



MERATCH
Measure & Watch Online

Solution of



Digitálne riešenia vodných systémov

27.11.2025

Dr. Andrej Mošať

Rieka Poprad 25.12.2022, Slatina Zvolen 25.10.2025, ...



<https://www.noviny.sk/krimi/728039-ropne-latky-sa-vlievaju-do-rieky-no-namiesto-riesenia-problemu-stale-hladaju-vinnika>



<https://www.imeteo.sk/spravy/ropne-skrvny-na-hladine-slatiny-nebezpecne-latky-vyplavilo-pocas-silnych-zrazok>

TVRDOST' VODY – WATER HARDNESS

Water Hardness effect on hip fracture risk, a spatial analysis of nationwide hospital admissions in Portugal, from 2000 to 2010

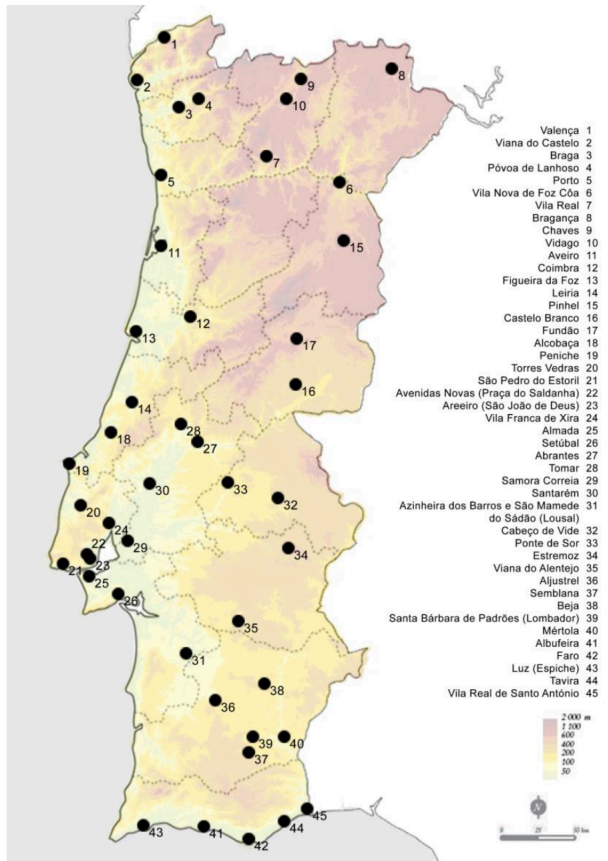


Figure 4 – Estimated drinking water composition effect on hip fracture risk and 95% confidence interval

