

# Visualizing social networks and political careers during the Roman Principate with Geovistory (BETA)

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## Visualizations of socio-political networks

As scientific methods, prosopography and social network analysis as well as the possibility of their visualizations greatly aid historians to identify and illustrate initially often hidden connections within various socio-political contexts. This is particularly important when large amounts of data have to be processed and interpreted in a meaningful way. In addition, visualizations in the context of public presentations or in didactic settings can help to showcase complex issues in an intelligible form. The online-software Geovistory (BETA) supports researchers aiming to systematically analyze and visualize (social) networks throughout history based on literary and documentary sources. It is developed by KleioLab supervised by Jonas Schneider and David Knecht. First results of the use of this software can be seen here based on the visualization of social networks during the Roman Principate (Fig. 1-4).

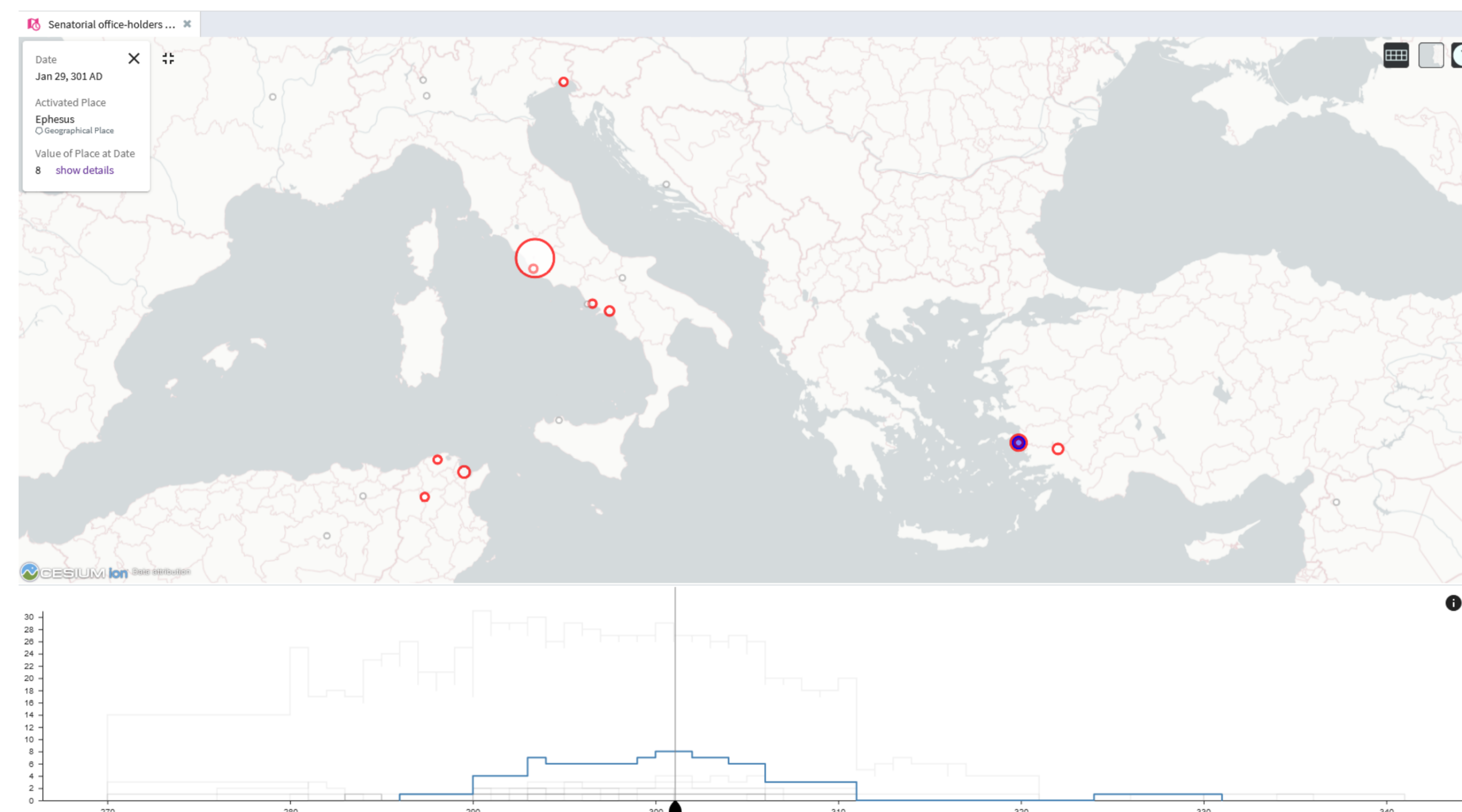


Fig.1: Localizations of senatorial office-holders between 284-305, snapshot of the year 301 AD, focus on Ephesus as capital of Asia

