STUDY OF THE POSSIBILITIES OF PROCESSING RADAR AND MULTI-ZONE SPACE IMAGES OF THE UNDERLYING SURFACE

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The article is devoted to a detailed analysis of various methods of remote sensing of the Earth, which are used to detect and map oil spills. The purpose of the article is to test various functions that will allow find the optimal combination of classification based on a semi-automatic approach. The article propose and confirm the hypothesis that synthetic aperture radar images by themselves do not contain enough information, but using longer time series this problem can be solved. Thus, the studies carried out made it possible to extract the spatial extent of oil development sites and oil pollution in the shelf waters using multi-temporal data from synthetic aperture radar and a multispectral merged image with a spatial resolution of 10 m. Time series of radar images of the same territory can process many identifiable objects of the water surface and recognize oil spill zones at early stages.

Keywords: Sentinel-1A, Sentinel-2A, radar images, multi-zone satellite images, oil pollution monitoring

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