From Collection to Analysis:

Plastic Pirates Data (European datasets)

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Plastic Pirates – Go Europe!
General Assembly April 2025

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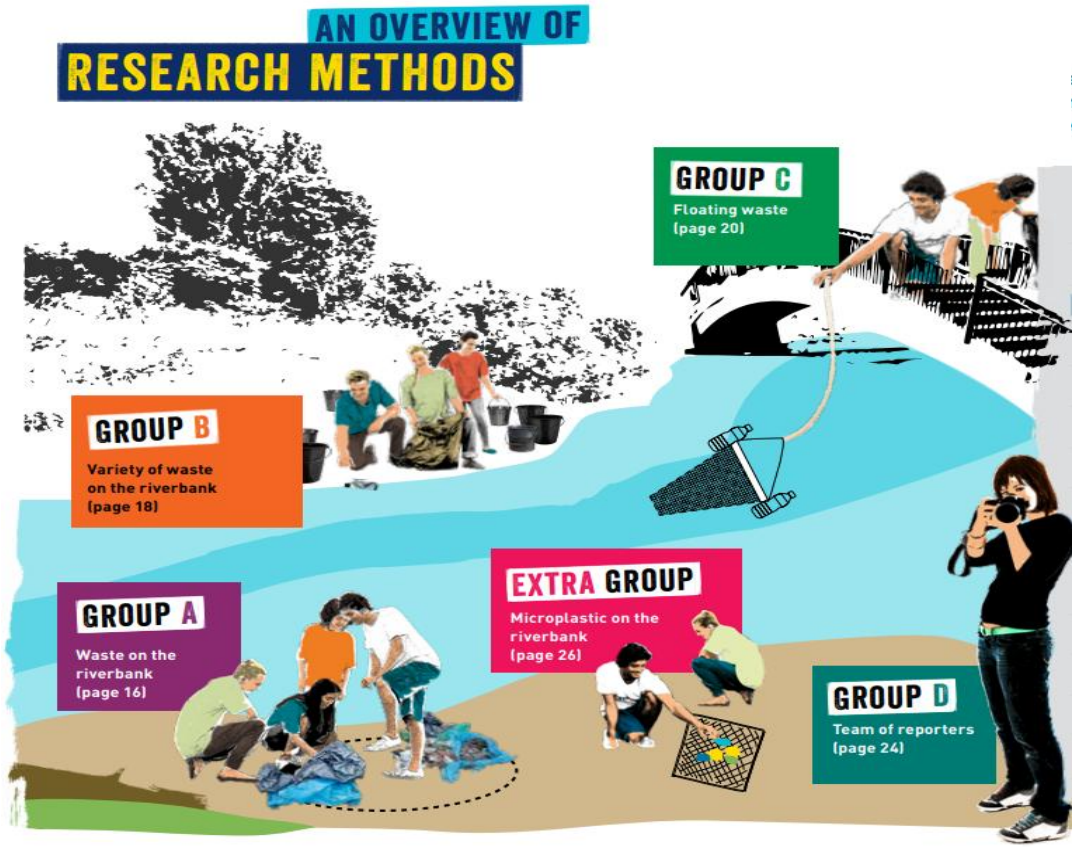
RIVERINE LITTER DATA: PP (EU)



GROUP	Riverbank	Floating	Macro	Micro
Group A	✓		✓	
Group B	✓		✓	
Group C		✓	✓	✓
Group Extra	✓			✓

Group D: metadata; sources (perception)

Data collection: Website

Scientific validation

Validated Data

Data analysis

Scientific Outcomes

F A I R

FINDABLE ACCESSIBLE INTEROPERABLE REUSABLE

EMODnet

European Marine Observation and Data Network

Waste Manage

Contents lists

Waste

journal homepage:

ELSEVIER

What potential does the EU Single-Use P plastic pollution at coastlines and riversi citizen science data

Tim Kiessling [a,*], Mandy Hinzmann [b], Linda Medera Marianne Böhm-Beck [a], Katrin Knickmeier [a], Martin

