

The Development of *depositar* —An Open Repository for FAIR Data

貼近 FAIR 資料原則的開放儲存庫—— 研究資料寄存所 (depositar) 的發展

2024-02-01 @ National Yang Ming Chiao Tung University Library

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with Cheng-Jen Lee¹, Chia-Hsun Wang¹, and Ming-Syuan Ho²

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¹ Institute of Information Science,
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³ Research Center for Humanities and Social Sciences (GIS Center)
Academia Sinica, Taiwan

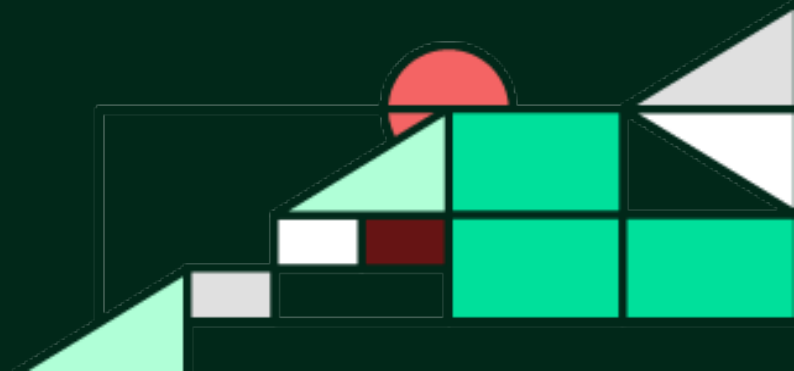


<https://pid.depositar.io/ark:37281/k5c6h2g3n>

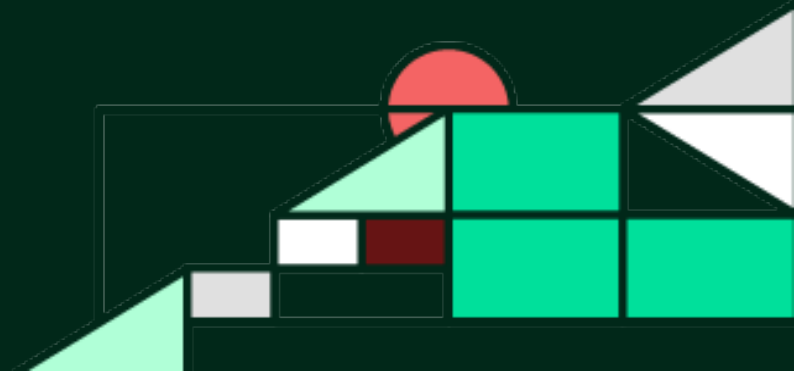


Outline

- A tour of *depositar* via a sample dataset
- *depositar*: A bottom-up data repository
- Repositories and “open science”
- Discussion



A tour of *depositar* via a sample dataset



The screenshot shows the Zenodo dataset page for 'Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan'. The page includes a title, a description of the dataset as an archive of audio data, recording locations, acoustic recorders used (AUSOMS-mini stereo recorders), configuration of audio recording, field deployment details, data processing methods, associated publications, data and resources (audio data, long-term spectrograms, codes for data access and analysis), tags, Wikidata keywords, basic information (data type, language), spatio-temporal information (temporal resolution, start/end time, spatial coverage), and management information (creator, contact person, email).

A Sample Dataset

<https://pid.depositar.io/ark:37281/k5d515442>

A tour of the dataset

- Long description of the dataset and the project
- Data and (external) resources
- Tags and Wikidata keywords
- Basic information
- Spatio-temporal information
- Management information
- License
- Citation snippet
- Data endpoints
 - JSON-API
 - RDF serializations

Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan

Followers




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Project



Ocean Biodiversity Listening Project

Project Website The ocean is full of sounds that are generated from geophysical events, marine animals, and human activities. By using a hydrophone (a microphone for underwater... [read more](#)

Dataset  Topics  Activity Stream  History

Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan



This dataset is an archive of audio data of shallow-water and upper-mesophotic coral reefs off Sesoko Island, Okinawa, Japan. Python codes to visualize the audio data were also provided in a notebook based on Google Colab.

Recording Locations

Three long-term recording sites were established since May 2017. Site A (N26.635° E127.865°) is located on the southeast coast of Sesoko Island and in front of the Sesoko Station of the University of the Ryukyus. The water depth is 1.5 m. Site B (N26.665° E127.869°) is located at the bottom of a reef slope on the north of Sesoko Island and the west of Toguchi Port. The water depth is 20 m. Site C (N26.670° E127.866°) is located on a nearly flat plateau to the north of Sesoko Island and the west of Toguchi Port. The water depth is 40 m.

Acoustic Recorders

[AUSOMS-mini stereo recorders](#) (AquaSound, Kobe, Japan) were used to collect underwater sounds. From May 2017 to July 2018, six AUSOMS-mini recorders were used: 14-0106, 14-0107, 15-0106, 15-0107, 15-0109, 15-0110.

Configuration of Audio Recording

(1) Duty Cycle: continuous. (2) Sampling Rate: 44.1kHz. (3) Channels: 2. (4) File Format: MP3 (128 kbps). (5) Audio Gain: High. (6) High Pass Filter: Off.

Field Deployment

At each recording site, one AUSOMS-mini stereo recorder was fixed to a cement





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ARK Identifier Beta ?

[ark:37281/k5d515442](https://doi.org/10.5446/37281/k5d515442)

Cite as

American Psychological Asso... v

Tzu-Hao Lin, Tomonari Akamatsu, Frederic Sinniger, Saki Harii. (2022). Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan (Version 2022-07-11T10:14:54.103158) [Data set].
<https://pid.depositar.io/ark:37281/k5d515442>

Cut to clipboard

Dataset extent

Map tiles & Data by OpenStreetMap, under CC BY-SA.

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At each recording site, one AUSOMS-mini stereo recorder was fixed to a cement block at the seafloor. Each deployment lasted for a maximum of 29 days. Deployment and recovery of recorders were conducted by divers.

Data Processing



Audio recordings generated by AUSOMS-mini recorders were saved in MP3 format. Each MP3 is about 8-hour long and do not have a time stamp on the file name. To facilitate data management, we segmented the 8-hour long MP3 into WAV files of 5-min duration.


We used the [LTSA_gui](#) to generate long-term spectrograms (LTS) and save the LTS in mat files. Each mat file contains median-based LTS and mean-based LTS. Median-based LTS was obtained by measuring median power spectral densities within each 5-min segment. Mean-based LTS was obtained by measuring mean power spectral densities within each 5-min segment.


Associated Publication


Tzu-Hao Lin, Tomonari Akamatsu, Frederic Sinniger, Saki Harii (2020) Exploring coral reef biodiversity via underwater soundscapes. [Biological Conservation, 253: 108901.](#)



Data and Resources

- 
[Audio data](#) 
[Explore](#) v

A link to a shared Drive folder of underwater recordings (WAV) and long-term...
- 
[Long-term spectrogram of Site A](#)
[Explore](#) v

A mat file contains the median- and mean-based long-term spectrograms.
- 
[Long-term spectrogram of Site B](#)
[Explore](#) v

A mat file contains the median- and mean-based long-term spectrograms.
- 
[Long-term spectrogram of Site C](#)
[Explore](#) v

A mat file contains the median- and mean-based long-term spectrograms.
- 
[Codes for data access and analysis](#) 
[Explore](#) v

A Google Colab notebook showing how to apply Soundscapes Viewer in the





Map tiles & Data by OpenStreetMap [↗](#)
under CC BY-SA [↗](#).

Other Access

The information on this page (the dataset metadata) is also available in these formats:

[</>JSON-API](#)

[RDF serializations](#)
based on DCAT 2: **Beta**

[</>JSON-LD](#) [</>Turtle](#) [</>XML](#)

via the [CKAN API](#) [↗](#)



Tags

Acoustic diversity Acoustic habitat Coral reef Mesophotic corals
 Noise Ocean sound Remote sensing Underwater soundscape



Wikidata Keywords

soundscape coral reef



Basic Information

Data Type	<ul style="list-style-type: none"> • Source code • Audiovisual data • Scientific and statistical data formats
Language	English (eng)

Spatio-temporal Information

Temporal Resolution	Daily
Start Time	2017-05
End Time	2018-07
Spatial Coverage	show more
X.min	127.8553390572779
X.max	127.88097380893306
Y.min	26.630362980584657
Y.max	26.68047930832328



Management Information

Author	Tzu-Hao Lin, Tomonari Akamatsu, Frederic Sinniger, Saki Harii
Contact Person	Tzu-Hao Lin





Map tiles & Data by OpenStreetMap
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其他存取方式

此頁面上的資訊 (資料集之後設資料) 也提供以下格式：

</>JSON-API

RDF 序列化輸出 (修改自 DCAT 2) : Beta

</>JSON-LD </>Turtle </>XML

經由 [CKAN API](#)



標籤

- Acoustic diversity
- Acoustic habitat
- Coral reef
- Mesophotic corals
- Noise
- Ocean sound
- Remote sensing
- Underwater soundscape

Wikidata 關鍵字

- 聲景
- 珊瑚礁

基本資訊

資料類型	<ul style="list-style-type: none"> 原始碼 影音資料 科學與統計資料
語言	英文 (eng)

時空資訊

時間解析度	日
起始時間	2017-05
結束時間	2018-07
空間範圍	顯示更多
空間範圍.X.min	127.8553390572779
空間範圍.X.max	127.88097380893306
空間範圍.Y.min	26.630362980584657
空間範圍.Y.max	26.68047930832328

管理資訊

產製者	Tzu-Hao Lin, Tomonari Akamatsu, Frederic Sinniger, Saki Harii
聯絡人	Tzu-Hao Lin



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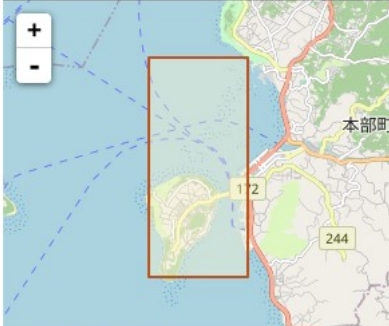
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Data and Resources

Audio data 🔥 Explore ▾

A link to a shared Drive folder of underwater recordings (WAV) and long-term...

Long-term spectrogram of Site A Explore ▾

A mat file contains the median- and mean-based long-term spectrograms.

Long-term spectrogram of Site B Explore ▾

A mat file contains the median- and mean-based long-term spectrograms.

Long-term spectrogram of Site C Explore ▾

A mat file contains the median- and mean-based long-term spectrograms.

Codes for data access and analysis 🔥 Explore ▾

A Google Colab notebook showing how to analyze Soundscapes 1 Year in the...





