

全國海洋資料整合應用工作坊

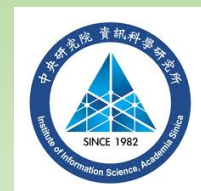


# 使用研究資料寄存服務 管理與共享無人載具影像 及公共工程生態檢核資料

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2019-08-29  
台北市福華文教會館


















# 無人載具應用



## remote sensing

Review

### On the Use of Unmanned Aerial Systems for Environmental Monitoring

Salvatore Manfreda <sup>1,\*</sup> , Matthew F. McCabe <sup>2</sup> , Pauline E. Miller <sup>3</sup> , Richard Lucas <sup>4</sup>, Victor Pajuelo Madrigal <sup>5</sup> , Giorgos Mallinis <sup>6</sup> , Eyal Ben Dor <sup>7</sup>, David Helman <sup>8</sup> , Lyndon Estes <sup>9</sup> , Giuseppe Ciralo <sup>10</sup> , Jana Müllerová <sup>11</sup>, Flavia Tauro <sup>12</sup>, M. Isabel de Lima <sup>13</sup> , João L. M. P. de Lima <sup>13</sup> , Antonino Maltese <sup>10</sup> , Felix Frances <sup>14</sup> , Kelly Caylor <sup>15</sup>, Marko Kohv <sup>16</sup>, Matthew Perks <sup>17</sup>, Guiomar Ruiz-Pérez <sup>18</sup> , Zhongbo Su <sup>19</sup>, Giulia Vico <sup>18</sup>  and Brigitta Toth <sup>20,21</sup> 

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REVIEWS REVIEWS REVIEWS

## Lightweight unmanned aerial vehicles will revolutionize spatial ecology

Karen Anderson\* and Kevin J Gaston

Ecologists require spatially explicit data to relate structure to function. To date, heavy reliance has been placed on obtaining such data from remote-sensing instruments mounted on spacecraft or manned aircraft, although the spatial and temporal resolutions of the data are often not suited to local-scale ecological investigations. Recent technological innovations have led to an upsurge in the availability of unmanned aerial vehicles (UAVs) – aircraft remotely operated from the ground – and there are now many lightweight UAVs on offer at reasonable costs. Flying low and slow, UAVs offer ecologists new opportunities for scale-appropriate measurements of ecological phenomena. Equipped with capable sensors, UAVs can deliver fine spatial resolution data at temporal resolutions defined by the end user. Recent innovations in UAV platform design have been accompanied by improvements in navigation and the miniaturization of measurement technologies, allowing the study of individual organisms and their spatiotemporal dynamics at close range.

*Front Ecol Environ* 2013; 11(3): 138–146, doi:10.1890/120150 (published online 18 Mar 2013)



## drones

Review

### Drones for Conservation in Protected Areas: Present and Future

Jesús Jiménez López <sup>1,\*</sup> and Margarita Mulero-Pázmány <sup>2,\*</sup>

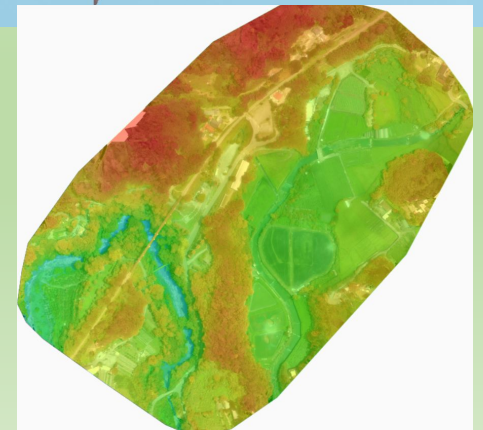
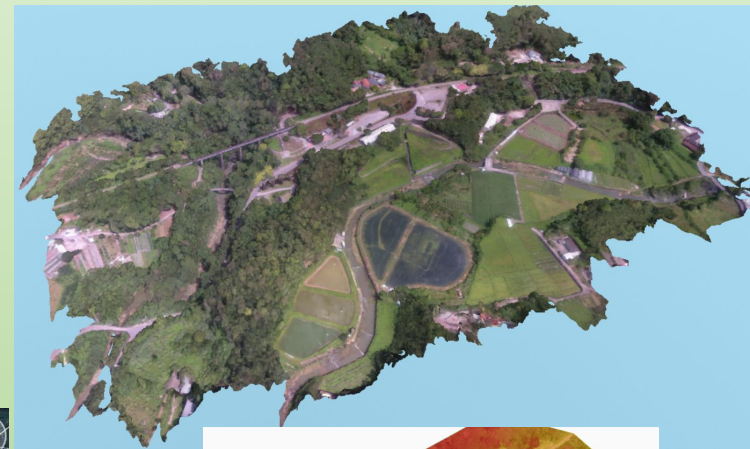
<sup>1</sup> MARE—Marine and Environmental Sciences Centre, Quinta do Lorde Marina, Sitio da Piedade, 9200-044 Caniçal, Madeira Island, Portugal

