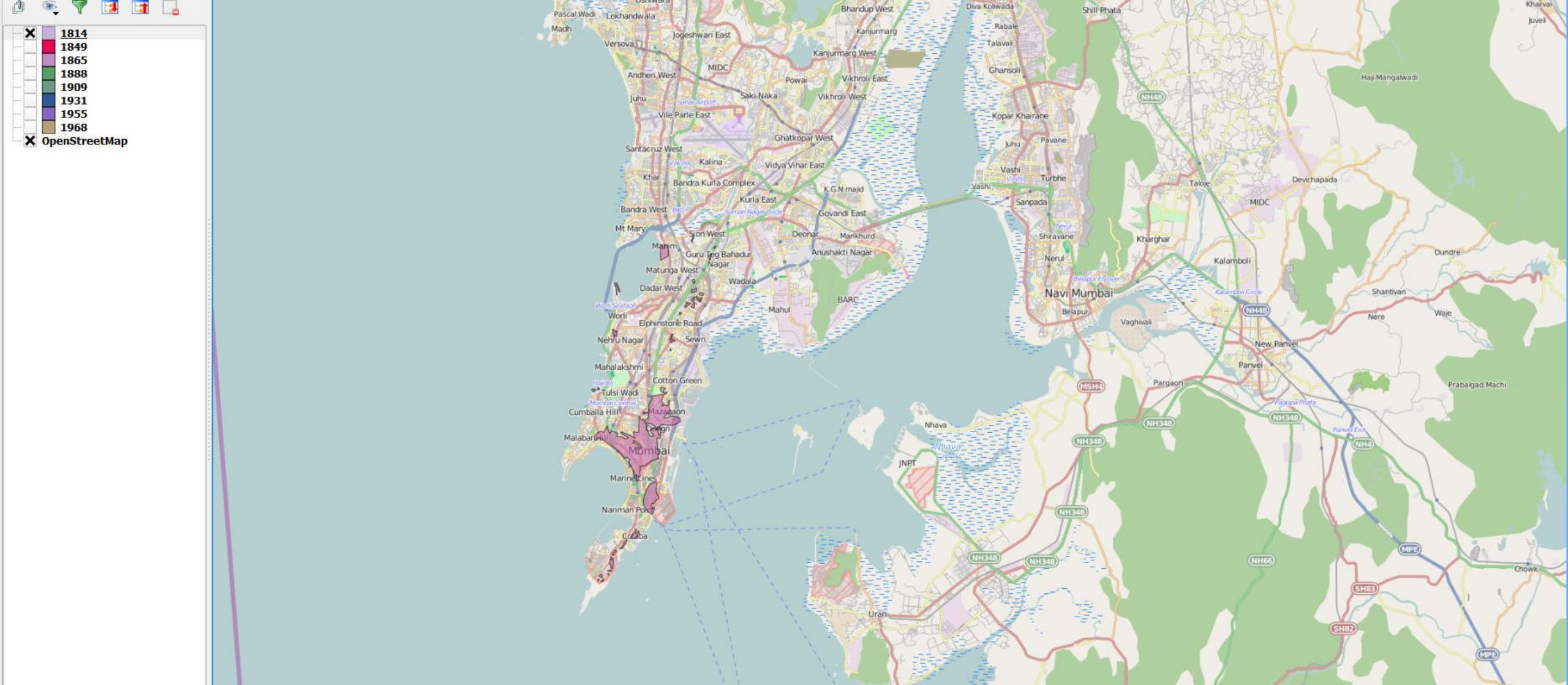
Image de Fond : google satellite





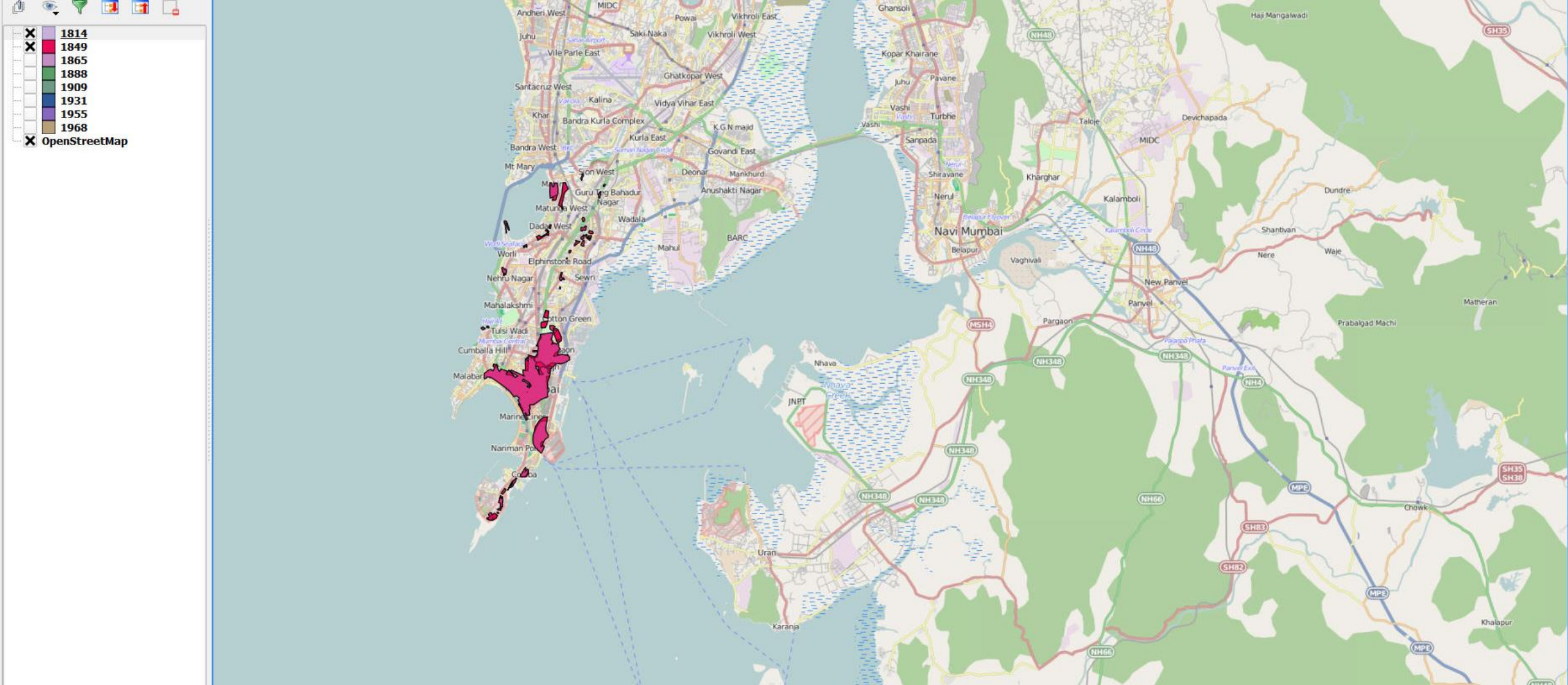
## Qgis propose un plug-in : OpenLayers

qui donne accès à de nombreuses données géographiques qui peuvent servir de références cartographiques



