



New scientific applications for ocean, coastal, land and icea remote sensing with ENVISAT altimeter individual echoes and S-band data

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RAIES is an ESA-funded study for the scientific exploitation of ENVISAT RA2 Individual Echo and S-band data for ocean, coastal, land and ice remote sensing. This paper will introduce some of the the new scientific applications of RA2 data for the ocean and the coastal zone, including improved rain, wind and wave products using Ku and S-band data. It will also introduce new science applications that will be made possible with RA2 individual echoes or averaged waveforms for ocean, the coastal zone, land and ice remote sensing. The paper will summarise the achievements and scientific findings of the study to date, highlight existing difficulties and provide recommendations to facilitate the exploitation of RA2 data.