

Flight summary June 10th, 2022

Boise State University
Created by Anna Roser

Near Glens Ferry, ID

Overview:

- This site is located approximately 1 hour from Boise off East I-84.
- Anna Roser was Pilot in Command for all flights.
- Anna, Cayden, Lena on site.
- 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.

| 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 |
|----------------------|--------------|--------------------|--------------------------|----------------------|------------|----------------------|------------------|--------------|--------------------|-----------------------------|-----------------|------------------|
| Cold – burn boundary | Mavic RGB | 44m | 1cm | 5degrees + off nadir | Map Pilot | Yes, 20degree offset | 814 | 2m/s | 72/80 | HP6, HP8, C2, C3, C1, Hp, 4 | 11:35am-1:34pm | 5.2m/s 2.0m/s |
| Cold – burn boundary | P4 Multispec | 38m | 2.0cm | 90 | DJI GS Pro | No | 543 | 1.7m/s | 80/75 | 2x | 10:53am-11:23AM | 4.4m/s 2.0m/s |

RTK TopCon Notes

| Start | End | Vert hgt (m) | Number of GCP |
|--------|--------|--------------|---------------|
| 9:25am | 2:00pm | 1.7615 | 9 bucket lids |

Notes:

- UAS: Mavic 2 Pro. RGB Hasselblad 20MP sensor and DJI Phantom 4 Multispectral (5 band)
- Weather: lots of clouds. Difficult to avoid changing light conditions. Became more windy as time goes on.

- Mavic flights include a crossgrid and 20degree diagonal flight. SD card filled during the diagonal flight so I restarted with a new SD card.

Data location:

- Images are on owncloud and external drive