

# THE MOSS TECHNIQUE AND NAA FOR TRACE ELEMENT ATMOSPHERIC DEPOSITION STUDY IN THE NORTHERN RUSSIA

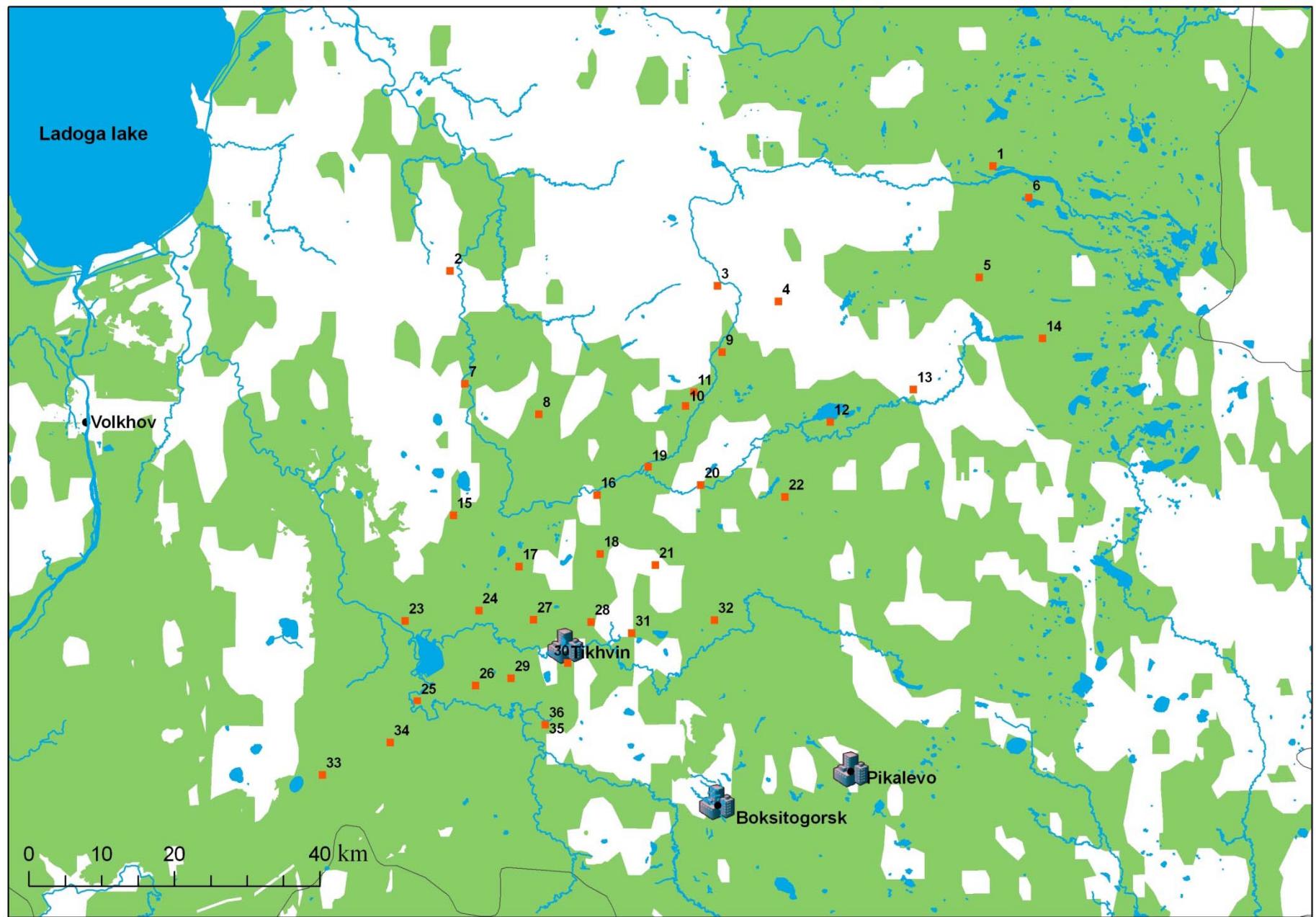
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# Sampled territory

36 sites



# Elements

H															He		
Li	Be																
Na	Mg																
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	*	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Ac**															