One Earth

CellPress

Volume 6, Issue 6, 16 June 2023, Pages 715-724

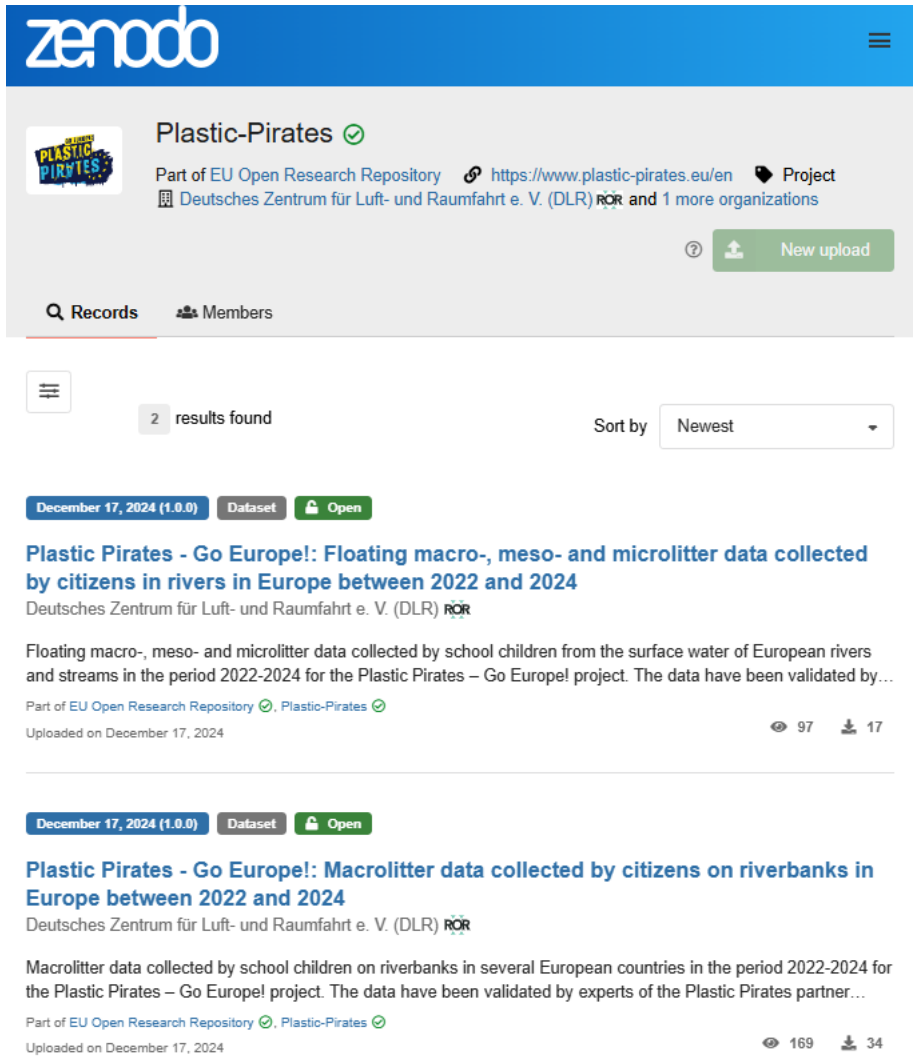
Article

UN plastic treaty must mind the people: Citizen science can assist citizen involvement in plastic policymaking

Nikoline G. Oturai [1,5], Kristian Syberg [1], Dilek Fraisl [2], Asta Hooge [1], Tiffany M. Ramos [1], Sven Schade [3], Steffen Foss Hansen [4]

VLIZ

Current datasets



April 2025:

