

ASSESSMENT OF AIR POLLUTION IN THE VICINITY OF INDUSTRIAL ENTERPRISES USING MOSS BAGS TECHNIQUE

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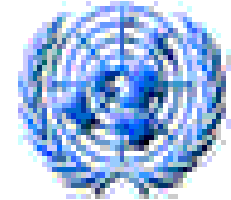
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ICP Programme



UNECE



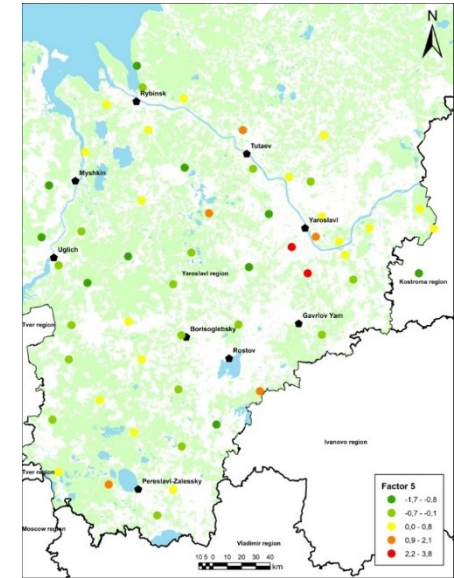
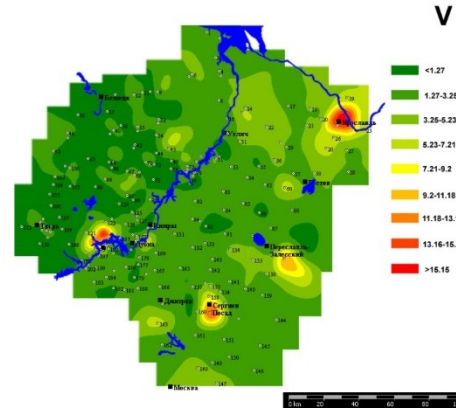
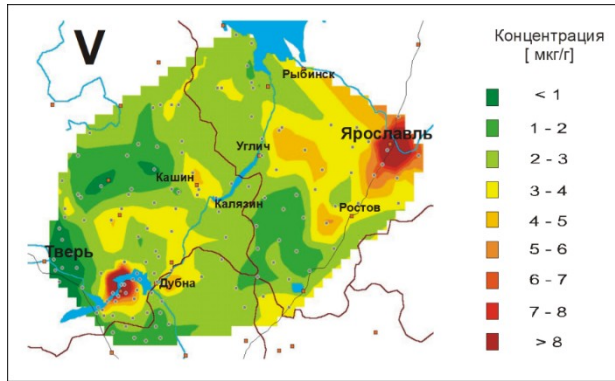
**United Nations
Economic Commission
for Europe**

**International Cooperative
Programme on Effects of
Air Pollution on Natural
Vegetation and Crops**

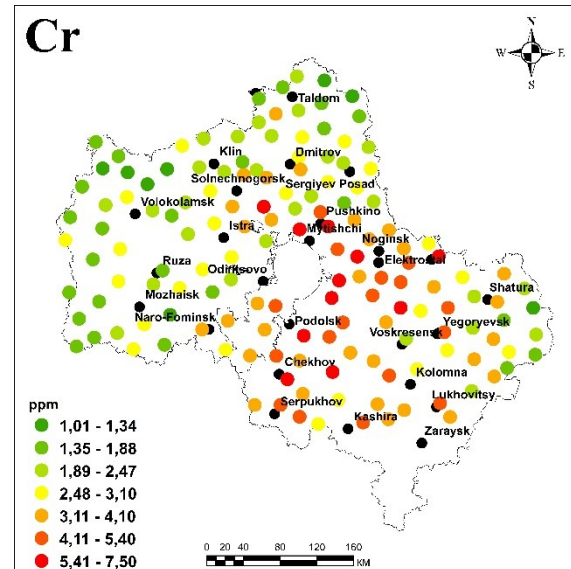
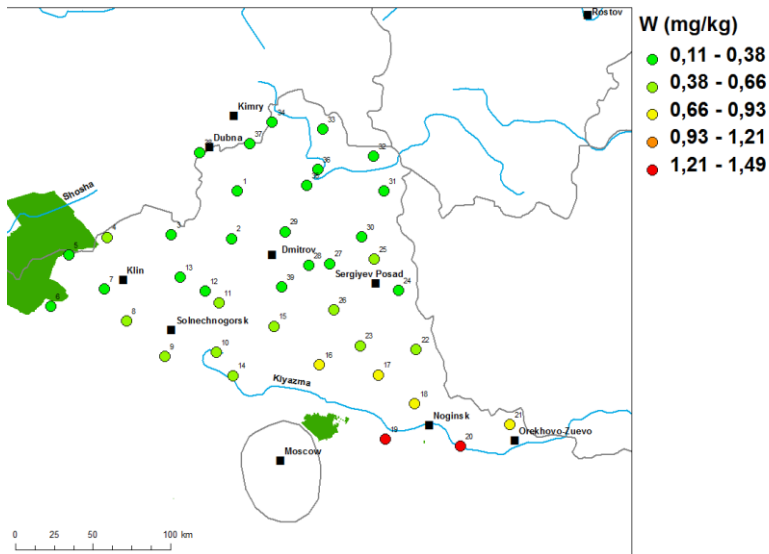
Working Group on Effects - 1981