Mumbai : aire urbanisée en 1814

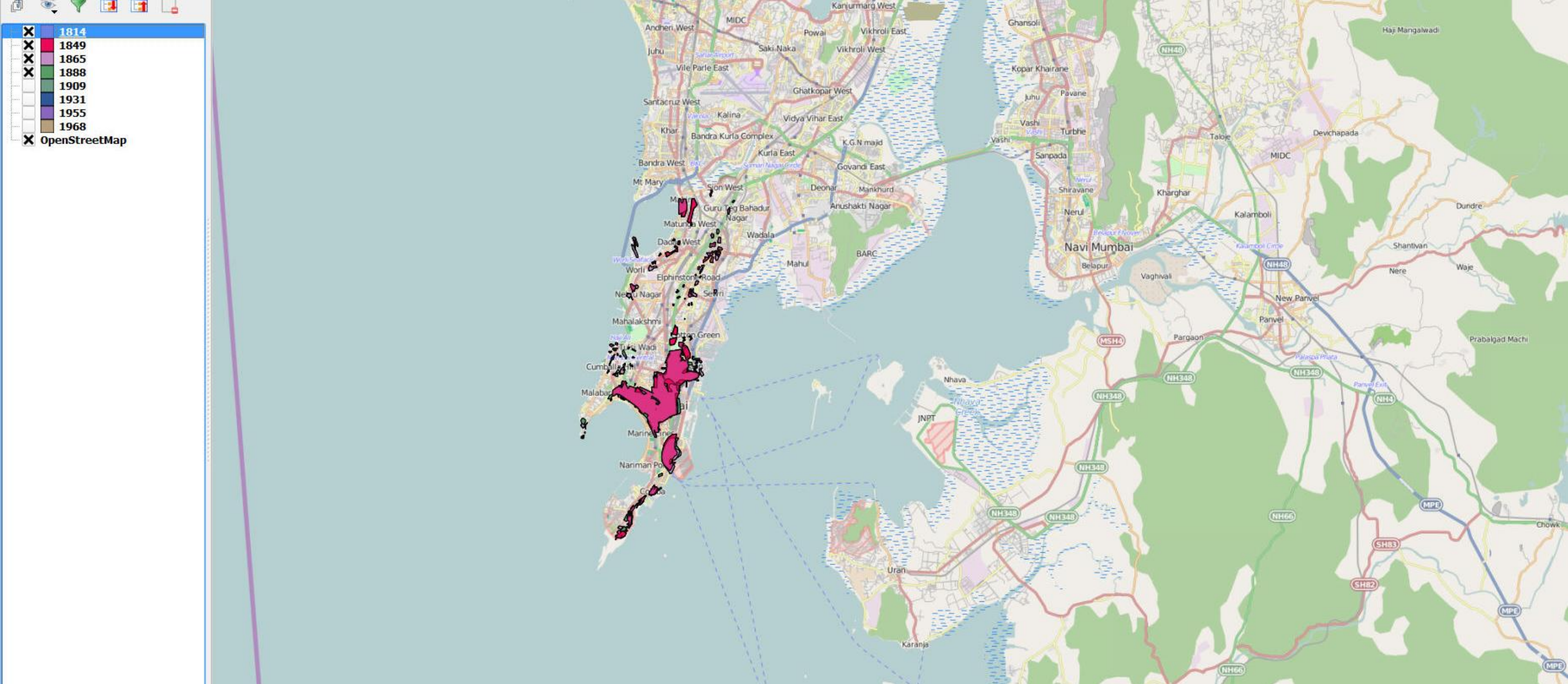




Mumbai : aire urbanisée en 1849

