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CryoSat2: Observing the Arctic

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Arctic sea ice has undergone major changes in recent years but there remains much uncertainty about its ultimate fate, in particular the timing of an ice-free Arctic in summer. Although satellite measurements of ice extent are well-established, wide-area measurements of sea ice thickness are key to understanding the fate of Arctic sea ice cover in the future. Satellite altimeters can provide direct measurements of sea ice freeboard from which sea ice thickness can be calculated. We present the first calibrated data on sea ice thickness from Cryosat-2, validated by in situ and aircraft data. In addition, we will summarise other key results from the new mission.