

This dataset describes a collection of rosbag files for event-based intruder monitoring using UAS. A DAVIS346 camera was mounted over a DJI Flamewheel F550 Drone, and an onboard computer recorded the sensor information from the event camera. Each dataset includes events, frames, and IMU measurements. The monitoring scenes were recorded outdoors at the School of Engineering of the University of Seville. In each dataset, an intruder moves and hides from the field of view of the camera simulating a scape-intrusion situation. A total of four monitoring setting were recorded:

Daylight monitoring: A daylight scene for intruder monitoring. An intruder runs and hides behind the objects of the scene to evade the camera field of view.

- GRIFFIN-20200703-Day1-Davis346_camera-1-v0-10.5281/zenodo. 3929689.bag

- GRIFFIN-20200703-Day2-Davis346_camera-2-v0-10.5281/zenodo. 3929689.bag

Night light monitoring: A monitoring scene during the night without the presence of any artificial light. The low light condition increases the difficulty of monitoring task due to the increment of noisy events.

- GRIFFIN-20200703-Night1-Davis346_camera-5-v0-10.5281/zenodo. 3929689.bag

- GRIFFIN-20200703-Night2-Davis346_camera-6-v0-10.5281/zenodo. 3929689.bag

Multi-target: An experiment with a suspect and a chaser drone moving in the monitoring area. The drone follows the suspect by simulating a pursuit operation.

- GRIFFIN-20200703-Multi1-Davis346_camera-3-v0-10.5281/zenodo. 3929689.bag

- GRIFFIN-20200703-Multi2-Davis346_camera-4-v0-10.5281/zenodo. 3929689.bag

Monitoring under illumination changes: A night scene where the lighting conditions changes by the movement of artificial lights in the scene.

- GRIFFIN-20200703-Illumination1-Davis346_camera-3-v0-10.5281/zenodo. 3929689.bag