

Redefined Horizons finds Skydio and Correlator3D a good fit for land development.



INTRODUCTION

Redefined Horizons, a Skydio Enterprise customer, has been pushing the limits of the Skydio 2 since it became available. However, these agile little drones are more known for their ability to model buildings and structures than they are for mapping the ground they fly over. While modeling is its primary use at Redefined Horizons, the team has recently begun deploying it for small land development projects. Like many small businesses, maximizing the productivity of their hardware whenever possible ensures the greatest return. SimActive's Correlator3D processing workflows support any sensor that can capture nadir imagery, including the Skydio 2.



INDUSTRY

Surveying

COUNTRY

United States

USE CASE

Using the Skydio 2 as an acquisition tool for land development

CHALLENGES

- Skydio 2 was developed for close range modeling
- Limited flight planning interface for mapping
- 12-megapixel sensor

BENEFITS

- Small form factor
- US manufactured
- Excellent collision avoidance



“Once we were able to get through the challenges of flight planning and acquisition, we knew the Skydio 2’s capabilities could be extended to small mapping projects. Correlator3D was developed to work with any sensor, while the workflows remain virtually the same. There is no new learning curve, we can trust the software to repeatedly provide high-quality data.”

- *Brian Leiser, Principal/LiDAR and 3d Mapping at Redefined Horizons.*

WORKFLOW

The team at Redefined Horizons is often tasked with small surveying projects for infill type land development. Each crew has a Skydio 2 available and can deploy it for various situations as needed. Recently they have been incorporating them as a tool for mapping. While Skydio’s flight management tool isn’t specifically designed for mapping, the team developed a method of acquiring imagery to support their needs. With a few additional minutes, they can acquire the project site after they have completed their survey work. Once the imagery is back in the office, Redefined Horizons imports the imagery into Correlator3D. Following the workflows available, they kick off the processing to create the desired project deliverables. Once processing is complete, the resulting data is checked for quality and prepared for delivery to the client.

DELIVERABLES

Typical deliverables consist of a digital elevation model (DEM), contours at an appropriate interval for the scale of mapping desired, and orthomosaics in multiple formats



BENEFITS

The benefits of using Correlator3D according to Redefined Horizons are its ease of use, and the speed in which it processes data. The infill projects we are using the Skydio 2 are typically small, under 30 acres and can be scripted to run one after another in Correlator3D.

ABOUT REDEFINED HORIZONS

Established in 2019, Redefined Horizons is a surveying and mapping company headquartered in Northern California. Operating various UAS, Redefined Horizons acquires imagery and process data on projects throughout the US. For more information, visit www.redefinedhorizons.com.

