

South Florida/Caribbean Network

National Park Service
Inventory and Monitoring Division



Standard Operating Procedure CR11

Dotting Captured Images with Adobe Photoshop Script— Version 2.1

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Summary

This SOP describes the procedures for applying labeled random “dots” (hollow boxes) on numerous images captured from video. As described below, the script is currently written to put ten points, labeled A–J, on images captured from high definition video cameras, and will work with BMP, PNG and TIF images. The script is a Photoshop script (JavaScript) comprised of approximately 600 lines of codes and comments and consolidates the dotting process into a single application. The script is a plain text file that can be edited in any text editor (e.g. Notepad). It has been tested to run in Photoshop Creative Suite and Creative Cloud versions through 2020.

Revision Log

Revision Date	Author	Changes Made	Reason for Change	New Version #
1998	Jeff Miller	Used program Winbatch to plot points in Excel and putting points in Photoshop (LOLA). (in: Miller and Rogers 2002)	Randomly places dots on video frames.	1.00
2008	Judd Patterson	Revised dotting script to v1.5.	Updated to current version of Adobe Photoshop.	1.01
2015	Jeff Miller	SOP written to meet I & M program, organization and format requirements.	Tied to I & M 2.00 version of protocol.	2.0
2020	Jeff Miller	SOP name changed from 11 to CR11. Added text to reflect the most-current script.	Renamed according to regional guidance. Script modified for VLC and analyst request.	2.1

Procedures

1. Copy the most recent version of the Adobe Photoshop script: **SFCN_Dotting_Script_v2.2.jsx** to a location on your hard drive. While the traditional script has used a red/yellow bounding box, a version of the script has been modified to place a blue bounding box instead. With the use of underwater lights there are some situations where the blue boxes may provide more contrast with red benthic features. Use the box color that is best for the site that will be analyzed:

Blue dots:

X:\SFCN\Vital_Signs\Marine_benthic_communities\CoralMonitoring\analysis\SFCN_Dotting_Script_v2.2_blue.jsx

Red dots:

X:\SFCN\Vital_Signs\Marine_benthic_communities\CoralMonitoring\analysis\SFCN_Dotting_Script_v2.2_red.jsx

2. To run the script, open Adobe Photoshop, select drop-down menu “file,” then “scripts” then “browse” to the location of the above-mentioned script.
3. Upon running the script, the user will be prompted for the following (note: folders mentioned below are in the site folders within the “coral video/images” folder):
 - a. Source image folder location
 - b. Source image type (png, bmp, or tif)
 - c. Destination folder for images upon dotting
 - d. Select site depth (where images were filmed—deep (> 25feet [7.6 meters]) or shallow (< 25 feet [7.6 meters])—this controls the strength of the color correction.
 - e. Script run verification—this provides a summary of the process about to be conducted and allows the user the option to continue or opt out of the dotting.
4. During the script run, you can work on other computer tasks. The script will continue to function even with Photoshop minimized.
5. Upon completion, a dialog box will appear saying the “Dotting Script finished.” It will say how many images were processed in what period of time. Depending upon your computer speed, the script takes greater than five seconds per image for processing.
6. The Photoshop script can be easily and quickly modified to change the “dot” size, color, number of dots, dot labels, and portion of the image where the dots fall. The default ensures that every pixel in the image has the potential to be the center of a dot. To edit the script,

open the script in a text editor like Notepad. The variables to change are located near the beginning of the file. Each line contains a comment describing its impact.