

ECAI Data Portal and SinicaView 4D GIS Platform

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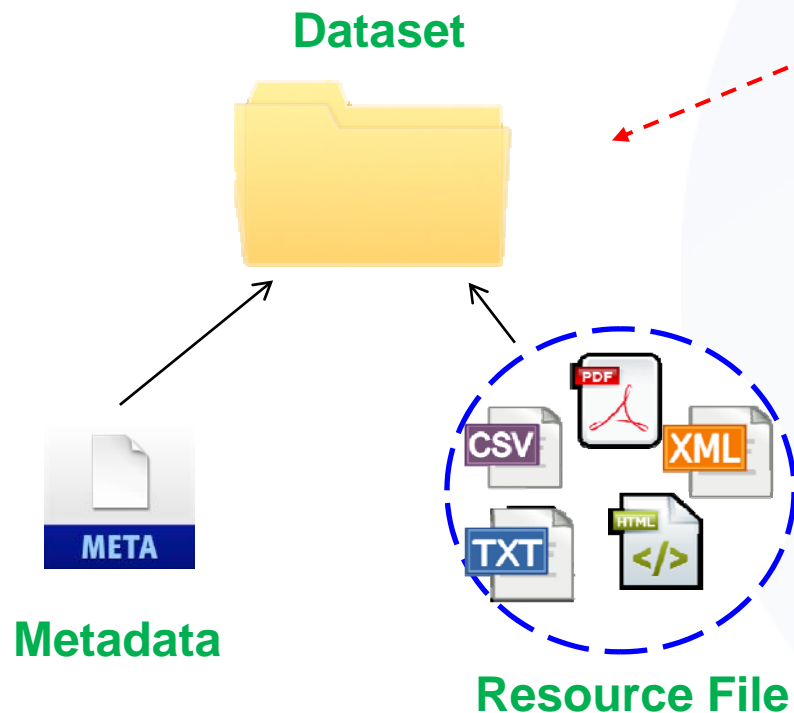
Chen-Jen Lee, IIS, Academia Sinica

Outline

- **ECAI Data portal**
 - Quick review of CKAN
 - ECAI Data portal status
 - Ongoing & Future work
- **SinicaView 4D GIS Platform**
 - Motivation
 - Features of SinciaView

CKAN introduction

- An open source project of Open Knowledge Foundation (OKFN) for data management system



ckan-ECAI Data Portal

Search datasets. **Keyword search**

1,198 datasets found

Order by: Relevance

Spatial temporal search tool

Filter

Dataset List

Formosa (Taiwan) Map Series, U.S. Army Map Service, 1944
Maps of Formosa (Taiwan) with topography, infrastructure and land use details. Text in Japanese. Published in 1944 with data compiled approx. 1933 to 1938.
HTML PNG

Pacific Language Atlas GIS Dataset
Registered scans of the maps from the Language Atlas of the Pacific Area (excluding the maps of Japan) are made available through the Electronic Cultural Atlas Initiative (ECAI)...
SHP PNG

Distribution of the Austronesian Language Family and Major Subgroupings
The ECAI Austronesian Team working with Paul Li and Academia Sinica has digitized several maps concerning the dispersal and classification of Austronesian languages, including:...
JPEG

Pacific Language Atlas Leaves - Taiwan
Taiwan (including Lanyu or Lan-yu (Orchid Island) in the South): scan of the map, legend, and reverse side of the map from the Language Atlas of the Pacific Area, Wurm and...
JPEG

Carte de L'Isle Formose et aux costes de la Chine
Map by Bellin, Jacques Nicolas, 1703-1772, published in France in 1764. Downloaded from DavidRumsey Historical Collection @ <http://davidrumsey.com>. See also: P638 and P3508;...
JPEG

Ban Yatra Parikrama: Pilgrimage Itineraries
This dataset has no description

Southern California Indian Language Regions
This dataset has no description
KML PNG

Spanish and Mexican Land Grants in California
Boundaries of the Spanish and Mexican Land grants as entered into the State of California land survey. GIS Shape files of the boundaries of the California Ranchos provided by...
PDF ZIP PNG KML URL

Maritime Buddhism Project Summary

CKAN is Popular!

- Instances around the world

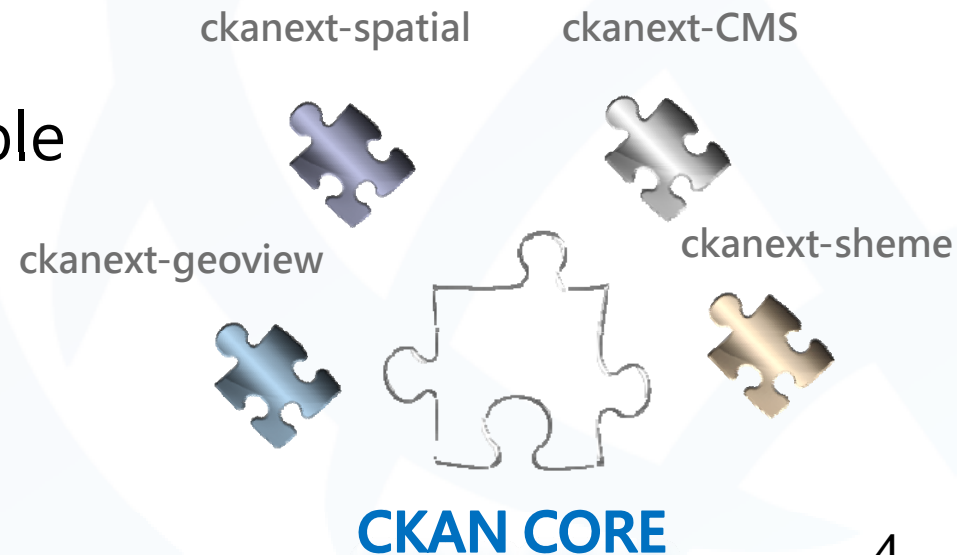
- About 140 instances
- Some of the most prominent open data portals around the world have been launched by CKAN

- Extensions and plugins

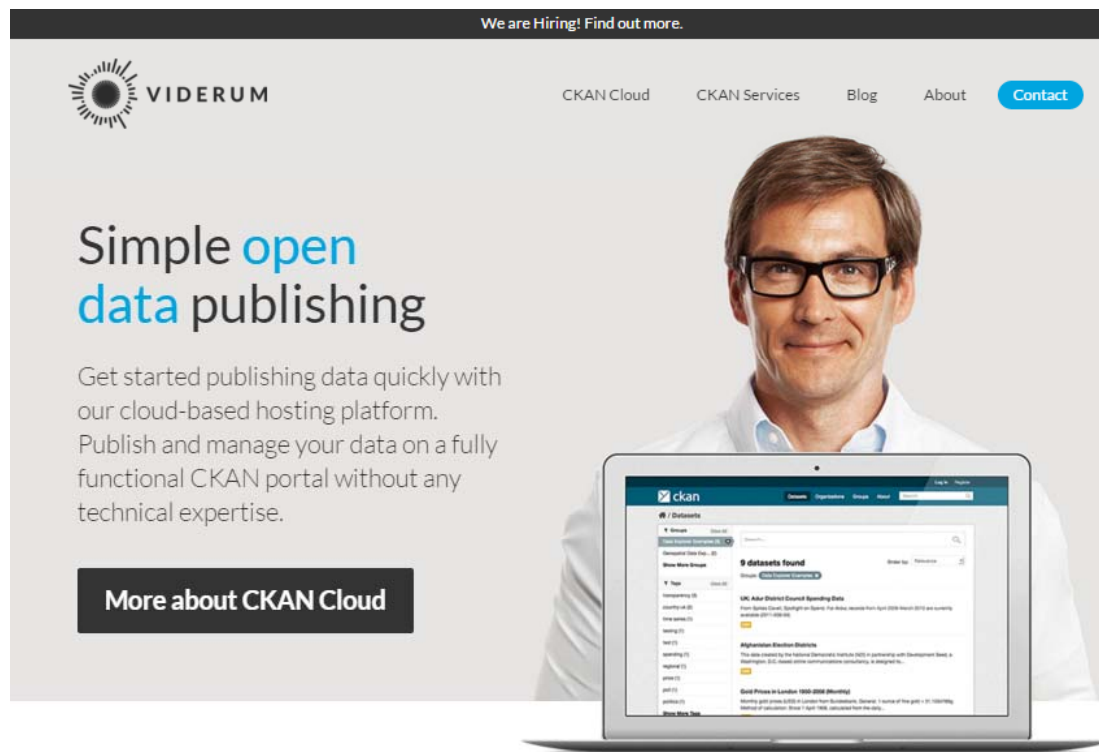
- More than 150 extensions available on CKAN site
- More plugins are available on Github

