

KonsortSWD



Consortium for the
Social, Behavioural, Educational
and Economic Sciences

**Gute Daten.
Bessere Forschung!**

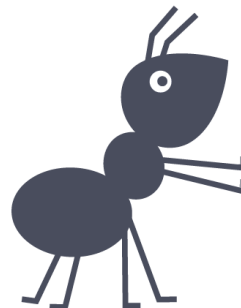
KonsortSWD meets NFDI4Earth

*What the data-infrastructure for
the Social Sciences might have in
store for Earth Systems Sciences*

Bernhard Miller

NFDI4Earth – Plenary Meeting -
10.06.22

nfdi



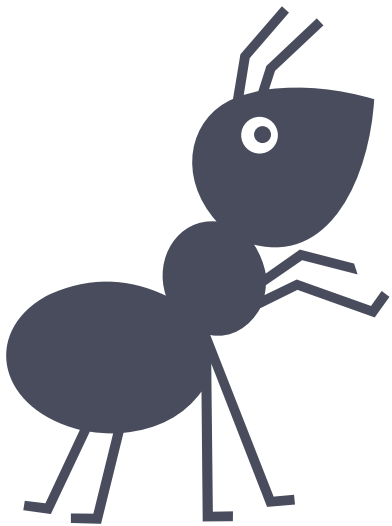
Contents

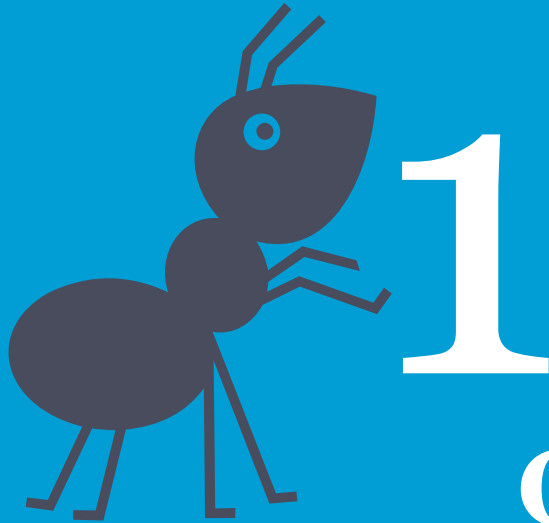
- Our Core. Decentralized RDC
- What we can Offer
- Potential Areas for Cooperation

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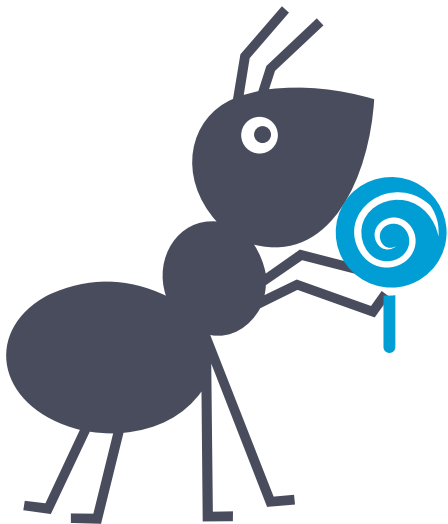




