

OpenDroneMap

Prepared by: Corey Snipes

For: UC DroneCamp, July 2021 (v1)

About WebODM for DroneCamp

OpenDroneMap normally runs on a server, which could be on your local computer or could be somewhere on the cloud. Once you have a server going, you typically access OpenDroneMap through a web browser.

For DroneCamp, we'll be using WebODM Lightning. WebODM Lightning has two parts. The Desktop App for Windows is a modest program you can install and provides a user-friendly interface to submit your images for processing, select processing options, view results, etc. However the desktop app by itself is useless - it doesn't actually process any data! For that you need to connect it to a processing engine or 'node', which in this case is running in the cloud.

For the DroneCamp WebODM workshop, we would like everyone to:

- Sign-up for a free WebODM Lightning account, and
- Install the WebODM Lightning client for Windows

This combo will give you a user-friendly interface and easy access to a good server in the cloud to process your images. The WebODM Lightning server is not free, but your WebODM Lightning account includes a generous 150 free credits which will be plenty for the DroneCamp exercise (don't use them up before then!)

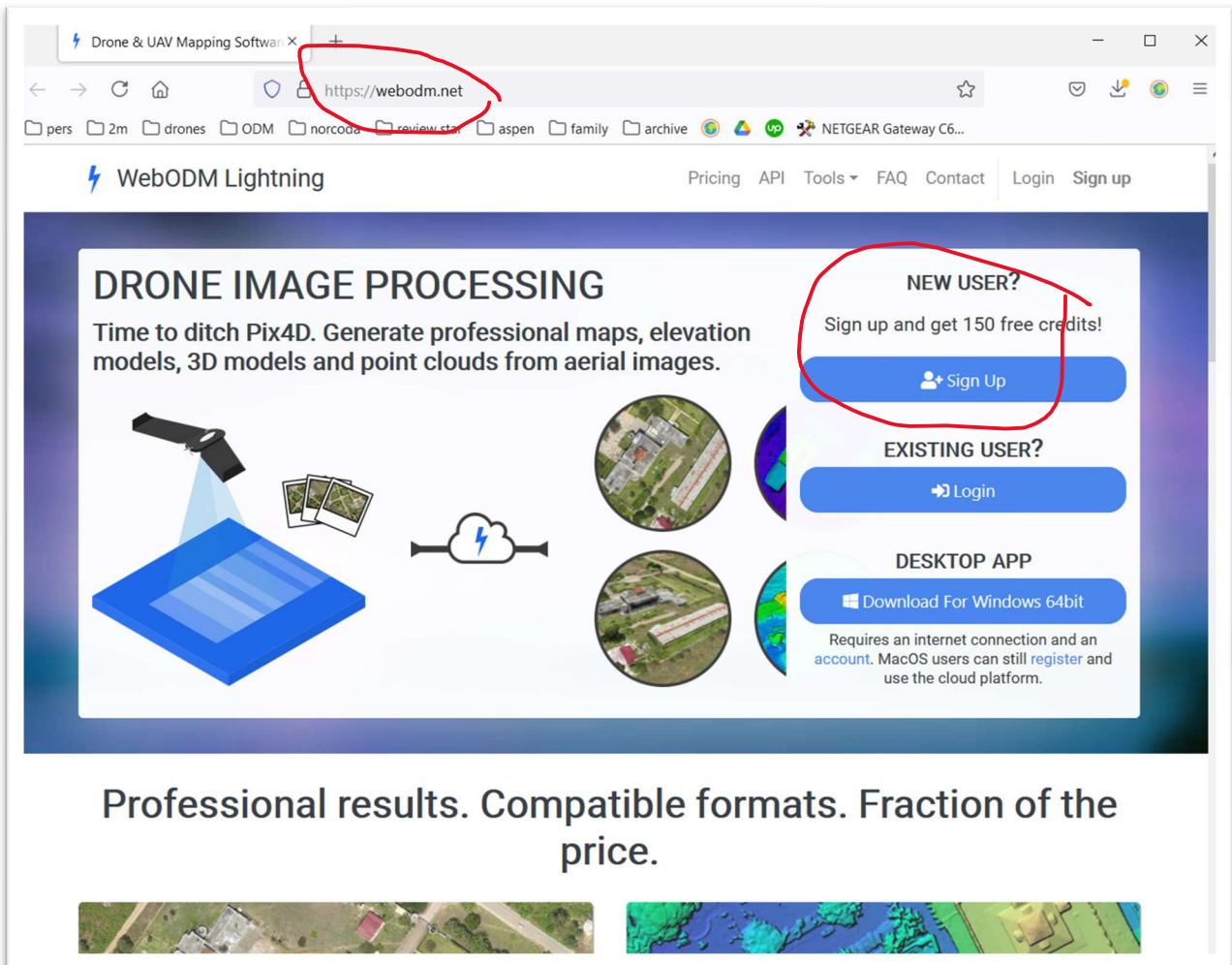
WebODM Setup

To get started, please visit webodm.net. Look for the blue "Sign Up" button to create your WebODM Lightning account. Use the blue "Download For Windows 64bit" button to download and install the WebODM Lightning client. Finally, download the test dataset. Once you've performed these steps, you'll be all set for DroneCamp.

