Supplementary Material

Spatial Connections between Microplastics and Heavy Metal Pollution within Floodplain Soils
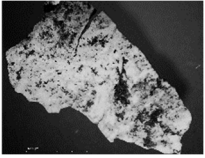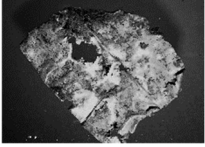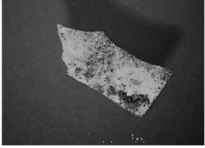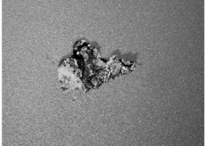
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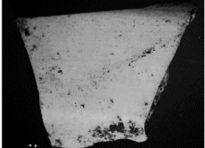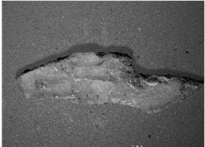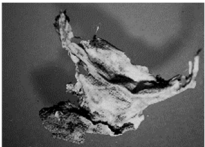**Table S1:** Mesoplastic and coarce microplastic particles for metal detection.

Size class[a]	Soil sample	Depth (cm)[b]	Particle mass (mg)	Description of particles	Main polymer type	Example picture
5	ELM-1-1	0-10	16.50	fragments (white)	PMMA	
5	ELM-1-3	20-30	11.30	plates (silver)	POM	
