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Article

Seasonal abundance and distribution patterns of microplastics in the Lis River, Portugal

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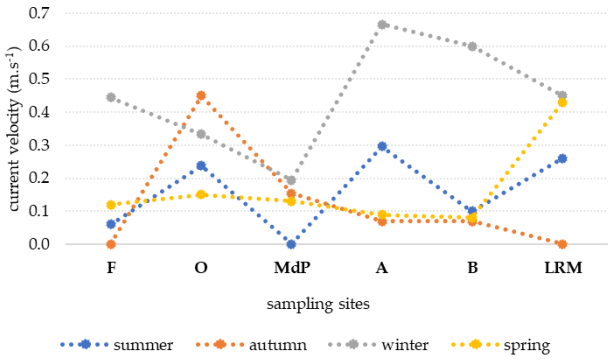

Figure S1. Current velocity measured in situ (m.s^{-1}) during the year along Lis River.

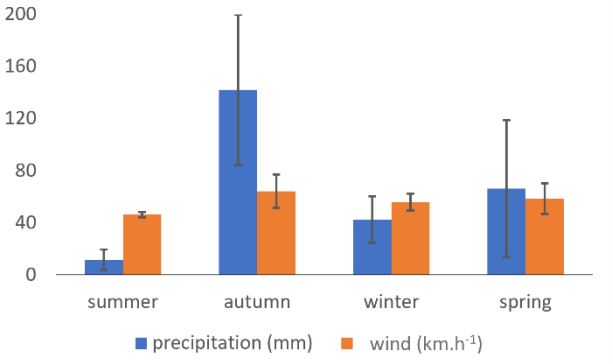

Figure S2. Seasonal precipitation level* (mm) and wind velocity* (km.h^{-1}) averages regarding the Lis River basin; * [49].

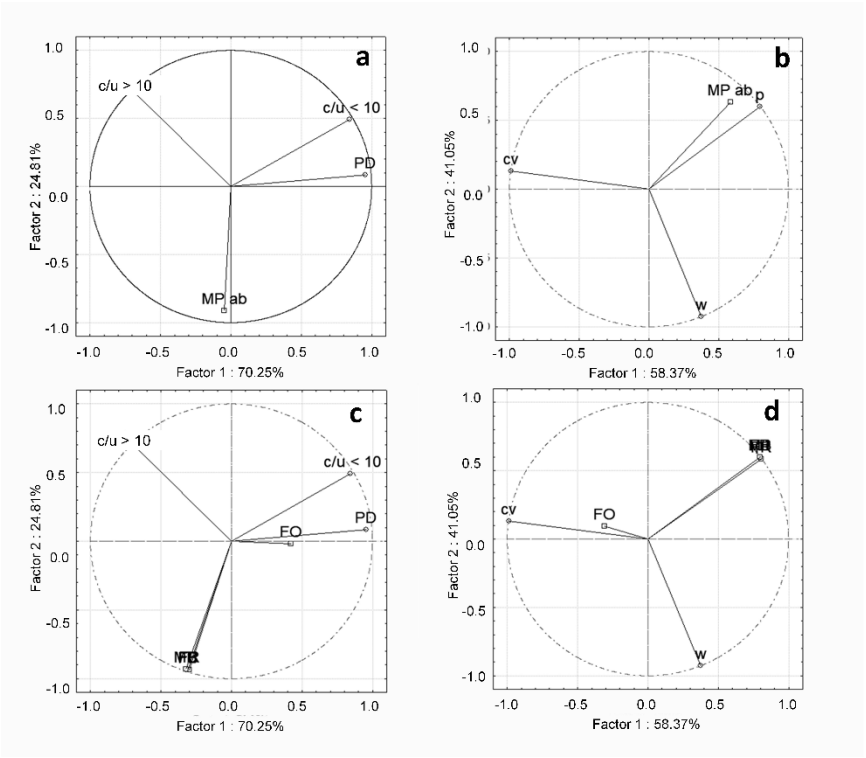

Figure S3. Principal components analysis
(PCAS), during summer between (a) MP abundance (MP ab, items.m^{-3}) in water samples, population density* (PD, hab.km^{-2}) and proximity to companies/units < and > 10 km (c/u < 10 and c/u >10), that include plastic products manufacturers and suppliers, recycling units, solid waste management units and WWTP; (b) MP abundance (MP ab, items.m^{-3}), wind** (w, km.h^{-1}), precipitation** (p, mm) and current velocity (cv, m.s^{-1}); (c) abundances (items.m^{-3}) of different MP typologies (fibres - FB, fragments - FR, foams - FO and microbeads - MB), population density* (PD, hab.km^{-2}) and proximity to companies/units < and > 10 km (c/u < 10 and c/u >10) and (d) abundances (items.m^{-3}) of different MP typologies (fibres – FB, fragments – FR, foams – FO and microbeads – MB), wind** (w, km.h^{-1}), precipitation** (p, mm) and current velocity (cv, m.s^{-1}); *[41]; **[49].