Power users may wish to install OpenDroneMap locally on your own hardware. A Windows 10 or Ubuntu Linux computer with at least 16 GB RAM is required. Manual installation instructions are here: <https://github.com/OpenDroneMap/WebODM/#getting-started>. This process has more steps and may require some fiddling. We won't be able to address any installation or configuration issues during the presentation, so if it gives you trouble please use WebODM Lightning instead.

Step 1: Sign Up for Free Account

Sign up for a free WebODM Lightning account. Make a note of the email address and password you select during this process, as you will need it later.



Step 2: Download WebODM Lightning

The screenshot shows a web browser window with the URL <https://webodm.net>. The page title is "WebODM Lightning". The main heading is "DRONE IMAGE PROCESSING" with the subtext "Time to ditch Pix4D. Generate professional maps, elevation models, 3D models and point clouds from aerial images." Below this is a diagram showing a drone, photos, and a cloud icon with a lightning bolt. To the right, there are three sections: "NEW USER?" with a "Sign Up" button, "EXISTING USER?" with a "Login" button, and "DESKTOP APP" with a "Download For Windows 64bit" button. The "DESKTOP APP" section is circled in red. Below the button, it says "Requires an internet connection and an account. MacOS users can still register and use the cloud platform." At the bottom, there is a banner with the text "Professional results. Compatible formats. Fraction of the price." and two small images showing drone processing results.

Drone & UAV Mapping Software x

https://webodm.net

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WebODM Lightning Pricing API Tools FAQ Contact Login Sign up

DRONE IMAGE PROCESSING

Time to ditch Pix4D. Generate professional maps, elevation models, 3D models and point clouds from aerial images.

NEW USER?
Sign up and get 150 free credits!
[Sign Up](#)

