

Histogram2D Tools User Manual

Nearshore Habitat Program
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PUGET SOUND ECOSYSTEM
MONITORING PROGRAM



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**NATURAL
RESOURCES**

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Copies of this report may be obtained from GitHub:
<https://github.com/WA-Nearshore/histogram2Dtools>

Abstract

The Histogram2D Tools consist of four ArcGIS Pro script tools and supporting files. The purpose of these script tools is to enable interactive exploration of the spectral properties of multi-band imagery. It was developed to aid in image classification and the use of spectral rules for isolating a particular class. The tools allow the user to create a 2-dimensional spectral frequency histogram from two specified bands of an image. The user can also delineate polygon AOIs within the image and locate the associated pixels on the histogram. Likewise, polygon AOIs within the histogram can be associated with pixels in the image.

The initial version of the tools (April 2023), available on GitHub¹, is a beta release for testing. There are significant known issues. This User Manual describes each tool and the known issues.

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¹ <https://github.com/WA-Nearshore/histogram2Dtools>

1.Download and Setup

The repository that contains the four Histogram2D tools, the associated files, and this User Manual, is available on GitHub at

<https://github.com/WA-Nearshore/histogram2Dtools>

The entire repository can be downloaded as a Zip archive by clicking on the “Code” button on the GitHub repository web page. This brings up a menu that includes the “Download ZIP” option.

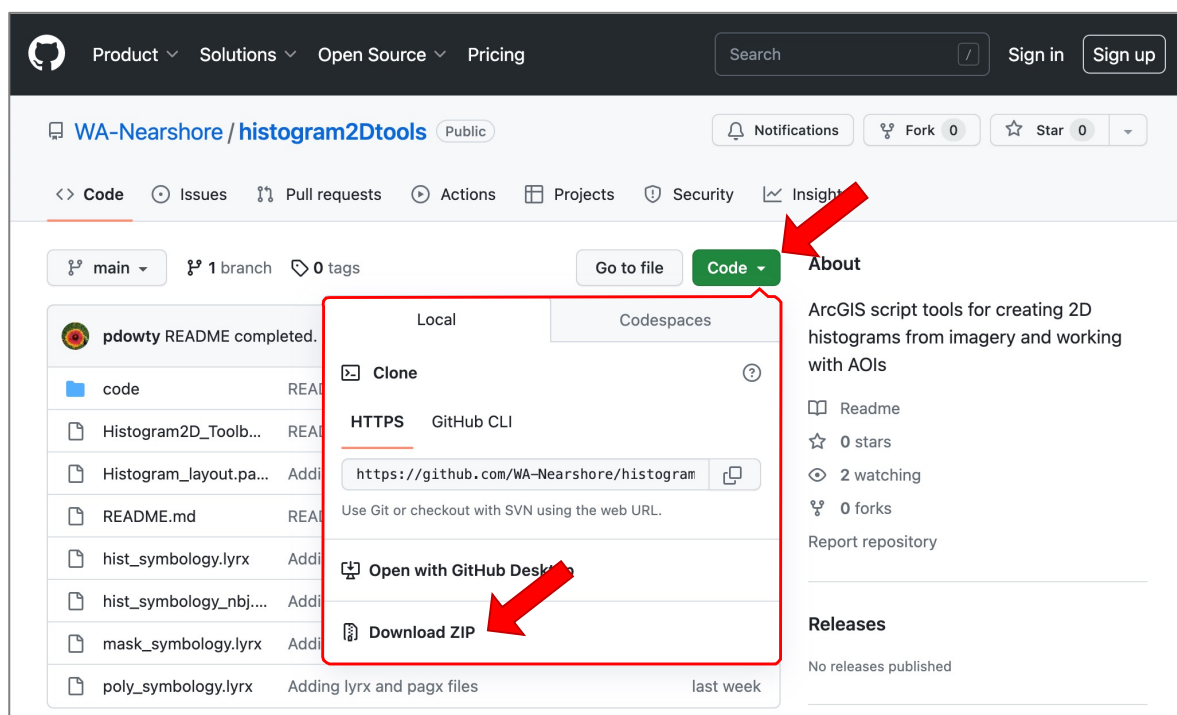


Figure 1-1. Screenshot of the GitHub repository page. The ‘Code’ button is selected to bring up the menu outlined here in red. Then ‘Download ZIP’ is selected to download the repository to a local system.

2.Import Layout Tool

3.Image to Histogram Tool

4.Polygon to Histogram Tool

5.Polygon to Image Tool

6.Known Issues