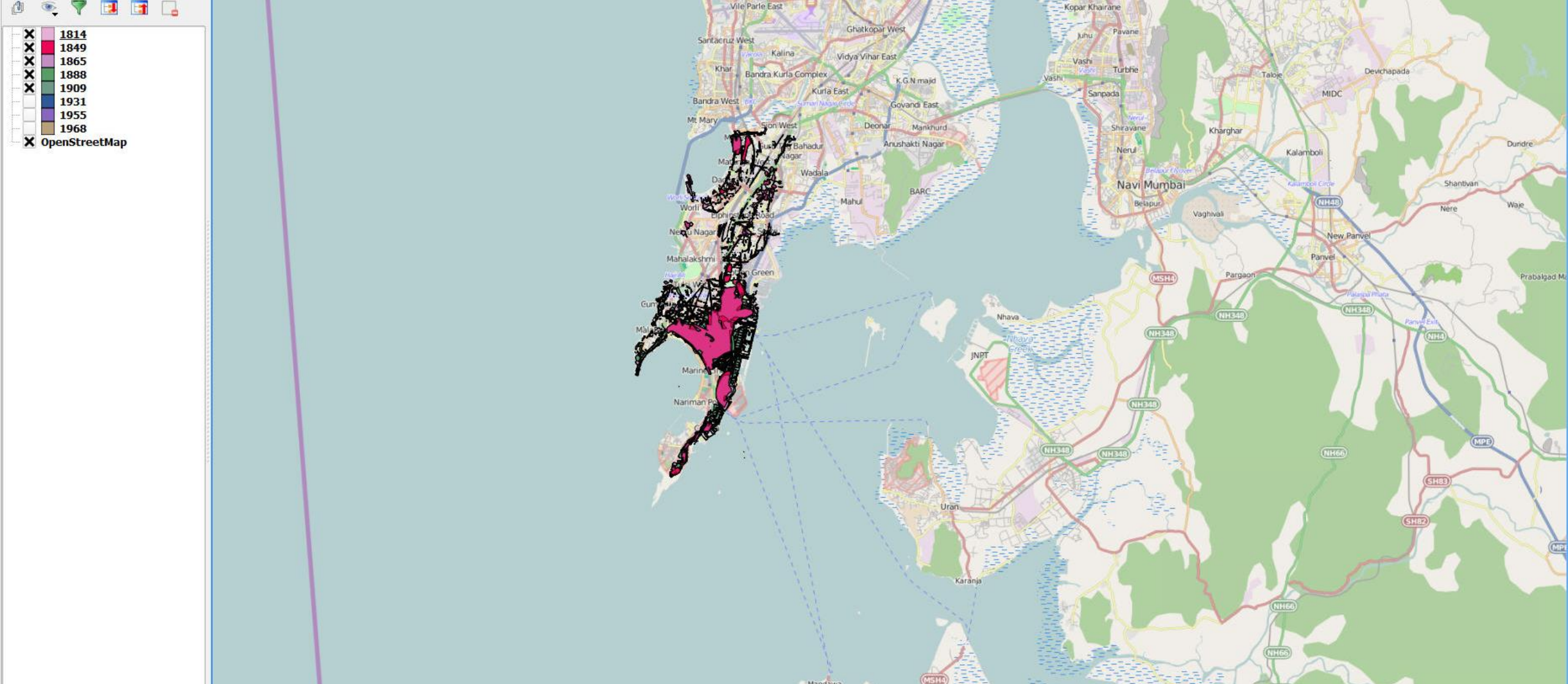




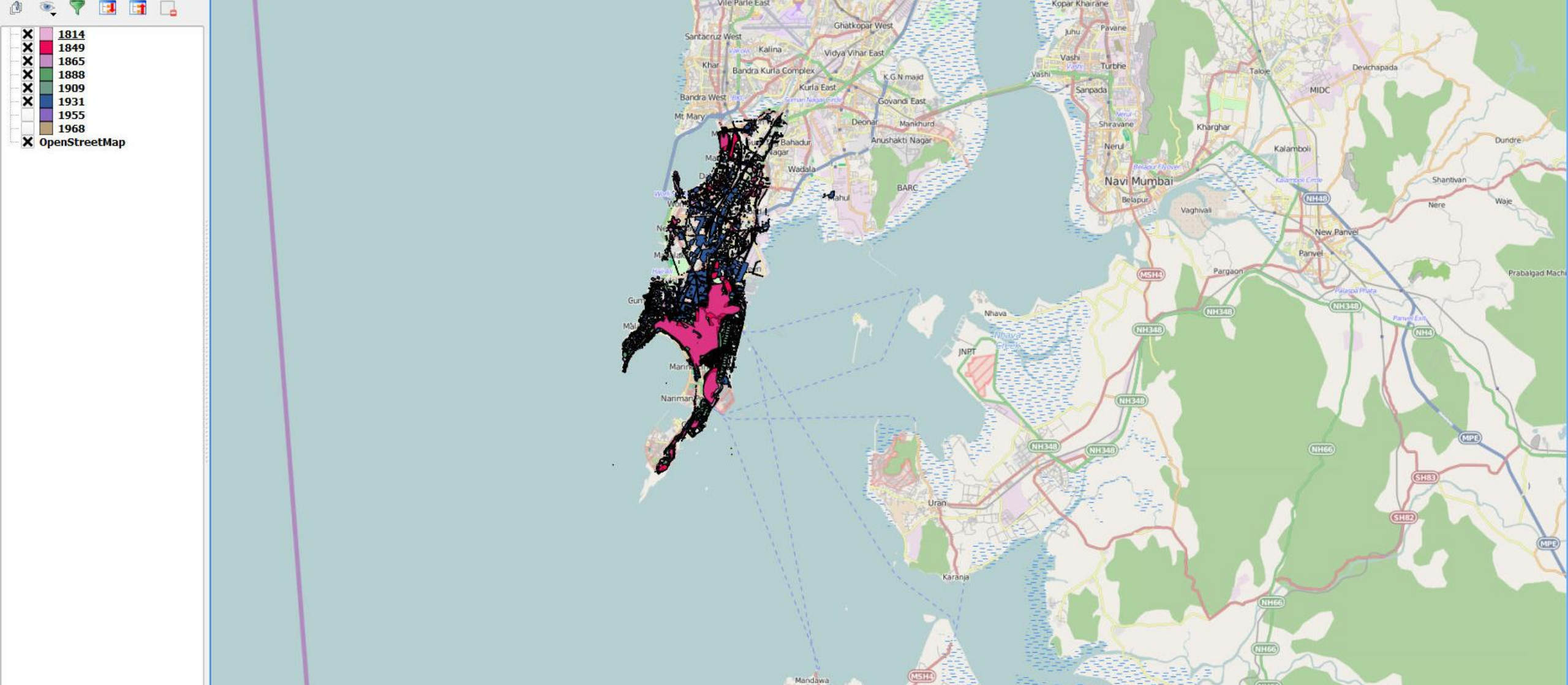


Mumbai : aire urbanisée en 1888



