

Evaluation of geophysical structure of the moon and the influence of moonquake on the structure on the moon.

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By removing specific character of seismometers from the records of moonquake's observations in Apollo Program, displacement-time relation has been obtained. The amplitude of the moonquake is found to be very small. But shallow moonquakes and meteoroid impacts happen to scale M2-4.

For an earthquake or a moonquake of the same scale, displacements of the structure on the earth and that on the moon are found to be of the same order. However, it is shown that displacements are different when attenuation is considered.

Further study is needed for the more detailed prediction of the behavior of structure on the moon during moonquakes.

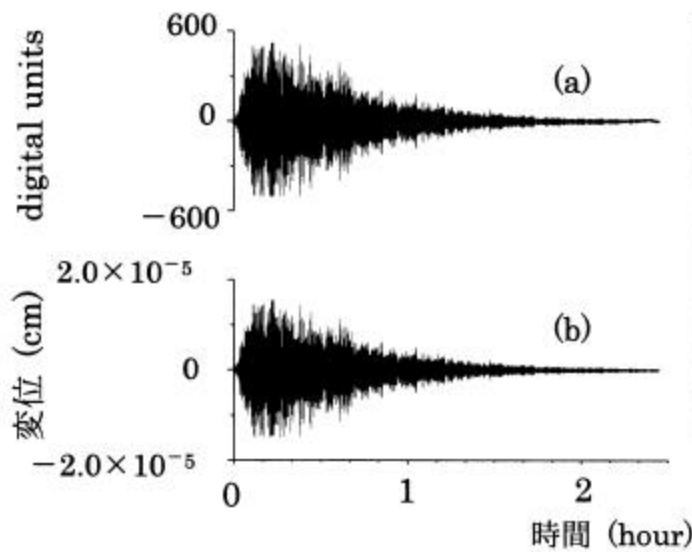


図1 月震の観測記録と変位波形

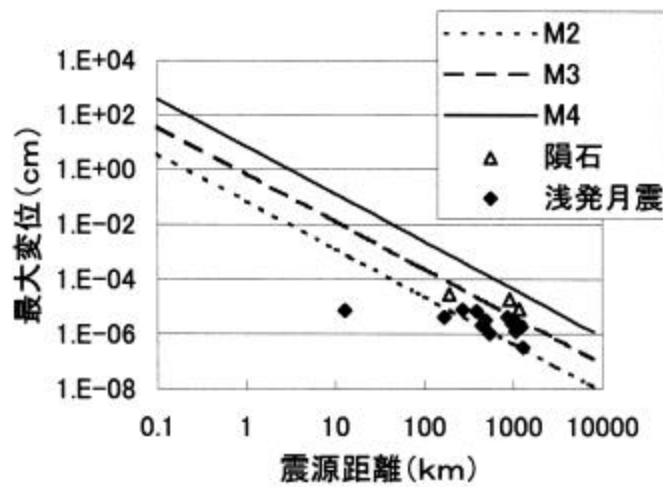


図2 震源距離と最大変位の関係

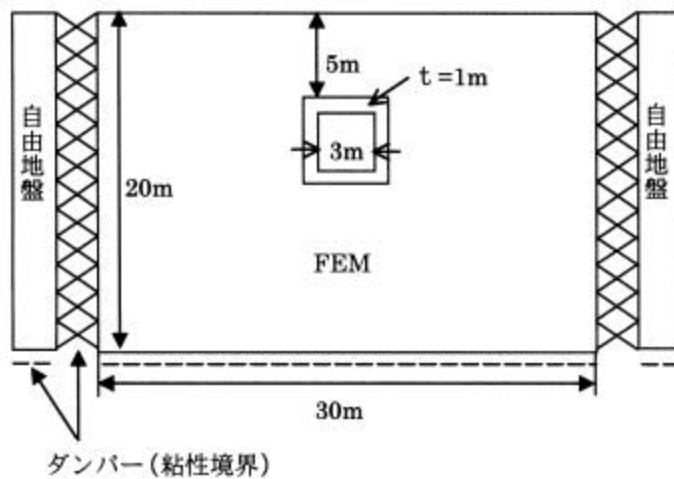


図3 解析モデル

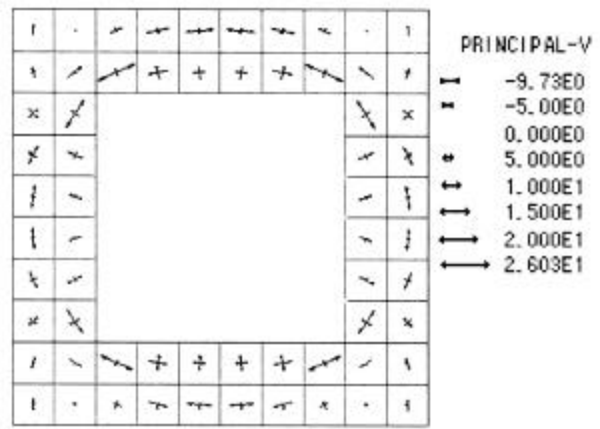


図4 月 (G/6)

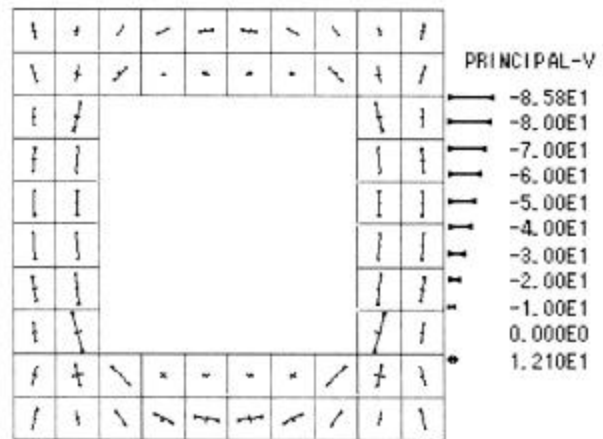


図5 地球 (1G)

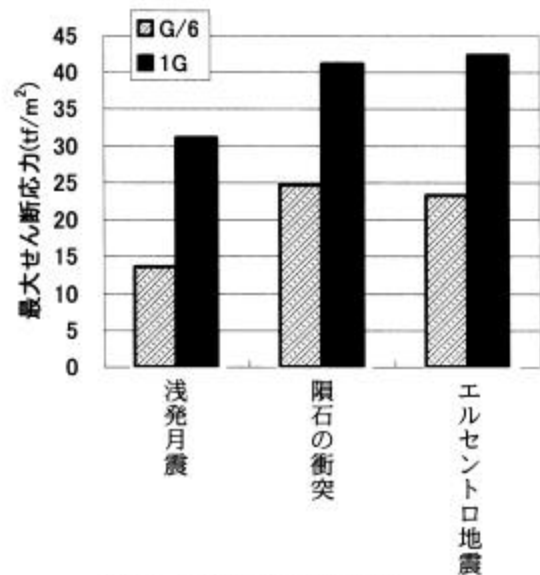


図6 最大せん断応力