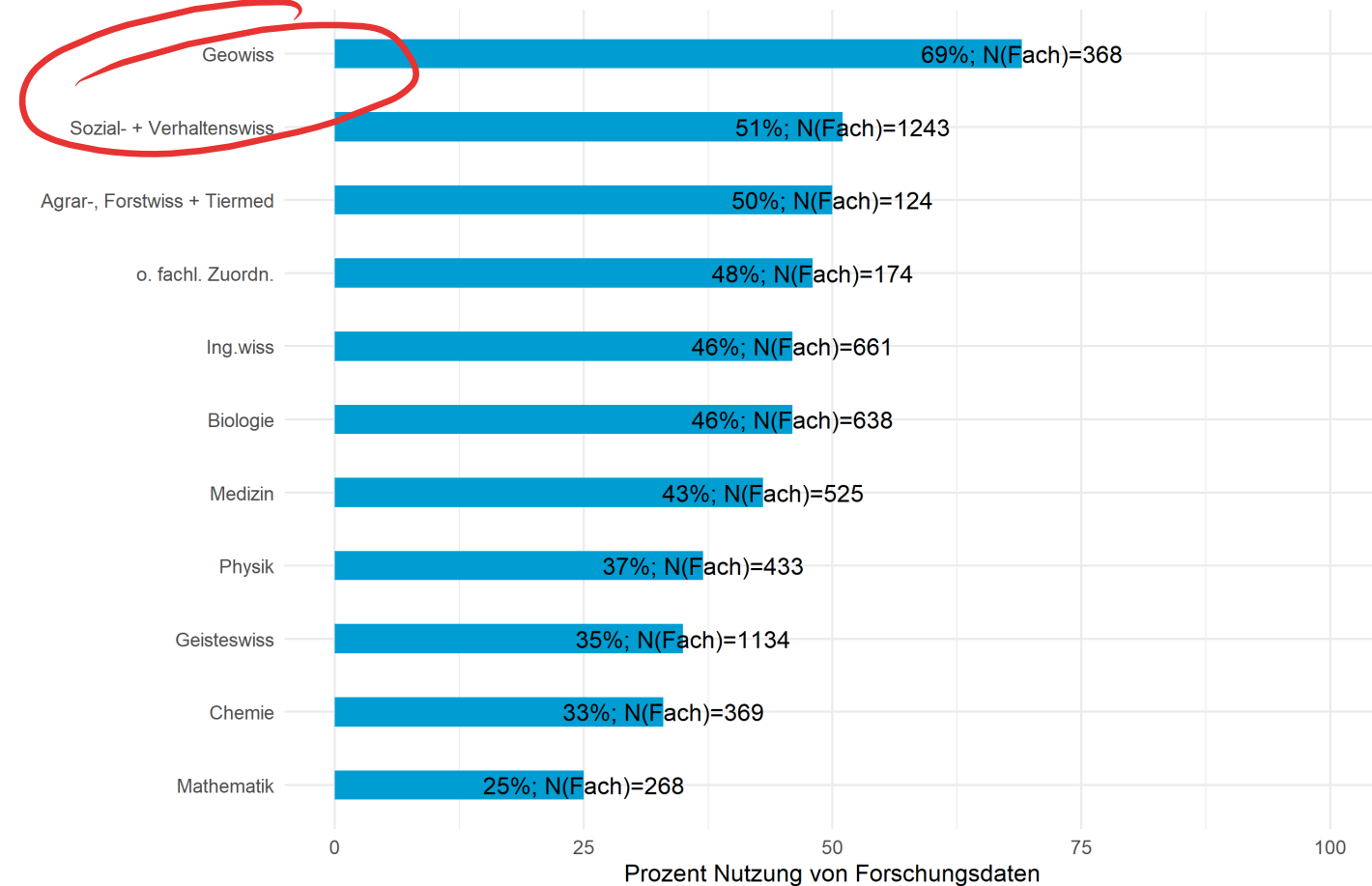
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Our Core: Decentralized Research Data Centers

Relevance of Shared Data ...

