

IMPLEMENTATION OF THOR-AIRPAS IN BELARUS

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FINAL TRAINING ON THOR MODELLING SYSTEM AND STUDY TOUR FOR AIR QUALITY
EXPERTS ON URBAN TRANSPORT ISSUES
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- THOR-AIRPAS IN BELARUS IS USED TO ASSESS AIR POLLUTION IN **NOVOPOLOTSK**. THE POPULATION IS ABOUT 100000. NOVOPOLOTSK IS ONE OF THE BIG INDUSTRIAL CENTER IN BELARUS.
- **3 MAIN POINT SOURCES** IN THE CITY: OIL REFINING AND PETROCHEMICAL FACTORIES AND POWER PLANT
- WE **DID NOT TAKE IN ACCOUNT AREA SOURCES**, BECAUSE THERE IS ALMOST NO RESIDENTIAL SECTOR IN THE CITY
- **MOBILE SOURCES** HAVE BEEN ADDED

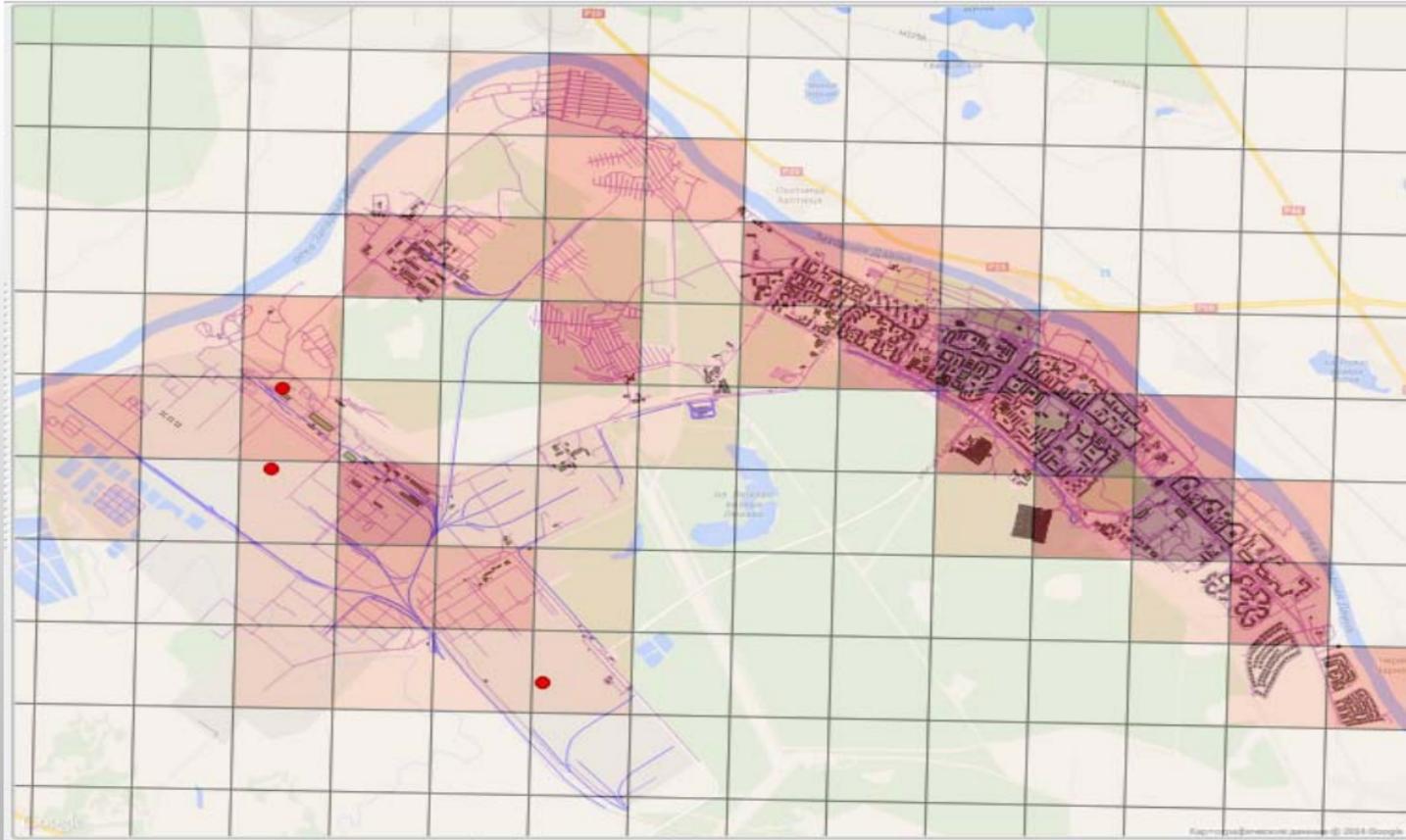
Ran OSPM for whole grid for 2012
SO2 concentrations in the city are high

