Theoretical study on lunar ionosphere exploration using low frequency wave reflection

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The evidence of lunar ionosphere provided by the Russian spacecraft Luna-19,22 has been controversial for these three decades. The SELENE Project gives opportunity to investigate the lunar ionosphere using radio occultation technique. We attempted to find the evidence by another approach using characteristic of low frequency wave reflection. We performed an electromagnetic Fullwave simulation at the lunar surface. With the simulation, we derived the relations between interference pattern in dynamic spectrum of observed waves, reflection altitude and incident angle of the wave.