

Description of the VS10 dataset (video+annotations)

General about the VS10 dataset

The VS10 dataset contains video recordings of ten vehicles (*Citroen C4 Picasso*, *Mazda 3 Skyactive*, *Mercedes AMG 550*, *Nissan Qashqai*, *Opel Insignia*, *Peugeot 3008*, *Peugeot 307*, *Renault Captur*, *Renault Scenic* and *VW Passat B7*) passing by the camera at a known constant speed. Specification of vehicles (engine type, power, transmission type and production year) is given in Table 1 in the paper. The dataset comprises **304** video recordings (MP4 format, full HD resolution, 30 fps, 10-second length), each containing a single drive of a single vehicle. The speed of vehicles ranges from 30 to 105 km/h, with the exact values presented in the rightmost column in Table 1 in the paper. The speed is maintained stable by the on-board cruise control, all vehicles were equipped with.

Annotation text files contain the speed of a vehicle and its pass-by-camera instant. Relative time from the beginning of the file, given in seconds with a two-decimal precision, was measured. Precise annotations were obtained by visual screening, i.e., by identifying a video frame when a vehicle starts to exit the camera view, which approximately corresponds to the closest point of approach.

Folder video+annotations

Folder **video+annotations** contains 10 zip archives. Each archive corresponds to one vehicle, i.e., it contains video files and textual annotations for that vehicle.

Naming convention for dataset files includes the vehicle name and the speed. For example, *Peugeot307_79.mp4* and *Peugeot307_79.txt* represent the names of video and annotation files, respectively, of Peugeot 307 driven at 79 km/h.

Total size of 10 archives within this folder is **10.4 GB**.