X	Y	NOx	NO2	O3	SO2	CO	TSP	PM10	PM2.5 (Unitsug/m3)
594500.	6149500.	5.66	5.02	48.91	17.99	113.79	10.14	9.79	9.60
595500.	6149500.	6.10	5.28	48.68	21.28	114.06	10.15	9.80	9.62
596500.	6149500.	6.45	5.53	48.46	24.43	114.31	10.17	9.82	9.63
597500.	6149500.	6.51	5.65	48.34	25.25	114.48	10.19	9.84	9.65
598500.	6149500.	6.57	5.68	48.31	26.40	114.58	10.22	9.87	9.68
599500.	6149500.	6.57	5.65	48.34	26.65	114.66	10.23	9.88	9.70
600500.	6149500.	6.41	5.52	48.46	25.63	114.71	10.24	9.88	9.70
601500.	6149500.	6.06	5.16	48.80	22.54	114.66	10.22	9.87	9.69
602500.	6149500.	5.63	4.88	49.05	18.80	114.54	10.19	9.84	9.66
603500.	6149500.	5.19	4.61	49.28	14.87	114.41	10.16	9.81	9.63
604500.	6149500.	4.86	4.39	49.47	12.00	114.23	10.13	9.79	9.61
605500.	6149500.	4.62	4.21	49.63	10.05	114.00	10.12	9.77	9.60
606500.	6149500.	4.42	4.06	49.77	8.55	113.72	10.11	9.76	9.59
607500.	6149500.	4.26	3.92	49.90	7.40	113.39	10.10	9.76	9.58
608500.	6149500.	4.15	3.83	49.98	6.60	113.26	10.09	9.75	9.58
594500.	6150500.	6.32	5.44	48.53	22.68	114.06	10.15	9.80	9.61
595500.	6150500.	7.09	5.86	48.18	28.86	114.47	10.18	9.82	9.63
596500.	6150500.	7.89	6.28	47.82	35.43	115.19	10.22	9.85	9.66
597500.	6150500.	8.00	6.52	47.58	37.06	115.41	10.25	9.89	9.69
598500.	6150500.	7.95	6.48	47.63	37.25	115.71	10.27	9.91	9.72