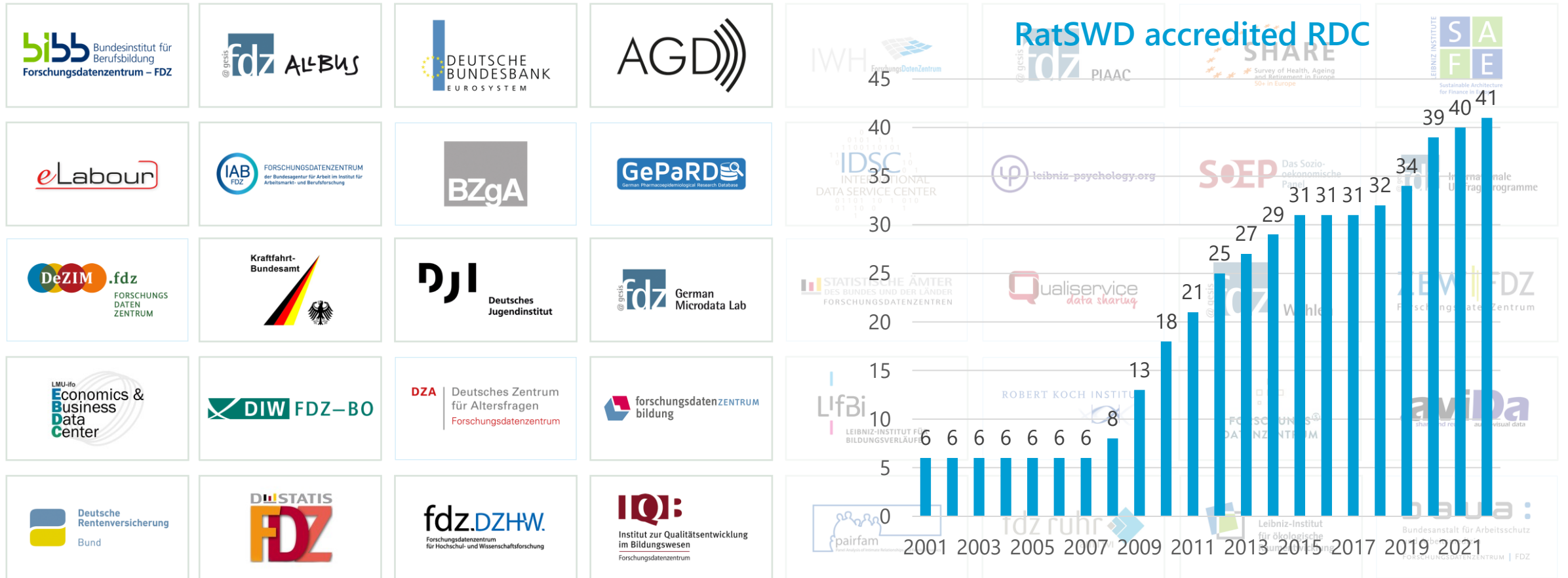


Nutzung von Forschungsdaten Dritter bei der wiss. Arbeit
Anteil nach Disziplinen (gem. DFG), nur Prof. und PostDoc



Quelle: DZHW Wissenschaftsbefragung 2019, doi:10.21249/DZHW:scs2019:1.0.0

Research Data Centres (RDC, FDZ)



RDC Data Make a Difference



4.917
datasets
546 new



43.703
external
Users



68.752
Downloads
of unrestricted datasets



2.906
publications
based on RDC data



294
FTE across
RDCs



520
Scientific publications
by RDC staff

RDC Harbor Sensitive Data


- For most part, RDC data is **individual level data** and needs to be **restricted**
- **GDPR** (sensitive personal data), legal restrictions, copyrights ...
- Non-sensitive (or anonymized) parts also available



KonsortSWD Short and Simple

 **S**trengthen
the FAIRness
of (meta)data

By strengthening metadata quality, KonsortSWD makes data FAIR and linkable. This enhances their analytical potential.

 **W**iden
the scope of data
available through
Research Data Centres
(RDC)

By widening the scope of RDCs, new communities benefit from data access across domains and from RDM expertise available within the KonsortSWD network.

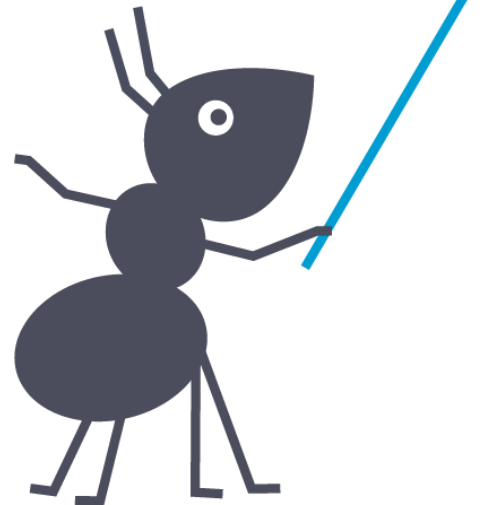
 **D**eepen
the cooperation
between RDCs

By deepening cooperation between RDCs, we overcome the fragmented data landscape and simplify data access.

