



## **A Pivoted Airborne Laser Scanning System for Alpine Areas**

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Rapid technological advances made Airborne Laser Scanning (ALS) a dominant system for deriving digital terrain models. However, a high point density is especially difficult to acquire in alpine areas, a fact that is unsatisfactory. In order to overcome this shortcoming, BEWAG Geoservice GmbH jointly with Vermessung AVT ZT-GmbH develop a laterally pivoted system that optimizes data acquisition for inclined surfaces. Many constraints need to be considered in terms of mechanics (vibrations), mass, flight planning, calibration and certification. If an approximate terrain model is available, then the challenging regions, where the pivoting makes sense, can be identified. As a consequence: a well prepared flight will diminish the flight costs substantially. The interpretation of geomorphic realities will be facilitated if a better coverage is available.