

2025/4/29

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Notice on AoikeColorMapping ver 5

1 Setting for fast calculations

In an excel work sheet describing calculation conditions, you can perform fast calculations by checking the following checkbox.

<input checked="" type="checkbox"/> Refl at bottom		<input checked="" type="checkbox"/> Scattering by water		<input checked="" type="checkbox"/> Mie scattering		<input checked="" type="checkbox"/> Using C++ Exe		<input checked="" type="checkbox"/> Reproduction of camera image	
Calculation results									
Lake surface averaged luminances (relative values)				calc time(s)					
Refl at bottom	29.00715915			1.4492					
Scattering by wat	4.789515914			1.85					
Mie scattering	17.50259401								

This check enables to

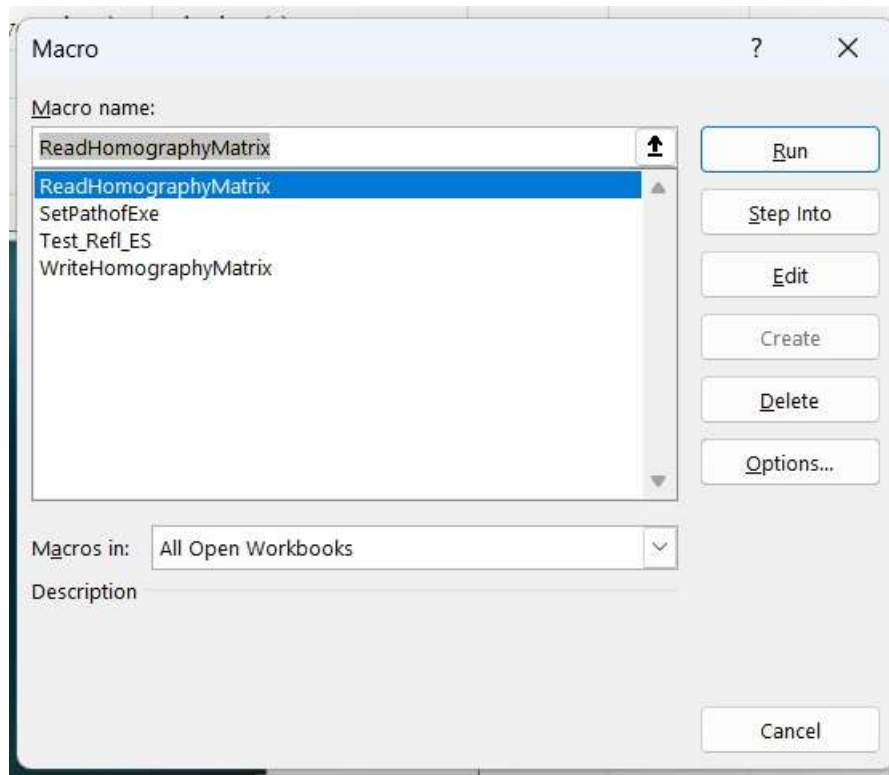
This check enables to
make fast calculation.

2 Launching macros: Four macros have been set

To perform fast calculations, it is necessary to execute a macro "SetPathofExe" so as to write the path of an executable file in a worksheet which describes calculation conditions, before coloration calculations. The executable file written in C is capable of performing fast calculations and is included within a zip file. This executable file is a 32-bit application and can run not only in 32-bit Excel but also int 64-bit Excel and Windows.

To calculate the camera images, you are requested to set the homography transformation matrix, which can be read from the hmr format file (the author's proprietary format). The matrix can be written into a file with the format after naming the file.

The following dialog appears when user selects "macros" on the dropdown list from the developer tab of the Excel.



“ReadHomographyMatrix”: Macro for reading a homography matrix, which calculates the camera images of a lake surface, from an hmr file.

“SetPathofExe”: Macro for setting the path of an executable files carrying out the fast calculations.

“Test_Refl_Es”: Macro for calculating the coloration of a lake surface.

“WriteHomographyMatrix”: Macro for writing a homography matrix, which calculates the camera images of a lake surface, into an hmr file.