

**VHF emission from lightning discharges recorded by “Chibis-M” microsatellite**  
Intended for the “Energetic Radiation from Thunderstorms and Lightning”

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The “Chibis-M” microsatellite was launched into an orbit on January 25, 2012. The main goal of the mission is to study lightning activity via the recording of electromagnetic signals in different parts of the spectrum. The microsatellite carries a radio-frequency analyzer, UV and IR detectors, a fast optical camera, and a plasma spectrum analyzer. In this paper, we will present VHF data acquired during the first 17 months of satellite operation. This data set includes 280 events. Among other things, we observed VHF (26-48 MHz) emissions with unusually long durations (about 150  $\mu$ s), which apparently have never been reported before.

We will present classification of events and their characteristics. Also, geographical occurrence of VHF emissions and its correlation with optical emissions will be examined. Most of the events were observed over the west coast of Africa, over Maritime Southeast Asia, and near the Central America.