IMPACT OF WEATHERING ON THE CHEMICAL IDENTIFICATION OF MICROPLASTICS FROM USUAL PACKAGING POLYMERS IN THE MARINE ENVIRONMENT

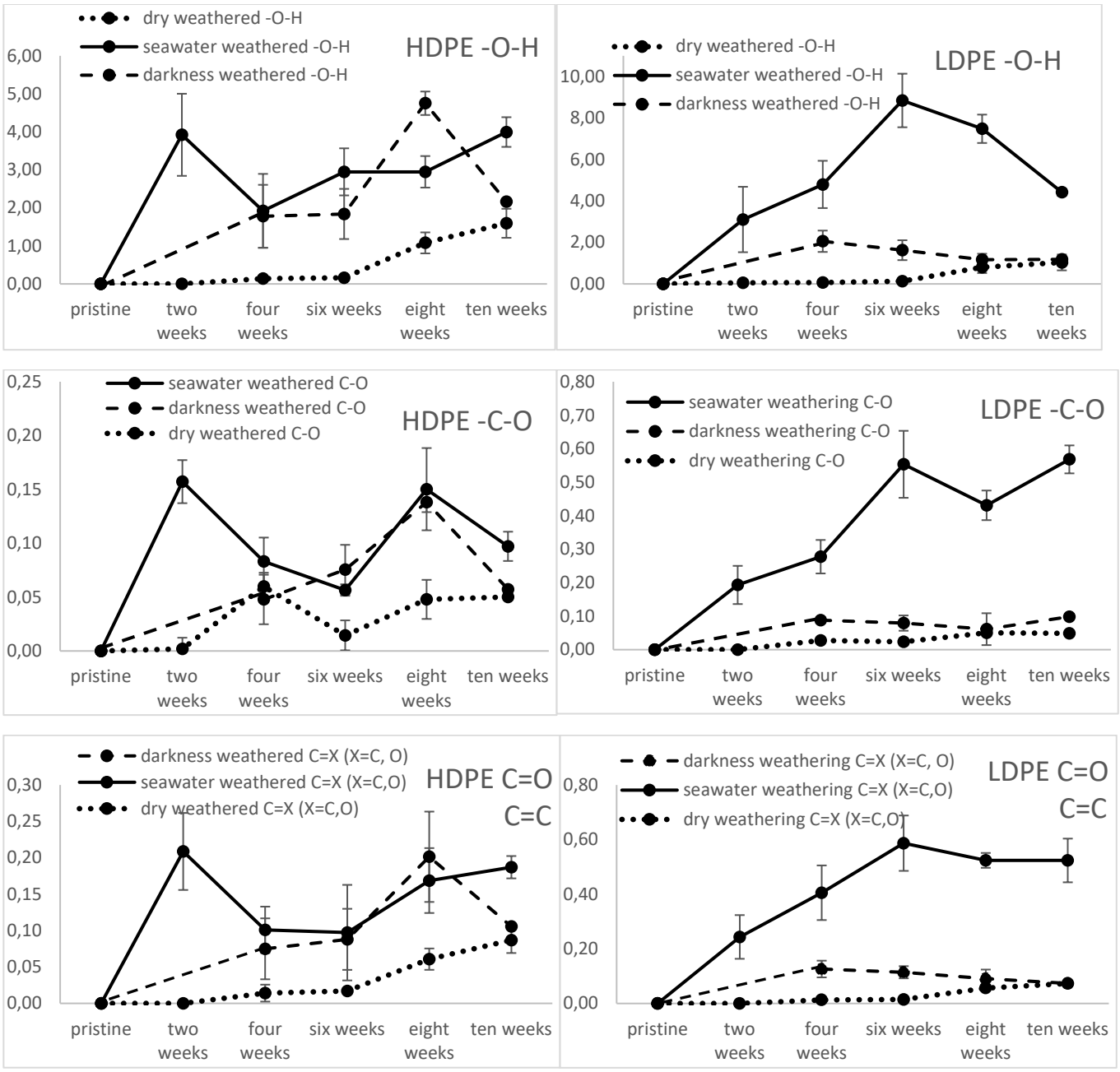
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Grupo Química Analítica Aplicada (QANAP), Instituto Universitario de Medio Ambiente (IUMA), Centro de Investigaciones Científicas Avanzadas (CICA). Universidade da Coruña, 15071 A Coruña, Spain.

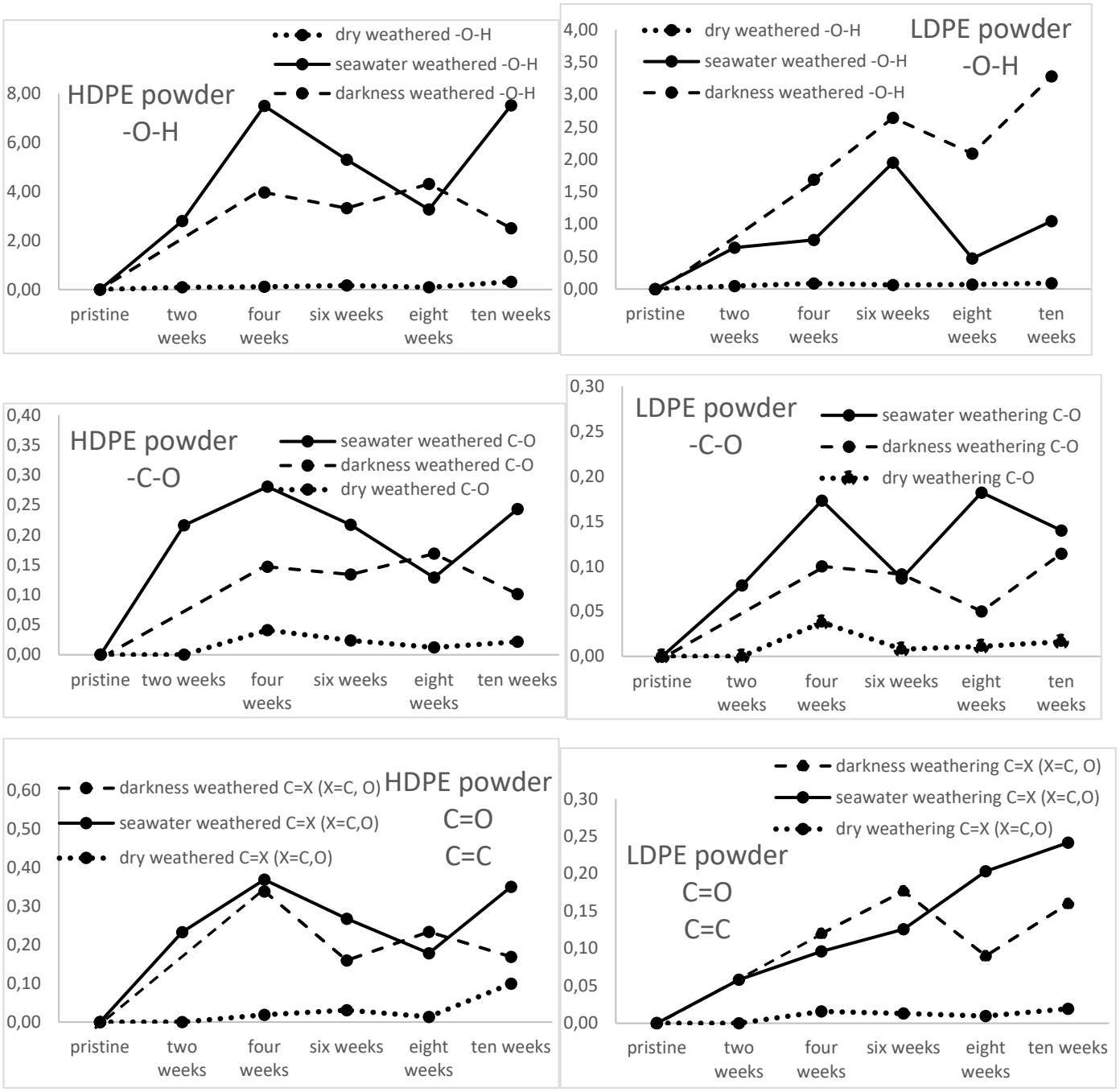
*Corresponding author: soledad.muniategui@udc.es

