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Status of the Pléiades Glacier Observatory

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The Pléiades Glacier Observatory (PGO) is an initiative by the French Space Agency (CNES) and LEGOS to facilitate access to Pléiades satellite stereo-imagery and DEMs for glaciologists. The goal is to acquire Pléiades sub-meter imagery on 10-20 glacierized targets every season at the right time of the year (i.e. generally, the end of the melt season) to generate 2 to 4 m digital elevation models (DEMs) and 0.5 m ortho-images. Data are freely available (under specific conditions) to all science users. Six acquisition campaigns already took place during summers 2016, 2017 and 2018 in the North hemisphere; 2017, 2018 and 2019 in the South hemisphere. Repeat acquisitions are planned after five years to build a catalogue of geodetic mass balances based on Pleiades DEM differencing. We will show the distribution of the selected targets, example of imagery and some first applications. We will illustrate the quality of the elevation changes and mass balance products during 2012-2018 over the Mont Blanc area (2012-2018).