Previous surveys

Yaroslavl region



Moscow region



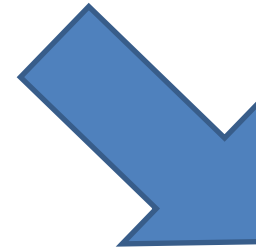
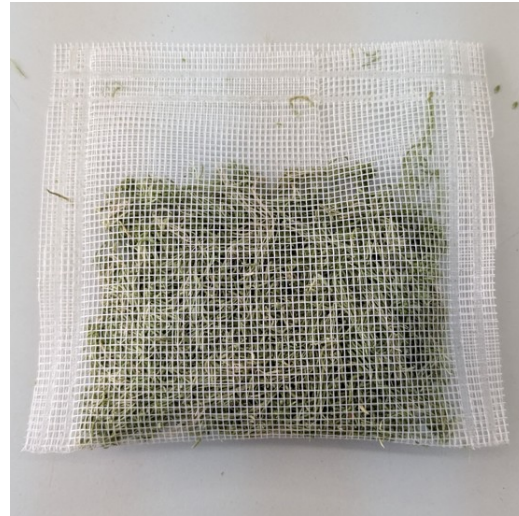
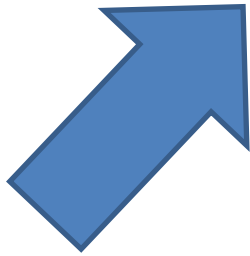
Oil refinery company “SLAVNEFT”



