

**PROSPECTS OF APPLICATION OF L-BAND MICROWAVE RADIOMETERS  
WITH ACQUISITION OF FULL-COMPONENT STOKES VECTOR OF  
EMISSION FROM OCEAN SURFACE FOR MONITORING OF EMERGENCY  
SITUATIONS IN THE OCEAN-ATMOSPHERE SYSTEM**

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**ABSTRACT:**

The potentialities of application of microwave radiometry data with acquisition of full-component Stokes vector for description of temperature and salinity of ocean surface layer for the purposes of early prognosis of tropical hurricanes birth will be discussed. The sensitivity of Stokes vector parameters measured with microwave radiometers to variations of temperature, salinity and wind waves parameters in the ocean will be described. Interferometric principle of signal forming in radiometer for full-component Stokes vector acquisition is proposed. This principle will allow creating more interference-immune radiometer. The functional scheme of radiometer will be described in the report. The analysis of possible indicators for hurricane birth is performed and will be presented in the report.

References:

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