Endless journey of plastic debris in rivers

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Riverine macrolitter emissions: hotspots in Europe

- 82% Plastics
- 1,600-5,000 mt/yr emitted into the Ocean
- Major contribution of small urban basins (<100 km²)

Model based on visual counting

300-900 million litter items per year!

How plastic debris are transported?

**The Seine estuary**

Tide influence > River discharge

Short-term dynamics (hours to months)

Long-term dynamics (months to decades)

10 km

How plastic debris are transported?

The Loire estuary

Tide influence > River discharge
How plastic debris are transported?

The Seine estuary under flooding conditions

River discharge > Tide influence

Cleaning opportunity

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Global plastic emissions: 0.8 to 2.7 million mt/r

Small urban rivers in South East Asia are major sources!

> 1500 Rivers account for 80% of the global plastic emitted!

Thank you

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