



# Data stewardship

Competências, boas práticas e desafios

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ICArEHB

Universidade do Algarve



ICArEHB



**UAlg**

UNIVERSIDADE DO ALGARVE

**fct**

Fundação  
para a Ciência  
e a Tecnologia



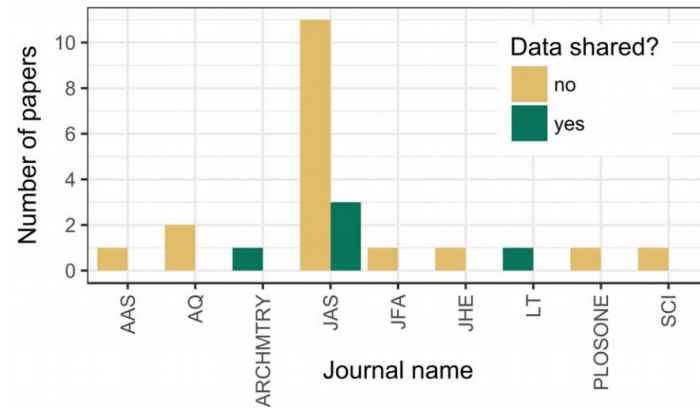
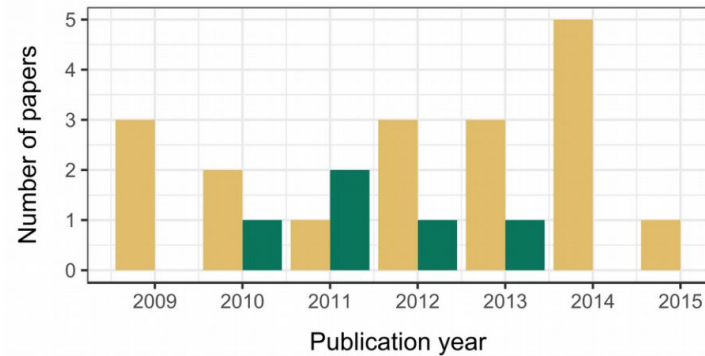
## Quem sou?

- Investigador em Arqueologia
- Praticante de ciência aberta
- Diretor de uma Unidade I&D

## Quem não sou?

- Especialista em ciência aberta
- Especialista em gestão de dados
- Ditador

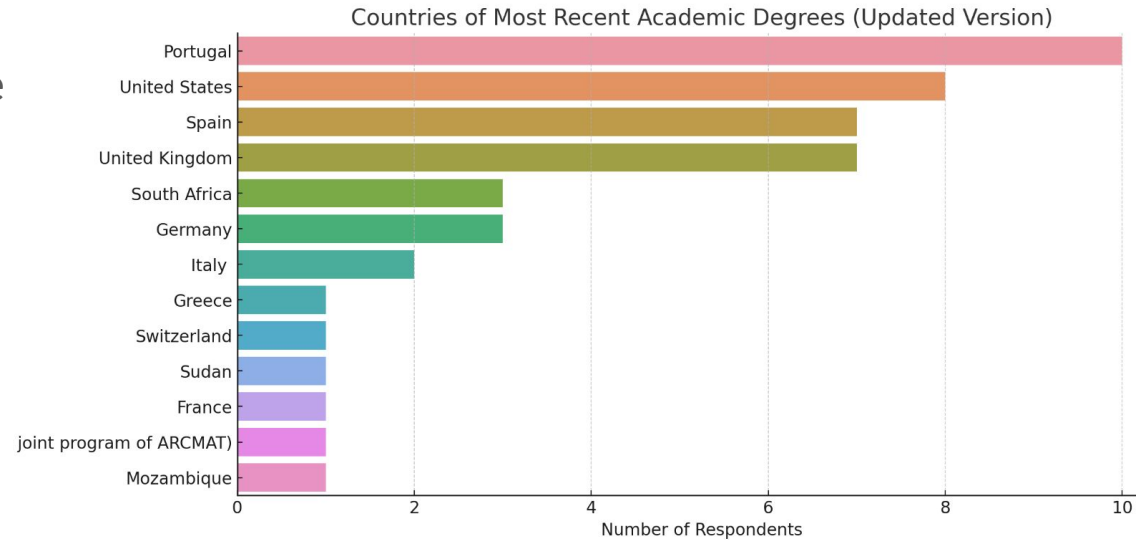
# Partilha de dados em Arqueologia



Marwick, B., & Birch, S. E. P. (2018). A Standard for the Scholarly Citation of Archaeological Data as an Incentive to Data Sharing. *Advances in Archaeological Practice*, 6(2), 125-143. <https://doi.org/10.1017/aap.2018.3>

