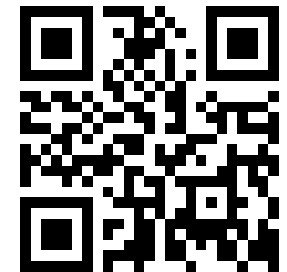




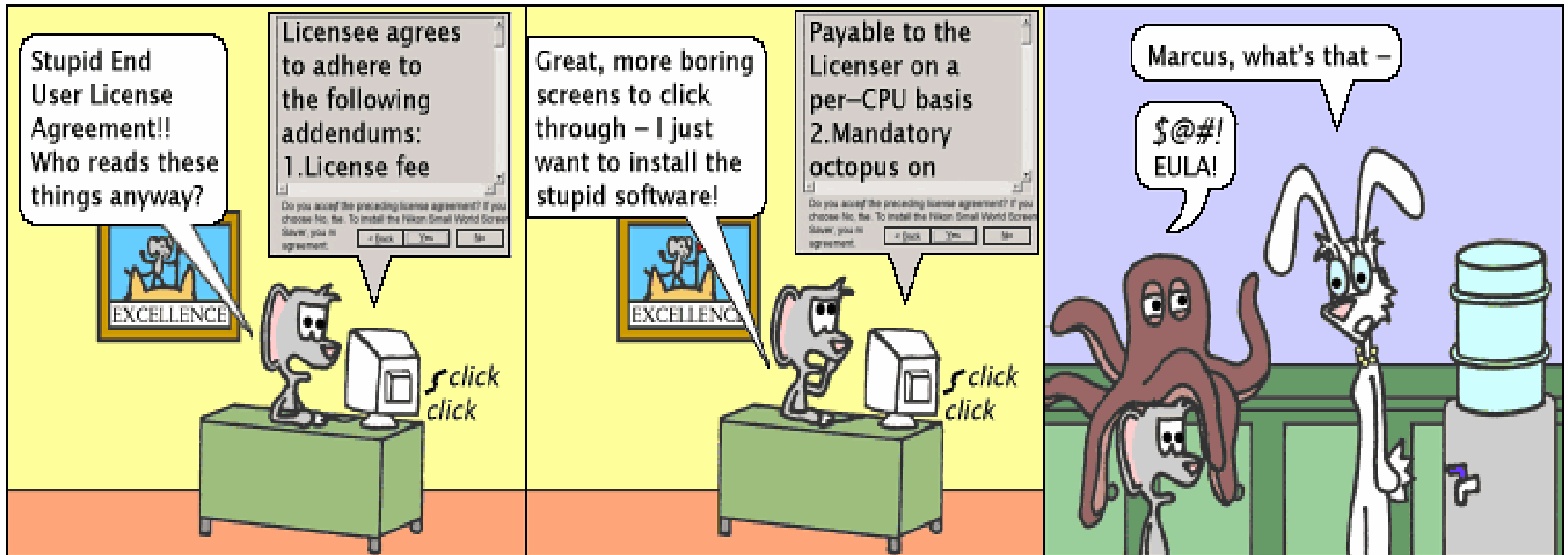
OpenStreetMap

- OZ Freemap Slovakia
 - www.freemap.sk
- OpenStreetMap
 - www.OpenStreetMap.org
 - free wiki map of the world
- Michal Páleník
- ITAPA, Oct 2011



Licenses ?

Hackles



By Drake Emko & Jen Brodzik

<http://hackles.org>

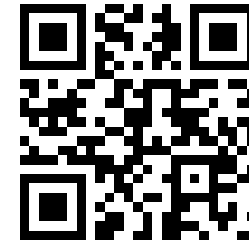
Copyright © 2003 Drake Emko & Jen Brodzik





OpenStreetMap

- free
- wiki
- map
- of the world
- OpenStreetMap creates and provides free geographic data such as street maps to anyone who wants them. The project was started because most maps you think of as free actually have legal or technical restrictions on their use, holding back people from using them in creative, productive, or **unexpected** ways.



OSM history

- 2004 – startup
- 2005 – 1 000 users
- 2006 – mapnik rendering, Slovakia started
- 2007 – 10 000 users, TIGER, AND, API v0.5
- 2008 – 20 million ways
- 2010 – 100 000 users
- 2011 – 481 153 users

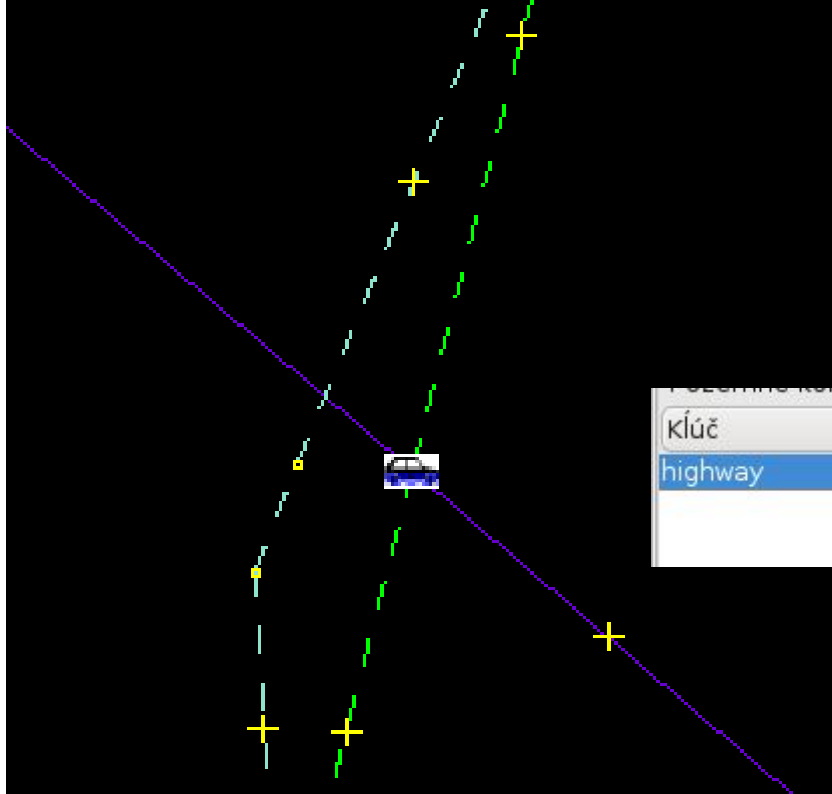


Current volume

- Number of users: 481 153
- Number of nodes: 1 236 723 935
- Number of ways: 111 712 298
- Number of relations: 1 139 996
- planet.osm.bz2: 18 GB



Database structure



Kľúč	Hodnota
highway	ford

Kľúč	Hodnota
cycleway_yellow	yes
highway	path
source	survey

Člen	Úloha
route ("0701c", 24 členov)	
route ("Trnavská stovka", 148 čle...)	
route ("33-107", 5 členov)	
route ("0750L", 41 členov)	
route ("Európska diaľková trasa"...	
route ("Kellys Green Bike Tour", ...)	