SUPPLEMENTARY MATERIAL

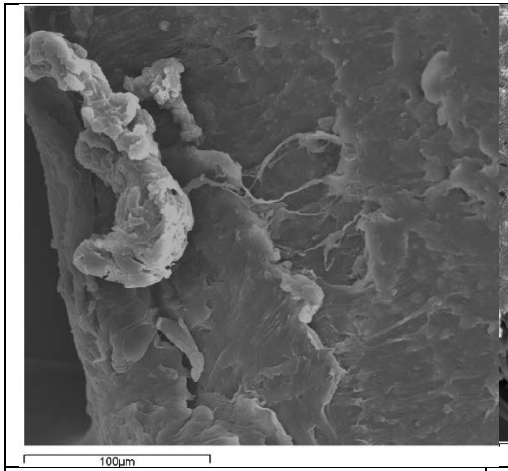
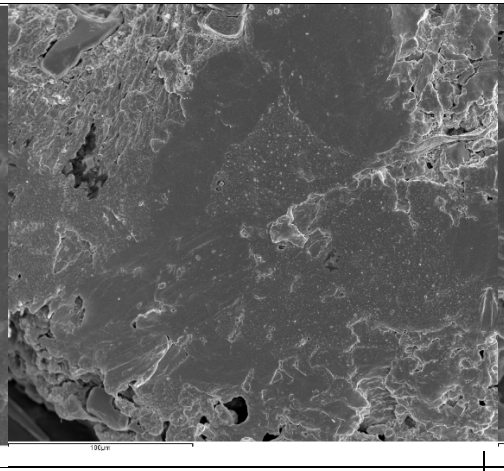
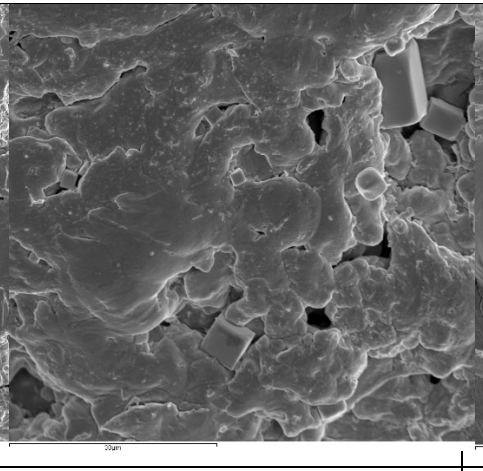
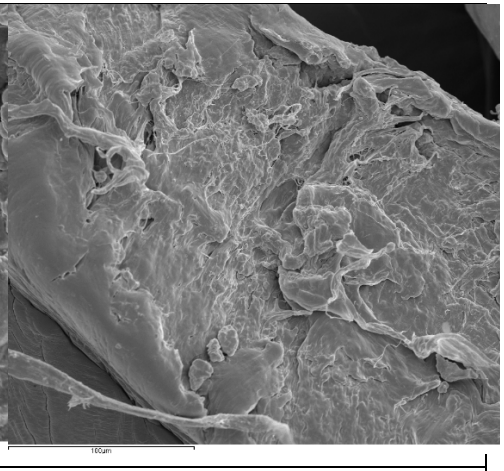
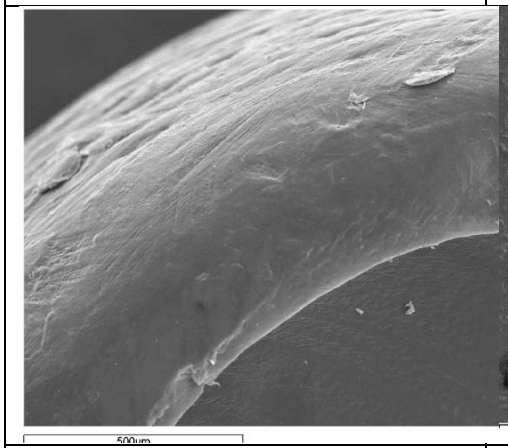
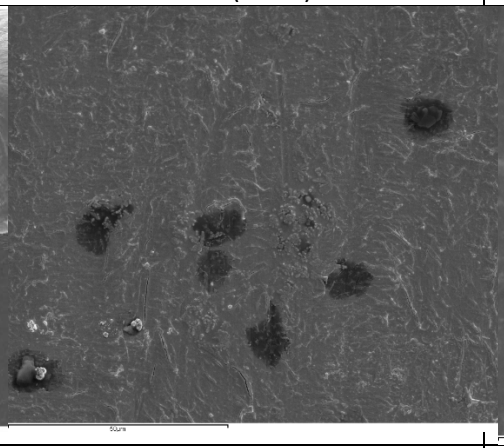
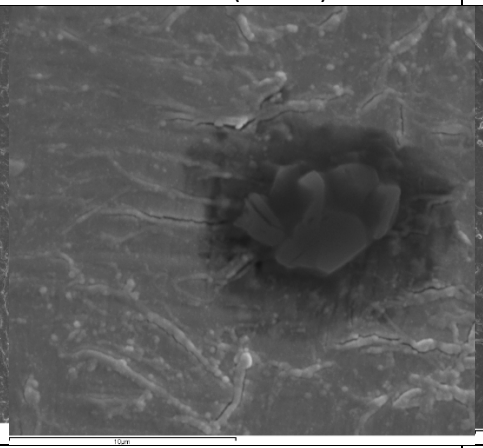
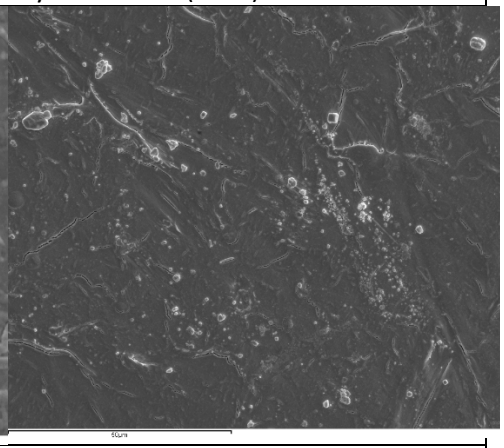
This Supplementary Material is constituted by ten figures, whose explanations are given in the main text of the paper.



