



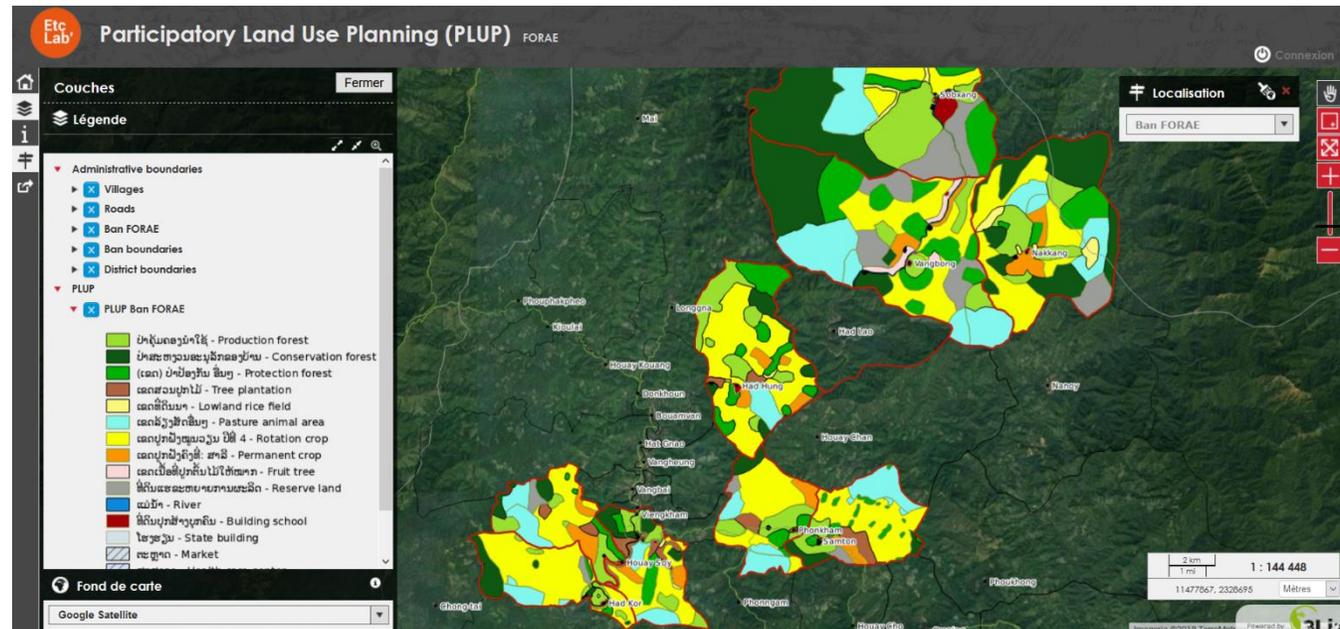
Map a land use plan & broadcast it on a web portal Exercice with Sentinel 2 images

Training from the FORAE Project



Simple map of land uses

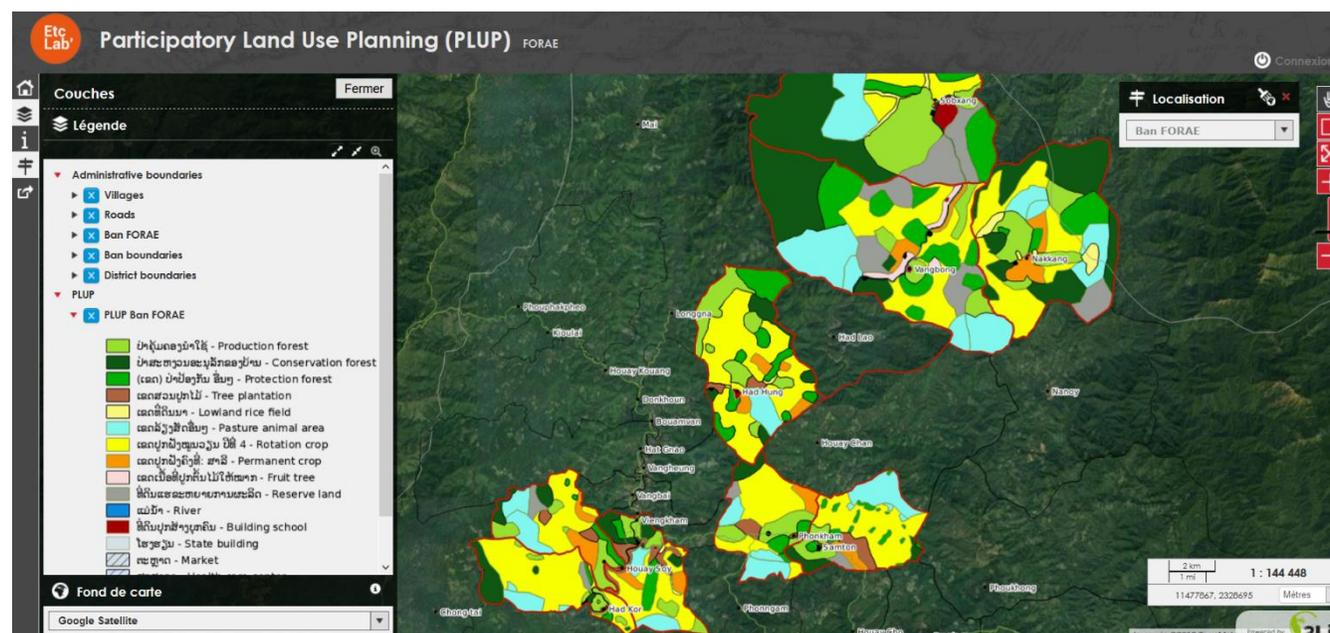
- Map land uses or land uses plans of your project zone
 - Report on areas
 - Assessment of spatial distribution
 - Diffuse the land use plan and control the application
 - Analyze fragmentation and connectivity of habitats



