
Transport of microplastics in the Argentine Sea: from the coastal to the Rincón and continental slope front

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Abstract

MPs (plastic particles 2-2.99 mm (14% and 8%) > 3-3.99 mm (11% and 4%) > 4-4.99 mm (5% and 2%)). Mesoplastics (particles > 5 mm) were also detected representing 11% and 7% of the MPs for coastal and open sea samples, respectively. According to their shape, microfibers were predominant for all samples (100% and 95% for coastal areas and open sea, respectively); and the principal color for coastal waters was red (37%) followed by black/transparent (20%), and blue (18%) while for open sea samples was black (35%) followed by transparent (21%), blue (18%), and red (15%). Other colors presented occurrences less than 5%. This work provides the first evidence of contamination by MPs from the coastal to the Rincón and continental slope front of the Argentine sea and generates a scientific baseline, necessary to improve the management of plastic waste and its derivatives in the area studied.

Keywords: Argentine continental shelf, plastic pollution, open sea, coastal

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