

Data Management Plan for EcoPop_ER Dataset

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1 Data Summary

The database aims to provide new informational tools to understand and mitigate the impact of rapid climate change on the population of Emilia-Romagna by developing and disseminating a database containing demographic, environmental, and climatic data for all municipalities in the region. The database implementation is promoted as part of the project 'Memorec - Resilience and Climate Memory in Emilia-Romagna', funded by the University of Bologna through AlmaCares funds.

1.1 Data Sources

The source of data are [Istat](#) (National Institute of Statistics of Italy), [Regione Emilia-Romagna](#), and [Arpae](#).

2 How We Make Data FAIR

2.1 Findability

- We will use standardized metadata and clear naming conventions for datasets to enhance their discoverability.
- Data will be cataloged in Zenodo with detailed descriptions and keywords for easy searchability.

2.2 Accessibility

- Open access datasets are deposited in Zenodo and will be integrated with this presentation, and with this DMP, so that all necessary resources will be accessible.

2.3 Interoperability

- Data are formatted using standardized file formats, such as .csv, .txt, .png, .pdf, .r, so that they do not become obsolete over time, but remain interoperable.

2.4 Reusability

- Datasets are accompanied by comprehensive documentation in order to enhance reproducibility
- We provided clear licensing information, in particular we decided to use a CC BY licence, to increase reproducibility and independent verification by other interested students and researchers.
- In future versions we will upload the R code used.

3 Data Security

- Data were kept secure by using OneDrive as a storage tool.

4 Ethics and Privacy

- Our data has no elements that would preclude its openness, such as might be privacy, ethics, and IPR, so procedures such as anonymization, patent protection, etc., have not been adopted

4 Annex 1: Table Describing Main Dataset

Dataset Name	EcoPop_ER
Version	1.1
Year	2024/2025
Description	Quantitative data about the municipalities of Emilia-Romagna region
Size	488.4 KB
Format	txt, csv
Licensing	CC BY 4.0
DOI	https://doi.org/10.5281/zenodo.13885777

4 Annex 2: Version history

The following changes were implemented between versions 1.0 and 1.1 of the dataset:

- Removal of duplicate entries.
- Removal of data from years prior to 2000.
- Removal of data for the year 2024 due to incompleteness.
- Removal of 9 indicators: 8 related to the resident population (due to redundancy) and one related to the year 2024.
- Adjusting municipality names by correcting special characters.