Simple map of land uses

etclab.org

- Map land uses or land uses plans of your project zone
- Publish it:
 - Example of FORAE web portal: you can download data
 - Example of another portal: you can have information on watersheds



Simple map of land uses

- Principle

- Use satellite images as background to identify land uses observed on the field and to plan with local stakeholders
- Use of simple optic images
- Different satellites images freely available but with different resolutions, extents and history
 - MODIS – resolution 250 m
 - Landsat – 30 m
 - Sentinel2 – 10 m
 - Google earth images also available
- Method : simple photo-interpretation with QGIS

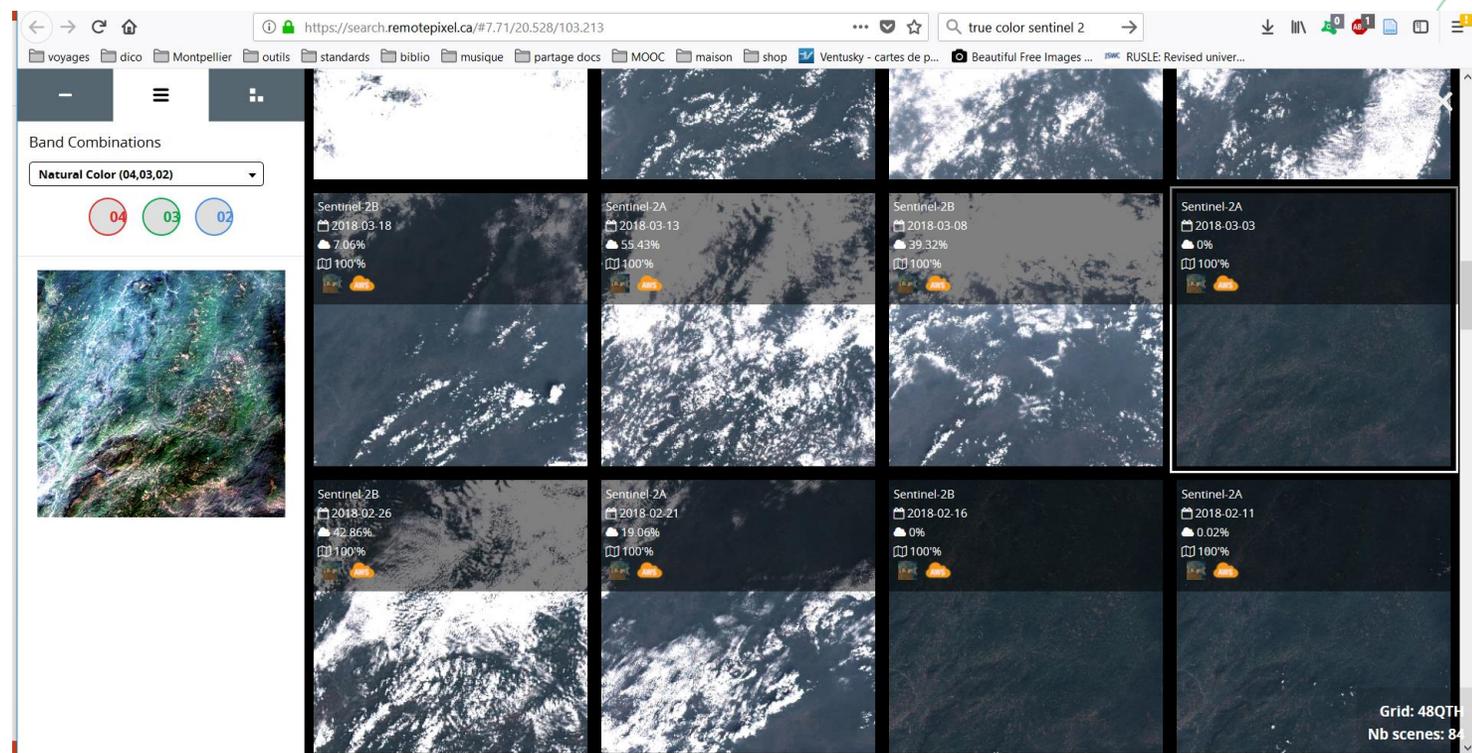


A tropical landscape with palm trees and a group of people working in a field. The scene is overlaid with a semi-transparent teal filter. In the foreground, several people are bent over, working in a field of low-lying plants. In the background, a dense forest of tall palm trees stretches to the horizon under a bright sky.

Questions before an exercise?

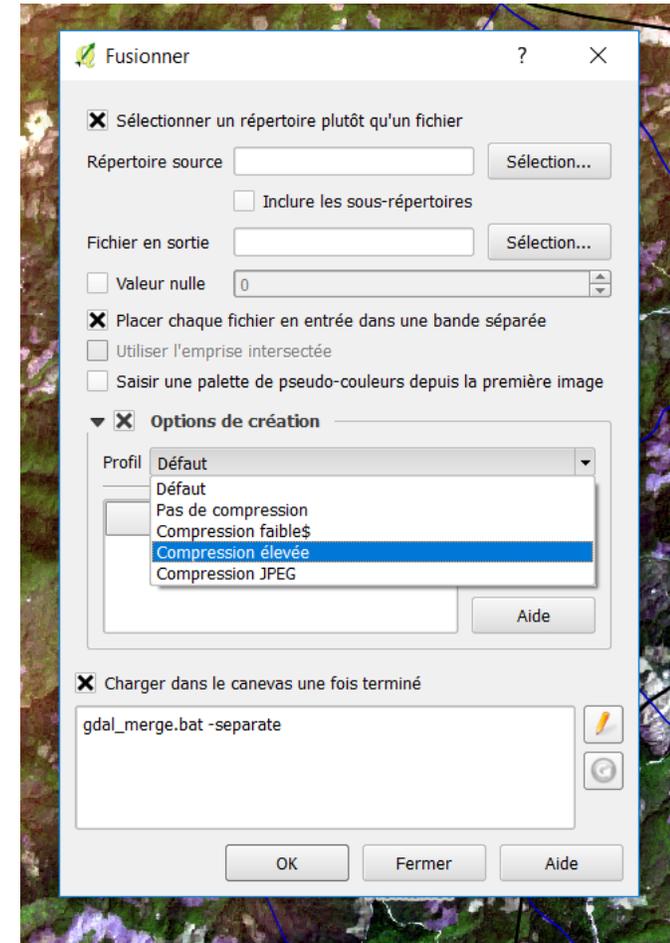
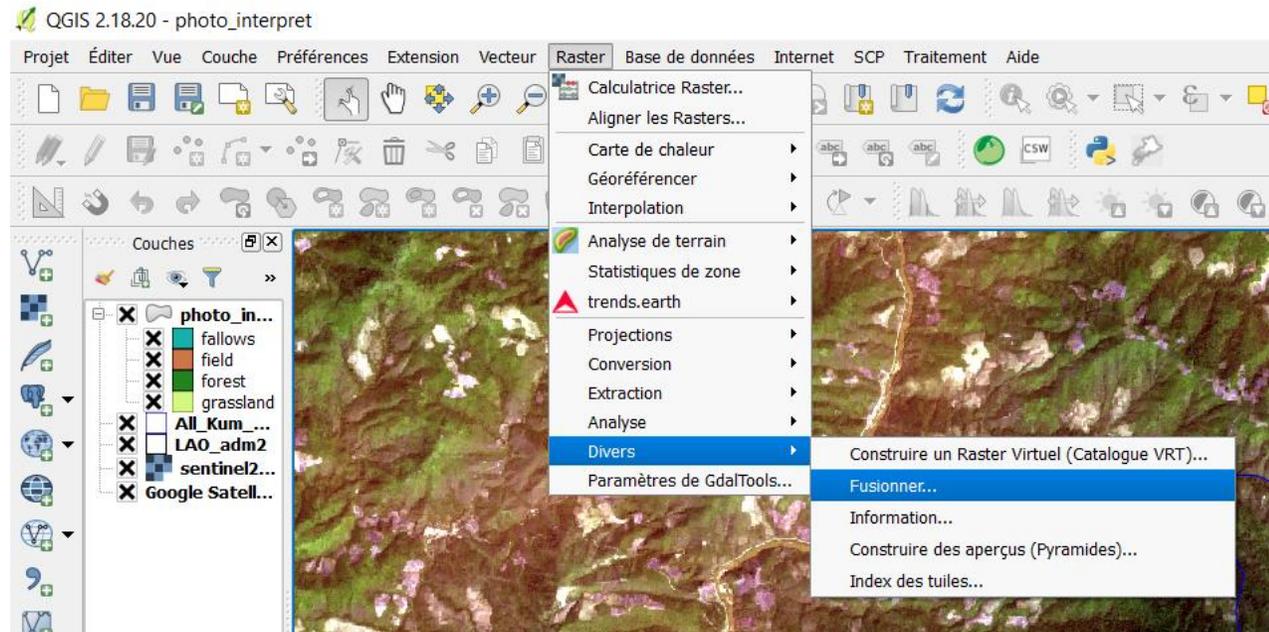
Exercise – map land use of a Ban