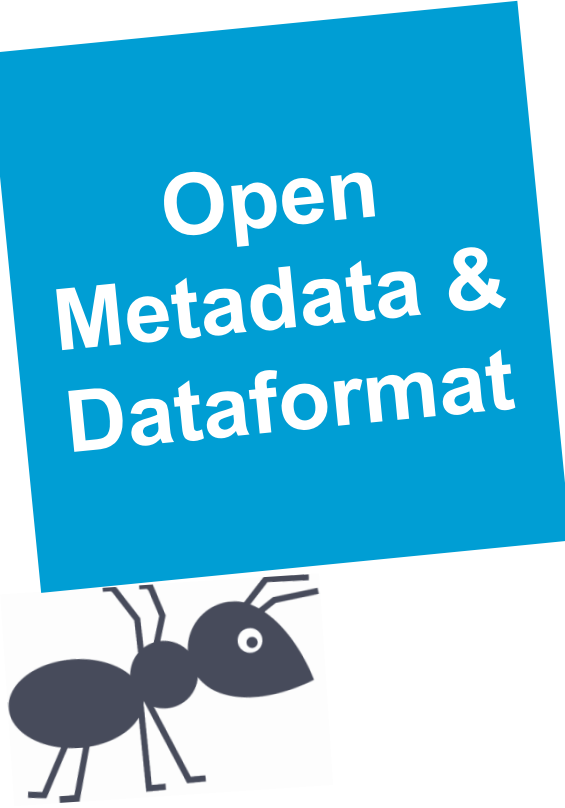
KonsortSWD Services



konsortswd.de/services



| | | | | | |
|---|--|---|---|--|--------------------------------------|
| CODI – automatic coding of open questions | Open Metadata & Dataformat | PID Service below data set level | Domain- Data Protocols | FDM Consulting for qualitative Data | RatSWD |
| Improving Findability | Linking text to other data | Unified Access Points for RDC | RDC Quality Assurance | Forum4Mica for RDC users | RDM Grants |
| Interfaces for data exchange | Federated Archiving of qualitative Data | Harmoni- sation of core concepts | RDC Consultation (CoreTrust- Seal, ...) | RDM Competence Base (COMPAS) | Network Develop- ment |



Open
Metadata &
Dataformat

- Open, **non-proprietary**, multilingual, metadata-enriched data format that can be used with common **statistical programs**
- Data linked to metadata (at variable level)
- Import / Export routines in **R** and **python**



2

What we can offer

Exemplary Data



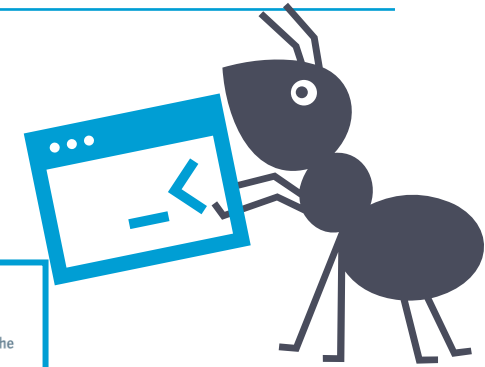
RDC pairfam (Panel Analysis of Intimate Relationships and Family Dynamics) covers geocoded data on ~ 12.500 individuals born after 1970. “Anchor” respondents are surveyed annually in face-to-face interviews. Data cover e.g. divorces and information on **development of partnerships**.



The **RDC of Germany's Federal Motor Transport Authority** provides anonymised quantitative microdata e.g. on the stock of vehicles with technical as well as demographic and regional characteristics of the vehicle keeper. It also holds data on legally binding decisions concerning **criminal** or **administrative offences**

