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Analysis of Forest Resource Change in Mao'er Mountain Forest Farm Based on GIS

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Key words: forest resource change; digital elevation model (DEM); overlay analysis ;GIS

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Introduction

With the development of social economy and population increased, more and more forest resource can be developed, which makes forest resource decrease in quantity and quality. How to carry out forest resource sustainable management becomes the common target of all the mankind, in fact, forest resource sustainable management can explain the coordinate relationship between mankind and forest ecosystem [1], which becomes an important element of the social sustainable development. It is very important for us to obtain the present situation and dynamic information of forest resource to make a plan to protect and manage forest resources in time. At the same time, the dynamic monitoring becomes an important basis to make a forest policy[2]. because of lacking the lasted technology. In the past, it was investigated mainly by manpower with such a long cycle that when a large scope investigation ended, the forest resources had already changed greatly during the period, the results we had made in the past can't reflect the spatial information of the dynamic forest resource. When the technology of Remote Sensing (RS) and Geographical Information System (GIS) is arrived, the situation has changed, people can use the new technology to realize and deal with problem of the forest resource, the methods that how to study the forest resources have changed from static characteristic to dynamic characteristic. The technology of RS and GIS has been used widely in those fields, such as forest survey and monitoring. The change of forest resource in

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