The Use of A Data Repository in Soundscape Monitoring and Ecological Assessment

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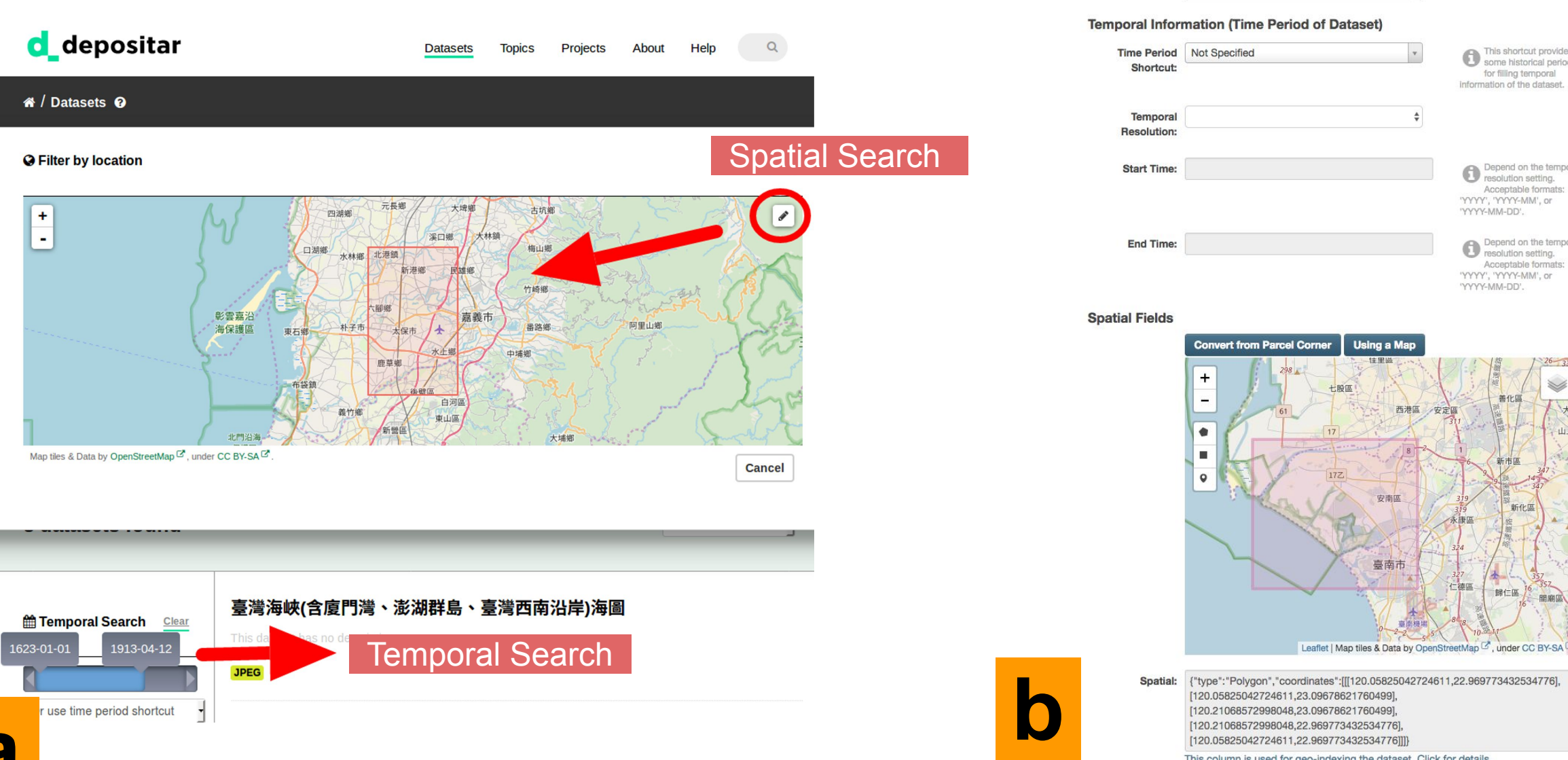Institute of Information Science, Academia Sinica, Taipei, Taiwan