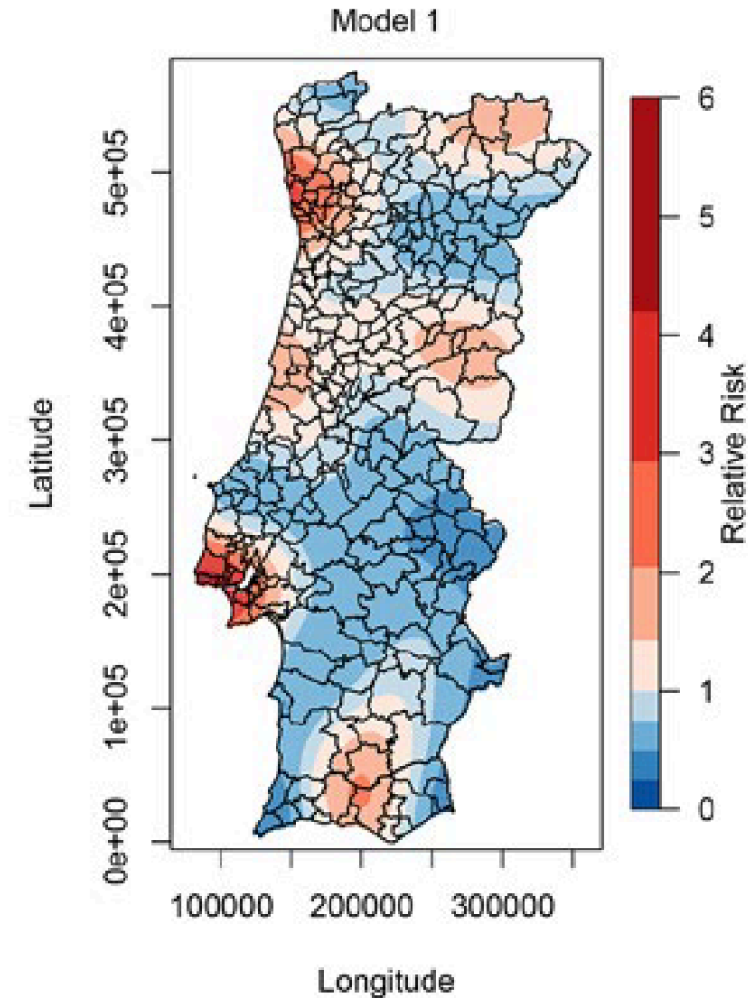
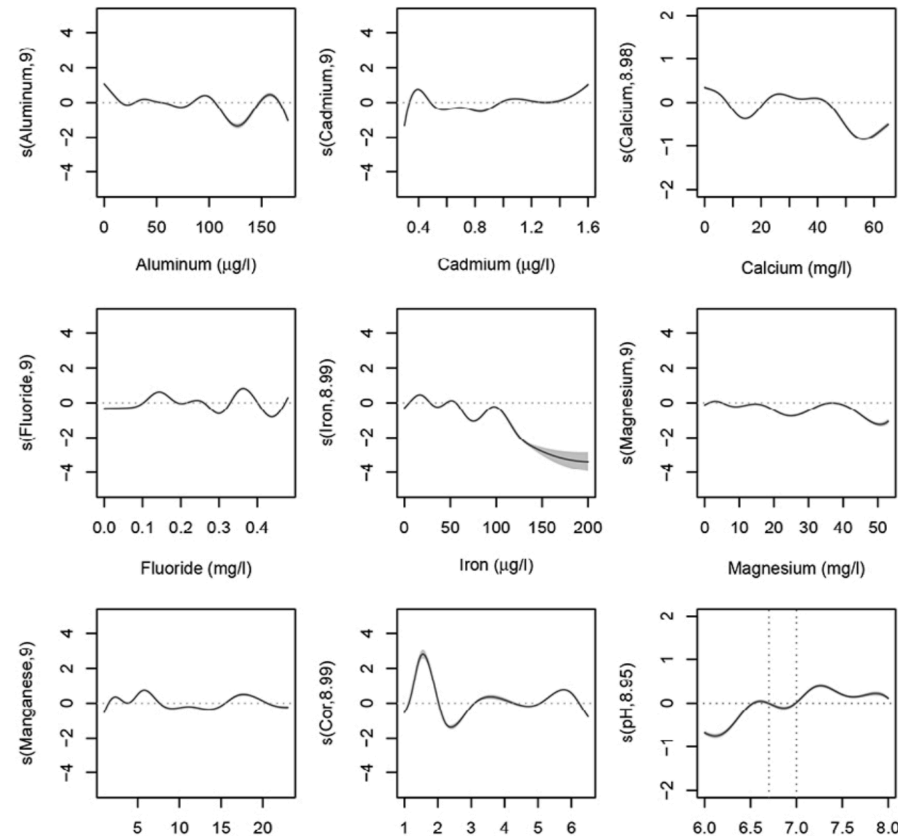
