Highly Accurate and Diverse Traffic Data: The DeepScenario Open 3D Dataset

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- Reconstruct textured mesh of the scene from mapping images via SfM/MVS & refine ground via B FlexRoad [2].
- Calibrate recordings via matching, optical flow, and raycasting. (\mathbf{C})
- Predict 3D bounding boxes of traffic participants via GroundMix [1] & refine them by projecting on D the ground surface [2].
- **E** Build trajectory tracks via 3D Kalman filter & smooth them via RTS-Smoothing.



DSC3D, a highly diverse 3D trajectory dataset that contains urban intersections, inner-city scenes, parking areas, and federal highways from Germany and the United States.

References

[1] J. Meier, L. Scalerandi, O. Dhaouadi, J. Kaiser, A. Nikita, and D. Cremers, "CARLA Drone: monocular 3d object detection from a different perspective," in GCPR, 2024 [2] O. Dhaouadi, J. Meier, J. Kaiser, and D. Cremers, "Shape your ground: Refining road surfaces beyond planar representations," in 2025 IEEE Intelligent Vehicles Symposium. [3] C. Selzer and F. Flohr, "DeepUrban: Interaction-aware trajectory prediction and planning for automated driving by aearial imagery," in ITSC, 2024.

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