

7.1.1

Grid Analysis for Hydrologic Modeling

Presenter

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Hydrologic engineers seek to answer the question, "Where does water go when it rains?" Determining the precipitation runoff and routing processes has become increasingly important as our population continues to grow and our urban areas expand. The answer helps to establish such things as water availability, drainage paths in urban environments, the impact of future urbanization, and ways to reduce flood damage. The U.S. Army Corps of Engineers' Hydrologic Engineering Center (HEC) has developed a software program called Hydrologic Modeling System (HEC-HMS) to help hydrologists model the response a basin has to precipitation and the associated runoff.

This presentation provides an introduction to GeoSpatial HMS, which creates the input data and parameters required by HEC-HMS. GeoSpatial HMS relies on grid analysis to create watersheds and stream networks, and this talk also gives a technical overview of grid analysis workflows and uses for GIS professionals.