## Objectives of Geovistory (BETA)

- All analysis are source-based due to the possibility of a systematic registration of primary and secondary sources:
  - Creation of a personal library of source texts and secondary literature
  - Systematic annotation of sources
  - Linking of source texts with structured data
- Creation of analyzable files:
  - Individual registration of structured data related to separate topics and personal projects
  - Construction of personal information systems
- Possibilities of individual analysis and publication:
  - Generation of (geographical) visualizations
  - Publication of (annotated) source texts, compiled data and visualizations on-line

## Data model and interoperability

- Geovistory is a collaborative research environment for teams and individual researchers.
- Events and phenomena can be adequately recorded and represented over time due to an event-centered data model.
- Thanks to CIDOC-CRM and connection to OntoMe, data saved in Geovistory are semantically clear and interoperable.
- Geovistory attaches great importance to OpenData. Stored data is ultimately made available to the general public.

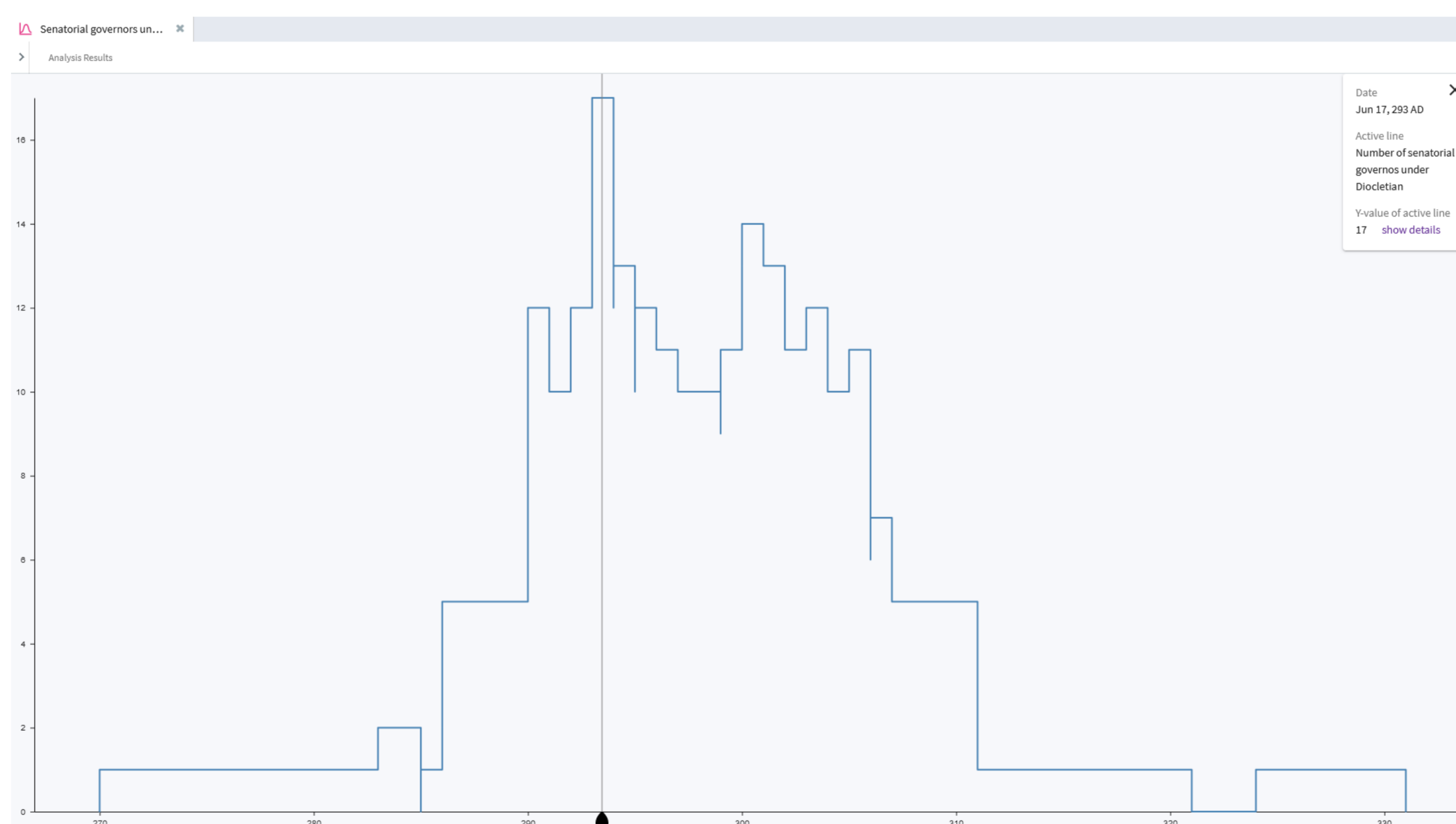
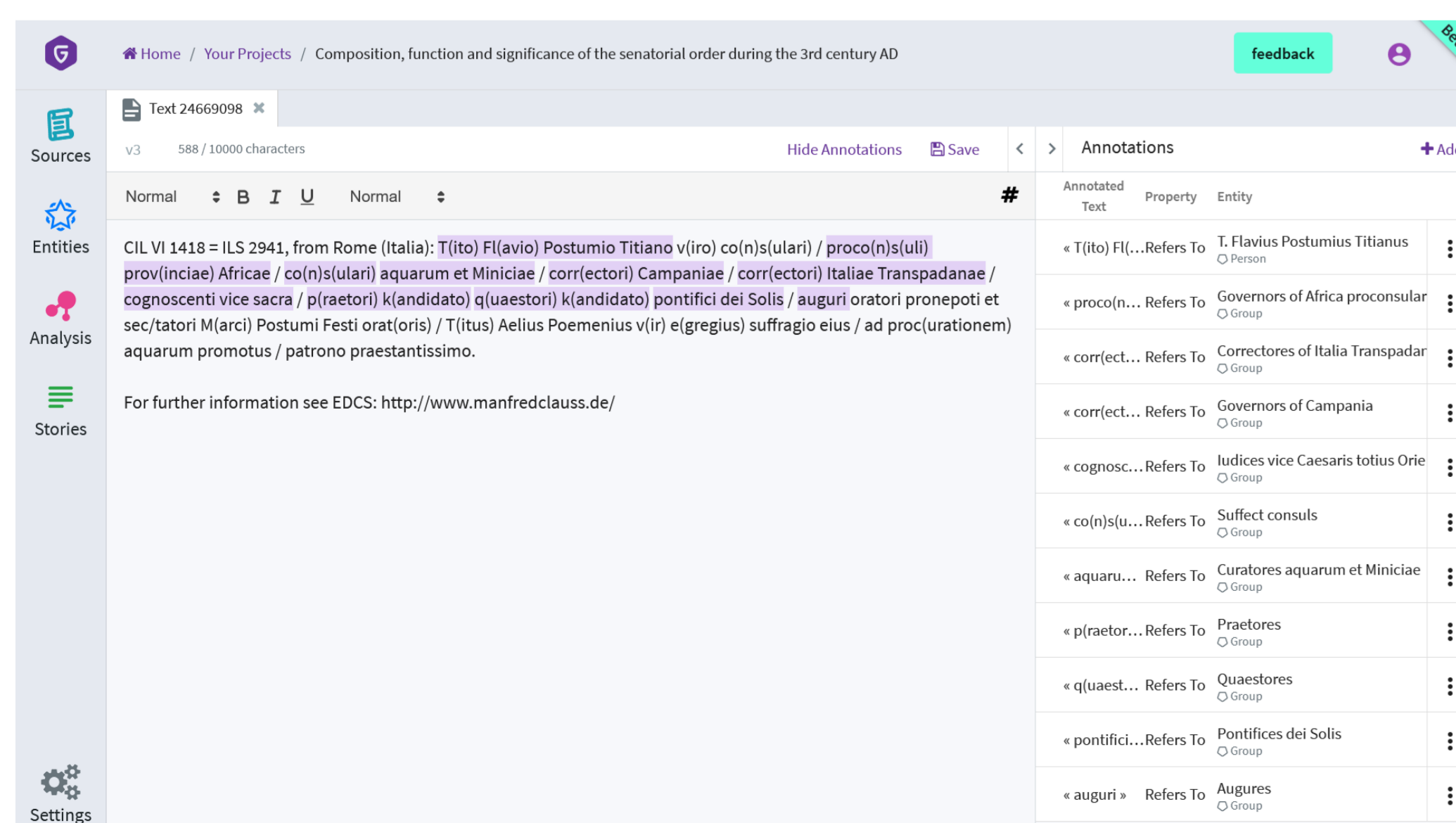
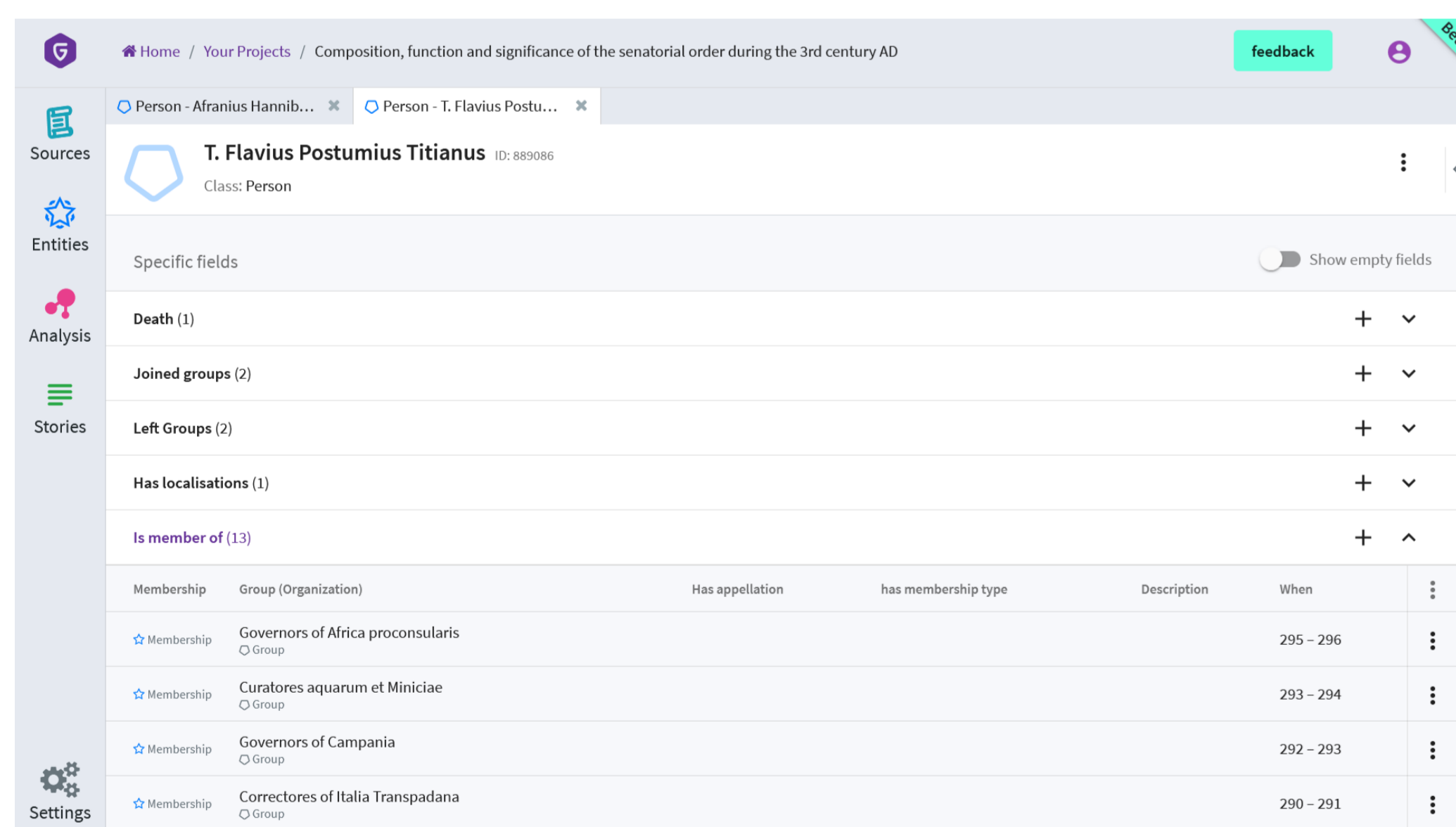


