Abstract

This study is to classify satellite data based on supervised fuzzy classification technique. Attempts to classify remote sensed data with traditional statistical classification technique faced number of challenges as the traditional per-pixel classifier examine only the spectral variance ignoring the spatial distribution of the pixels, corresponding to the land cover classes and correlation between bands causes problems in classifying the data and its result. Hence in this work, we use fuzzy classification. this makes no assumption about stastical distribution of the data & it provides more complete information for a thorough image analysis. The results show that fuzzy supervised technique algorithm showed an improvement of more than 5% of accuracy at 12 classes on comparison with MLC.

References

- Akif Mohammed Al Fugra, Biswajeet Pradhan, Thamer Ahmed Mohammed, Improvement of land-use classification using object oriented and fuzzy logic approach, Appl Geomat, November 2009, pp 111-120.
Index Terms

Computer Science
Image Processing

Keywords

Fuzzy Supervised Classification   Mlc   Remote Sensing