2	ELM-1-3	20-30	30.40	films and fragments (white/transparent)	PA	
2	ELM-1-4	30-40	23.50	fragments (silver/white)	CSM	
5	LIM-1-1	0-10	42.10	fragments (white/transparent)	PP	
5	LIM-1-2	10-20	17.00	films (transparent)	PE-LD	
5	ROT-1-2	0-10	131.40	fragment (white, massive)	PE-LD	
5	STD-1-2	10-20	42.10	fragment and film (transparent /colored)	CSM	
5	STD-1-3	20-30	40.90	film (white)	PE-LD	
5	STD-4-1	0-10	120.90	film (transparent/blue)	PP	

[a] Sieved size class of plastic particles, [b] Depth of sampling section within soil profile
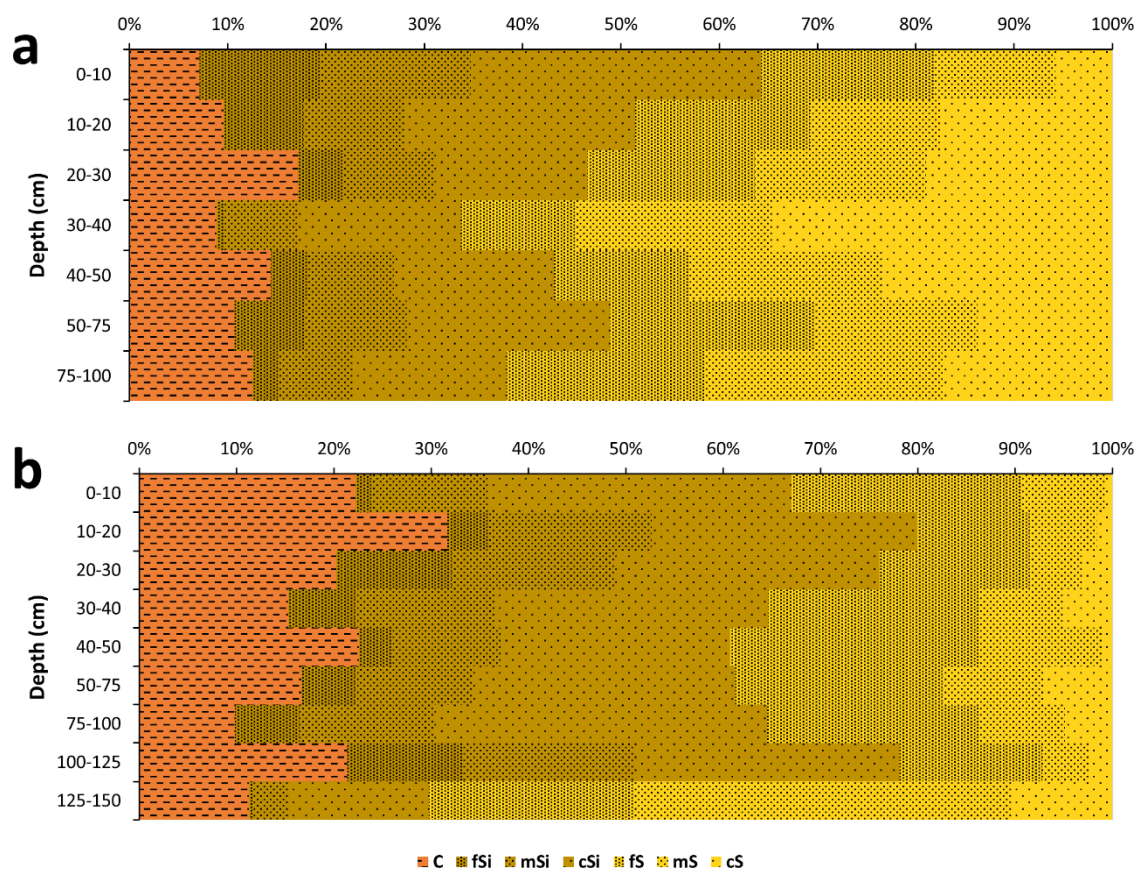
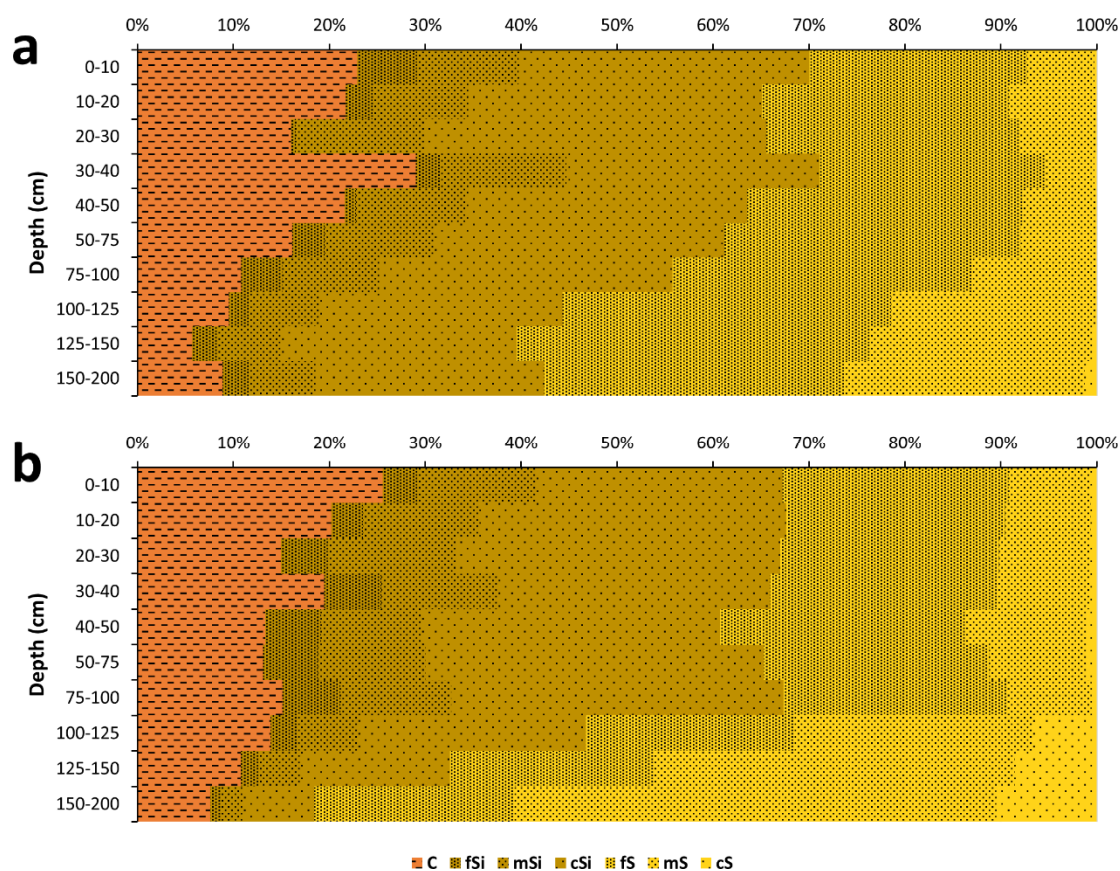**Figure S1:** Grain size distribution for soil profiles of site ELM. a: Profile ELM-1, b: Profile ELM-2.

