

Performance analysis:

Drone versions:

V1: Normal speed (1 m/s)

V2: Changing speed (up to 3 m/s)

The drone versions were tested 3 time each for 50% of the battery (which is 4 mins of flight):

Version	% of map covered
V1	92.6
	93.1
	95
V2	83.3
	87.2
	72.8 (drone crashed midflight)

The results show that using normal speed consistently, due to the drone's PID controllers' properties, the V1 drone is better for covering more area of the map.