<http://ckan.org/instances/>

<http://extensions.ckan.org/>



Viderum – CKAN commercial service



- Provides services and products for governments, institutions, to publish open data
- CKAN Cloud
- CKAN Service

CKAN Cloud

An OpenSaaS solution which makes your open data publishing extremely simple. CKAN's intuitive browser-based interface allows you to publish and manage your data on a fully functional portal without any technical expertise.

[More](#)

CKAN Services

Whether you are looking for a simple route into open data publishing, or have a ton of custom requirements, we have a range of skills and services to make it happen. Services include deployment, branding & theming, custom development and technical Support.

[More](#)

About Viderum

Viderum is an open-data solutions provider spun out from [Open Knowledge](#). We build tools, provide advice, implement projects, and develop communities in the area of [open data](#). Our mission is to make the world's public data discoverable and accessible to everyone.

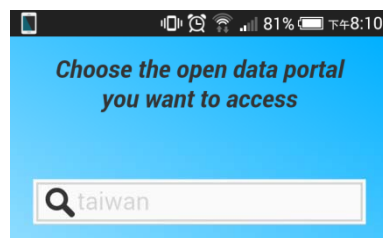
[More](#)

<https://www.viderum.com/>

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Open Data Companion

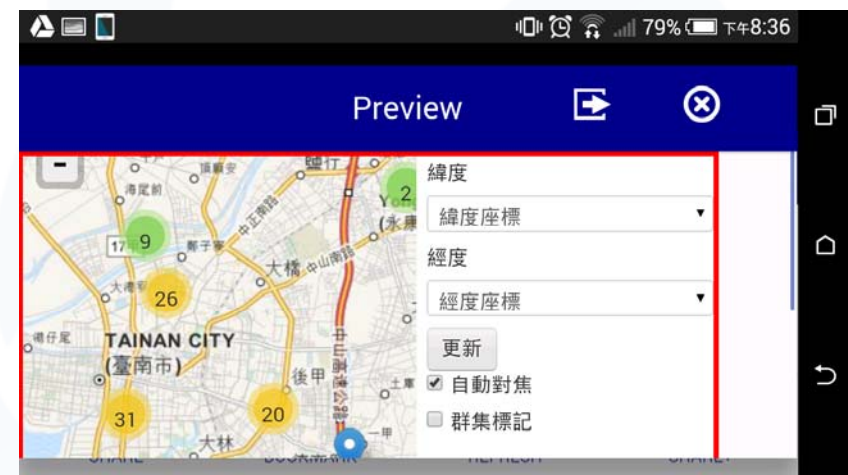
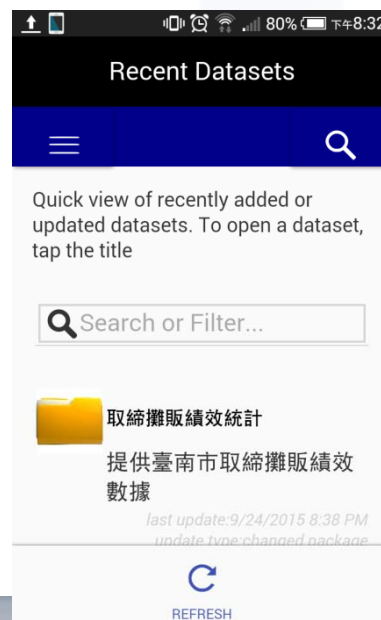
- A mobile App provides a unified access point to CKAN 2.0+ compliant portals, which have been registered to the CKAN website
- Users can subscribe to interested CKAN portals and receive push notifications when new datasets are available



Taipei City Open Data
location: Tainan, Taiwan
url: <http://data.tainan.gov.tw>

Taijiang Research Data Repository
location: Tainan City, Taiwan
url: <http://taijiang.tw/en/>

Swipe left to move forward



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ECAI Data Portal

ECAI Data Portal

- <http://ecaidata.org>



ECAI Data Portal

Spatial constraint

Temporal constraint

‘-’ Means B.C

Based on DC_Coverage_T_Early and DC_Coverage_T_Late

The screenshot displays the ECAI Data Portal interface. At the top, there is a navigation bar with links for 'Datasets', 'Projects', 'Groups', and 'About', along with a search bar. Below the navigation bar, the 'Datasets' section is active. A 'Filter by location' map is shown, with a red rectangle highlighting a region in South America (Peru). Below the map, there is a 'Temporal Search' section with a date range from -200 to 2015. A blue arrow points from the '-200' input field to the text '‘-’ Means B.C'. Below the temporal search, a 'Projects' section lists 'ECAI Clearinghouse (362)'. To the right of the filters, a search bar contains the text 'Search datasets...'. Below the search bar, it states '362 datasets found' and 'Order by: Relevance'. A snippet of a dataset titled 'Peru: Background' is visible, describing the Cultural Atlas Peru project.

ECAI Data Portal Status

- Version: 2.4.1
- Applied extensions
 - ckanext-spatial
 - ckanext-geoview
 - **ckanext-ECAI**: customized one, including the interface theme and template, ECAI metadata scheme, temporal search function

The screenshot shows the GitHub repository page for 'yawshan / ckanext-ECAI'. At the top, it displays 'Unwatch', '1' star, '0' star, and '0' fork. Below this are tabs for 'Code', 'Issues (0)', 'Pull requests (0)', 'Wiki', 'Pulse', 'Graphs', and 'Settings'. A message states 'No description or website provided. — Edit'. A progress bar shows '3 commits', '1 branch', '0 releases', and '1 contributor'. Below the progress bar are buttons for 'Branch: master', 'New pull request', 'New file', 'Upload files', 'Find file', 'HTTPS', 'https://github.com/yawsha', and 'Download ZIP'. A table of commits is shown, with the latest commit '28c25e2' from 'yawshan' titled 'Fix dataserach, fq: Start_Date+End_Date' made 'a day ago'. The commit details show files 'ckanext', 'ckanext_ECAI.egg-info', and 'setup.py' with their respective commit messages and times. At the bottom, there is a prompt to 'Add a README'.