## Questionário ICArEHB

- 46 respostas no conjunto de dados
  - 31 investigadores doutorados
  - 15 alunos doutoramento



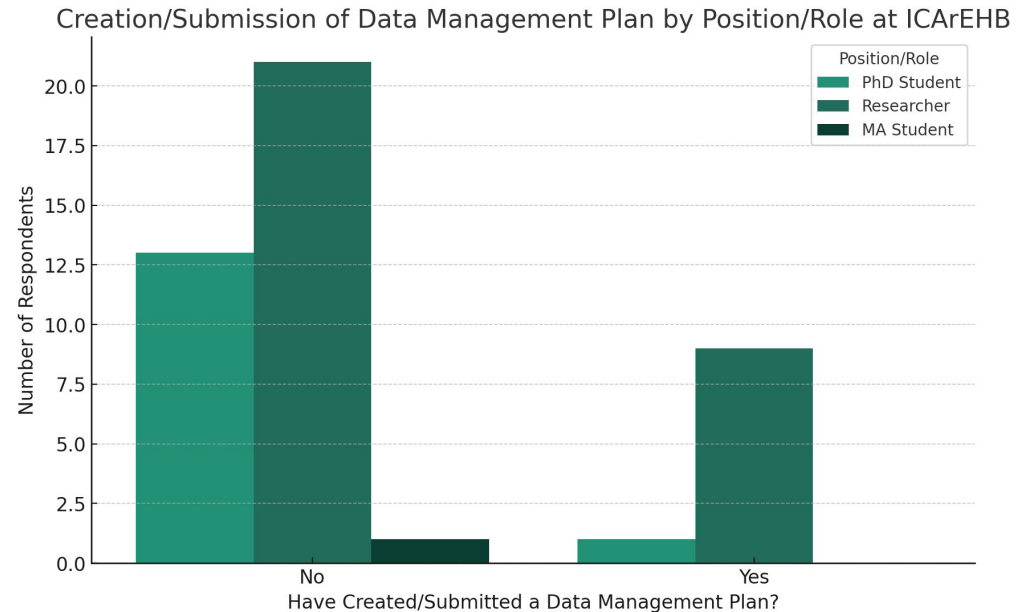
82%

Não recebeu formação em gestão de dados

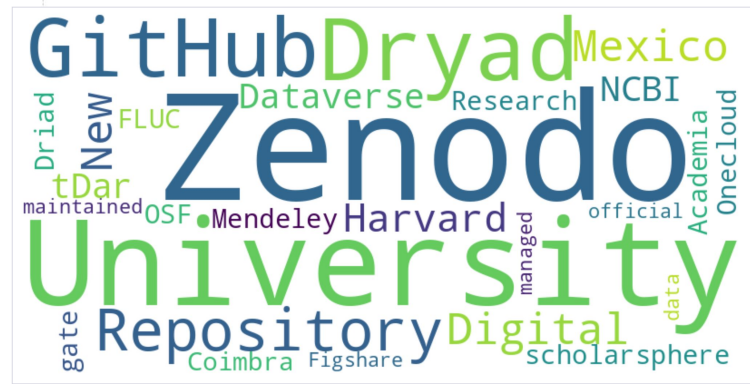
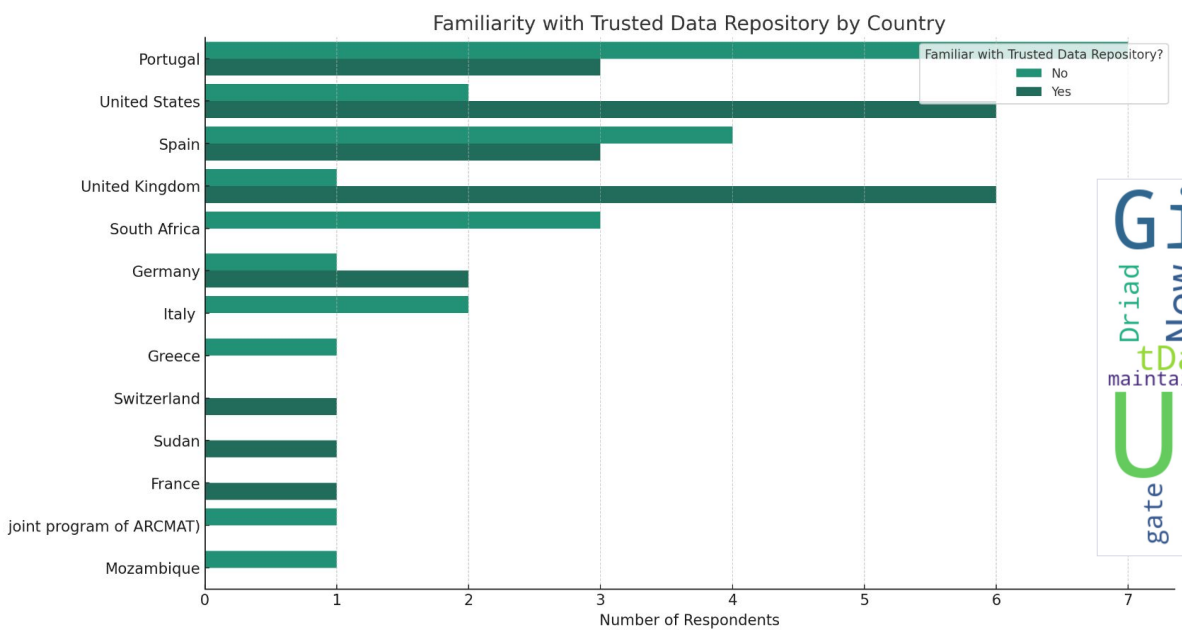


