

Supplementary material of: "Lidar-based snow monitoring: cable car deployment in the Austrian Alps"

B. Dikic, T. Goelles, C. Gaisberger, B. Schlager, S. Muckenhuber, P. Batista, M. Keuschnig, and M. Schratter

Correspondence to: T. Goelles (thomas.goelles@uni-graz.at) and B. Dikic (berin.dikic@v2c2.at)



(a)



(b)

Fig. S1. MOLISENS lidar sensor mounting styles: (a) Vertically scanning lidar, used for the first three measurements; (b) Horizontally scanning lidar, used for the final measurement

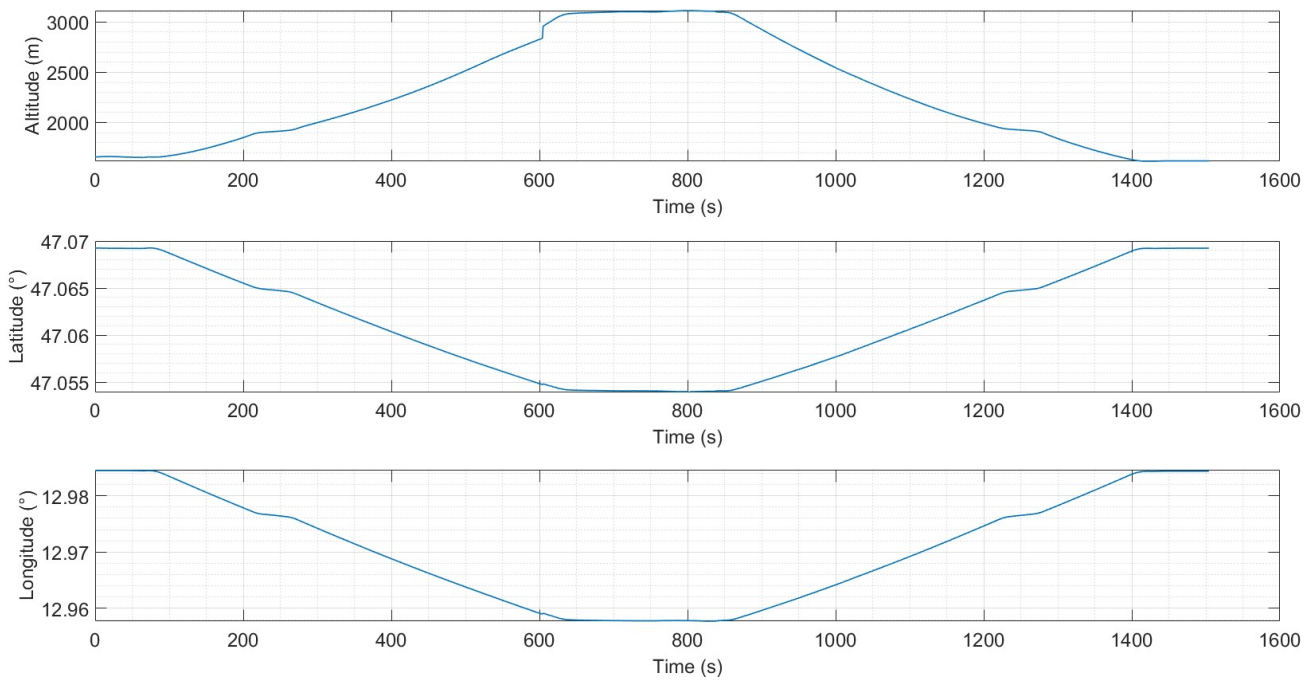


Fig. S2. GNSS data with lidar mounted horizontally

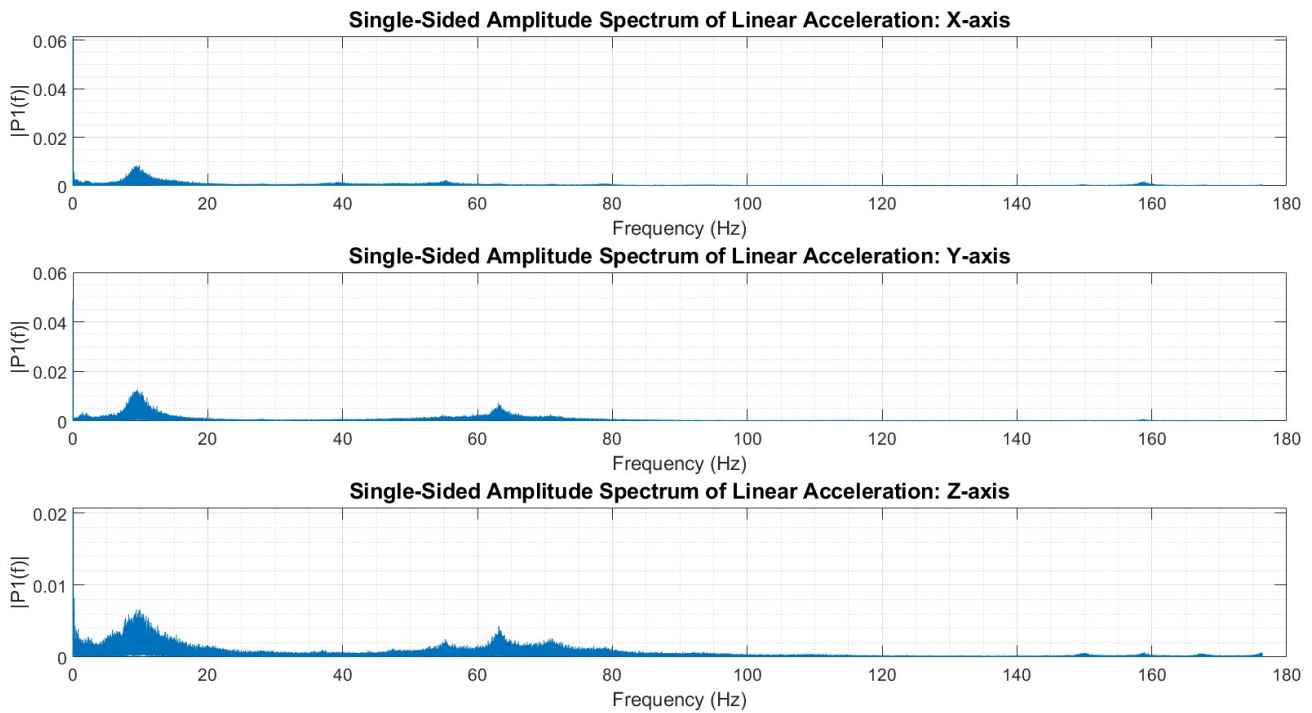


Fig. S3. FFT of the linear acceleration for the x-, y-, and z-axis with the lidar mounted horizontally

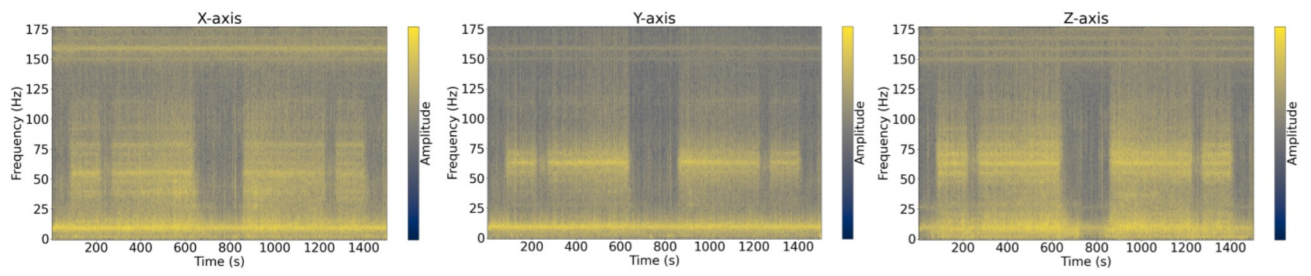


Fig. S4. Spectrogram of the linear acceleration for the x-, y-, and z-axis with the lidar mounted horizontally