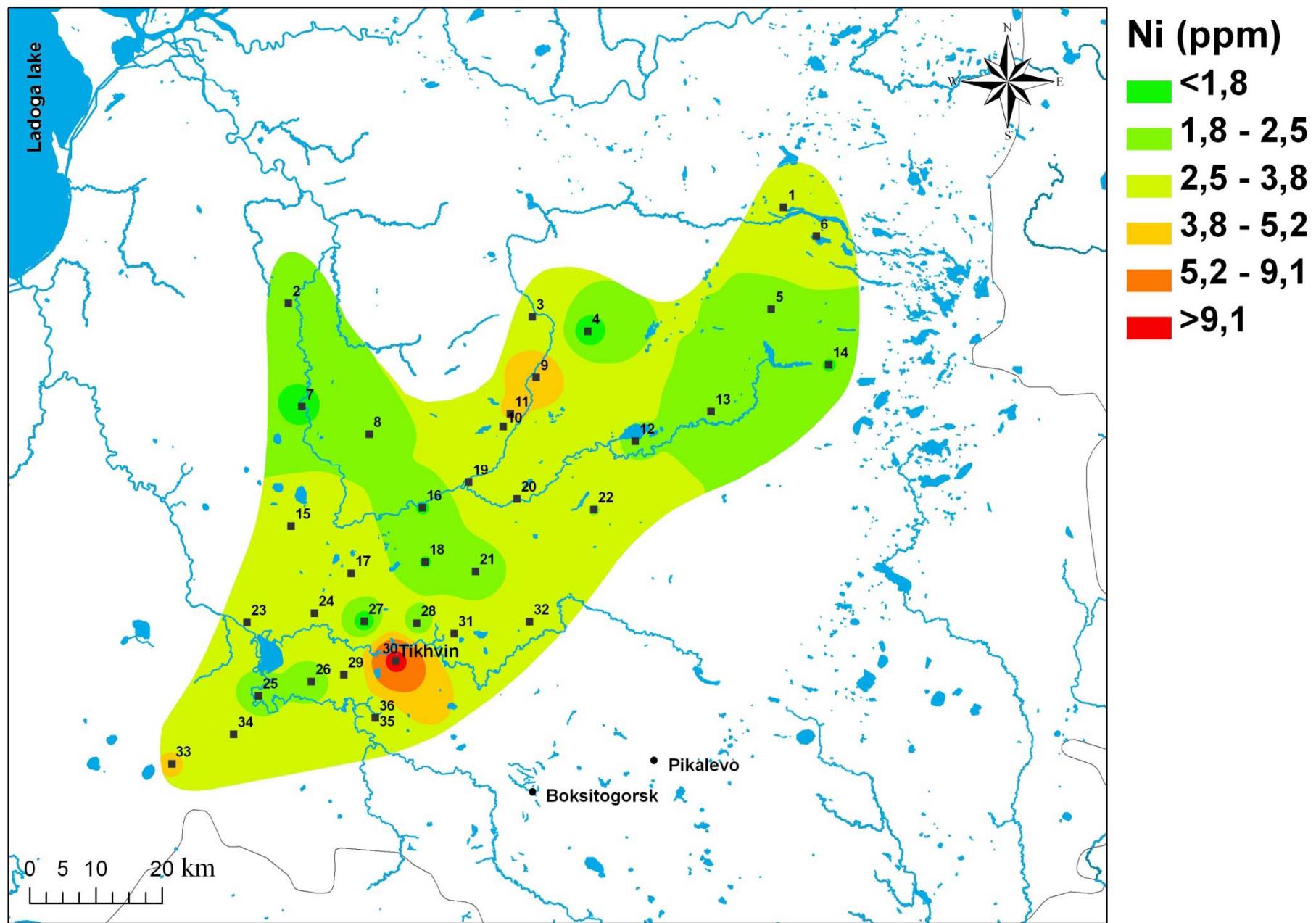
P S

*	Ce	Pr	Nd	m	m	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
**	Th	Pa	U	Np	Pu	m	Cm	Bk	Cf	Es	Fm	Md	No	Lw