## Conhecimento de DMP

- 67% dos inquiridos sabem o que é um plano de gestão de dados
- 76% nunca criou um plano de gestão de dados

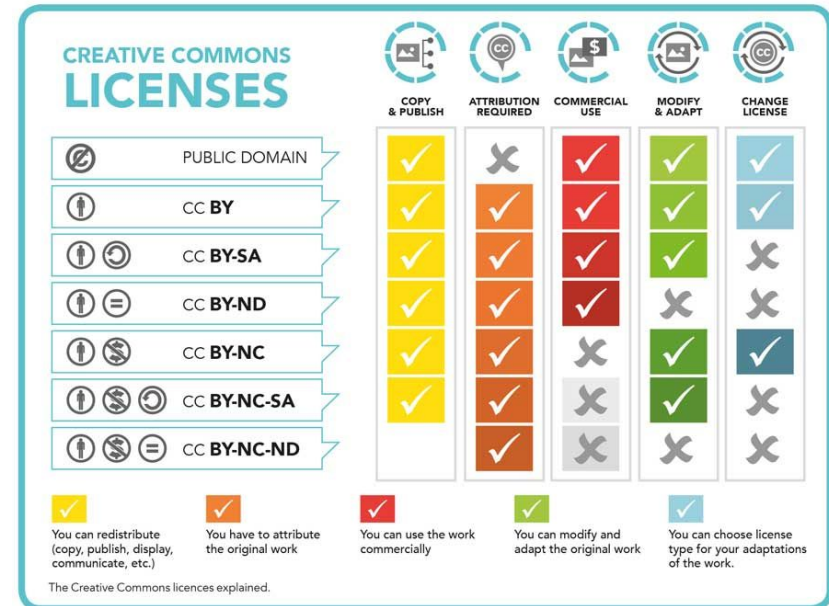


# “Trusted repositories”



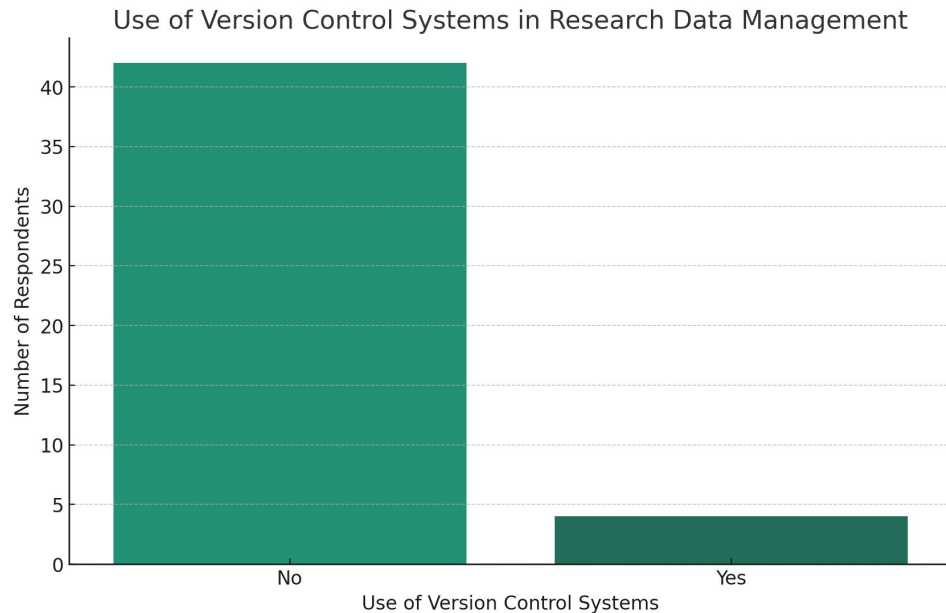
