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Monitoring the flow of the Greenland Ice Sheet: The PROMICE ice velocity product and recent updates

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We present the Programme for Monitoring of the Greenland Ice Sheet (PROMICE) ice velocity product, which is a time series of ice velocity mosaics derived using offset tracking on Sentinel-1 SAR data. The time series starting in January 2016 is continuously updated with a new mosaic every 12 days and is posted at 500 m grid resolution. Within PROMICE, the ice velocity product is used directly as input to estimate the solid ice discharge from the Greenland Ice Sheet as well as to study ice dynamic processes on seasonal and multi-annual time scales. Recently, we have made changes to the processing chain due to spurious cases of slow down detected in a few glaciers in Southeast Greenland. In this contribution, we discuss how this was resolved as well as other recent improvements to the product.