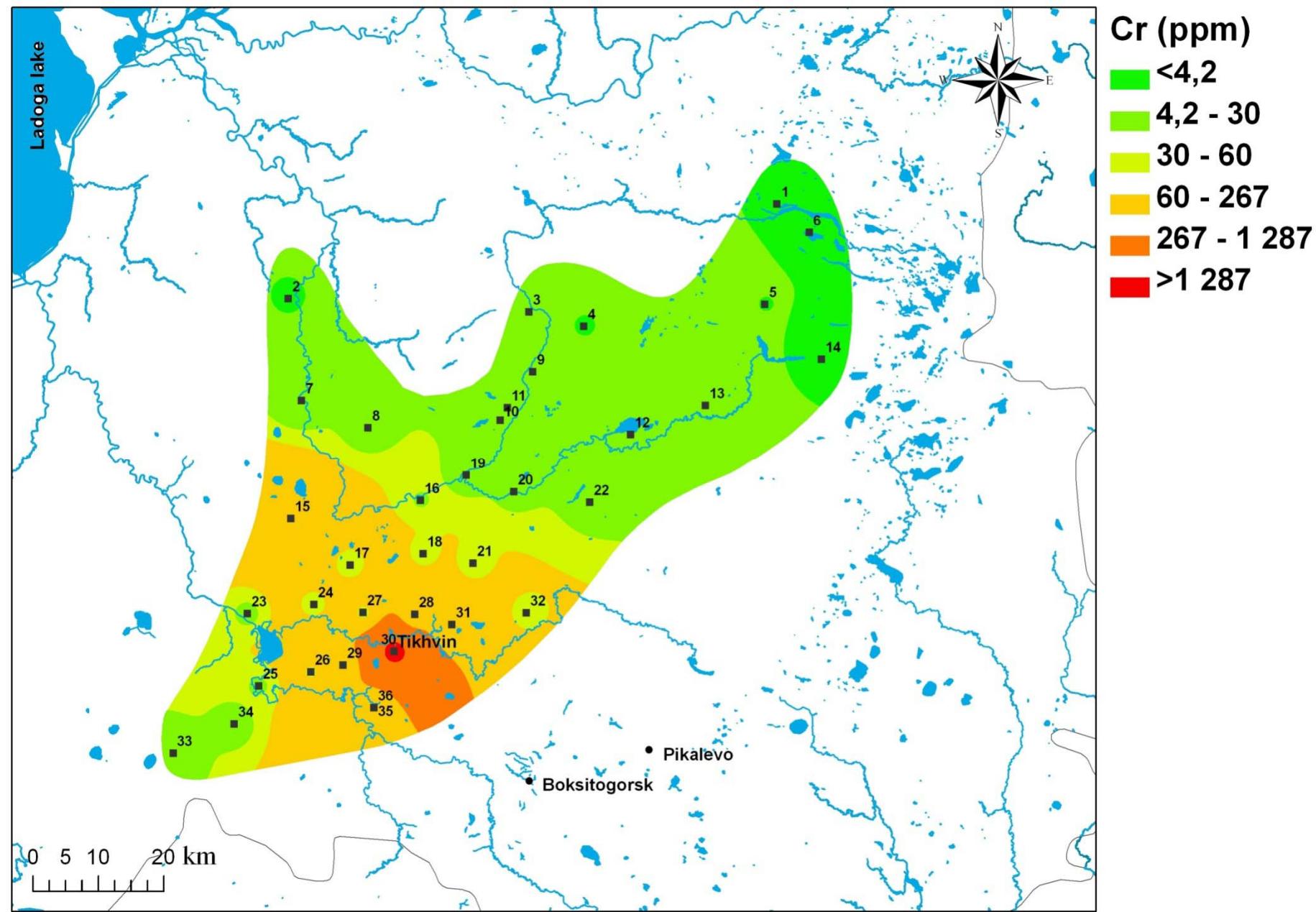
- Elements, determined by NAA

Atlas: As, Cr, Cu, Fe, Ni, V, Zn