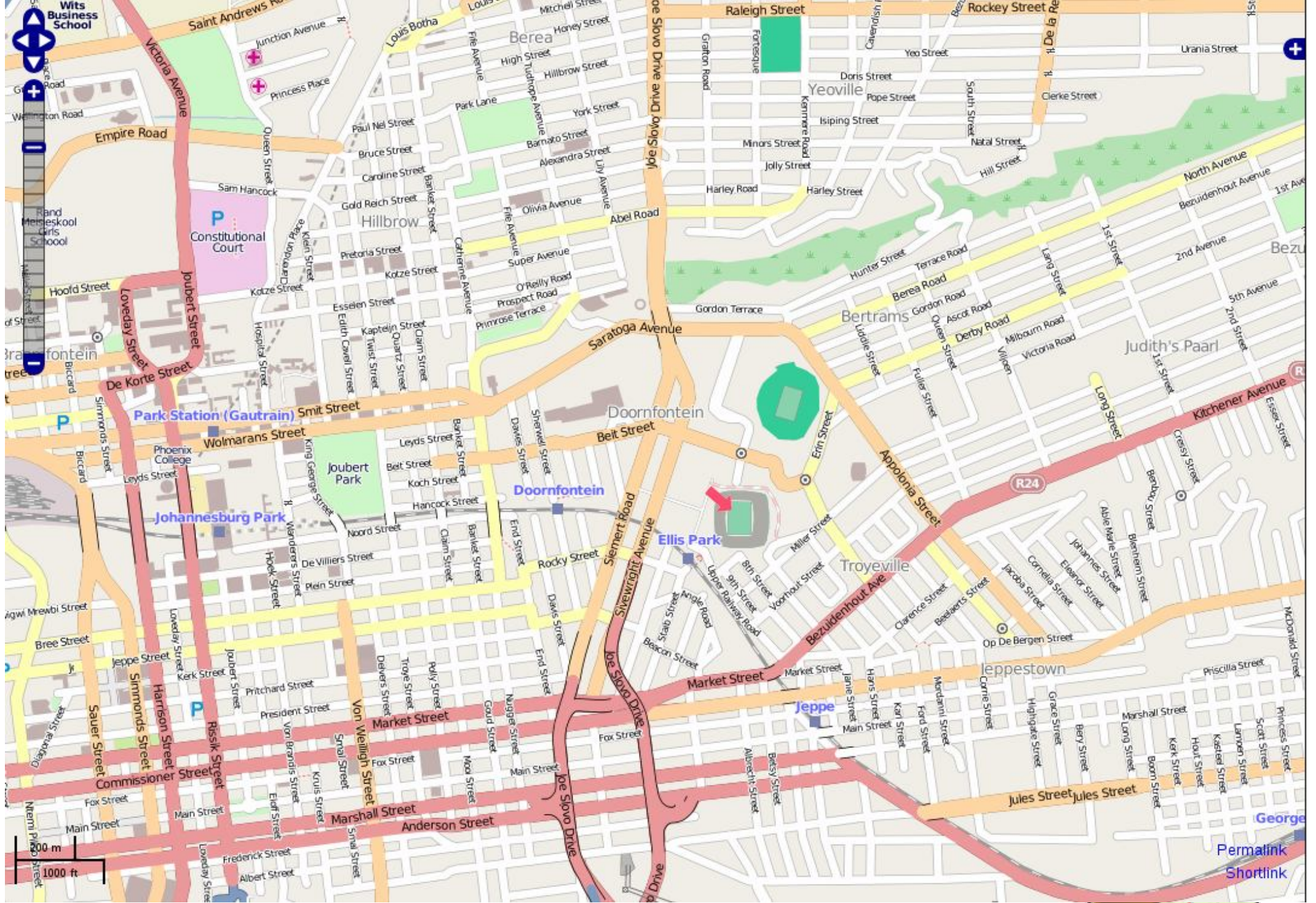
Značky	
Kľúč	Hodnota
colour	red
complete	yes
description	Biely kríž - Pezinská Baba
network	nwn
operator	KST
osmc:symbol	red:white:red_bar
ref	0701c
route	hiking
symbol	major
type	route

Geografia(Zemepis)/Hranice/Administratívne	
Kľúč	Hodnota
admin_level	7
boundary	administrative
source	kapor2

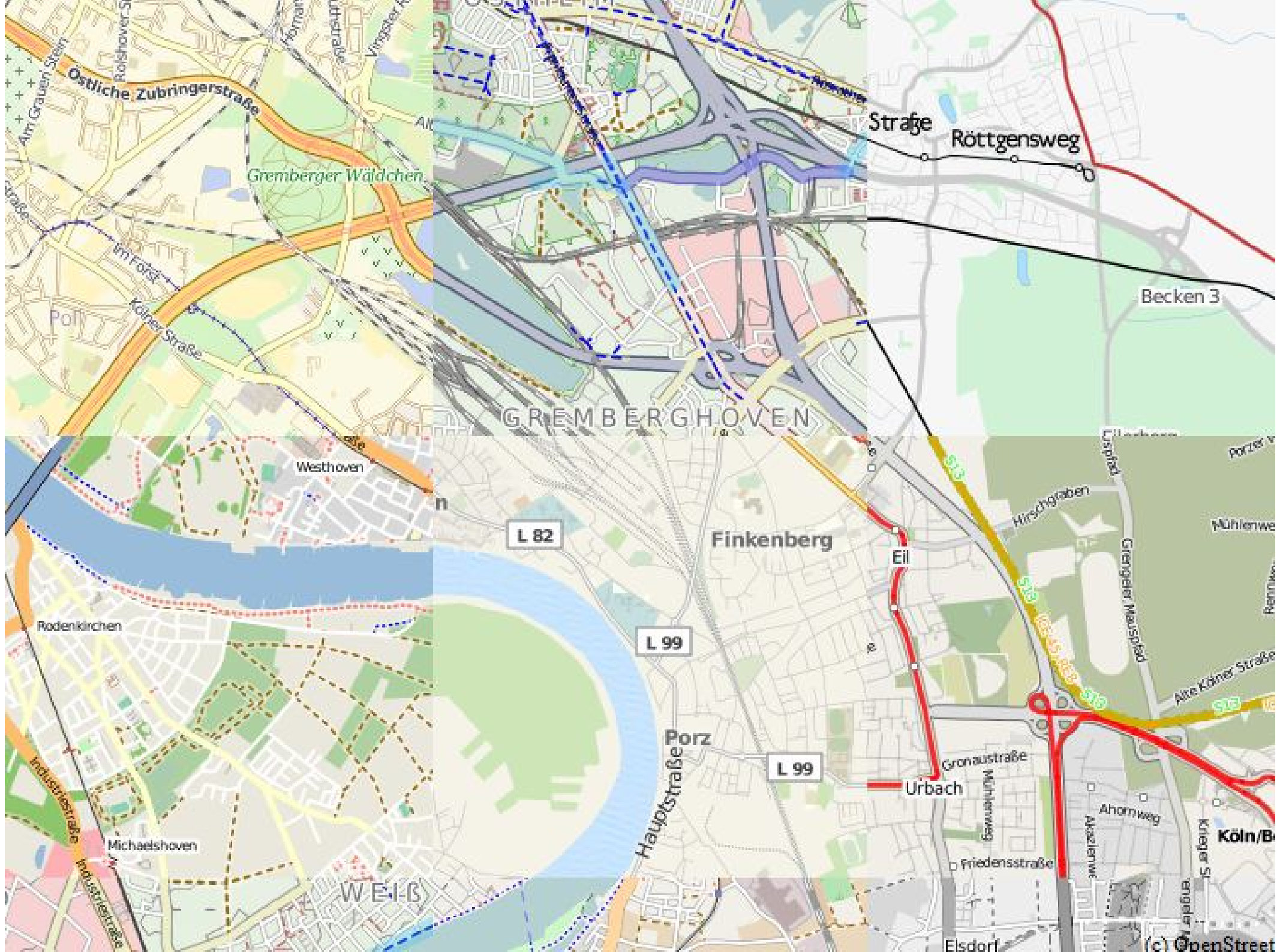
Člen	Úloha
boundary ("okres Malacky", 12 členov)	outer
boundary ("okres Pezinok", 6 členov)	outer

Relácie: 12	
boundary ("Bratislavský kraj", 36 členov)	
boundary ("okres Malacky", 12 členov)	
boundary ("okres Pezinok", 6 členov)	
route ("0701c", 24 členov)	
route ("0750L", 41 členov)	
route ("2404", 36 členov)	
route ("33-106", 8 členov)	
route ("33-107", 5 členov)	
route ("Európska diaľková trasa", 881 členov)	
route ("Kellys Green Bike Tour", 140 členov)	
route ("Trnavská stovka", 148 členov)	
superroute ("Europe route E8", 8 členov)	





