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Supporting Information for

# Plastic Release during COVID-19 and its Fate in the Global Ocean

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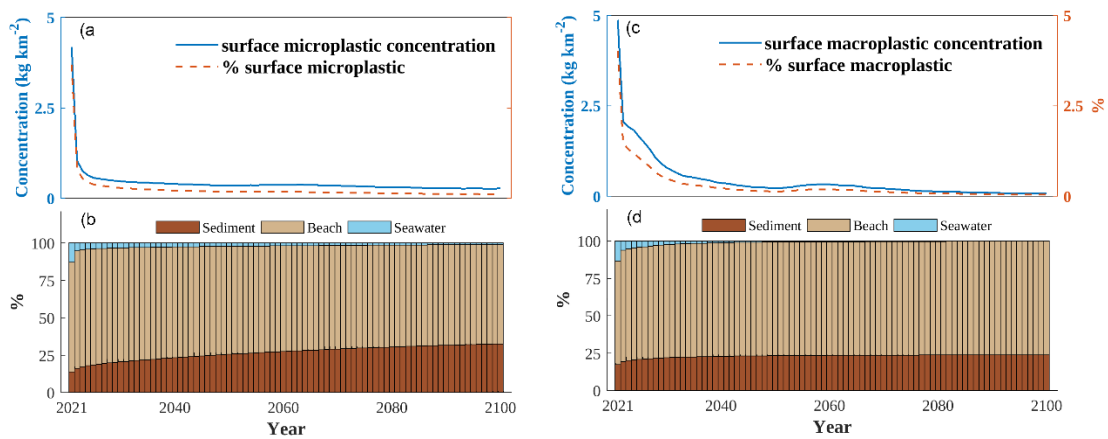
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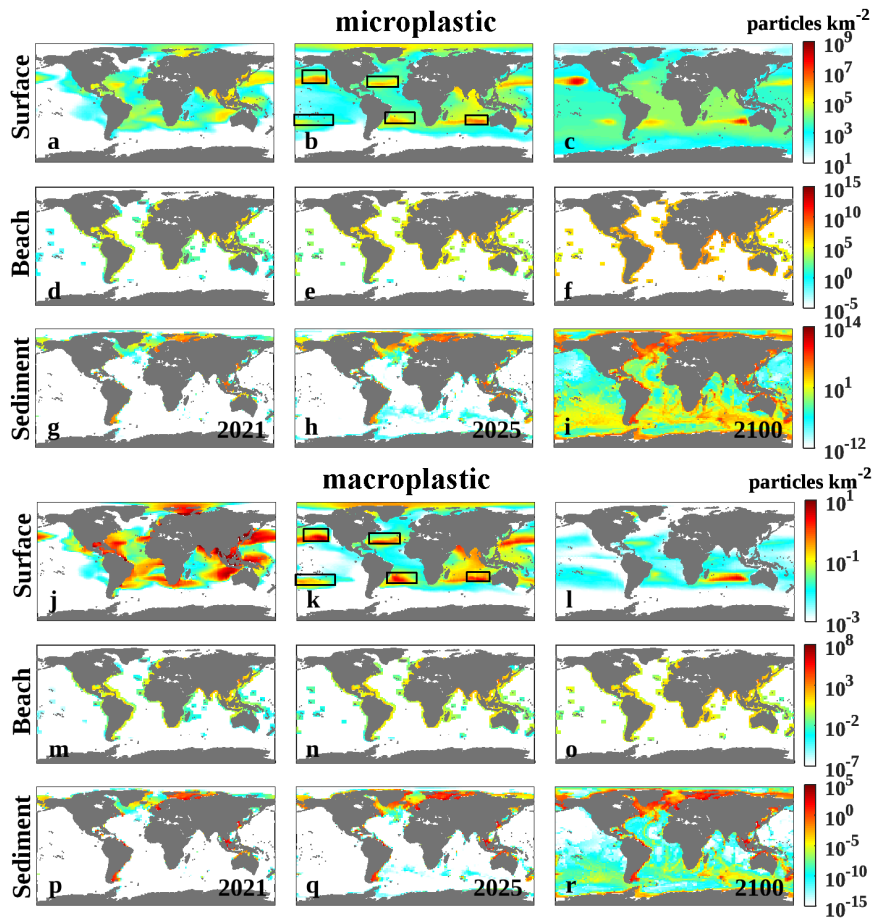
- Fig. S1
- Fig. S2
- Fig. S3
- Table S1

18 **Table S1 | The generation of mismanaged plastic waste from four sources in**  
 19 **different continents.**

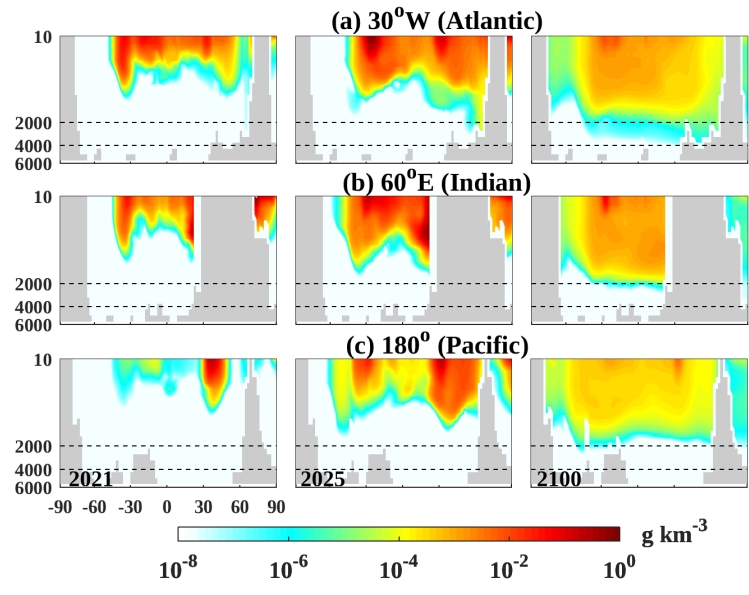
<b>Sources</b> <b>Continents</b>	Hospital (tons)	Test Kits (tons)	PPE (tons)	Packaging (tons)
Africa	512003	9085	141790	0
Asia	3104755	8876	416121	359855
Europe	1922557	3853	40153	32604
North America	442228	2254	20255	2746
Oceania	767	0	1671	201
South America	1362599	2719	17165	941



21 **Fig. S1 | Projection of the mass fractions of discharged pandemic-associated**  
 22 **microplastics (a and b) and macroplastics (c and d). Panels a and c show the fraction**  
 23 **of plastics in the surface ocean, while b and d are the fractions in seawater, beach, and**  
 24 **sediment.**



26 **Fig. S2** | Modeled spatial distribution of the number concentrations of COVID-19  
 27 associated plastics in the surface ocean (a-c, j-l), one the beaches (d-f, m-o), and the  
 28 seabed (g-i, p-r) in 2021, 2025, and 2100. The black boxes on the top panel indicate  
 29 the five subtropical ocean gyres (North Pacific Gyre, North Atlantic Gyre, South  
 30 Pacific Gyre, South Atlantic Gyre, and Indian Gyre). Panels a-i are for the  
 31 microplastics, while j-r are for the macroplastics.



33 **Fig. S3** | Vertical distribution of plastics in ocean along the meridional profile (in g  
 34  $\text{km}^{-3}$ ). The year is the same as above. The shaded area represent seabed.