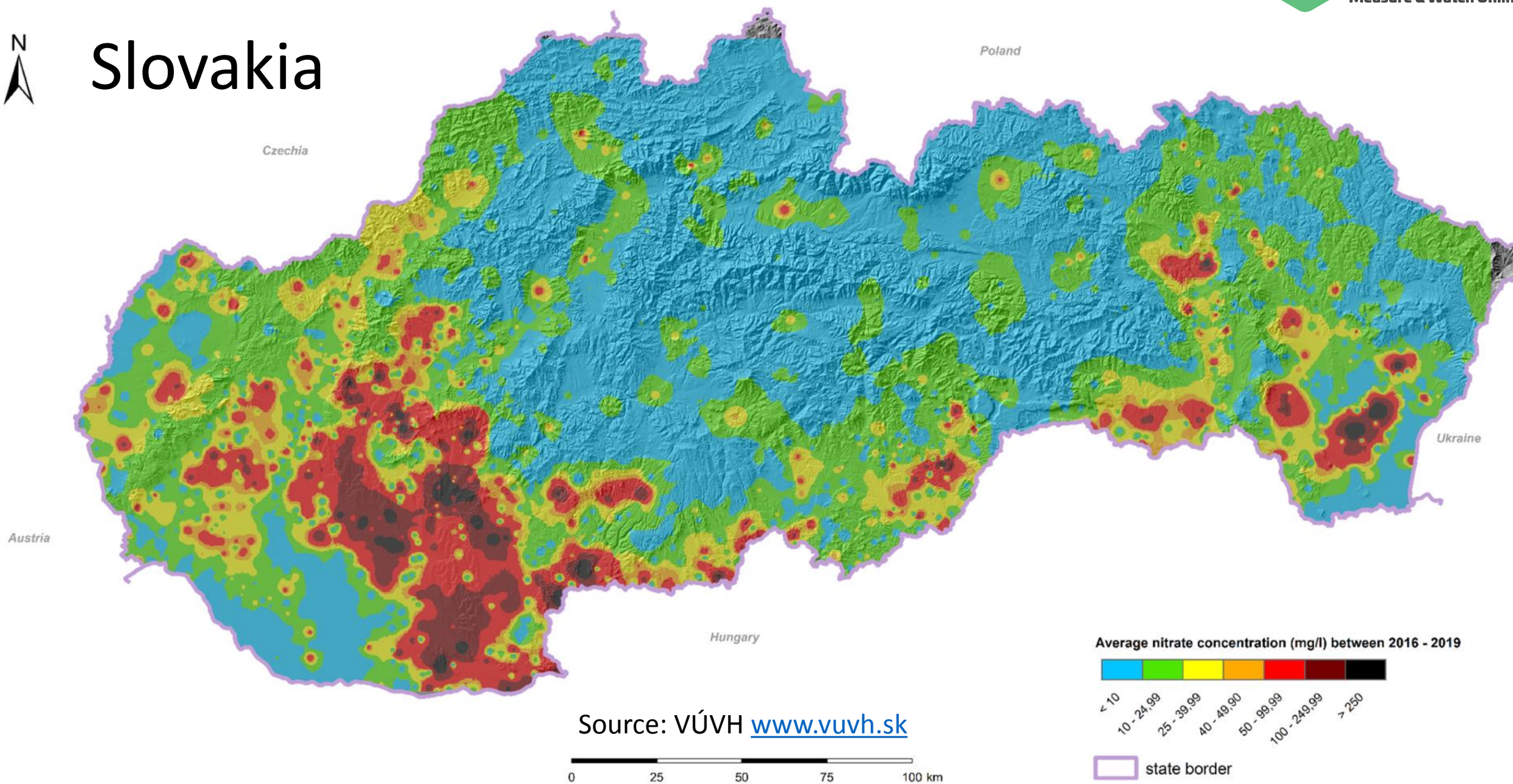


