

Supplementary materials for ‘Transport and accumulation of riverine microplastic from
Siberian rivers’

Table 1. List of experiments on sensitivity to plastic density, particle size and biofouling rate.

Experiment name	Plastic density (kg/m ³)	Particle size (mm)	Biofouling rate (mm/day)
HDPE10	955	5	0
HDPE11	955	5	10 ⁻⁴
HDPE12	955	5	10 ⁻³
HDPE13	955	5	10 ⁻²
HDPE21	955	0.5	10 ⁻⁴
HDPE22	955	0.5	10 ⁻³
HDPE23	955	0.5	10 ⁻²
PP10	1010	5	0
PP11	1010	5	10 ⁻⁴
PP12	1010	5	10 ⁻³
PP13	1010	5	10 ⁻²
PP21	1010	0.5	10 ⁻⁴
PP22	1010	0.5	10 ⁻³
PP23	1010	0.5	10 ⁻²
PS10	1040	5	0

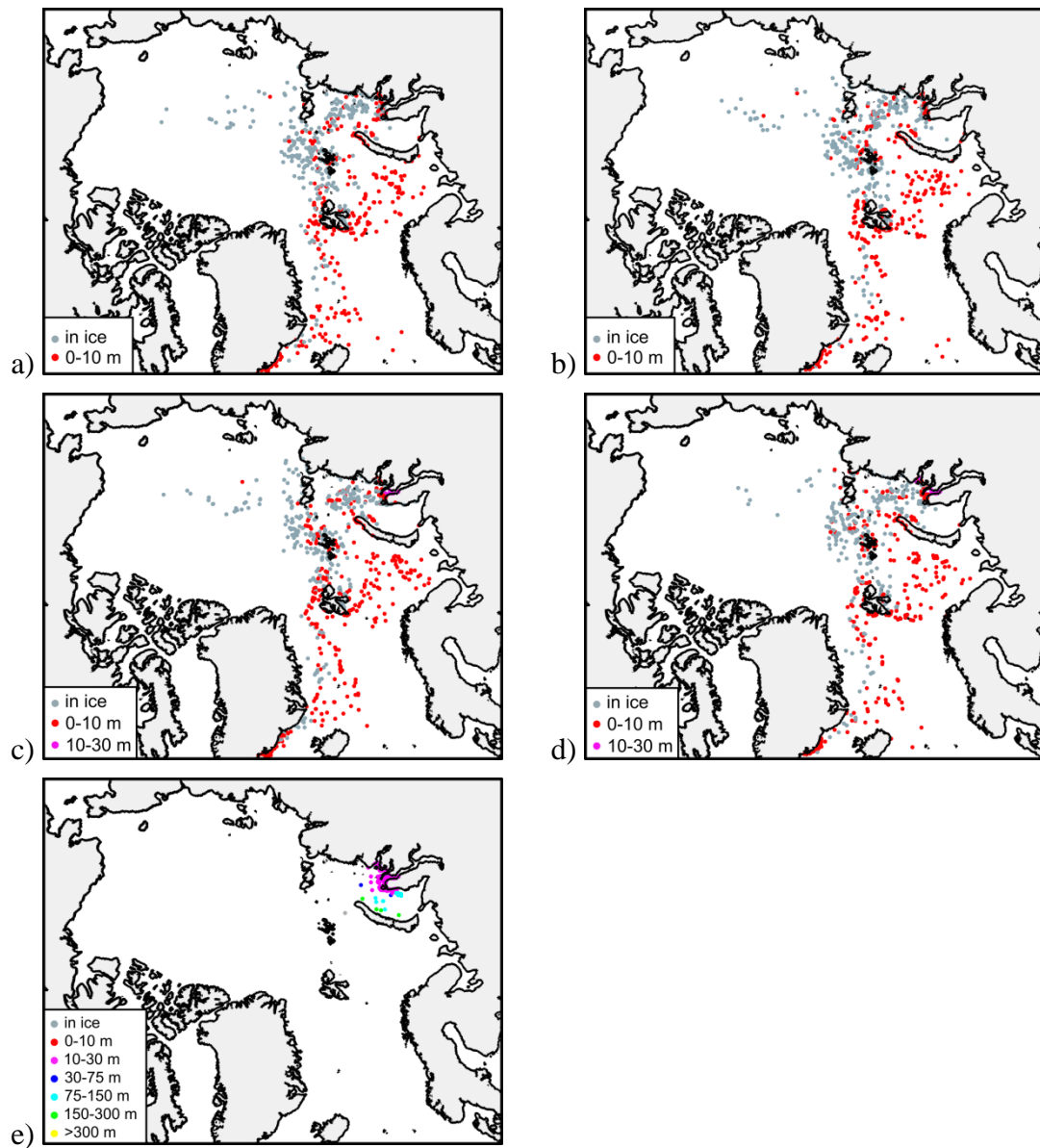


Figure 1. Simulated microplastic particles distribution after 5 years continued riverine influx without biofouling. a) HDPE10, b) HDPE20, c) PP10, d) PP20, e) PS10.