- South Africa – football



Ostliche Zubringerstraße

Strasse Röttgensweg

Gremerberger Wäldchen

Becken 3

GREMERBERGHÖFEN

Westhoven

L 82

Finkenbergl

Eil

L 99

Hirschgraben

Rodenkirchen

Grengeler Mauspfad

Hauptstraße

L 99

Urbach

Gronastraße

Mühlenweg

Friedensstraße

Ahornweg

Akazienweg

Alte Köhler Straße

Michaelshoven

WEIß

Köln/B

Elsdorf

© OpenStreet

• Gaza

GAZA TOURIST MAP
خريطة غزة السياحية



work **JumpStart**
INTERNATIONAL

Copyright 2009, Ezzouk Ltd., All Rights Reserved

- Legend**
- Hotel
 - Restaurant
 - Cafe
 - Bank
 - Hospital, Clinic, Pharmacy
 - University, college, school
 - Fuel Station
 - Public Building
 - Taxi Office
 - Supermarket
 - Mosque

0 250 500
Meters



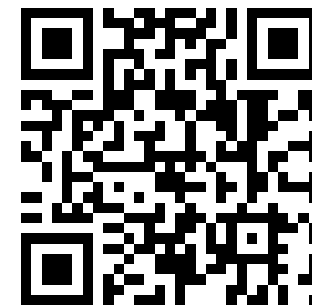


Ševčenko, Dnipropetrovsk



- Saint Petersburg Dam





Xplane

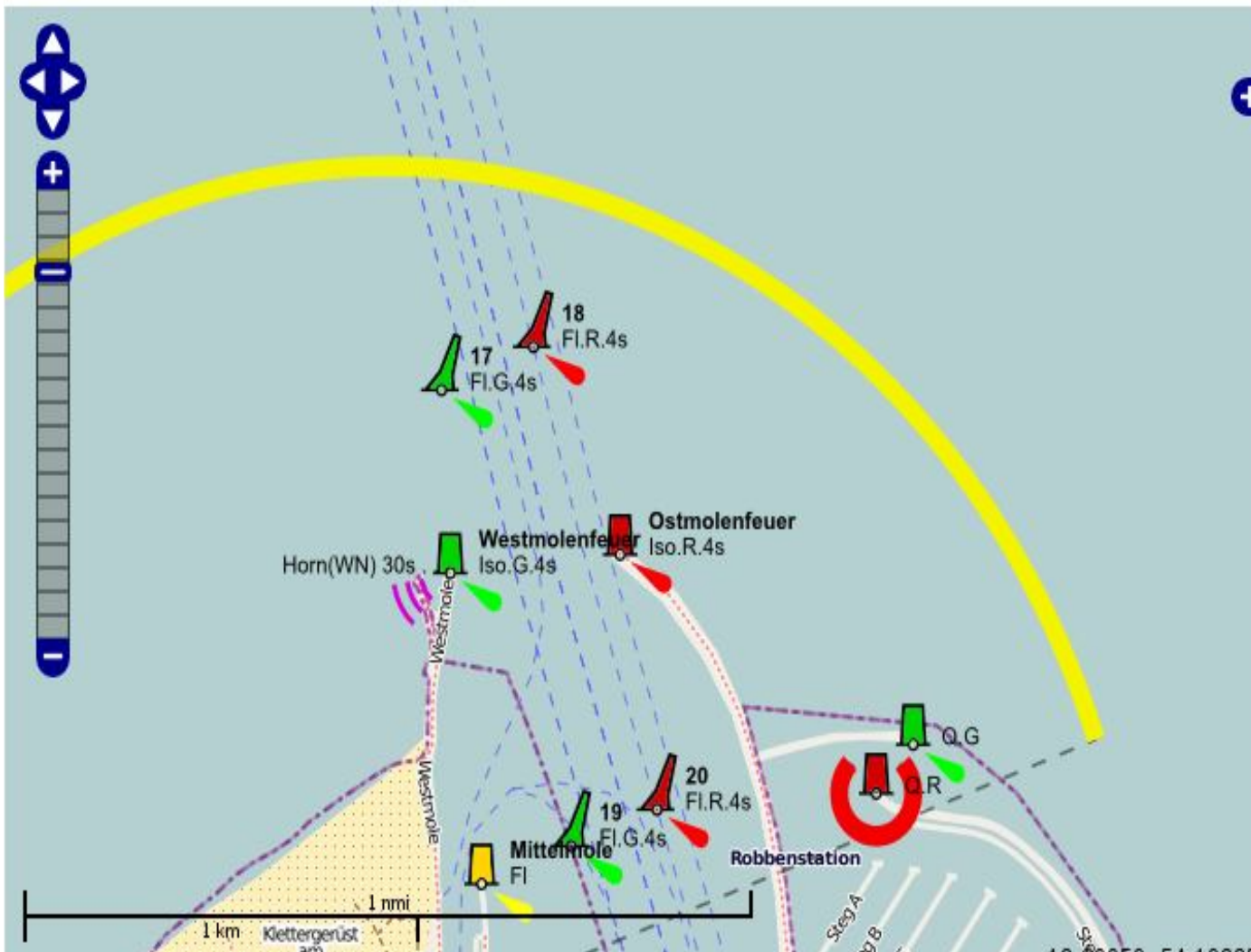


freg	var	vis	grnd	flit
49.76	0.002	1.000	1.000	1.000
/sec	/sec	ratio	ratio	ratio



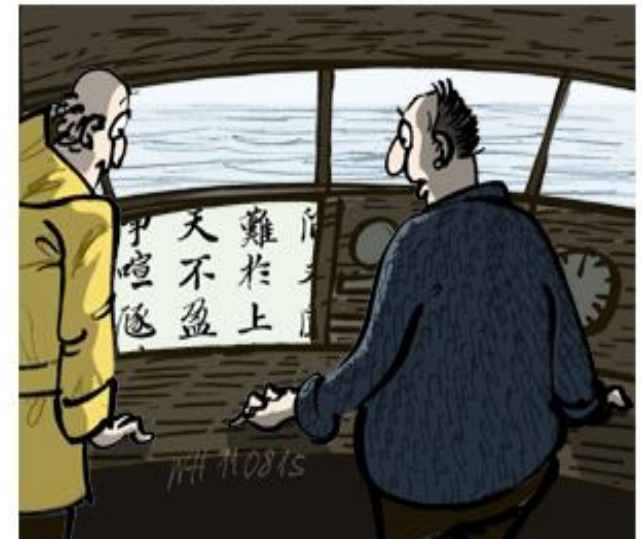
OpenSeaMap - The free nautical chart

Deutsch English Español Français Italiano Русский عربي



Cartoon of the month

Effects of US- debt crisis:



Our Navi has not crashed. It's worse:
The Americans have sold GPS!