Electrostaal industrial zone



Active biomonitoring



Sphagnum Girgensohnii

Moss bag



Exposure site

Sampling map in Yaroslavl

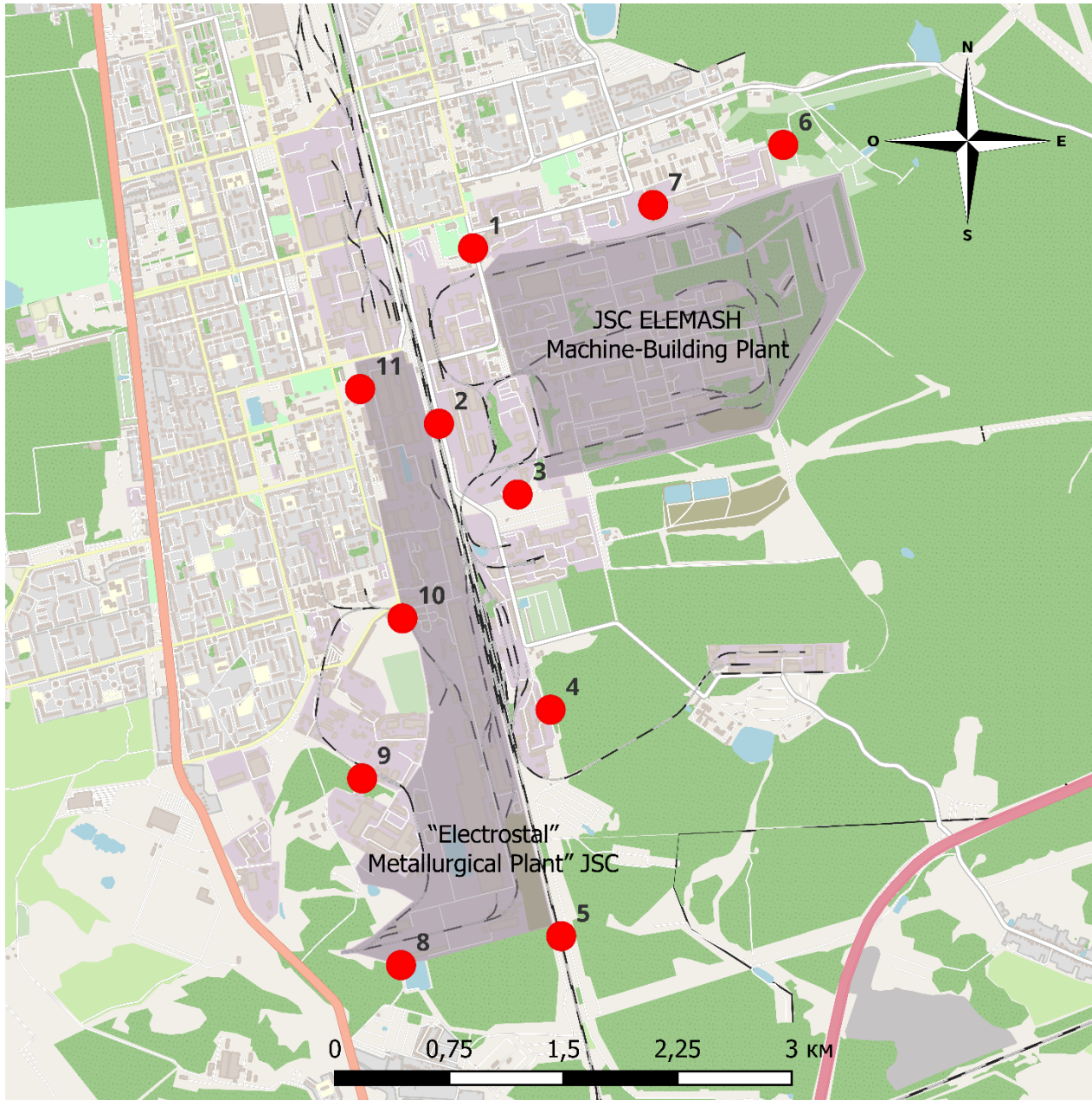


“Slavneft” – one of the biggest oil refinery plant in Central Russia.