Commit	Message	Time
28c25e2	Fix dataserach, fq: Start_Date+End_Date	a day ago
	ckanext	Fix dataserach, fq: Start_Date+End_Date
	ckanext_ECAI.egg-info	ECAI-CKAN with datasearch plugin
	setup.py	ECAI-CKAN with datasearch plugin

Supported Preview format

- Multiple views of same resource

Place Name

URL: <http://taijiang.tw/dataset/663e06ce-904b-44e6-94fe-370a103f9587/resource/2bbe675c-67eb-4c91-8aef-e675fd16064a/download/pl...>

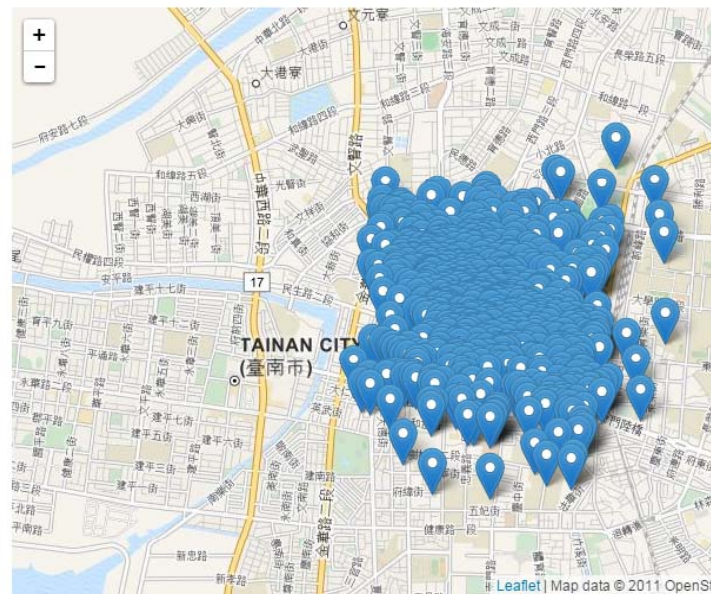
From the dataset abstract

Place Names on Ancient Maps of West Central District of Tainan.

Source: Place Names in West Central District of Tainan

[All](#) [1875](#) [1896](#) [1907](#) [1917](#) [1924](#) [資料瀏覽器](#)

Multiple view of the resource



Place Name

URL: <http://taijiang.tw/dataset/663e06ce-904b-44e6-94fe-370a103f9587/resource/2bbe675c-67eb-4c91-8aef-e675fd16064a/download/pl...>

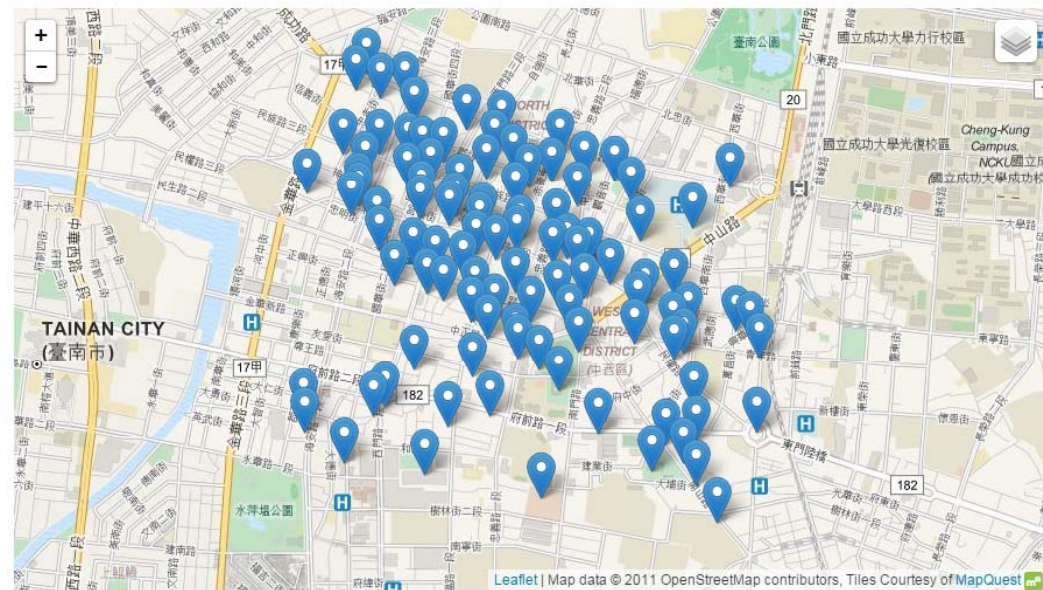
From the dataset abstract

Place Names on Ancient Maps of West Central District of Tainan.

Source: Place Names in West Central District of Tainan

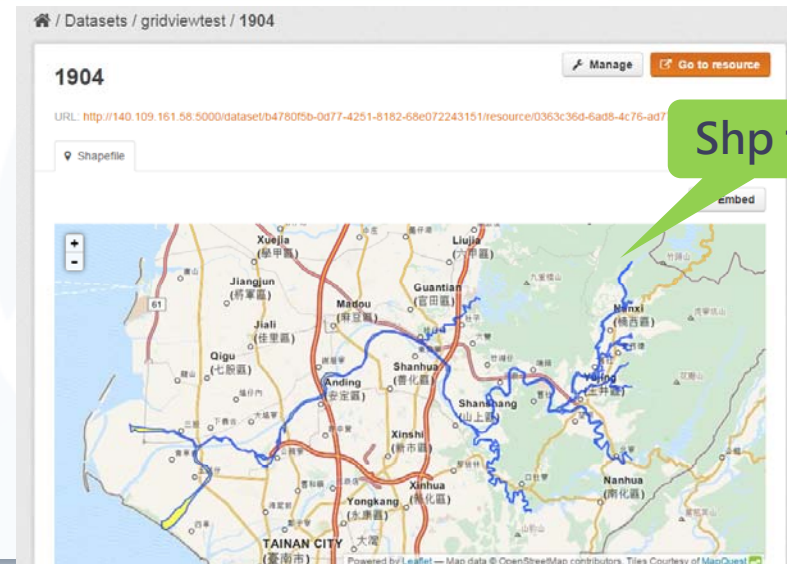
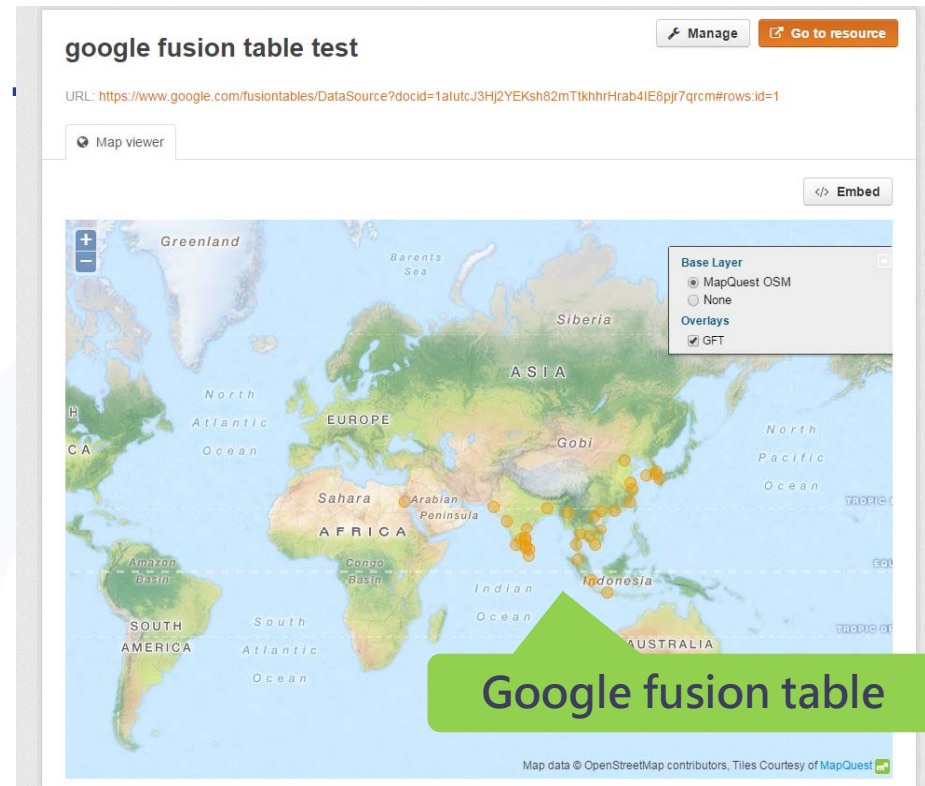
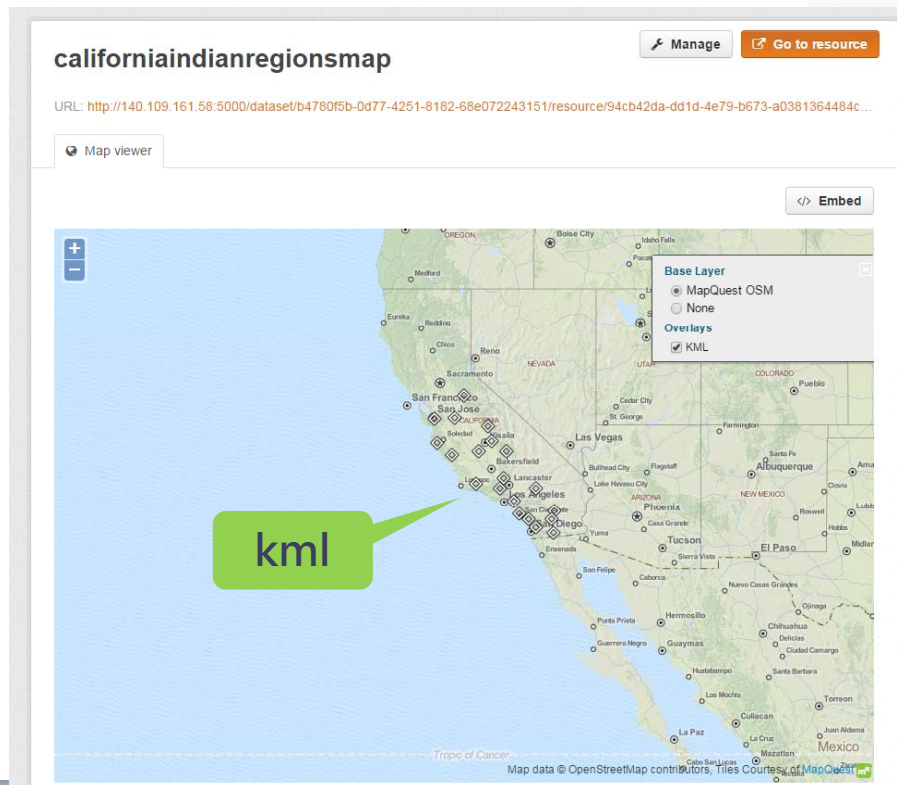
[All](#) [1875](#) [1896](#) [1907](#) [1917](#) [1924](#) [資料瀏覽器](#)