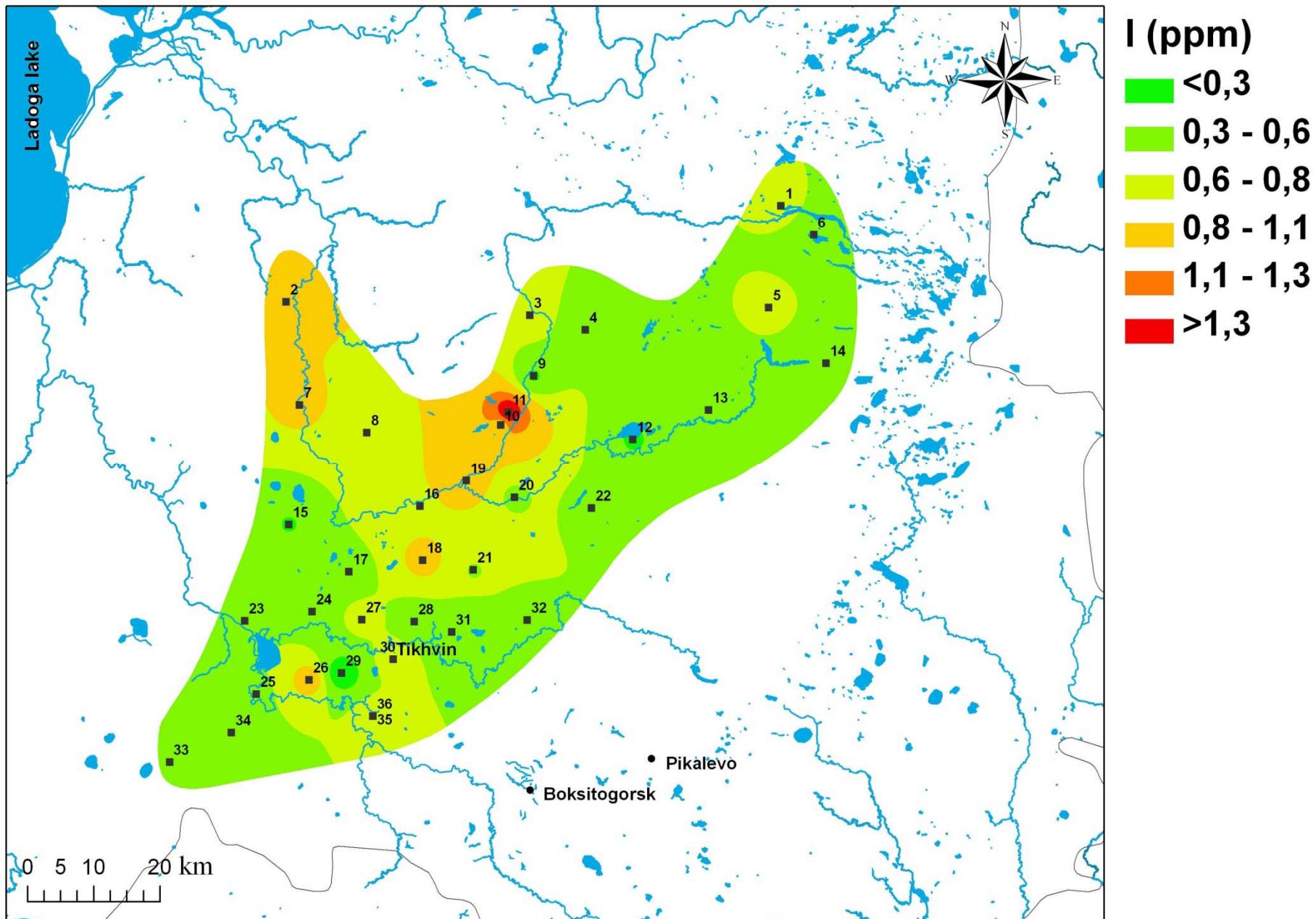
# Nickel distribution map



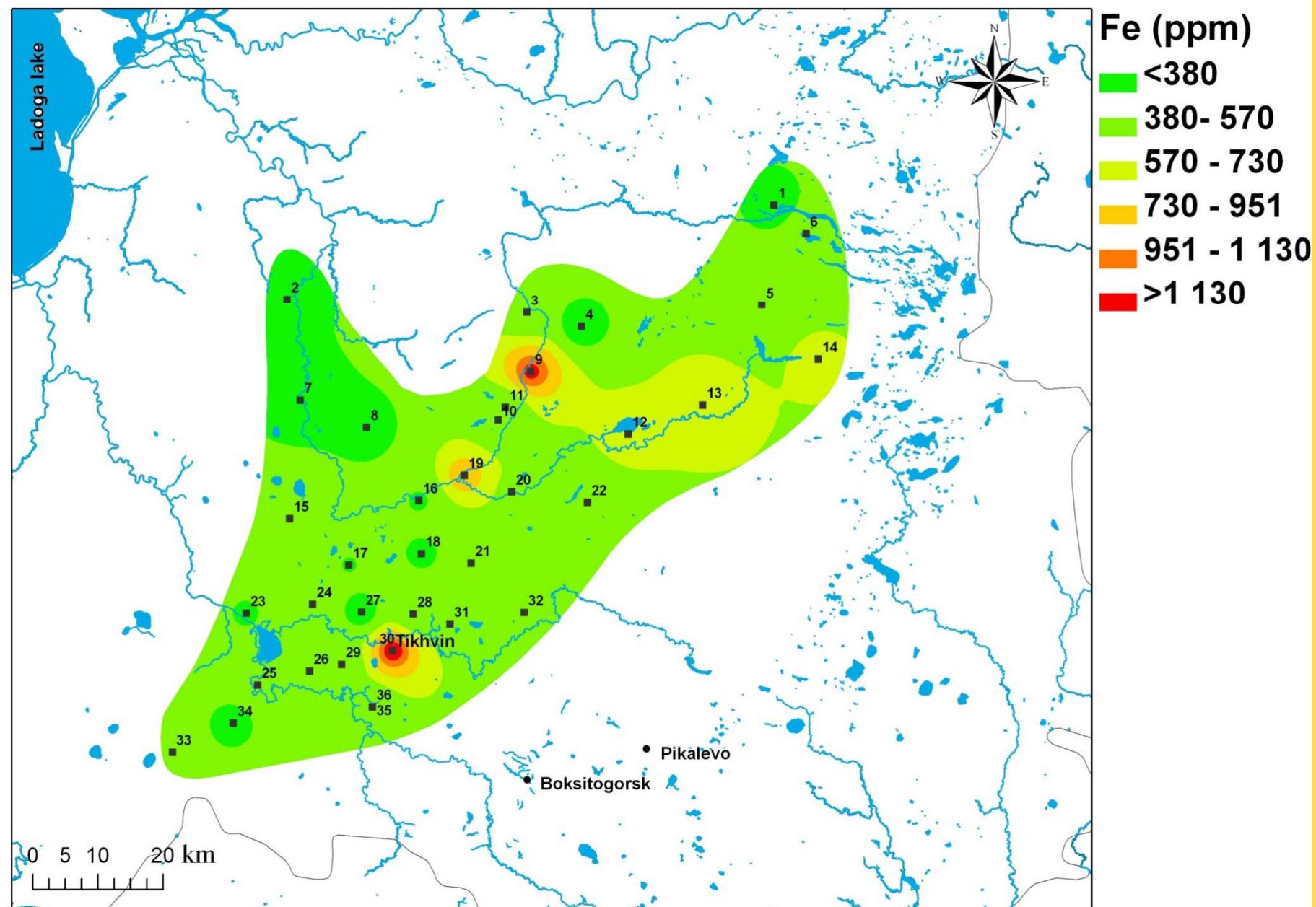
# *Chromium distribution