Contents lists available at ScienceDirect

Biological Conservation

journal homepage: www.elsevier.com/locate/biocon

Exploring coral reef biodiversity via underwater soundscapes

Tzu-Hao Lin^{a,*}, Tomonari Akamatsu^{b,*,**}, Frederic Sinniger^c, Saki Harii^c^a Biodiversity Research Center, Academia Sinica, Taiwan^b The Ocean Policy Research Institute, The Sasakawa Peace Foundation, Japan^c Tropical Biosphere Research Center, University of Ryukyus, Japan

ARTICLE INFO

Keywords:

Ocean sound
Mesophotic corals
Remote sensing
Noise
Acoustic habitat
Acoustic diversity

ABSTRACT

Information on biodiversity is essential to evaluate the ecological status of coral reefs. Sounds produced by reef-associated organisms have been used as a biodiversity indicator. However, the interference from abiotic sounds and the lack of a comprehensive audio library have impeded effective evaluation. This study investigated the application of underwater soundscapes as a remote-sensing method to detect biological and anthropogenic activities. Using techniques including the visualization of long-duration recordings, source separation, and clustering, soundscapes were separated into sounds of anthropogenic and biological sources. Our results revealed the dynamics of biological sounds among coral reefs off Sesoko Island, Oki nawa, Japan. Biological sounds were much more prominent in shallow-water reefs than in upper-mesophotic reefs, but their spectral features and compositions differed. The shallow-water reefs were dominated by broadband sounds of crustaceans and low-frequency transient fish calls, whereas the upper-mesophotic reefs were characterized by a diverse array of fish choruses and transient sounds. We also discovered that shipping noise heavily interfered with the soundscapes from the upper-mesophotic reefs and represented an invisible threat to life in the low-light habitat. The applied techniques of soundscape information retrieval revealed the distinct ecological status of coral reefs and the behavior change of sound-producing organisms in high temporal resolution. Implementation of soundscape monitoring can generate ecological information on habitat quality, reef biodiversity, human activities, and their interactions. Global collaboration on underwater soundscapes will establish a data-informed platform and help stakeholders assess the resilience of coral reefs to environmental and anthropogenic stressors.

1. Introduction

Marine ecosystems provide irreplaceable services and currently face significant pressures due to climate change, human disturbance, and excessive use of marine resources. The United Nations has recognized these threats and placed the conservation of marine ecosystems as one of its sustainable development goals (UN General Assembly, 2015). Coral reefs support various social and economic activities, such as fisheries, coastal protection, and tourism, of many maritime tropical and subtropical nations (Moberg and Folke, 1999; Barbier, 2017; Spalding et al., 2017; Woodhead et al., 2019). These benefits rely on the abundant biodiversity in coral reefs. However, coral reefs have undergone recurrent high-frequency bleaching episodes over the past 20 years due to increased sea surface temperatures (Hughes et al., 2017, 2018). Therefore, detailed information on the spatiotemporal changing patterns of marine biodiversity and interactions with human activities is crucial for

the conservation management of coral reefs.

Biodiversity monitoring in coral reefs remains challenging, partially due to the distinct reef environments and their unique fish assemblages (Pearman et al., 2018; Dumlalan et al., 2019). A comprehensive and long-term assessment of reef biodiversity, environmental characteristics, and human activities may not be feasible because of limited resources for observation and survey opportunities, especially for developing regions or remote reefs. An underwater sensing system capable of monitoring the changing patterns of marine biodiversity, with the ability to diagnose potential risks due to environmental and anthropogenic stressors, is required for establishing management strategies of coral reefs and for providing alerts to the early-warning signs of ecosystem changes (Schmeller et al., 2017; Obura et al., 2019).

A potential solution for such an underwater sensing platform is through monitoring ocean sounds. One autonomous recorder can store long-duration audio recordings, with improved time resolution of

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E-mail addresses: lintzhuo@gate.sinica.edu.tw (T.-H. Lin), akamatsu.tom@gmail.com (T. Akamatsu).

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With the recent development of underwater technology and audio in-
formation retrieval techniques, a soundscape monitoring network can
generate numerous acoustic data that contain ecological information in
multiple dimensions, including the quality of the acoustic habitat,
community of sound-producing organisms, and potential effects due to
human activities. The generated information will allow managers and
stakeholders to conduct a more comprehensive assessment of ecosystem
health at scale.

The feasibility of using 2-h daytime recordings to obtain rapid
ecoacoustic indicators to characterize the major ecosystem functions of
coral reefs is currently being discussed (Elise et al., 2019a). Our result
suggests that beyond a spatial survey based on snapshot recordings,
several long-term recording sites must be established within a spatial
range of interest to allow a full understanding of the temporal variations
of underwater soundscapes and ecosystem dynamics. The exceptional
power of time-series recordings can help establish a library to document

Data availability

The audio dataset used in preparing this paper are available from the corresponding authors on reasonable request. A dataset of the LTS is available on depositar (<https://data.depositar.io/en/dataset/coral-reef-sesoko>).

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CRediT authorship contribution statement

Tzu-Hao Lin: Conceptualization, Methodology, Software, Validation, Data curation, Formal analysis, Resources, Writing – original draft.
Tomonari Akamatsu: Conceptualization, Methodology, Resources, Data curation, Writing – reviewing and editing, Funding acquisition.
Frederic Sinniger: Conceptualization, Visualization, Investigation, Data curation, Writing – reviewing and editing.
Saki Harii: Conceptualization, Investigation, Writing – reviewing and editing, Funding



Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan

Followers




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Project



Ocean Biodiversity Listening Project

Project Website The ocean is full of sounds that are generated from geophysical events, marine animals, and human activities. By using a hydrophone (a microphone for underwater... [read more](#)

Dataset  Topics  Activity Stream  History

Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan



This dataset is an archive of audio data of shallow-water and upper-mesophotic coral reefs off Sesoko Island, Okinawa, Japan. Python codes to visualize the audio data were also provided in a notebook based on Google Colab.

Recording Locations

Three long-term recording sites were established since May 2017. Site A (N26.635° E127.865°) is located on the southeast coast of Sesoko Island and in front of the Sesoko Station of the University of the Ryukyus. The water depth is 1.5 m. Site B (N26.665° E127.869°) is located at the bottom of a reef slope on the north of Sesoko Island and the west of Toguchi Port. The water depth is 20 m. Site C (N26.670° E127.866°) is located on a nearly flat plateau to the north of Sesoko Island and the west of Toguchi Port. The water depth is 40 m.

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[AUSOMS-mini stereo recorders](#) (AquaSound, Kobe, Japan) were used to collect underwater sounds. From May 2017 to July 2018, six AUSOMS-mini recorders were used: 14-0106, 14-0107, 15-0106, 15-0107, 15-0109, 15-0110.

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(1) Duty Cycle: continuous. (2) Sampling Rate: 44.1kHz. (3) Channels: 2. (4) File Format: MP3 (128 kbps). (5) Audio Gain: High. (6) High Pass Filter: Off.

Field Deployment

At each recording site, one AUSOMS-mini stereo recorder was fixed to a cement

Data Discovery via Google Dataset Search

<https://datasetsearch.research.google.com/search?query=Coral Reef Soundscapes>

The screenshot shows a Mozilla Firefox browser window displaying the Google Dataset Search results for the query "Coral Reef Soundscapes". The search bar at the top contains the query, and the results page shows 29 datasets found. The top result is "Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan" by the Ocean Biodiversity Listening Project. A yellow arrow points to the "Explore at depositor" button for this dataset. The dataset is updated as of Jan 9, 2021, and is provided under an Attribution 4.0 (CC BY 4.0) license. The description states that the dataset is an archive of audio data of shallow-water and upper-mesophotic coral reefs off Sesoko Island, Okinawa, Japan, with Python codes to visualize the audio data provided in a notebook based on Google Colab. The recording locations are detailed as three long-term sites established since May 2017: Site A (N26.635° E127.865°), Site B (N26.665° E127.869°), and Site C (N26.670° E127.866°).

Dataset Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help


Dataset Search x +


← → ↻ 🏠 🔒 https://datasetsearch.research.google.com/search?query=Coral Reef Soundscapes&docid=L2cvM 200% ... 📄 🌟


Google Coral Reef Soundscapes x ? 🗨️ Sign in




▼ Last updated ▼ Download format ▼ Usage rights ▼ Topic Free Saved datasets


29 datasets found

 Data from: Hurricane impacts on a coral reef soundscape
zenodo.org
datadryad.org
📄 txt, zip
Updated Dec 28, 2020

 Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan
data.depositor.io
📄 mat
Updated Jan 9, 2021

 Correlation between benthic algal cover and coral reef soundscapes

Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan   

[Explore at depositor](#) 

📄 mat(151517946), mat(178270495), mat(141770285)

Dataset updated Jan 9, 2021

Dataset provided by
Ocean Biodiversity Listening Project

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Acoustic Recorders

Coral Reef Soundscapes off Sesoko Island, Okinawa, Japan

Followers




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More Google Dataset Search

<https://datasetsearch.research.google.com/search?query=劉厝溪>

The screenshot shows a Mozilla Firefox browser window with the title 'Dataset Search - Mozilla Firefox'. The address bar contains the URL <https://datasetsearch.research.google.com/search?query=劉厝溪&docid=L2cvMTFwNWR4Znp6OC>. The search bar contains the text '劉厝溪'. The page displays one search result for '台中市南屯區鎮平溪－劉厝溪航攝影像' (Aerial Photography of Liujiexi, Zhongli Township, Nantun District, Taichung City). The result includes a blue button labeled '前往以下網頁探索: depositar' with a yellow arrow pointing to it, a list of file formats (external resources, kml(2334), zip(77363561)), the update date (Apr 18, 2021), the provider (Asian Ecological Observation Network), and the license (Attribution-NonCommercial-ShareAlike 4.0 (CC BY-NC-SA 4.0)). A sidebar on the left contains a search tip: '找不到預期的結果嗎? 瞭解如何將資料集新增至我們的索引。' (Didn't find the expected results? Learn how to add datasets to our index.)

Dataset Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Dataset Search x +

← → ↻ 🏠 🔒 <https://datasetsearch.research.google.com/search?query=劉厝溪&docid=L2cvMTFwNWR4Znp6OC> 170% ... 📄 🌟

Google 🔍 劉厝溪 × ⓘ 🗨️ 登入

已儲存的資料集

找到 1 個資料集

D 台中市南屯區鎮平溪－劉厝溪航攝影像
data.depositar.io
external resources +2
更新日期: Apr 18, 2021

找不到預期的結果嗎?
瞭解如何將資料集新增至我們的索引。

前往以下網頁探索: **depositar** ←

external resources, kml(2334), zip(77363561)

資料集更新日期 Apr 18, 2021

資料集提供者
Asian Ecological Observation Network

授權
Attribution-NonCommercial-ShareAlike 4.0 (CC BY-NC-SA 4.0)
授權資訊是由系統自動產生

說明
台中市南屯區鎮平里劃入台中高鐵路特定區，已完成區段徵收；在尚未進行都市重劃前，以無人載具航拍紀錄此筏子溪支流鎮平溪－劉厝溪段附近的農田和聚落地景。

https://pid.depositar.io/ark:37281/k5f912n4j

資料與資源



航拍規劃中心線

規劃航線中心線KML檔



探索



OAM正射影像連結 (Link to OpenAerialMap)

發布於OAM的正射影像連結 (Link to accessing the ortho-mosaics published on the...)



探索



2021-04-13 正射影像Google圖磚 (Google Earth tiles)

Google圖磚壓縮檔。解壓縮後，點選開啟資料夾中的kml檔，即可使用Google Earth...