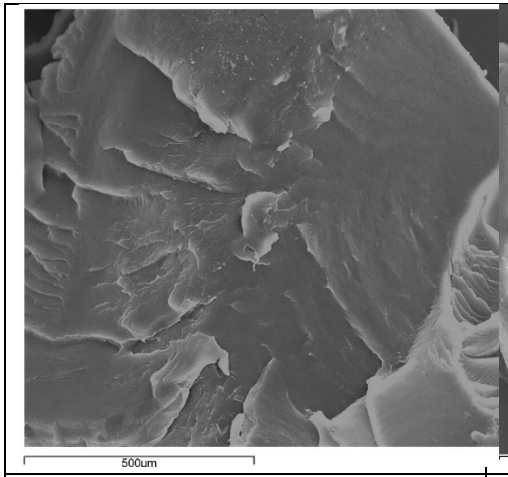
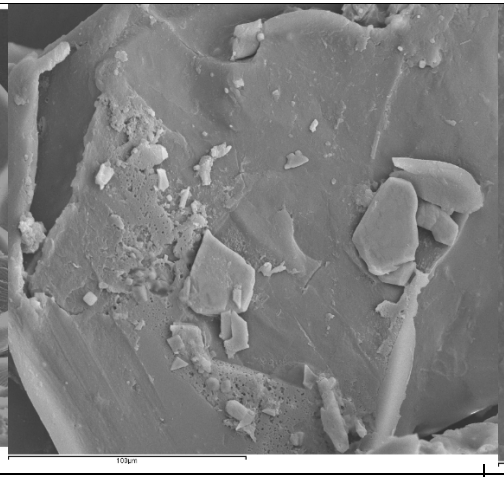
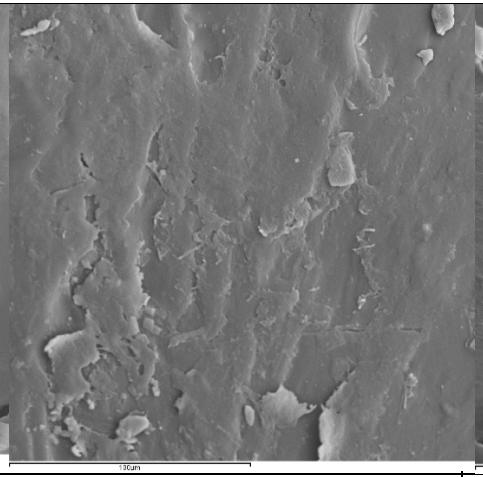
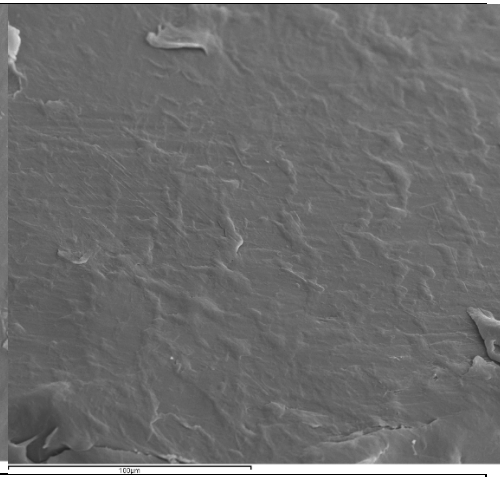
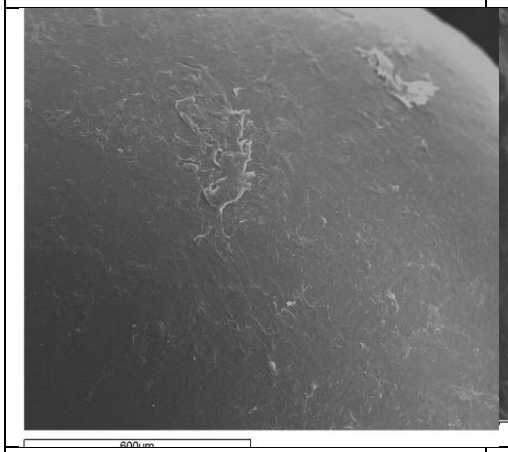
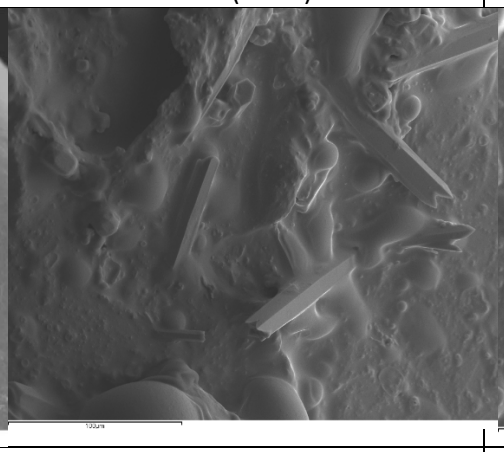
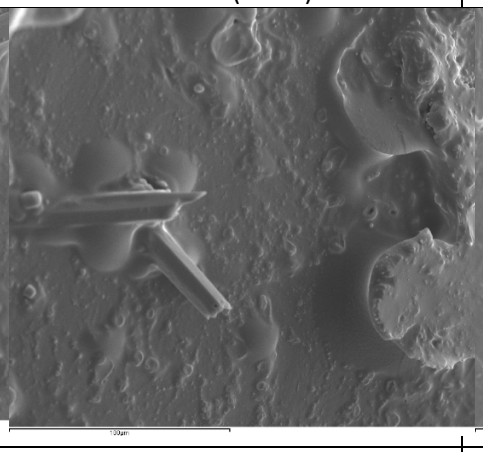
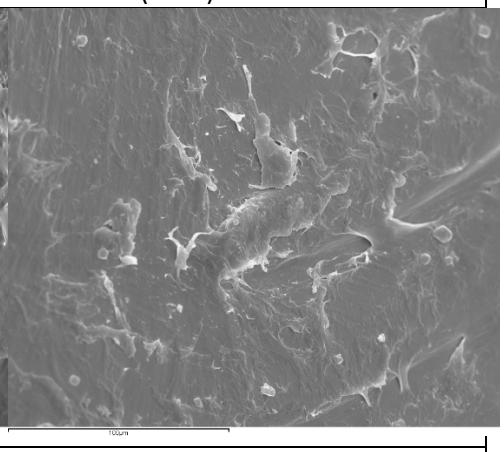
SM1. Representation of the indices calculated for HDPE and LDPE (pellets) for all weathering processes studied



