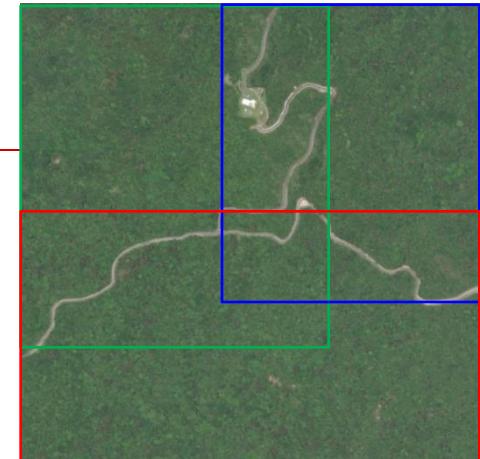


HW2

- Due on 11/13, 23:59

- Connected components

- Generate a binarized image of **road**
- Label the **forest** regions with 4-connected neighbor
 - Label each connected component with R/G/B bounding box in output image.
 - Compute the centroid and area of each regions and print the data on output image or command window.
- Use the morphology algorithms to reserve the **road**
i.e., the output connected component are only one region.
 - Report the length and orientation of the longest axis
- Analyze and print the computational time of your program

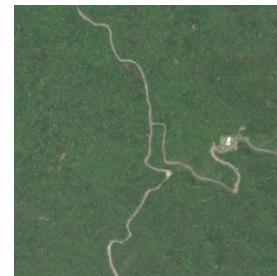
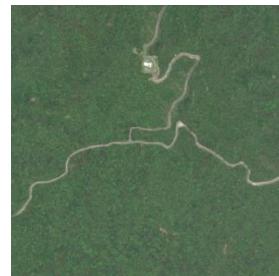


Time(sec.)	binarizing	morphology	connected component	property analysis	drawing
C program	xxx	xxx	xxx	xxx	xxx
OpenCV	ooo	ooo	ooo	ooo	ooo

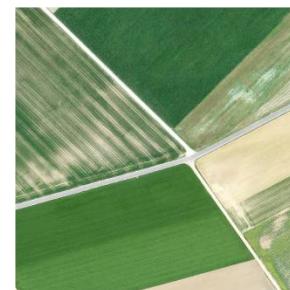
HW2

Bonus

- Use the region properties to estimate the rotation angle ($90^\circ/180^\circ/270^\circ$) of the aerial image.



lan_island_square



Switzerland_square

HW2

□ Requirements

■ Two Programs

- C or C++ source code with .exe file (You are NOT allowed to use any library, such as OpenCV)
 - Except the R/W image
 - You can also use .raw to complete your work
- by using OpenCV

■ Report

- Describe the employed source code editor and how to execute your program (input/interface/output)
- Introduce your work, method, and discussions
- With all of the images or results

■ Upload to i-school Plus