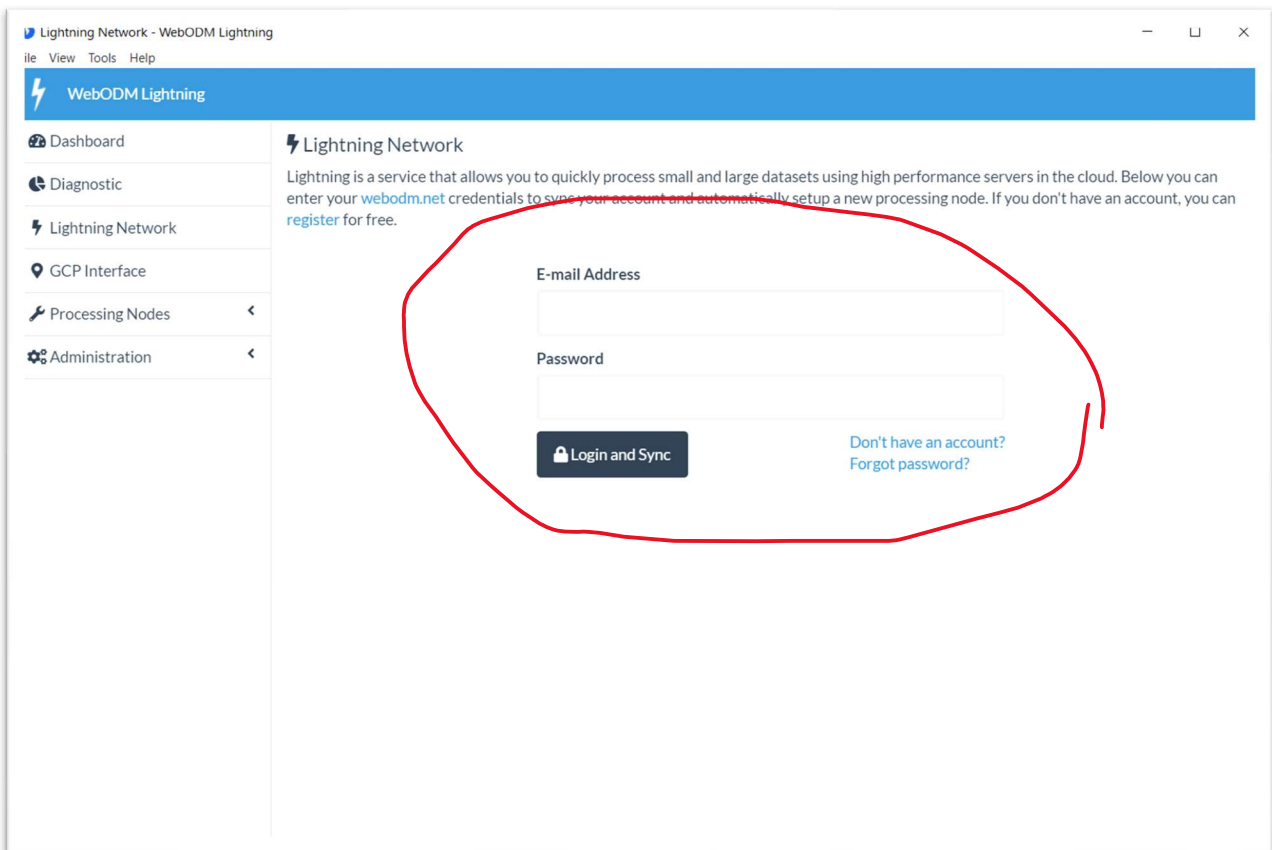
EXISTING USER?
[Login](#)

DESKTOP APP
[Download For Windows 64bit](#)
Requires an internet connection and an account. MacOS users can still register and use the cloud platform.

Professional results. Compatible formats. Fraction of the price.

Step 3: Install and Connect Your Account

Run the installation file you downloaded and follow the steps to install WebODM Lightning on your local machine. After installation is complete, open WebODM Lightning and connect your account as shown below. You will need the email address and password you selected earlier.



The screenshot shows the 'Lightning Network - WebODM Lightning' application window. On the left is a sidebar menu with options: Dashboard, Diagnostic, Lightning Network, GCP Interface, Processing Nodes, and Administration. A red arrow points to the 'Lightning Network' option. The main content area is titled 'Lightning Network' and contains a description of the service. Below the description is a login form with two input fields: 'E-mail Address' and 'Password'. A red oval highlights these fields and the 'Login and Sync' button below them. To the right of the button are links for 'Don't have an account?' and 'Forgot password?'. The 'Lightning Network' section in the sidebar menu is highlighted with a red arrow.

