

SUMMARY

The understanding of rock mass has great benefits in engineering and geology. This understanding can benefit in the field of colonizing and terraforming other planetary bodies. To achieve this task, we can begin by using current methods to see if we can evaluate rock mass and if these can be inferred to understanding rock mass on other planetary bodies.

Therefore, this bachelor's thesis is sought to examine if the use of compositional and volume information in order to figure out the mass of a rock pebbles on planetary bodies. For this purpose, 3D computing Photogrammetry method and X-ray Fluorescence methods were used to derive the necessary physical quantities for the mass computing.

Five rocks where used in this study. Data was collected and analyzed using the two methods, software program and instruments. The results showed use of the two methods were accurate and efficient. Compare to the classic methods, these two methods proved as efficient and accurate.