

## **Application and Evaluation of Remotely Sensed Data in Semi-Distributed Hydrological Model**

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Hydrological models are tools intended to realistically represent the basin's complex system in which hydrological characteristics result from a number of physical, vegetative, climatic, and anthropomorphic factors. Spatially distributed hydrological models were first developed in the 1960s, Remote sensing(RS) data and Geographical Information System(GIS) play a rapidly increasing role in the field of hydrology and water resources development. Although very few remotely sensed data can applied in hydrology, such information is of great. One of the greatest advantage of using RS data for hydrological modeling and monitoring is its ability to generate information in spatial and temporal domain, which is very crucial for successful model analysis, prediction and validation. In this paper, SLURP model is selected as semi-distributed hydrological model and MODIS Leaf Area Index(LAI), Normalized Difference Vegetation Index(NDVI) as Remote sensing input data to hydrological modeling of Kyung An-chen basin. The outlet of the Kyung An stage site was simulated, We evaluated ttwo RS data, based on ability of SLURP model to simulate daily streamflows, and How the two RS data influence the sensitivity of simulated Evapotranspiration.