



Supplementary Material:

Figure S1. Typical marcoplastics and mesoplastics collected in this study.

Table S1. Abundance comparison with other freshwater areas (Surface water).



Figure S1. Typical macroplastics and mesoplastics collected in this study.

Table S1. Abundance comparison with other freshwater areas (Surface water).

| Surface Water | Location | Abundance (Items/m ³) | Reference |
|----------------------------------|-------------------------|-----------------------------------|------------|
| Los Angeles River | USA | 22–12,932 | [1] |
| Tamar Estuary | UK | 0.028 | [2] |
| Yangtze River Estuary | China | 500–10,200 | [3] |
| Oujiang Estuary | China | 100–4100 | [4] |
| Seine River | France | 3–108 | [5] |
| Great Lakes tributaries | North America | 0.05–32 | [6] |
| Lake Bolsena | Italy | 0.82–4.42 | [7] |
| Lake Chiusi | Italy | 2.68–3.36 | [7] |
| Taihu Lake | China | 3400–25,800 | [8] |
| Bei Lake | China | 7800–10,050 | [9] |
| Wu Lake | China | 1160–2380 | [10] |
| Three Gorges Dam | China | 1594–12,611 | [11] |
| Rhine River and Meuse River | Netherlands and Germany | 100–18,700 | [12] |
| Middle-Lower Yangtze River Basin | China | 500–3100 | [13] |
| Antua River | Portugal | 58–1265 | [14] |
| Hong Lake | China | 1250–4650 | [15] |
| East Dongting Lake | China | 900–2800 | [15] |
| West Dongting Lake | China | 433–2217 | This study |
| South Dongting Lake | China | 367–2316 | This study |

Table S2. Abundance comparison with other freshwater areas (Sediment).

| Sediment | Location | Abundance (Items/kg) | Reference |
|------------------------|----------|----------------------|------------|
| Lagoon of Venice | Italy | 672–2175 | [16] |
| Rhine River | Germany | 228–3763 | [17] |
| Taihu Lake | China | 11–234.6 | [8] |
| Lake Chiusi | Italy | 205–266 | [7] |
| Lake Ontario | Canada | 20–27,830 | [18] |
| Beijiang River | China | 178–544 | [9] |
| Huangpu River | China | 410–1600 | [19] |
| Edgbaston Pool | UK | 250–300 | [20] |
| Yangtze River Esuary | China | 20–340 | [21] |
| River Thames Tributary | UK | 18.5–66 | [22] |
| Antua River | Portugal | 18–619 | [14] |
| Three Gorges Dam | China | 25–300 | [11] |
| West Dongting Lake | China | 320–480 | This study |
| South Dongting Lake | China | 200–1150 | This study |

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