Filter records by columns and create another view



Supported Preview

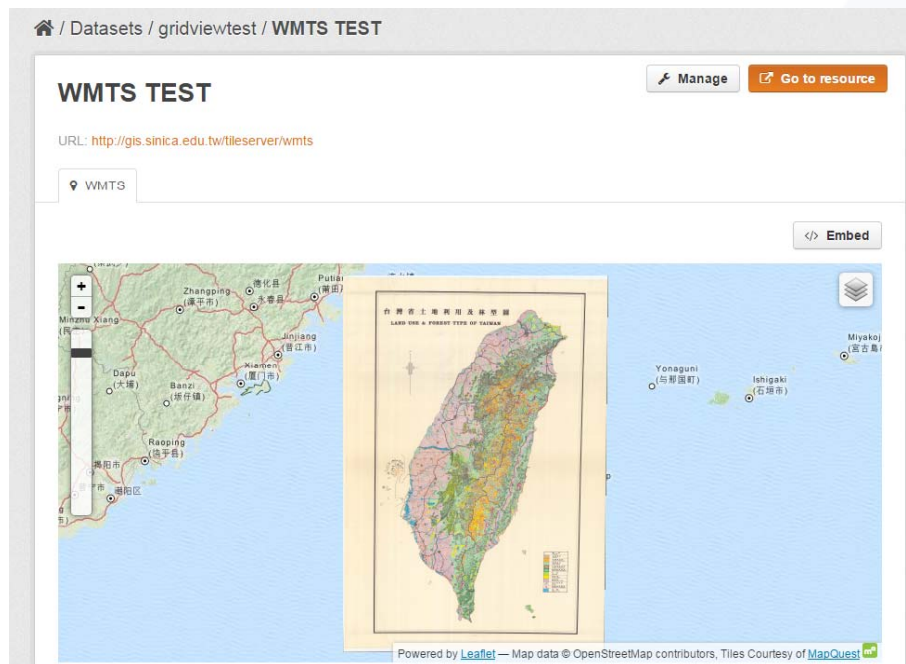
- Spatial Data Preview
- Support multi formats



