

3D Photo-realistic Model Data Specification

Version 1.0

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1 Introduction

This Application Programming Interface (API) is a service to retrieve 3D photo-realistic models in different formats, including OSGB, OBJ and Cesium 3D Tiles, through a HTTP request. Users can provide a HK1980 Grid coordinate to obtain an URL to download the 3D photo-realistic model of the area.

2 API

2.1 Get 3D Photo-realistic Model tiles data

Get 3D photo-realistic Model tiles data download URL(s) by providing the coordinate of a location.

API Type: REST

HTTP Method: GET

Resource URL: <https://ppgis.pland.gov.hk/opd/api/3D-model-tile?e=<parameter>&n=<parameter>&fileType=<parameter>>

Resource Information:

Response formats	JSON
Requires authentication	NO
Response encoding	UTF-8

Parameters:

Variables	Description
e	Easting in HK1980 Grid Coordinates. Default value is 0. Valid values are: Range between 799 500 and 867 500 (metres)
n	Northing in HK1980 Grid Coordinates. Default value is 0. Valid values are: Range between 799 000 and 848 000 (metres)
fileType	Optional. Return of specific format of 3D-realistic tiles. Valid values are: OSGB OBJ CESIUM

HTTP code	Definition
200	Success.
400	Bad Request.
500	Internal Server Error
503	The server is currently unavailable

Example Request:

<https://ppgis.pland.gov.hk/opd/api/3D-model-tile?E=834251&N=815501&fileType=OSGB>

Example Response:

```
{
  "respCd":0,
  "msg":"Success",
  "gridList":[
    {
      "fid":87,
      "grid_name":"tile_20_26",
      "loc_en":"\"Wan Chai, Admiralty and Central\"",
      "loc_tc":"灣仔、金鐘及中環",
      "loc_sc":"湾仔、金钟及中环",
      "file_url":"https://ppgis.pland.gov.hk/3dpds/OpenData/OSGB/tile_20_26_OSGB.zip",
      "modi_date":"26/02/2019"
    }
  ]
}
```

2.2 Information of API Response

Item	Field Name	Type	Definition
1	respCd	Integer	0 = success 1 = fail
2	Msg	String	Success or failure information would be provided. Possible values: "success" "No available 3D Model for Location Specified(e=834251&n=835501) " "Invalid File Type(Only accept OBJ/OSGB/CESIUM)"
3	gridList	[Object Array]	Multiple array item would be returned when coordinate falls into multiple tiles files. Empty array is returned when error or criteria is not matched
3.1	fid	Integer	ID
3.2	grid_name	String	Index Grid Name
3.3	loc_en	String	Location Name in English
3.4	loc_tc	String	Location Name in Traditional Chinese
3.5	loc_sc	String	Location Name in Simplified Chinese
3.6	file_url	String	Path of File
3.7	Modi_date	String	Modify Date (DD/MM/YYYY)