



Lunch meets cartography

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How close is any Milanese from the many restaurants the Ambrosian city has to offer? The road traffic being infamous, how realistic it is on average to walk towards one of them, timewise?

OpenStreetMap (OSM), coupled with the computing power of the **Open Source Routing Machine** (OSRM), can provide an answer to these questions.

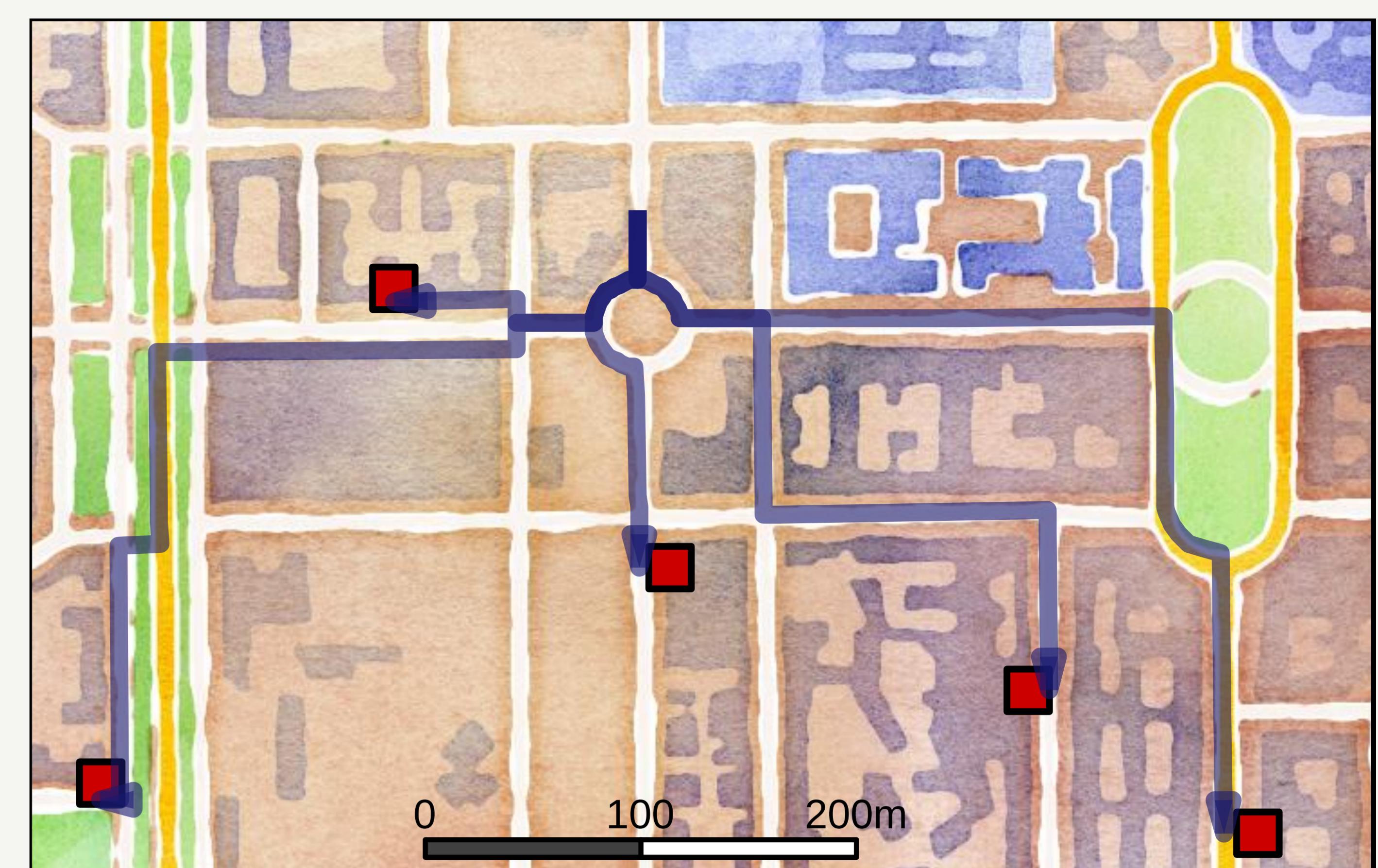
To define a route, one needs a point of departure and one or more destinations. The former consists in an **urban building block** devoted to residential purposes, according to the Copernicus Land Monitoring Service. The latter are represented by the **restaurants in Milan**, extracted thanks to the Overpass API.

The picture on the side explains the method thanks to which the colors on the map are determined. Once the computations are completed, the map is eventually created thanks to the **ggplot2** and **sf** libraries **in the R language**.

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Geometries by Copernicus Land Monitoring Service EU-DEM v1.1, under CC BY 2.5

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This picture represents a zoom of the area highlighted by the rectangle in the main map. The arrows represent the walking paths to the five restaurants closest to a common point of departure. Their journey times are averaged and a corresponding color is assigned to the starting polygon.

