
Whitepaper

Shading Correction with SVCapture2 (>v2.5.3)

Created:			
	Date	Division	Name
First Release	29.09.2019	Support	Andreas Ritzinger
Added CL Cameras	09.09.2020	Support	Alexander Hess
Added Delete via Register	04.12.2020	Support	Andreas Ritzinger

This whitepaper explains how you do shading correction with SVCapture2.

1.Step

Connect the camera to the PC and open it with SVCapture2 (>2.5.3).

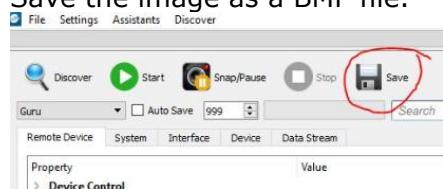
2.Step

Make a picture in which you can see the vignetting (shading) well.

Please note that the image is not overexposed and AOI and Binning is disabled.

3.1) Step (GigE, USB3, CXP Cameras)

Save the image as a BMP file.



3.2) CameraLink (CL) Cameras

On CL Cameras you need to take a picture with the Grabber Software and save it to the computer, this will be needed in the next steps in SVCapture.

Please check if the picture you are taking in the Grabbers Software has the maximum resolution which is supported by the camera.

4.Step

You can find the Shading Correction feature in the GeniCam Tree.

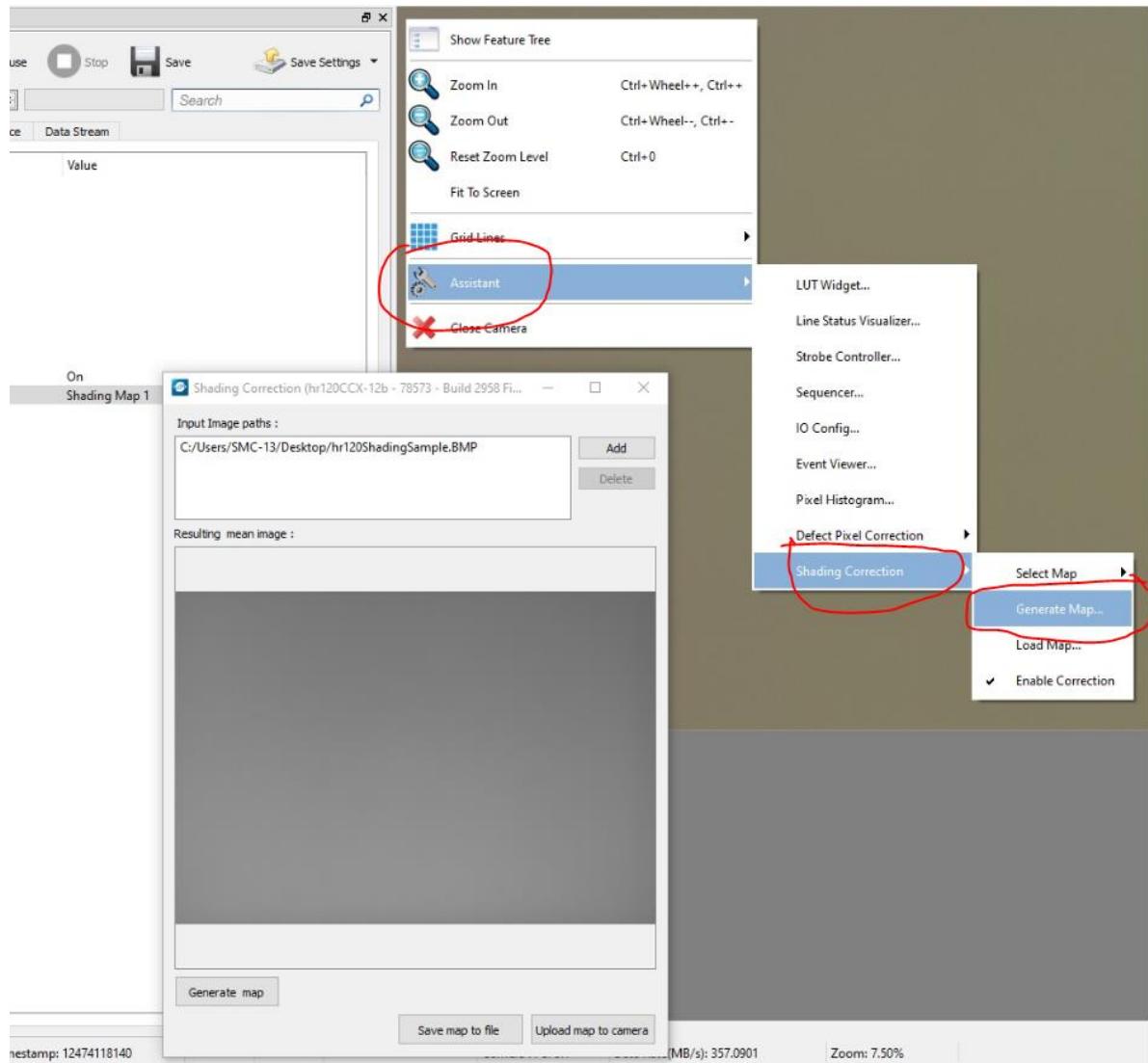
With Shading Control you can enable or disable the Shad. Corr.