Exhibition

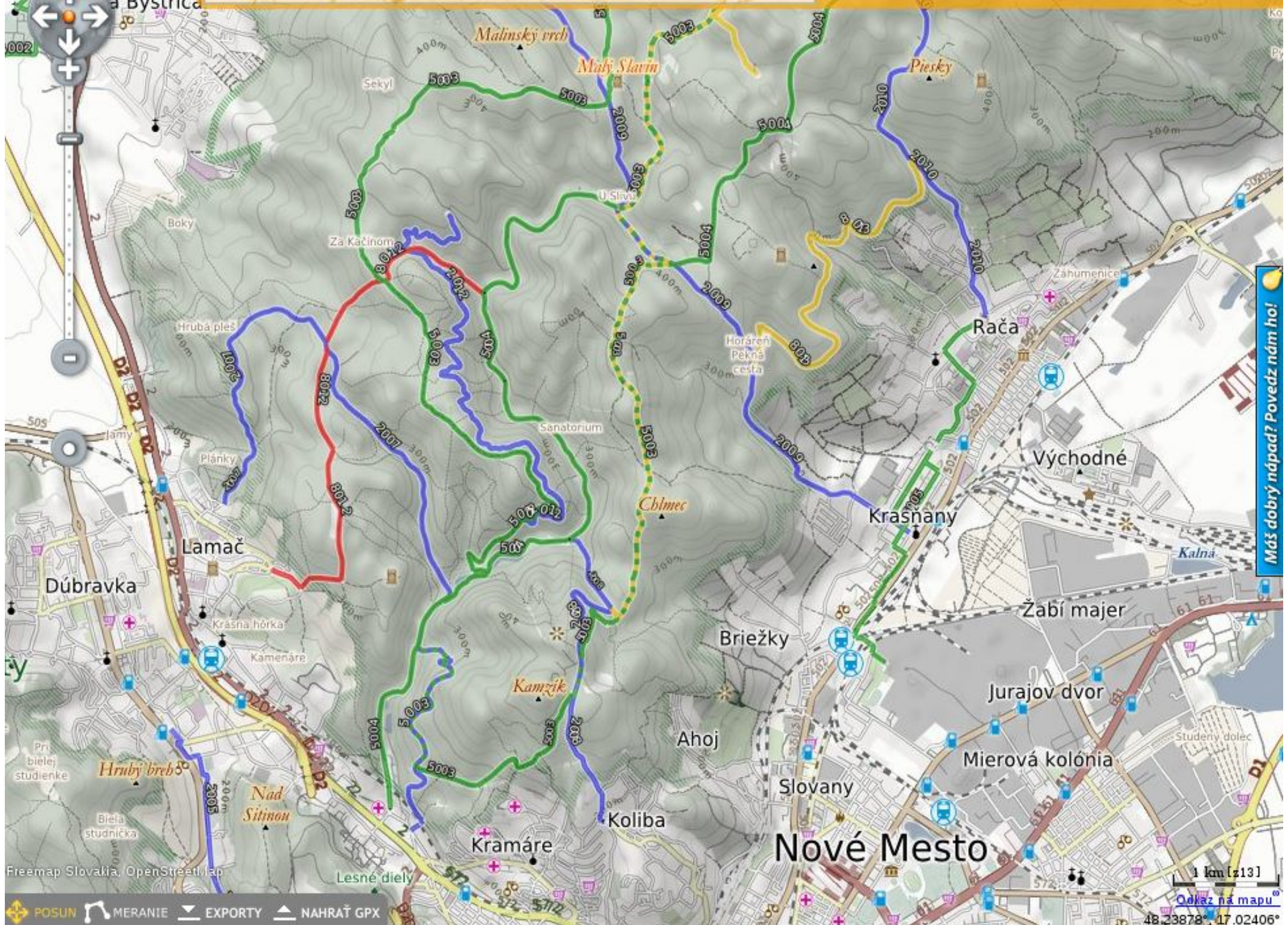


Night map

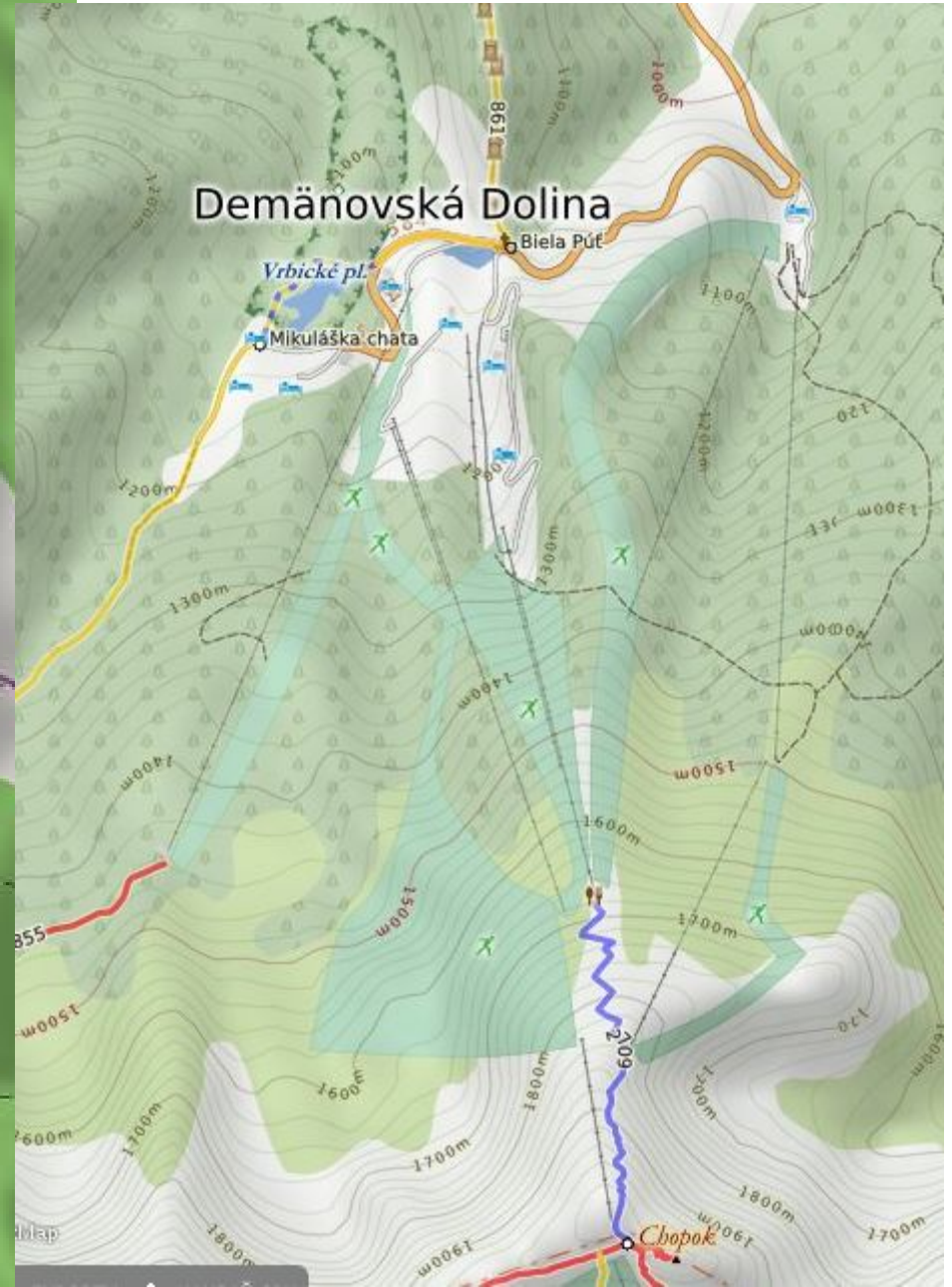
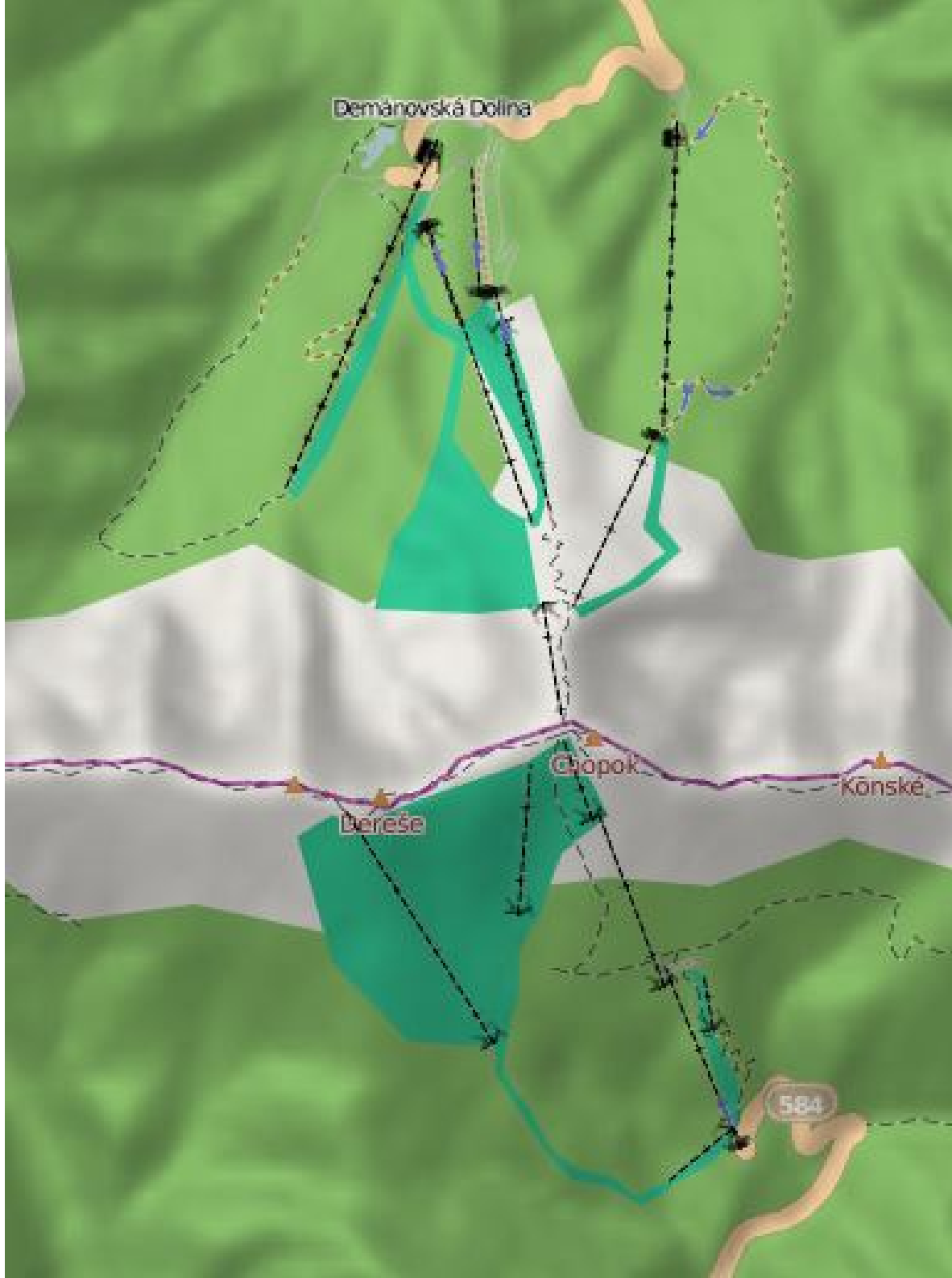


