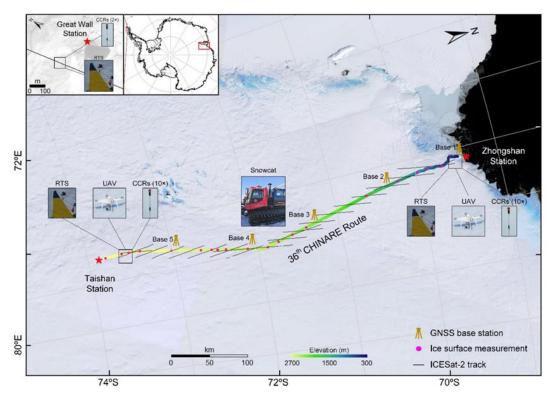
Te Kura Kairūri School of Surveying Lunchtime Seminar Series



Insights into the capabilities of new photon-counting altimetry satellite ICESat-2 using multi-sensor observations over Antarctic Ice Sheet

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Since its successful launch in 2018, the new photon-counting laser altimetry satellite ICESat-2 has been collecting data with an unprecedented ice surface elevation accuracy of 2-4 cm. The ICESat-2 mission team has conducted a validation campaign and stated that the data in the flat Antarctic interior met the design requirements. This campaign to validate ICESat-2 data covered a large part of Antarctica's flat interior at 88°S. However, it should have gone over more of the lower-latitude interior and coastal regions to get a full picture of the elevation of different parts of the Antarctic. We planned and carried out a number of validation campaigns across a number of sites, using GNSS, unmanned aerial vehicles (UAV), corner cube retroreflectors (CCR), and retroreflective target sheets (RTS) to check how accurate single-photon elevation was. The seminar will provide further details and results.