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Analyzing the forms of visibility and invisibility in the process of publicizing drought: Methodological proposals

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ISSUES

- Investigating, on the scale of a territory and through a case study, the process of publicizing the debates around a socio-hydrosystem
- Examining the forms of visibility and invisibility :
 - Individuals and groups
 - Observed data: water management policies, modes of regulation (access and uses), choice of technical devices, conflicts of use, initiatives and alternative solutions

A COMPARATIVE APPROACH BETWEEN OHM

Analyzing visibility-invisibility in 5 steps (HYDECO)

- Conducting field surveys: the case study
- Building a network of stakeholders (relationships, strategies)
- Analyzing the media coverage of current events (press)
- Analyzing the communication of stakeholders on digital media
- Interpretive synthesis on the visibility-invisibility of observed data and stakeholders by case study and between case studies

ENVIRONMENTAL GEOGRAPHY – MEDIA AND COMMUNICATION STUDIES – LINGUISTICS

A MIXED METHOD



Qualitative methods
Case studies in social sciences: observations, interviews, literature research
Corpus analysis: discourse analysis (enunciative, lexical, argumentative), content analysis

Unsupervised Learning by Probabilistic Latent Dirichlet Allocation (LDA)
 ■ **Topic Modeling (LDA):** Building a generative probabilistic model to study the variation of topics over time, compare the distribution of topics between different articles or sources
Stakeholder identification: NLP tools (Named Entity Classifier), snowball sampling
Visual representations as a heuristic method

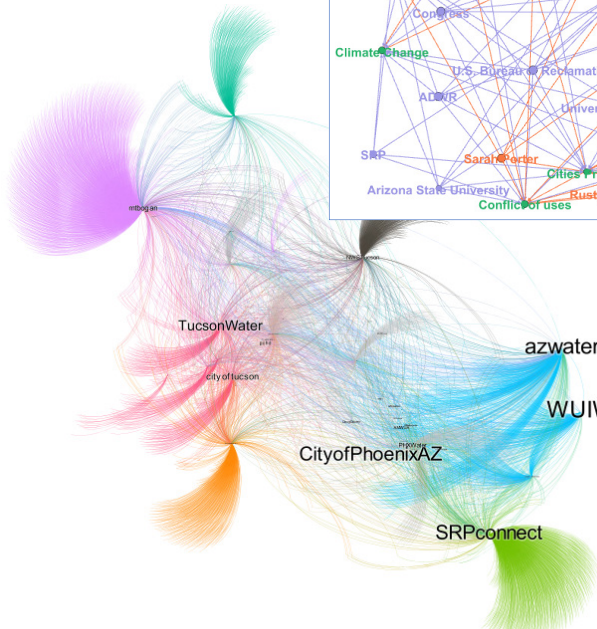
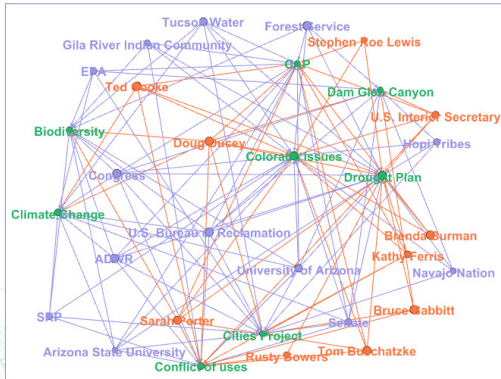
HARVESTING DATA



- 1 095 Newspaper articles (January 1999-December 2022)
- 58 082 tweets, 41 695 sent by 8 669 Twitter accounts

ANALYZING THE STAKEHOLDERS NETWORK IN MEDIA

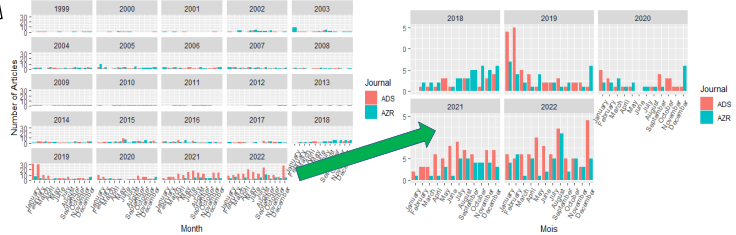
Stakeholders and topics relayed by the press



Interactions of stakeholders and groups on Twitter

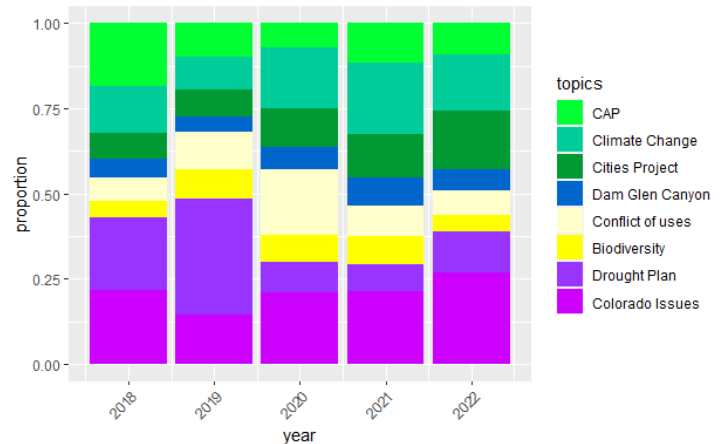
ANALYZING TEMPORAL FLOWS

Annual flows 1999 - 2022



Drought visibility in the press since 2018

IDENTIFYING AND ANALYZING TOPICS EVOLUTION



Annual evolution of the topics visibility