



Properties of the Lunar Noise and its Correlations

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Seismic interferometry has a strong impact on seismology. Many efforts are made to understand and characterize the terrestrial seismic noise and to improve the retrieval of Green's functions. In this context it is interesting to analyze the lunar seismic noise that originates in a completely different, but in a way more simple environment. Our investigations show how different deviations of the character of the lunar noise from the ideal situation result in different noise correlation functions that resemble the Green's functions to a variable degree.

Nevertheless it is possible to obtain information about the shallow velocity structure of the lunar subsurface and to observe a dynamic process using the ambient noise recorded on the Moon.