
Plan Overview

A Data Management Plan created using DMPonline

Title: 中国城市PM2.5和PM10污染现状与趋势——基于多源数据的分析

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Project abstract:

本文使用Echarts和VOSviewer对2013-2023年中国城市PM2.5和PM10的污染现状与趋势进行了分析。通过多源数据的整合与分析，揭示了污染物的时空分布特征及其变化趋势。研究发现，PM2.5的污染水平在2013-2023年间呈现波动上升的趋势，而PM10则呈现波动下降的趋势。此外，NO₂的污染水平在2013-2023年间呈现波动上升的趋势。本文的研究结果对于制定大气污染防治政策具有重要的参考价值。

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Data Collection

What data will you collect or create?

From 2018-2023, we will collect 26 variables including PM2.5, NO₂, and GDP data from the World Bank and the European Central Bank.

How will the data be collected or created?

The data will be collected via API calls using Python and the API documentation provided by the data sources.

Documentation and Metadata

What documentation and metadata will accompany the data?

The data will be accompanied by a JSON file containing the metadata and a README file containing the documentation.

Ethics and Legal Compliance

How will you manage any ethical issues?

The data will be managed in accordance with the GDPR and the Open Access Research Data Platform policies.

How will you manage copyright and Intellectual Property Rights (IPR) issues?

The data will be managed in accordance with the CC BY-ND 4.0 license and the Open Access Research Data Platform policies.

Storage and Backup

How will the data be stored and backed up during the research?

The data will be stored in a secure cloud storage and backed up using NAS and Git.

GitLab

How will you manage access and security?

SSL/TLS
AES-256

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

GIS

What is the long-term preservation plan for the dataset?

1
NetCDF
GeoJSON
DOI
3
10

Data Sharing

How will you share the data?

GitHub
Gitee
MIT

Are any restrictions on data sharing required?

Responsibilities and Resources

Who will be responsible for data management?

What resources will you require to deliver your plan?

1 GIS 2 ScienceDB 3 1 4

Planned Research Outputs

Dataset - "Population of the United States (2018-2023)"

Dataset covering 2018-2023, updated 26 January 2026. This dataset provides a comprehensive overview of the United States population, including demographic and geographic data. The data is sourced from the U.S. Census Bureau and is available for research and analysis.

Planned research output details

Title	DOI	Type	Release date	Access level	Repository(ies)	File size	License	Metadata standard(s)	May contain sensitive data?	May contain PII?
Population of the United States (2018-2023)		Dataset	2024-01-01	Open	None specified		Creative Commons Attribution 4.0 International	None specified	No	No