<sup>2</sup> School of Natural Sciences and Psychology, Liverpool John Moores University, Liverpool L3 3AF, UK

\* Correspondence: lopezjimenezjesus@mare-centre.pt (J.J.L.); M.C.MuleroPazmany@ljmu.ac.uk (M.M.-P.)

# UAV航攝影像資料

- 正射影像(Orthomosaics)
- 影像圖磚(Google Earth/Maps tiles)
- 地表/高程模型(Digital surface/terrain models (DSM / DTM))
- 3D 點雲(point cloud)
- 3D 網格材質模型(mesh model)

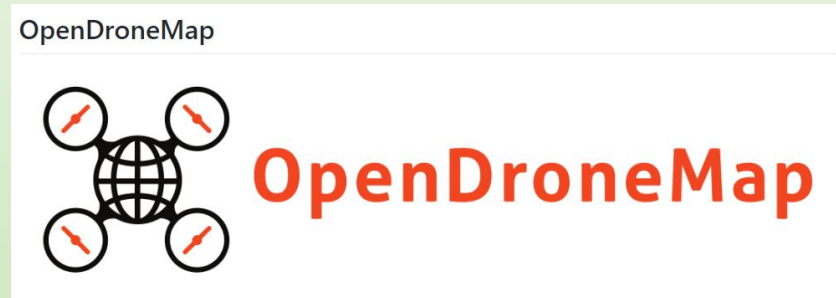


# UAV資料共享平台

資料類型	共享平台	附註
正射影像	<a href="#">OpenAerialMap</a>	開放、免費。
影像圖磚	?	?
地表 / 高程模型	?	?
3D 網格材質模型	<a href="#">Sketchfab</a>	免費帳號可上傳小於50MB per scene的檔案。
3D Map	<a href="#">Melown Cloud</a>	免費帳號有2GB儲存容量，每月3,000次地圖瀏覽(map views)，無法下載地圖。
3D 點雲	<a href="#">PointScene</a>	免費帳號可上傳小於50M points per scene的檔案，僅開放基本瀏覽功能，無法下載資料，無量測功能。


# 開放原始碼影像處理工具與 資料共享平台

- OpenDroneMap (ODM)
- Web ODM

The image is a screenshot of the OpenDroneMap website. At the top left is the OpenDroneMap logo. To the right of the logo is a navigation menu with links for "WebODM", "Documentation", "Forum", "Blog", and "Code". Below this is a secondary navigation bar with links for "Home", "Services", "Live Demo", "Download", "Server Installer", "Portable USB", and "Cloud Processing". The main content area features a large heading "WebODM" and a sub-heading "Drone Mapping Software". Below the sub-heading is a paragraph: "Generate maps, point clouds, DEMs and 3D models from aerial images." and another paragraph: "Runs on your computer, even offline. No monthly fees." At the bottom of this section are two buttons: "Live Demo" (blue) and "Download" (red). To the right of the text is a video player with a play button and a red location pin icon. The video player has a title "What is WebODM? Drone Mapping Sof..." and buttons for "Watch later" and "Share". The video player shows a drone flying over a world map, a person thinking, and a 3D mountain model.









