**WASHTREET - Application of Structure from Motion (SfM) photogrammetric technique to determine surface elevations in an urban drainage physical model.**

This dataset contains raw data and surface elevations results from the application of the Structure from Motion (SfM) photogrammetric technique in a 36 m$^2$ full-scale urban drainage physical model, which is placed in the Hydraulic Laboratory of the Centre for Technological Innovation in Construction and Civil Engineering (CITEEC) at the University of A Coruña (Spain). This work is part of the WASHTREET project, where a series of high-resolution experiments were performed measuring urban surface wash-off and sediment transport through gully pots and pipes under laboratory-controlled conditions. The accurately measurement of the surface elevations is needed for a proper representation of surface flow, which is key in the detachment and transport of solids in the model surface. The dataset was used in the work developed in Naves et al. (2019) (DOI: https://doi.org/10.1016/j.jhydrol.2019.05.003)

A detailed description of experimental procedure and data collected can be consulted in '*1_ExperimentalProcedure.pdf*'. Raw images taken as input for the SfM software are included in '*2_RawImages.zip*'. Then, the point cloud resulted is provided in '*3_SFM_RawPointCloud.dat*'. This point cloud was processed and the final elevation map with a resolution of 5 mm is included in '*4_SfM_ElevationMap(m).xyz*'.

Further details of the physical model and hydraulic and sediment transport experiments can be consulted in the dataset *WASHTREET - Hydraulic, wash-off and sediment transport experimental data*. In addition, raw data and runoff velocities results obtained using seeded and unseeded Particle Image Velocimetry (PIV) techniques are provided in the dataset WASHTREET - PIV data.

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