map*



# *Iodine Map distribution*



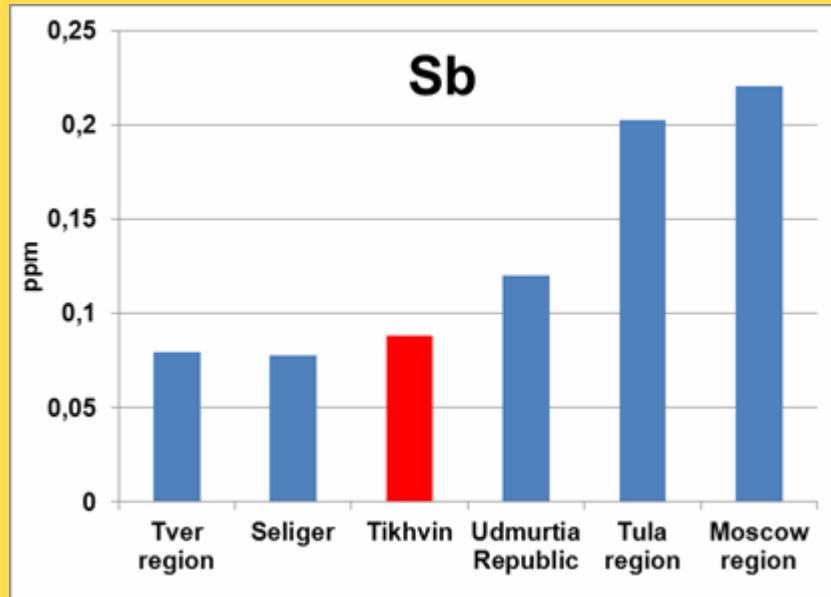
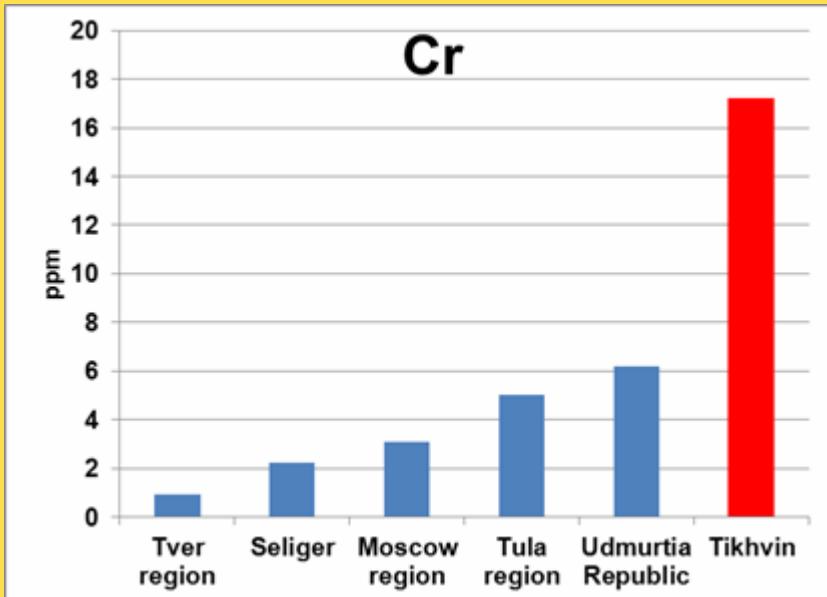
