FAIRMODE
Forum for air quality modelling in Europe

Composite Emission Mapping Exercise

Hands-on session

FAIRMODE Technical Meeting
19-21 June 2017, Athens, Greece

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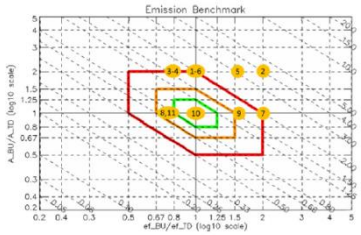
Workflow

CSV
Shapefiles

Δ DELTA Benchmarking
Fairmode Tools and Software



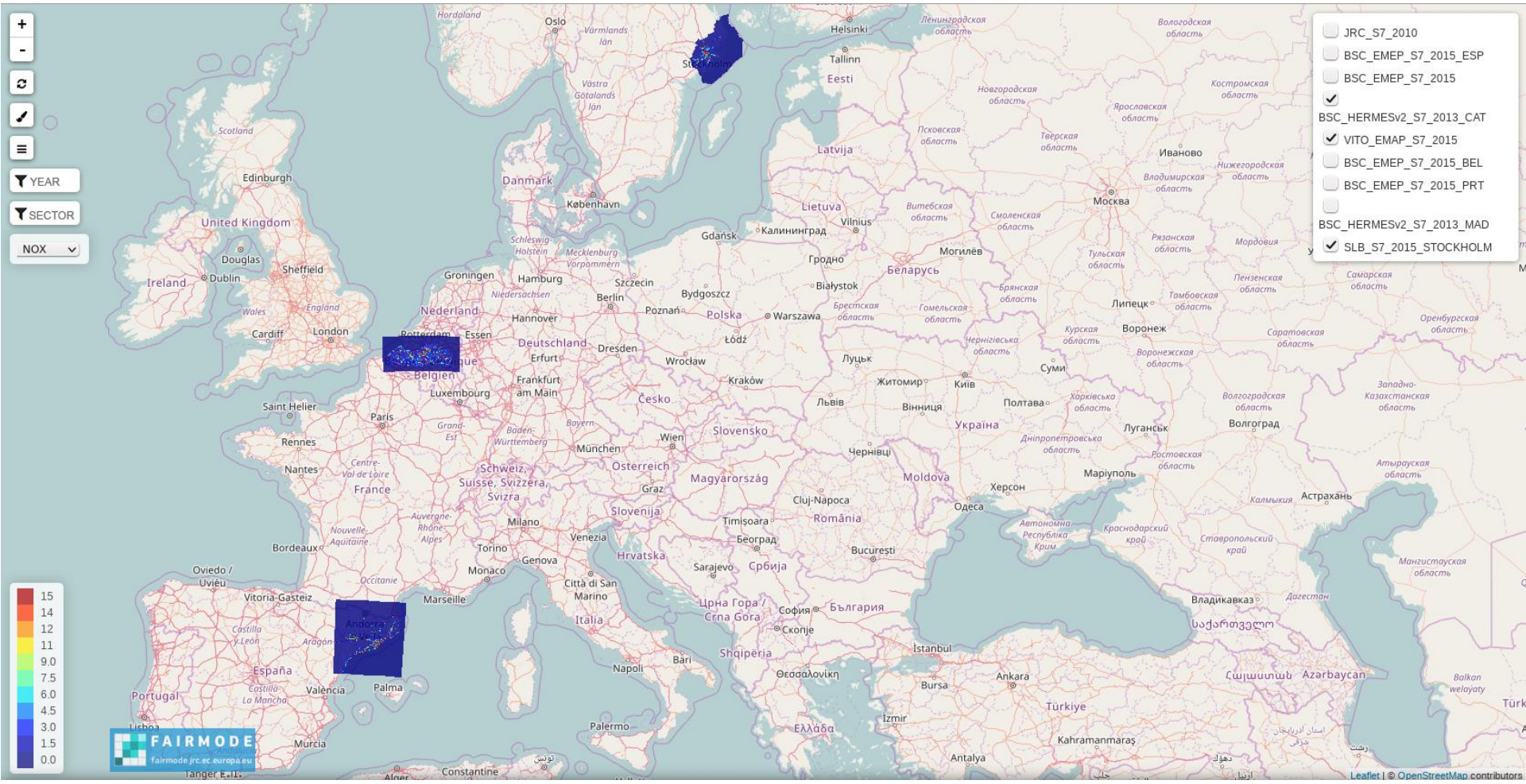
CMapping quality check tool

European Composite Maps database

European Composite Map viewer

ASCII
TIFF

First results



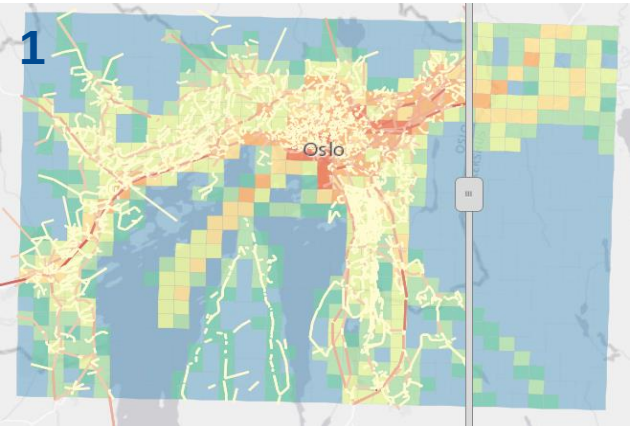
https://eucompositemaps.marvin.vito.be/emissions/