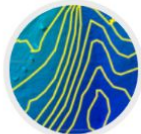

# WebODM GitHub

README.md



build passing version 1.1.0

A user-friendly, extendable application and [API](#) for drone image processing. Generate georeferenced maps, point clouds, elevation models and textured 3D models from aerial images. It supports multiple engines for processing, currently [ODM](#) and [MicMac](#) (experimental).

- **Orthomosaics**  
Georeferenced, orthorectified maps.
- **3D Models**  
3D models and point clouds in a variety of formats.
- **Export**  
High resolution GeoTIFF, PNG, LAS, OBJ formats.
- **Elevation Models**  
Easily generate georeferenced DSMs/DTMs.
- **Measurements**  
Make volume and area measurements with ease.
- **Rebrand**  
Choose a logo and color scheme that matches your organization.
- **Ground Control Points**  
Create and use GCPs for additional accuracy.
- **Share**  
Easily share your maps and 3D models.
- **Contours**  
Preview and export elevation contours to AutoCAD, ShapeFile, GeoPackage.
- **Scale**  
Run multiple jobs in parallel, on your own infrastructure.

# 成果資料管理與共享

- [中央研究院網格計算專題中心WebODM](#)—無人載具航攝影像計算與成果共享
- [OpenAerialMap \(OAM\)](#)—正射影像開放資料平台
- [中央研究院研究資料寄存所](#)—紀錄、保存無人載具觀測詮釋資料、原始影像及相關成果資料

# ASGC WebODM

- 無人載具航攝影像處理開放平台－以開放共享觀測資料為前提，提供免費資料處理雲端服務。

The screenshot displays the ASGC WebODM web interface. The top navigation bar is green and contains the text "WebODM for the Asian UAS Observation Network" and a user profile icon. A left sidebar lists navigation options: Dashboard, OpenAerialMap, GCP Interface, Diagnostic, Lightning Network, Processing Nodes, Administration, API, and Customize. The main content area shows a project titled "南投中寮組坑吊橋上游野溪整治二期工程溪流環境變化監測 (Monitoring the environmental changes in the Tsukeng River, Chungliiao, Nantou, Taiwan)". Below the title, there are buttons for "Select Images and GCP" and "View Map". A summary of 3 tasks is shown, with two tasks listed in detail. Each task entry includes a date, location, image count, processing time, and a "Completed" status bar. The first task is from 2017-08-04 with 799 images and a processing time of 04:17:23. The second task is from 2017-06-11 with 911 images and a processing time of 10:58:10. For each task, a list of processing steps is shown with checkmarks, including Image Resize / Upload, Load Dataset, Structure From Motion / MVS, Meshing, Texturing, Georeferencing, DEM, Orthophoto, and Post Processing. At the bottom of each task entry, there are buttons for "Download Assets", "View Map", "View 3D Model", "Restart", "Delete", and "Edit".



# WebODM管理介面

ASGC WebODM for Asian UAS Observation Network

Press **F11** to exit full screen

+ Add Project

- Dashboard
- GCP Interface
- OpenAerialMap
- Processing Nodes
- Administration
- API
- Customize

### 苗栗獅潭大東勢坡地開發監測

監測苗栗獅潭大東勢山坡地疑似違法過度開發的過程。

1 Tasks Edit

2018-12-21 苗栗獅潭大東勢坡地開發監測 493 04:05:18 Completed

Created on: 12/21/2018, 6:19:00 PM  
Status: Completed  
Options: dsm: true

```
INDEXING: 3,000,000 points processed; 3,000,000 points written; 5.3 seconds passed  
INDEXING: 4,000,000 points processed; 4,000,000 points written; 7.406 seconds passed  
INDEXING: 31,000,000 points processed; 31,000,000 points written; 120.905 seconds passed  
INDEXING: 32,000,000 points processed; 32,000,000 points written; 124.497 seconds passed  
closing writer
```