Lightning Network - WebODM Lightning

WebODM Lightning

Dashboard

Diagnostic

Lightning Network

GCP Interface

Processing Nodes

Administration

Lightning Network

Lightning is a service that allows you to quickly process small and large datasets using high performance servers in the cloud. Below you can enter your [webodm.net](#) credentials to sync your account and automatically setup a new processing node. If you don't have an account, you can [register](#) for free.

E-mail Address

Password

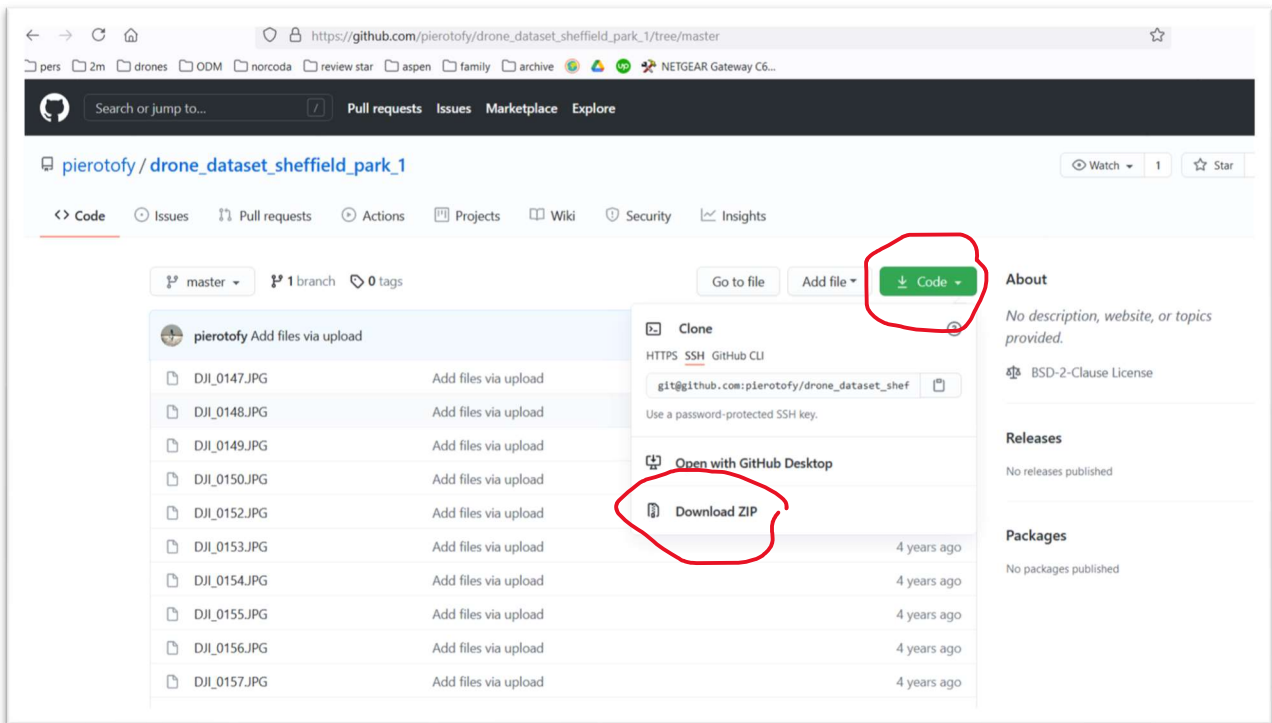
Login and Sync

Don't have an account?
[Forgot password?](#)

Step 4: Download the Sheffield Park 1 Test Dataset

Go to the github page: https://github.com/pierotofy/drone_dataset_sheffield_park_1/tree/master

Download the zipfile, as shown below.



That's it! You're ready for the OpenDroneMap session at DroneCamp 2021.

Need Help?

If you are having trouble with the installation or setup steps, feel free to contact the instructor at corey@twomile.com for assistance.

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