Figure 1 - Map of Portugal with the locations of the sampled public waters.



Slovakia



Asociácia rakoviny hrubého čreva a dusičnanov v podzemnej vode

Imrich Berta, Veronika Rybanská, Andrea Rusnáková

18.09.2024



MINISTERSTVO ZDRAVOTNICTVA SR

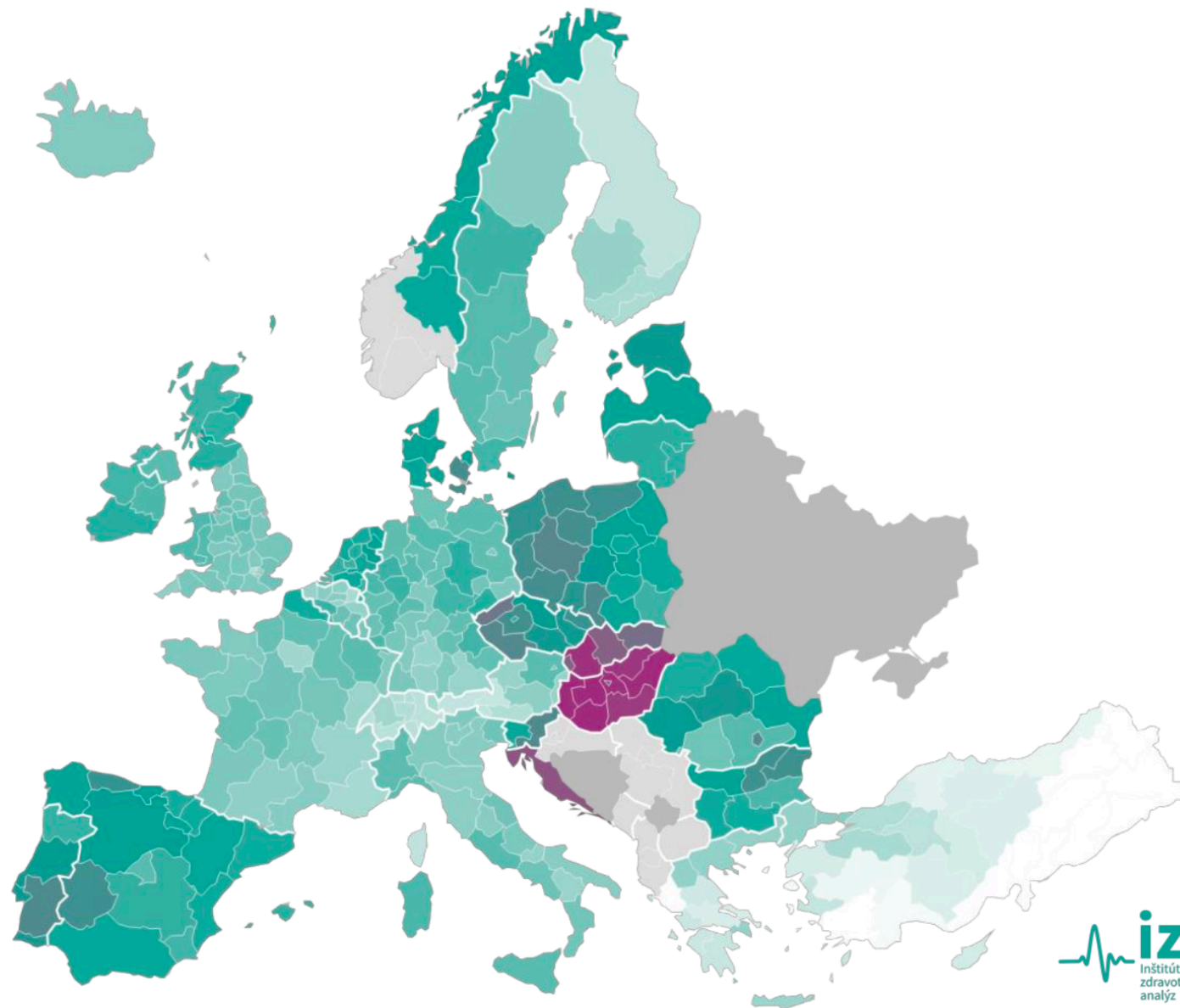


Stredná Európa je región s vysokou úmrtnosťou na rakovinu hrubého čreva a konečníka