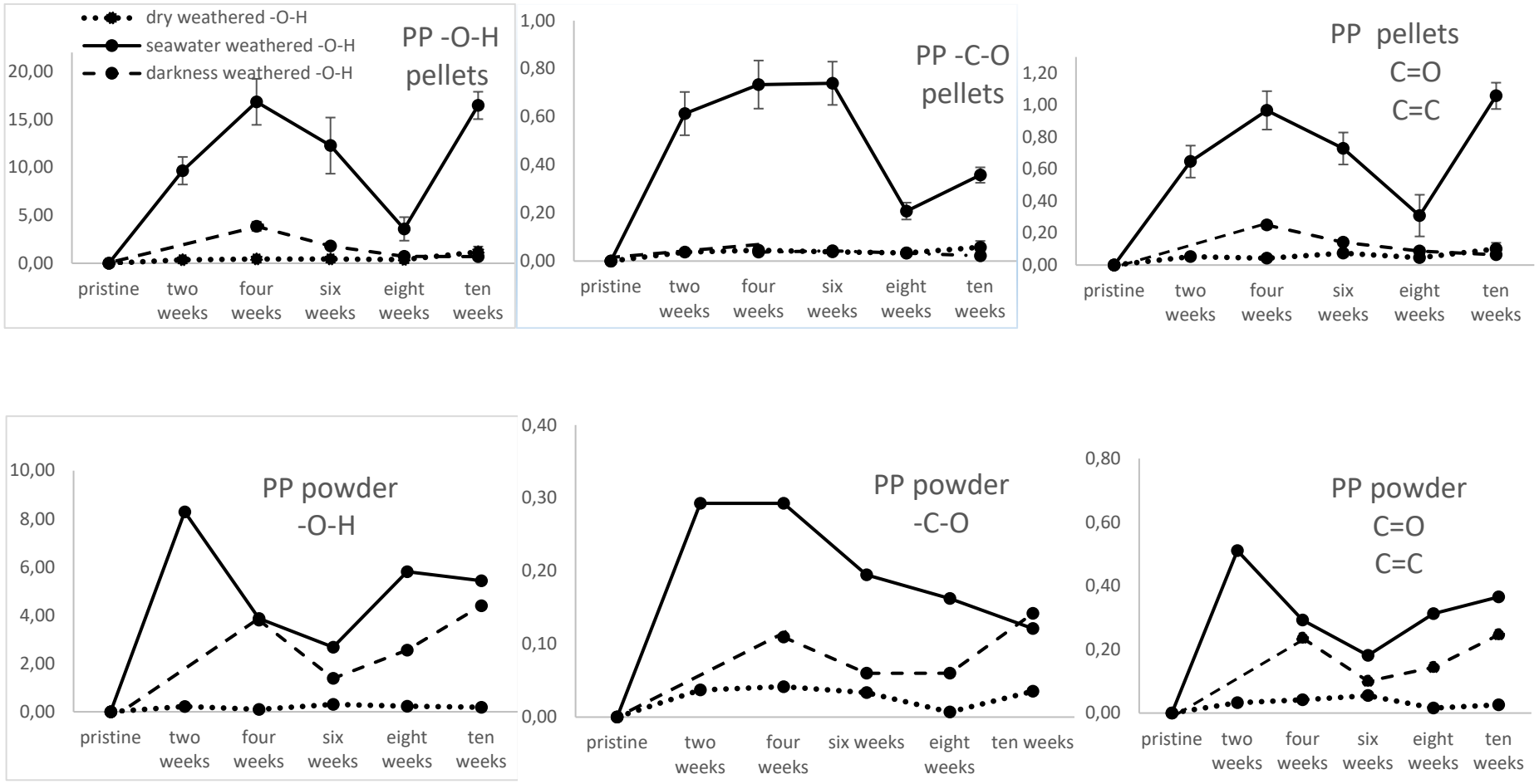
SM2. Representation of the indices calculated for HDPE and LDPE powder for all weathering processes studied (the variability of the average values depicted in the figures was <5% (RSD) in all cases).

			
Pristine HDPE powder (400x)	HDPE powder 10 weeks weathered marine conditions (400 x)	HDPE powder 10 week weathered marine conditions (1500 x)	HDPE powder 10 weeks weathered dry conditions (400x)
			
Pristine HDPE pellet (100x)	HDPE pellet 10 weeks weathered marine conditions (1000 x)	HDPE pellet 10 weeks weathered marine conditions (5000 x)	HDPE pellet 10 weeks weathered dry conditions (400x)

