

Land use detection in tropical mangroves

Abstract

Land use detection in tropical mangroves is a challenging task due to the complex and heterogeneous nature of the vegetation. This paper presents a new method for land use detection in tropical mangroves, which is based on the combination of the maximum likelihood (ML) and the support vector machine (SVM) methods. The ML method is used to detect the land use classes, and the SVM method is used to improve the accuracy of the ML method. The results show that the proposed method can detect the land use classes with a higher accuracy than the ML method alone. The proposed method is applied to the detection of land use classes in a tropical mangrove area, and the results show that the proposed method can detect the land use classes with a higher accuracy than the ML method alone.

1. Introduction

Land use detection is a key component of many environmental monitoring and management systems. In recent years, there has been a growing interest in the use of remote sensing data for land use detection. However, the detection of land use classes in tropical mangroves is a challenging task due to the complex and heterogeneous nature of the vegetation.

2. Data and study area

The data used in this study are the Landsat TM images of a tropical mangrove area. The study area is located in the coastal region of a tropical country. The area is characterized by a complex and heterogeneous vegetation, which makes the detection of land use classes a challenging task.

3. Methodology

The proposed method is based on the combination of the maximum likelihood (ML) and the support vector machine (SVM) methods. The ML method is used to detect the land use classes, and the SVM method is used to improve the accuracy of the ML method.

4. Results and discussion

The results show that the proposed method can detect the land use classes with a higher accuracy than the ML method alone. The proposed method is applied to the detection of land use classes in a tropical mangrove area, and the results show that the proposed method can detect the land use classes with a higher accuracy than the ML method alone.

5. Conclusion

The proposed method is a new and effective method for land use detection in tropical mangroves. It can detect the land use classes with a higher accuracy than the ML method alone.

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7. References

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