- Search your satellite data
 - Control on the dates of the images (by comparison to google earth)
 - Good resolution of Sentinel2 data : 10 m
 - <https://remotepixel.ca/>
 - Natural colors: RGB



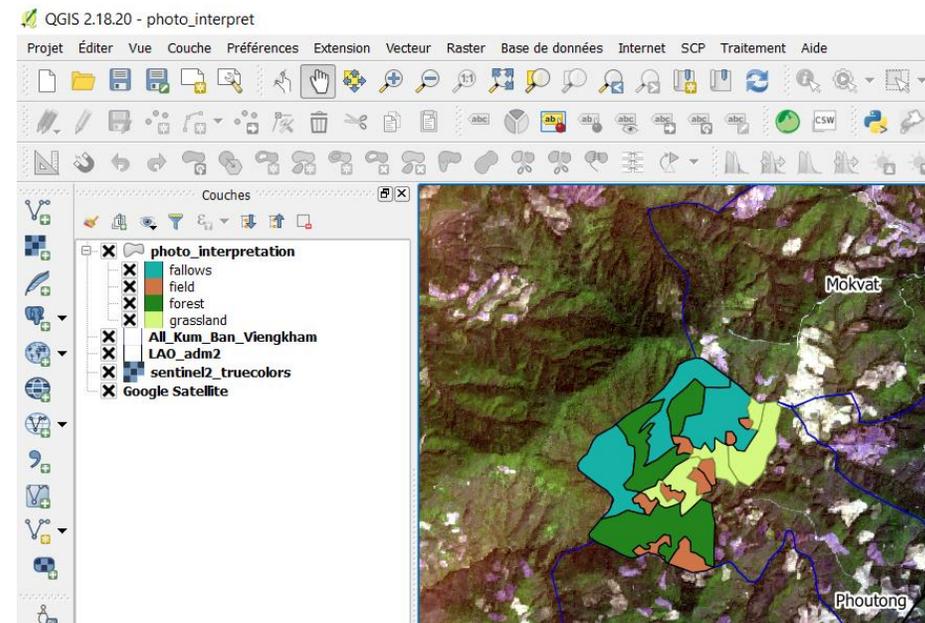
Exercise – map land use of a village

- Open QGIS – save project
- Merge the bands in 1 image on QGIS
 - Long step – image available on USB drive
 - Be careful to SCR



Exercise – map land use of a Ban

- Merge the bands in 1 image on QGIS
 - Long step – image available on USB drive
 - Be careful to SCR
- Identify the land uses you want to map
 - Be realistic
- Identify your area of interest