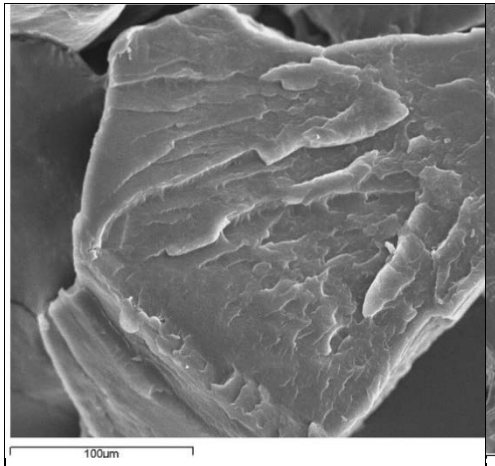
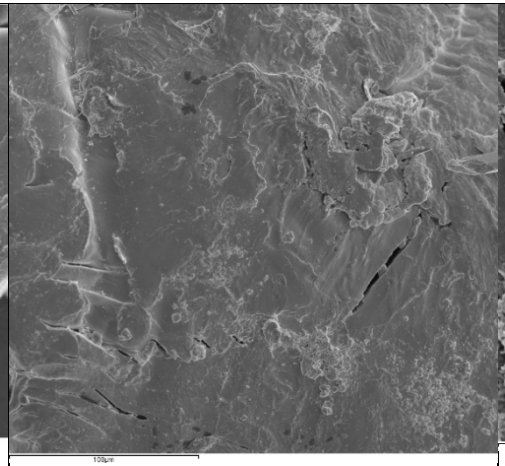
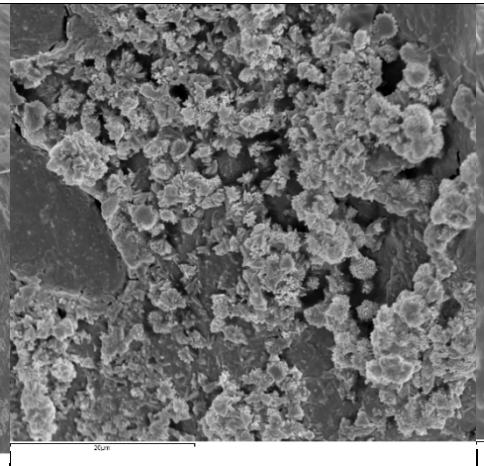
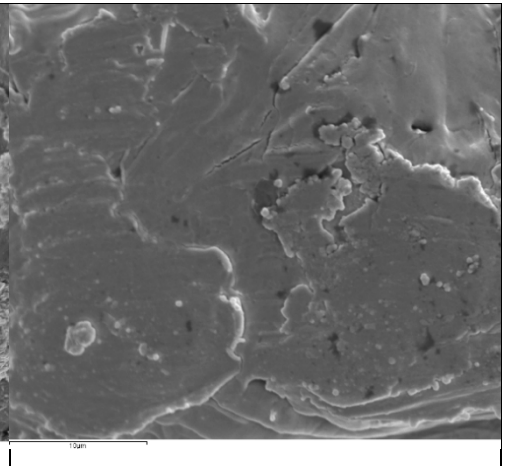
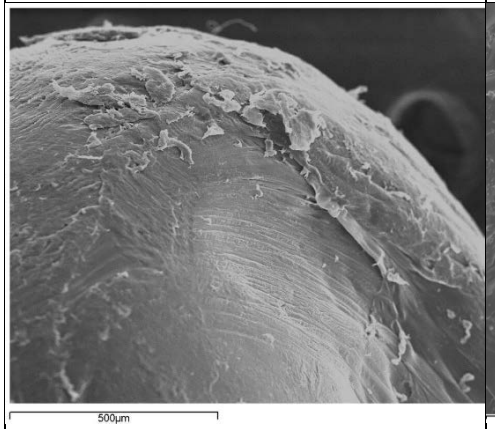
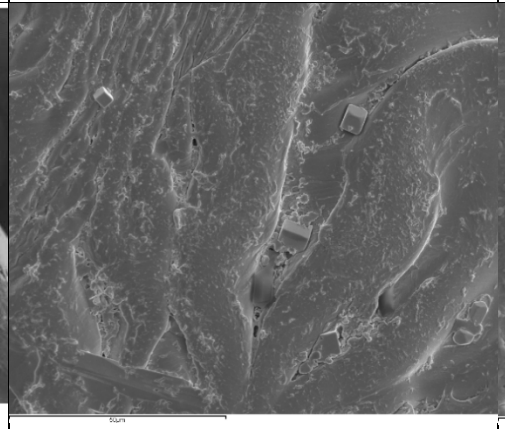
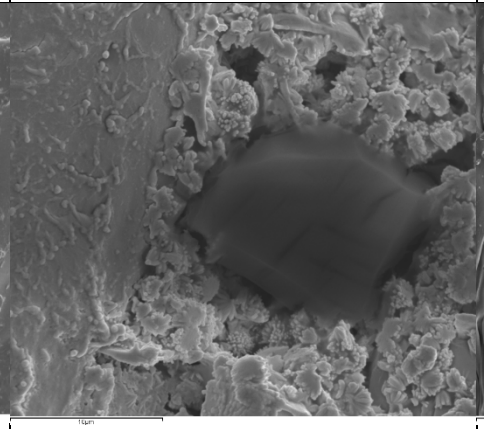
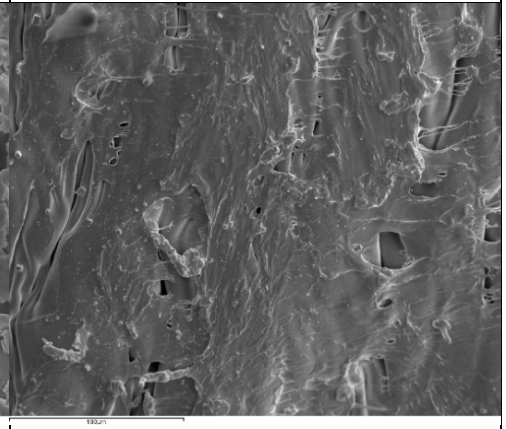
SM3. SEM images of pristine and weathered HDPE

			
Pristine LDPE powder (400x)	LDPE powder 10 weeks weathered marine conditions (500 x)	LDPE powder 10 week weathered marine conditions (500 x)	LDPE powder 10 weeks weathered dry conditions (500x)
			
Pristine LDPE pellet (100x)	LDPE pellet 10 weeks weathered marine conditions (400 x)	LDPE pellet 10 weeks weathered marine conditions (500 x)	LDPE pellet 10 weeks weathered dry conditions (500x)

