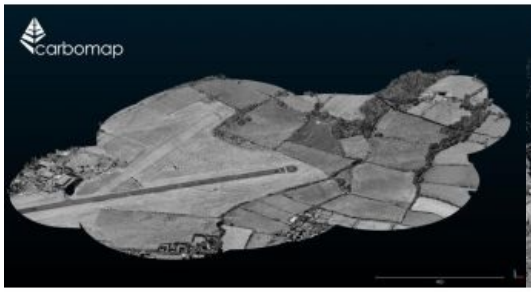
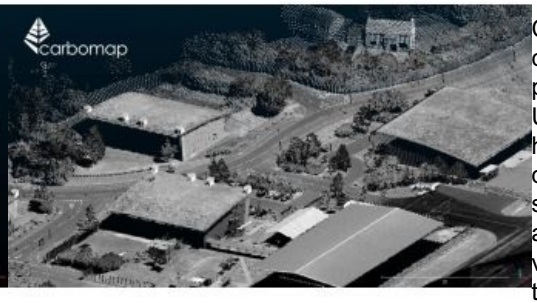
Carbomap to Map with Advanced Lidar UAS Solution





Carbomap, an environmental survey company, in collaboration with high-performance Lidar manufacturer RIEGL, UAVE and the University of Edinburgh, have announced the first successful demonstration flight of a RIEGL VUX-1LR survey-grade waveform laser scanner on a fixed wing, long range unmanned aerial vehicle (UAV). This is likely the first time that such a high-performance scanner has ever flown on a fixed wing UAV with such an advanced specification for long duration (8 hrs) and long range (1,000km).

With centimetre-scale 3-dimensional accuracy, this breakthrough development will greatly increase the worldwide accessibility to high-quality laser scanning. Throughout the world, Lidar data is used for mapping infrastructure, conducting forest inventory, and determining flood risk in river basins, for example. However, obtaining such high-quality 3D data can be very expensive to obtain using conventional airborne surveys. It is difficult to process without specialised software, and as a consequence, it is rarely available in most developing nations. By bringing such instruments together into a single UAV system (named Forest-Lux or F-Lux, for short), together with its own solution-focused software, it is now possible to get a system that can be a local asset, under local stakeholder control, and be operated at an affordable price in any country in the world.

F-Lux is the result of successful cooperation between Carbomap (Scotland), RIEGL Laser Measurement Systems (Austria), UAVE (Wales), and the University of Edinburgh. The development was also supported by the Forestry Commission (UK) and Scottish Enterprise.

The results of the test flight (see images) demonstrate the quality of the data that can be collected by the F-Lux. The test flights were flown by UAVE at West Wales Airport.

For more information about the technical details see here.