**Dataset underlying the scientific publication “Suitability of river plastic monitoring methods for citizen science”**

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**Introductory information**

• Data from: 1) survey results about the suitability of monitoring methods for quantifying river plastic pollution based on surveys conducted in Accra, Ghana; 2) plastic observations conducted along the river Odaw, Accra, Ghana.

• The dataset is in an Excel format and is comprised of five datasheets.

**Methodological information**

• Method description:

1. *Survey results.* The data in the ‘Survey results’ datasheet presents the raw anonymized survey results data regarding the suitability of four monitoring methods for quantifying river plastic pollution. The original raw data includes answers regarding personal information about the participants, such as age, gender, education, experience in citizen-science monitoring. This information has been removed to ensure the anonymity of survey participants. The manuscript related to this dataset – entitled “” – presents some of the data about age, gender and education level in an aggregated way. Survey design and gathering of survey results are detailed in the manuscript.
2. *Macro - net.* The data in the “Macro – net” datasheet presents the data collected on macroplastics using a sampling net, in the Odaw river, during the sampling campaign. The data is presented for each sampling round (rows 1 to 13); as well as aggregated by river sampling location (rows 16 to 20). Details about the sampling method and calculations are presented in the associated manuscript. The data presented per sampling round also details the macroplastic composition per item count and mass, following eight plastic categories based on material and use. The data aggregated by river sampling location also includes flow velocity, volume (referring to the sampled volume of water) and area of the sampling net, variables that are necessary to estimate macroplastic concentrations in the river. Note that the flow velocity data was extracted from the datasheet “Hydrometric”, and averaged first daily, and then by river location. The columns “Duration” refer to the duration of measurements.
3. *Macro - visual counting.* The data in the “Macro - visual counting” datasheet presents the data collected on macroplastics using the visual counting method, in the Odaw river, during the sampling campaign. The data is presented for each sample (e.g.: per river segment) from rows 1 to 40; as well as aggregated by river sampling location (rows 44 to 48). The data presented per sample also details the macroplastic composition per item count and mass, following eight plastic categories based on material and use. It should be noted that the mass statistics per item were not directly measured with this method. In indeed, the visual counting method does not entail the collection of plastic items from the river. Therefore, the mass composition and mass transport were derived using the mean mass statistics per item category from the macroplastic net measurements.
4. *Hydrometric.* The data in the “Hydrometric” datasheet presents the estimated hydrometric data at the three monitored locations along the Odaw river, Ghana. The two main variables of interest were the flow velocity – measured through a propeller flow meter – and the water depth – measured using a marked rope. More details on the methodology can be found in the manuscript.
5. *Micro – net.* The data in the “Micro – net” datasheet presents the data collected on microplastics using a sampling net, in the Odaw river, during the sampling campaign. Two samples were taken per day, one in the morning and one in the evening. The data is here presented for each sample. The column “Microplastic full range count” indicates the count of microplastic for the full size range of microplastic (1-5000 μm). We used a correction factor of 112.2 (Koelmans et al., 2020) to convert the observed particle count (“Microplastic count [items]) for the observed size range (1-5 mm) to the full microplastic range (1-5000 μm). Additional details on the method are provided in the manuscript.

**Sharing and access information**

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