

An effective object-based settlement area extraction method and its application on monitoring urbanization trends in China

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Since the early 1980s, the unprecedented economic development and population growth have led to dramatic changes in China's landscape. China is in transition from a largely rural society to a predominantly urban one. Urbanization and the impact of human settlements are two of the main causes of global environmental change. Therefore, monitoring the spatial-temporal patterns of urban sprawl and their impact on the environment is of critical importance for urban planning and sustainable development in China. In this presentation, we firstly introduce an effective object-based settlement area extraction method. We have made some efforts in improving the segmentation speed and improving the accuracy of settlement area extraction results. Then we use this method to monitor the urbanization trends in Jing-Jin-Ji, Yangtze River Delta and Pearl River Delta and analyze the trends. We'll give detailed findings in the presentation.

我国典型区域的城市化遥感监测

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上世纪八十年代以来，由于经济的快速发展和人口的增长，中国社会正从一个农业为主向城市为主的社会转变，这种转变导致了地表剧烈变化。城市化和城市化的影响是全球环境变化的两个主要因素。因此，监测城市扩张的时空分布，以及它们对环境带来的影响，对中国的城市规划和可持续发展有着重要意义。在本次报告中，我们首先介绍了一种高效的基于对象的居民地提取方法。我们在改进分割效率、提高居民地自动制图精度方面做了一些有效的尝试。接着，我们把该方法应用到监测中国的京-津-冀、长江三角洲和珠江三角洲的城市化进程，并分析了这三个区域的城市化趋势。我们将在报告中详细介绍我们的研究进展。