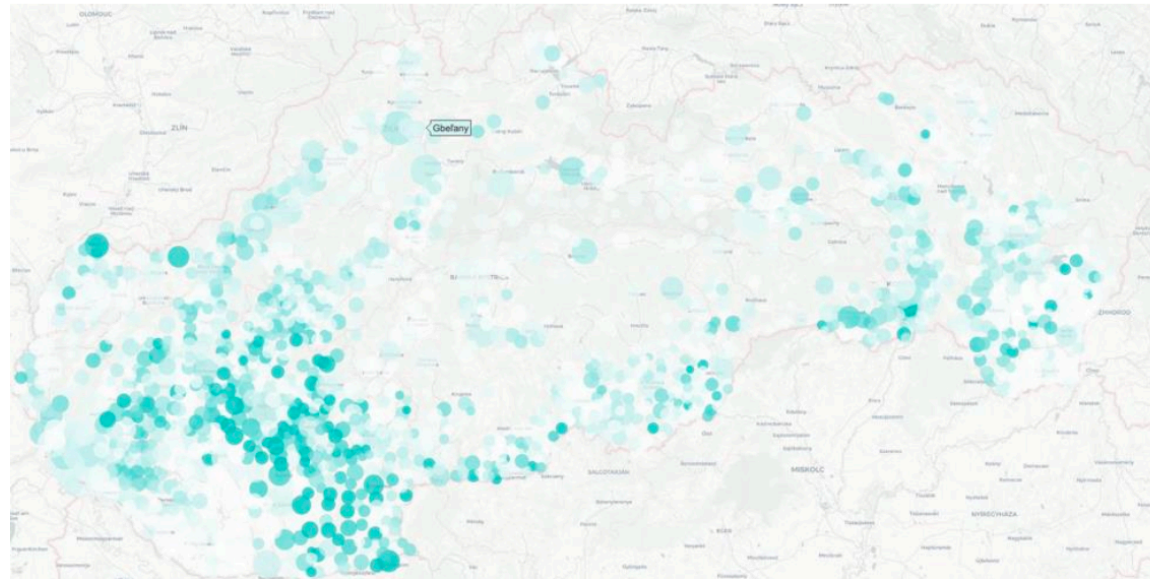
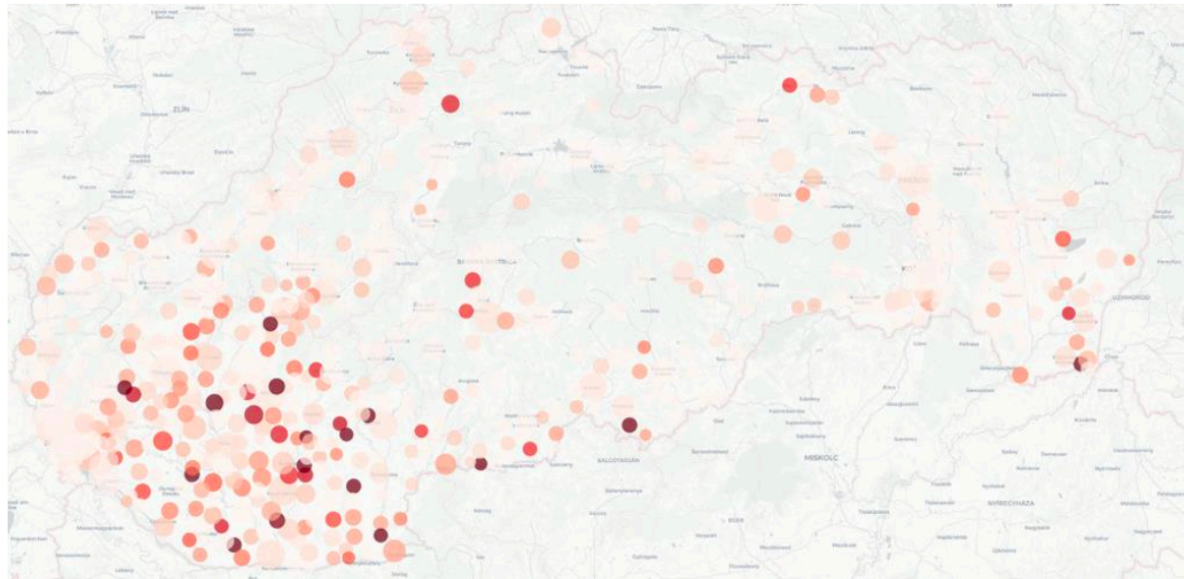
Imrich Berta, MPhil
Inštitút zdravotných analýz | Ministerstvo zdravotníctva SR

