

# SATELLITE MICROWAVE SOUNDING OF KAMCHATKA AND THE SURROUNDING SEAS

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Acquisition of quantitative data on the surface and atmosphere regardless the clouds and light conditions along with improved equipment characteristics shows the high priority of satellite radar-locating and microwave radiometric methods for investigation of Kamchatka and the adjacent waters. Data on hazardous phenomenon in the atmosphere, zones of strong winds, ice covers, and such oceanic phenomenon as currents, fronts, and vortex formations, are crucial for investigations. The paper describes the results from quantitative processing and interpretation of estimations obtained using microwave radiometre AMSR2 from GCOM-W1 as well as satellite scatterometers with synthetic aperture ASAR from Evisat. The paper emphasizes high importance of data from next-generation satellites Suomi NPP, Global Precipitation Measurement, Sentinel-1A. This data may be used for both scientific investigation and fieldworks.

*Keywords: microwave sounding, AMSR2, extratropical cyclone, ASAR, sea ice.*