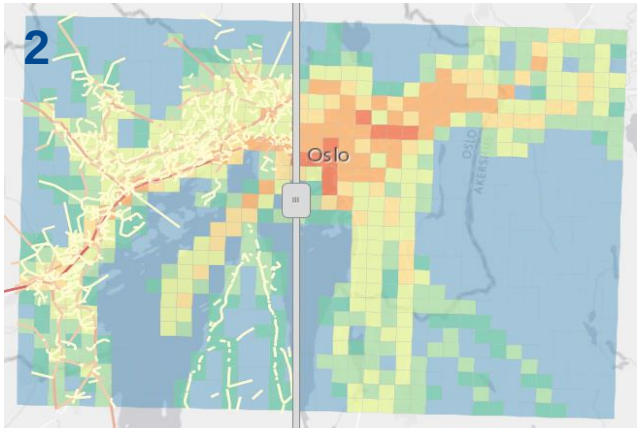
Current fuctionalities

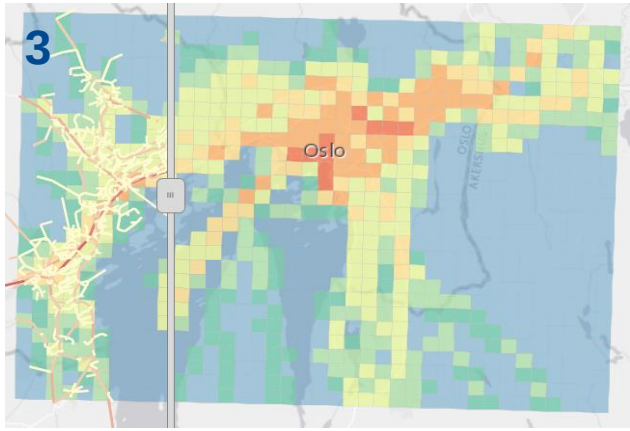
- Zoom and pan functionality
- Visualization of map for a selected year, pollutant and emission sector combination
- Limit the set of available maps that is shown in the list to those that have data for the area you are looking at.
- Set the legend to the data you have selected or reset it to the initial legend

Potential fuctionalities

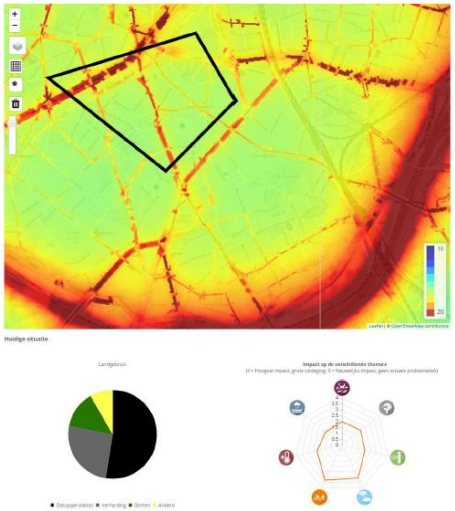
- Transparency (courtain effect to see what is underneath)