Download Assets View Map View 3D Model Restart Delete Edit

Share To OAM

### 前瞻水環境計畫苗栗卓蘭濕地公園監測

監測前瞻水環境計畫苗栗卓蘭濕地公園開發過程及後續影響

1 Tasks Edit

Select Images and GCP View Map

### 臺南市左鎮地區

1 Tasks Edit

Select Images and GCP View Map

### 嘉義千人洞(Thousand-People Cave, Chiayi County, Taiwan)

Mapping the 3D model of the Thousand-People Cave The aerial images were acquired on 2018-10-08 by a DJI Phantom 4 drone and an iPad tablet with Pix4Dcapture app. One free flight mission with 3-meter interval and tilt camera was used to take the aerial images.

Select Images and GCP View Map

# 瀏覽2D影像與共享資料

WebODM for the Asian UAS Observation Network

Dashboard

- OpenAerialMap
- GCP Interface
- Diagnostic
- Lightning Network
- Cesium ion
- Processing Nodes
- Administration

2017-05-25 南投中寮粗坑溪 (2017-05-25, Tsu-Keng River, Chong-Liao, Nantou, Taiwan)

Orthophoto Surface Model

金龍山法華寺  
Buddhist temple

500 m  
1000 ft  
23.87616 : 120.82141

Opacity: [Slider]

OSM Digitize

Share

3D

Map data: © Google Maps

Share This Task

Enabled QR

Link:  
<http://webodm.twgrid.org>

HTML iframe:  
<iframe scrolling="no" titl

# 瀏覽3D模型

WebODM for the Asian UAS Observation Network

2017-05-25 南投中寮粗坑溪 (2017-05-25, Tsu-Keng River, Chong-Liao, Nantou, Taiwan)

Dashboard

- OpenAerialMap
- GCP Interface
- Diagnostic
- Lightning Network
- Cesium ion
- Processing Nodes
- Administration

Textured Model

Appearance

Tools

Measurement

Clipping

Clip Task

None Highlight Inside Outside

Clip Method

Inside Any Inside All

Navigation

Camera Projection


Perspective Orthographic

Speed: 448.4

Scene

Filters

About



Share 2D

# “無人載具”查詢研究資料寄存所



Log in Register 中文

d.depositor Datasets Topics Projects About Help 無人載具

deposit · discover · reuse

Learn More

Topics Find datasets?

- General reference
- Culture and the arts
- Geography and places
- Health and fitness
- History and events
- Human activities
- Mathematics and logic
- Natural and physical sciences

Log in Register 中文

d.depositor Datasets Topics Projects About Help

/ Datasets

無人載具

30 datasets found for "無人載具" Order by: Relevance

Filter by location Clear

台中市筏子溪無人載具航拍監測影像 (UAV mapping of the Fatzu River, Taichung, Taiwan)

應用無人載具航拍製圖監測台中市筏子溪及沿岸環境變化。 UAV images for monitoring the changes in the riverscape and landscape of the Fatzu River in Taichung, Taiwan.

geotif ZIP

2017-07-04 苗栗三義魚藤坪 (Yutenping, Sanyi Township, Miaoli County, Taiwan)

苗栗三義魚藤坪地景變遷監測 (Monitoring the landscape change in Yutenping, Sanyi Township, Miaoli County, Taiwan.)

PDF geotif ZIP tdx

前瞻水環境建設苗栗縣西湖溪(銅鑼段)環境營造計畫監測

前瞻水環境建設苗栗縣西湖溪(銅鑼段)環境營造計畫施工中期航攝影像紀錄。

geotif ZIP geotiff PDF

# 以“南投中寮”查詢 研究資料寄存所



## 南投中寮粗坑吊橋上游野溪整治二期工程溪流環境變化 監測 (Monitoring the environmental changes caused by the construction in the Tsukeng River, Chongliiao, Nantou, Taiwan)

無人載具航拍監測紀錄粗坑溪治理工程的環境變化與衝擊 (UAV mapping the environmental changes and impacts on riverscape caused by construction in the Tsukeng River, Chongliiao, Nantou, Taiwan)