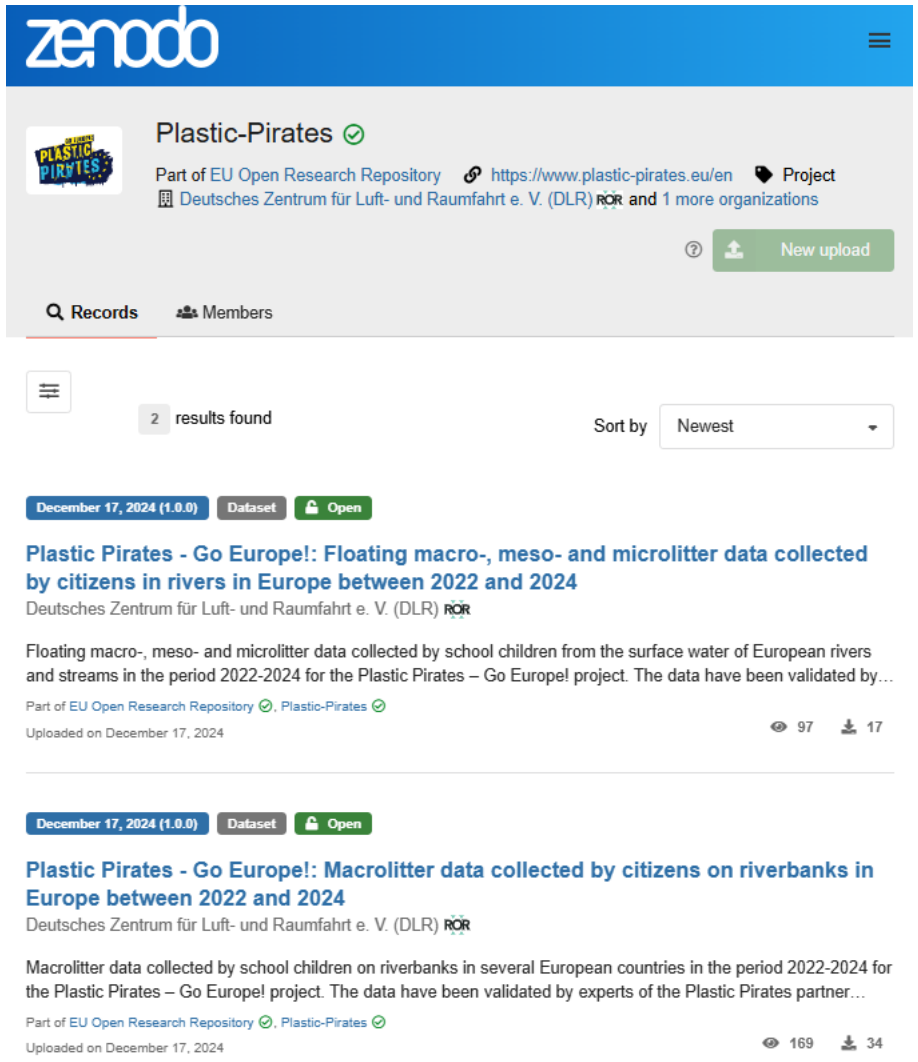
New publication of datasets

Question 1) Protocols with DOI? (Zenodo)

(Acknowledges original authors)

https://zenodo.org/communities/plastic-pirates

Current datasets + April publication



Data paper
+ SOPs (DOI)

Research questions
Data analysis

https://zenodo.org/communities/plastic-pirates

Research manuscripts (riverine litter)

Question 2) Publication strategy

Scientific Peer Reviewed Publications:

I. All European riverine datasets (until April 2025): first research questions (macro + micro)

II. In-depth data analysis (macro + micro; macro and micro)

Research manuscripts

Question 3) Manuscript – I: Research questions (Macro):

Most common types and quantities of litter per region?
(Group B: riverbanks; Group C: floating litter)

Litter diversity? (Group B)

Are floating and riverbank litter types common?
(Macro: Group B, C)

Effectiveness of environmental policies? (Group B)

Research manuscripts (riverine litter)

Question 4) Manuscript – I: Research questions (Micro):

Most common polymers and concentrations of MPs per region?
(Group C: floating litter, Extra)

MPs diversity? (Group C/extra)

Research manuscripts (riverine litter)

Question 5) Manuscript – II: Research questions (Macro + Micro):

Spatial and temporal trends in the distribution and abundance (Macro: Group A, C; Micro: Group C)?

- Hotspots (accumulation)
- Weather and seasonal patterns
- Hydrological dynamics
- Climate regions
- Extreme weather events (floods)

Potential sources (Perception; Group D) vs actual land use on litter composition (Group B)?

Question 6)

Other Research Questions?

Question 7)

Mapping active contributors

THANK YOU!

DEPARTMENT OF ECONOMY SCIENCE & INNOVATION

www.plastic-pirates.eu/dt

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Plastic Pirates Belgium

Plastic Pirates - Go Europe! Belgium

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