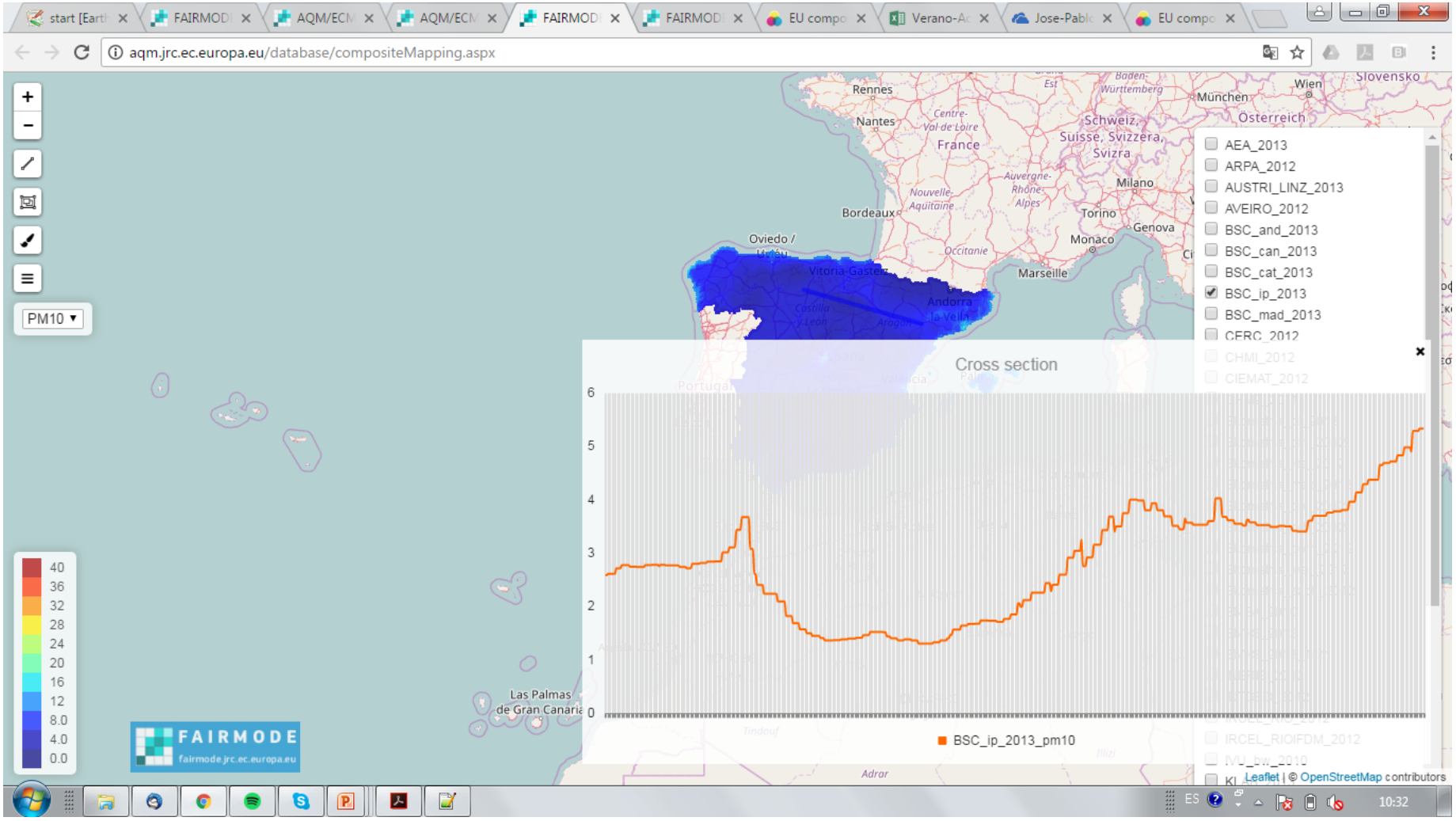


- Visualization of absolute contribution of emissions over different sectors for a selected area/polygon as a spider / pie diagram



