

Group Computational methods in environmental sociology



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Jan Sodoge (jan.sodoge@ufz.de)

I'm going to this drought conference in Geneva, any ideas what to present?

Taís Carvalho (tais.carvalho@informatik.uni-leipzig.de)

What is your key message?

Jan Sodoge (jan.sodoge@ufz.de)

Our **goal** is to show how text data can be instrumental in natural hazard research. The increase in text availability and recent advances in **natural language processing** and **machine learning** have opened up previously unforeseen opportunities. By using text data we can now investigate how droughts impact society and the adaptation measures taken.

Mariana de Brito (mariana.brito@ufz.de)

What about showing them how text-mining can detect drought impacts across different sectors from newspaper articles. And don't forget we used those to detect cascading impact patterns in Germany during the recent multi-year drought!

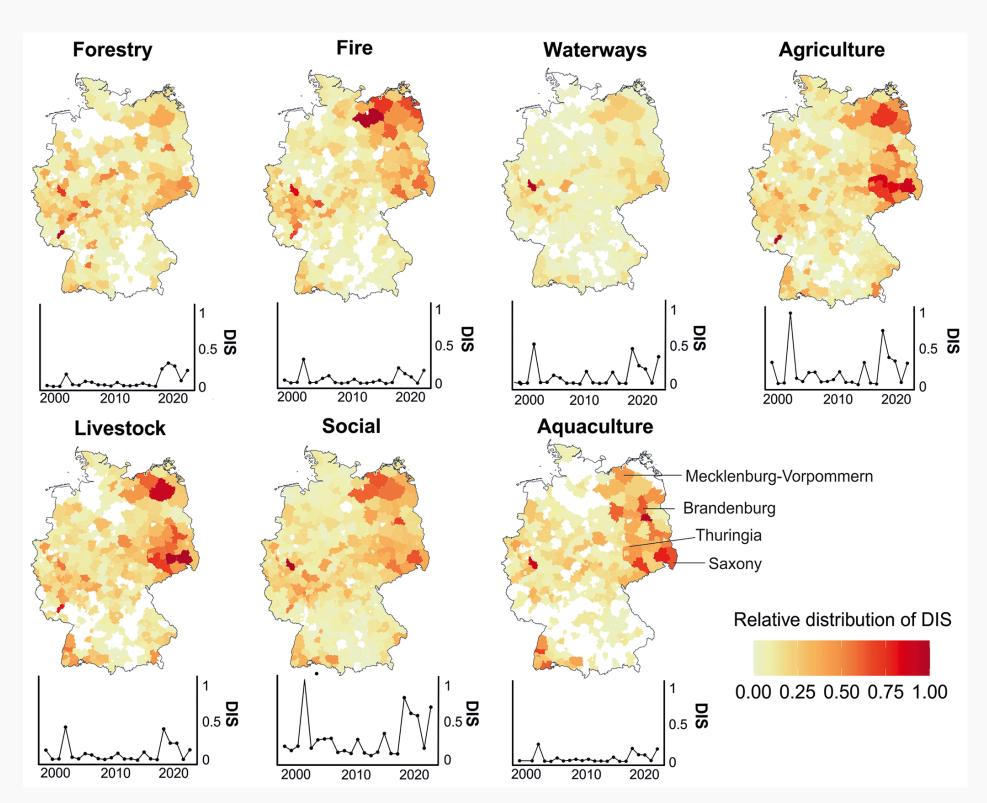


Figure 1: Spatial and temporal distribution of drought impact statements (DISs) between 2000–2022