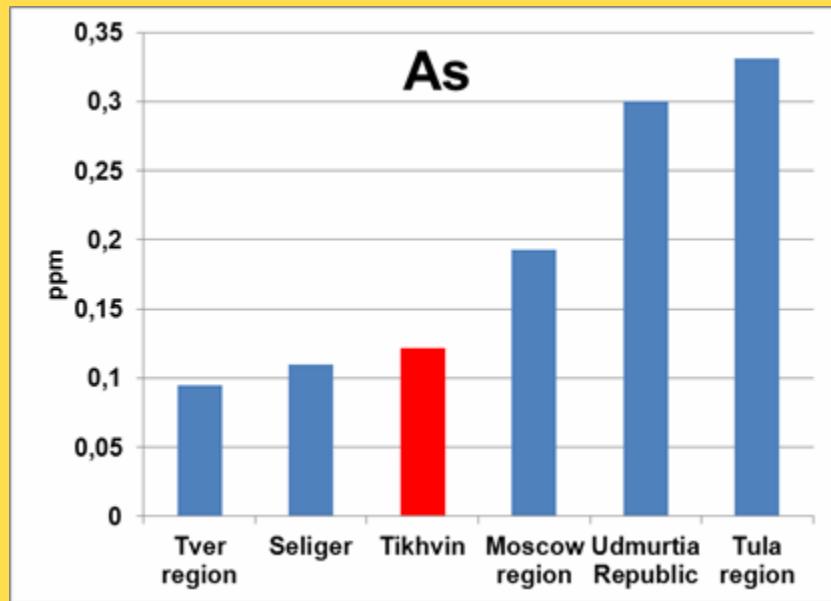
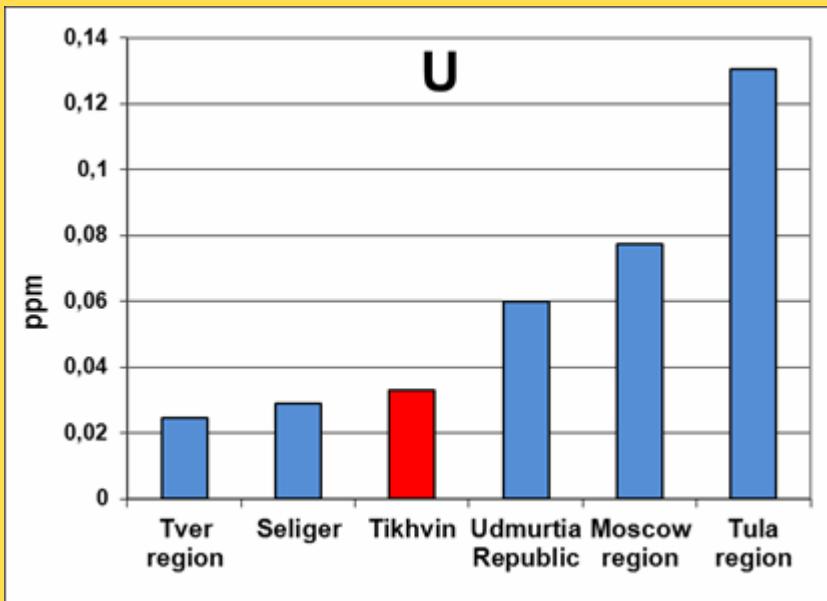
# *Ferrum distribution map*



