

Trackers Comparison

- CSRT (color and grey);
- KCF (color and grey);
- MIL (color and grey).

Idea: tracker must supervise object during all video.

Notes:

object's speed was no more than 5 km/h;
each photo corresponds 100th video's frame;
video duration is **0:47** min.

CSRT_Color





Result:

On the second frame tracker lost the object and caught error aim.
Till the end of video the situation did not changed.

CSRT_Grey





Result:

Tracker had supervised the object during all video.
Bounded box had flexible sizes.

KCF_Color





Result:

Tracker had no flexible bound box. Tracker caught the object and supervised it till end of video, but with worse precision as CSRT (grey).

KCF_Grey





Result:

On the second frame tracker lost the object and caught error aim.
Till the end of video the situation did not changed.

MIL_Color





Result:

On the second frame tracker lost the object and caught error aim.
Till the end of video the situation did not changed.

MIL_Grey





Result:

Tracker had supervised the object 5 *100 frames. Because of huge changes in object's size, tracker lost the object.

It seems, that at the end of video it caught the object again.

COMPARISON OF TRACKERS

*concerning to this task, each tracker has its own domain of usability.

Tracker	Result	Note
CSRT (color)	Bad	Object was lost
CSRT (grey)	Best	Object was supervised
KCF (color)	Good	Object was supervised
KCF (grey)	Bad	Object was lost
MIL (color)	Bad	Object was lost
MIL (grey)	Medium	Object was supervised partially