d_ depositar
— A Research Data Repository

depositar is an online research data repository built on top of CKAN, an open source software package originally developed for publishing open (government) data. We customize and extend the CKAN codebase to better support research data management. The service provided by data.depositar.io is experimental as of now. It is free for all academic use.
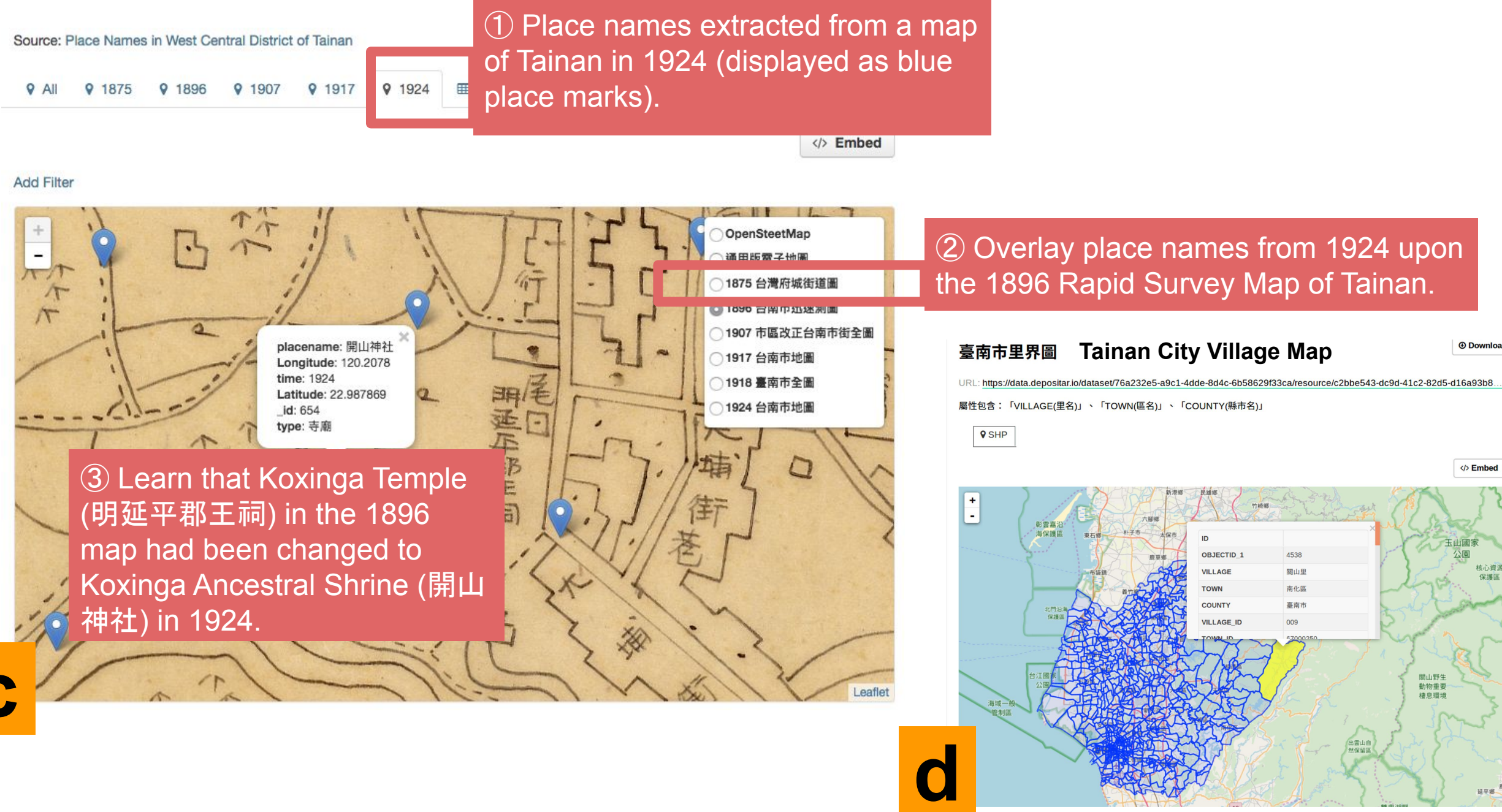
New Features on *depositar*