探索



2021-04-13 台中市南屯區鎮平溪—劉厝溪航攝影像

中央研究院網格計算中心WebODM計算成果下載連結；建議使用Firefox瀏覽器開啟連結，瀏覽影像2D、3D影像資料。

探索



空中360影像

空中360影像Google Street View連結。



探索

標籤

南屯區

台中市

地景變遷

筏子溪

都市重劃

Wikidata 關鍵字

正射影像

riverscape

筏子溪

光球

南屯區

無人航空載具

臺中市

The screenshot shows the depositar website interface. At the top, there's a navigation bar with 'depositar' logo and links for '登入', '註冊', and 'English'. Below that, the breadcrumb trail reads '專案 / Asian Ecological ... / 台中市南屯區鎮平溪—劉厝溪航攝影像'. The main content area is divided into several sections: '資料與資源' (Data and Resources) with a list of links and search buttons; '標籤' (Tags) with a set of filter buttons; 'Wikidata 關鍵字' (Wikidata Keywords) with a list of keywords; '基本資訊' (Basic Information) with a table of metadata; '時空資訊' (Spatio-temporal Information) with a table of dates; '管理資訊' (Management Information) with a table of production details; and 'Dataset extent' with a map. The right sidebar contains a '資料與資源' section with a list of links and search buttons, and a '基本資訊' section with a table of metadata.

Orthophoto (link to Open Aerial Map)

OpenAerialMap Browser - Mozilla Firefox

File Edit View History Bookmarks Tools Help

OpenAerialMap

Search location or coordinates

2021-04-13 台中市南屯區
鎮平溪－劉厝溪

UPLOADED BY
Yu-Huang Wang

Display as TMS Thumbnail

Open in iD editor | JOSM

Copy image URL TMS | WMTS

DATE 2021-04-13

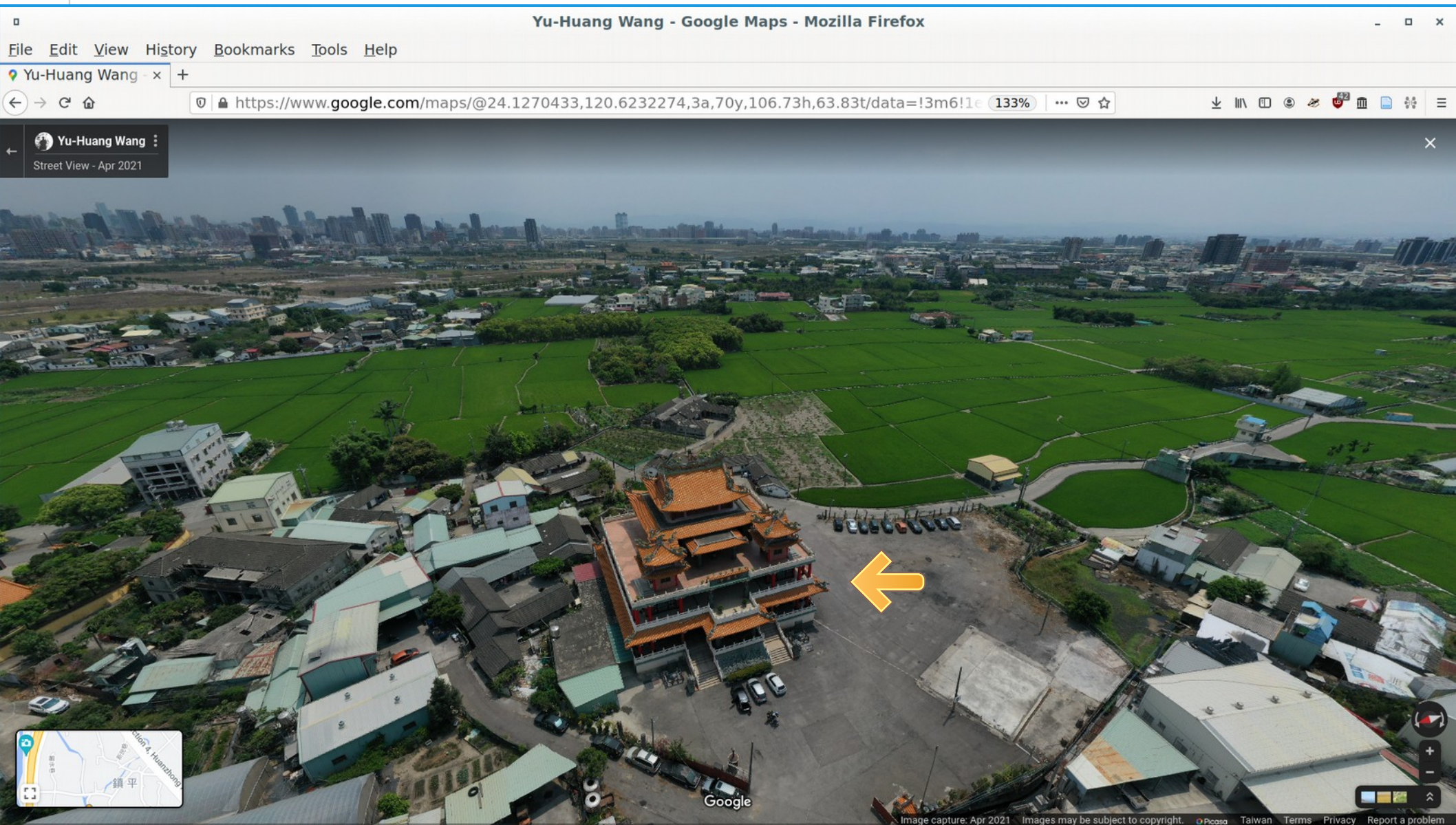
RESOLUTION 4 cm

PROVIDER Yu-Huang Wang
(<https://data.depositar.io/en/dataset>)

Sign In

Leaflet | © Mapbox © OpenStreetMap | Report an issue with this map

360° Panorama (link to Google Street View)



<https://goo.gl/maps/zZZwQ3PkstQzrXYN7>

https://data.depositar.io/

d.depositar Datas

Home / Projects

What are Projects?

Projects are used to create, manage and publish collections of datasets. Users can have different roles within a Project, depending on their level of authorisation to create, edit and publish.

Search projects...

131 projects four

高雄美濃雙溪橋上下游疏濬工程溪流環境變化監測 (Monitoring the environmental changes caused by the Dredging in the SHUANG XI River, Meinong, Kaohsiung, Taiwan)

無人載具航拍監測紀錄高雄美濃雙溪橋上下游疏濬工程的環境變化與衝擊 (UAV mapping the

d.depositar Datasets Topics

Home / Datasets

Search datasets...

871 datasets found

Filter by location [Clear](#)

Map tiles & Data by [OpenStreetMap](#), under CC BY-SA

Filter by Time [Clear](#)

Wikidata Keywords

Deep-sea soundscapes of Japan

This dataset is an archive of acoustic data soundscapes of Japan. Recording Location Japan were recorded. This...

[mat](#)

新竹左岸生態情報地圖及環境教育圖與導覽計畫資料

本資料集保存計畫產出的生態情報圖層資料、導覽計畫文件與相關點位、路線點點、計畫資料。

[KMZ](#) [gpkg](#) [KML](#) [PDF](#) [CSV](#)

水環境改善計畫第2-3批次新竹市置圖套疊

此資料集為新竹市環保局提供的水環境改善工程平面配置圖，處理成可使用Google Ea

d.depositar 資料集 專案 專題 關於 支援

儲存 · 尋找 · 分享

搜尋資料集

[資料集列表](#) [上傳資料集](#) [建立新專案](#)

研究資料的妥善管理和保存，讓您的研究可再次重現。
讓我們一起實踐 FAIR 資料原則，讓研究資料可被找用、可被取用、可相互操作、可再次使用！

開放且自由使用

以開放存取協議 CC-BY 為基礎建構的資料儲存服務，已客製化並具備功能，並支援研究資料管理，所有研究資料均可被使用、用來管理和維護研究資料。

[更多資訊](#)

資料集易取易得

目前沒有其他限制，您在不同資料集型、您不需要安裝軟體，透過網頁介面、資料集型、關鍵字搜尋，可快速找到資料集、資料集是由 Google 資料集搜尋引擎收錄索引。

[更多資訊](#)

具程式存取介面

可透過程式存取介面 (API)，自動取用並匯入資料集。API 亦可用於存取結構化的資料內容，如 CSV 與 Excel 表格，方便開發者進行資料取用與分析。

[更多資訊](#)

特色專案

ThakBong | 讚基
將台灣與亞太地區豐富的濕地生態數位化，資料保存作為濕地、調查、調查、跨區域的研究、教學、以及資訊用途。
[更多](#)

RDM Hub | 研究資料管理推播室
關心研究資料管理的研究人員，在這座平台空間分享與探討各學科領域所遇過的資料議題，以促進研究資料管理。
[更多](#)

Asian Ecological Observation Network | 亞洲生態觀察網
王雅博博士發起之專案，使用無人飛行載具紀錄地景變遷，目前主要關注
[更多](#)

資料集	專案	瀏覽總數
1729	269	208.3k
PDF	HTML	JPEG
1071	200	159
CSV	ZIP	SHP
105	87	142
		KML
		80

Collaborative Badlands | 惡地協作

作者

Collaborative Badlands

🔗 前往網站

📦 展示案例包含的資料集

西南惡地點位資料庫

【英國攝影家湯姆生1871台灣線性文化遺產】

🔗 社交

🐦 Twitter

📘 Facebook

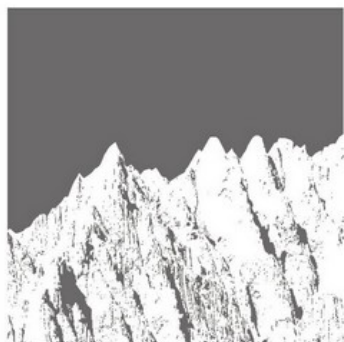
Collaborative Badlands | 惡地協作



以台南左鎮為實驗場域，對外延伸至其他惡地形地區，包括台南龍崎、以及高雄田寮、內門等地區，建立地方研究、教學、服務等各項工作。由國立成功大學推動的協力計畫。

A collaborative project at the National Cheng Kung University on the rural regeneration and transdisciplinary research in the Southwestern Taiwan Badlands Region.