OpenOrienteeringMap





OpenPisteMap

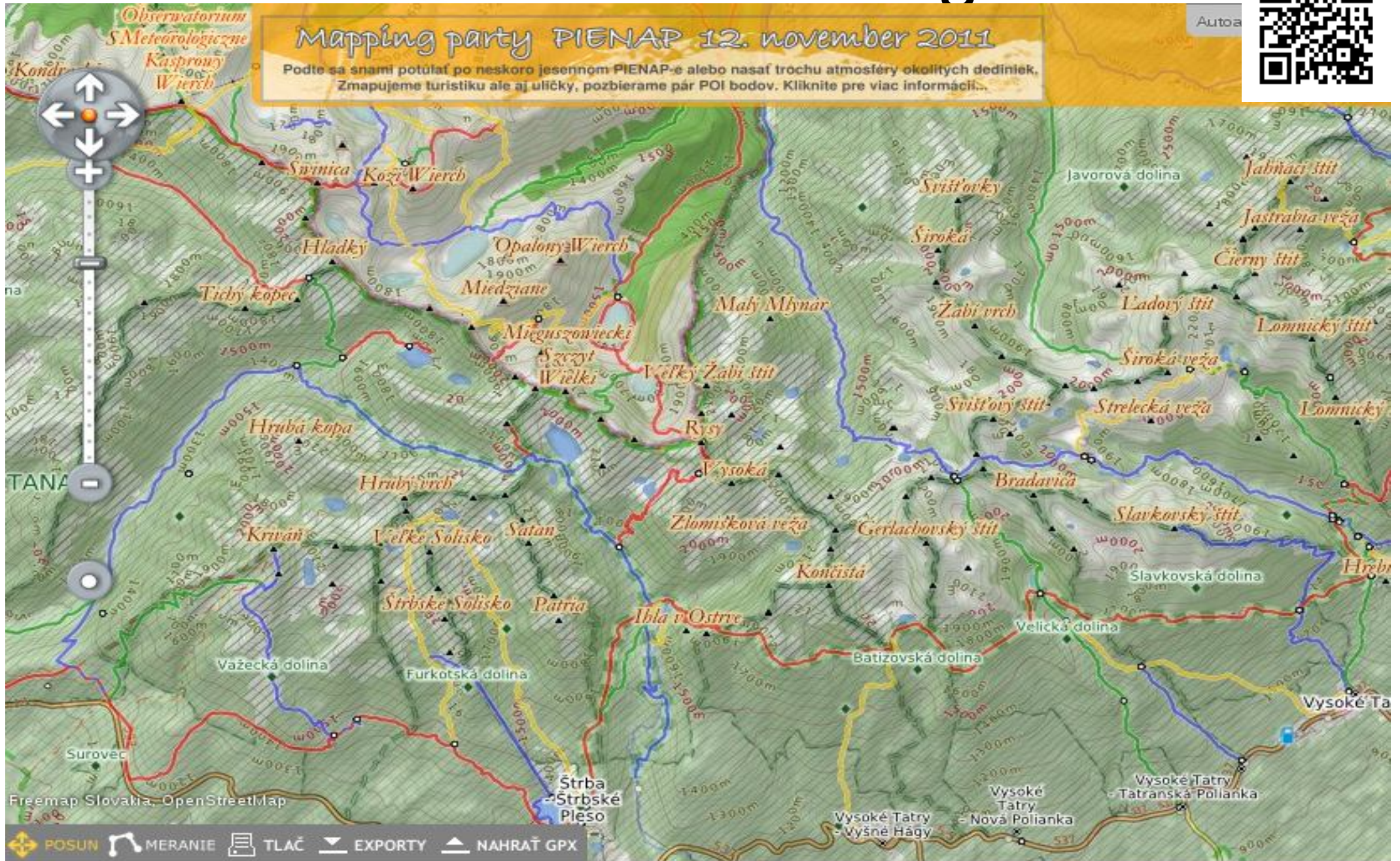


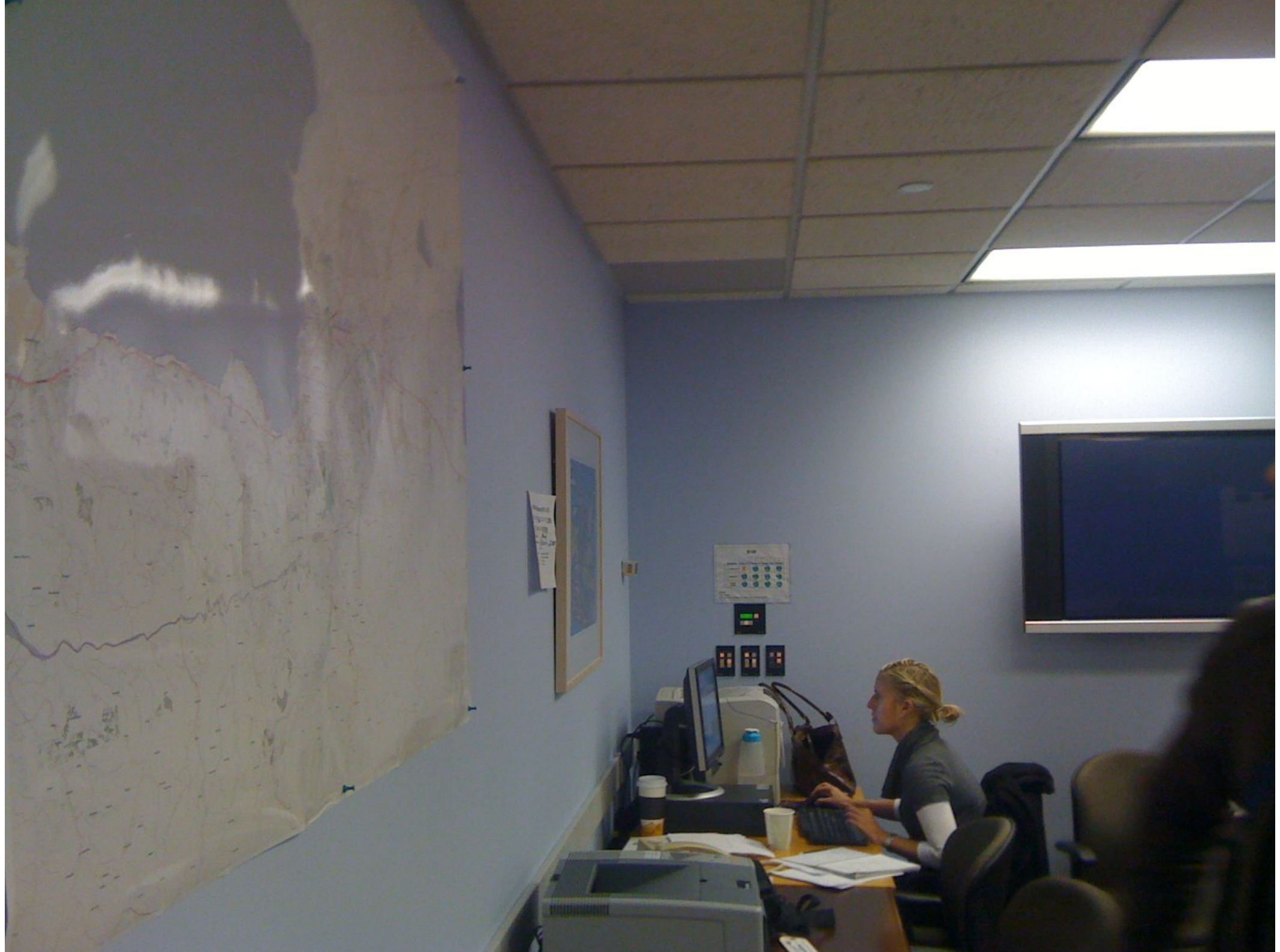
Hiking



Mapping party PIENAP 12. november 2011

Podľa sa s nami potúlajte po neskoro jesennom PIENAP-e alebo nasajte trochu atmosféry okolitých dedínok. Zmapujeme turistiku ale aj uličky, pozbierame pár POI bodov. Kliknite pre viac informácií...



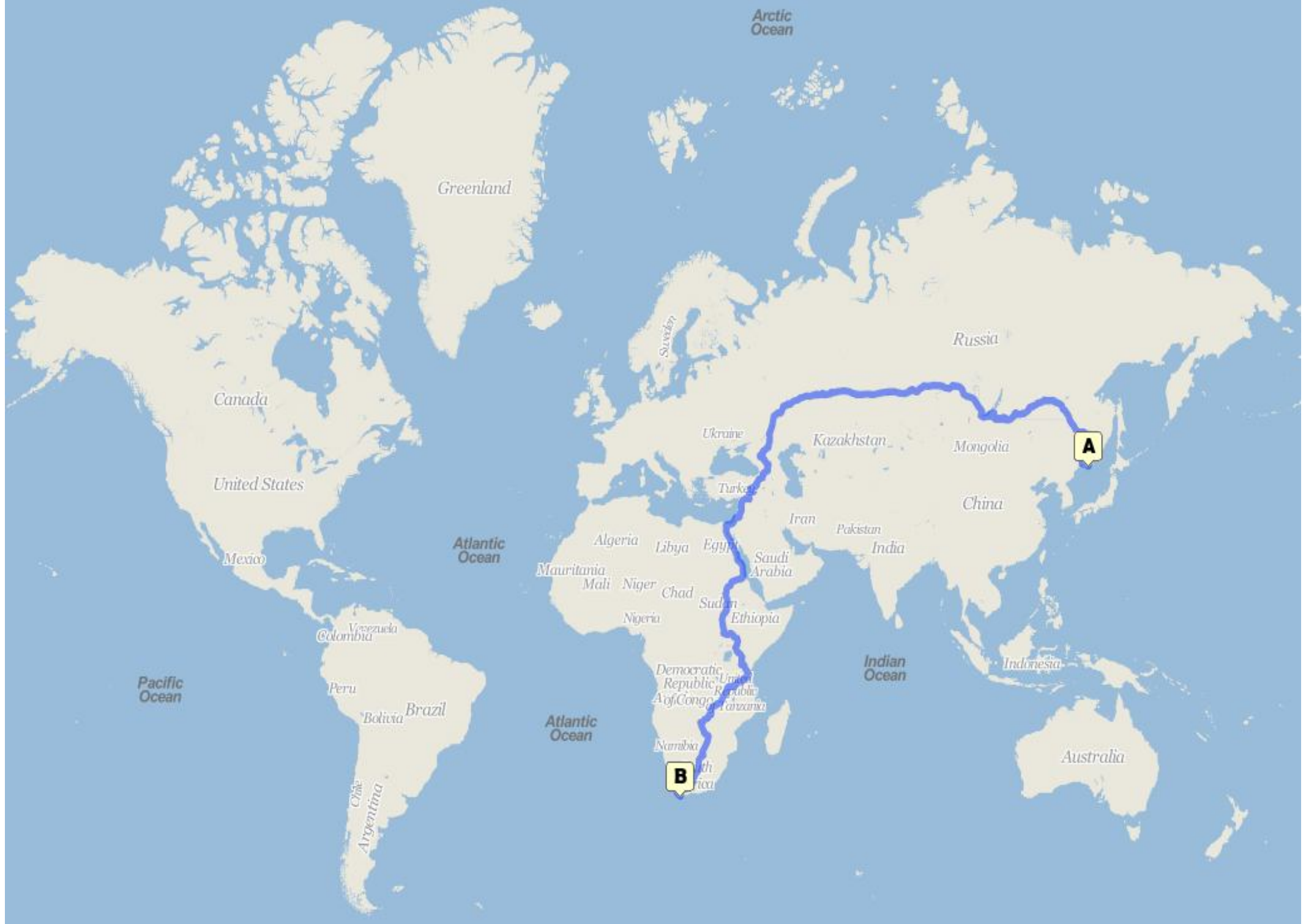


Routing, navigation



COLD...
WARM...
HOT!
COLD...





