

Temporal Based Information System (T²Map - Time & Theme Map)

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Importance of temporal data

Temporal data is important to analyze relationships between information

- Events occurred simultaneously
- Events occurred periodically

We can use various types of information with temporal data

- Historical calendars, Diaries
- Information about art works, folk materials
- Statistics of population, Indices of economics
- Data about environmental monitoring
- Records about disasters (earthquakes, floods, tsunamis)



Example study based on temporal data (a case of RIHN's study)



stable isotope



climate

pollen analysis



vegetation

fossils remains



ecosystem

Interaction between Human and Nature

population
economics



statistics

politics



documents

customs



hearings

habits

documents
statistics
hearings
questionnaires



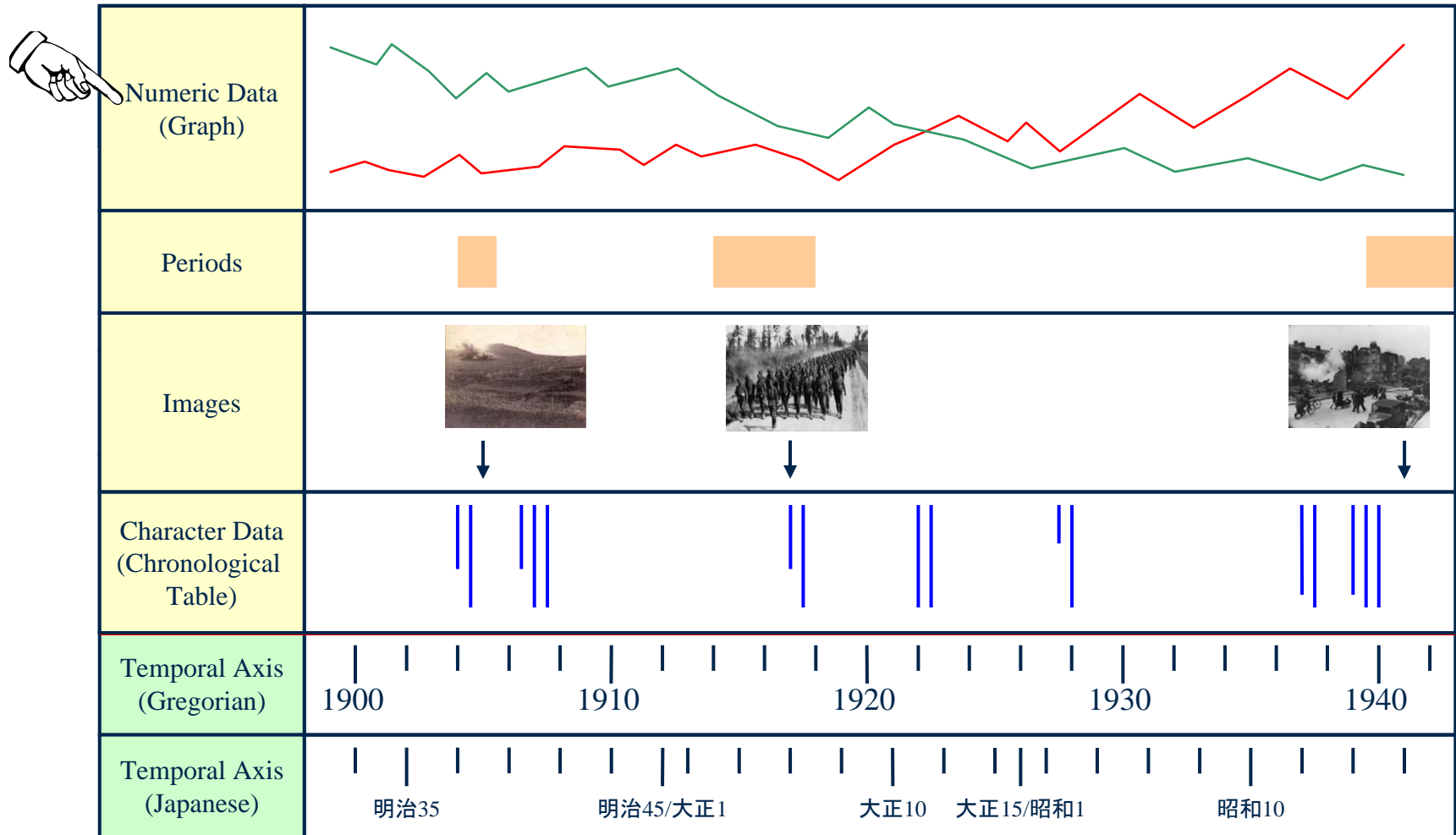
core samples of lake sediment
glacial samples
annual rings of trees

