Monitoring the land cover changes in Nakdong River Basins using the multi-temporal remote sensing datasets is necessary for preserving properties in the river basins and monitoring the environmental changes in the river basins after the 4 major river restoration project. This research aims to monitor the land cover changes using the multi-temporal Landsat imageries and the airborne topographic LiDAR data. Firstly, the river basin boundaries are determined by using the LiDAR data, and the multiple river basin imageries are generated from the multi-temporal Landsat imageries by using the river basin boundaries. Next, the classification method is employed to identify the multiple land covers in the generated river basin imageries. Finally, monitoring the land cover changes is implemented by comparing the differences of the same clusters in the multi-temporal river basin imageries.

Key words: Nakdong River Basins, Land Cover Changes, Landsat Imageries, LiDAR