

Lab 14 实验报告

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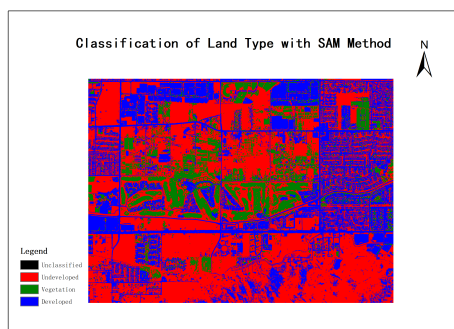
2024 年 12 月 16 日

目录

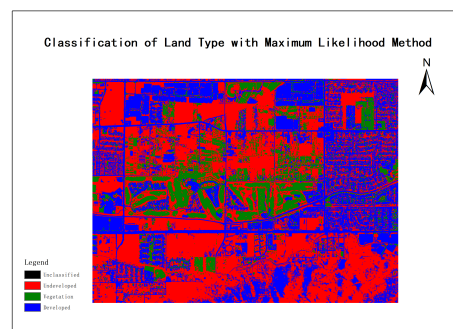
1	Lab 14.1 不同方法的土地利用类型分类图比较	2
2	Lab14.2 地质矿产的高光谱分析	3
2.1	Exercise 1 View Library Data	3
2.2	Exercise 2 Extract Mean Spectra from ROIs	3
2.3	Exercise 5 View Rule Images	4
2.4	Exercise 6 Spectral Feature Fitting	4

1 Lab 14.1 不同方法的土地利用类型分类图比较

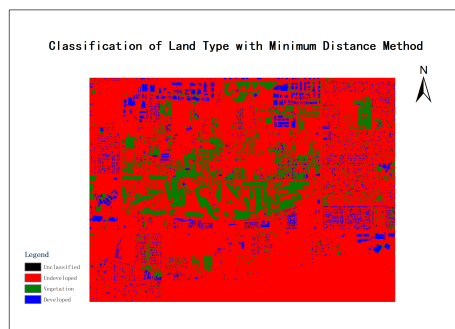
用四种不同方法对遥感图像进行土地利用类型分类，结果如下：



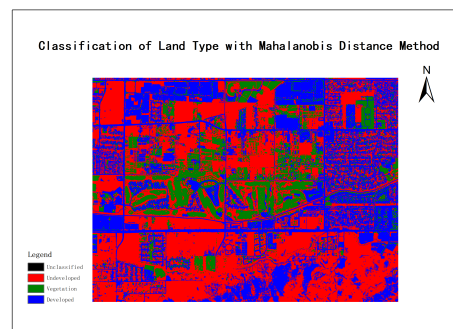
(a) Classification of Land Type with SAM Method