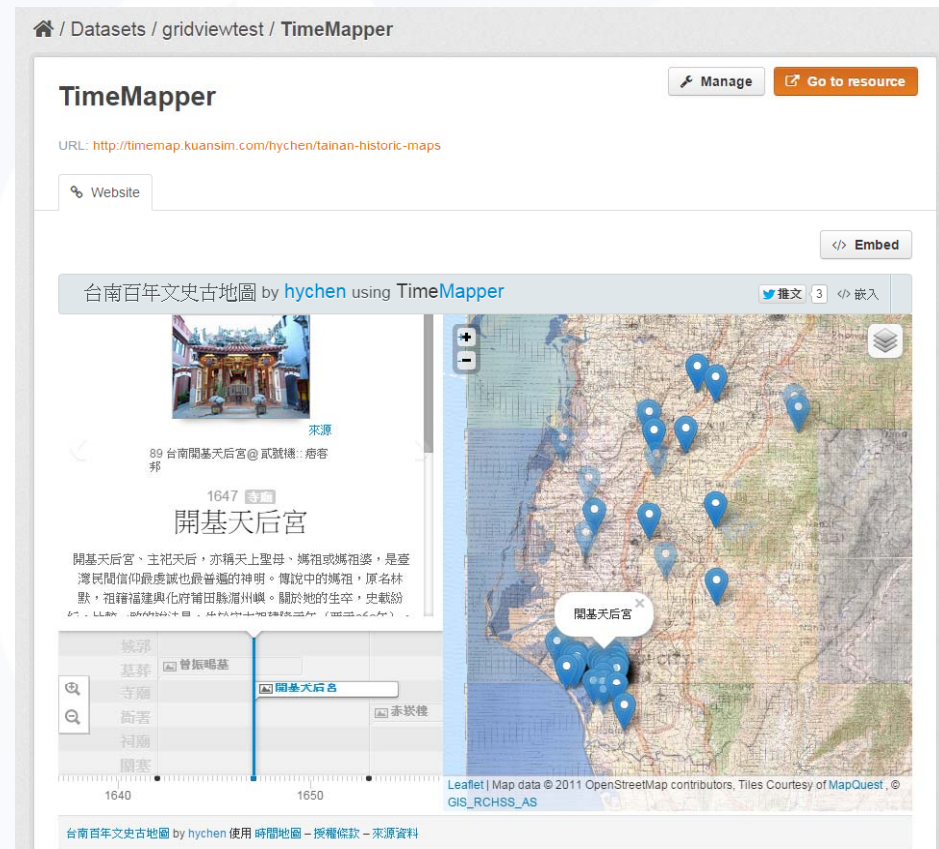
Supported Preview format

- Spatial Data Preview
- Support multi formats

WMTS

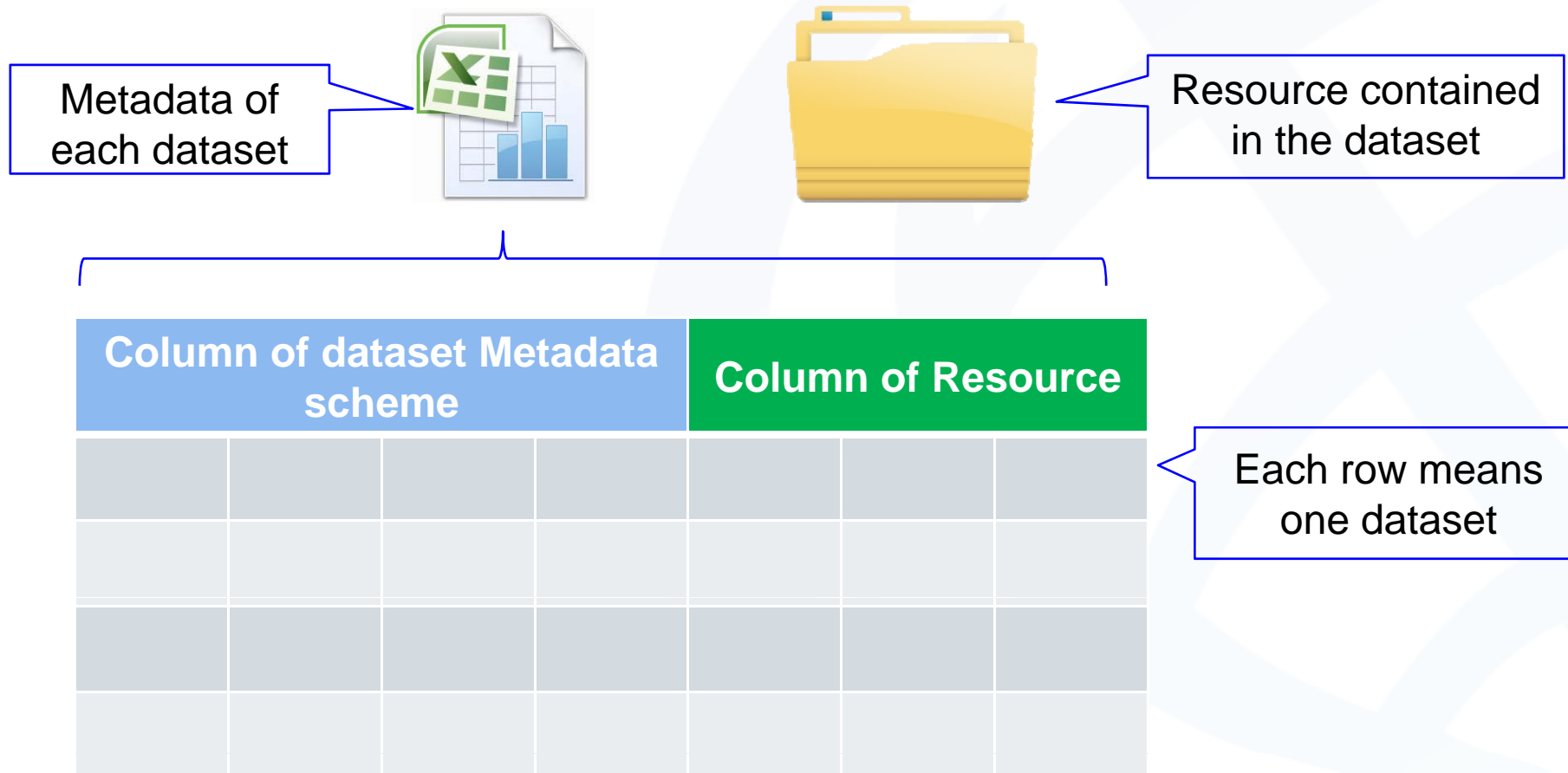


TimeMapper Service



Ongoing works

- Bulk upload dataset and resource

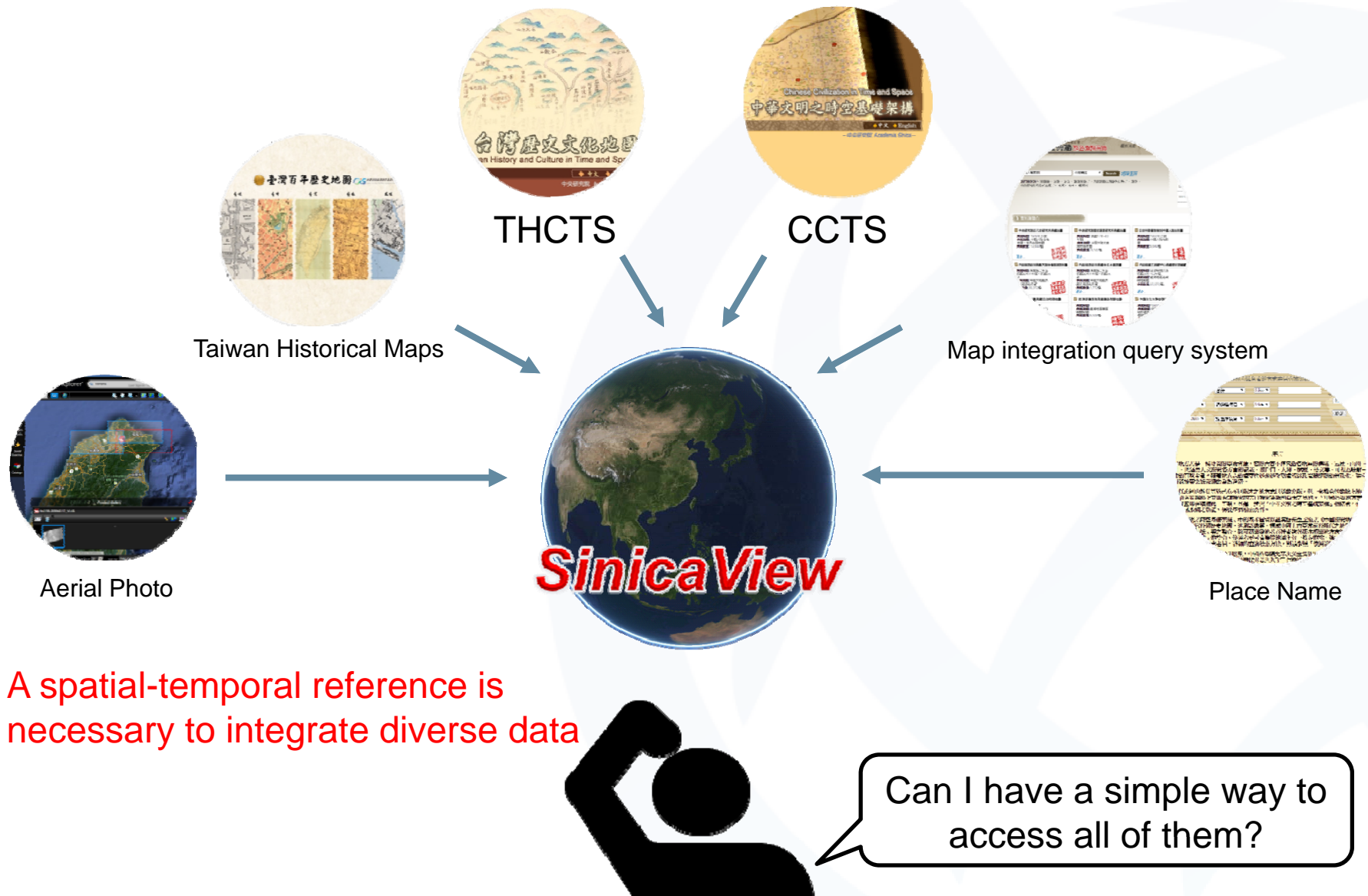


Future work for ECAI-CKAN

- Implement the UI for the bulk upload function
- Study on the ckanext-fulldtext extension and try to implement on ECAI-CKAN
- Publish the user manual for using the ECAI-CKAN

