



## **Structure and variation of the synoptic disturbances of ocean currents in the Drake Passage and Scotia Sea**

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Twenty two years ( 1993-2014 ) data of the satellite altimeter observations are used for the analysis of structure and variability of the ocean current synoptic disturbances ( meanders and eddies ) in the Drake Passage and Scotia Sea. Wavelet analysis, with the damped in time sinusoid as the wavelet function, of the time series of ocean surface absolute dynamics topography ( OSADT ) at a set of points in studied ocean area has revealed a high degree of the statistical nonstationarity of these series appearing as relatively short ( few years ) intervals of intensive fluctuations of OSADT with the typical period of 150-400 days separated by long intervals of weak fluctuations. Analysis of the synoptic OSADT maps has showed that the intervals of the strong ocean current fluctuations at a point are conditioned by the alternation of processes of cyclonic and anticyclonic eddy-meanders formation by the jets of Antarctic Circumpolar Current, strengthening of the eddies, their following attenuation and final eddy confluence with the mother jets. Besides of the statistical nonstationarity, a considerable spatial variability of the statistical characteristics of the ocean current synoptic disturbances has been revealed for the scales of 150-200 km. This result allows to suppose, that the above mentioned statistical nonstationarity of the ocean current synoptic disturbances is connected not with the climatic atmosphere variabilities which should have large spatial scales but rather with the internal properties of the ocean geostrophic turbulence field.