Required functions in the System

- Display of various information along the same time axis
- Transformation of calendar and expression format
- Information search and analysis based on temporal data (ex. periodicity, relationship between information)



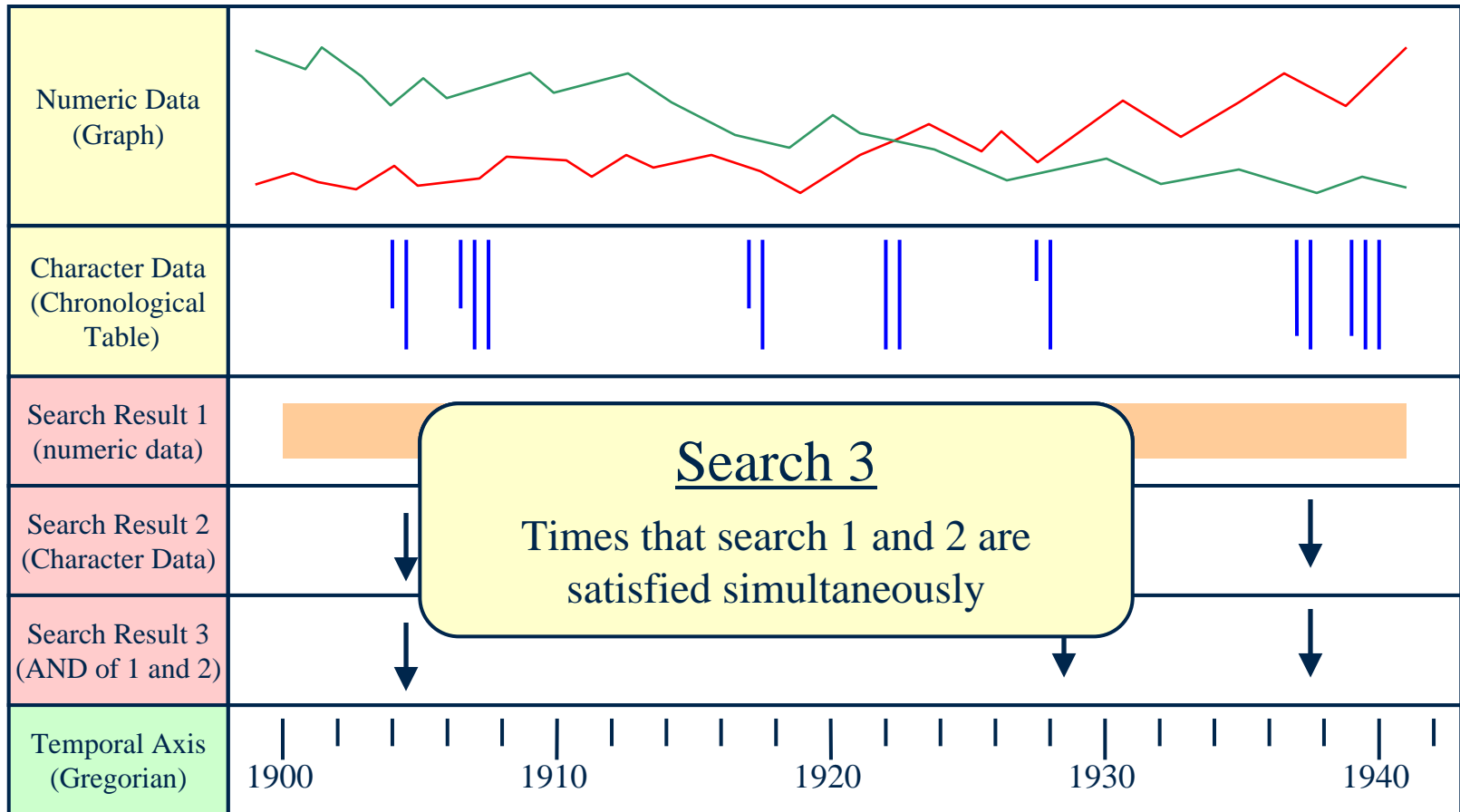
Outline of T2Map – Data Display



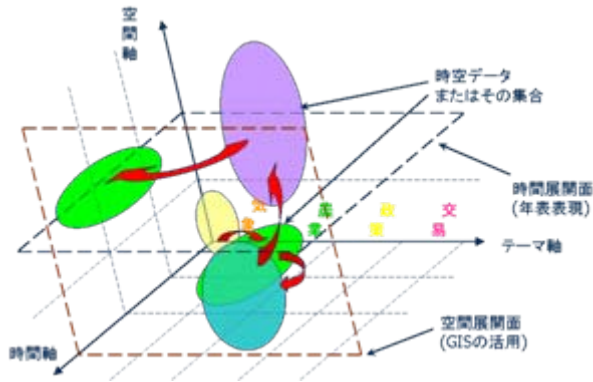
Time Information System (SEKINO)



