

RESEARCH OF THE POSSIBILITY OF DETECTING THE NEGATIVE IMPACT OF OIL SPILLS ON THE SURROUNDING VEGETATION BASED ON REMOTE SENSING DATA

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The article presents the results of research analyzing the possibilities of images from PlanetScope satellites for monitoring areas contaminated with oil spills. The results of experiments on oil spill detection based on visual analysis of synthesized images are presented. The values of the indexes (NDVI) in the polluted area were analyzed. The suppression of the vegetation state in the zone exposed to the influence of oil products was detected. The data obtained as a result of the experiments are confirmed by comparison with the processing of Sentinel-2 images and the results of automated recognition of images. Further research on the development of methods for determining the types of oil pollution based on an integrated approach used on the space images of various spatial resolution are offered.

Keywords: results of oil spills, remote sensing data, vegetation, environmental damage, PlanetScope, Sentinel-2, index images

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