

Generating Offline Maps

Quantum Geographic Information System (QGIS)

QGIS (Quantum GIS) is a free and open-source geographic information system (GIS) software that allows users to view, analyze, and manage geographic data. It provides a robust set of tools for working with spatial data. QGIS is continuously improved ensuring that QGIS remains current with the latest GIS technologies and innovations. QGIS supports MBTiles, a format that stores map tilesets in a single SQLite database allowing users to download and use maps offline with the Skydio Enterprise Controller. Skydio X2D operators can conduct missions leveraging high-quality maps without an Internet connection.

Generating QGIS Maps

Step 1 - Navigate to the QGIS website <https://qgis.org/en/site/>

- Select **Download Now**

Step 2 - Select the download based on your operating system

- The download file is approximately 1.1 GB
- Follow the on-screen prompts and instructions to complete installation

Step 3 - Open the executable file

- Select **QGIS Desktop 3.32.1** from the list of files to open the application

Step 4 - Select Plugins from the toolbar and Manage and Install Plugins

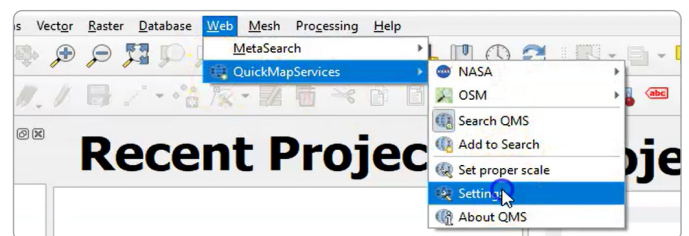
Step 5 - Search for and install plugins

- **Zoom Level**
- **QuickMapServices**

Step 6 - Select Web **QuickMapServices** and **Settings**

Step 7 - Select **More Services** and **Get Contributed Pack**

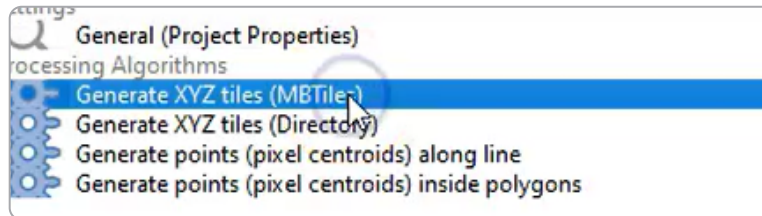
- A message stating Last Version of contrib pack was downloaded will display
- Select **Ok** and **Save**



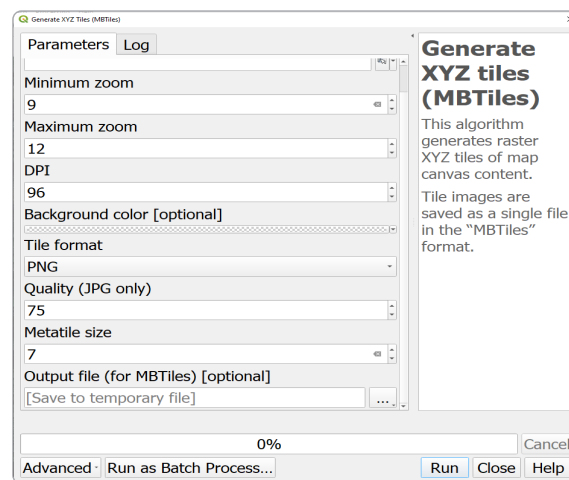
Step 8 - Select Web > QuickMapServices > Google > Google Hybrid

- This will populate the earth satellite view
- Navigate to your desired location

Step 9 - In the Type to locate (Ctrl + K) bar enter Generate XYZ Tiles (MBTiles) and double click the option.



Step 10 - Enter the requirements for the map extraction.



Step 11 - Select **Run** to start the export process

- QGIS will generate the MBTiles file based on your selected settings
- The map file will have a .mbtiles extension

Step 12 - Load your map files onto a USB-C flash drive or SD memory card

Step 13 - Insert the USB-C drive or adapter into the controller

Step 14 - Select the **INFO** menu

Step 15 - Select **Import Maps**

Step 16 - Select **Maps**

- Navigate to the storage device
- Select the maps to import

Step 17 - Select **Done**

- Wait for your maps to import
- Select View Map Library to review your imported maps

