

Abstract

Title: Interferometric velocity and grounding line estimates for the Ross Ice Shelf

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In September and October 1997, the Canadian RadarSat SAR was maneuvered to a South looking orientation, allowing collection of the first SAR imagery south of -79 deg. Six days of repeat coverage were acquired that were suitable for velocity mapping with SAR interferometry. We have used these data to map the velocity of a large portion of the Ross Ice Shelf, which is largely fed by outflow from Ice Streams D and E. The Interferometric data also provide a precise means of locating the grounding lines in the vicinity of Siple Dome and Steershead.