

## Preliminary Analysis Result for the Integrated Lineament Map in South Korea

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The geological lineament reflects the characteristics of various geological parameters and scale etc. In order to obtain more reliable analysis results, it is necessary to integrate the results from several experts' opinions. In this study, we used previous lineament data in the Korean Peninsula from the Korea Institute of Geoscience and Mineral Resources (KIGAM) and obtained new lineament data from the field geologists such as structural geologist, paleoseismologist, and geomorphologist. To ensure the reliability of the newly lineament analysis data, we used high-resolution satellite images and hill-shade relief maps which were constructed by a digital elevation model from the National Geographic Information Institute of Korea (NGII). In the prevailing direction analysis from the acquired lineament data, the NNE-SSW direction was the most dominant, but the ENE-WSE and NNW-SSE directions also showed highly frequency depending on the experts. Different lineament analysis results based on the same data are interpreted as a result of subjective experience and analytical criteria from each expert. Therefore, it is necessary to establish integrated criteria and consider various geographical data for the publication of reliable nation-wide lineament map.

Keywords: geological lineament, integrated map, density map