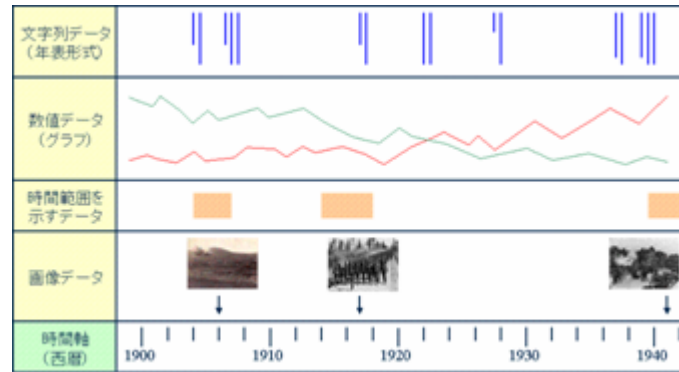
Outline of T2Map – Search and Analysis



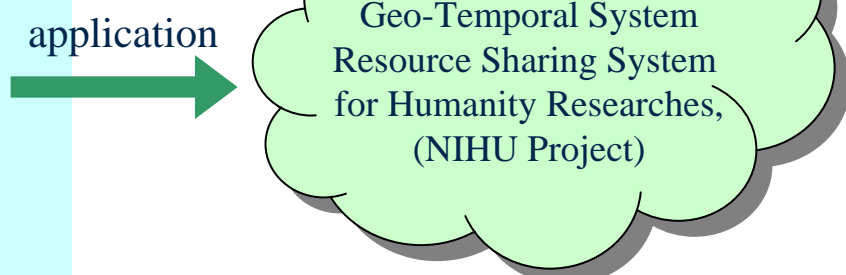
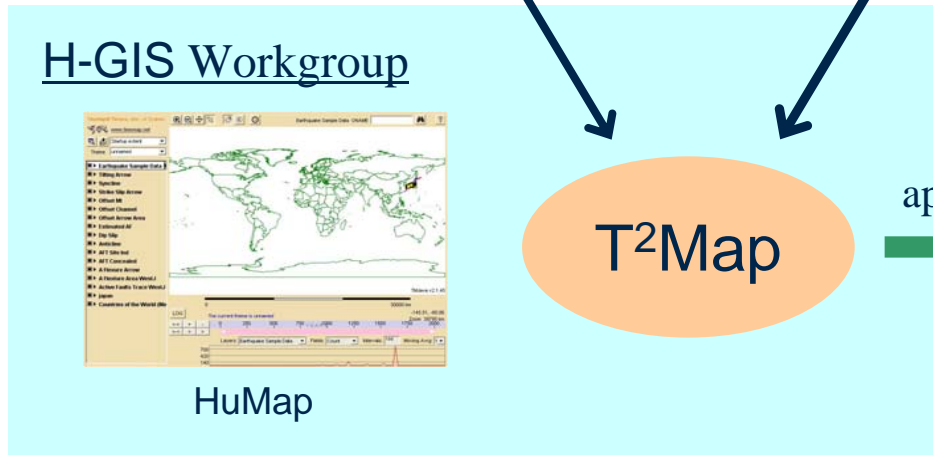
Progress of development



Integrated Geo-Temporal Archives (KUBO)



Time Information System (SEKINO)



T²Map

(Time & Theme Map)

Demonstration



Feature development

- Data Import / Export
- Logical Calculation between Layers
- Multi-Calendar
- Statistical Analysis