### Data and Resources

- 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...)
- 2017-05-25 正射影像Google 圖磚 (Google Earth/Maps tiles)**  
Google 衛星遙測檔。解壓縮後，點選網站資料夾中的html檔即可網頁瀏覽器(建議使用Google Chrome)開啟與Google...
- 2017-06-11 正射影像Google 圖磚 (Google Earth/Maps tiles)**  
Google 衛星遙測檔。解壓縮後，點選網站資料夾中的html檔即可網頁瀏覽器(建議使用Google Chrome)開啟與Google...
- 2017-08-04 正射影像Google 圖磚 (Google Earth/Maps tiles)**  
Google 衛星遙測檔。解壓縮後，點選網站資料夾中的html檔即可網頁瀏覽器(建議使用Google Chrome)開啟與Google...
- 2017-05-25 南投中寮粗坑溪 (2017-05-25, Tsu-Keng ...)**  
WebODM完整計算成果連結 (Link to accessing the full data products generated by WebODM)
- 2017-06-11 南投中寮粗坑溪 (2017-06-11, Tsu-Keng ...)**  
WebODM完整計算成果連結 (Link to accessing the full data products generated by WebODM)
- 2017-08-04 南投中寮粗坑溪 (2017-08-04, Tsu-Keng ...)**  
WebODM完整計算成果連結 (Link to accessing the full data products generated by WebODM)
- 2017-05-25 航拍原始影像 (2017-05-25 original aerial ...)**  
下載連結 Link to downloading the original aerial images.

The screenshot shows the Depositor website interface. At the top, there's a navigation bar with 'd.depositor', 'Datasets', 'Topics', 'Projects', 'About', and 'Help'. Below that, a search bar contains '南投中寮'. The main content area displays the dataset title: '南投中寮粗坑吊橋上游野溪整治二期工程溪流環境變化監測 (Monitoring the environmental changes caused by the construction in the Tsukeng River, Chongliiao, Nantou, Taiwan)'. It includes a description in both Chinese and English, a list of 'Data and Resources' with links to OpenAerialMap, Google Earth/Maps tiles, and WebODM products, and a 'Basic Information' section with metadata like 'Data Type', 'Language', and 'Temporal Information'. A QR code is visible on the left side of the page.

**南投中寮粗坑吊橋上游野溪整治二期工程溪流環境變化監測 (Monitoring the environmental changes caused by th...**

無人載具航拍監測紀錄粗坑溪治理工程的環境變化與衝擊 (UAV mapping the environmental changes and impacts on riverscape caused by construction in the Tsukeng River, Chongliiao, Nantou, Taiwan)

geotiff ZIP JPEG

**臺南縣菜寮溪的人類化石**

連照美, & Lien, C. M. (1981) 臺南縣菜寮溪的人類化石. 國立臺灣大學考古人類學刊 Bulletin of the Department of Anthropology, 42.

**臺南市新化丘陵二寮景觀區地質概況**

說明在二寮景觀區的斜坡道所發現的地質及化石概況

The screenshot shows the Depositor website search results for '南投中寮'. It displays '98 datasets found for "南投中寮"'. Below the search bar, there are filters for 'Filter by location' and 'Temporal Search'. The results list several datasets with titles like '南投中寮粗坑吊橋上游野溪整治二期工程溪流環境變化監測' and '臺南縣菜寮溪的人類化石', along with their respective authors and publication information.

# 前瞻水環境建設公共工程破壞生態環境的爭議

- 公民參與
- 生態檢核資訊公開、資料開放
- 苗栗卓蘭大安溪濕地公園破壞石虎重要棲地



# 關鍵字搜尋生態檢核資料集

The screenshot shows the Data Depositor website interface. At the top right, there are links for 'Log in', 'Register', and '中文'. The main navigation bar includes 'd. depositor', 'Datasets', 'Topics', 'Projects', 'About', and 'Help'. A search bar is highlighted with a red box, containing the text '生態檢核'. Below the navigation bar is a large dark green banner with the text 'deposit · discover · reuse' and a 'Learn More' button. To the right of the text is a large, stylized 'd' logo composed of various colored squares. Below the banner is a 'Topics' section with a search bar labeled 'Find datasets?'. Below the search bar are eight circular icons representing different topic categories: General reference, Culture and the arts, Geography and places, Health and fitness, History and events, Human activities, Mathematics and logic, and Natural and physical sciences.