# Licenciamento para reutilização de dados

- 71% não está familiarizado com as licenças de proteção de partilha de dados



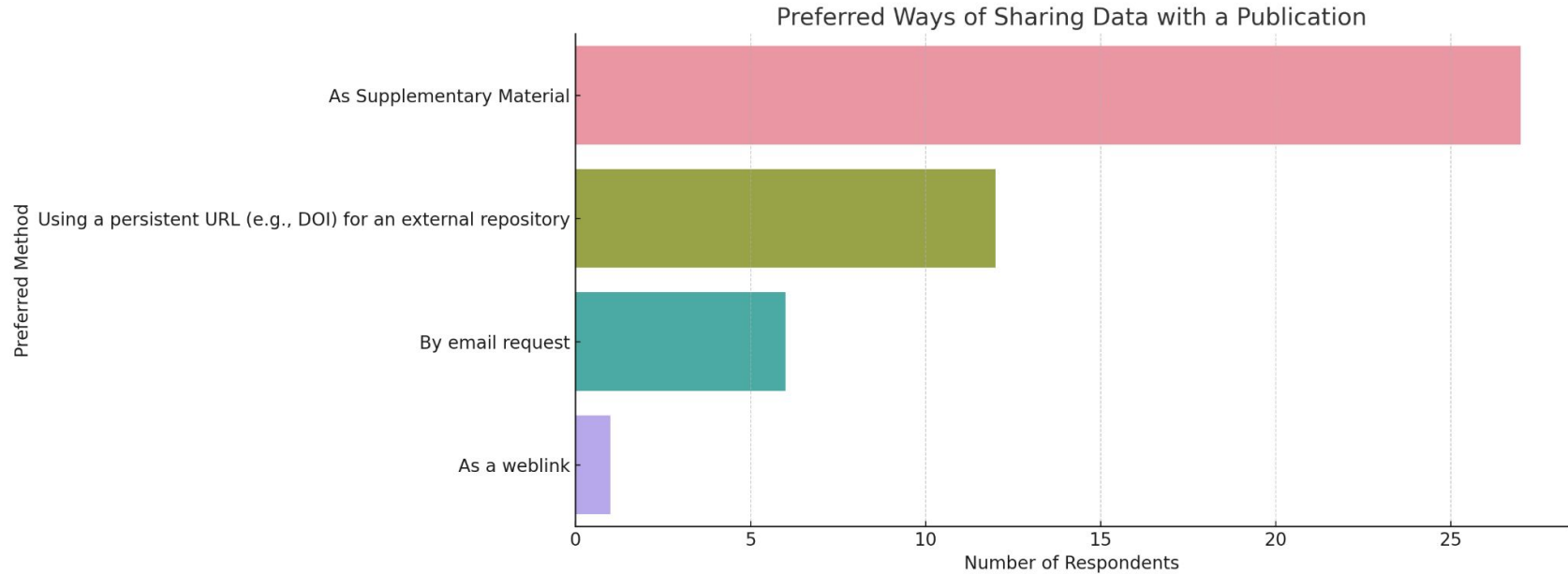


## Controlo de versões



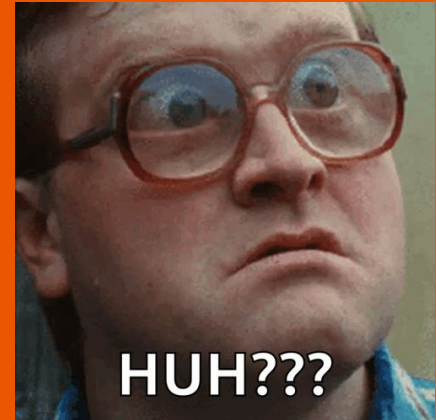
control  
Machine Time  
backup Date Github  
Synology MacOS  
Dropbox version Acronis