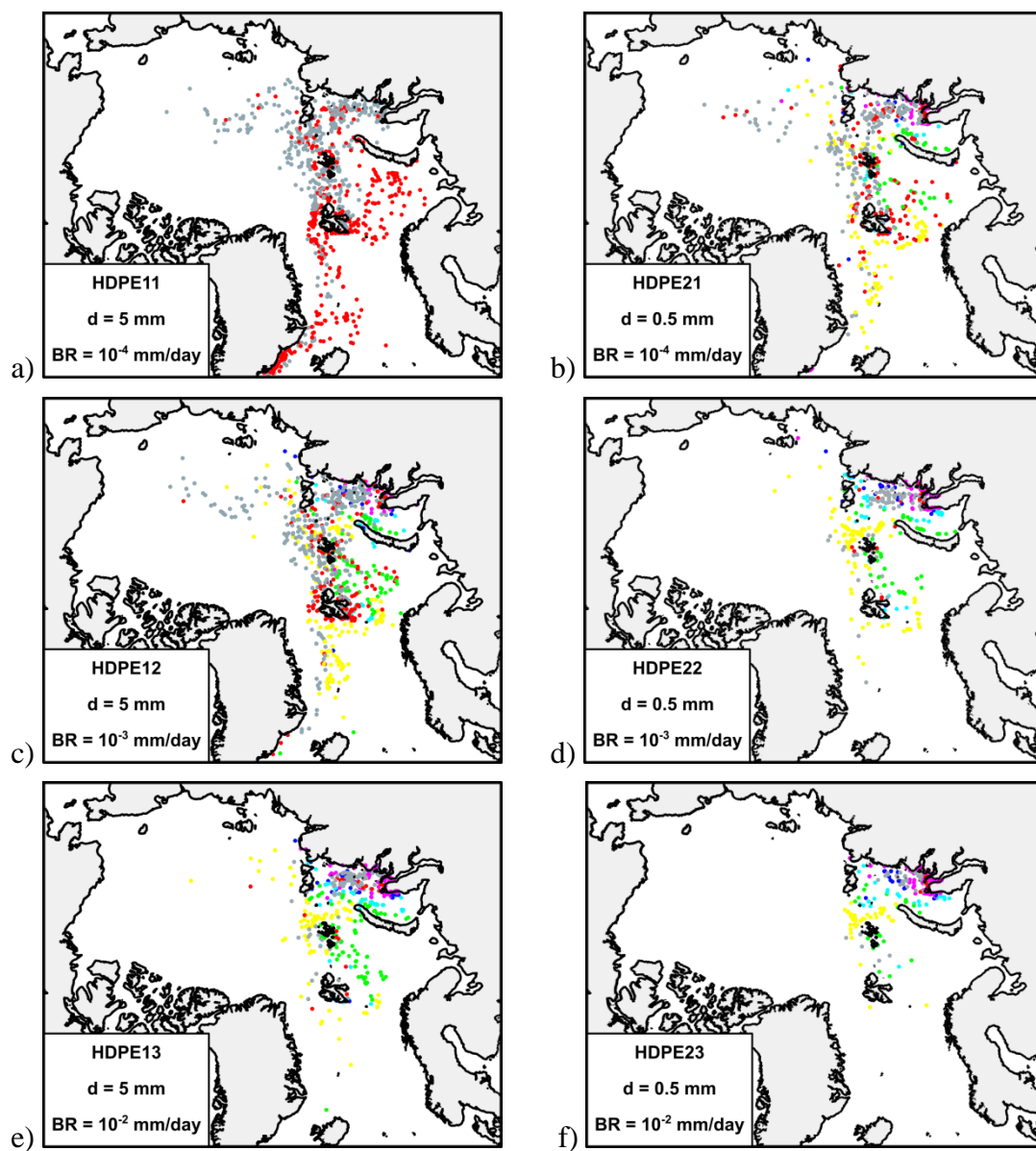


Figure 2. Simulated microplastic particles distribution after 5 years continued riverine influx for HDPE with different particle sizes and biofouling rates.