Arctic Ocean

Greenland

Canada

United States

Mexico

Pacific Ocean

Venezuela
Colombia

Peru

Bolivia
Brazil

Chile
Argentina

Atlantic Ocean

Atlantic Ocean

Sweden

Ukraine

Turkey

Algeria
Mauritania

Libya

Egypt

Mali

Niger

Chad

Nigeria

Sudan

Ethiopia

Democratic
Republic of
Congo

Republic
of Congo

Tanzania

Namibia

South
Africa

Iran

Saudi
Arabia

Pakistan

India

Kazakhstan

Mongolia

China

Indian Ocean

Indonesia

Australia

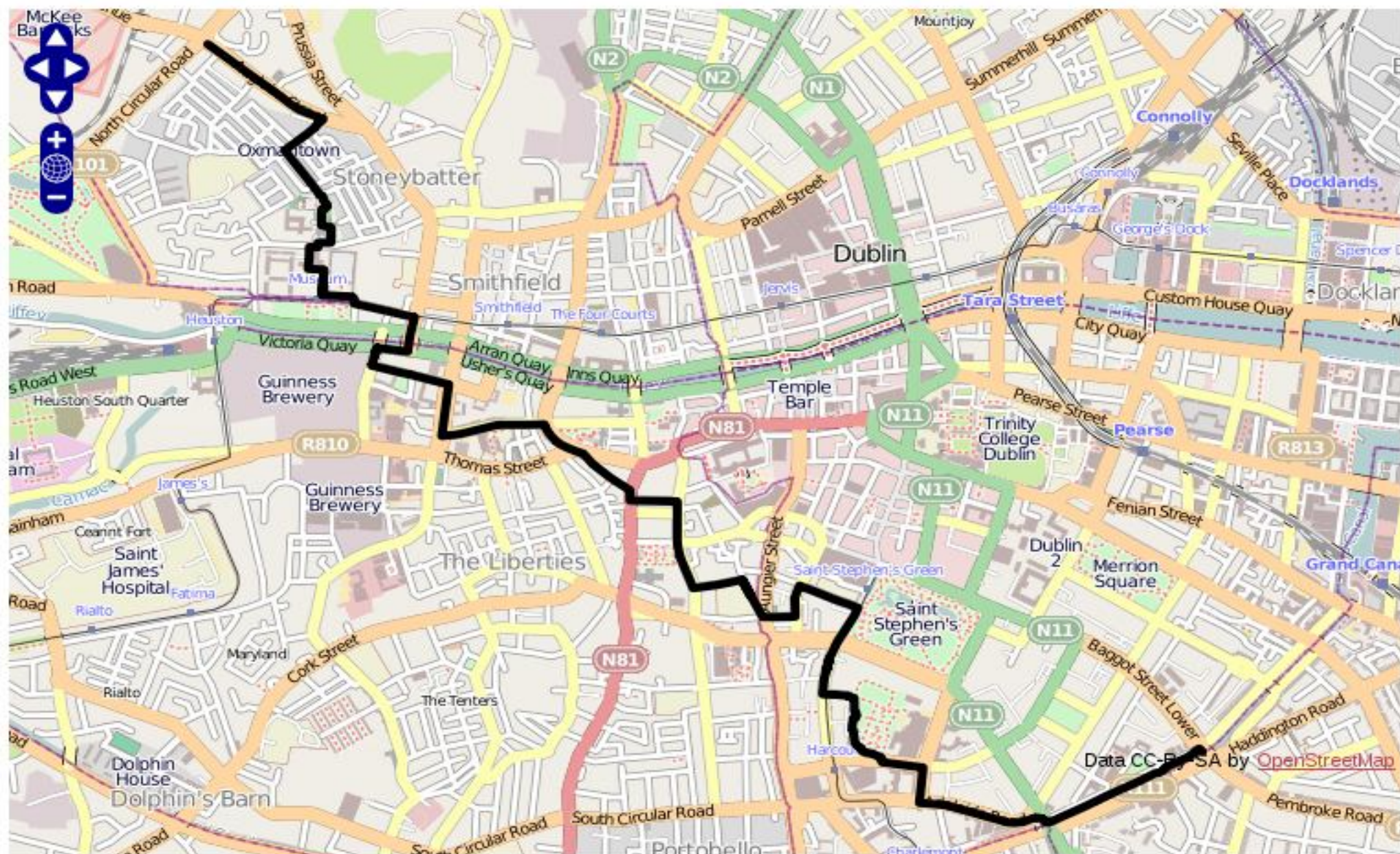
Russia

A

B

However with computers and open data from [OpenStreetMap](#) it's possible to answer this question! And **yes! it is possible to cross Dublin without passing a pub.**

