Oklahoma Map of Forest Cover at 30-m Spatial Resolution in 2010

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Forest and their changes are important to carbon cycle, biodiversity and ecosystem services. Great uncertainties about forest cover in sparsely forested regions calls for an accurate forest cover map. In this study, we developed a decision tree method to map forest distribution at the spatial resolution of 30-m in Oklahoma in 2010, using ALOS PASLAR orthorectified mosaic images and time series Landsat TM/ETM+ images. Our result shows that the total forest area is about 39,518 km2 in Oklahoma, about 22% of entire state, which is quite close to the forest area from Oklahoma Forest Resource Assessment 2010 (40,468 km2). This study could help to reduce the uncertainties about forest cover and facilitate the policy makers to modify forest management.