

## Search for lunar radio emission caused by meteoroid impacts at 325MHz: Radio observation during the Perseids in Aug. 2004.

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Previously search for lunar radio emission caused by meteoroid impacts was conducted at wavelengths of 8 mm - 21 cm. During such observations, for example, quasi-periodic oscillations of received lunar signal were detected with typical periods equal to several minutes. However, these results can be explained by instrumental errors as instability of the receiver, and theoretical predictions suggest radio observations of the moon at longer wavelengths based on the dependence of intensity of impact-produced radio emission in silicates on frequency. For these reasons, observations of lunar radio emission were carried out at Iitate Planetary Radio Telescope (IPRT) of Tohoku University with the frequency of 325 MHz during the Perseids in Aug. 12-14, 2004. In Aug. 13, it was found that the antenna temperature of the moon increased by 3K which was greater than the uncertainty of the temperature estimated to be about 1.5K in the worst case. Further observation of the moon is planned to reveal detailed characteristics of the variation of the lunar radio emission caused by meteoroid impacts.