4D GIS : SinicaView

Motivation



SinicaView

- A spatio-temporal 4D GIS platform which can be used as a "GeoBrowser"
- Integrate the resource from Academia Sinica and also the available resource worldwide, so as to lower the threshold of accessing spatial information
- It can serve researchers for cross-disciplinary studies

Free download SinicaView

 地理資訊科學研究專題中心
Center for GIS, RCHSS, Academia Sinica

首頁 地理資訊科學研究專題中心 人社中心 中央研究院

下載適用於 PC 的 SinicaOview (beta版)

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同意並下載

系統需求：

- DirectX

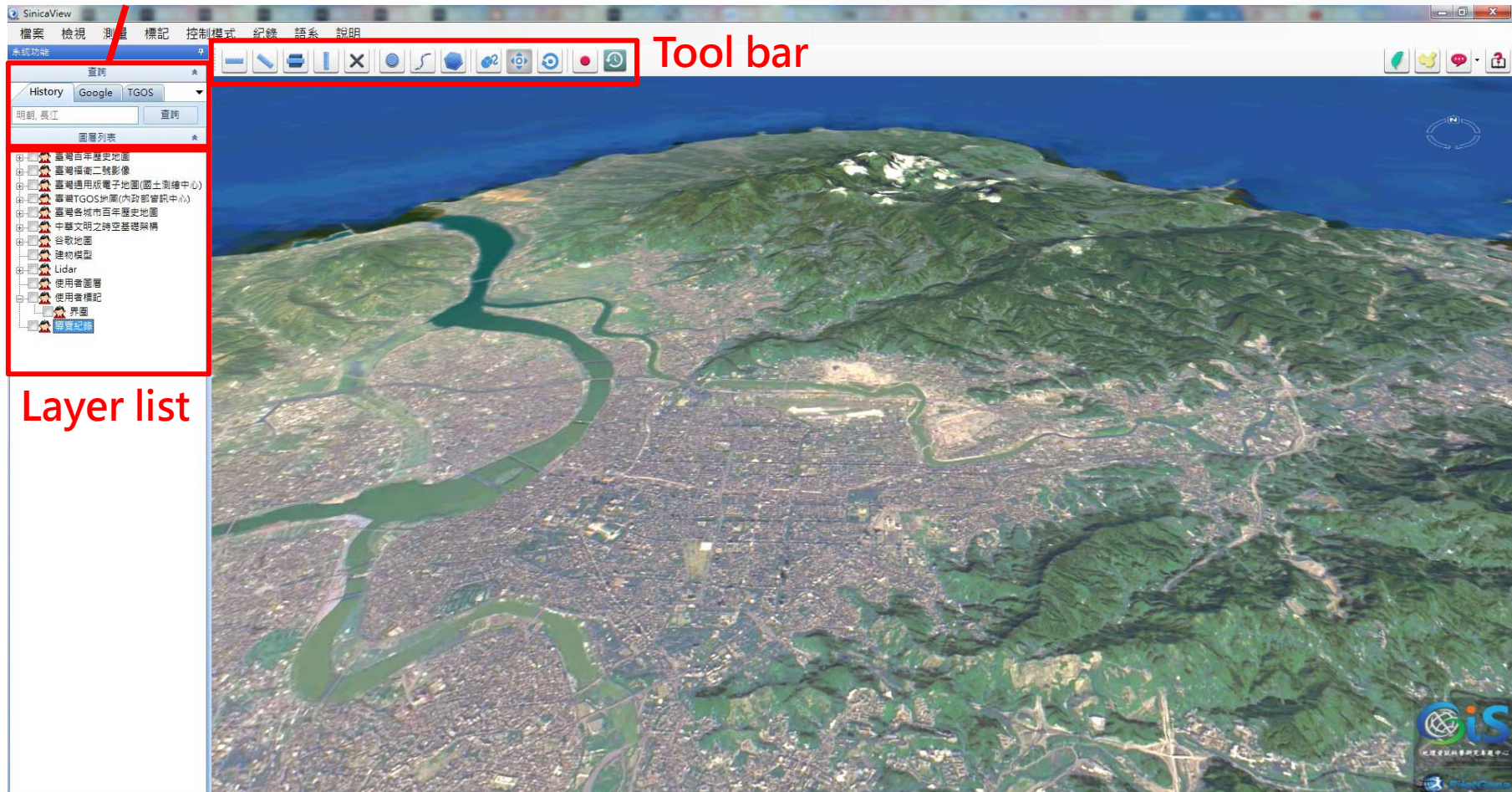
SinicaOview · 關於地理資訊科學研究專題中心 · 隱私權與條款

中文 (繁體)