Log in | Register | 中文

d. depositor

Datasets Topics Projects About Help

生態檢核

deposit · discover · reuse

Learn More

Topics

Find datasets?

General reference

Culture and the arts

Geography and places

Health and fitness

History and events

Human activities

Mathematics and logic

Natural and physical sciences



生態檢核

98 datasets found for "生態檢核"

Order by: Last Modified

Filter by location Clear



Map tiles & Data by OpenStreetMap under CC BY-SA

Temporal Search Clear



Or use time period shortcut

### 2018台中市霧峰區車籠埤排水治理工程設計階段生態檢核

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市霧峰區車籠埤排水1K+700 - 5K+300治理工程設計階段生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、細部設計平面配置圖、生態調查、關注區域、細部設計平面配置圖等基礎資料及成果報告。

KML KMZ ZIP geotif PDF DOCX

### 2018台中市豐原區北坑溪治理工程設計階段生態檢核

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市豐原區北坑溪0K+000 - 0K+741.4治理工程設計階段生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、生態調查、關注區域、細部設計平面配置圖等基礎資料、成果報告。

KML KMZ ZIP geotif PDF DOCX

### 2018台中市大里區中興排水治理工程設計階段生態檢核

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台



# Google Dataset Search

Google Dataset Search Beta

生態檢核



Try [boston education data](#) or [weather site:noaa.gov](#)

[Learn more](#) about including your datasets in Dataset Search.

Google Dataset Search

生態檢核



About



Feedback

42 results found

D

2018台中市大里區中興排水治理工程設計階段生態檢核  
data.depositar.io

Updated 2019年4月25日

D

2018台中市豐原區北坑溪治理工程設計階段生態檢核  
data.depositar.io

Updated 2019年4月25日

D

2019 台中市大里區中興段排水治理工程生態檢核  
data.depositar.io

Updated 2019年6月30日

D

2018 台中市霧峰區車籠埤排水治理工程設計階段生態檢核  
data.depositar.io

Updated 2019年8月22日

2018台中市大里區中興排水治理工程設計階段生態檢核

[Explore at depositar](#)

Dataset updated 2019年4月25日  
Dataset published 2018年9月8日

Dataset provided by  
107年度台中市生態檢核工作計畫

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Description

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市大里區中興排水0K+080—1K+737治理工程生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、生態調查、關注區域、細部設計平面配置圖等基礎資料及成果報告；資料集持續更新中。

# 前瞻水環境建設公共工程 生態檢核開放資料

- 2018台中市區域排水治理工程生態檢核資料集為例



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d.depositor

Datasets Topics Projects About Help

🏠 / Projects / 107年度台中市生態檢核工作計畫

🏠 Datasets Activity Stream About

Search datasets...

4 datasets found Order by: Relevance

**107年度台中市生態檢核工作計畫**

此計畫是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間執行台中市大里區中興排水0K+080 - 1K+737、霧峰區車籠埤排水1K+700 - 5K+300、豐原區北坑溪0K+000 - 0K+741.4、新社區九渠溝0K+000 - 0K+500等四件治理工程規劃設計階段生態檢核工作；各治理工程資料集內容包含無人載具航拍影像... [read more](#)

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**2018台中市霧峰區車籠埤排水治理工程設計階段生態檢核**

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市霧峰區車籠埤排水1K+700 - 5K+300治理工程設計階段生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、細部設計平面配置圖、生態調查、關注區域、細部設計平面配置圖等基礎資料及成果報告。

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**2018台中市豐原區北坑溪治理工程設計階段生態檢核**

