

**Z234-001**

**Room: 101A**

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## Development top soil grain size index for monitoring soil degradation of arid land

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Grain size distribution of topsoil is an indicator to soil properties and structure, and can be potentially used to monitor land desertification using remote sensing. This study proposed an index to detecting topsoil grain size through ground in-situ soil spectral measurement and soil physical analysis. The new soil grain size index (GSI) was applied to detect the desertification in Siziwang area of Inner Mongolia, China, by using a Landsat/TM image (1993) and a Landsat/ETM+ image (2000).