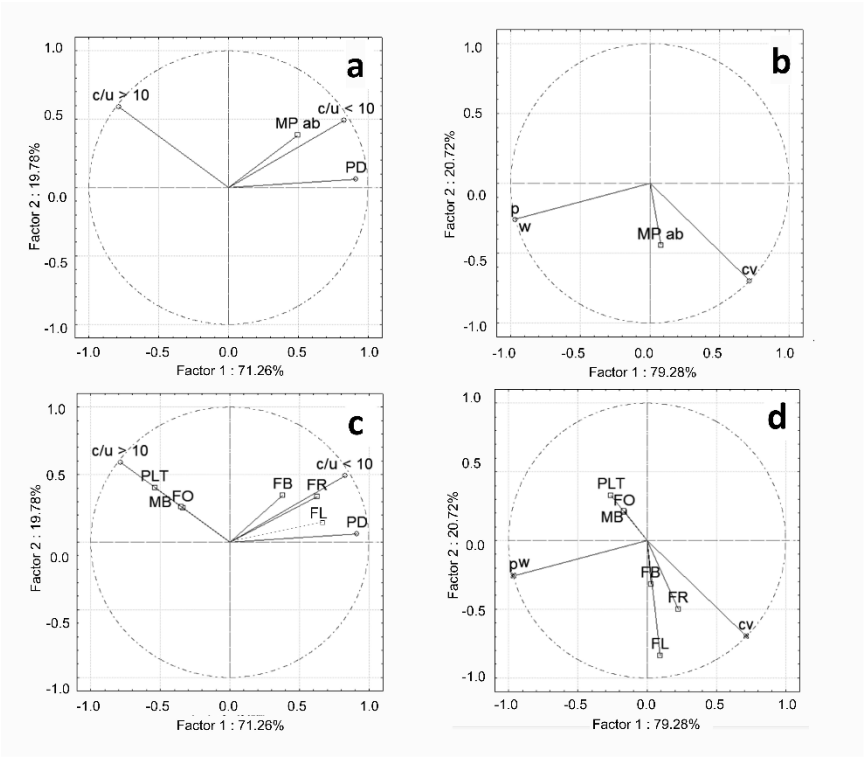

Figure S4. Principal components analysis (PCAS), during autumn between (a) MP abundance (MP ab, items.kg^{-1}) in sediment samples, population density* (PD, hab.km^{-2}) and proximity to companies/units < and > 10 km (c/u < 10 and c/u >10), that include plastic products manufacturers and suppliers, recycling units, solid waste management units and WWTP; (b) MP abundance (MP ab, items.kg^{-1}), wind** (w, km.h^{-1}), precipitation** (p, mm) and current velocity (cv, m.s^{-1}); (c) abundances (items.kg^{-1}) of different MP typologies (fibres – FB, fragments – FR, pellets – PLT, foams – FO, films – FL and microbeads – MB), population density* (PD, hab.km^{-2}) and proximity to companies/units < and > 10 km (c/u < 10 and c/u >10) and (d) abundances (items.kg^{-1}) of different MP typologies (fibres – FB, fragments – FR, pellets – PLT, foams – FO, films – FL and microbeads–MB), wind** (w, km.h^{-1}), precipitation** (p, mm) and current velocity (cv, m.s^{-1}); *[41]; **[49].

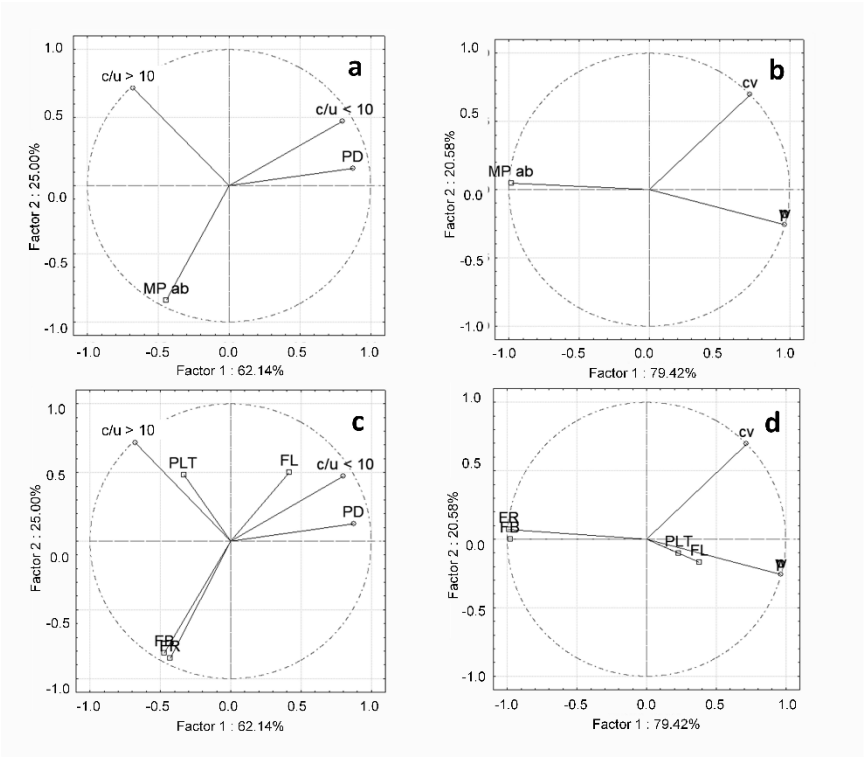

Figure S5. Principal components analysis (PCAS), during autumn between (a) MP abundance (MP ab, items.m^{-3}) in water samples, population density* (PD, hab.km^{-2}) and proximity to companies/units < and > 10 km (c/u < 10 and c/u >10), that include plastic products manufacturers and suppliers, recycling units, solid waste management units and WWTP; (b) MP abundance (MP ab, items.m^{-3}), wind** (w, km.h^{-1}), precipitation** (p, mm) and current velocity (cv, m.s^{-1}); (c) abundances (items.m^{-3}) of different MP typologies (fibres - FB, fragments - FR, pellets - PLT and films - FL), population density* (PD, hab.km^{-2}) and proximity to companies/units < and > 10 km (c/u < 10 and c/u >10) and (d) abundances (items.m^{-3}) of different MP typologies (fibres – FB, fragments – FR, pellets – PLT and films – FL), wind** (w, km.h^{-1}), precipitation** (p, mm) and current velocity (cv, m.s^{-1}); *[41]; **[49].