Exercise – map land use of a Ban

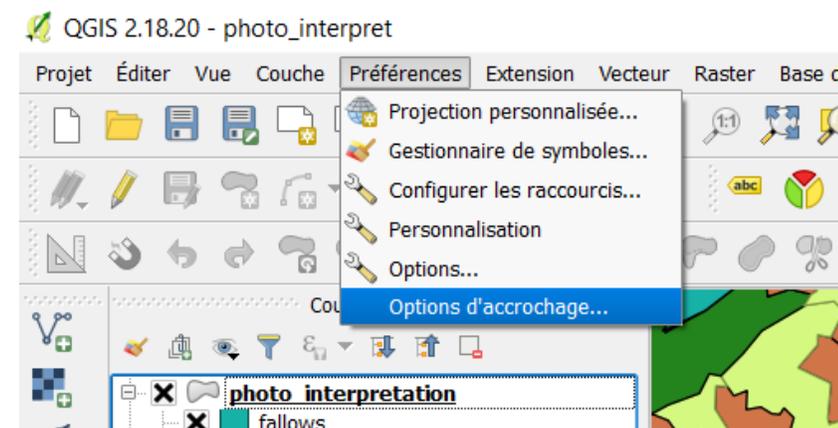
- Start the photo-interpretation
 - Create a layer (polygon)
 - Add a field with LU category
 - Be careful to SCR

The screenshot shows the QGIS 2.18.20 interface with the 'Couche' menu open. The 'Créer une couche' option is selected, and the 'Nouvelle couche shapefile...' dialog box is open. The dialog box is configured for a polygon layer with a text field named 'id' of type 'Donnée texte' and length 80. The coordinate system is set to 'SCR du projet (EPSG:32648 - WGS 84 / UTM zone 48N)'. The 'Liste des champs' table is visible, showing the 'id' field.

Nom	Type	Longueur	Précision
id	Integer	10	

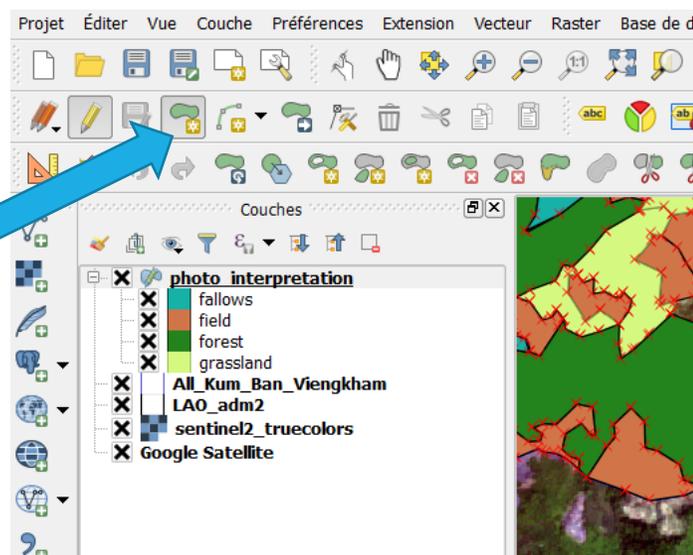
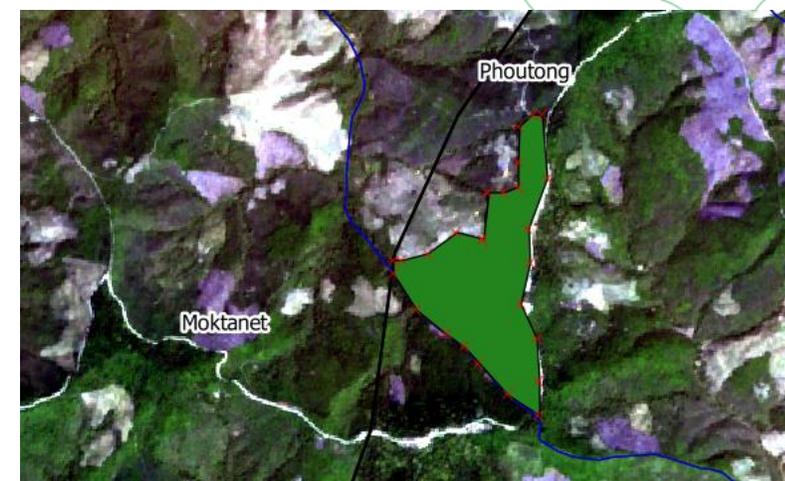
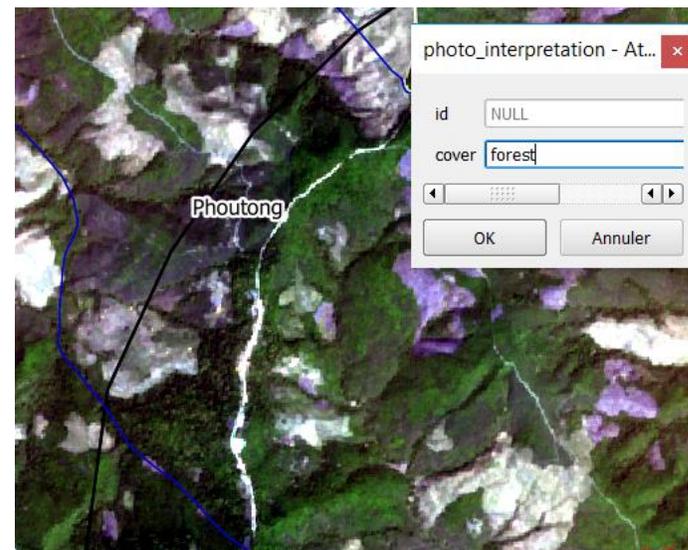
Exercise – map land use of a Ban