With Shad. Map Selector you can choose a Shading Map.



5.Step

Open the shad. corr. assistant and open the "Generate Map..."



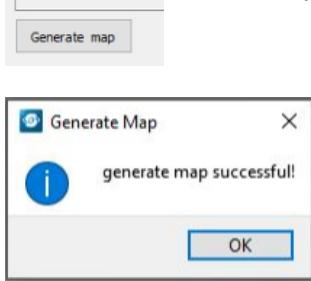
6.Step

Add the BMP file in the Shad. Map Generator



7.Step

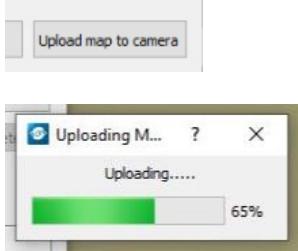
Actuate "Generate map" and wait until the map is generated successful!



8.Step

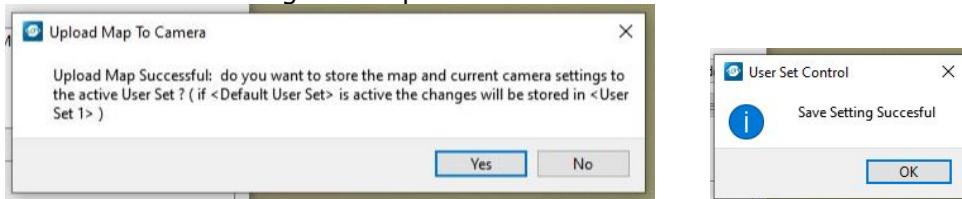
Now the map is saved in the background.

For upload the map in the camera, actuate "Upload map to camera".



Now the map is uploaded in the camera.

Press "Yes" for saving the map in the User Set.



That's it!

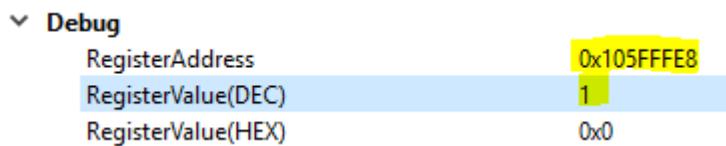
Delete Shading Map:

You can delete the loaded shading map with a register address:

```
#define GVCP_USER_SPACE_CAMMODE_SHADING_MAP_CLEAR 0x105FFFE8
```

With SVCapture2 you can set a register address in the Debug feature:

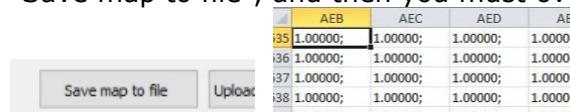
If you set the RegisterValue to 1, the loaded shading map will be deleted.



After the delete, please set the RegisterValue to 0 again and save the settings in the User Set (User Set Control).

You also can delete the map via loading an empty map:

If you want to delete the shad. corr. Map via empty map, you must save the map again with "Save map to file", and then you must overwrite the values to 1 (e.g. with Excel).



A screenshot of an Excel spreadsheet. The table has 4 columns and 5 rows. The columns are labeled AEB, AEC, AED, and AE. The first row contains empty cells. The second row contains values: 'i35 1.00000;', '1.00000;', '1.00000;', '1.0000'. The third row contains values: 'i36 1.00000;', '1.00000;', '1.00000;', '1.0000'. The fourth row contains values: 'i37 1.00000;', '1.00000;', '1.00000;', '1.0000'. The fifth row contains values: 'i38 1.00000;', '1.00000;', '1.00000;', '1.0000'. Below the table are two buttons: 'Save map to file' and 'Upload'.

After this, you can upload the map with "Load Map..." from the assistant.

