

## Influence of Imaging Condition on Matching Point Detection

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A lunar explorer SELENE will be launched in the summer of 2007. The SELENE will provide huge amounts of data, which is difficult to manage by a traditional style of analysis. Accordingly, it becomes necessary that the data should be processed automatically and quickly by utilization of computer.

Because raw image data from cameras on SELENE are narrow strips, they have to be mosaicked to make a regional coverage or a global coverage. Therefore, it is important to find a corresponding point in two images. This research investigate influence of imaging condition on detection of corresponding point. Imaging condition including the solar elevation angle, the solar azimuth angle, and the image azimuth angle, however, changes with time.

In this research , the algorithm which is named Sequential Similarity Detection Algorithm (SSDA) was utilized, SSDA is famous and simple method for detection of corresponding point. Because SSDA has an advantage in calculation time, it is effective for a processing large quantity of data. A result of SSDA shows its applicability to various imaging condition.