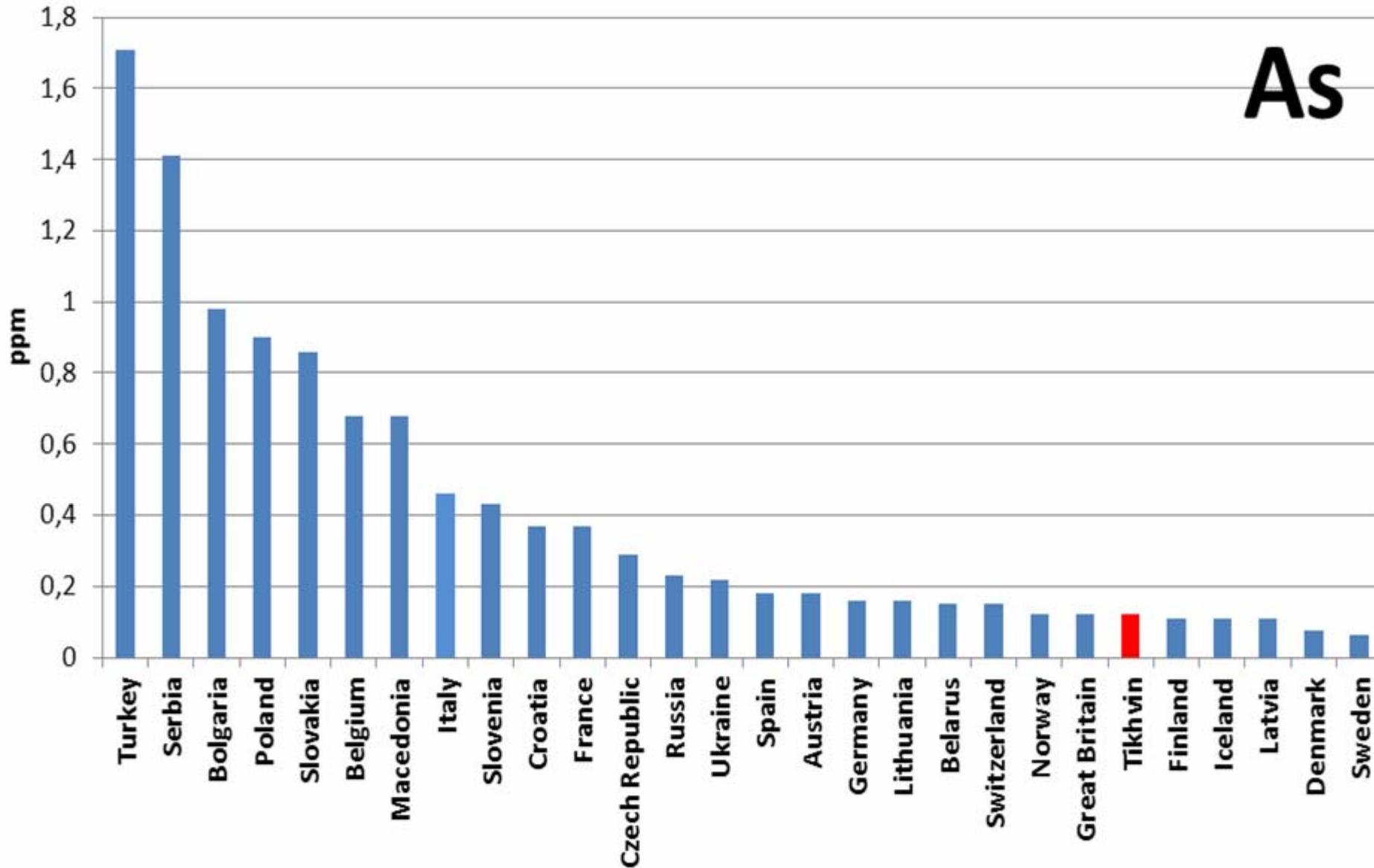
# Factor analysis

- **Factor 1** («soil factor») —  $Na, Al, Sc, V, Fe, As, Ba, La, Ce, Sm, Tb, Hf, Th, U$
- **Factor 2** («vegetation») —  $Mg, Cl, K, Ca, Se, Cs$
- **Factor 3** («industry») —  $V, Cr, Fe, Ni, Co$
- **Factor 4** ( ) —  $Mn, Br, Sb, I$

