

Tools to Realize Spatiotemporal Analysis in the Humanities

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Abstract

There are few tools available today to visually analyze temporal information such as that included in geographic information systems (GIS), though the term “spatiotemporal” is often used in geographic information science. HuTime, developed by the H-GIS Research Group in Japan, is a tool that allows temporal information to be visually analyzed, and displays characteristic data as a chronological table and numerical data as a chart along the same temporal axis. There are also functions available to merge two chronological tables and to create new chronological tables of events based on selected criteria.

Various types of spatiotemporal analyses are possible using HuTime in conjunction with HuMap, also developed by the H-GIS Research Group. The development of these spatiotemporal tools makes it possible to use information which has not been available for traditional spatial analysis. For the next stage of development, data for basic chronological table and a dictionary of common names for specific events must be accumulated.

Keywords: GIS, chronological table, HuTime, HuMap, calendar, visualization