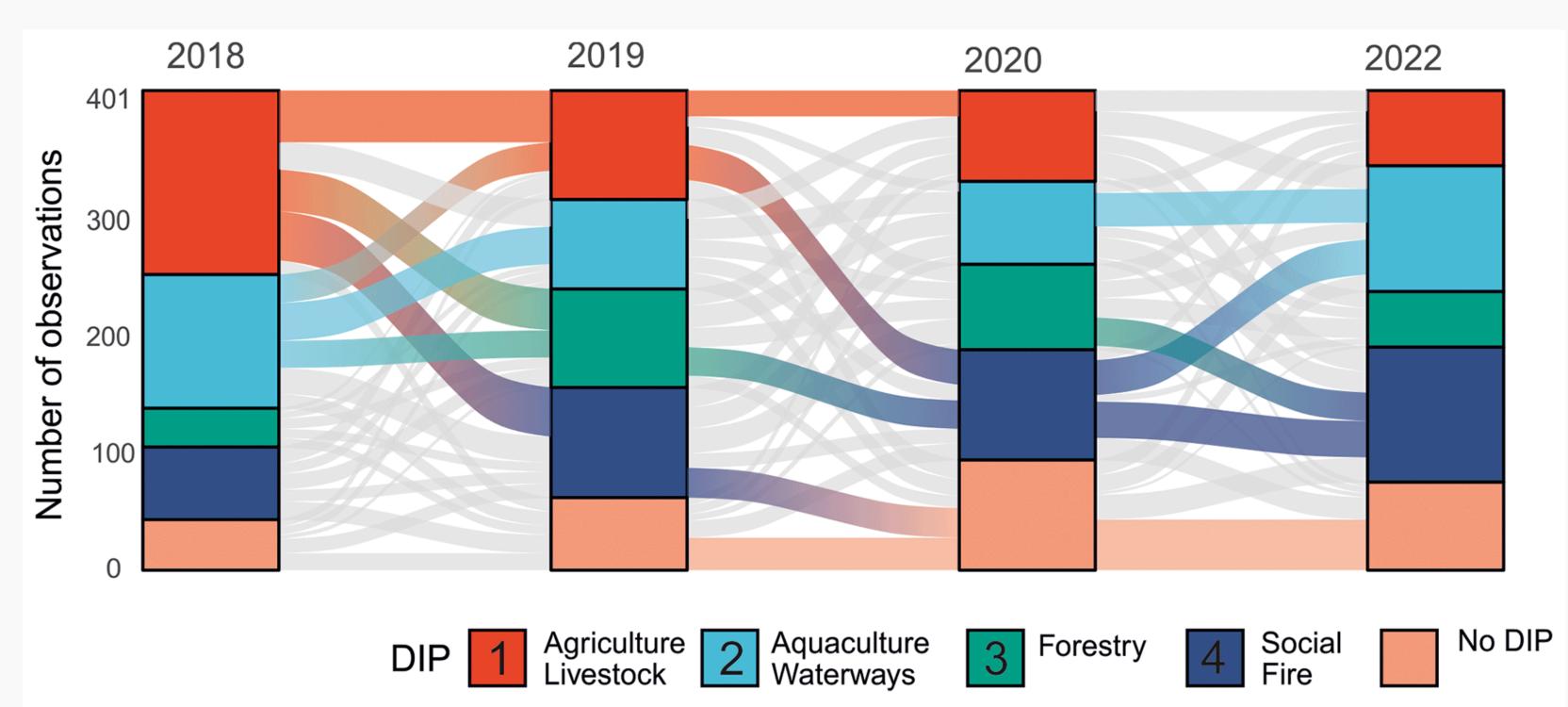


Figure 2: Transitions of drought impacts in German districts during the multi-year drought 2018-2022

Jan Sodoge (jan.sodoge@ufz.de)

Makes sense. @Tais, what about showcasing your research that shows how **minutes of meetings** of water committees in Ceará,Brazil, supported the investigation of **water allocation practices** as well as **powerful stakeholders**

