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The diurnal dynamics of surface wave anomalies in a shelf area

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The variability of the surface wave anomaly characteristics in a shelf area depending on time of day and hydrometeorological conditions was investigated in field experiments in June, - July 2006 in region of city Gelendzhik (Black sea). The experiments were carried out in the interests of development of a bottom topography remote (radar and optical) diagnostics. The measurements were realized from the research vessel "Aquanaut" by means Doppler radars, optical spectrum analyzers of wind waves and aerophysical devices. The radar panoramas of a marine surface were registered simultaneously from a coast by X-band radar. The measurements were accompanied by recording of marine surface characteristics in the given region from the satellite. The change of location of surface wave intensification and weakening areas in a shelf region depending on time of day is detected on marine surface radar panoramas. The intensification of an energy exchange and increase of atmospheric turbulence was observed in a depth “dumping” region.

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