Vekovo-štandardizovaná mortalita na rakovinu hrubého čreva a konečníka

Úmrtia na 100 000 obyvateľov v roku 2019



Korelácia je viditeľná aj na mape



-  Koncentrácia dusíčanov
-  Incidencia C18-C21

Imrich Berta, MPhil
Inštitút zdravotných analýz | Ministerstvo zdravotníctva SR

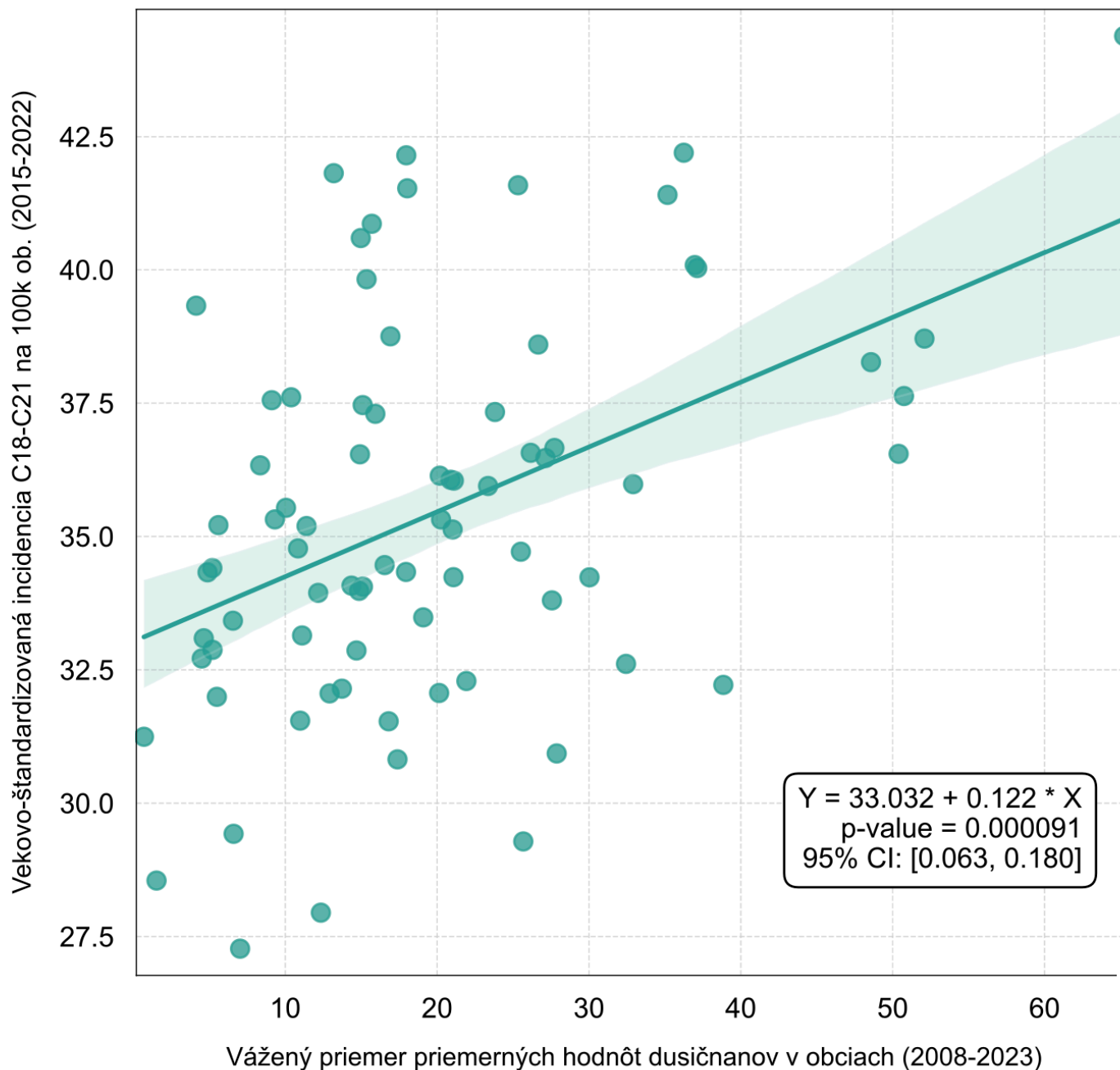
Regresná analýza incidencie na úrovni okresov odhalila silnú štatistickú asociáciu s koncentráciou dusičnanov