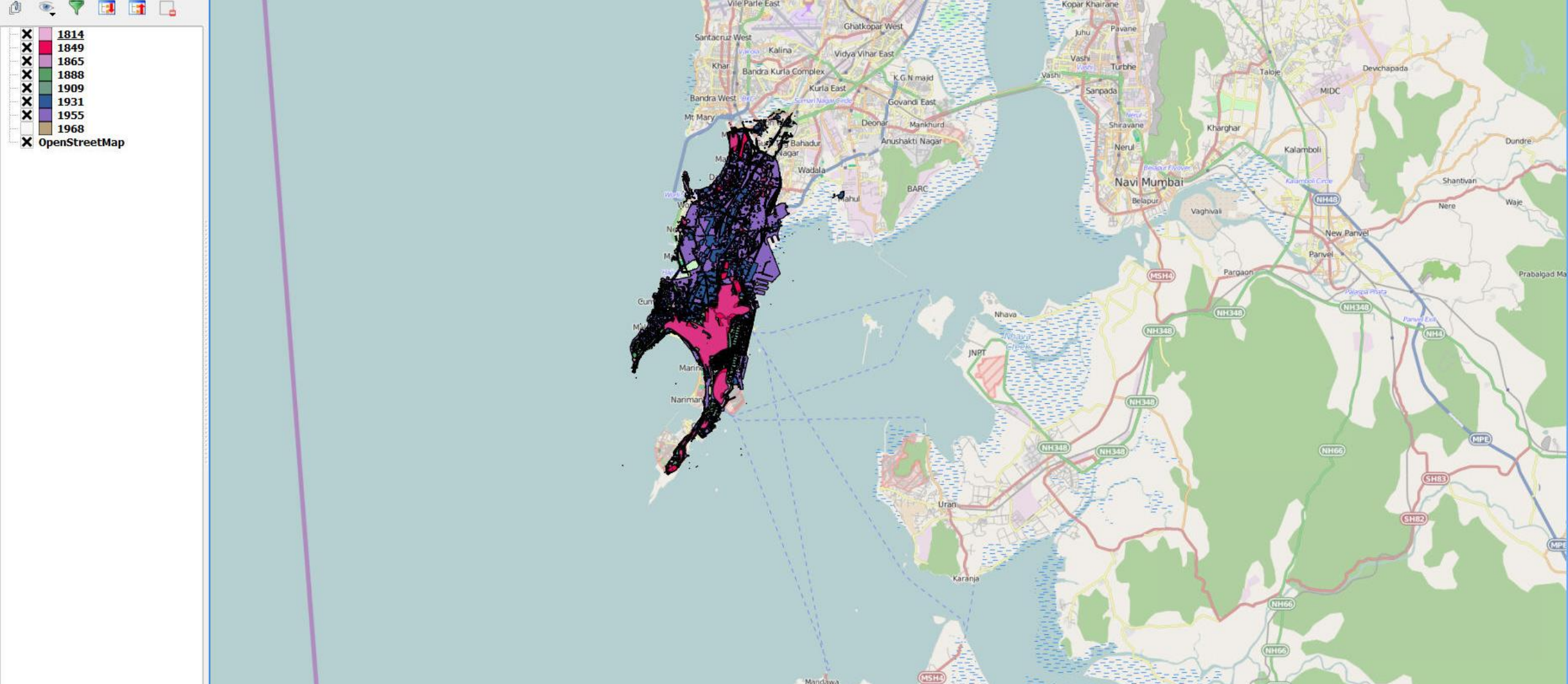


Mumbai : aire urbanisée en 1909

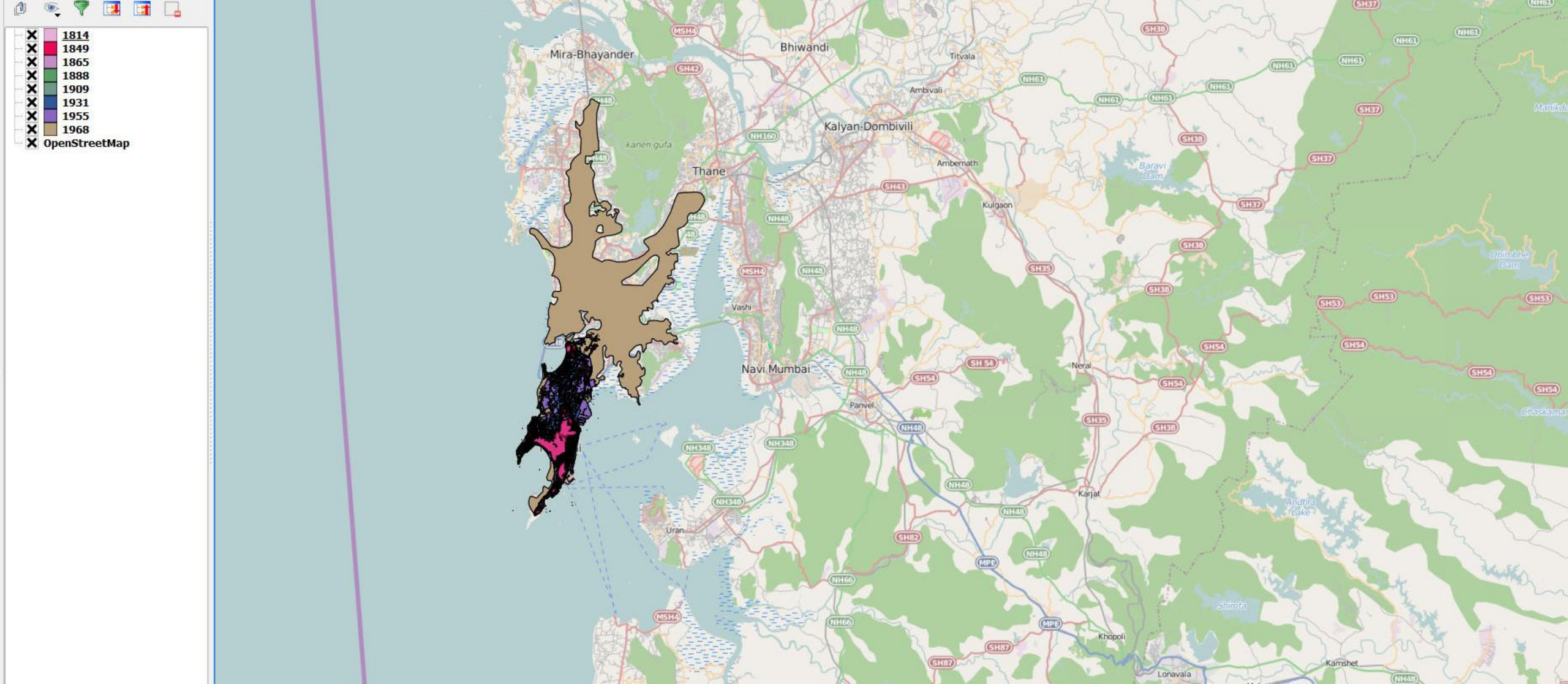


Mumbai : aire urbanisée en 1931





Mumbai : aire urbanisée en 1955



Mumbai : aire urbanisée en 1968