技术应用

基于CBERS-02遥感影像的湿地地表覆被分类研究

于欢1,2，张树清1，崔利3，那晓东1,2

1. 中国科学院东北地理与农业生态研究所，长春 130012； 2. 中国科学院研究生院，北京 100049；3. 长春工程学院勘测学院，长春 130021

摘要：

基于CBERS遥感影像多光谱数据，运用信息量、相关系数及OIF方法，分析了波段数据特征，获得了对影像数据的整体认识。

通过绘制地表覆被类型的样本均值光谱曲线，分析了多种地表覆被类型在5个影像波段中的光谱特征，得出了不同覆被类型在各波

段中的反射特性。基于典型地表覆被类型样本数据，分别针对影像的5个波段及第一主成分、归一化植被指数这两个重要特征，运

用盒须图进一步分析了不同地表覆被类型的分异特性。运用Z-test统计方法，筛选出了区分不同地表覆被类型的最优纹理特征。运

用面向对象分类技术开展了研究区覆被类型分类实验，验证了基于CBERS遥感影像进行内陆淡水湿地区地表覆被分类的可行性，丰

富了地表覆被信息提取方法，拓展了CBERS遥感影像的应用领域。

关键词： CBERS； 湿地； 地表覆被； 分类； 面向对象

WETLAND COVER CLASSIFICATION BASED ON CBERS REMOTE SENSING IMAGE

YU Huan1,2，ZHANG Shu-Qing1，CUI Li3，NA Xiao-Dong1,2

1. Northeast Institute of Geography and Agricultural Ecology, Chinese Academy of Sciences, Changchun 130012, China; 2. Graduate School, Chinese Academy of Sciences, Beijing 100049, China; 3. Institute of Prospecting and Surveying, Changchun Institute of Technology, Changchun 130021, China

Abstract:

Based on multi-spectral remote sensing image data of CBERS and using information quantity, correlation

matrix and OIF method, the authors analyzed image band characteristics and obtained the overall cognition of image

data. Through drawing spectral curves of land cover sample average values, this paper deals with land cover

spectral characteristics in five bands and describes land cover reflection characteristics of each band. Based on

typical land cover sample data, the authors drew the box plots for five bands and two means of PC1 and NDVI and

further analyzed land cover characteristics. Using the Z-test method, this paper got the optimal texture measures

for the discrimination of different land covers. Using the object-oriented classification technique, the authors

carried out classification experiments, and the results obtained have verified the effectiveness of applying CBERS

remote sensing imagery to wetland cover classification, enriched methods for inland wetland cover extraction, and

expanded the application field of CBERS remote sensing image.

通讯作者: 于欢（1981-），男，博士研究生，主要研究方向为基于遥感与地理信息系统的湿地信息提取研究。

作者简介:
作者Email:

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