How? Here's the route:



Can't see anything? Try [downloading this overview image](#) of the route. This image is Creative Commons licenced. Please include "(©) OSM Contributors CC-BY-SA" if you're reuse it.



ŠTART

Staré Mesto

CIEL

Dvory

Muchovo námestie

Hrabiny

Lodenica

Nový prístav

Zimný prístav

Malý Dunaj

Searching ... ITAPA

Results from [OpenStreetMap Nominatim](#)

[Village Itapa, Nigera](#)

[Village Itapa, Nigera](#)

[More results](#)

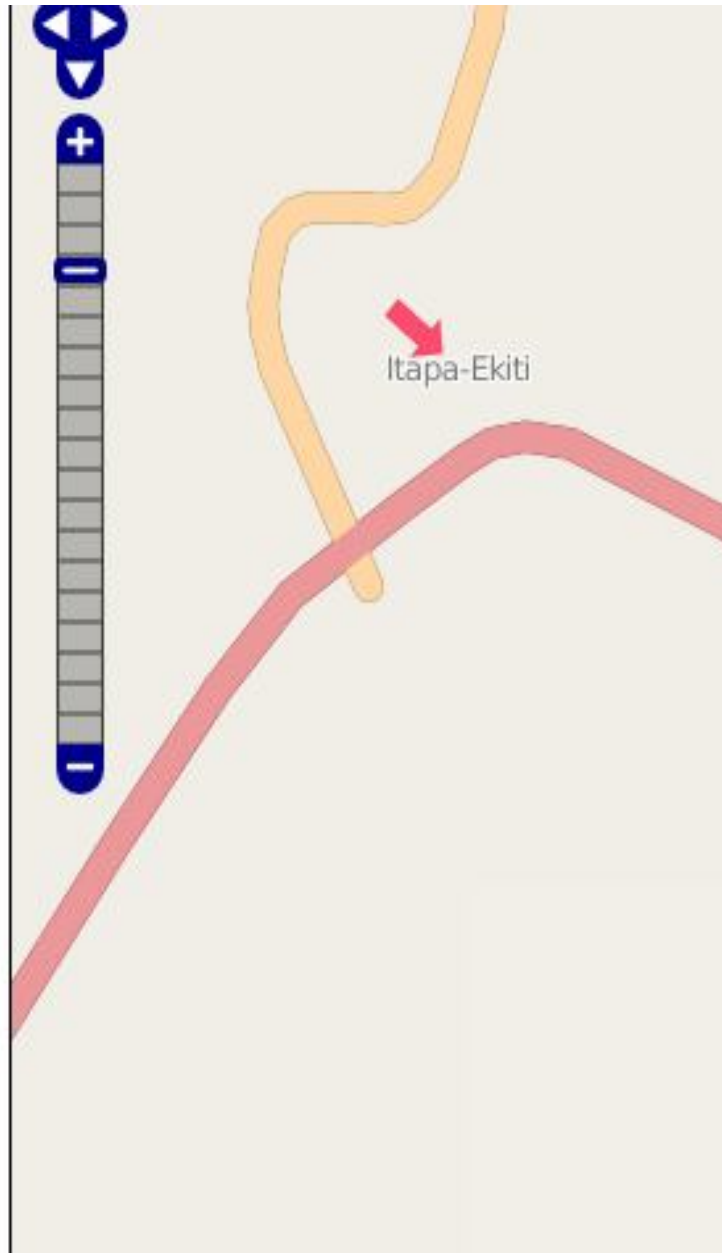
Results from [GeoNames](#)

[Itapa-Ekiti, Nigeria](#)

[Santa Ana Island, Solomon Islands](#)

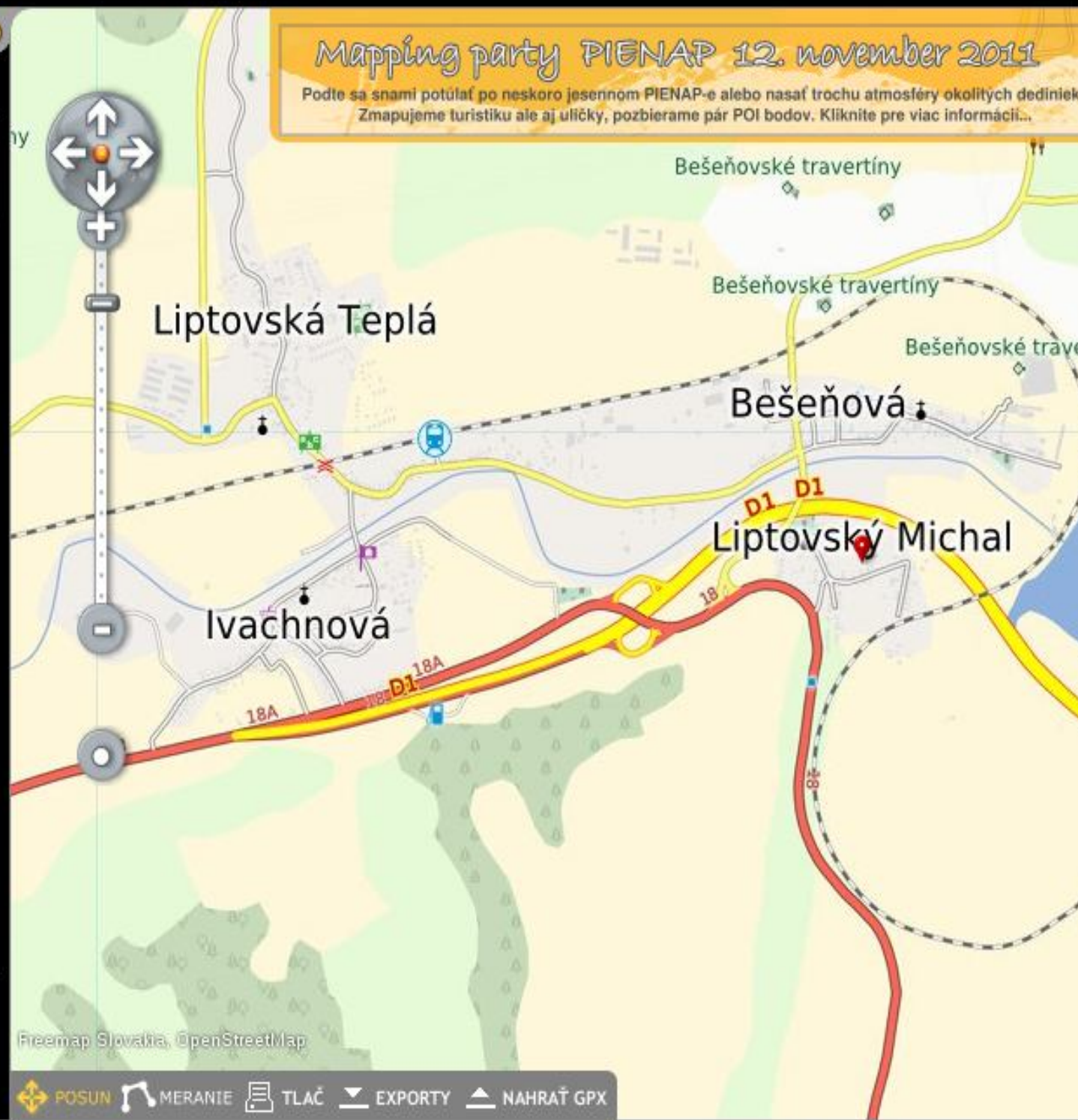
[Itapanpa, Nigeria](#)