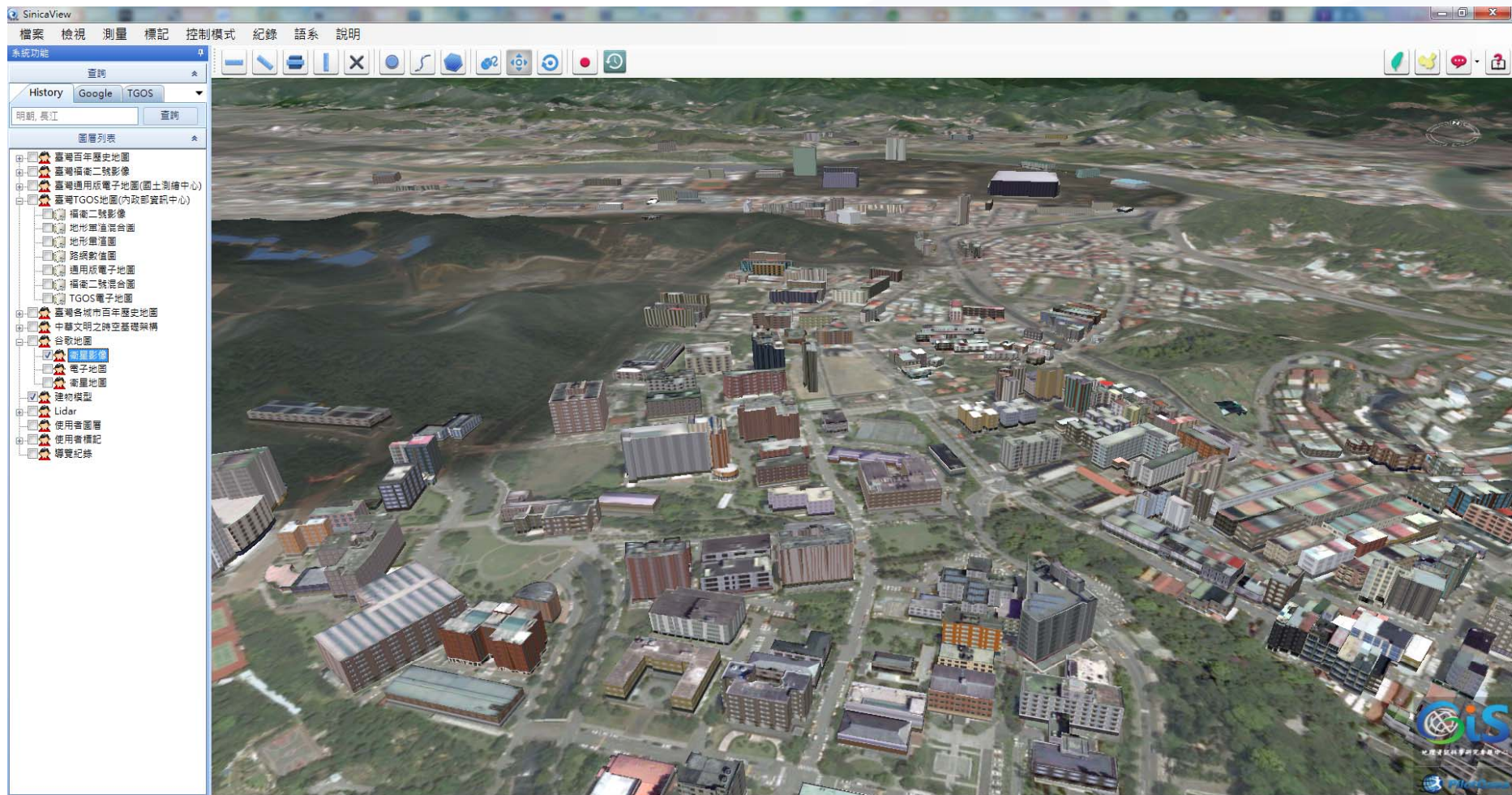
<http://3dgis.rchss.sinica.edu.tw>

SinicaView – Basic environment

Goecoding tool



SinicaView – 3D Model



Geocoding of historical geoname

系統功能

查詢

History Google TGOS

和州 查詢

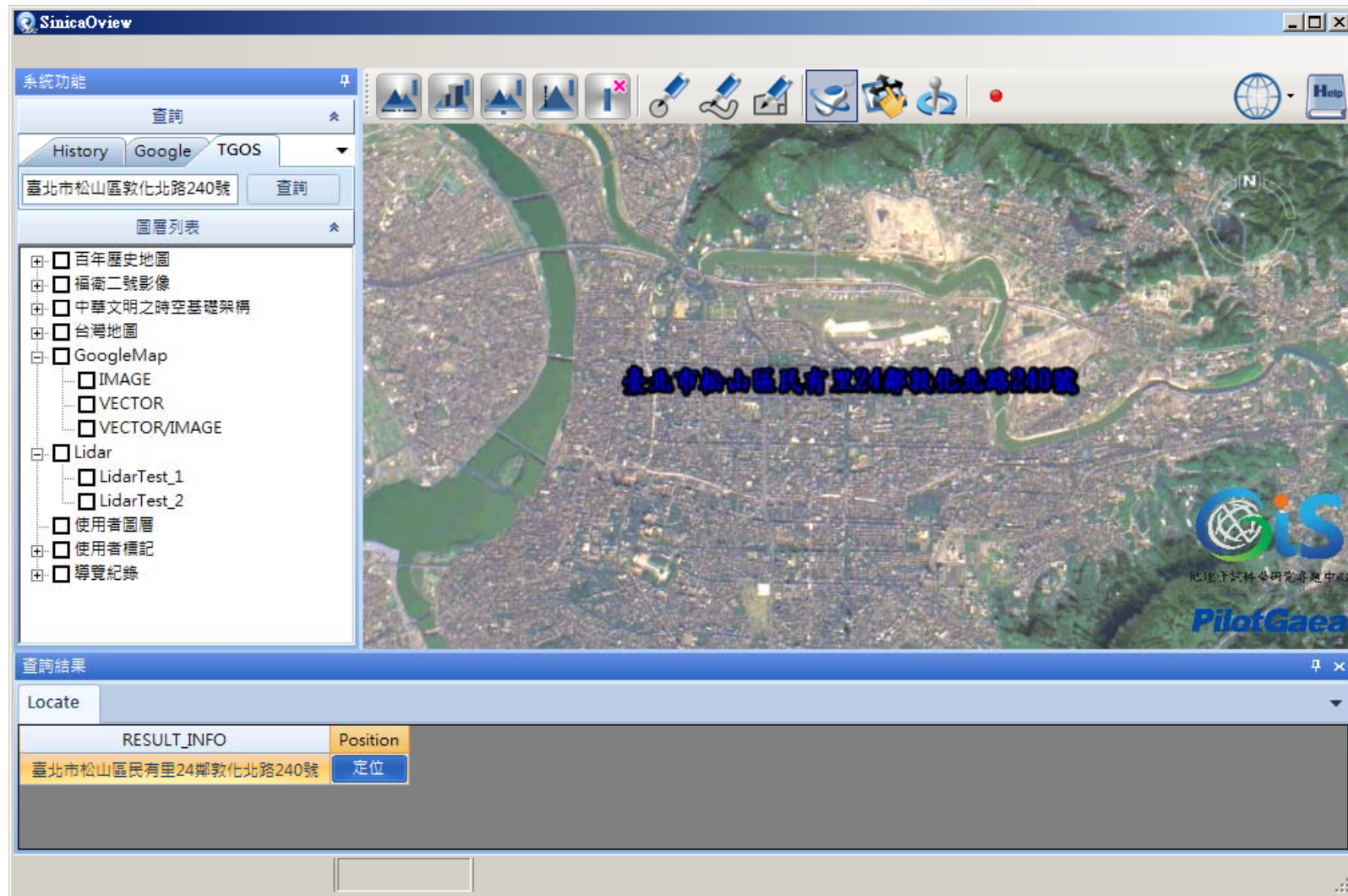
圖層列表

- ☐ 百年歷史地圖
- ☐ 福衛二號影像
- ☐ 中華文明之詩空基礎架構
- ☐ 台灣地圖
- ☐ GoogleMap
 - ☐ IMAGE
 - ☐ VECTOR
 - ☐ VECTOR/IMAGE
- ☐ Lidar
 - ☐ LidarTest_1
 - ☐ LidarTest_2
- ☐ 使用者圖層
- ☐ 使用者標記
- ☐ 導覽紀錄

查詢結果

Place	District	Attribute	Relation									
Name	E_Name	T_Name	B_year	E_year	County	Class_Name	Literature	Publisher	version	publishYear	Position	SaveAsMark
和州	He Zhou	和縣	1368	1644	明_南京	府級、州級行政中心所在地	中國歷史地圖集	中國社會科學院	1	1982	定位	儲存為標記
和州	He Zhou	和縣	1644	1911	清_安徽	府級、州級、部級行政中心所在地	中國歷史地圖集	中國社會科學院	1	1982	定位	儲存為標記

