**H1\_abundance:** This file includes the abundance of MPs (<1mm and >50µm) counted for each replicate of the different DD treatment (Variable: **MPs**). This abundance has been multiplied by 3 as mentioned in the manuscript, and has been used for the data analysis and representation regarding **H1** (Variable: **MPs3**).

**H2\_mass\_loss:** This file includes the initial mass proportions of each plastic disk exposed to DD treatment found in the 1mm sieve (Variable: **Fraction 1**) and estimated present in the 20µm sieve (Variable: **Fraction 2**) and has been used for the data analysis and representation regarding **H2**.

**H3\_size:** This file includes the average size of MPs (<1mm and >50µm) counted for each replicate of the different DD treatment (Variable: **Size**) and has been used for the data analysis and representation regarding **H3**.

**IBPFI:** This file includes the different IBPFI calculated for the Albarine river catchment (Variable: **IBPFI**) depending on the used time period (Variable: **period**) and GCMs (or reference for ERA5-land) (Variable: **model**).

**SUN\_abundance\_size:** This file includes the abundance and average size of MPs (<1mm and >50µm) counted for each replicate of the different FI treatment (Variable: **MPs** and **Size**). The abundance has been multiplied by 3 as mentioned in the manuscript (Variable: **MPs3**), these variables have been used for the data analysis and representation regarding the comparison between UV-C and sunlight exposure.