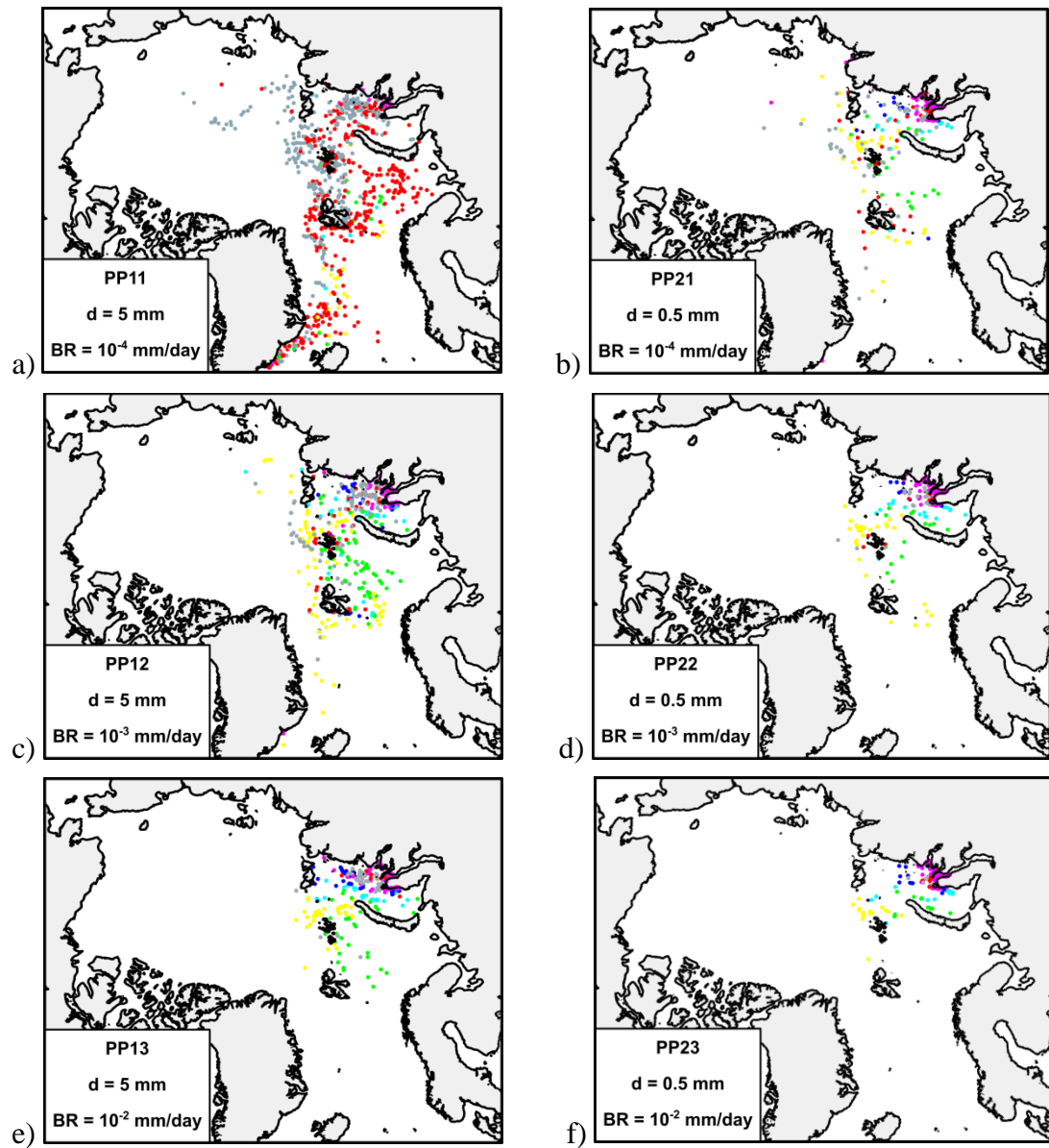


Figure 3. Simulated microplastic particles distribution after 5 years continued riverine influx for PP with different particle sizes and biofouling rates.