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市豐原區北坑溪0K+000 - 0K+741.4治理工程設計階段生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、生態調查、關注區域、細部設計平面配置圖等基礎資料、成果報告。

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**2018台中市大里區中興排水治理工程設計階段生態檢核**

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市大里區中興排水0K+080 - 1K+737治理工程設計階段生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、生態調查、關注區域、細部設計平面配置圖等基礎資料及成果報告。

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**2018台中市新社區九渠溝治理工程設計階段生態檢核**

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市新社區九渠溝0K+000 - 0K+500治理工程生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、生態調查、關注區域、細部設計平面配置圖等基礎資料及成果報告。

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# 豐原北坑溪治理工程 設計階段生態檢核資料集

## 2018台中市豐原區北坑溪治理工程設計階段生態檢核

此資料集是由台中市政府水利局委託台灣石虎保育協會，於2018-05-01至2018-10-31期間進行台中市豐原區北坑溪0K+000 - 0K+741.4治理工程設計階段生態檢核所產生的資料，包含無人載具航拍影像、治理工程範圍、生態調查、關注區域、細部設計平面配置圖等基礎資料、成果報告。

### Data and Resources

-  [台中市豐原區北坑溪0K+000~0K+741.4治理工程範圍](#) [Explore](#)  
北坑溪0K+000-0K+741.4治理工程範圍KML檔
-  [台中市豐原區北坑溪治理工程範圍圖層KMZ檔](#) [Explore](#)  
資料包含0K - 0K+741.4治理範圍、細部設計平面配置圖套疊等，使用者可利用Google Earth...
-  [正射影像Google圖磚](#) [Explore](#)  
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...
-  [正射影像](#) [Explore](#)  
2018-05-05拍攝，發布於OpenAerialMap的正射影像連結。
-  [航攝影像資料品質報告](#) [Explore](#)  
Pix4Dmapper Pro影像處理資料品質報告。
-  [植物名錄](#) [Explore](#)  
2018-06至2018-07期間，沿北坑溪治理工程範圍調查記錄的植物種類。
-  [動物名錄](#) [Explore](#)  
2018-06至2018-07期間，沿北坑溪治理工程範圍調查記錄的動物種類。
-  [豐原北坑溪治理工程關注區域圖及保育措施自主檢查表](#) [Explore](#)  
關注區域圖讓施工廠商掌握施工範圍內的重要區域，施工過程必須注意，不可破壞，生態保育措施自主檢查表列出施工廠商必須遵守的作業規範，以確保各項保育措施能確實執行。
-  [臺中市生態檢核工作計畫\(107年度\)委託專業服務成果報告](#) [Explore](#)  
報告內容包含大里區中興排水0K+080 - 1K+737、霧峰區車輪埤排水1K+700 - 5K+300、豐原區北坑溪0K+000 - 0K+741.4、新社區九溝溝...



The screenshot shows the Depositor website interface. At the top, there are navigation links for Datasets, Topics, Projects, About, and Help. The main content area displays the project title, a brief description, and a list of resources with 'Explore' buttons. A QR code is prominently displayed in the center. The right sidebar contains a 'Tags' section with labels like 'UAS', 'UAV', '前線水環境建設', '台中市', '水與安全計畫', '生態檢核', and '豐原'. Below that is a 'Basic Information' section with details on Data Type, Language, and Temporal Information.

This screenshot shows the lower portion of the Depositor website page. It includes a 'License' section with a CC-BY 4.0 license, a 'Cite as' section with a citation for 'American Psycholog...', and a 'Dataset extent' section with a map showing the project area. The 'Other Access' section is at the bottom. The right sidebar continues with 'Management Information' including Author, Created Time, Maintainer, and Maintainer Email.

