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**Investigation of radio signals from Sun and Jupiter using radio JOVE antenna.** RAJEEB SHARMA, SUYOGYA KARKI, NICHOLAS LEMOINE, SANICHIRO YOSHIDA, Southeastern Louisiana University — A Radio JOVE Antenna has been setup to monitor the radio signals received from the Sun and Jupiter. The setup uses a dual-dipole, phased arrangement of the antenna and has been configured to operate at a frequency of 20.1 MHz. The antenna is connected to the receiver with 133.68 ft ( $3.5 \lambda$  of the radio signal) of RG-6 coaxial cable resulting in 1.12 dB attenuation of the signal received. The incoming radio waves generate a voltage in the antenna which is configured as change in temperature from the cosmic background temperature. This change in temperature is recorded and archived using the Radio-Skypipe software in Coordinated Universal Time (UTC). Data collected by the software is converted into frequency domain using Fourier transform functions and analyzed using MATLAB. Analyzing the peaks observed in frequency domain makes it easier to separate the required signals from other background interferences. Although no major signals from the Sun or Jupiter have been observed, various natural and man-made interferences have been successfully identified and recorded.

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