# Elements content in selected Russian regions

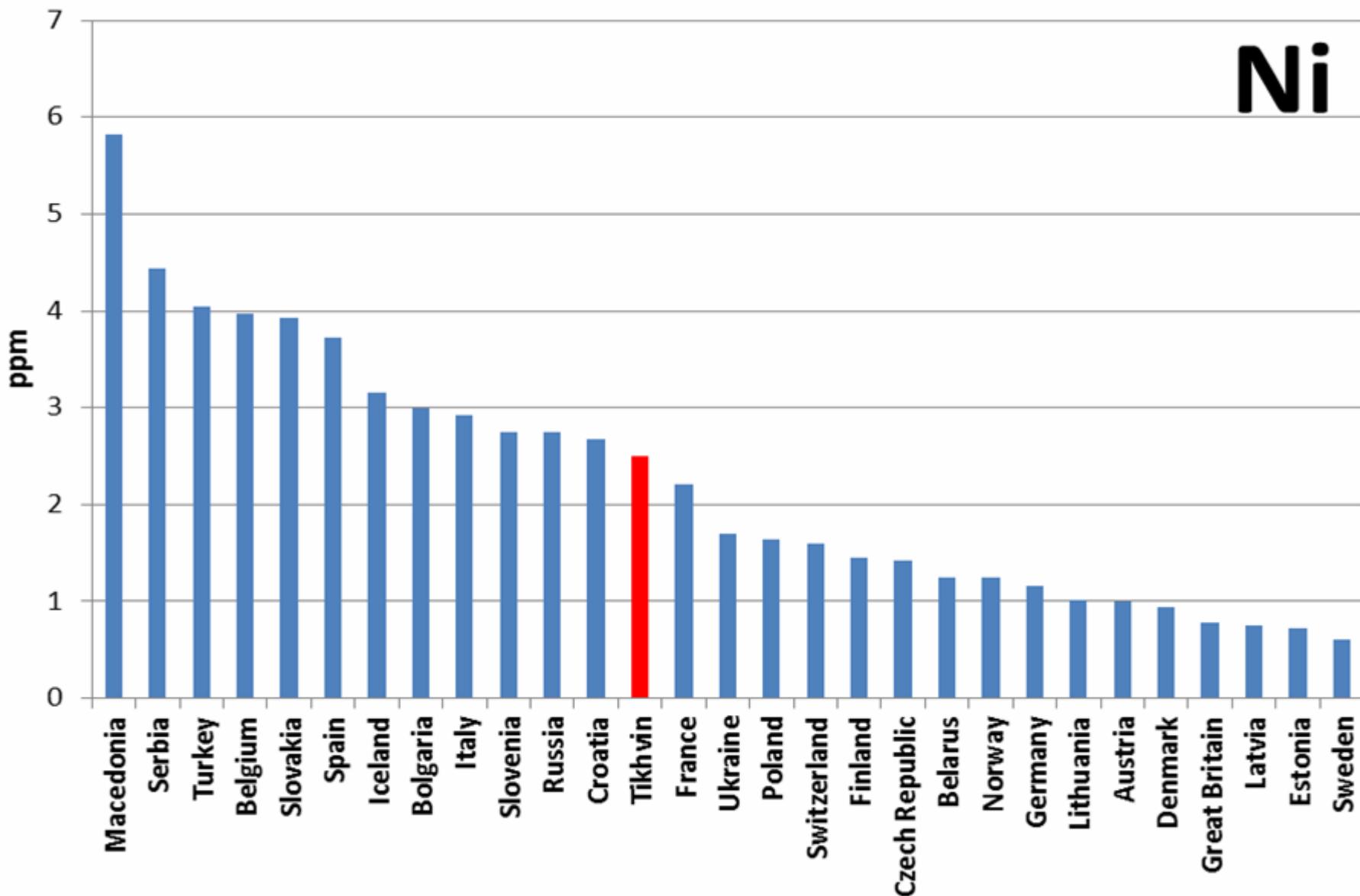


# Elements content in selected European regions



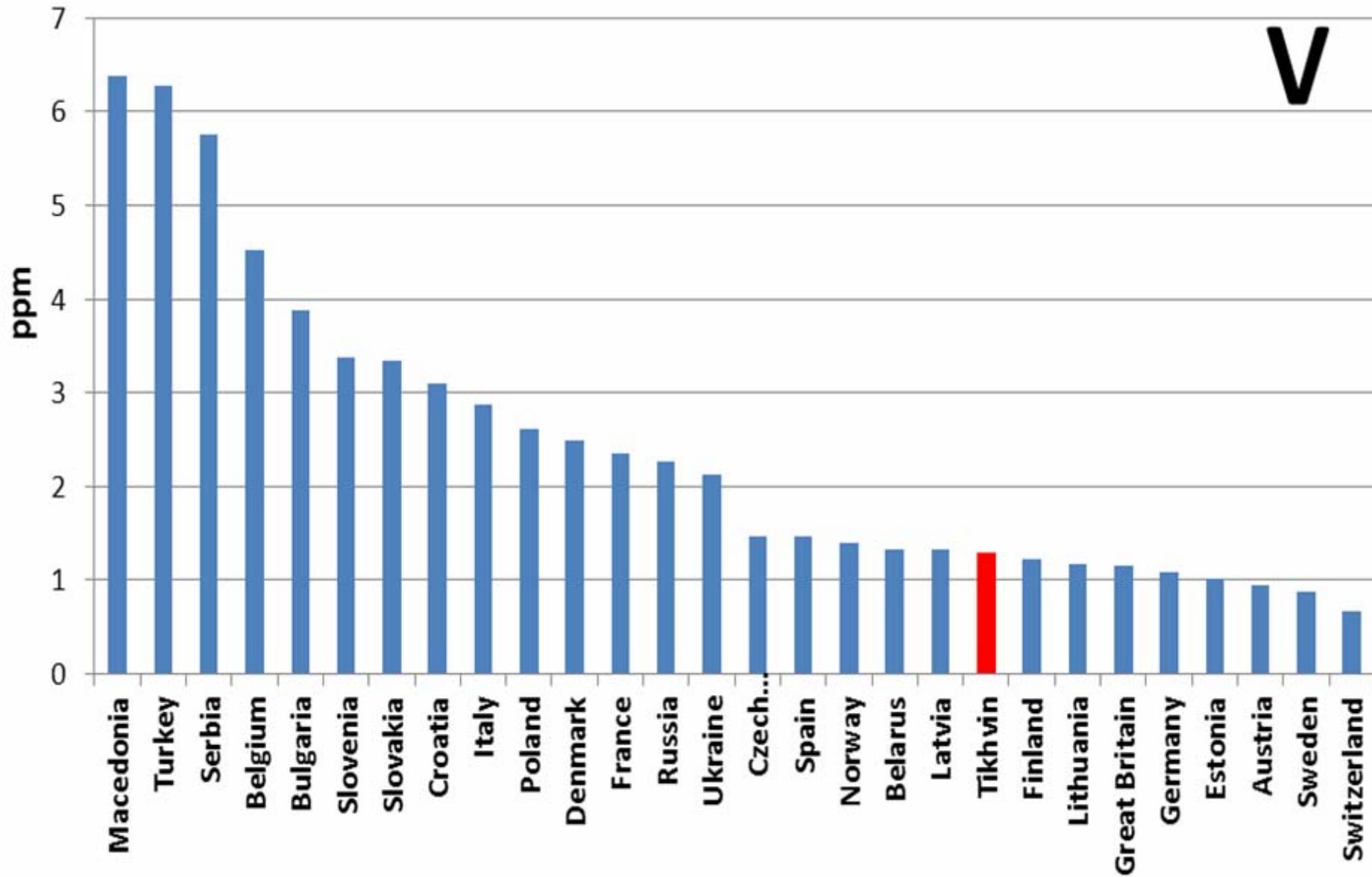
# Elements content in selected European regions

Ni



# Elements content in selected European regions

V



A photograph of a forest with tall, thin trees. The foreground is dominated by dark green grass. In the background, there are more trees, some with bare branches and others with green needles. The sky is bright and hazy.

# Thank you