Figure S2: Grain size distribution for soil profiles of site ROT. a: Profile ROT-1, b: Profile ROT-2.
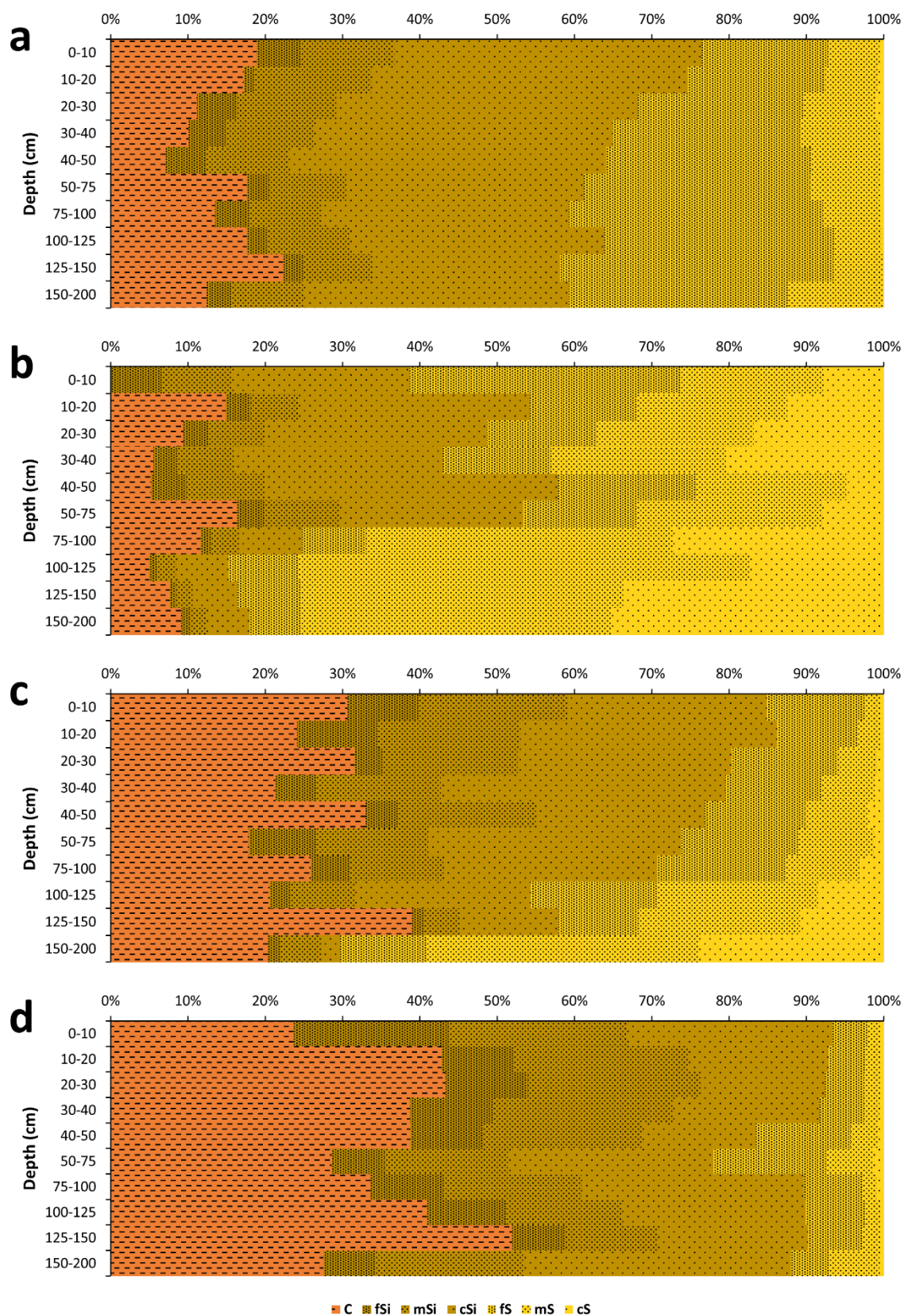
Figure S3: Grain size distribution for soil profiles of site STD. a: Profile STD-1, b: Profile STD-2, c: Profile STD-3, d: Profile STD-4.
