

1. The specification list of videos in AGVS-T24 is as follows:

<b>videos</b>	<b>duration</b>	<b>frame rate</b>	<b>resolution</b>
baseline-1	24.0s	30FPS	1280×960
baseline-2	220.8s	30FPS	1280×960
baseline-3	154.2s	30FPS	1280×960
baseline-4	243.3s	30FPS	1280×960
baseline-5	144.8s	30FPS	1280×960
baseline-6	112.6s	30FPS	1280×960
baseline-7	82.8s	30FPS	1280×720
baseline-8	30.8s	30FPS	1280×720
baseline-9	156.7s	30FPS	1920×1080
baseline10	139.9s	30FPS	1920×1080
illumination change-1	6.9s	30FPS	1920×1080
illumination change-2	6.6s	30FPS	1920×1080
illumination change-3	123.2s	30FPS	1960×1080
illumination change-4	200.5s	30FPS	1920×1080
illumination change-5	24.8s	30FPS	1920×1080
illumination change-6	143.2s	30FPS	1920×1080
illumination change-7	38.7s	30FPS	1920×1080
illumination change-8	90.7s	30FPS	1920×1080
illumination change-9	38.8s	30FPS	1920×1080
illumination change-10	38.5s	30FPS	1920×1080
infrared-1	48.7s	30FPS	1960×1080
motion-1	5.1s	30FPS	1920×1080
motion-2	190.0s	30FPS	1920×1080
motion-3	204.0s	30FPS	640×368
motion-4	89.1s	30FPS	640×368
motion-5	40.4s	30FPS	1920×1080
motion-6	15.4s	30FPS	1920×1080
motion-7	62.1s	30FPS	1920×1080
motion-8	60.1s	30FPS	1920×1080
motion-9	3.4s	30FPS	1920×1080
occlusion-1	35.3s	30FPS	1960×1080
occlusion-2	35.3s	30FPS	1960×1080
occlusion-3	47.9s	30FPS	1960×1080
occlusion-4	338.4s	30FPS	1920×1080
occlusion-5	25.0s	30FPS	1440×1080
occlusion-6	25.2s	30FPS	1920×1080
panorama-1	14.7s	30FPS	7968×1776
panorama-2	45.0s	30FPS	1960×1080
panorama-3	93.6s	30FPS	6688×1088
panorama-4	57.5s	30FPS	7056×1232
ptz-1	71.3s	30FPS	1920×1080
ptz-2	38.7s	30FPS	1920×1080
simultaneous multi-scale-1	36.9s	30FPS	1960×1080
simultaneous multi-scale-2	56.2s	30FPS	1920×1080
weather-1	50.5s	30FPS	1960×1080
weather-2	18.6s	30FPS	1920×1080
weather-3	40.6s	30FPS	1960×1080
weather-4	40.3s	30FPS	1920×1080
weather-5	44.7s	30FPS	1960×1080
weather-7	116.4s	30FPS	1280×960
weather-8	214.8s	30FPS	1280×960
weather-9	17.8s	30FPS	1960×1080

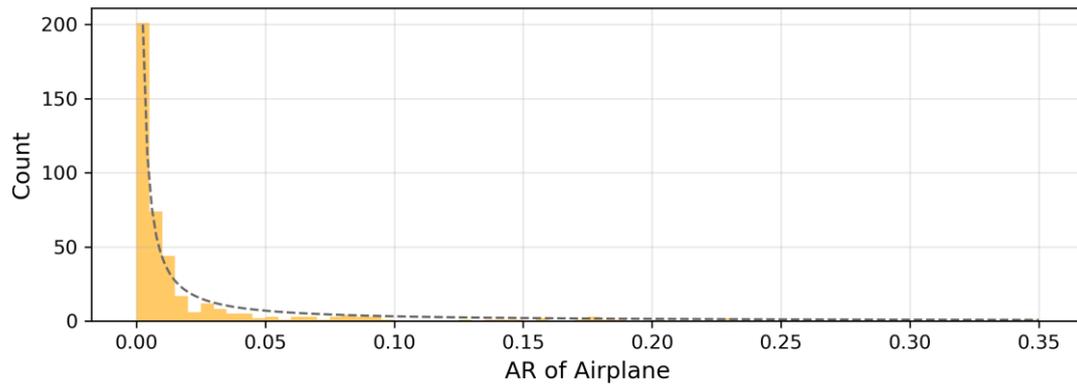
2. The video list of high vs. low visibility condition subsets is:

subsets	videos	
<b>low visibility</b>	baseline-10	weather-4
	illumination change-3	weather-5
	illumination change-4	weather-6
	illumination change-5	motion-1
	illumination change-7	motion-5
	illumination change-8	motion-7
	illumination change-9	occlusion-3
	weather-1	panorama-4
	<b>high visibility</b>	baseline-1
baseline-2		motion-3
baseline-3		motion-4
baseline-4		motion-6
baseline-5		motion-8
baseline-6		motion-9
baseline-7		simultaneous multi-scale-1
baseline-8		simultaneous multi-scale-2
baseline-9		occlusion-1
illumination change-1		occlusion-2
illumination change-2		occlusion-4
illumination change-6		occlusion-5
illumination change-10		occlusion-6
weather-2		panorama-1
weather-3		panorama-2
weather-7		panorama-3
weather-8		ptz-1
weather-9		ptz-2

3. The video list of simple vs. complex background subsets is:

subsets	videos	
<b>complex background</b>	baseline-4	motion-2
	baseline-5	motion-6
	baseline-6	motion-7
	baseline-8	simultaneous multi-scale-1
	illumination change-1	occlusion-1
	illumination change-4	occlusion-4
	illumination change-7	occlusion-5
	weather-4	panorama-2
	weather-6	panorama-3
	weather-8	panorama-4
	weather-9	ptz-1
	motion-1	ptz-2
	<b>simple background</b>	baseline-1
baseline-2		weather-3
baseline-3		weather-5
baseline-7		weather-7
baseline-9		motion-3
baseline-10		motion-4
illumination change-2		motion-5
illumination change-3		motion-8
illumination change-5		motion-9
illumination change-6		simultaneous multi-scale-2
illumination change-8		occlusion-2
illumination change-9		occlusion-3
illumination change-10		occlusion-6
weather-1		panorama-1

4. The distribution of aircraft in AGVS-T24 is shown in the figure below.



5. The tracking result on different subsets in AGVS-T24 is shown in the table below.

Method	baseline	infrared	multiscale	occlusion	panoramic	illustration	weather	motion	ptz
<b>FairMOT[36]</b>	75.1	46.0	14.8	68.3	6.3	67.6	87.8	56.4	9.5
<b>CenterTrack[38]</b>	92.9	82.6	6.6	99.5	10.9	65.3	97.5	60.6	24.8
<b>TrackFormer[43]</b>	76.1	71.0	35.1	90.6	14.5	75.7	89.8	80.5	22.0

6. The tracking result on normal vs. small aircraft size subsets is shown in the table below.

Method	small size	normal size
<b>FairMOT[36]</b>	42.0	60.1
<b>CenterTrack[38]</b>	52.8	77.6
<b>TrackFormer[43]</b>	47.6	64.7

7. The tracking result on high vs. low visibility condition subsets is shown in the table below.

Method	low visibility	high visibility
<b>FairMOT[36]</b>	20.3	69.5
<b>CenterTrack[38]</b>	44.9	78.6
<b>TrackFormer[43]</b>	46.4	70.2

8. The tracking result on simple vs. complex background subsets is shown in the table below.

Method	complex background	simple background
<b>FairMOT[36]</b>	23.1	70.0
<b>CenterTrack[38]</b>	47.3	73.5
<b>TrackFormer[43]</b>	48.8	66.2