# Partilha em publicações



“Penso que é ingenuamente altruísta pensar que as pessoas darão livremente dados a que dedicaram anos, ou mesmo décadas, de trabalho árduo para recolher e analisar. Esta é uma das questões fundamentais da Ciência Aberta que nunca é abordada”

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**“Estou preocupado com quem terá acesso aos meus dados se os partilhar através de um repositório público”**

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“Perda dos direitos de  
propriedade intelectual”

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## Incentivos/reconhecimento

- “Formação em partilha de dados, políticas claras a nível institucional e reconhecimento dos investigadores que partilham dados”
- “Deixar de dar prioridade às métricas de publicação”
- “Criação de um índice como os índices de publicação, que mostraria a abertura dos investigadores à partilha de dados”
- “Orientações seguras sobre a forma de o utilizar e aspectos claros relativos aos direitos de autor”



## Política de dados na UAlg



OSF Institutions enhances transparency and increases the visibility of research outputs, accelerating discovery and reuse. Institutional members focus on generating and sharing research, and let OSF Institutions handle the infrastructure.

[Read more](#)



# OSF.io



## Unique Persistent Identifiers

- ✔ Assigns PIDs to datasets
- ✔ PID points to persistent landing page

## Long-Term Sustainability

- ✔ Long-term management of data
- ✔ Maintain availability of dataset
- ✔ Stable technical infrastructure
- ⚠ Stable funding
- ✔ Contingency plan for data

## Metadata

- ✔ Datasets must have metadata
- ✔ Use schemas appropriate to the community

## Free and Easy Access

- ✔ Free access to datasets and metadata
- ✔ Support for broad, equitable, open access
- ✔ Timely access after submission
- ✔ Maintain privacy, confidentiality, tribal sovereignty, and protection of sensitive data

## Provenance

- ✔ Record the origin, chain of custody, and modifications

### Legend

- ✔ Characteristic met
- ⚠ Working towards characteristic

## Curation and Quality Assurance

- ✔ Datasets must have metadata

## Broad and Measured Reuse

- ⚠ Measure attribution, citation, and reuse

## Clear Use Guidance

- ✔ Clear documentation of terms for access and reuse

## Security and Integrity

- ✔ Documented criteria for preventing unauthorized access, modification, or release of data
- ✔ Security levels appropriate to the sensitivity of data

## Risk Management

- ✔ Ensure administrative, technical, and physical safeguards

## Common Format


- ✔ Allows datasets and metadata downloaded, accessed, or exported
- ✔ Support for widely used and non-proprietary formats

## Retention Policy

- ✔ Policy for data retention



# Política de dados no ICArEHB

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[Research Project \(2\)](#)

**Publication Year**  
2023 (3)

**Author Name**  
[Emily Hallinan \(1\)](#)


1 to 3 of 3 Results Sort ▾



[Interdisciplinary Center for Archaeology and the Evolution of Human Behaviour, Universidade do Algarve \(ICArEHB\)](#) 🔗

Jun 16, 2023 [Piloto Repositório Polen](#)

Coleção Dataverse criada no âmbito da fase piloto do Repositório Polen, gerida pelo Interdisciplinary Center for Archaeology and the Evolution of Human Behaviour. Dados arqueológicos provenientes de um projeto de investigação do centro.