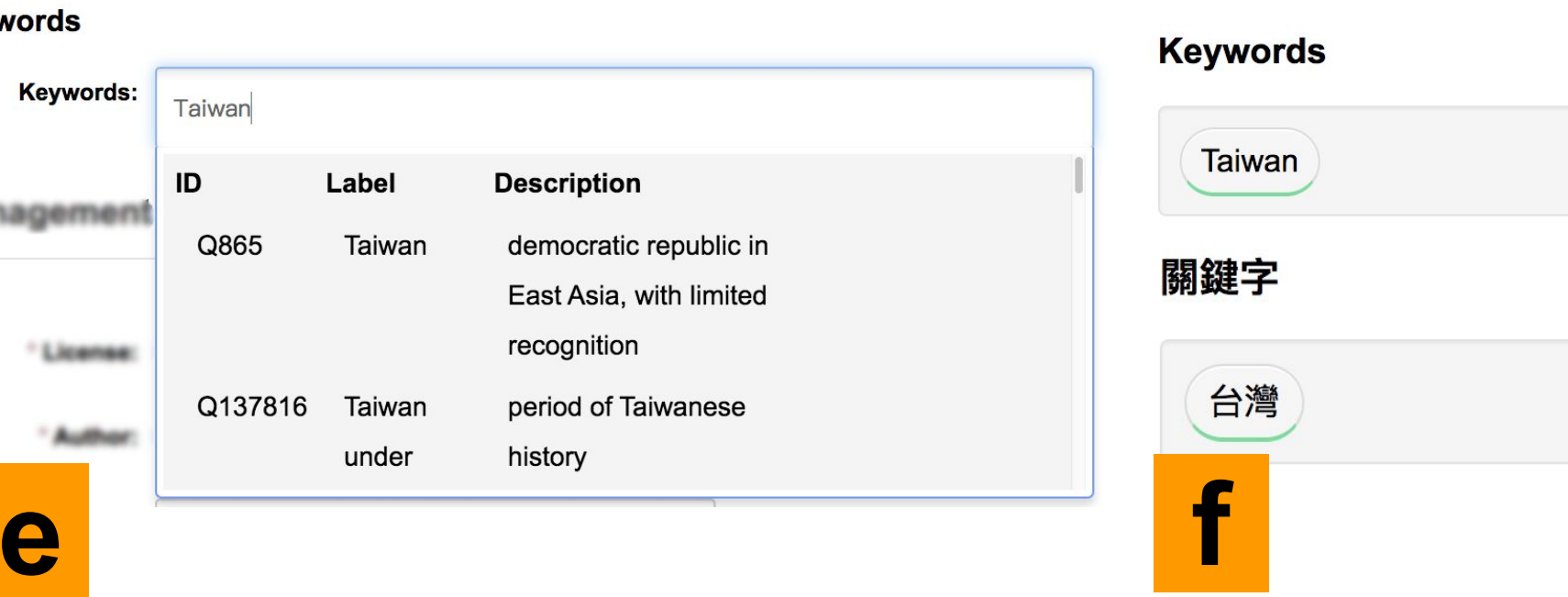### 1. Spatiotemporal Annotation and Query

(a) An example of spatiotemporal search. Datasets are filtered by spatial or temporal constraints, or both. (b) An example of metadata spatiotemporal description.

2. Preview and Overlay of Spatial Datasets

① Place names extracted from a map of Tainan in 1924 (displayed as blue place marks).

② Overlay place names from 1924 upon the 1896 Rapid Survey Map of Tainan.

③ Learn that Koxinga Temple (明延平郡王祠) in the 1896 map had been changed to Koxinga Ancestral Shrine (開山神社) in 1924.

(c) An example of spatiotemporal mapping. Place names extracted from a map in 1924 are overlapped upon another map in 1896. (d) An example of geospatial data preview (for Shapefile).