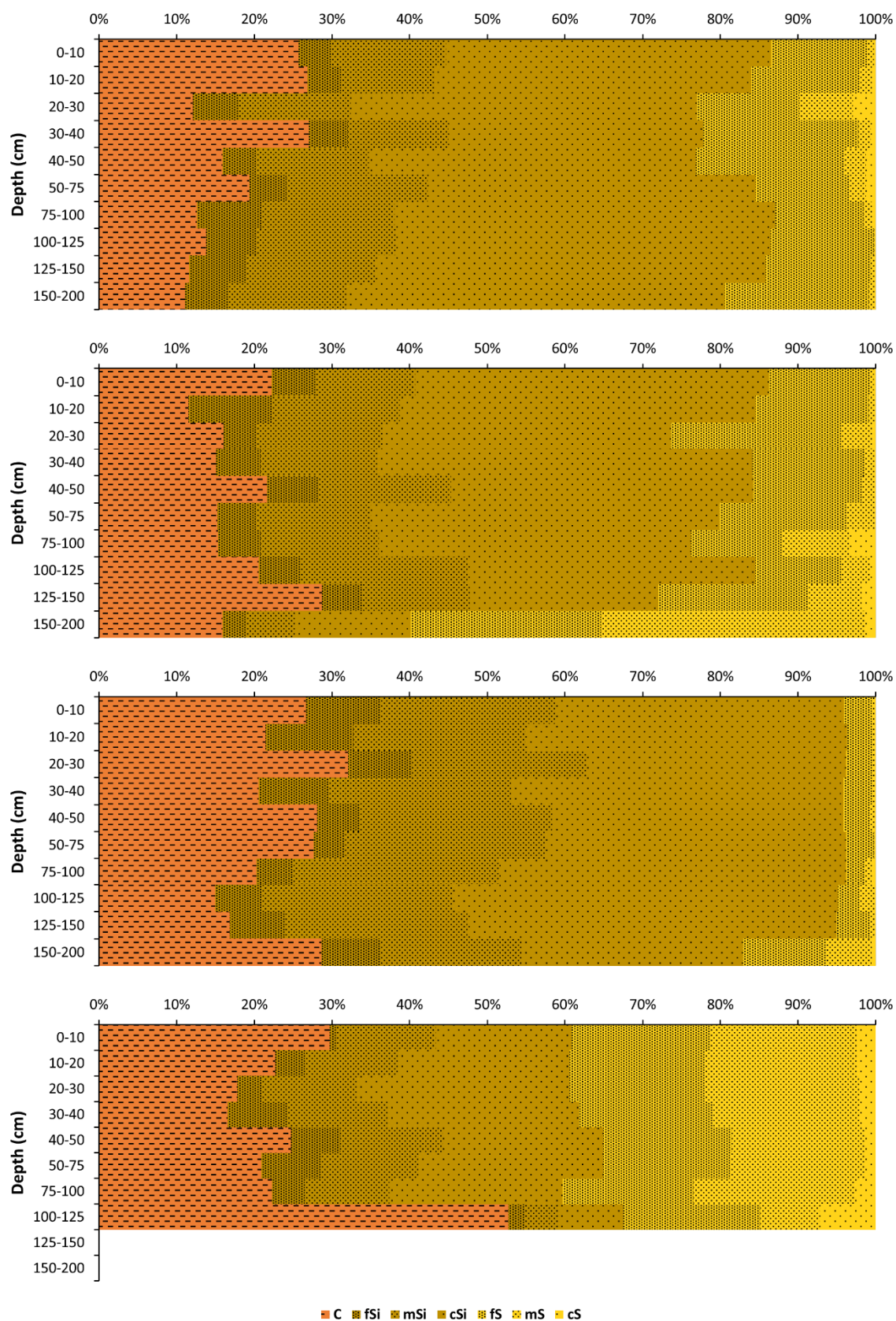
Figure S4: Grain size distribution for soil profiles of site LIM. a: Profile LIM-1, b: Profile LIM-2, c: Profile LIM-3, d: Profile LIM-4.