🔗 前往網站



COLLABORATIVE BADLANDS

惡地協作跨領域協作教學研究群 / Collaborative Badlands Project

惡地協作跨領域協作教學研究群為國立成功大學都市計劃學系與中央研究院人社中心地理資訊科學研究專題中心合作建立之社區地理資訊系統(Community GIS)專案之一部分，主要目的以台南左鎮為實驗場域，對外延伸至其他惡地形地區，包括台南龍崎、以及高雄田寮、內門等地區，建立地方研究、教學、服務等各項工作之資料庫，希望整合既有的資訊、資源與技術，建立在地知識之整合平台，鏈結跨領域跨尺度之成員，促進在地協作交流創新之網絡。

讀取更多

追蹤者

0

資料集

125

👤 資料集 🔄 動態牆 ⓘ 關於

惡地協作跨領域協作教學研究群 / Collaborative Badlands Project

惡地協作跨領域協作教學研究群為國立成功大學都市計劃學系與中央研究院人社中心地理資訊科學研究專題中心合作建立之社區地理資訊系統(Community GIS)專案之一部分，主要目的以台南左鎮為實驗場域，對外延伸至其他惡地形地區，包括台南龍崎、以及高雄田寮、內門等地區，建立地方研究、教學、服務等各項工作之資料庫，希望整合既有的資訊、資源與技術，建立在地知識之整合平台，鏈結跨領域跨尺度之成員，促進在地協作交流創新之網絡。

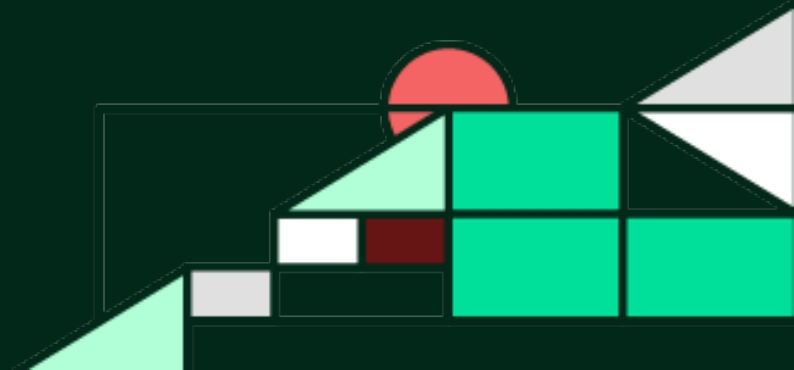
資料庫內容目前已初步彙整以下三類資料：1) 以左鎮、龍崎、田寮、內門為關鍵字進行網路搜尋的獲得的二手資料，包括影音、論文、報告、網站等資訊。2) 國立成功大學惡地協作相關課程參與之學生作品、報告書、以及圖資 3) 歷史照片掃描檔

資料庫內容仍持續建置中，歡迎回饋與協作，若有引用也煩請標註資料原始出處。

相關問題請洽：國立成功大學惡地協作團隊 collaborativebadlands@gmail.com；國立成功大學都市計劃學系 張秀慈老師 hsiutzuchang@mail.ncku.edu.tw

本資料集建置經費部分由107年行政院農委會水土保持局農村再生創新研究計畫以及109-111年教育部大學社會責任實踐計畫補助

depositar: A bottom-up data repository



The road to *depositor*

- Developed to facilitate data sharing for two “integral” research projects funded by the Ministry of Science and Technology (MOST), Taiwan
 - 2013 – 2015 and 2016 – 2019
 - First presented at Open Repositories 2015
- Open to the public for general use in Oct 2018
 - Launched at the Pacific Neighborhood Consortium (PNC) 2018 Annual Conference, San Francisco, CA, USA
 - From “data sharing portal for some” to “data depository for all”
- Celebrating the five-year anniversary at PNC 2023, Okinawa, Japan
 - Progress report at Open Repositories 2021, 2022, 2023 too

Digital Heritage 2018 3rd International Congress & Expo: ECAI - New Technologies and Infrastructu... - Mozilla Fir... - x

File Edit View History Bookmarks Tools Help

Digital Heritage 2 x +

https://digitalheritage2018.sched.com/event/HNxu/ecai-ne

SCHED Digital Heritage 2018 3rd International Congress & Expo has ended [Create Your Own Event](#)

Saturday, October 27 • 9:00am - 10:30am [Back To Schedule](#)

ECAI - New Technologies and Infrastructure **FILLING**

<https://sched.co/HI> [Tweet](#) [Share](#)

Limited Capacity filling up


Moderator: Lewis Lancaster, University of California, Berkeley

9:00-9:30
Alex Amies, Google
"Artificial Intelligence and the Study of Buddhism"

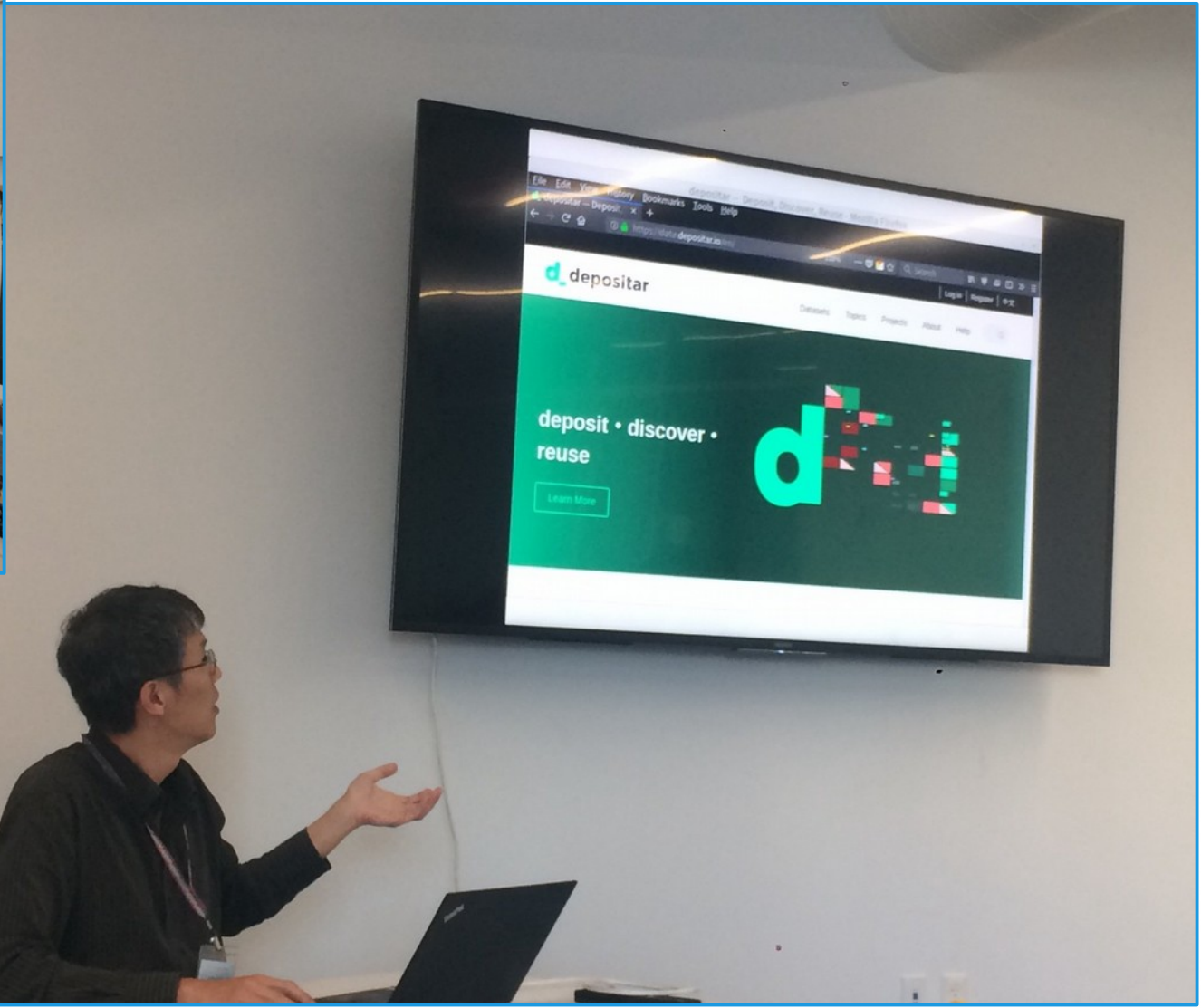
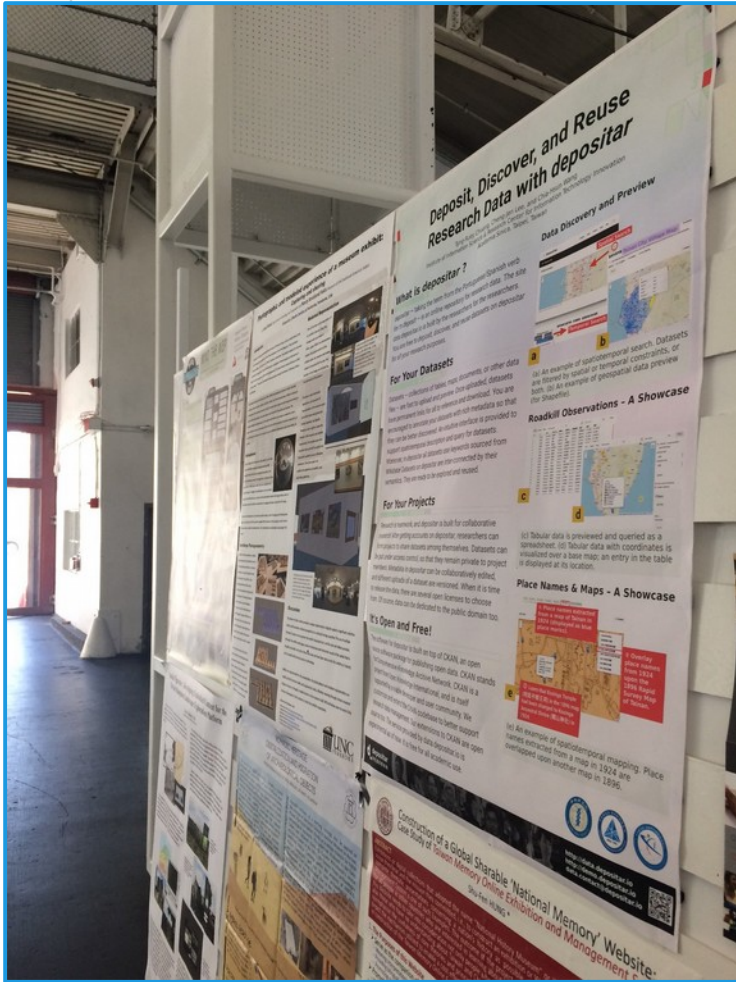
9:30-10:00
Patrick Schmitz, University of California, Berkeley
"Scaling Research Computing and Data Infrastructure for Humanities and ... g Domains"

10:00-10:30
Prof. Tyng-Ruey Chuang, Cheng-Jen Lee, and Chia-Hsun Wang, Academia Sinica, Taiwan
"Retooling An Open Data Repository for A Research Data Repository"

Moderators

 **Lewis Lancaster**
Prof. Emeritus, UC Berkeley
Honorary Chair VSMM 2016

The *depositar* was formally launched at the 2018 Pacific Neighborhood Consortium Annual Conference and Joint Meetings – San Francisco, CA, USA



Infrastructure from below

- Research data management is infrastructure work
 - basic but not sexy; mismatch in needs and resources
 - culture of collaboration; priority in coordination
 - need to be a community of practices
- Infrastructure with small pieces from below
 - common licenses, vocabularies, formats, protocols, etc.
 - reusable tools (e.g. CKAN) and references (Wikidata)
 - resource pooling: people, CPU, storage, bandwidth, etc.
 - engaging in communication: code, data, experience, etc.

