CryoSat Mission and data products status after 10 years of operation

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The ESA Earth Explorer CryoSat-2 was launched on 8 April 2010 and from an altitude of just over 700 km and reaching latitudes of 88 degrees, monitors precise changes in the thickness of terrestrial ice sheets and marine ice. The aim of the CryoSat-2 mission is to determine variations in the thickness of the Earth's marine ice cover and understand the extent to which the Antarctic and Greenland ice sheets are contributing global sea level rise. In its 10 years of operations, CryoSat has achieved its mission objectives and has provided high-quality data for a number of Earth science applications and opened up new research streams and triggered new scientific questions which have emerged from the previous phases. The purpose of this paper is to provide a general overview of the mission status and provide programmatic highlights in its new extended phase until 2021. It will also provide an overview of CryoSat data products covering both Ocean and Ice processing chains, presenting also the main evolutions and improvements that have implemented to the processors and anticipating evolutions for the future.