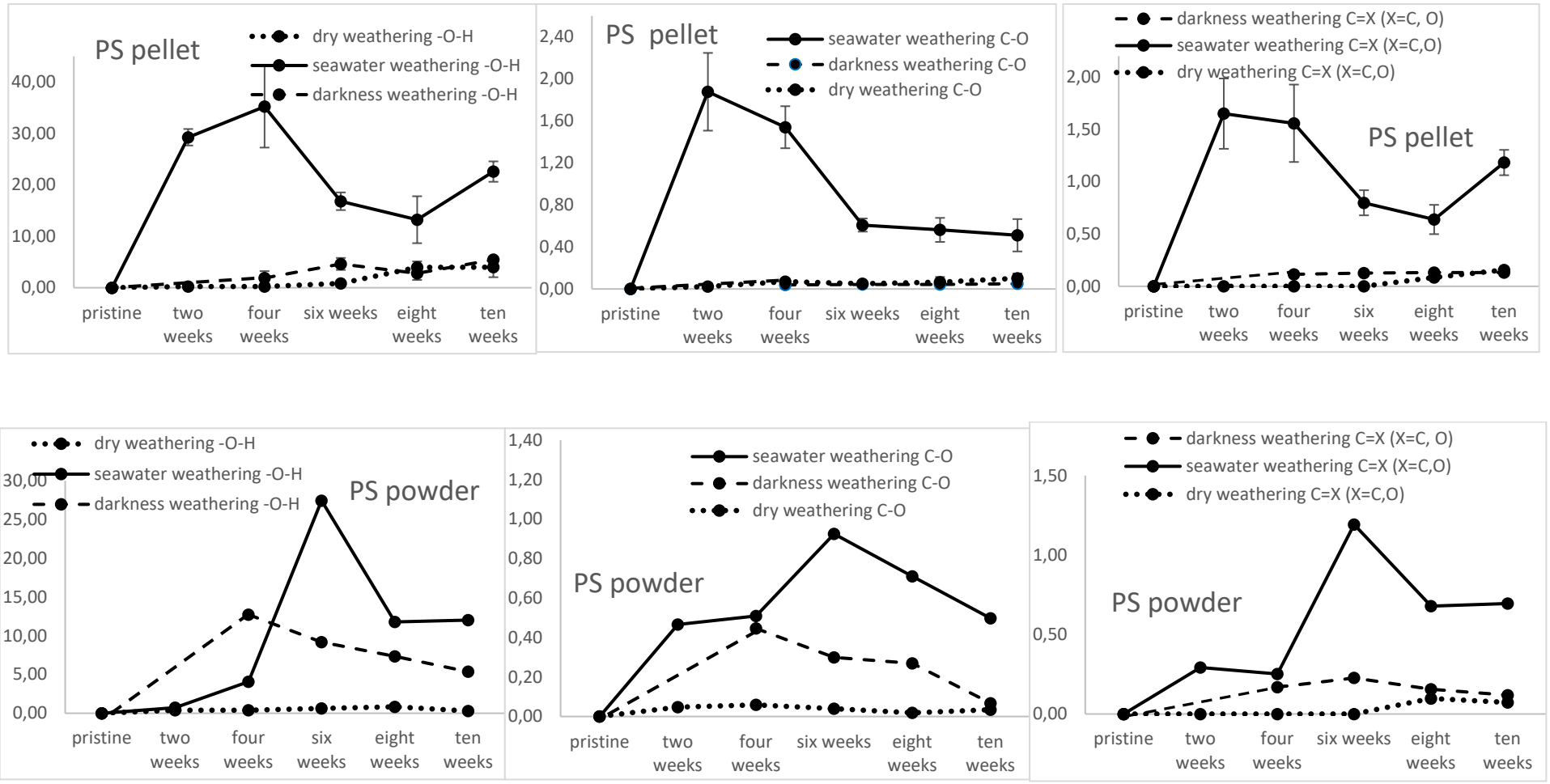
SM4. SEM images of pristine and weathered LDPE



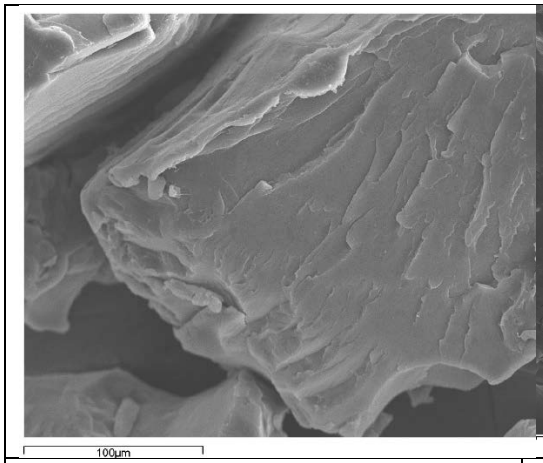
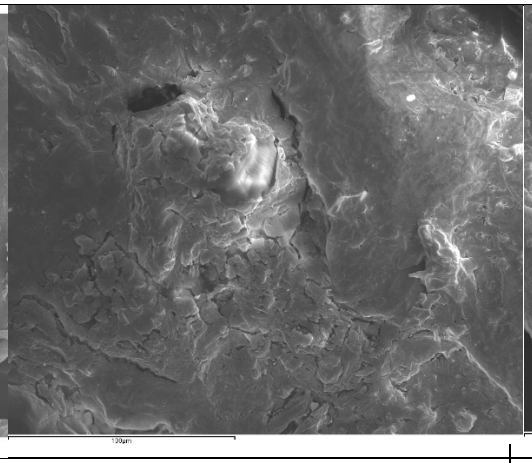
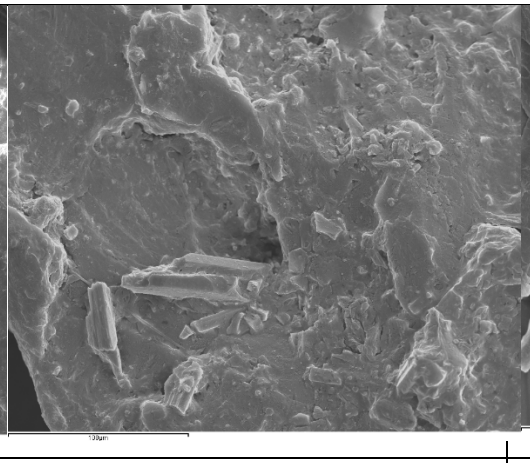
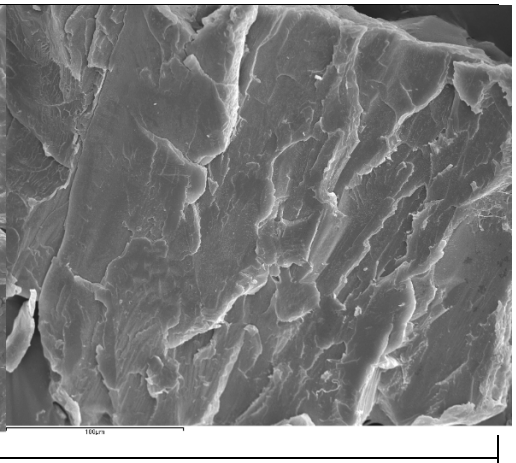
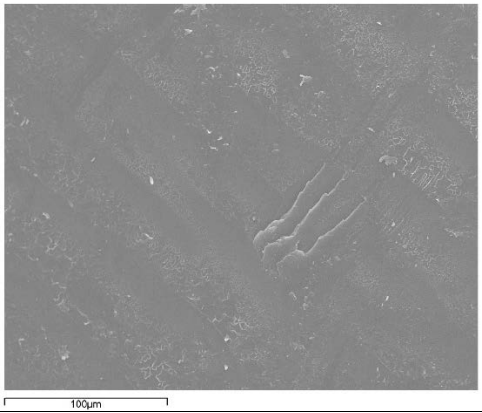
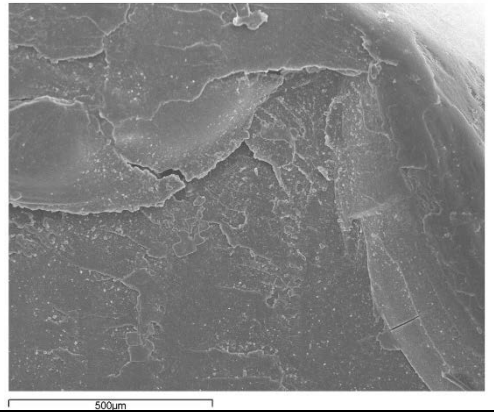
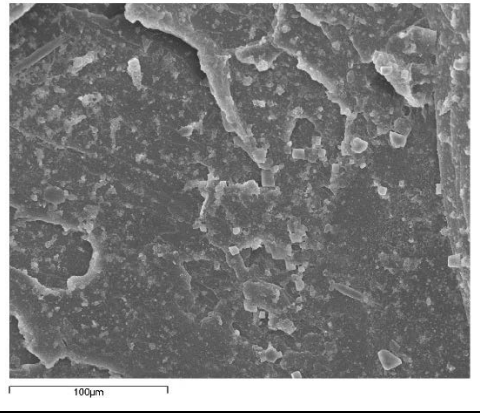
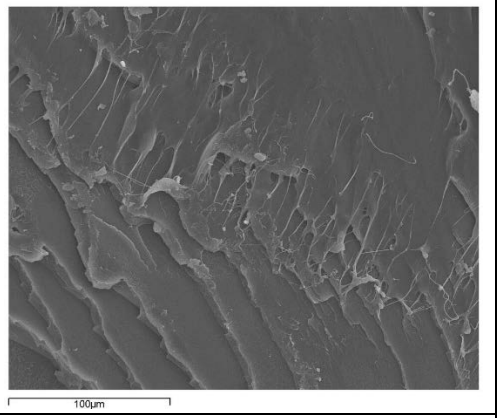
SM5. Representation of the indices calculated for PP, pellets and powder (marine conditions); the variability for the powder measurements was <5% (RSD).