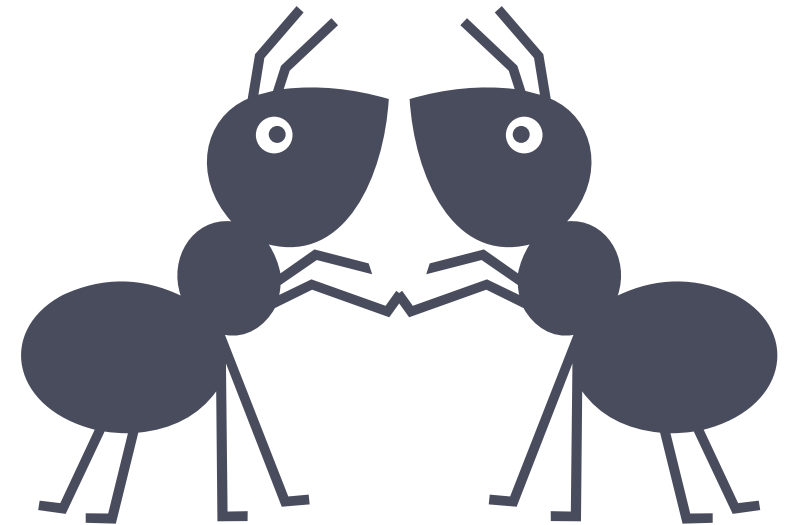


SOEP RDC provides data from the largest and oldest longitudinal household survey in Germany. Topics include information in living conditions, school grades, job changes, commuting time, health and health care, environmental behavior, leisure behavior, ...



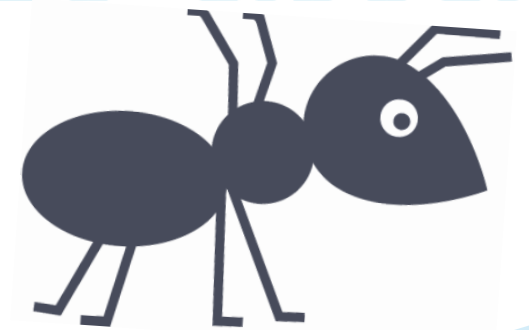
Data on Behavior and Perceptions

- Environment (are people afraid where they live? - ALLBUS)
- How do they spend their money?
- What are their values?
- Mostly, however, based on **national samples**



Search us on da|ra

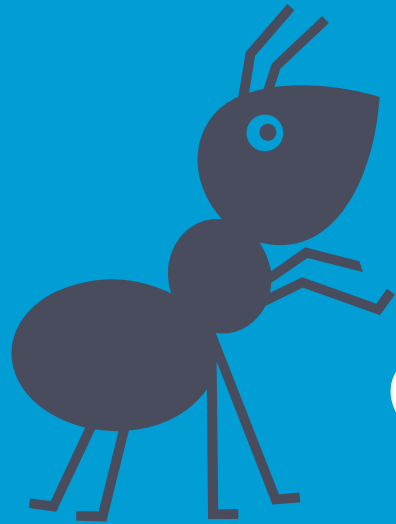
- **Water:** Kostenstrukturerhebung der Unternehmen der Energie- und Wasserversorgung (Stat Off)
- **Holiday/Tourism:** Change and Development of Families` Way of Life (DJI / GESIS)



**Network
Develop-
ment**



- Flex Funds like 4Earth Incubators
- Preparing **new services** and **expanding network**
- z.B. collaboration on RDM across domains
- Funding for **21** months from 9/23 or 1/24
- **Call** due summer **2022**

