



Space-time variability of geophysical corrections from the COASTALT coastal altimetry product in the west Iberia region

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Satellite altimetry is a fundamental component of ocean remote sensing. Though initially devised for measuring the height of the sea surface in the open ocean, retracking of the radar data is being performed to extend its application to the coastal area. The use of satellite altimetry data in coastal regions is hindered by limitations in the geophysical corrections that need to be applied to the retracked range in order to retrieve relevant information on the sea surface height. This work addresses the space-time variability in the west Iberia region of the sea state bias (SSB), wet troposphere and ionosphere geophysical corrections from the 18Hz CGDR product resulting from the ESA-funded COASTALT project. The variability of the geophysical corrections as a function of the distance of the measurement point to the coast is characterised by means of an Empirical Orthogonal Function (EOF) analysis of collocated along-track values of the geophysical corrections.