$p\text{-val} < 0.0001$

Imrich Berta, MPhil

Inštitút zdravotných analýz | Ministerstvo zdravotníctva SR

Incidencia rakoviny hrubého čreva vs dusičnany v podz. vode v okresoch SR



Water Quality Measurements

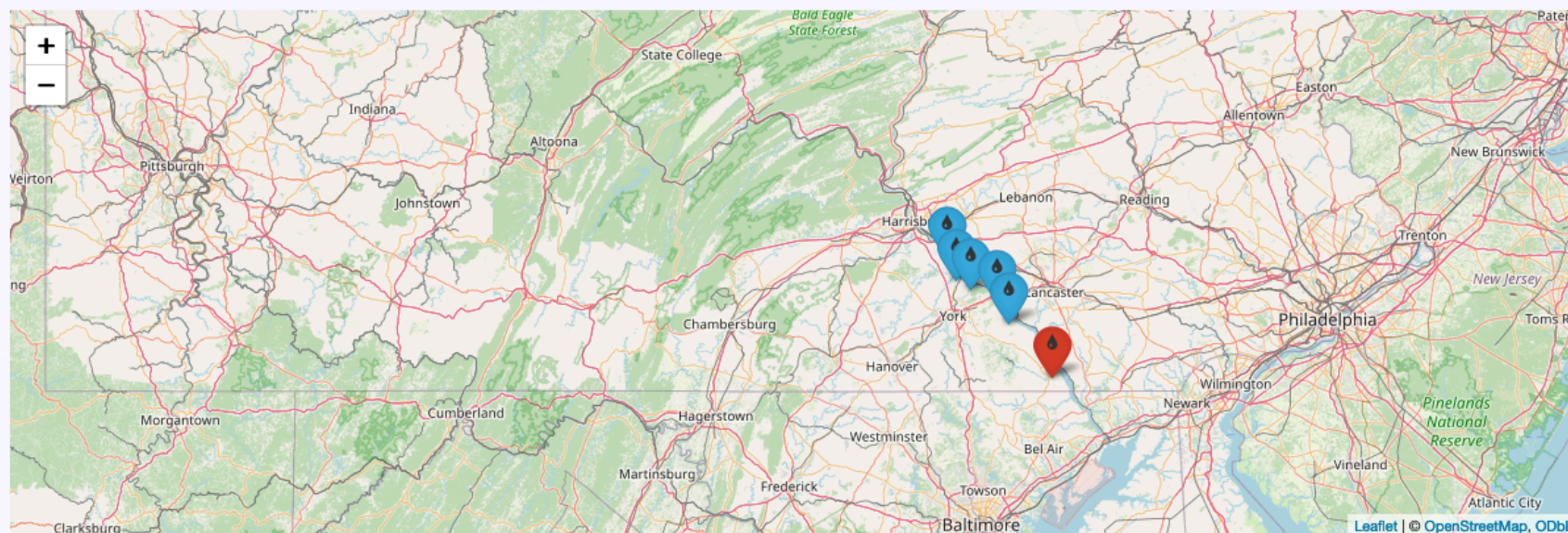
Data form USGS

*** Initial statistics and visualization ***

Select parameters:

Location ID:

01577500



Muddy Creek at Castle Fin, PA

Site Name



Stream, River

Site Type



Phosphorus

Phosphorus Nutrients



Multiparametric water quality



Meratch Water level (Radar, Pressure)

Meratch Flowrate*

Nitrates (UV)

Turbidity (NTU)

Abs@254

Spectrum UV VIS* NIR*

DO (Fluorescence)

Temperature

TOC*

COD*

BOD*

Chlorophyll*

Color*

Salinity* (UV)

Oil* (Fluorescence)

Conductivity

$$\text{Analyte Mass Flow} = \text{Flowrate} \times \text{Concentration}$$

Sensor - Qualitowatch

1. Portable Plug & Play

2. Online Worldwide

3. Cost Effective

4. Modularity of Sensing +10 parameters

5. 10y+ Lifetime

Water Cloud

AI / ML

1. Pollution understanding

2. Pollution forecasts

3. Correlated pollutants + 30 area specific parameters

Water Watch App

Revolutionary water monitoring: New approach applied; from costly, manual lab precision to fully automatic real-time simplicity, yielding big data for enhanced cloud computing results.

WELL HOME 2
AB2200AS

0 ppm (mg/L)

5.0
25
40
60
100

The value is high. Danger for human health.

