



Currently, in the frame of the SCOOP ESA project, CLS is investigating new SAR/Doppler processing solutions that would provide potential improvement of the Cryosat-2 SAR altimetric measurements' precision over ocean. The proposed approach is an alternative methodology to the well-known antenna pattern compensation or stack beam weighting techniques. It consists in processing individual echo beams then averaging the estimates such that all Doppler beams may equally contribute to the noise reduction, with no beams weighting, and thus improve the SAR-mode performance.

This paper will present the principle of these methods, and their benefits and drawbacks will be discussed. The aim of this paper is also to determine whether the new processing schemes have a potential impact in operational use or not.