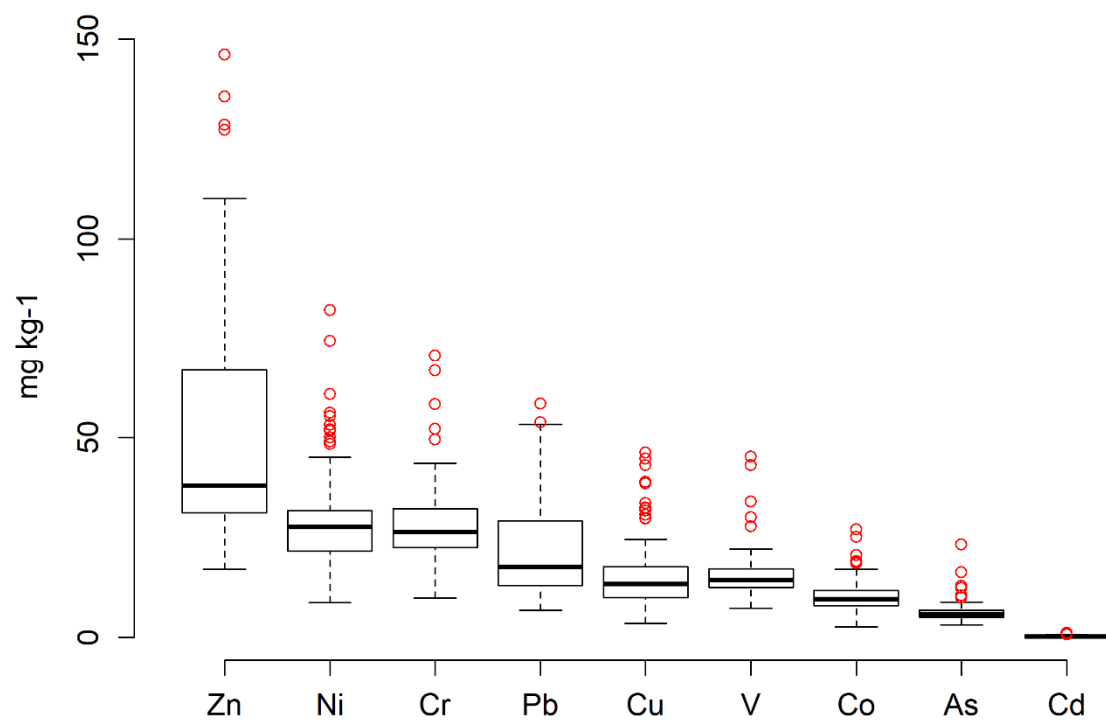
Figure S5: Heavy metal and metalloid As concentrations (mg kg^{-1}) from floodplain soils samples ($n = 112$) ordered by descending mean concentration.