# 北坑溪治理工程範圍KML檔

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## 台中市豐原區北坑溪0K+000~0K+741.4治理工程範圍

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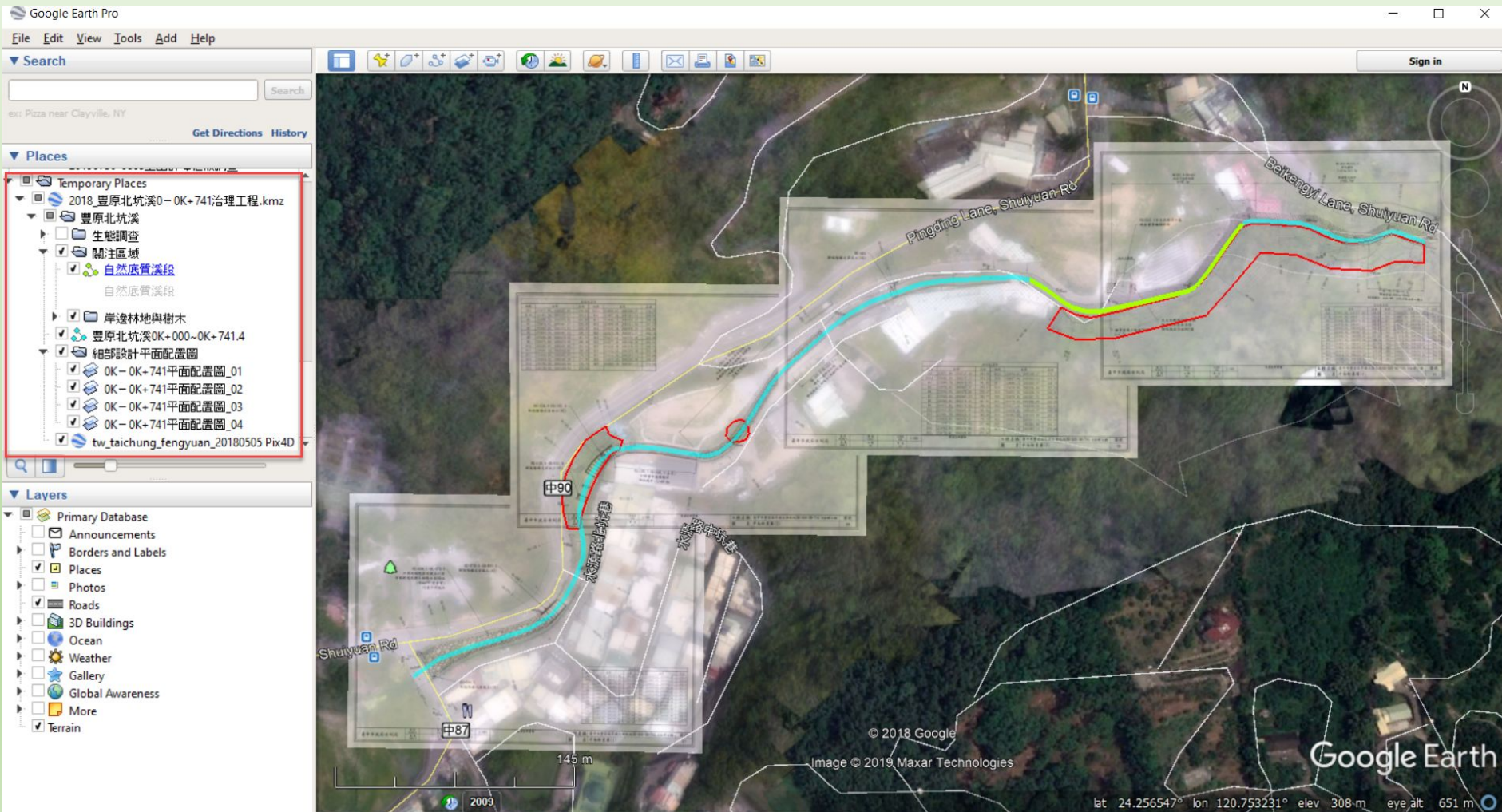
北坑溪0K+000~0K+741.4治理工程範圍KML檔

Map viewer

Embed

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

# Google Earth套疊北坑溪治理工程範圍、關注區域、平面配置圖、正射影像



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