

The Cyber Infrastructure For GeoHumanities : Taking CCTS API and Web Services as An Example

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Chinese Civilization in Time and Space (CCTS) developed by Center for GIS, RCHSS, Academia Sinica is one historical GIS platform with a large number of Chinese historical gazetteer. The data structure of CCTS based in numerical longitudes and latitudes incorporated in the polygons for administrative boundary and points for settlement point in different Chinese dynasties. Historical GIS like CCTS can be regarded as spatio-temporal information framework which can be applied to convert unstructured historical literature into numerical coordinate or link space-time relationship between different textual materials. On this basis, the research methods of digital humanities involve using spatio-temporal tools for visualization and analysis can become a new research domain so-called GeoHumanities or Spatial Humanities.

The application programming interface (API) based CCTS database is for web services of applications and mashup of different dataset. The value of the API is linking heterogeneous database without duplicate data collection and system developing. A Ming-Weiso event analytics tool is one web-based application case with named entity markup and spatio-temporal information linking using CCTS API. The success of Spatial Humanities needs to increase public accessibility of cyber infrastructure and continue to accumulate spatial Big Data. This presentation will share the experience of the above architectural development and future prospects.

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