

## Source estimation of Electrostatic Solitary Waves (ESWs) observed by Kaguya near the Moon

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In KAGUYA (SELENE) LRS[1], WFC-L [2] observes waveforms of plasma waves in 100Hz-100kHz and a lot of electrostatic solitary waves (ESWs) have been observed. Some results have been reported [3].

An ESW potential generally has a two-dimensional structure. They have not only a parallel component to the background magnetic field, but also a perpendicular component. Then received ESW fields are distorted from well-known bipolar fields based on the one-dimensional potential. In order to evaluate the effects of the perpendicular components, the received ESW waveforms are fitted to ideal ESW waveforms based on the two-dimensional structures. We examined where ESWs are received near the moon. The source positions of the ESWs will be discussed based on the two-dimensional structures and the background magnetic field directions and magnetic anomalies.

### References

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