Combining GlobCurrent Ocean Current Products with Tidal Currents to Monitor Marine Litter in the North Atlantic Ocean

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NOVELTIS, France
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Marine litter convergence in the North Atlantic Ocean

- Opendrift lagrangian tool fed with GlobCurrent surface current products (geostrophy + Ekman).
  - General convergence into the North Atlantic subtropical gyre, low influence of the tidal currents offshore.

Coastal behavior and ocean tide contribution

- 80% of marine litter originate from land-based sources.
- Tidal currents are a major contributor on these debris pathways on the shelves.
  - Combination of GlobCurrent and tidal currents improves the comparison with drifting buoys on the continental shelf.