Fig. 2: Table of senatorial governors from 284-305 AD, snapshot of the year 293 AD

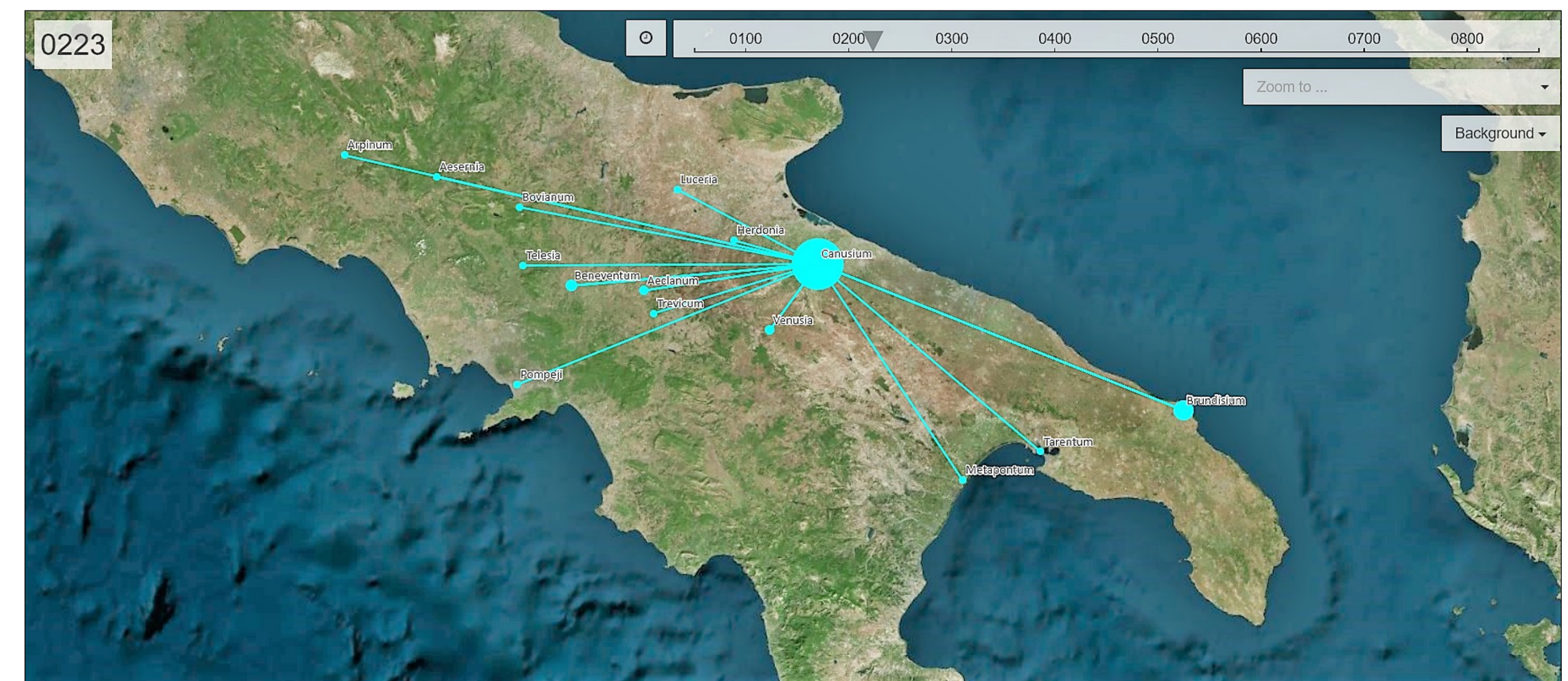


Fig. 4: Visualization of the socio-economic connections of persons mentioned on the *album decurionum* from Canusium (CIL IX 338)

Fig. 3a (top): Individual entry of the senator T. Flavius Postumius Titianus, containing information with regard to his death, family structures and *cursus honorum* based on the known sources

Fig. 3b (below): Example of an annotated source text (CIL VI 1418) as basis for the reconstruction of the career of T. Flavius Postumius Titianus