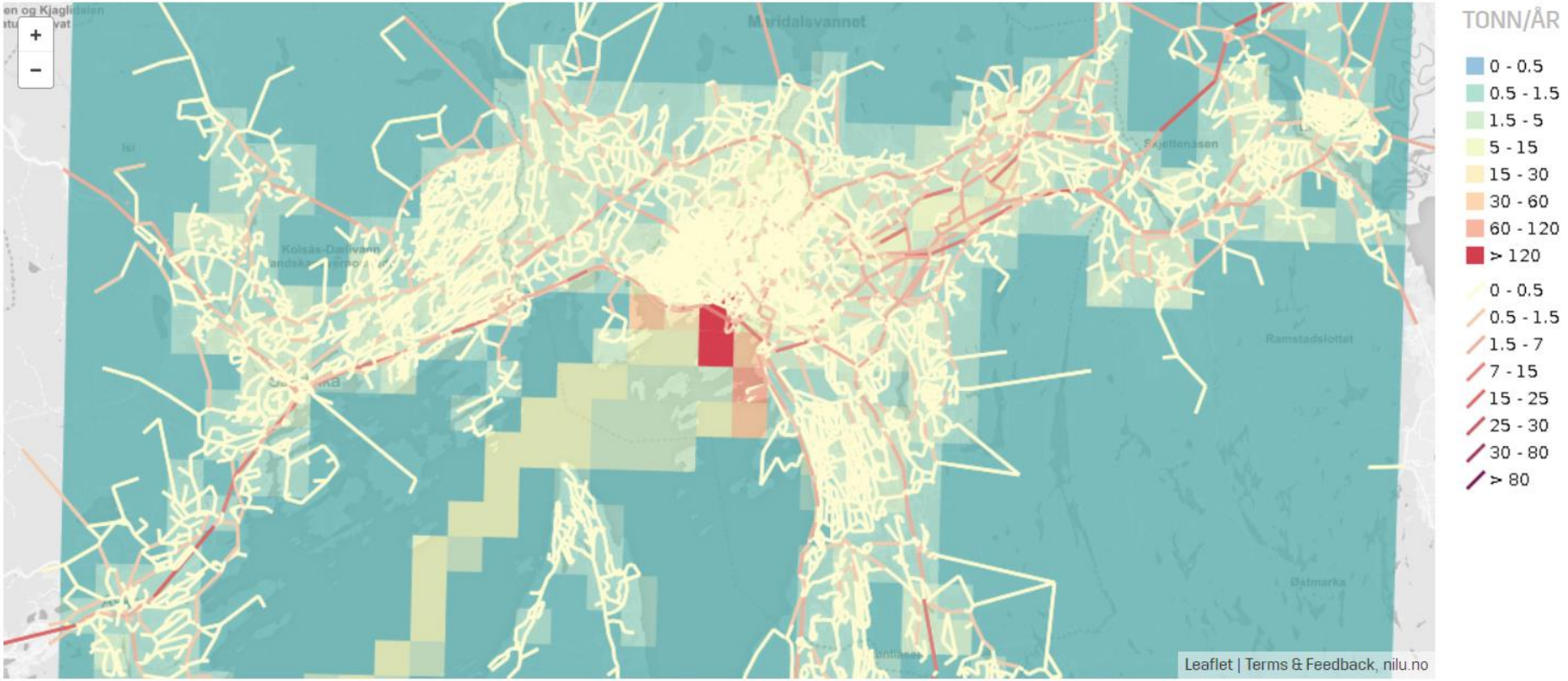
Potential fuctionalities

- Cross section line: Draw a polilyne to plot an emission profile



Spatial resolution for reporting

NOx Emissions at the road link (road traffic) and gridded at 1 x 1 km (others)



Line and point sources:
Which spatial resolution should we use for reporting?

Mapping between SNAP and GNFR14

GNFR14	SNAP
A_PublicPower	SNAP1 (Public electricity and heat production)
B_Industry	SNAP1 (Petroleum refining) SNAP3 SNAP4 SNAP5 (Quarrying and mining of minerals other than coal → PM)
C_OtherStationaryComb	SNAP2
D_Fugitive	SNAP4 (Fugitive emissions oil: Refining / storage, Fugitive emission from solid fuels: Solid fuel transformation → NMVOC) SNAP5 SNAP9 (Venting and flaring (oil, gas, combined oil and gas)
E_Solvents	SNAP6
F_RoadTransport	SNAP7
G_Shipping H_Aviation I_Offroad O_AviCruise P_IntShipping	SNAP8
J_Waste	SNAP9 (except D_Fugitive category)
K_AgriLivestock L_AgriOther	SNAP10

Mapping between SNAP and GNFR14

GNFR14	SNAP
A_PublicPower + B_Industry	**SNAP1 SNAP3 SNAP4**
C_OtherStationaryComb	SNAP2
D_Fugitive + J_Waste	**SNAP5 SNAP9**
E_Solvents	SNAP6
F_RoadTransport	SNAP7
G_Shipping H_Aviation I_Offroad O_AviCruise P_IntShipping	SNAP8
K_AgriLivestock L_AgriOther	SNAP10

Or move to the GNFR14 nomenclature…