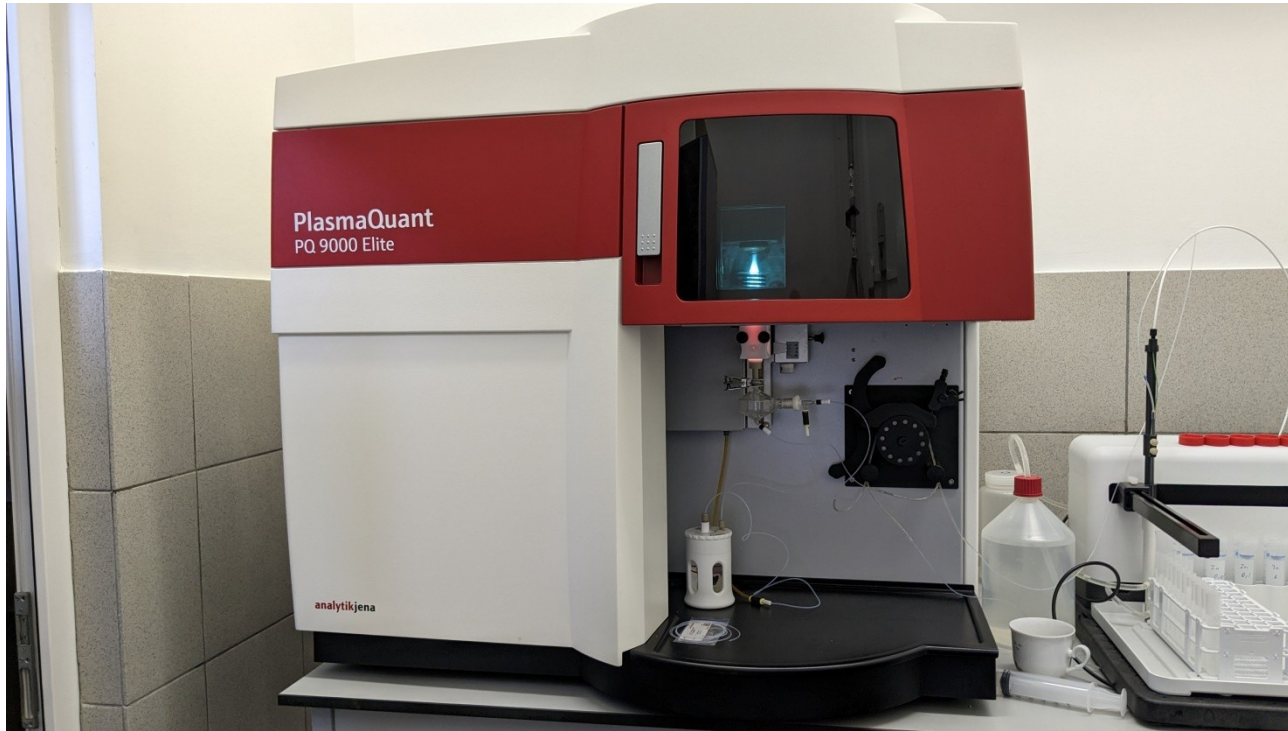
S = 809 ha

Exposure time:
2 months

Sampling map in Electrostal

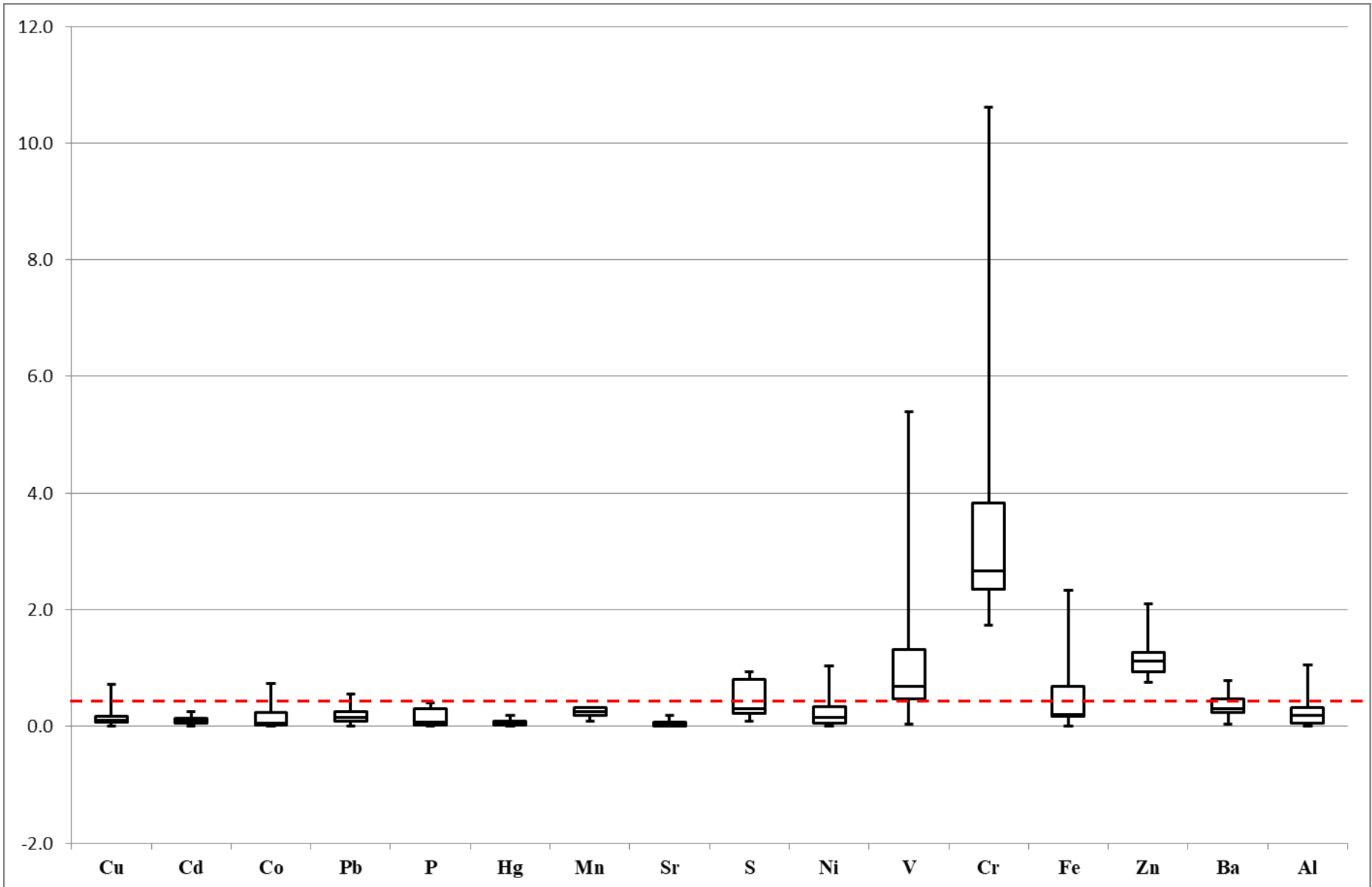


