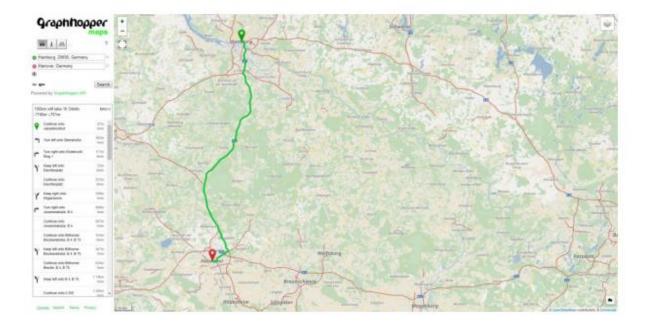
## # OsmoPoly

Osmosis is a command line application for processing data from open streetmaps. Osmosis offers the possibility to extract data from a .osm file with a polygon. A detailed usage of Osmosis can be found here https://wiki.openstreetmap.org/wiki/Osmosis

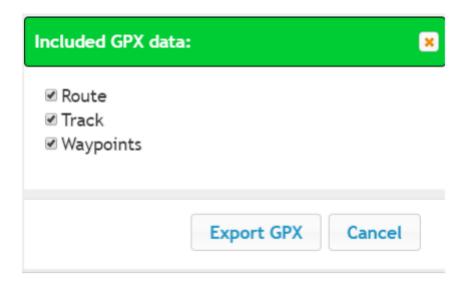
Often it is needed to extract a specific area really big .osm-files like they can be found on https://download.geofabrik.de/index.html

The program "OsmoPoly" offers the possibility to calculate the geocoordinates of a polygon around a given route. The route is specified by a .gpx-File from www.graphhopper.com



Download the .gpx from www.graphhopper.com





To extract the polygon call OsmoPoly in shell like that:

./OsmoPoly /home/andreas/Dokumente/OsmoPoly/test/dat1.gpx 1500 /home/andreas/Dokumente/OsmoPoly/test/dat2.gpx 1500

First argument:
./OsmoPoly

Second argument:

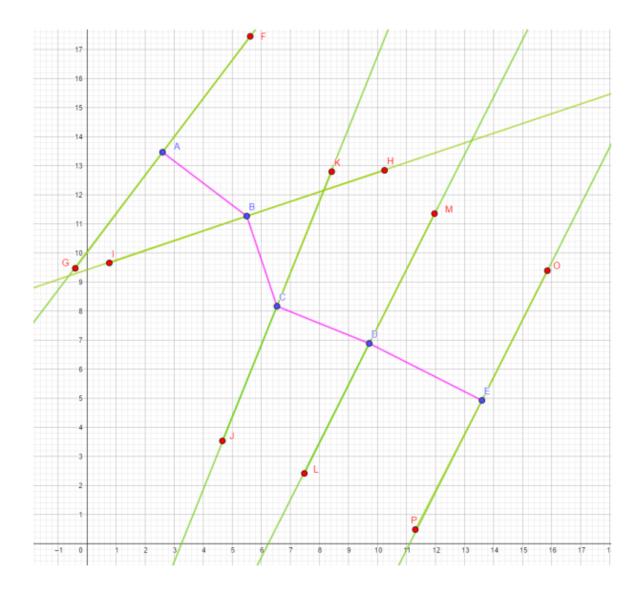
PathToGpx

Third argument:

Size of extraction polygon

You can convert so many .gpx files to polygon files as you want. Just make sure you always have the following order: "pathToFile" "extractionSize" "pathToFile" extractionSize"....

The pink line with its waypoints A,B,C,D,E represent our .gpx-route. The red points represent the theoretical extraction hull. The hullpoints are calculated perpendicular to the blue route points. The distance between a routepoint (blue) and a hullpoint (red) is specified by the entered distance in meter. The calculation of the hullpoint coordinates is done by geodesic algorithms.



OsmoPoly will always show the result in two plots per conversion. One UTM plot and one Geodesic plot.