- Start the photo-interpretation
 - Create a layer (polygon)
 - Add a field with LU category
 - Be careful to SCR
 - Manage encroachment first



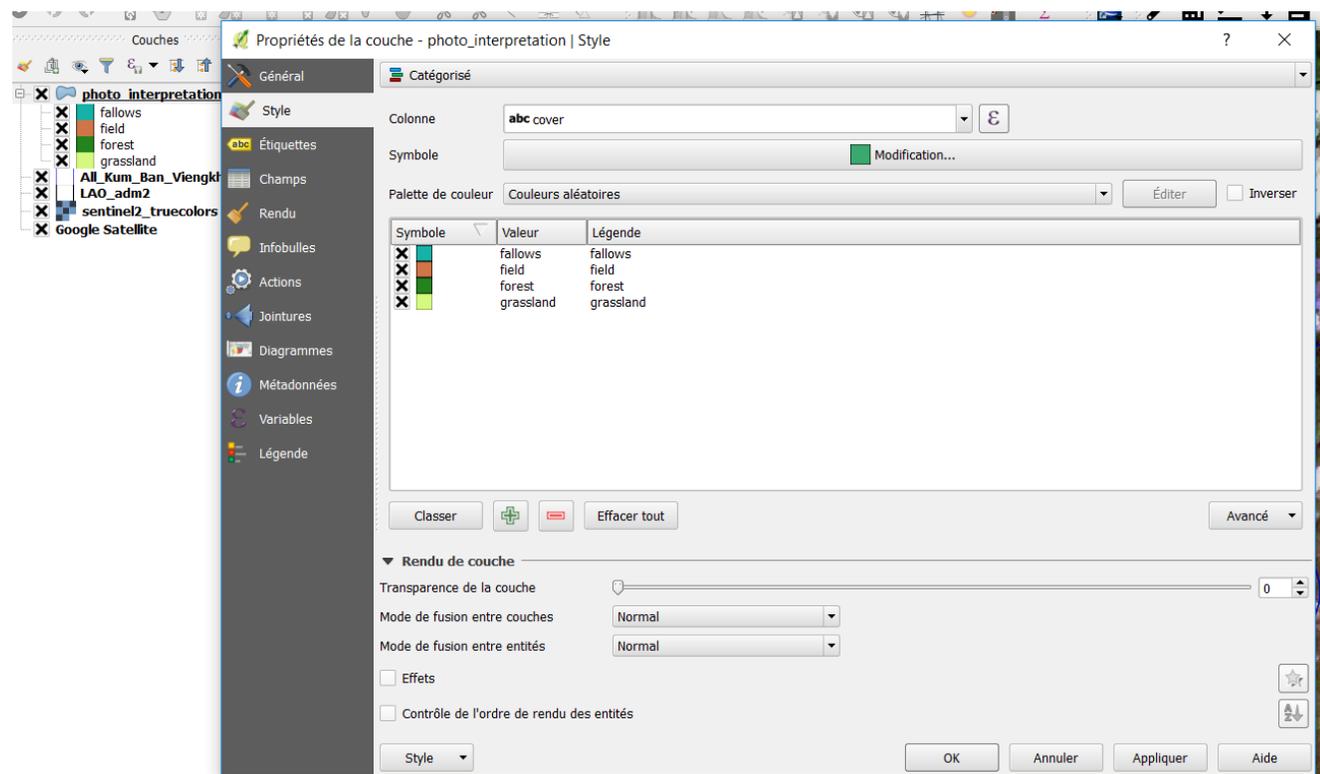
Exercise – map land use of a Ban

- Start the photo-interpretation
 - Create a layer (polygone)
 - Add field with LU category
 - Be careful to SCR
 - Edit & create a new entity
 - Add new line, plot per plot



