

➤ VISO dataset

Source/Platform: Jilin-1

The categories of target: Vehicle, train, airplane, vessel

Description: It contains 40 satellite videos with a size of 12000×5000 pixels for each image. A total of 853,911 instances, including vessels, trains, airplanes and vehicles, are manually-labeled.

Download: <https://github.com/QingyongHu/VISO>

➤ SatSOT dataset

Source/Platform: Jilin-1, Skybox, Carbonite-2

The categories of target: Vehicle, train, airplane, vessel

Description: It contains 105 satellite video sequences: 26 trains, 65 vehicles, 9 airplanes and 5 vessels with 27,664 frames in total.

Download: http://www.csu.cas.cn/gb/jggk/kybm/sjlyzx/gcxx_sjj/sjj_wxxl/

➤ SAT-MTB dataset

Source/Platform: Jilin-1

The categories of target: Vehicle, train, airplane, vessel

Description: It contains 249 videos with more than 50,000 sequential frames. The object categories are divided into two levels of coarse and fine granularity, with aircraft, ships, vehicles, trains and their corresponding 14 types of fine-grained objects annotated frame by frame in the form of horizontal bounding box, rotating bounding box, masks, etc. The total number of annotation instances is 1,033,511.

Download:

http://www.csu.cas.cn/gb/kybm/sjlyzx/gcxx_sjj/sjj_wxxl/202211/t20221121_6551405.html

➤ FAIR1M dataset

Source/Platform: Gaofen, Google Earth

The categories of target: Vehicle, vessel, airplane

Description: It collected more than 1 million instances and more than 40,000 images in this dataset with a spatial resolution ranging from 0.3 m to 0.8 m. All targets are annotated by oriented bounding boxes. This dataset is available from:

Download: <http://sw.chreos.org/benchmark>

➤ DFC 2016 dataset

Source/Platform: UrtheCast, Chang Guang Satellite Technology Co., Ltd

The categories of target: Train, vessel, airplane

Description: It contains a full-colour ultrahigh definition video, which took place on July 2, 2015, over the harbour of Vancouver. The frame format was 3840×2160 pixels

with 1 m GSD. It contains five videos at 25 frames per second with 0.92 m GSD. Frame formats are 3840×2160 pixels that cover nearly 2.7 km × 1.5 km, 3600 × 2700 pixels that cover nearly 2.5 km × 1.9 km, and 4096×2160 pixels that cover nearly 2.9 km × 1.5 km.

Download:

<http://www.grss-ieee.org/community/technical-committees/data-fusion/>

<http://english.cas.cn/newsroom/news/201605/t20160513/163009.shtml>

➤ SV248S dataset

Source/Platform: Jilin-1, Chang Guang Satellite Technology Co., Ltd

The categories of target: Train, vessel, airplane, vehicle

Description: It selected about 40 targets for each video. These videos have 500–753 frames, and they last for 20–30.12 s with the frame rate at 25 fps, including four countries, five cities, and 248 objects in total. There are four categories of objects in the SV248S, including ships, vehicles, large vehicles, and airplanes.

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