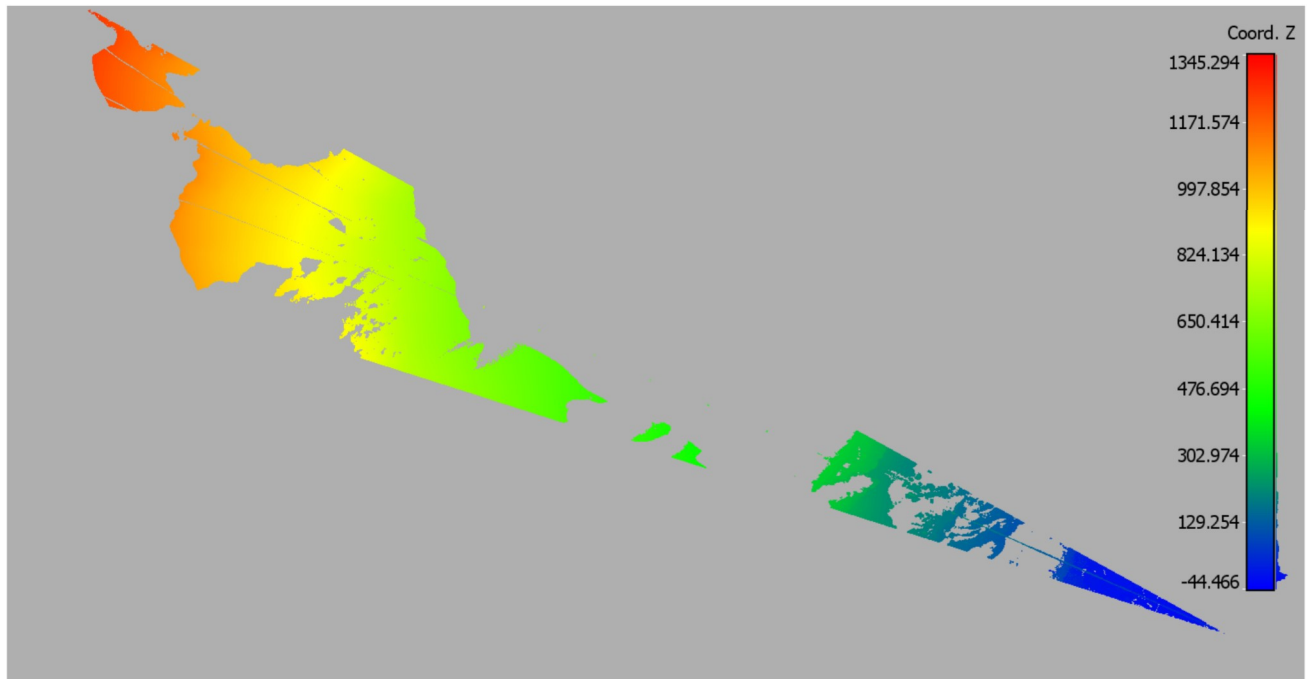
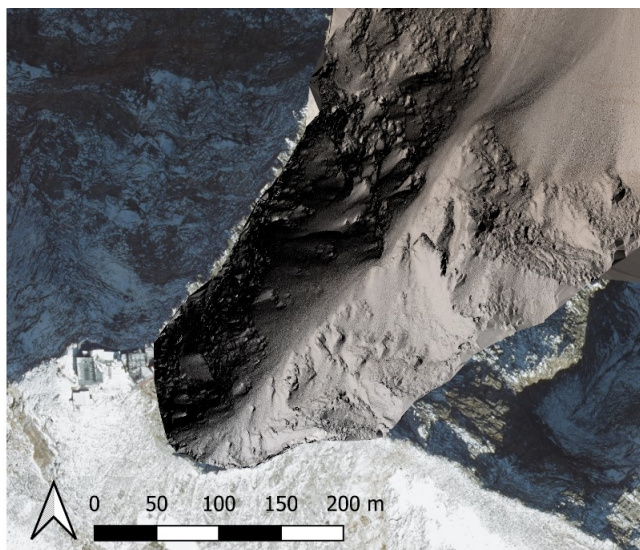


Fig. S5. Riegl VZ-6000 scan of the survey area showing large number of occluded areas



(a)



(b)

Fig. S6. 3D SLAM generated and subsequently georeferenced point cloud, with an aerial orthophoto from 2022 with 30 cm resolution from geolonad.at as a reference: (a) part near the valley station; (b) part near the mountain station