Organic bottom-up growth

- Uptake by NPOs (non-profit organizations) since 2019
 - *e.g.* from the groups monitoring ecological impacts resulted from governmental construction works
- Two grants from MOST (NSTC) with some focus on Research Data Management (2019 – 2022, 2022 – 2025)
 - interacting with other project teams working on Sustainability Research and on Long-Term Social and Ecological Research (LTSER research stations)
- Use by researchers at Academia Sinica, Taiwan
 - as well as by others in Taiwan and from abroad
- Formalized *Terms of Use* and *Privacy Policy*, July 2021

Workshops co-organized by NPOs on
Research Data Management (RDM)

2019 公共工程生態檢核 資料管理與開放應用工作坊

2019年11月02日：台北南港中央研究院人文社會科學大樓遠距會議室(台北市南港區研究院路二段128號)

2019年11月09日：台中文山社區大學—台中世貿中心3樓303會議室(台中市西屯區天保街60號)

2019年11月23日：台南社區大學—後甲國中校區「池東樓112教室」(台南市東區林森路二段260號)

議程 線上報名 範例資料集

2017年4月25日公共工程委員會頒佈公共工程生態檢核機制；2019年5月10修正，重新頒佈為公共工程生態檢核注意事項，規範中央目的事業主管機關的新建工程，或地方政府接受中央經費補助超過50%的新建工程，從計畫核定至工程完工階段必須執行生態檢核，並將相關資料、資訊公開於開放平台。2017年開始的前瞻建設水環境計畫也必須依此規範執行生態檢核，落實資訊公開和公民參與。目前，各單位仍缺乏妥善管理、開放生態檢核相關資料的協作平台，以致前瞻水環境建設計畫的資訊公開不完整、不透明，執行單位亦忽視生態檢核程序，造成許多水環境改善、營造計畫破壞既有自然環境而引起公眾嚴厲的批評。因此，公民團體要求相關單位必須立即改善資訊公開作為，開放生態檢核相關資料。

研究資料寄存所是一個通用的研究資料管理協作平台。此平台短期內可以協助提供政府相關部門管理和開放生態檢核資料所需的平台與技術資源；長期維護，更可以持續妥善保存全國的生態環境基礎資料，提供未來各領域學術研究、政府政策檢討及民間加值運用，是全民共享的重要數位資產。目前，研究資料寄存所已累積至少106個與生態檢核相關的資料集；但是，多數資料集缺乏基本的詮釋資料，且上傳的資料多為PDF檔，可用性低，對於公民團體要求部門落實資訊公開和資料開放的期許仍有很大的落差。為提升資料提供者(相關政府單位、水環境顧問團及執行生態檢核廠商)對於資料管理的觀念與使用研究資料寄存所妥善管理資料的能力，並向一般民眾和公民團體推廣使用此平台來瞭解公共工程對環境生態的影響，我們邀請中央目的事業主管機關、縣市政府、前瞻水環境計畫顧問團、生態檢核計畫團隊、生態顧問公司及民眾與公民團體，就近參加11月2、9、23日分別在台北、台中、台南舉辦的三場生態檢核資料管理與應用工作坊，以提升生態檢核資料管理的品質，並促進公共工程資訊公開與公民參與。

中央研究院資訊科學研究所、中央研究院資訊科技創新研究中心、中央研究院網格計算中心、中央研究院地理資訊科學研究專題中心、台中文山社區大學、台南社區大學、台灣生態學會、竹園工作室、台灣河溪網、台灣石虎保育協會 合作舉辦

Translation of the RDM Guide
from Science Europe

國際合用的研究資料管理實用指南 增訂版

Practical Guide to The International Alignment of Research Data Management - Extended Edition

包含 DMP 評量指標
with DMP Evaluation Rubric

Science Europe





推動聲景生態調查——專訪林子皓博士

我們其實希望其他人用我們的 code，添加上他們的想法後，將他們的 code 也發佈出來。這會是一種很有趣的資料應用狀況，可以看各研究團隊，基於同一份資料，為了不同目的，如何去做分析。

VIEW DETAILS



撰寫資料管理方案 (DMP)

資料管理方案 (Data Management Plan, DMP) 是一份描述研究資料將如何被蒐集、使用、管理、(短期或長期) 保存、分享等歷程的文件。DMP 時常是研究團隊在資料管理上的第一步。

Read More



挑選可信賴的資料儲存庫

研究人員需能分辨可信賴的資料儲存庫，以便妥善儲存和共享資料。對於研究人員及其機構、資助機構而言，識別合適的資料儲存庫會是一項富有挑戰的任務。

Read More



研究資料管理的好工具

各學科可能有自身慣用的 RDM 工具。許多研究機構亦會提供一些需付費方能使用的工具，研究者可洽詢機構取得更完整的工具協助。

Read More

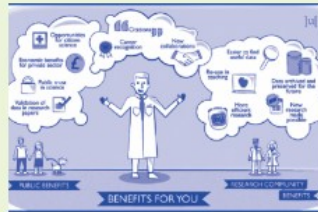
最新文章



長期社會生態系統研究的資料管理原則

對 LTSER 而言，規劃堅實且彈性的資料管理策略是達成資料永續的必要基石。國際上以站點前線與網絡支持的資料管理二層級為框架，由貼近資料的各自研究站點自行建立資料管理規劃，...

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讓資料共享成為責任 簡介國際近期的科研資料開放政策

為改善研究資料分享的窘境，近來國際上許多科研補助機構，陸續頒布了與資料分享有關的政策，建議或要求研究人員分享研究資料。以下簡介世界衛生組織 (World Health Organization, WHO)、...

READ MORE >



研究計畫提案該如何準備資料管理方案? 認識中研院「研究資料寄存所」

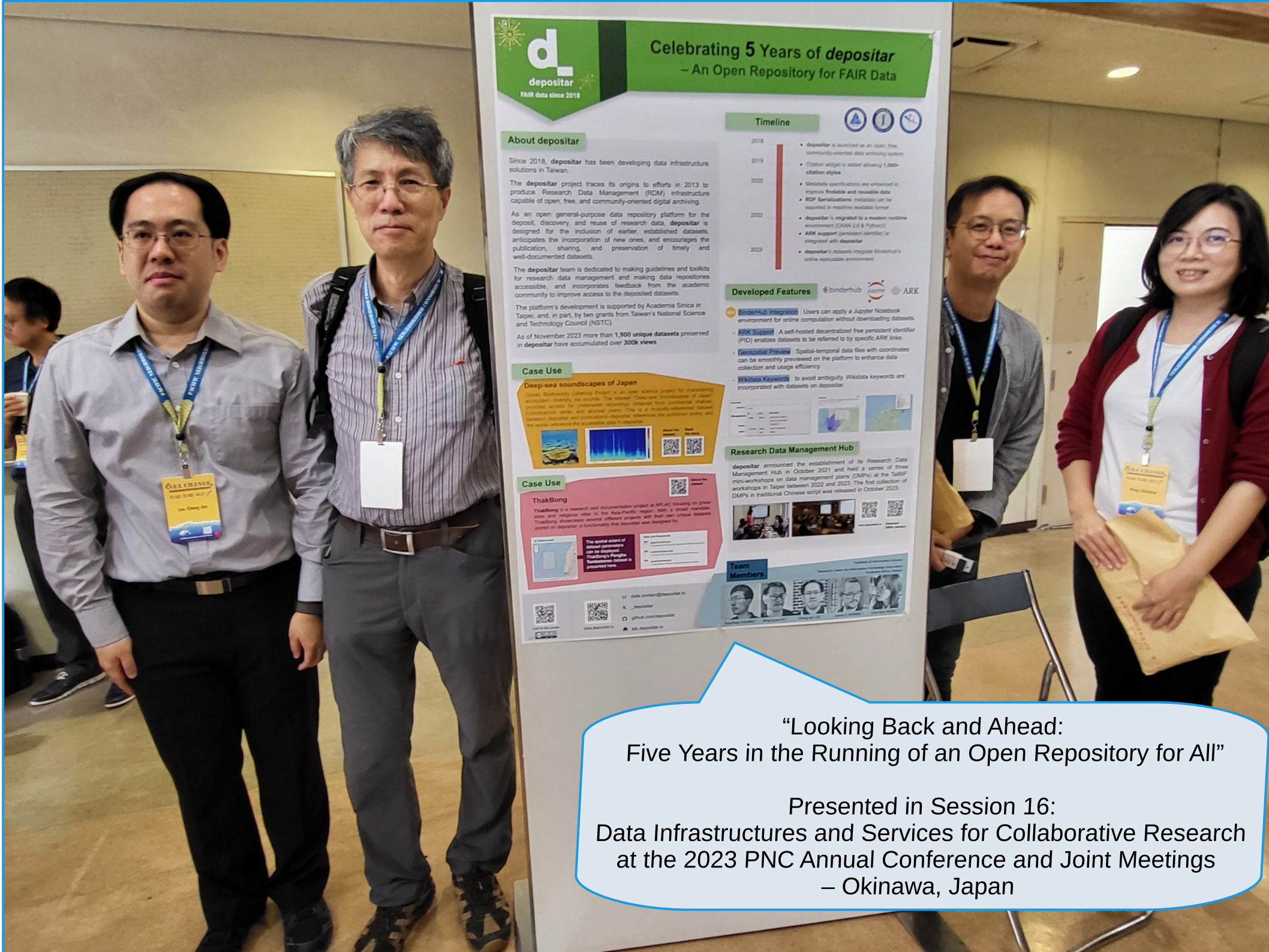
文/王家薰 (中央研究院 資訊科學研究所 專案經理)、莊庭瑞 (中央研究院 資訊科學研究所 副研究員)

本文亦刊登於...

Research Data Management Hub (RDM Hub)

<https://rdm.depositar.io/>

- Resources
- News and Reporting
- Communities of Practices



depositor

FAIR data since 2018

Celebrating 5 Years of *depositor* – An Open Repository for FAIR Data

About depositor

Since 2018, *depositor* has been developing data infrastructure solutions in Taiwan.

The *depositor* project traces its origins to efforts in 2013 to produce Research Data Management (RDM) infrastructure capable of open, free, and community-oriented digital archiving.

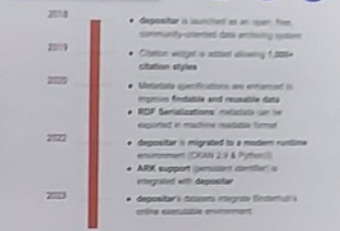
As an open general-purpose data repository platform for the deposit, discovery, and reuse of research data, *depositor* is designed for the inclusion of earlier, established datasets, anticipates the incorporation of new ones, and encourages the publication, sharing, and preservation of timely and well-documented datasets.

The *depositor* team is dedicated to making guidelines and toolkits for research data management and making data repositories accessible, and incorporates feedback from the academic community to improve access to the deposited datasets.

The platform's development is supported by Academia Sinica in Taipei, and, in part, by two grants from Taiwan's National Science and Technology Council (NSTC).

As of November 2023 more than 1,900 unique datasets preserved in *depositor* have accumulated over 300k views.