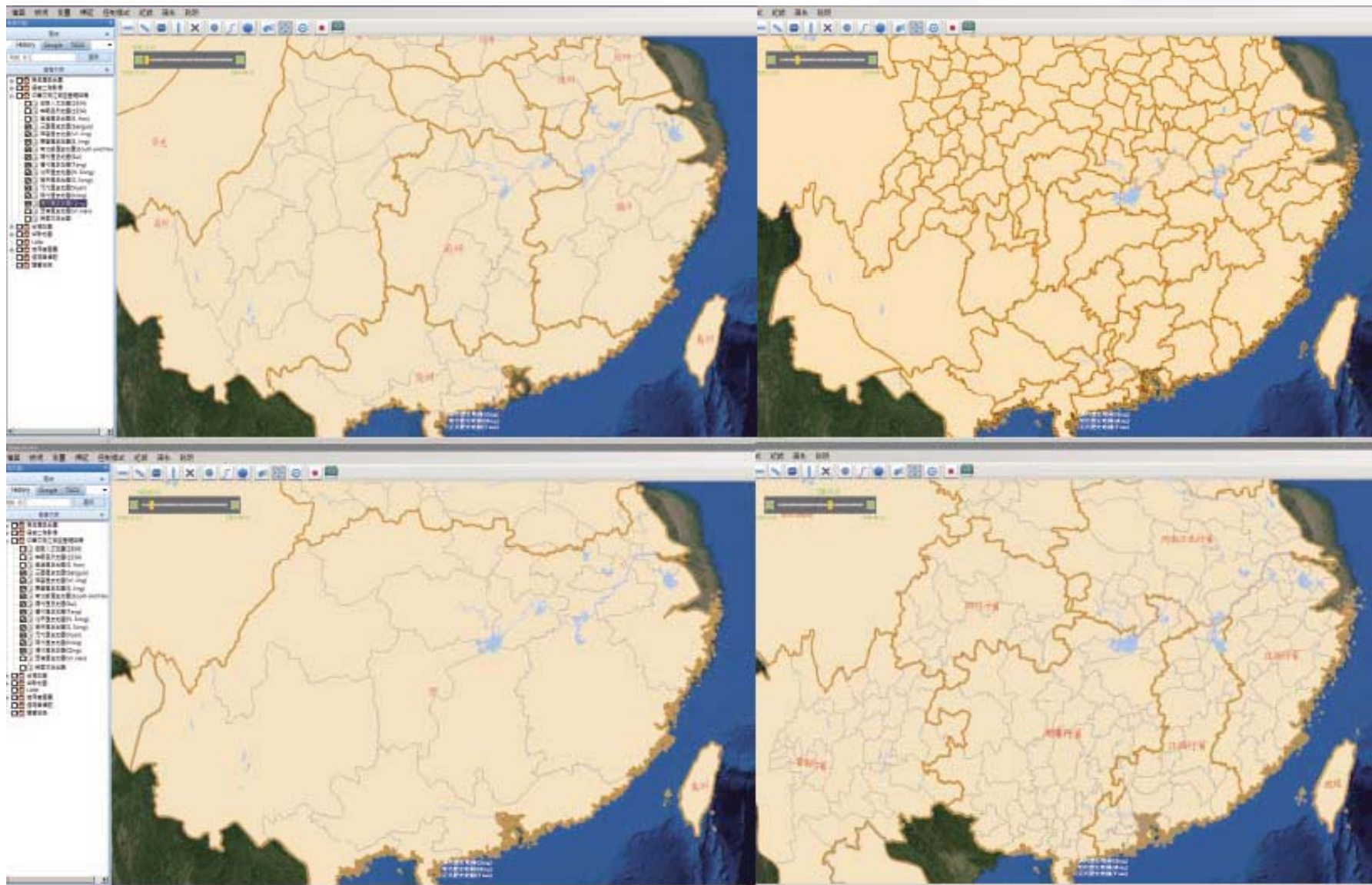
SinicaView-Address geocoding



SinicaView-editing tool



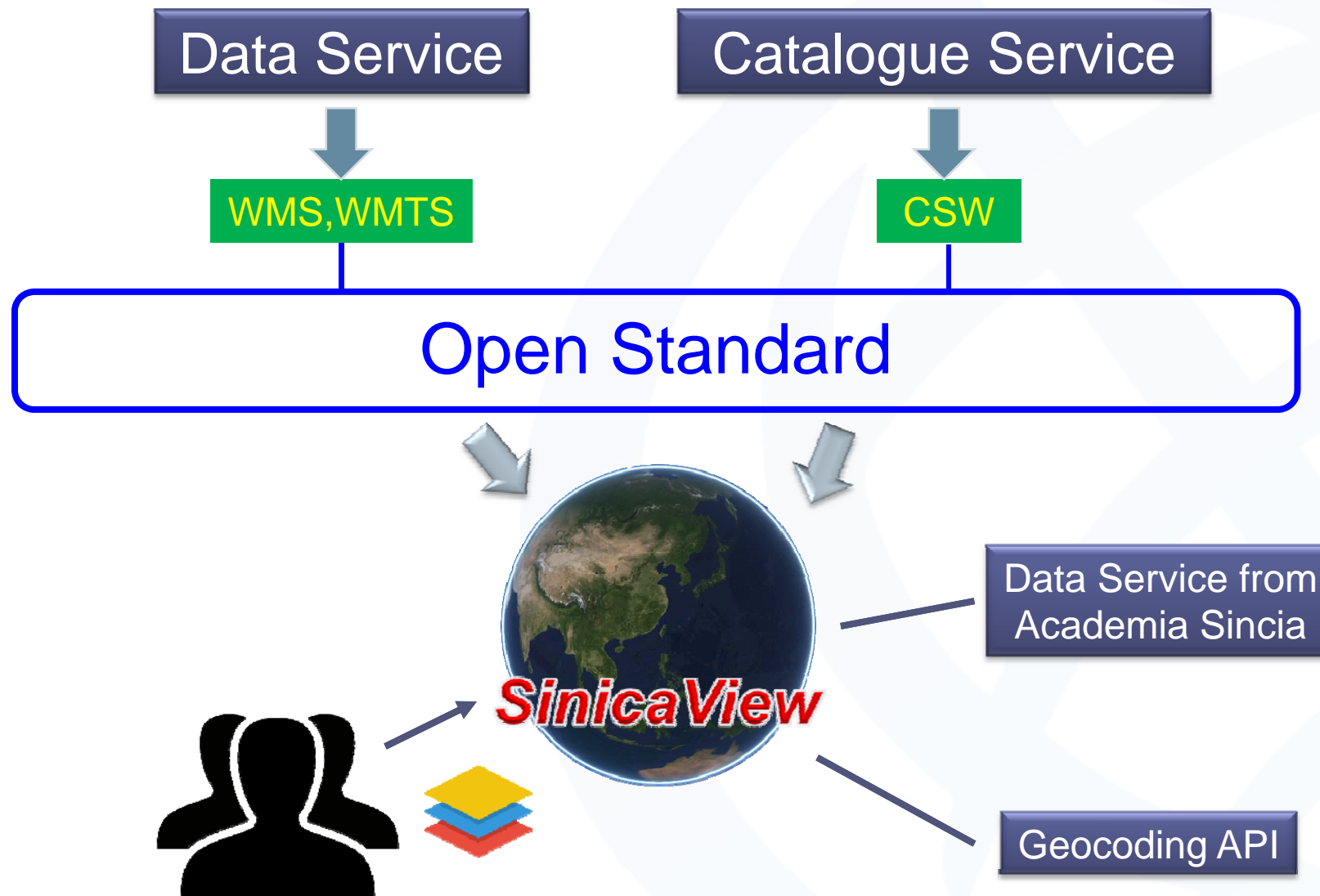
Timeline for different layers



SinicaView

- Support various data formats/services
 - GIS vector data formats
 - SHP
 - KML
 - GPX
 - OGC WMS/WMTS
 - LAS (Lidar Data)
 - 3D Model
 - Geocoding API
 - CCTS API
 - Google Map Geocoding API
 - TGOS Geocoding API
 - 天地圖API
 - 地政資訊服務API

Open Policy



SinicaView & CKAN