			
Pristine PP powder (400x)	PP powder 10 weeks weathered marine conditions (400 x)	PP powder 10 week weathered marine conditions (2000 x)	PP powder 10 weeks weathered dry conditions (3000x)
			
Pristine PP pellet (400x)	PP pellet 10 weeks weathered marine conditions (1000 x)	PP pellet 10 weeks weathered marine conditions (3500 x)	PP pellet 10 weeks weathered dry conditions (400x)

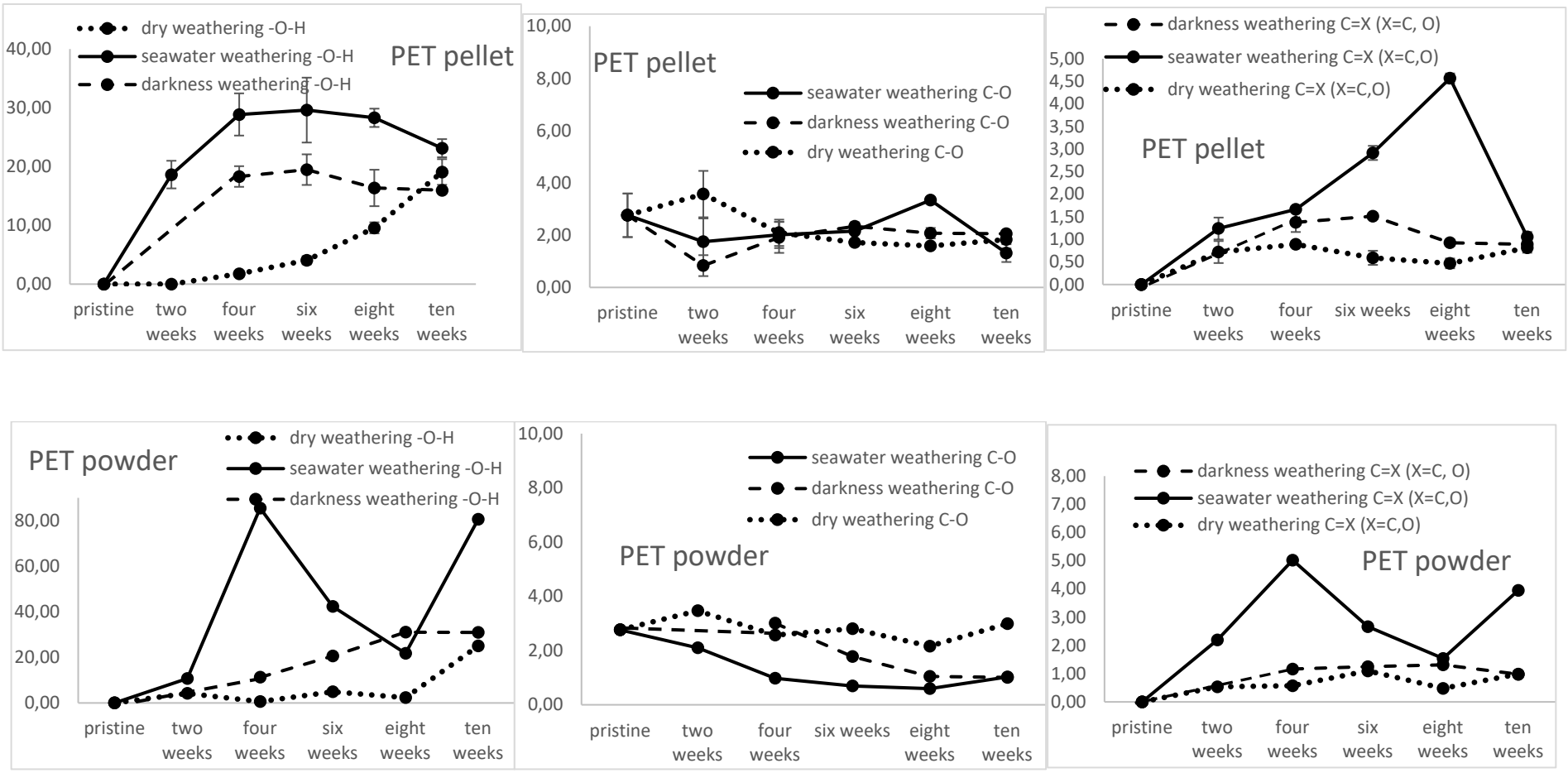
SM6. SEM images of pristine and weathered PP