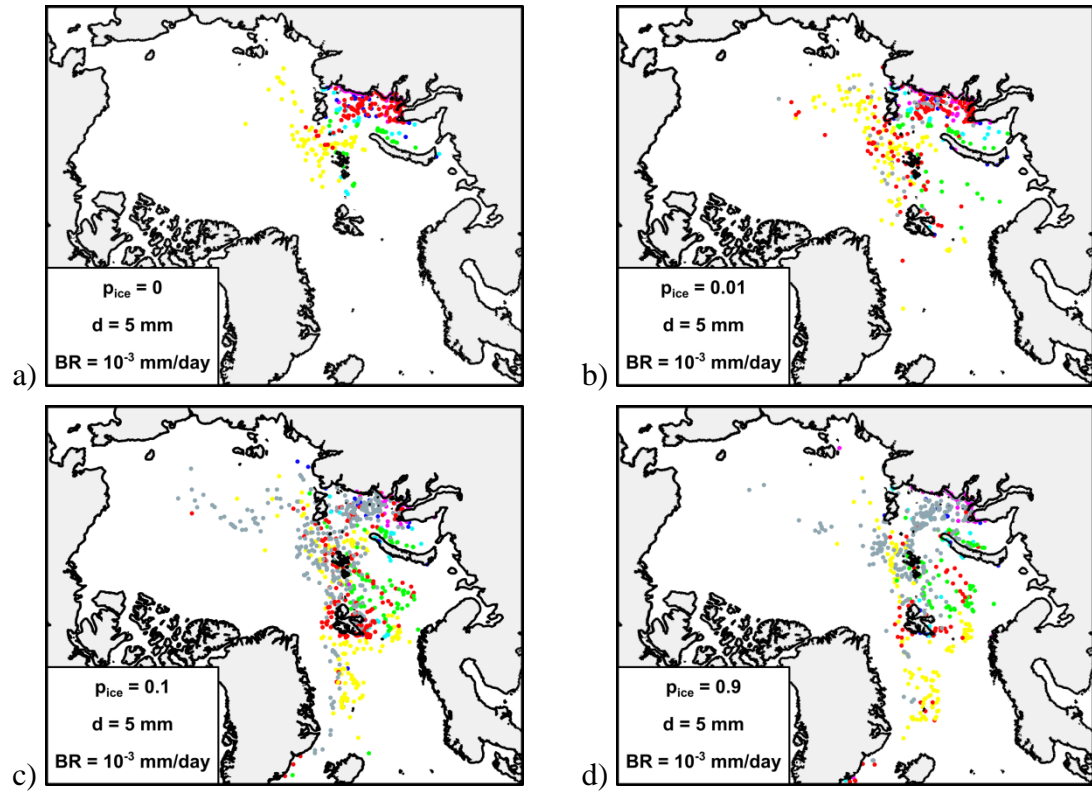


Figure 4. Simulated microplastic particles distribution after 5 years continued riverine influx for HDPE of the same particle size and biofouling rate with different probability of freezing into ice.