

BER Analysis of DVB-S2 Waveform Under Partial Band Jamming

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Abstract

Due to the continual need for commercial based satellite applications, the use of DVB-S2 systems see continual use. This growth has led to the prospect of adversarial jamming attacks on these communication systems. The purpose of this paper is to analyze the effect of the bit error rate (BER) of DVB-S2 waveforms under partial band jamming (PBNJ) attacks. Also, this paper presents machine learning (ML) based adaptive coding modulation (ACM) schemes to further improve system BER. The results will be simulated in MATLAB to determine their efficacy.

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