[Isla Garrao, Chile](#)



[Odkaz na stránku](#)

- Liptovský Michal
Obec
Ružomberok
- ✚ Sv. Michal
Kostol
- ✚ sv. Michal
Kostol
- ✚ sv. Michal
Kostol
- ✚ Sv. Michal
Kostol
- ✚ Sv. Michal
Kostol
Levice
- ✚ sv. Michal
Kostol
- 🚗 Pension Michal a Tonka
Penzión
Bojnice
- Michal nad Žitavou
Obec
Nové Zámky



REKLAMA
REKLAMA



Freemap Slovakia, OpenStreetMap

Results from [OpenStreetMap Nominatim](#)

Administrative Boundary Bratislava, Bratislavský kraj, Slovakia

City Bratislava, Bratislavský kraj, Slovakia, Europe

Hamlet Bratislava, Paraná, Brazil

Residential Bratislava, JAXVALOS /pan-sharpnd, 2007-05-27, Candelaria, Talcahuano, Provincia de Concepción, Biobío Region, Chile

Residential Bratislava, Concepción, Biobío Region, Chile

Residential Братислава, Черноморетс, Bulgaria

Сinema Братислава, Mate Zalky Street, Оболонь, Київ, Kyiv region, 04212, Ukraine

Residential Братислава, Черноморетс, Bulgaria

Residential Bratislava, JAXVALOS /pan-sharpnd, 2007-05-27, Candelaria, Talcahuano, Provincia de Concepción, Biobío Region, Chile

Hotel Братислава, Andriia Malyshko Street, Соцмісто, Київ, Kyiv region, 02156, Ukraine

Restaurant Братислава, Степана Будного вулиця, Тернопілля, Ternopil Oblast, Ukraine

Osobný prístav Bratislava, Fajnorovo nábrežie, Staré Mesto, Bratislava, 814 75, Slovakia

[More results](#)

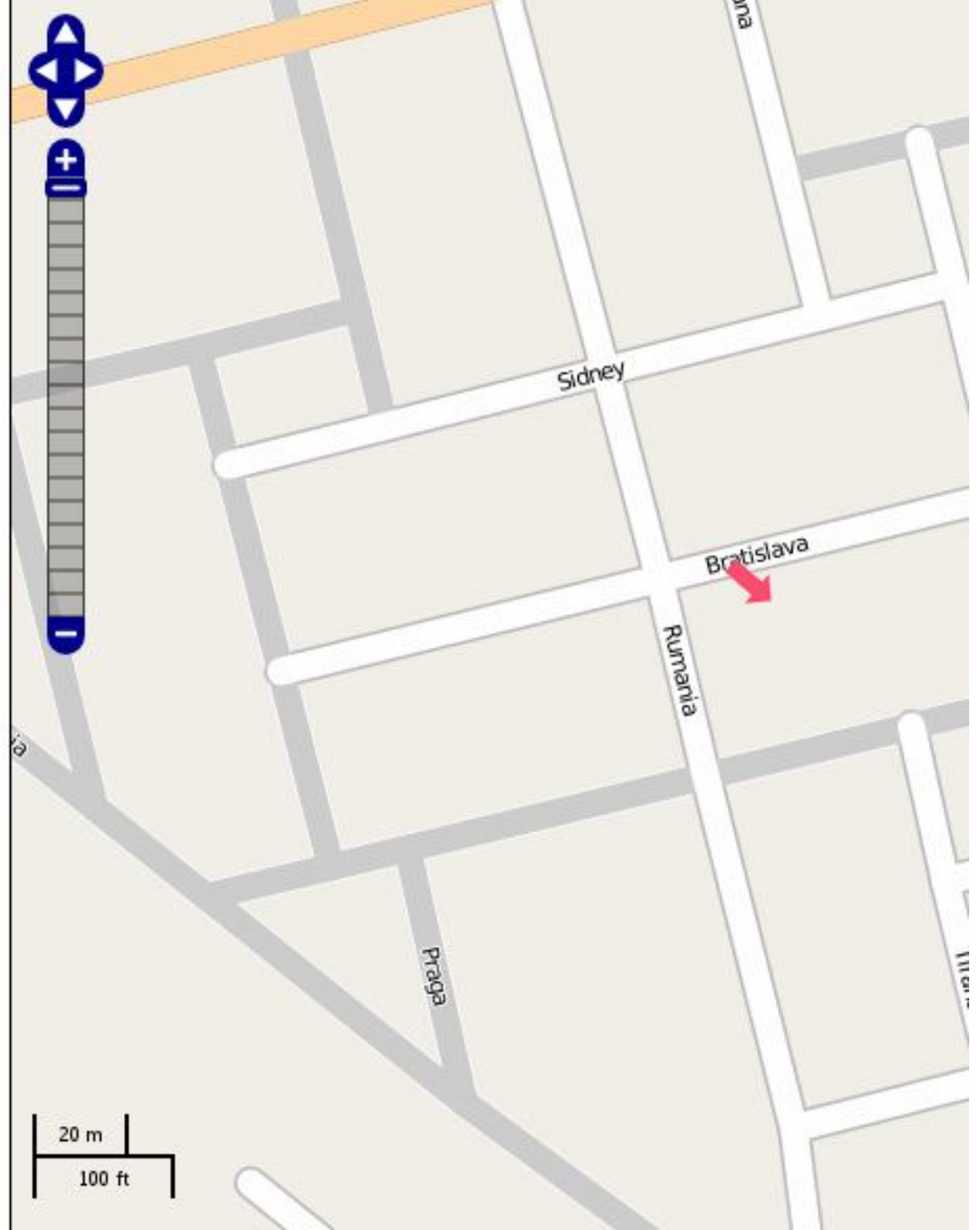
Results from [GeoNames](#)

Bratislava, Slovakia

Bratislava Ivanka, Slovakia

Hlavné Mesto Bratislava, Slovakia

Bratislavský kraj, Slovakia





Possibilities

- Online maps
- Printed maps
- Routing, navigation
- Searching, geocoding
- Mobile phones
- Offline navigation
- Customized visuals
- Raster and vector
- ...





OpenStreetMap

- OZ Freemap Slovakia

- www.freemap.sk



- OpenStreetMap

- www.OpenStreetMap.org



- Michal Páleník

