

Cryosat ESA data products: Quality and next steps

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CryoSat is the first SAR/SARin altimeter concept to be flown on Earth with the main objective to quantify how the thickness of the land ice and the floating sea-ice are changing. Beside its ice monitoring and climate objectives, CryoSat also appears to be a highly valuable source of observations for the oceanographic community and operational polar services. The CryoSat data are therefore operationally processed and analysed by ESA both over the ocean and ice surfaces with two independent processing chains following two different processing baselines. These data are routinely Quality-Controlled and thoroughly Validated (QCV) by ESA with the support of external scientific and technical teams. Based on the QCV results and feedback from the user community, the data products continuously evolve in order to accommodate a growing range of users and operational services both over the Sea ice, the Land Ice and the Ocean domains. The main objectives of this paper are to give an overview of the quality assessment of these data products; as well as to present the new and future processing algorithm upgrades to be implemented in the ESA operational processing chains.