

Summary of the Final Report of Research Results

1) Title of the proposed research

Monitoring land surface status using thermal infrared emissivity and visible to near-infrared reflectance

2) Principal Investigator (PI) and Co-Investigators (Co-Is)

PI:

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3) PI's affiliation

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4) Summary of the Final Report of Research Results

We acquired several GOSAT data products of October 9 from GUIG (GOSAT USER INTERFACE GATEWAY). We used GOSAT level 1B data products acquired over North Africa area for preliminary analysis to extract surface emissivity from the data and its application. As a result, significant differences in the spectral patterns were observed between desert and other land cover types. This differences indicated that the difference in surface emissivity.

We also used some AQUA/AIRS data products. The emissivity spectra stored in the level 2 support products showed good agreement with the shape of laboratory-measured quartz spectra.

For further work, it will be interesting to compare surface TIR emissivity from GOSAT data and one from MODIS or other TIR sensor after the more level 2 GOSAT FTS TIR products becomes available to users.

5) List of publications relating to the proposed research

N/A