[NuBIAN - Nubian technology, Behavioural Innovation and Adaptation: New perspectives on Middle Stone Age technological variability and population dynamics \(ICArEHB - Universidade do Algarve\)](#) 🔗

Jun 16, 2023 [Interdisciplinary Center for Archaeology and the Evolution of Human Behaviour, Universidade do Algarve](#)



# Política de dados no ICArEHB (2025-2029)

- 1. Formação**
  - 1.1. Avaliar as necessidades de formação
  - 1.2. Lançar um programa de formação piloto
- 2. Infraestrutura e ferramentas**
  - 2.1. Avaliar e atualizar as ferramentas existentes de armazenamento
  - 2.2. Implementar as ferramentas seleccionadas e oferecer formação sobre utilização
- 3. Documentação de políticas e diretrizes**
- 4. Envolvimento da comunidade e incentivos**
  - 4.1. Iniciar colaborações com instituições líderes na gestão de dados
- 5. Revisão e feedback regulares**
  - 5.1. FAIR Data Maturity Model



## Our vision of what's Open

### Guidelines

1. Pre-Registration
2. Data Management Plan (DMP)
3. Data Collection Protocols
4. Data Dictionary
5. Logbook
6. Data Storage
7. Scripts
8. Metadata
9. Version Control
10. Preprints
11. Peer review

### References

## Our vision of what's Open

The core mission of ICArEHB is to build an integrative understanding of human behavior in prehistoric times and assure that the main outputs of this research are new and outstanding knowledge, ideas, and understanding in the fields of prehistoric archaeology and human evolution, that can be shared with other scientists and with the society.

Particularly, the destructive nature of archaeology means that we must stick to the highest standards; we must leave a maximum of elements available for other scientists and the future generation of archaeologists. To keep these standards, ICArEHB embraces the concept of Open Science, i.e., research that is transparent and allows reproducibility, the best guarantee to stay at the forefront. It means that, as much as possible, our research projects are validated by our peers before we start it, our procedures, software, and code, are made accessible to others, and our results are shared with various audiences (e.g., other scientists, the general public, policymakers) and our data are archived for the future.

## Open methodologies

Did you know that even before it starts, projects can be examined and validated by other experts? This is the case for all projects funded in ICArEHB, which go through peer review either by the third-party funder or by an internal review process.

In addition, we encourage our researchers to pre-register their study in journals and platforms allowing this format. This ensures that our study plans are robust and helps to reduce the bias of publication, so all results are shared, even if less exciting than expected.

## Open source

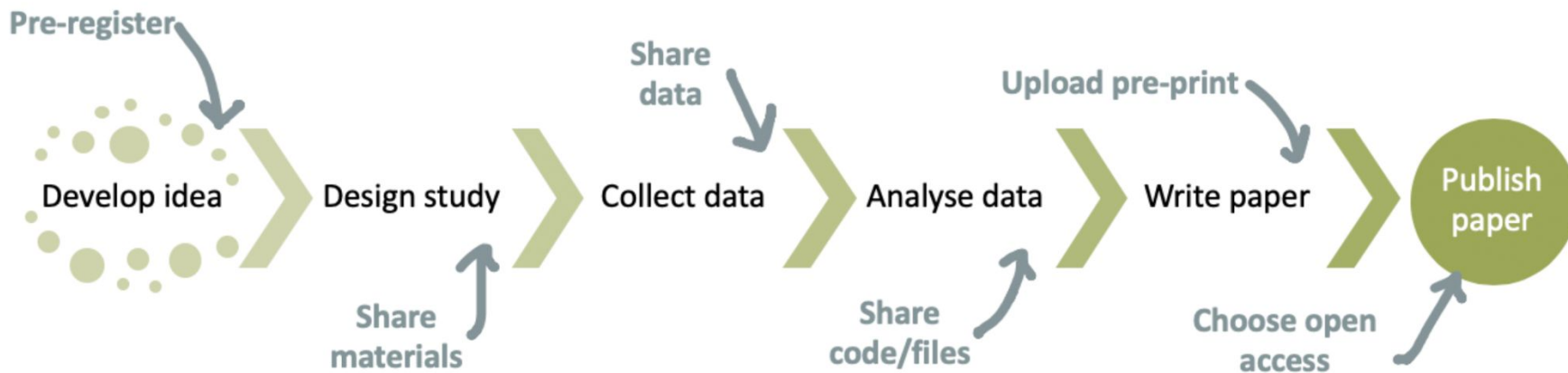
As much as possible, we use open-source software and file formats that everyone can use. When we write code, or new software and apps, we publish them and assure that they are available for the rest of the community. Check out some of these examples [here](#) and [here](#).

### Table of contents

#### Our vision of what's Open

- Open methodologies
- Open source
- Open publications
- Open communication
- Open data

## Política de dados no ICArEHB



Source: [https://jamesbrandscience.github.io/tutorials/open\\_science/Introduction.html#1](https://jamesbrandscience.github.io/tutorials/open_science/Introduction.html#1)