

## An algorithm for processing ice areas by Earth remote sensing data (by the example of MASIE-NH data)

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**Abstract.** An algorithm was developed to automate processing of large datasets of Earth remote sensing. The algorithm was developed and implemented in the form of an M-Processor program in the Python programming language using the modules of the ArcGIS Desktop 10.2 software, which allows complex calculations without spending additional time on programming and reduces the number of manipulations for calculating separate desired characteristics. The implementation of the developed algorithm is considered on the example of calculating the numerical characteristics of the ice area in the Sea of Okhotsk according to the data of the Multisensor Analyzed Sea Ice Extent – Northern Hemisphere (MASIE-NH) with a spatial resolution of 1 and 4 km and an ice-cover zoning mask.

*Keywords:*

**sea ice, Earth remote sensing, geographic information systems, software, Multisensor Analyzed Sea Ice Extent – Northern Hemisphere**

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