Exercise – map land use of a Ban

- Start the photo-interpretation
 - Create a layer (polygone)
 - Add field with LU category
 - Be careful to SCR
 - Edit & create a new entity
 - Add new line, plot per plot
 - Manage your legend



A photograph of a tropical landscape with palm trees and a field of people, overlaid with a teal tint. The scene shows a large group of people in a field, possibly engaged in an activity or demonstration. The background is filled with tall palm trees and dense vegetation. The overall tone is greenish-blue.

Questions before demonstration on webmapping?

Webmapping option

- Use of Lizmap with QGIS
 - Example with a specific server
 - Possibility to use QGIS server – installation can be difficult on windows

Consult :
www.3liz.com

The steps of publishing with Lizmap

Prepare
your map applications



The editor configures in QGIS® the options for each map and the tools that will be available within the map application with the Lizmap plugin.

Transfer
your data and QGIS® projects



The Lizmap web client is installed on a map server with QGIS® Server. The publisher places its QGIS® projects and the Lizmap configuration on the server.

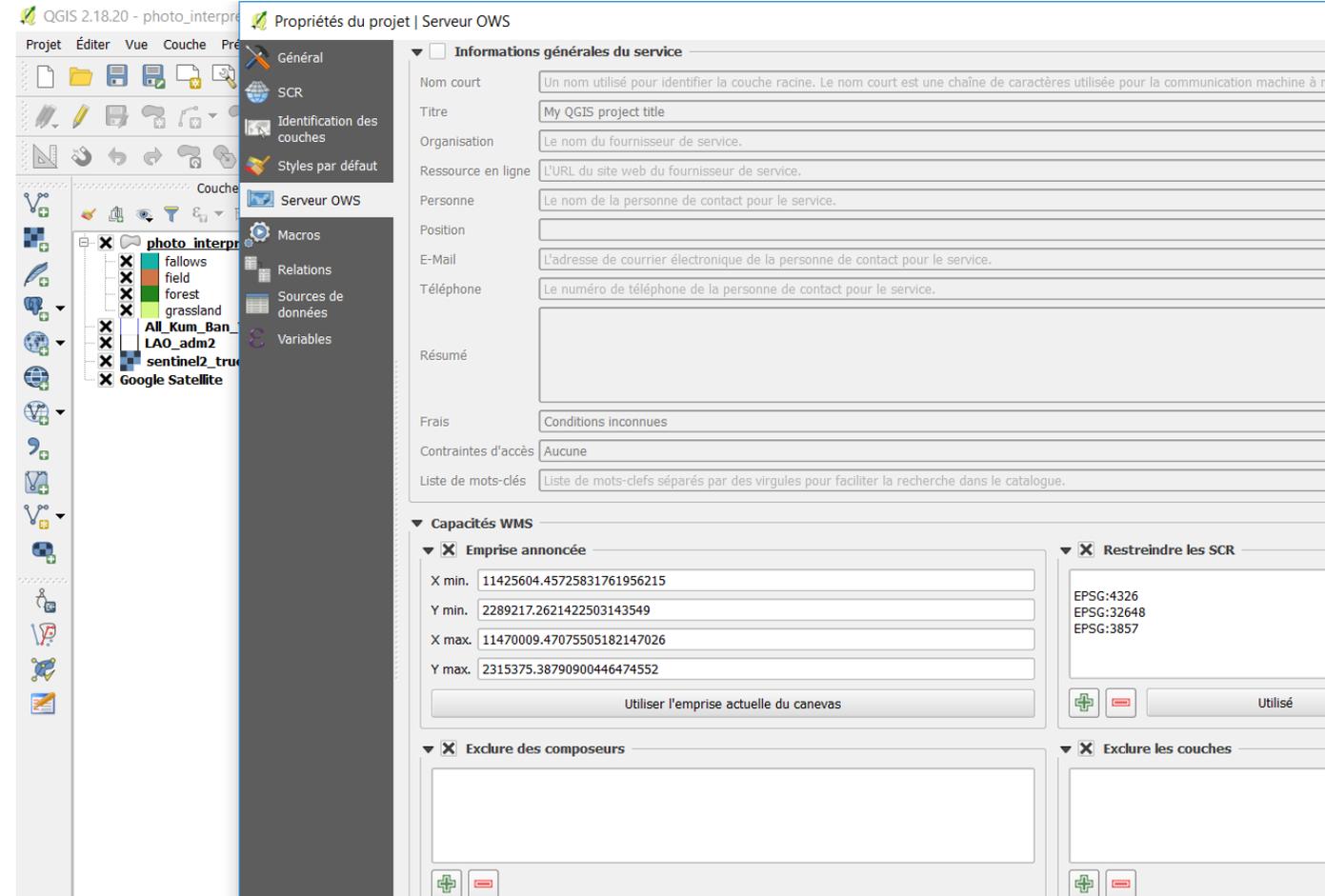
View
on the Web



Users can access map applications with their web browser (Firefox, Chrome, Safari, Opera, Edge, etc.) and use the tools made available by the publisher.

Webmapping option

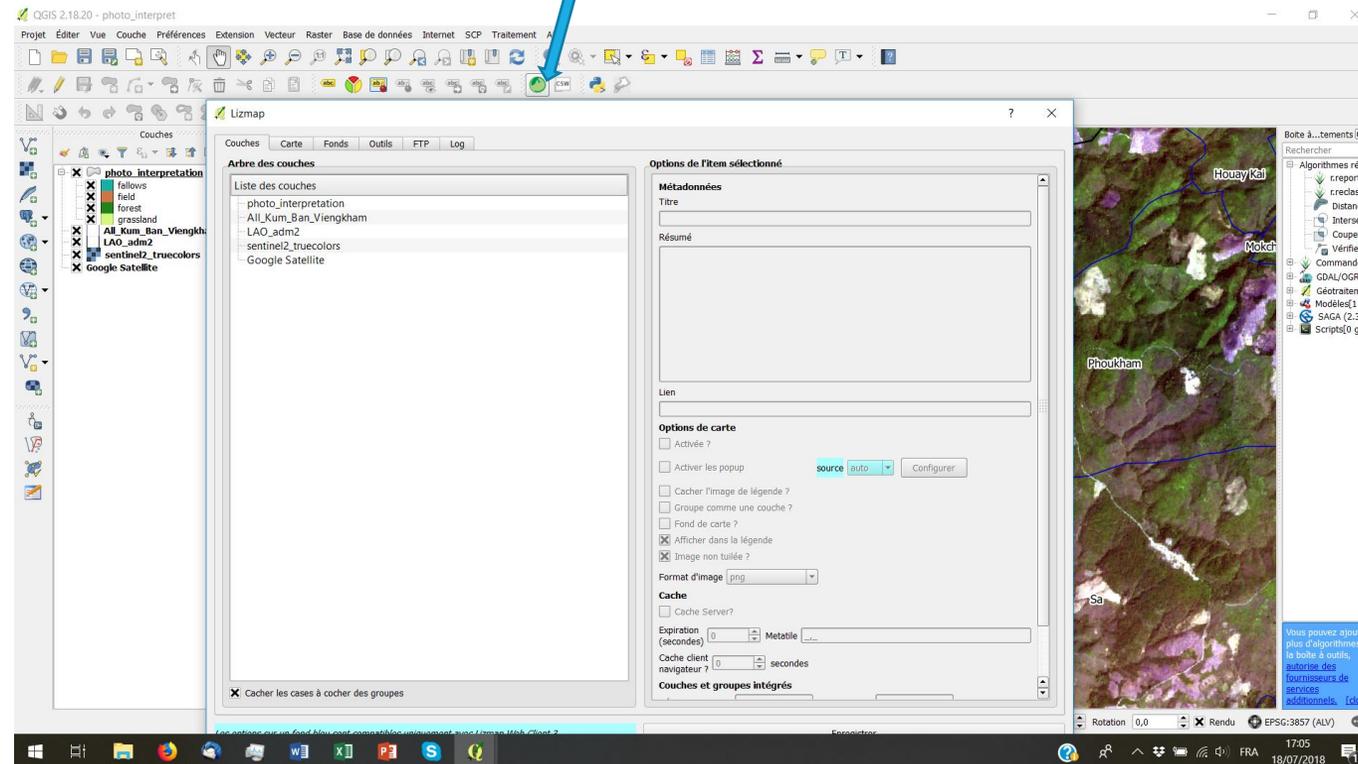
- Use of Lizmap with QGIS
 - Example with a specific server
 - Settings on QGIS



Webmapping option

- Use of Lizmap with QGIS
 - Example with a specific server
 - Settings on QGIS

Demonstration on QGIS



Thank you for your attention

Questions?

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