

Drone-based Thermal Imaging System

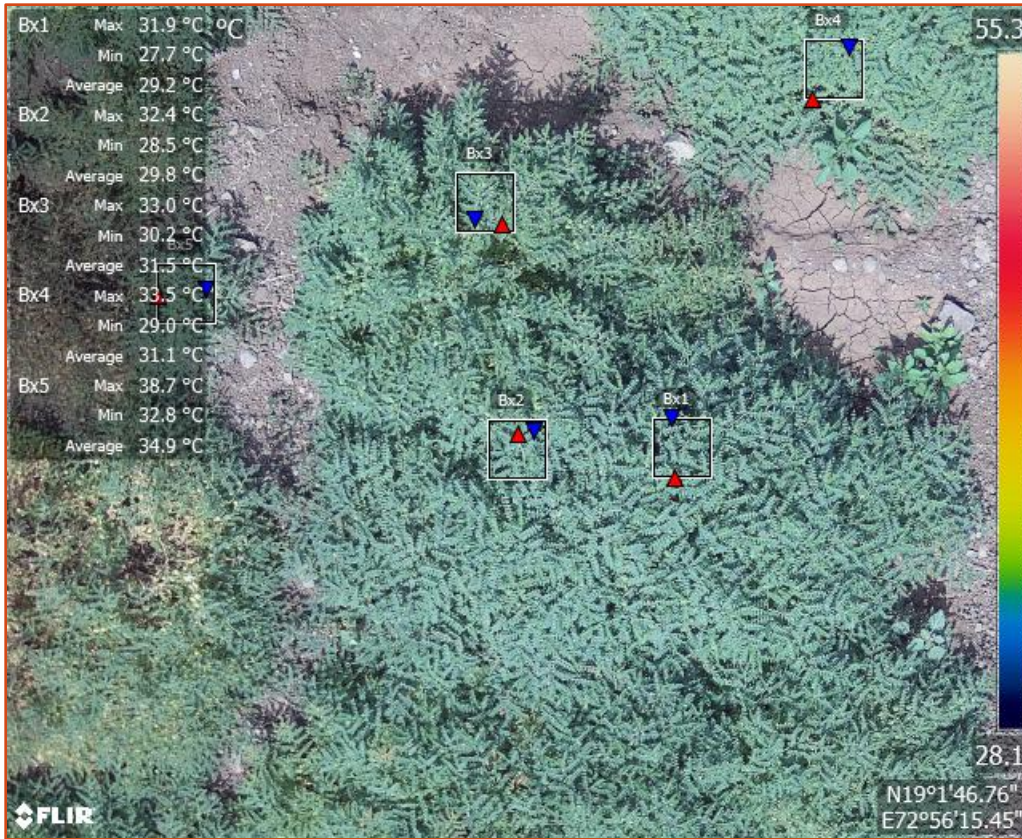


Unmanned Aerial Vehicle with payload



Qualification trials for survey mission

The system captures thermal and colour images of crop with high-resolution thermal and visible-light imager. Drone navigates along pre defined path and capture thermal images autonomously. The thermal cue from captured images undergoes further analysis. Qualification trials have been conducted at NA&BTD farms near Gamma field.

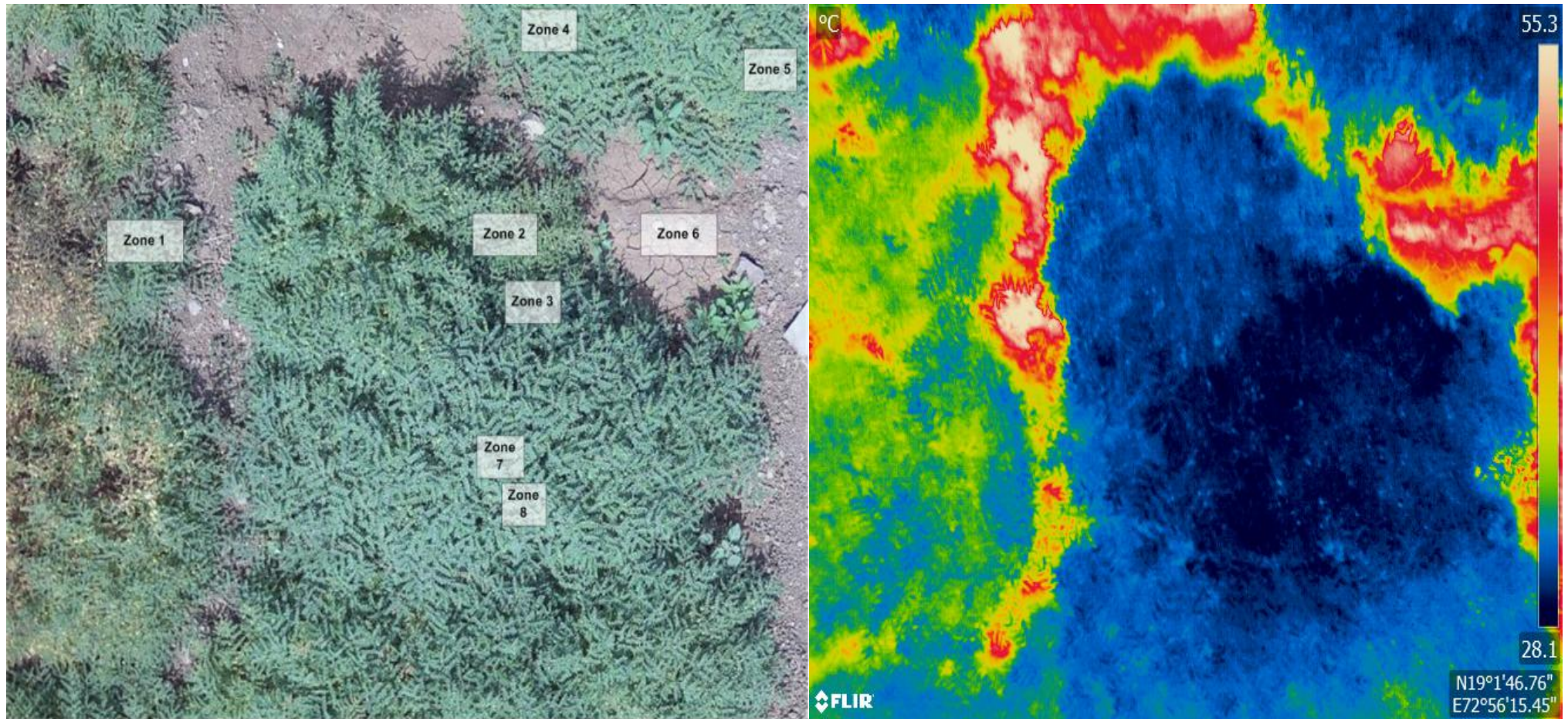


Crop image with thermal statistics

Mission Planner 1.3.62 build 1.3.6917.15581 interface. The main view shows a 3D model of a drone over a field. The bottom panel displays a table of waypoints.

Command	Delay	Lat	Long	Alt	Delete	Grad %	Angle	Dist	AZ
153 WAYPOINT	0	19.0297189	72.9376242	100	X	0.0	0.0	2.5	55
154 WAYPOINT	0	19.0297278	72.937645	100	X	0.0	0.0	2.4	66
155 WAYPOINT	0	19.0297398	72.9376685	100	X	0.0	0.0	2.8	62
156 WAYPOINT	0	19.0297518	72.937692	100	X	0.0	0.0	3.2	57

Mission planner & Navigation interface



Colour & thermal images from a low altitude flight