Analytical method

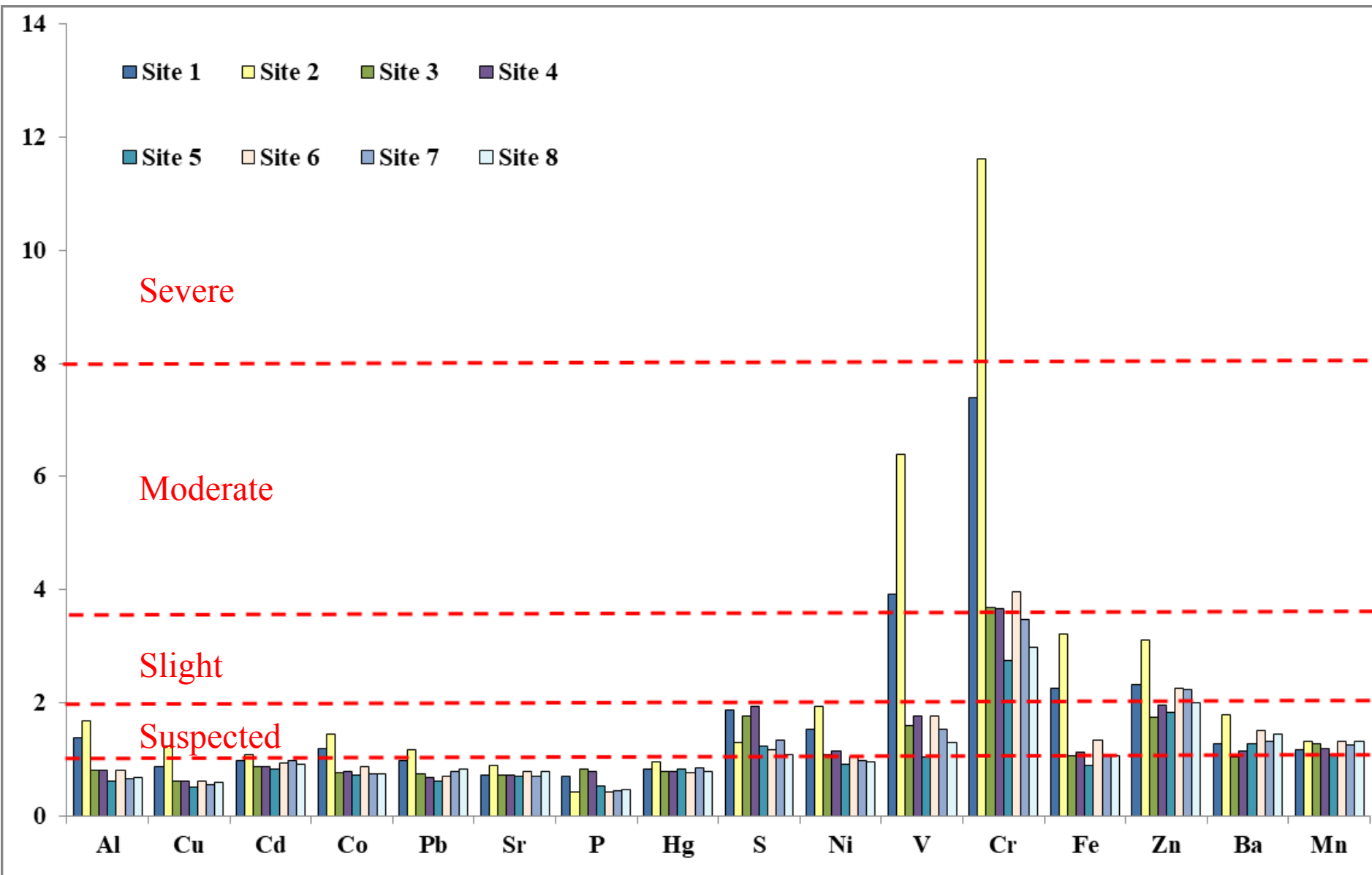


Determined elements: *Al, S, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Sr, Cd, Ba, Hg, Pb*