3. Wikidata-powered Keywords

(e) An example of searching and adding Wikidata items as keywords for datasets. (f) Displaying Wikidata-powered keywords attached to the dataset in a multilingual setting (English and Chinese).
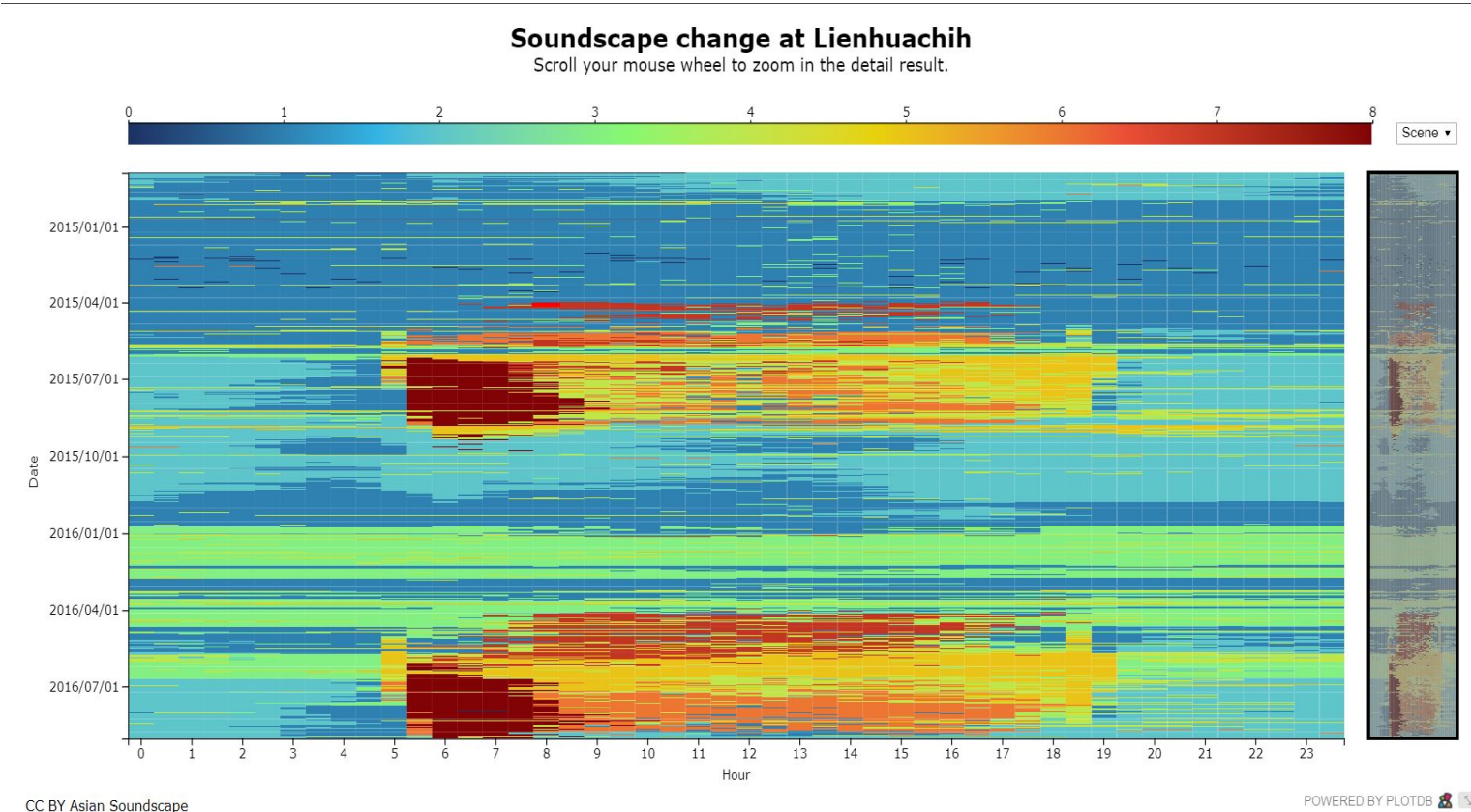
Use Case | Soundscape Monitoring

Partners of the Asian soundscape monitoring network archived the soundscape recordings on an open platform powered by Pumilio; however, this platform has limited capability in documenting the detailed metadata of a monitoring site. *depositar* can support the partners to preserve detailed metadata and other information on the application of the data from each monitoring site. In the dataset created on *depositar*, data users can easily read the monitoring protocol and access the original soundscape archive, site photos, and visualization of long-term soundscape change via the links to the external resources.

Use Case | Ecological Assessment

depositar also can help the collaborative management and making available of the datasets from the ecological assessment and monitoring of public construction projects in Taiwan.

From the datasets, people can easily get the data of spatial range of the construction site, access to the series of orthophotos published to OAM and the full assets of UAV photogrammetry on ASGC WebODM, link to the Google Photos of habitat change at the construction site, etc.