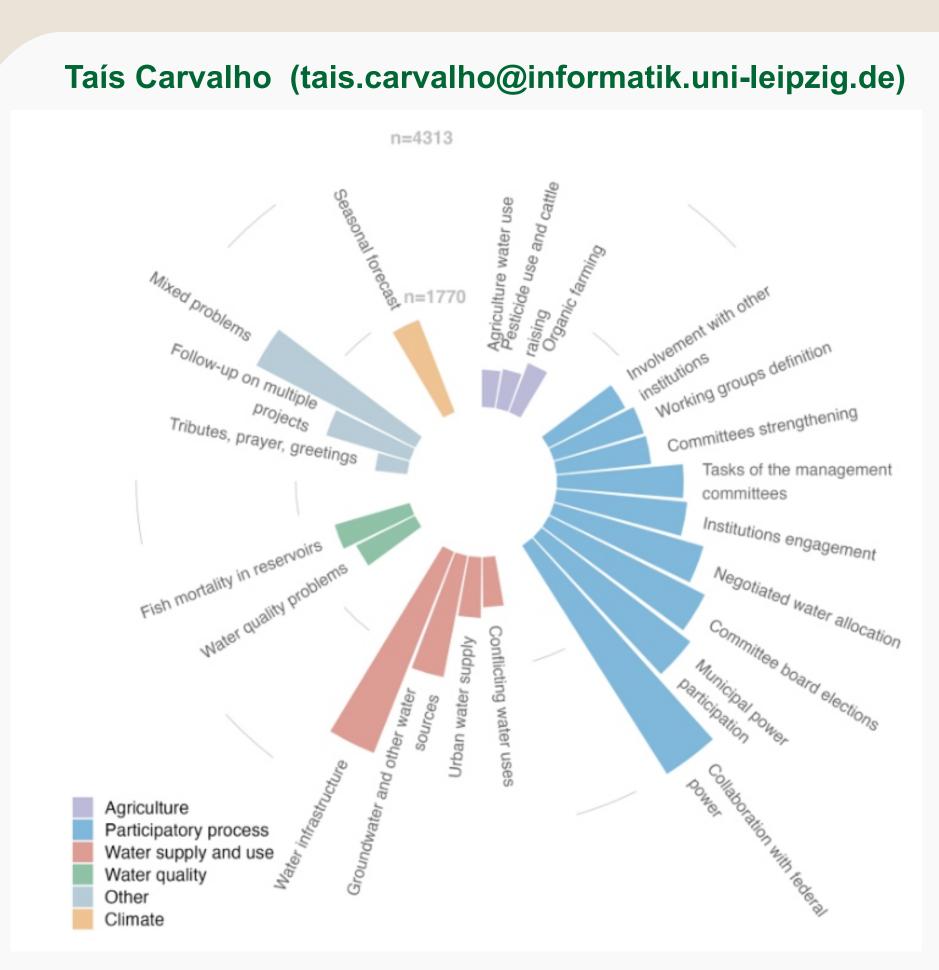


Figure 3. Total frequency of topic mentions in the corpus of meeting minutes, grouped by their main theme.

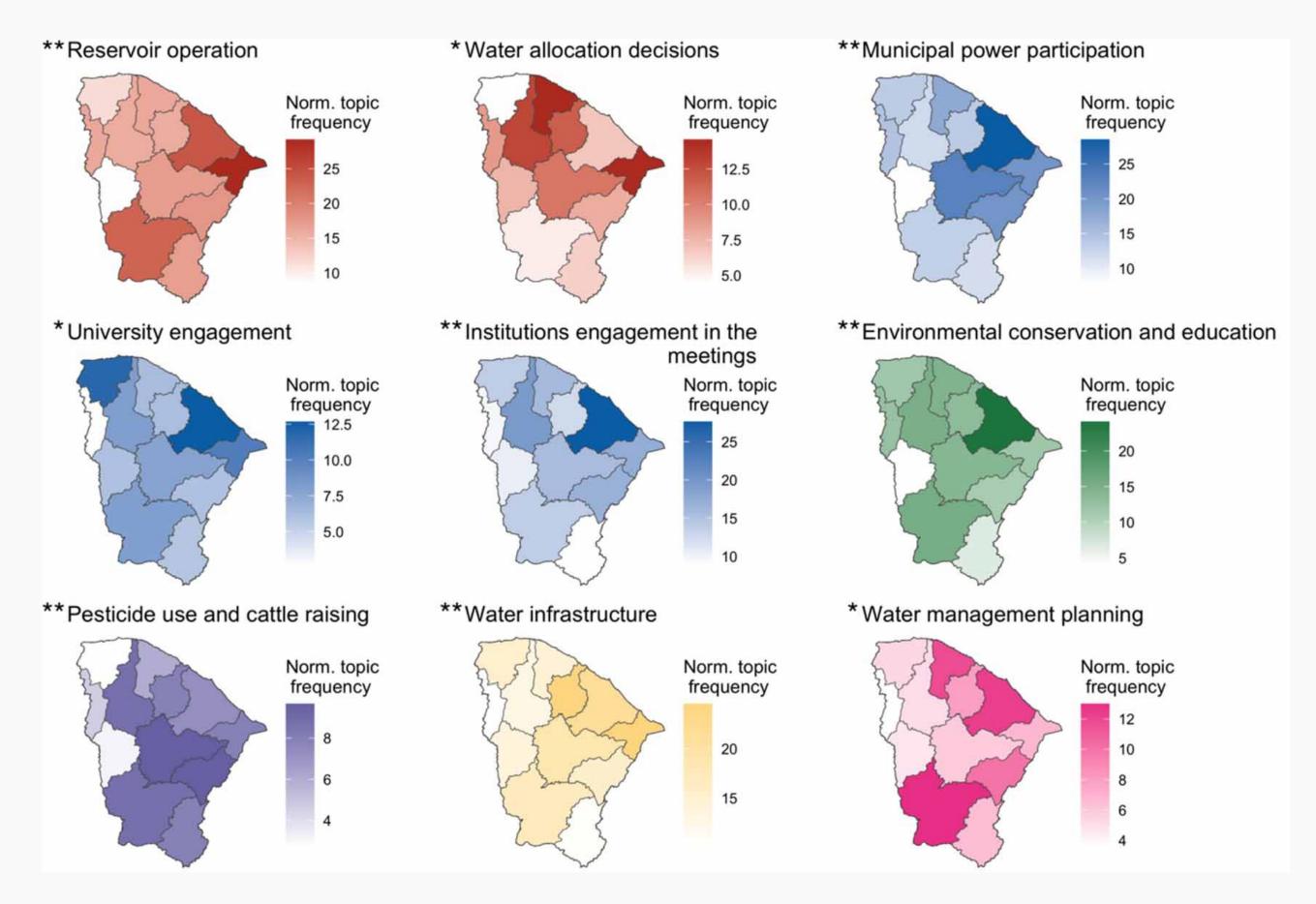


Figure 4: Normalized topic frequency per water basin

Mariana de Brito (mariana.brito@ufz.de)

Don't forget the swiss chocolate for your research group leaders;)