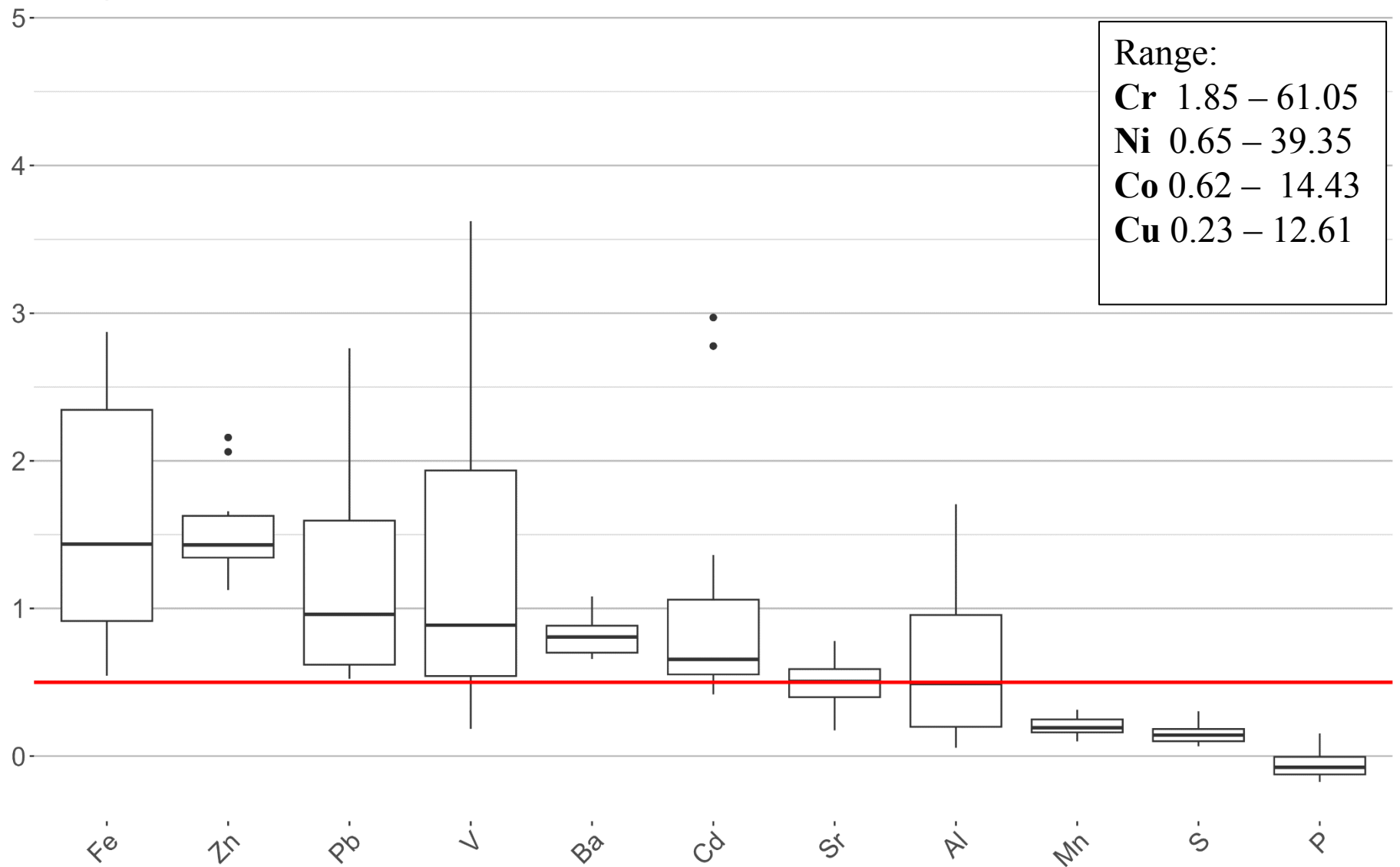
RAF index Yaroslavl



Contamination factor



RAF index ElectrostaI



Conclusions

- Contamination with Cr, Zn and V around oil refinery plant and Cr, Ni, Cu, Co, Fe, Pb, Cd and V for industrial zone in Electrostal
- Sites 1 and 2 in Yaroslavl and 1-4 in Electrostal more contaminated
- Investigation of air contamination in different distances