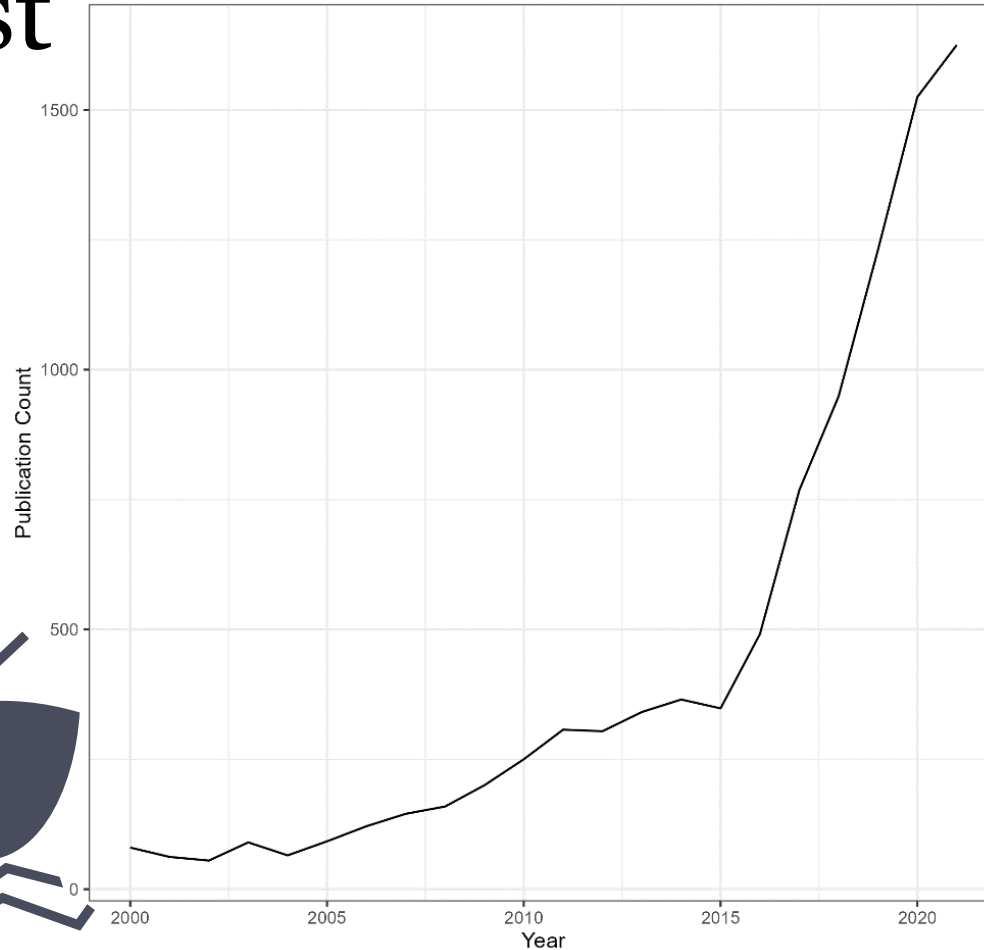


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Potential Areas for Cooperation

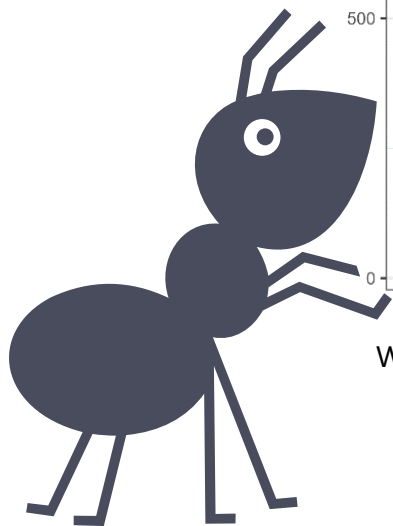
Interest

SSCI + A&HCI Publications on Topic 'Satellite Data' and 'Remote Sensing'



Web of Science Data compiled by Abel / Jünger (unpublished, 2022)

KonsortSWD's community is **increasingly** interested: SSCI and HCI publications on **Satellite Data** and **Remote Sensing**