Timeline



Developed Features

- Binderhub Integration** Users can apply a Jupyter Notebook environment for online computation without downloading datasets.
- ARK Support** A self-hosted decentralized free persistent identifier (PID) enables datasets to be referred to by specific ARK links.
- Geospatial Preview** Spatial-temporal data files with coordinates can be smoothly previewed on the platform to enhance data collection and usage efficiency.
- Wikidata Keywords** To avoid ambiguity, Wikidata keywords are incorporated with datasets on depositor.

Case Use

Deep-sea soundscapes of Japan

Global Biodiversity Learning Project is an open science project for characterizing biodiversity diversity and sounds. The Global "Deep-sea Soundscapes of Japan" provides access for underwater recordings obtained from commercial vessels, recreational vessels, and research vessels. This is a community-oriented and open science resource that provides access to the published works and related resources the accessible data in depositor.

QR Code: [QR Code](#)

ThakBong

ThakBong is a research and documentation project at APLAC focusing on green sites and religious sites in the Asia-Pacific region. It is a broad mandate. ThakBong structures several different projects with their own unique datasets stored on depositor. A functionality that depositor was designed by.

The spatial extent of dataset parameters can be displayed. ThakBong's Platform Features and is presented here.

QR Code: [QR Code](#)

Research Data Management Hub

depositor announced the establishment of its Research Data Management Hub in October 2021 and held a series of three mini-workshops on data management plans (DMPs) at the Taipei workshops in Taipei between 2022 and 2023. The first collection of DMPs in traditional Chinese script was released in October 2023.

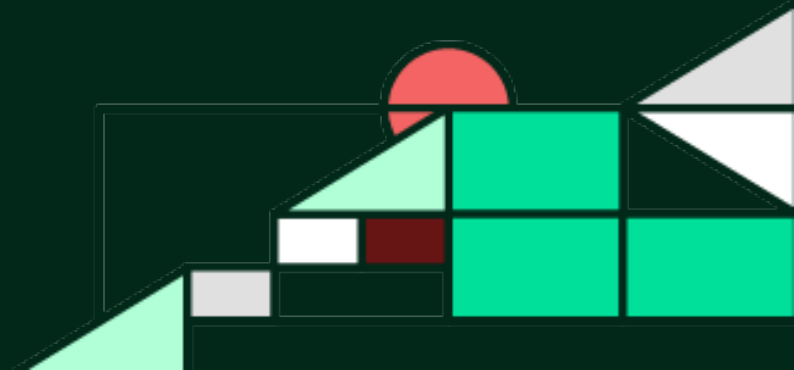
Team Members



data.contact@depositor.io
@depositor
github.com/depositor
info.depositor.io

“Looking Back and Ahead:
Five Years in the Running of an Open Repository for All”
Presented in Session 16:
Data Infrastructures and Services for Collaborative Research
at the 2023 PNC Annual Conference and Joint Meetings
– Okinawa, Japan

depositar: A bottom-up data repository



Building on top of CKAN

- CKAN from OKFN: open source and in Python
 - repurposed and customized for research datasets
 - enriched metadata & connected to more resources

- Added features

- Wikidata (2017)



ckan

- Citation Widget (2018)



- RDF Serialization (2020)

- Archival Resource Key (2022 Q2)

- BinderHub Integration (2023 Q4)



Feature Highlights

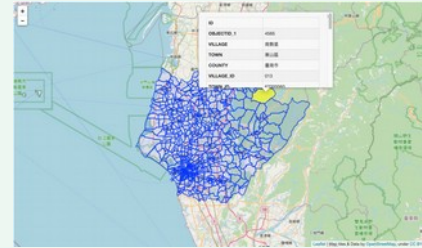


Spatio-temporal Search

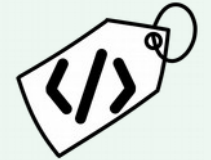


site:data.depositar.io

Dataset Search



Data Previewers



W3C DCAT-based Metadata



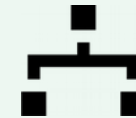
ARK Persistent Identifier



Wikidata Keywords



FAIR data since 2018



Project Management



/api/3/action/
JSON Data API



JSON-LD | XML | Turtle
RDF Serializations



BinderHub Integration

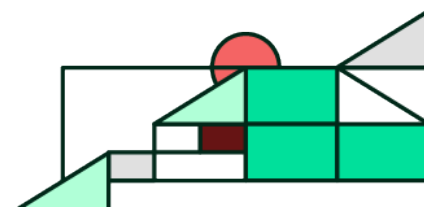
Dataset Citation



ckan



Open Data License Widget



Why Use Wikidata?

Are we flying from Taiwan to Japan or flying from Japan to Taiwan?

「松山飛松山」首航 華航創先例



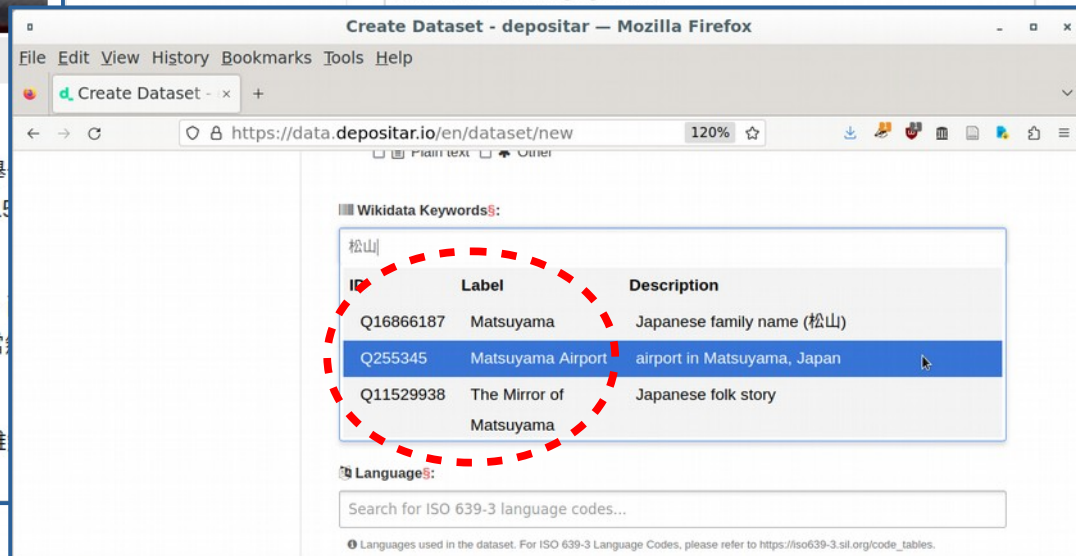
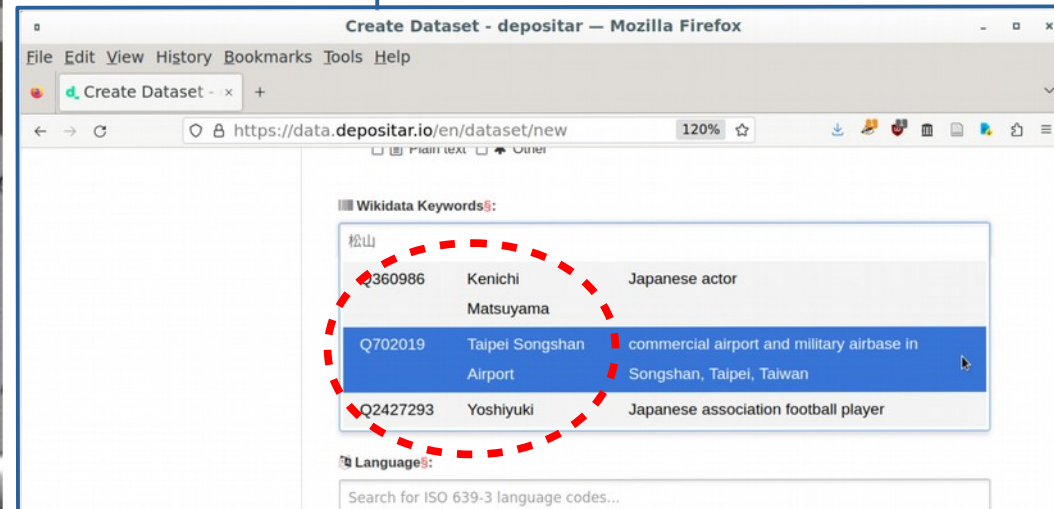
台灣松山機場往日本松山機場的同名航線今首航！（圖擷取自年代新聞台）


2013/10/11 11:33

【即時新聞／綜合報導】台灣松山機場往日本松山機場的同名航線今首航！此舉機場後，破例開放二線城市日本愛媛松山機場航線，首航班機採包機制，共有15民眾紛紛表示，全球首例當然要捧場，不過最重要的還是只需2小時就到日本。

中華航空公司創下全球首例，加開台灣松山機場對飛日本松山機場的對飛航線，多將有158位幸運乘客創下歷史先例，搶到首航機票的民眾直呼，既然是首航當了，只要兩小時。

另外，台灣松山機場也破格開放二線城市機場對飛，對此，搭機乘客則認為，雖本都逛大城市，藉機來趟祕境之旅也會有不一樣的感受。



Language	Label	Description	Also known as
English	Taiwan	country in East Asia	Republic of China Chunghwa Minkwo Chunghwa Minkuo Formosa Nationalist China Free China Free area of the Republic of ... Republic of China (Taiwan) Chinese Taipei  TW ROC Taiwan ROC China, Republic TWN TPE Nanasian Taywan Taivang Ilaod Taivang𠄎 The ROC
Traditional Chinese	中華民國	東亞國家	自由中國 臺灣 臺澎金馬 中華台北 ROC 台灣 民國 中華民國臺灣 ROC 台灣 中國 (1970年前)