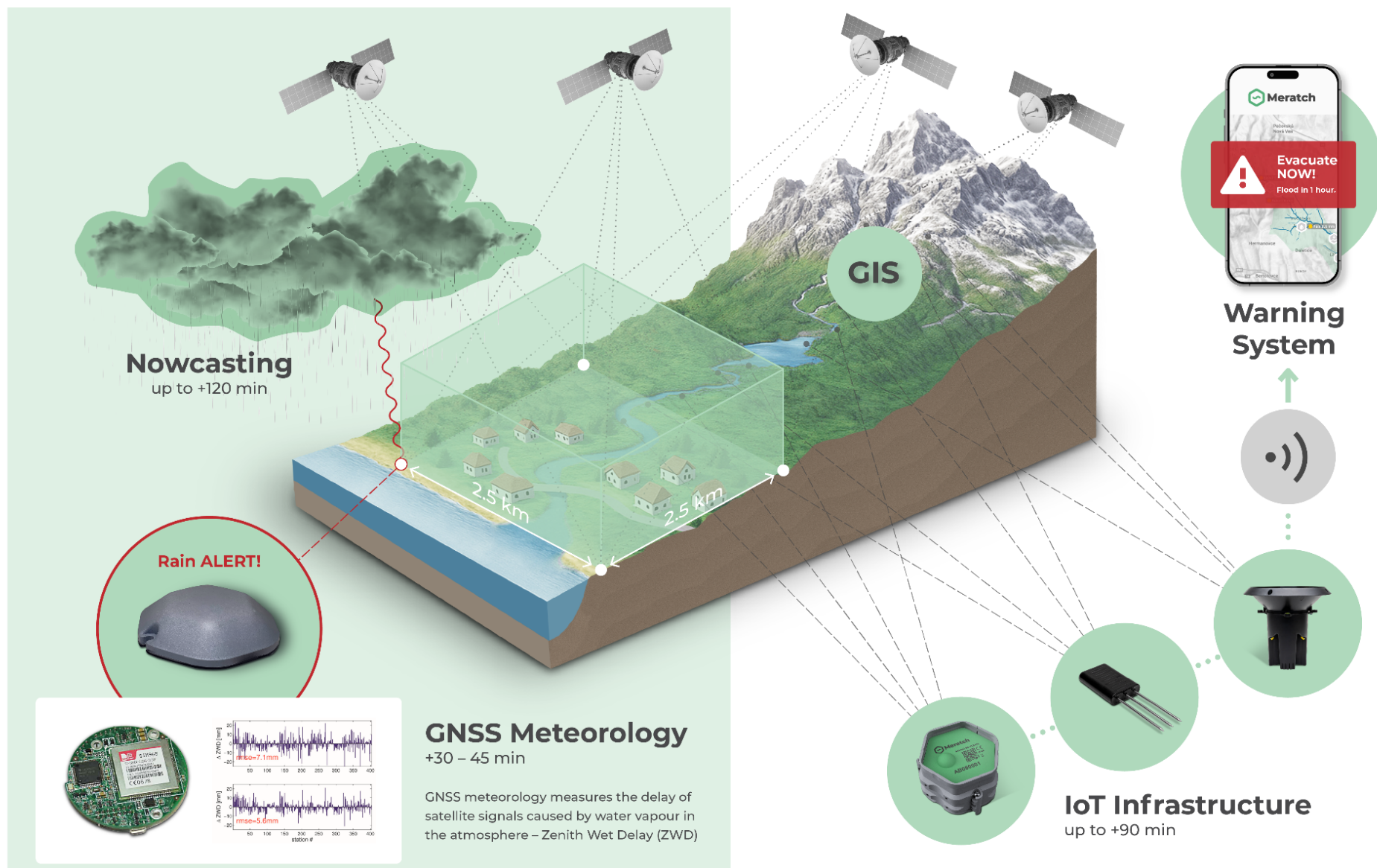
Last measurement 27.12.2022, 17:00

NO3 concentration: 5 days Week Month

ppm

100
75
50
25
0

1.12 4.12 7.12





Let us join forces for drinkable rivers!

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meratch.com