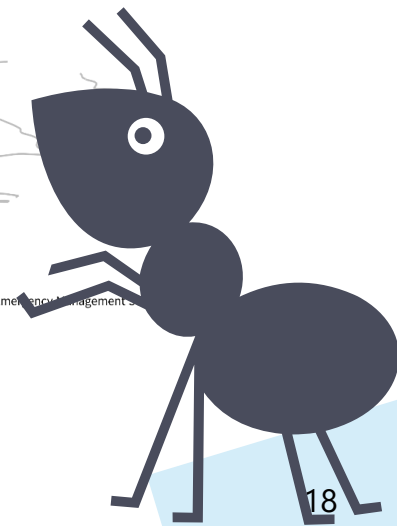
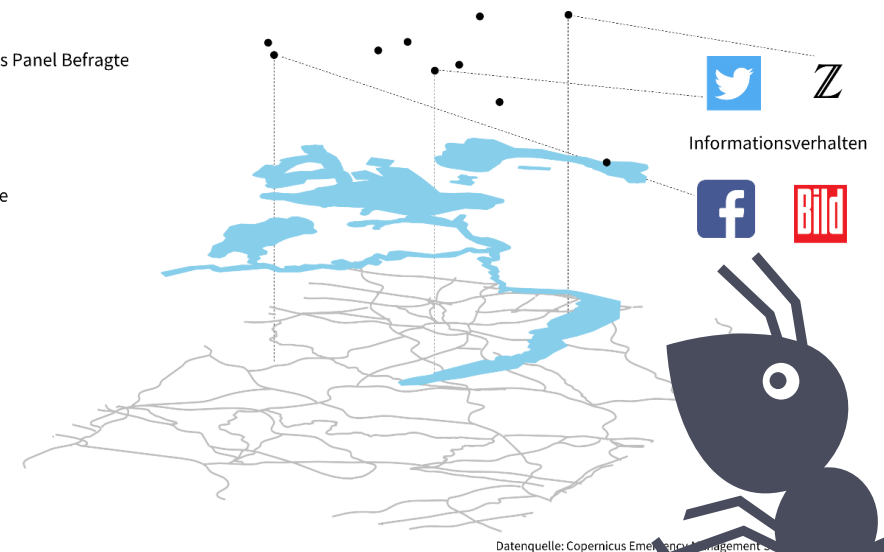
e.g. Copernicus

- Informing research on environment attitudes, acceptance of policies, health and wellbeing
- **Exploratory** Project @ GESIS 2023-2024
- **R Interface** for Earth Science Data from Copernicus

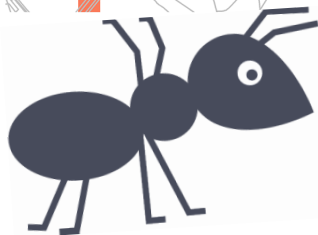
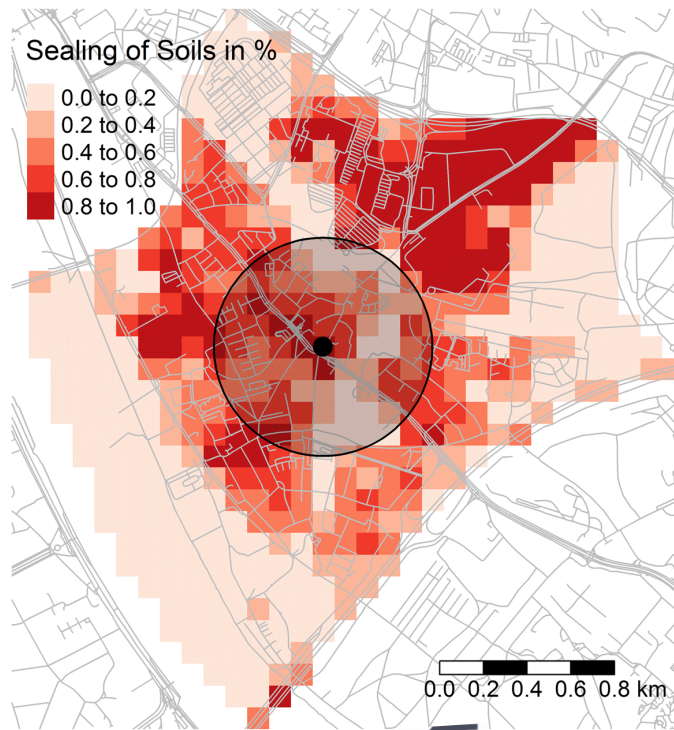
DVD Access Panel Befragte

Flutgebiete

Straßen



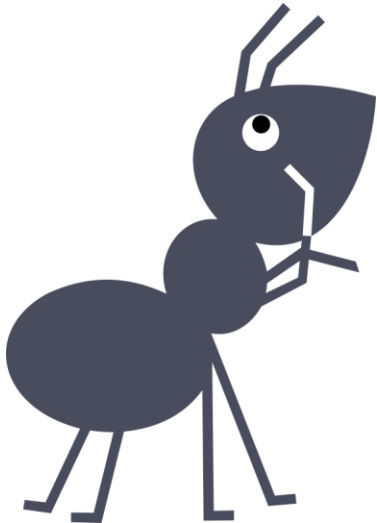
e.g. along the lines of SORA



- **Spatial Linking** of Survey Data with Geospatial Data
- Reduces Risk of Re-Identification
- And allows relevant questions to be answered (e.g. U.S. finding, testing toxic air exposure of single parents)
- Partners: IÖR, KIT, SOEP@DIW, GESIS

