

# Metadata Report

Project Name *Survey of region of Isle of Skye near Kilcris September 22-24, 2021*

Summary *These data show a student field mapping area in the southwest part of Isle of Skye near Kilcris, Scotland. These data were collected using a Phantom 4 Pro v2.0 with Teokit dGPS system. All heights are ellipsoidal.*

## Personnel

- PI(s) *Ian Pierce*
- Field staff
- Additional team members

## Site Information

- Site description *The site is heavily vegetated with typical low Scottish Highland vegetation. Outcrops of carbonate, sedimentary, and igneous rocks are visible.*
- Site objective *The objective was to produce detailed basemaps useable for an undergraduate mapping course.*
- Site location (GPS cords and/or map) *57.19, -5.95*
- Site conditions *Cloudy, intermittent rain, fog, and low clouds.*
- Date/time spent at each site *2 hours spent each day for 3 days.*

## Survey Results

- Equipment used *Emlid Reach RS2 as base station & three total GCP's. Phantom Pro v2.0 UAS with Teokit dGPS*
- GPS solutions *1 base station/GCP used*
- Errors *0.2 m accuracy in PPP of base station, 5 cm accuracy of photo locations*
- Alignments *Spare & Dense clouds aligned using high setting.*
- Collection methods *Litchi autopilot, 7.5 m/s UAS velocity, and 2s photo intervals. 3589 total photos collected*

## Products

- Date of dataset collection *September 22-24, 2021*
- Coordinate system of datasets *WGS84*
- Spatial resolution *7.5 cm/pix ortho, 15 cm/pix DEM.*
- Horizontal Accuracy *0.85 m*
- Vertical Accuracy *0.85 m*
- Data formats *TIF, LAZ*
- Data processing methods *CSRS PPP processing of base location, TeoBox PPK processing of UAS locations, Agisoft Metashape processing of imagery & DEMs.*

## Misc Notes

*Elevations are Ellipsoidal*