Elaboration of procedure for ocean water main primary features concentrations retrieval from ocean color remote sensing data.

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Methods of empirical determination of chlorophyll-a and CDOM concentrations from hyperspectral ocean color data in case of various ratios between concentrations of a chlorophyll-a and CDOM are considered. The study was carried out on water areas of the Japan Sea, East China Sea, Okhotsk Sea, Barents Sea, Chukchi Sea in waters of various optical types during 2009-2013. Basing on a collected array of field data, the research group devised the technique for tuning of regional empirical algorithms for chlorophyll-a and CDOM concentrations retrieval, taking into account the distinction of their contributions into ocean color. Most suitable spectral channels for modern ocean color satellite scanners also were defined. At the same time, concentrations of a chlorophyll-a and CDOM were retrieved using of model for remote sensing reflectance. Then comparison of efficiency for both approaches was carried out.