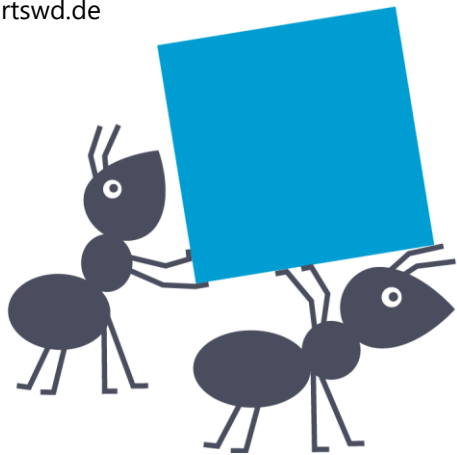
Areas for Cooperation

- Collaboration to
 - **Extract** information from Earth Science Data (e.g. pictures)
 - **Facilitate** linking them to Social Science Data
 - **Explore** angles on other questions of mutual interest





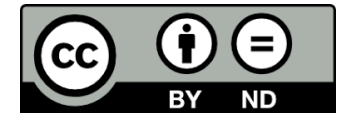
konsortswd.de



All
great collaborations
start out small

info@konsortswd.de

| | |
|--|---|
|  Leibniz-Institut für Bildungsforschung und Bildungsinformation |  |
|  Deutsches Zentrum für Hochschul- und Wissenschaftsforschung |  Leibniz-Institut für Sozialwissenschaften |
|  LEIBNIZ-INSTITUT FÜR BILDUNGSVERLÄUFE e.V. |  |
|  |  Wissenschaftszentrum Berlin für Sozialforschung |
|  Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics |  |





Supplementary Materials

Ideas: Social Science and Earth Science Data

| Datenquelle | | Link | | Analytischer Zweck |
|--|---|--|-----------|---|
| GESIS | Copernicus | Geographie | Zeit | |
| DVD-Access Panel (inkl. Web-Tracking) | Sturminformationen | ≤ 1 km ² | h / d | Informationsverhalten vor und nach Extremwetterereignissen |
| TweetsKB | Flutwellen, Waldbrände | Geotagged Tweets / Nennung von Lokalitäten | h / d / m | Rezeption von Extremwetterereignissen in der Öffentlichkeit / Tweets als „Frühwarnsystem“ |
| FReDA | Urban Atlas / Siedlungsstruktur | ≤ 1 km ² | y | Einfluss der Wohnumgebung auf Freizeitaktivitäten von/mit Kindern |
| ALLBUS | Anzahl Schneetage im Winter in den letzten 5 Jahren | ≤ 1 km ² / Gemeinde / Kreis | d / m | Einstellungen zum Klimawandel |
| GLES | Trockenheit, Waldsterben, markantes Wetter | Wahlkreis / Gemeinde / Kreis / Regierungsbezirk / Bundesland | m / y | Positionen, die menschengemachten Klimawandel relativieren |
| GESIS Panel | Hitzewellen | ≤ 1 km ² | d / m / y | Auswirkungen von Hitzestress auf mentale Gesundheit |
| EVS | Klimarisiken | NUTS 1 | m / y | Umwelteinstellungen und -verhalten - Bereitschaft zum Aktivismus |
| Eurobarometer | Standortbedingungen für erneuerbare Energien | NUTS 1/2 | m / y | Zustimmung zu nachhaltigen Investments und Fördermaßnahmen |
| CSES | Extremwetterereignisse | NUTS 0 | m / y | Einfluss auf politisches Vertrauen im internationalen Vergleich |
| H2020 GRETA Multinational Survey | Sonneneinstrahlung | NUTS 2 | m / y | Individuelle Verhaltensänderungen (z.B. eigenes Solarpanel) |