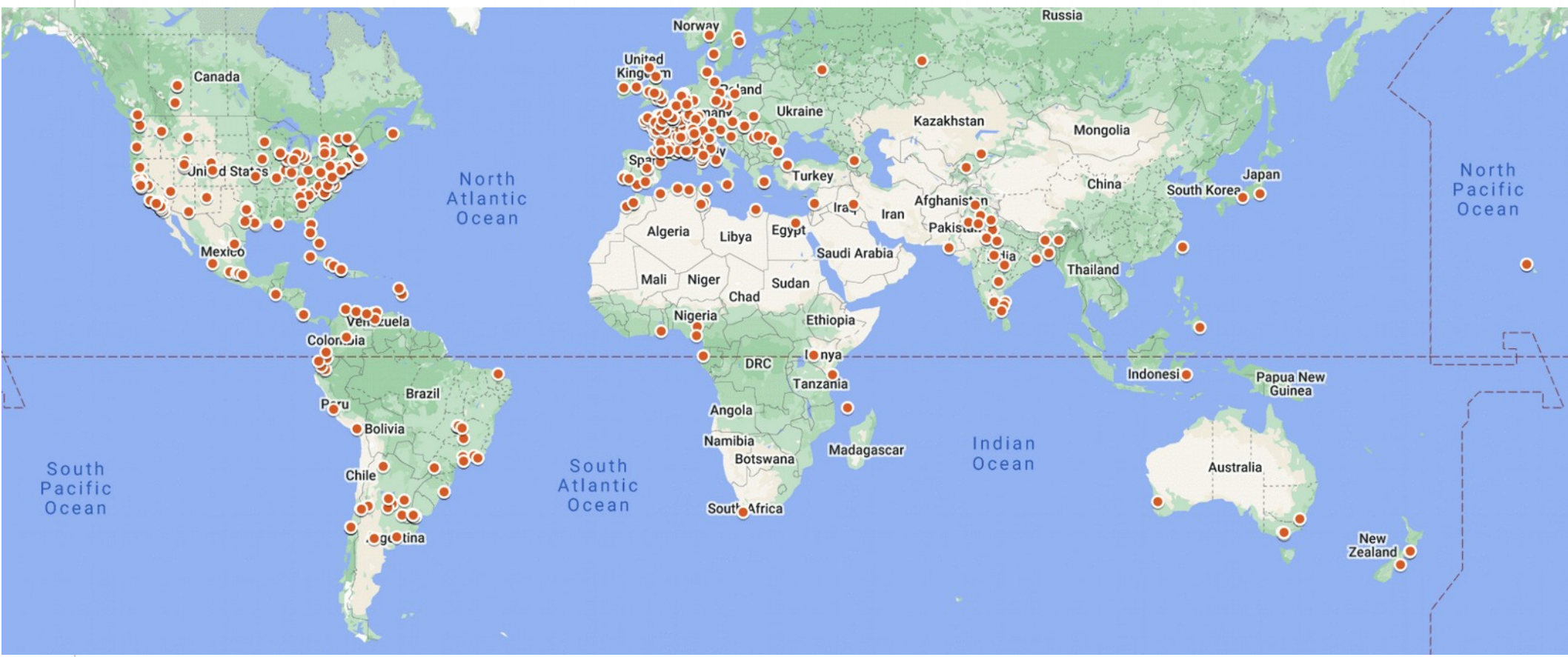
<https://www.wikidata.org/wiki/Q865>



Why Use ARK (Archival Resource Key)?

Issue Persistent Identifiers (PIDs) for Free and Support Each Others in Resolving Them!

- Institute of Information Science, Academia Sinica, mints and resolves its own ARKs ... so are BnF, Caltech, Crossref, Internet Archive, Smithsonian Institution, ...
- ARKs not issued by ourselves can be passed to their minters to resolve them...
- <https://n2t.net/ark:37281/k5d951q1h> →
<https://pid.depositar.io/ark:37281/k5d951q1h> →
<https://data.depositar.io/dataset/binder-example-sea-turtle-sightings-in-taiwan>



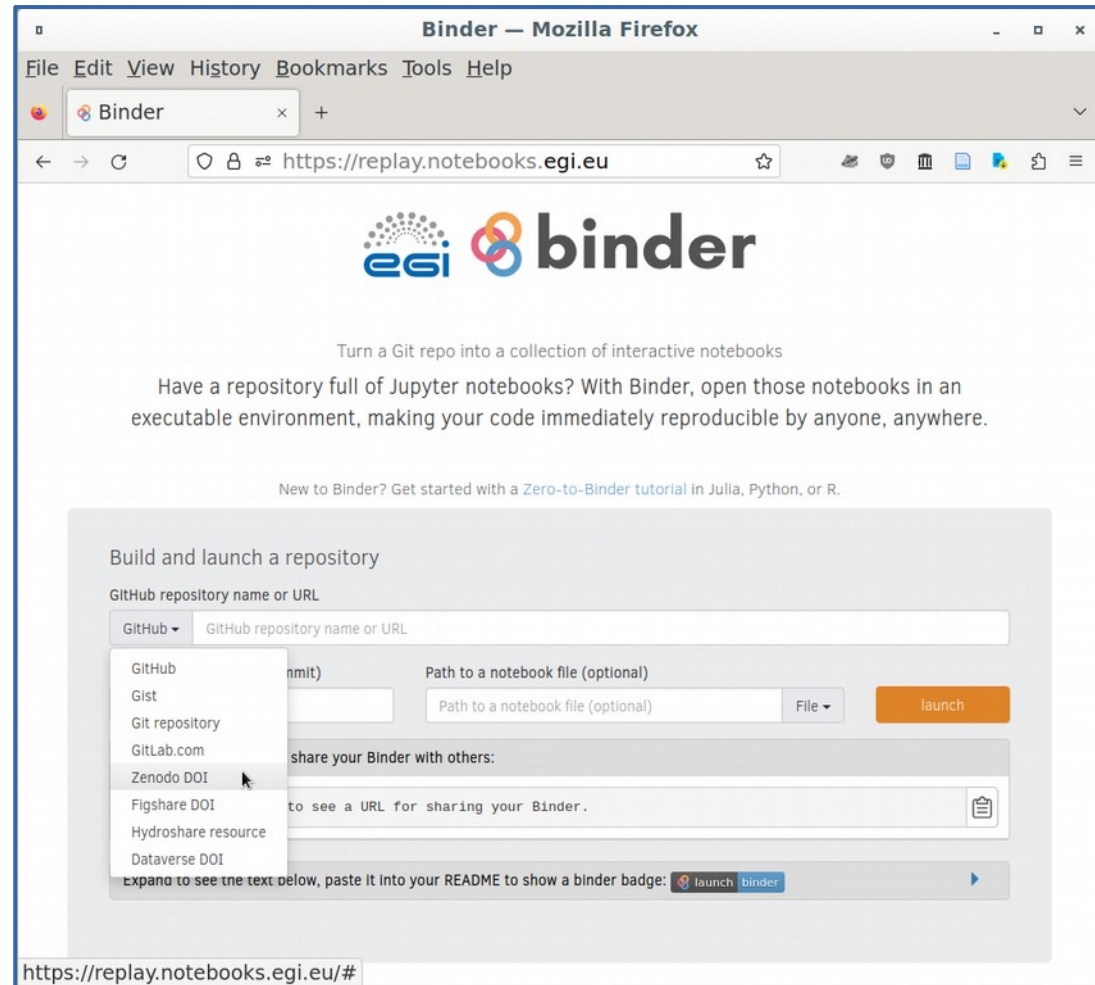
Bringing Computation to Data Repositories

- Our inspirations

- EGI Notebook and Replay
- GESIS Notebooks
- Code Package Function from NII (Japan)

- Repositories for reproducible research

- Article, code, and data are all open access and at the same place in a repository
- Analytical results in the article can be automatically generated with the code and the data (by clicking a single button)
- The repository coordinates computational and storage resources that are needed for the reproducibility of the results



Online Interactive Computing: Support and Challenge

- Jupyter (Jupyter Notebook, JupyterLab)
 - A web-based interactive computing platform
 - Support many kernels (programming languages)
- JupyterHub
 - A multi-tenancy JupyterLab service for group of users
- The current JupyterHub service for specific data partners
 - Limited and inelastic processing power as a single server
 - The need for downloading the data from the repository and then uploading it to Jupyter



BinderHub Integration for *depositar*

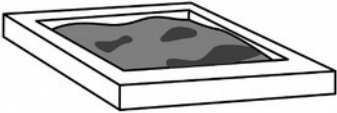
- BinderHub: establish a JupyterHub in the Kubernetes (k8s) environment to create Jupyter notebooks from data repositories such as GitHub, Zenodo, or Dataverse
 - MyBinder.org: a public Binder service
- **BinderHub integration** for *depositar* (available as of October 2023)
 - binder.depositar.io: a customized Binder service with a “CKAN provider” to support datasets on the *depositar*
 - Launch a Jupyter environment containing resources from a dataset by **clicking a button** on the dataset page without downloading the resources
 - Highly scalable thanks to the k8s technology



Demo

<https://n2t.net/ark:37281/k5d951q1h>

Project



測試區 / Sandbox
僅供測試用途。 For testing purposes only.
[read more](#)

Social

Twitter

Facebook

License

CC-BY 4.0 [OPEN DATA](#)

ARK Identifier [?](#)

[ark:37281/k5d951q1h](#)

[launch binder](#)


Dataset Topics Activity Stream Showcases


Binder Example: Sea turtle sightings in Taiwan

An example dataset to demonstrate the BinderHub integration for depositor.

Original dataset: [Sea turtle sightings in Taiwan | 台灣海龜目擊紀錄](#), TurtleSpot Taiwan, CC-BY 4.0.

Data and Resources

 [TurtleSpot2022_v2](#) [Explore](#)

 [Example Jupyter notebook](#) [Explore](#)


Wikidata Keyword

[Binder Project](#)

Basic Information

Data Type

- Source code
- Structured text

 **BinderHub** Beta

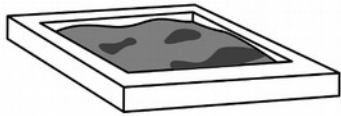
[launch binder](#)

① Click the “launch binder” button on the dataset page

Demo

<https://n2t.net/ark:37281/k5d951q1h>

Project



測試區 / Sandbox

僅供測試用途。For testing purposes only.

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ARK Identifier [?](#)

[ark:37281/k5d951q1h](https://n2t.net/ark:37281/k5d951q1h)

[BinderHub](#) Beta

[launch binder](#)

Dataset

Binder Exam

An example dataset to

Original dataset: [Sea](#)

CC-BY 4.0.

Data and Resource

[TurtleSpot2022_v2](#)

[Example Jupyter notebook](#)

Wikidata Keyword

Binder Project

Basic Information

Data Type

- Source code
- Structured text

BinderHub Beta

Simple 0 1 Python 3 (ipykernel) | Idle Mem: 214.97 / 2048.00 MB Mode: Command Ln 1, Col 1 Example.ipynb 0

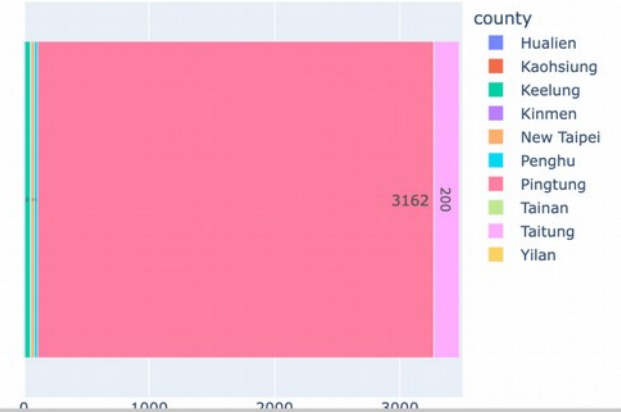
Name	Last Modified
Example.ipynb	18 hours ago
TurtleSpot2022_v2_gbifV1.7.csv	18 hours ago

