Flight summary June 3, 2022

Boise State University
Created by Anna Roser
Initial Point, Kuna ID

Overview:

- This site is located approximately 45 minutes from Boise, south of Kuna.
- Anna Roser was Pilot in Command for all flights.
- Mission objective was to collect UAS imagery with the goal of creating high spatial resolution point clouds for shrub height measurement, and collect multispectral imagery to assist with differentiating plant types. Additionally, we completed a test flight with the multispectral drone to assess if slick spot pepper grass can be identified.

Site	Sensor	Above Ground Level	Ground Sampling Distance	Camera Angle	Software	Cross grid	Number of Images	Flight Speed	Forwardlap/ Sidelap	Number of batteries	Start/End	Wind Max & Avg
Initial Point – burn boundary	Mavic RGB	41m	1cm	90	Map Pilot	Yes, 20degree offset	436	2m/s	72/80	C1, HP7, C3	10:51am-11:50am	4.3m/s 1.0m/s
Initial Point – burn boundary	P4 Multispec	38m	2.0cm	90	DJI GS Pro	No	120	1.7m/s	80/75	2x	11:57am-12:29pm	3.7m/s 1.3m/s
Slickspot pepper grass site	P4 Multispec	38m	2.0cm	90	DJI GS Pro	No	121	1.7m/s	80/75	2x	12:40pm-1:18pm	3.4m/s 1.1m/s

RTK TopCon Notes

Start	End	Vert hgt (m)	Number of GCP
9:35am	1:30pm	1.828	X6 bucket lids per site

Notes:

- UAS: Mavic 2 Pro. RGB Hasselblad 20MP sensor and DJI Phantom 4 Multispectral (5 band)
- Anna forgot to bring the multispectral calibration panel so those images will only have the DLS metadata for light corrections.
- Weather: lots of clouds. Difficult to avoid changing light conditions. Became more windy as time goes on.
- The first two flights were over the 1996 burn boundary. The second flight was over the slickspot sites that Ian Roberson identified and flagged with tape.
- Mavic flights are much more battery/time efficient with the 20 degree offset than 90degree.
- During the slickspot site with the P4M, the gimbal did not position itself correctly. There was no error but I could tell from the livestream. I brought it back and restarted the flight – no issues.

Data location:

- Images are on owncloud.