

# My work @QuantLandscapeEcology

Eduard Szöcs

Institute for Environmental Sciences, University of Koblenz-Landau

Landau, 01.03.2016

## My field of research is somewhere between...



... Eco(toxico-)logy, Statistics, Data analytics and Programming

# My philosophy: reproducible and open

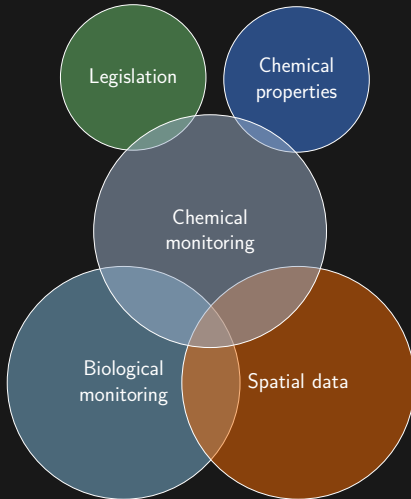
reproducible: always!

open: as much as I am allowed

Tools I am using and developing:

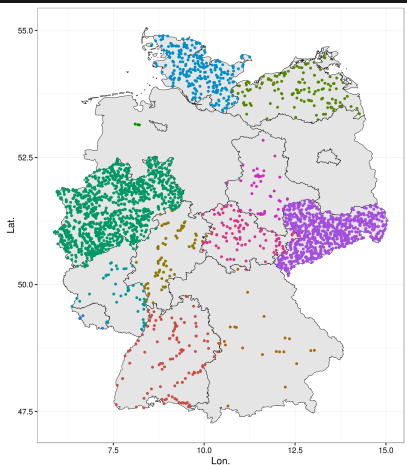
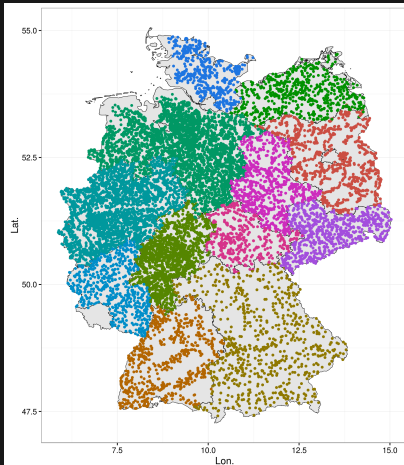


# I - Compilation of chemical monitoring data

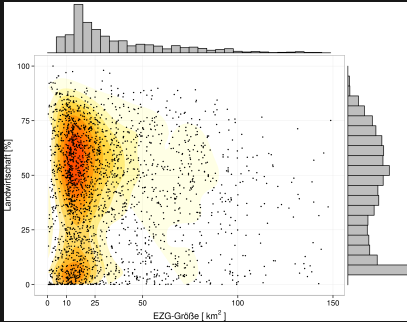


# I - Data overview

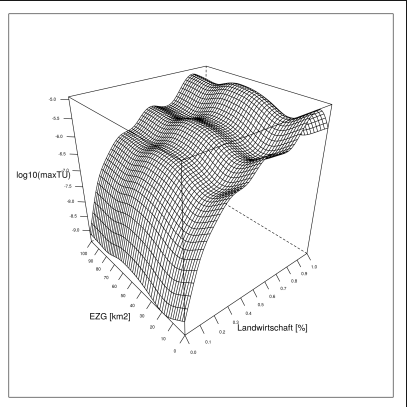
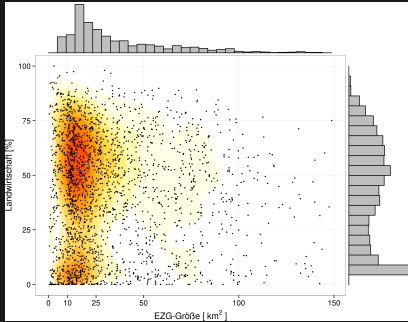
| type       | start*     | end        | no. sites | no. samples | no. variables |
|------------|------------|------------|-----------|-------------|---------------|
| pesticides | 2005-01-02 | 2015-03-25 | 3112      | 46295       | 491           |
| biological | 2005-01-11 | 2013-11-29 | 14211     | 27392       | 2824          |



# I - What do we know about small waterbodies?



# I - What do we know about small waterbodies?



Other questions / analyses are in the pipeline...

## II - Develop tools to handle such data

Mainly R-packages:

`taxize`: Cleaning and handling **taxonomic** data.

`webchem`: Search **chemical** information.

`other`: `vegan`-package, resolving ambiguous taxa, ...





# III - Other stuff I am working on

Field study: Organization, communication, field work, ...

Statistics:

- ▶ Methods to analyze mesocosm data
- ▶ Methods to model non-linear non-normal censored data
- ▶ Help out my nice colleagues

Freelance:

- ▶ in my (rare) free time...
- ▶ R Courses
- ▶ Data sourcing, cleaning & analysis

# Data in Eco(toxico)logy

Eduard Szöcs

Institute for Environmental Sciences, University of Koblenz-Landau



<http://edild.github.io/>



@EduardSzoecs



[https://github.com/EDiLD/talk\\_work](https://github.com/EDiLD/talk_work)



szoecs@uni-landau.de