② A JupyterLab with resources in the dataset will be presented

Show sightings counts for each county

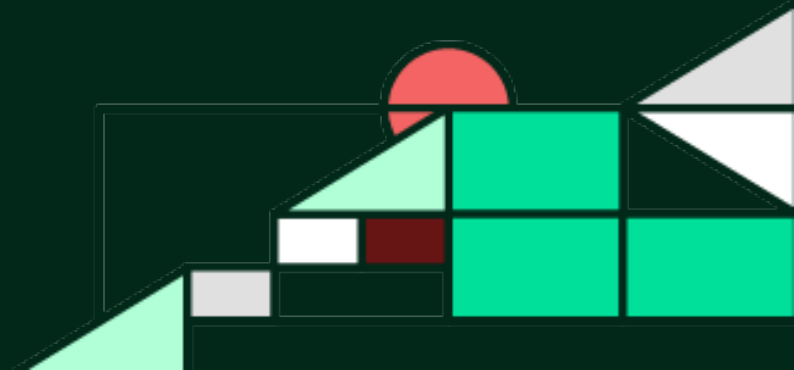
```
[3]: # Group by county
county_df = df.groupby(["county"]).count()

# Show total individual counts for each county
county_df["y"] = 0
fig1 = px.bar(county_df, x="individualCount", y="y", text = 'individualCount', color=county_df["individualCount"].keys(), orientation="vertical")
fig1.update_yaxes(showticklabels=False, title=None)
fig1.update_xaxes(range=[0, 3500])
fig1.update_layout(margin={"r": 0, "t": 0, "l": 0, "b": 0})
fig1.show()
```

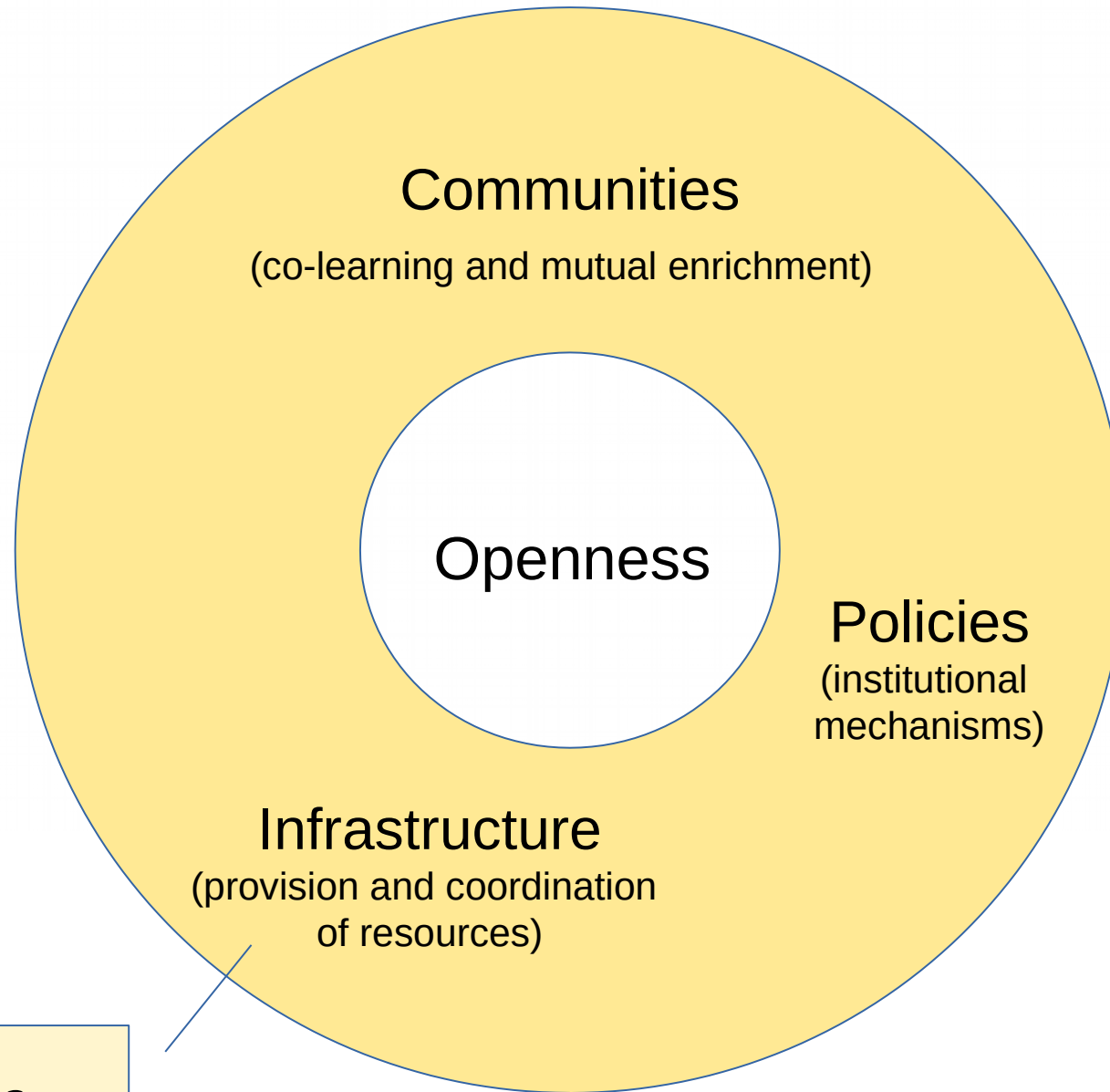


① Click the "launch binder" button on the dataset page

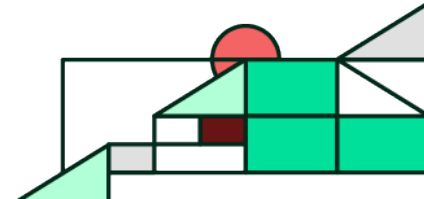
Repositories and “open science”



Repositories in Open Source/Data/Science...



Repositories



The FAIR Data Principle

Findable

可被找到

人或機器能輕鬆找到資料或後設資料。

- F1. 配發持續識別碼 (PIDs)
- F2. 使用豐富的后設資料 (metadata)
- F3. 資料在可搜尋的資源中註冊或索引
- F4. 後設資料指明資料的識別碼

Accessible

可被取用

人或機器可存取或下載資料或後設資料。

- A1. 資料的識別碼使用標準化的通訊協定
- A2. 即使資料不可取得，後設資料仍可得

Interoperable

可相互操作

不同來源的資料可被交換或結合。

- I1. 使用正規、共享及廣泛使用的語言以達成知識再現 (e.g. RDF, JSON-LD)
- I2. 使用符合 FAIR 原則的語彙 (vocabulary)
- I3. 資料包括對其它資料的合適參照

Reusable

可再次使用

資料能容易被未來的研究複製或結合。

- R1. 以精確且相關的多種屬性，豐富地描述 (後設) 資料
 - R1.1 以清晰、可取用的資料授權條款釋出 (後設) 資料
 - R1.2 (後設) 資料連結到詳細的溯源資訊
 - R1.3. (後設) 資料符合該領域相關的社群標準

The TRUST Principles for Digital Repositories

- Transparency 服務透明

- 儲存庫的服務與其所保有的資料等資訊是透明的，且可被公眾取用並驗證。
- To be transparent about specific repository services and data holdings that are verifiable by publicly accessible evidence.

- Responsibility 確保責任

- 確保資料的真實性和完整性，並對於所提供服務的可靠性與持續性負起責任。
- To be responsible for ensuring the authenticity and integrity of data holdings and for the reliability and persistence of its service.

- User Focus 以使用者為重

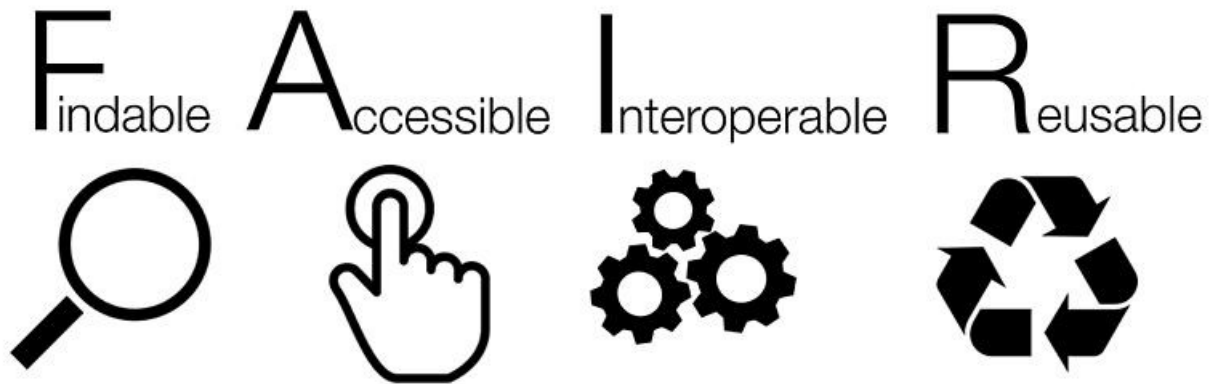
- 確保使用者社群的資料管理需求獲得滿足，並關照社群的期待。
- To ensure that the data management norms and expectations of target user communities are met.

- Sustainability 永續發展

- 服務永續與資料保存是長期性的工作。
- To sustain services and preserve data holdings for the long-term.

- Technology 基礎設施與技能

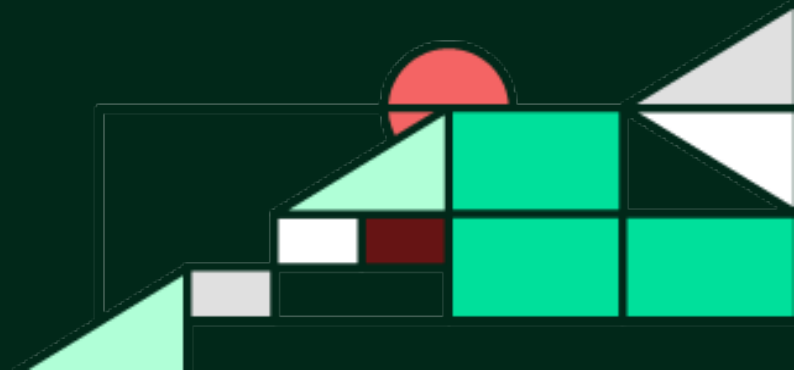
- 提供基礎設施與技能以支撐安全、持續和可靠的服務。
- To provide infrastructure and capabilities to support secure, persistent, and reliable services.



Data and Repositories



Discussion





Discussion

- Paths to sustainability
 - Tools (keep no data) →
Systems (keep our own data) →
Services (keep other people's data)
 - Persistent services and/or persistent datasets?
- Collaborations among diverse data communities
- Pooling resources together

Thank You!

<https://data.depositor.io/>
<https://rdm.depositor.io/>
<https://lab.depositor.io/>

data.contact@depositor.io

The *depositor* is a collaboration at the Institute of Information Science, the Research Center for Information Technology Innovation, and the Research Center for Humanities and Social Sciences (GIS Center) in Academia Sinica, Taiwan. The project has been supported, in part, by grants from Taiwan's National Science and Technology Council.

「研究資料寄存所」是中央研究院資訊科學研究所、資訊科技創新研究中心、人文社會科學研究中心（地理資訊科學研究專題中心）的協作專案，部份經費來自台灣國科會的專題研究計畫。



Please Write to Us 請與我們聯繫

data.contact@depositar.io

We Are Hiring! 人員招募中!

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