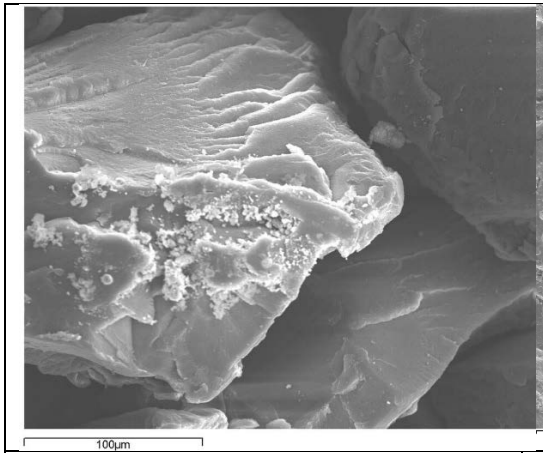
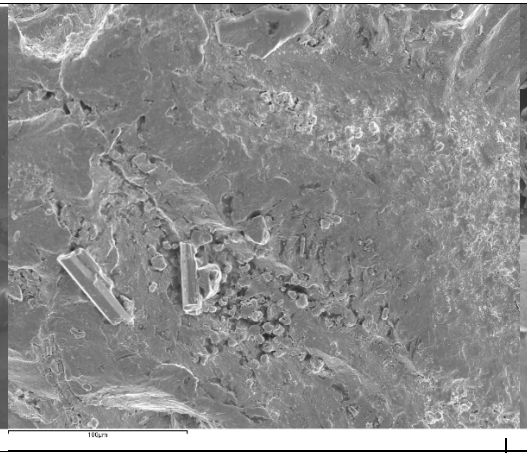
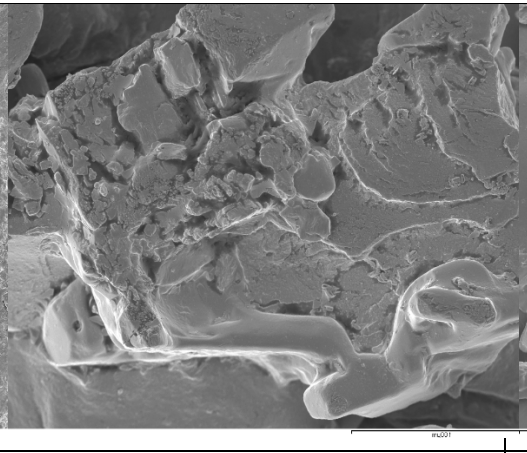
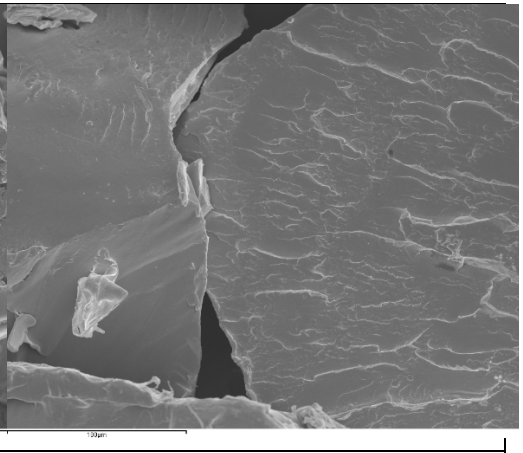
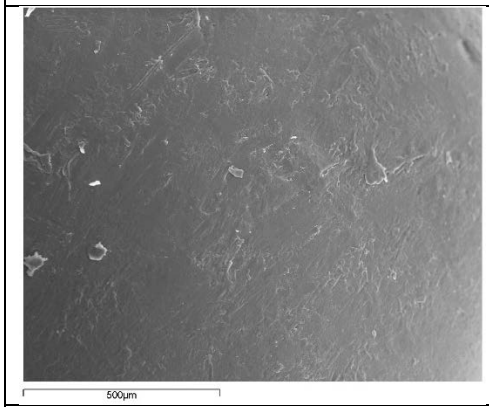
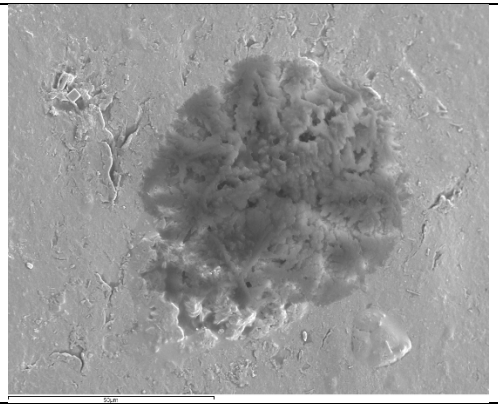
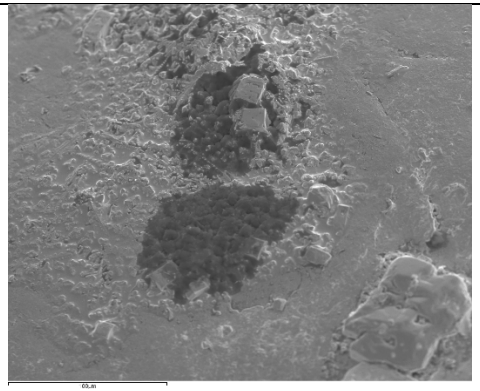
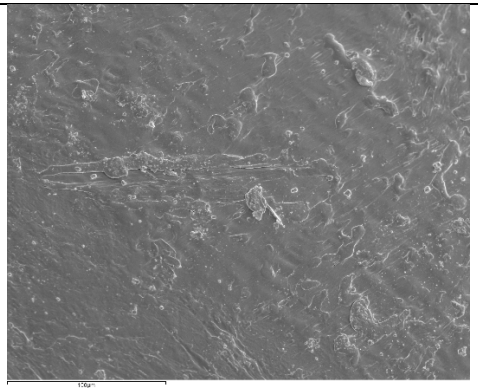
SM7. Representation of the indices for PS pellets and powder for all weathering processes studied. The variability for the powder measurements was <5% (RSD)

			
Pristine PS powder (400x)	PS powder 10 weeks weathered marine conditions (500 x)	PS powder 10 week weathered marine conditions (400 x)	PS powder 10 weeks weathered dry conditions (400x)
			
Pristine PS pellet (400x)	PS pellet 10 weeks weathered marine conditions (400 x)	PS pellet 10 weeks weathered marine conditions (400 x)	PS pellet 10 weeks weathered dry conditions (400x)

SM8. SEM images of pristine and weathered PS



SM9. Representation of the indices calculated for PET pellets and powder for all weathering processes studied. The variability for the powder measurements was <5% (RSD)

			
Pristine PET powder (400 x)	PET powder 10 weeks weathered marine conditions (1000 x)	PET powder 10 week weathered marine conditions (400 x)	PET powder 10 weeks weathered dry conditions (400x)
			
Pristine PET pellet (400 x)	PET pellet 10 weeks weathered marine conditions (1000 x)	PET pellet 10 weeks weathered marine conditions (400 x)	PET pellet 10 weeks weathered dry conditions (400x)

SM10. SEM images of pristine and weathered PET