(b) Classification of Land Type with Maximum Likelihood Method



(c) Classification of Land Type with Minimum Distance Method



(d) Classification of Land Type with Mahalanobis Distance Method

图 1: Classification Results of the RS Image

2 Lab14.2 地质矿产的高光谱分析

2.1 Exercise 1 View Library Data

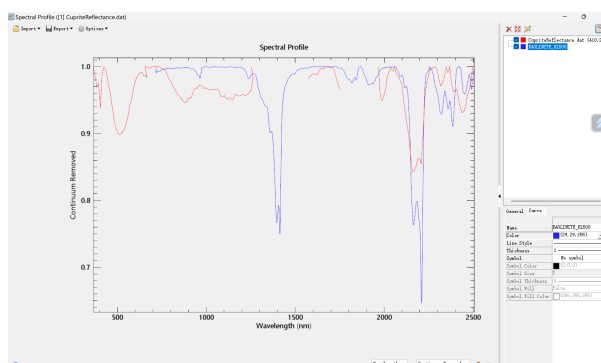


图 2: Spectral Profile Comparison of RS Image and Spectral Library Data

2.2 Exercise 2 Extract Mean Spectra from ROIs

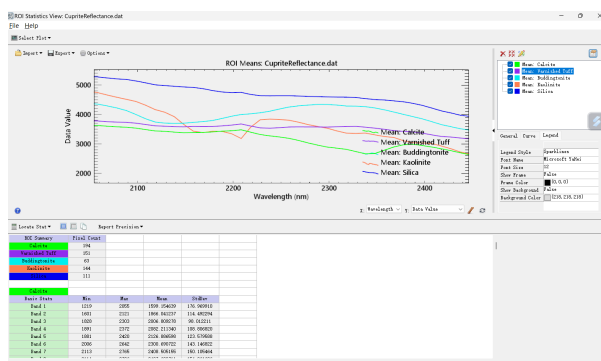
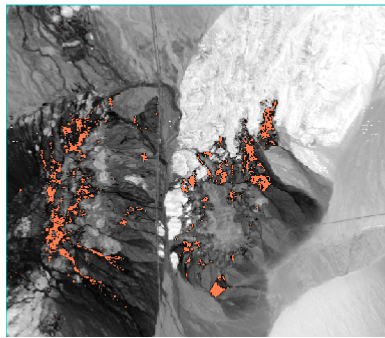
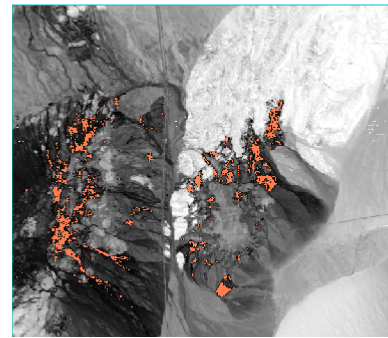


图 3: Mean Spectral Statistics of the Five Minerals

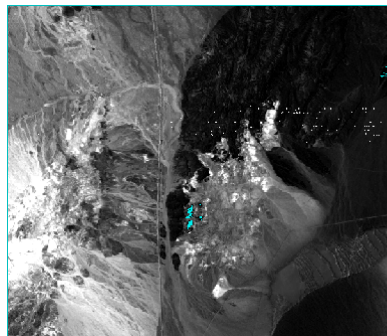
2.3 Exercise 5 View Rule Images



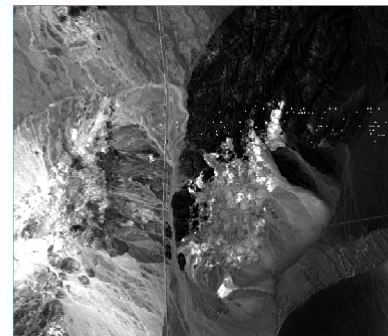
(a) Classification Results of Kaolinite



(b) Rule Image of Kaolinite



(c) Classification Results of Buddingtonite



(d) Rule Image of Buddingtonite

图 4: Comparison of Classification Results against the Rule Image

2.4 Exercise 6 Spectral Feature Fitting

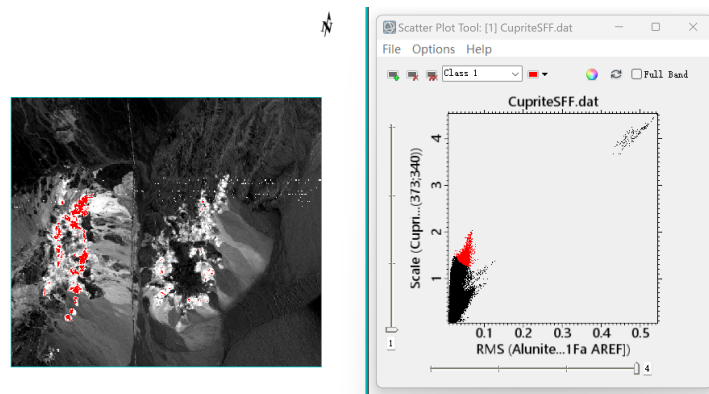


图 5: Highlighted Good Spectral Fit for Alunite Absorption Feature