Scalable Place Recognition Under Appearance Change for Autonomous Driving Supplementary Material

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Abstract

In this supplementary material, we provide the statistics information of video sequences from Oxford RobotCar dataset, which we use in our experiment. Also, we show several sample images from Mapillary dataset.

1. Statistics of Oxford RobotCar dataset

The statistics information of 8 sequences we use in Oxford RobotCar [1] is shown in Table 1.

2. Sample images of Mapillary

Sample images from our Mapillary dataset are shown in Figure 1

References

[1] Will Maddern, Geoffrey Pascoe, Chris Linegar, and Paul Newman. 1 year, 1000 km: The oxford robotcar dataset. *The International Journal of Robotics Research*, 2017.

Abbreviation	Recorded	Condition	Sequence length
Seq-1	26/06/2014, 09:24:58	overcast	3164
Seq-2	26/06/2014, 08:53:56	overcast	3040
Seq-3	23/06/2014, 15:41:25	sun	3356
Seq-4	23/06/2014, 15:36:04	sun	3438
Seq-5	23/06/2014, 15:14:44	sun	3690
Seq-6	24/06/2014, 14:15:17	sun	3065
Seq-7	24/06/2014, 14:09:07	sun	3285
Seq-8	24/06/2014, 14:20:41	sun	3678

Table 1. Used sequences from the Oxford RobotCar dataset.



Figure 1. Samle images from our Mapillary dataset. The database image and its corresponding query have different appearance due to changes of environmental conditions and traffic density.