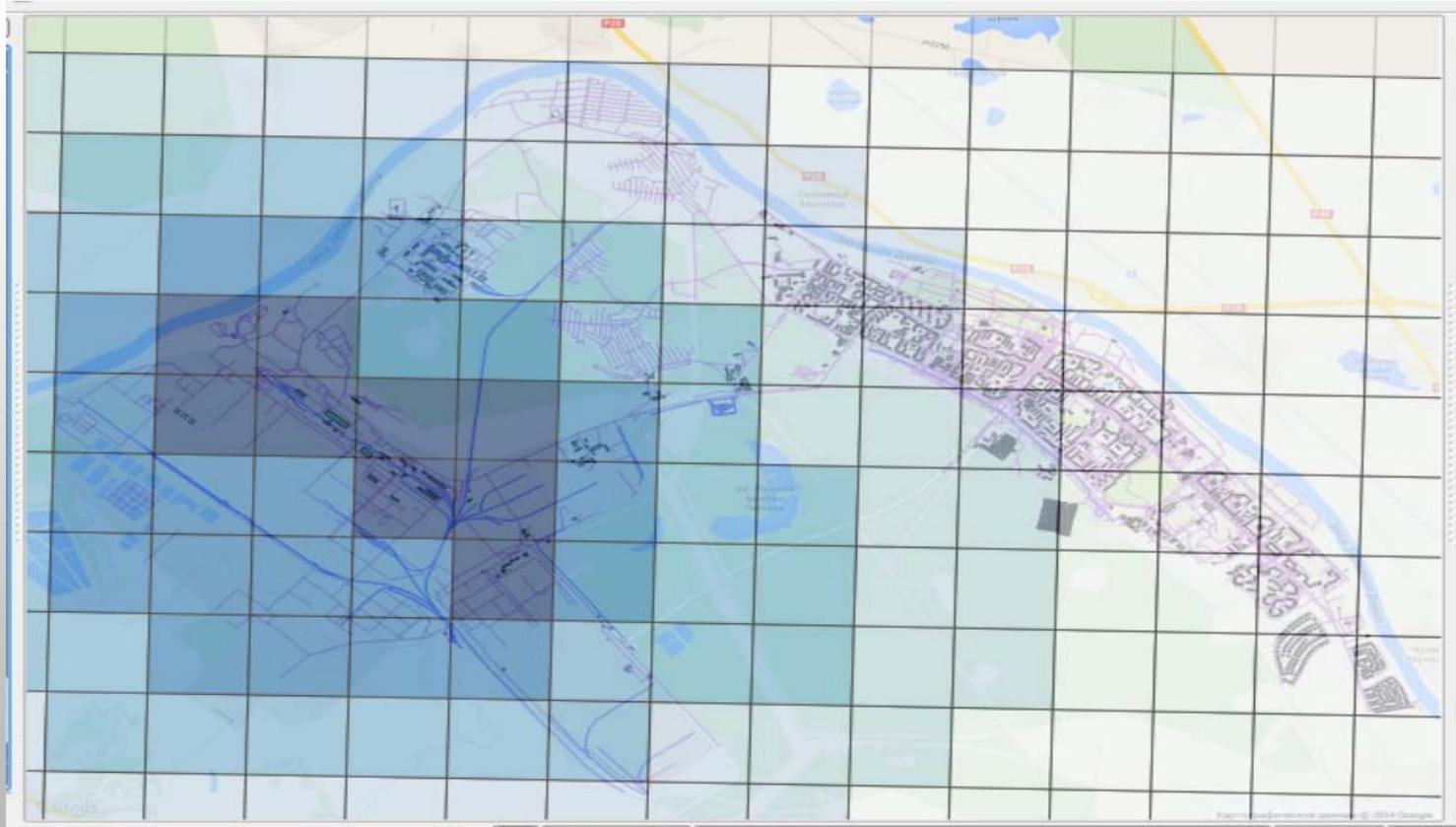
Import in Q-GIS different layers (Urban Area, Road, Google Streets, Grid and Build)



Emissions of SO₂



Concentrations of SO₂



WE PLANE TO USE MODEL FOR

- ESTIMATING OF MEASURES FOR REDUCTION SO₂ CONCENTRATION IN THE CITY
- ESTIMATING OF MEASURES FOR REDUCTION EMISSIONS FROM TRANSPORT
- FORECASTING AIR POLLUTION LEVEL
- DEVELOPMENT OF SYSTEM OF MONITORING
- ANOTHER CITY OF BELARUS



Thank's for attention!

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