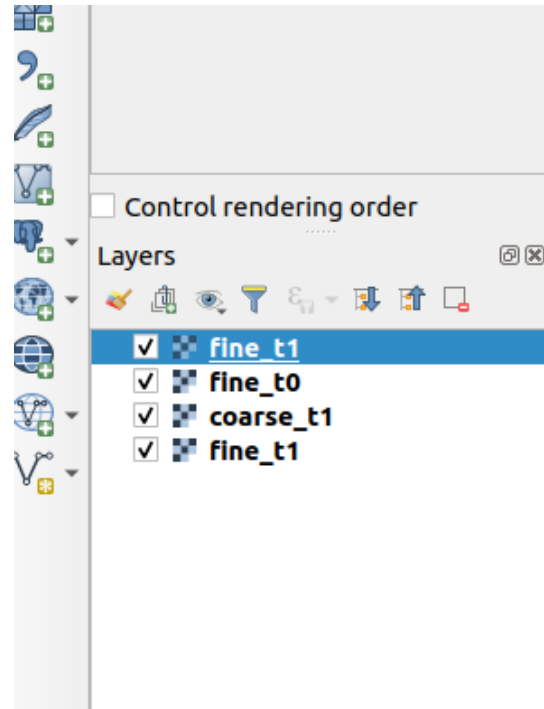


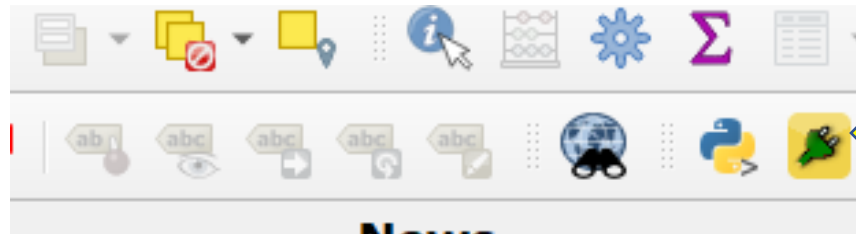
Manual for Image Fusion

- Load raster files into QGIS.



Step 1: Load Raster Files

- Install Image Fusion plugin from zip file (Refer Installation manual).



Step 2 : Click on the icon

- Image Fusion GUI appears as shown below.

The screenshot shows a software window titled "Image Fusion" with a close button (X) in the top right corner. The window contains two tabs: "Predict" (selected) and "Evaluate".

Under the "Predict" tab, there are five rows of controls:

- Row 1: "Select coarse image at t0" with a dropdown menu and a "Get Layers" button.
- Row 2: "Select coarse image at t1" with a dropdown menu and a "Get Layers" button.
- Row 3: "Select fine image at t0" with a dropdown menu and a "Get Layers" button.
- Row 4: "Save File As:" with a text input field and a "Browse" button.
- Row 5: "Select Algorithm" with a dropdown menu showing "Standard-ESTDF".

Below these controls is a section titled "Parameters" containing several input fields:

- "Scale Factor" with a text input field containing "0".
- "Neighbours" with a text input field containing "0".
- "Iterations" with a text input field containing "0".
- A checkbox labeled "Use Recommended Values" which is currently unchecked.
- A series of five parameter pairs, each consisting of a text input field, a "to" label, and another text input field:
 - Pair 1: "Param_x" (0) to (0)
 - Pair 2: "Param_y" (0) to (0)
 - Pair 3: "shift_x" (0) to (0)
 - Pair 4: "shift_y" (0) to (0)
 - Pair 5: "Rotation Angle" (0) to (0)

At the bottom center of the window is a "Submit" button.

Image Fusion Prediction

- Step 1 : Click on Predict tab.
- Step 2 : Load missing pixels file into QGIS.
- Step 3 : Click on Get Layers button.
- Step 4 : Select layer from combo box.
- Step 5 : Click browse button, select output directory and enter output file name.
- Step 6: Select Algorithm from combo box.
- Step 7 : Enter parameters or use recommended values
- Step 8 : Click on submit button to run the program.

Step 1

Step 4

Step 3

Step 6

Step 5

Step 7

Step 8

Image Fusion

Predict

Evaluate

Select coarse image at t0

coarse_t0

Get Layers

Select coarse image at t1

coarse_t1

Get Layers

Select fine image at t0

fine_t0

Get Layers

Save File As

Browse

Select Algorithm

Standard HISTIF

Parameters

Scale Factor

1

Neighbours

4

Iterations

200

☒ Use Recommended Values

FWHM_x

1

to

3

FWHM_y

1

to

3

Shift_x

-1

to

1

Shift_y

-1

to

1

Rotation Angle

35

to

65

Submit

Image Fusion Evaluation

- Step 1 : Click on Evaluate tab.
- Step 2 : Load predicted file into QGIS.
- Step 3 : Click on Get Layers button.
- Step 4 : Select ground truth and predicted layers from combo box.
- Step 5 : Click browse button, select output directory and enter output file name.
- Step 6 : Click on submit button.

The screenshot shows the 'Image Fusion' application window. It has two tabs: 'Predict' and 'Evaluate'. The 'Evaluate' tab is selected, indicated by a yellow arrow labeled 'Step 1'. The interface contains three main sections: 'Select Ground Truth Layer', 'Select Predicted Layer', and 'Save File As'. Each section has a dropdown menu and a 'Get Layers' button. The 'Select Ground Truth Layer' dropdown is set to 'fine_t1', with a yellow arrow labeled 'Step 4' pointing to it. The 'Select Predicted Layer' dropdown is also set to 'fine_t1'. The 'Save File As' section has an empty text input field and a 'Browse' button, with a yellow arrow labeled 'Step 5' pointing to the 'Browse' button. A 'Submit' button is located at the bottom center, with a yellow arrow labeled 'Step 6' pointing to it. Additionally, a yellow arrow labeled 'Step 3' points to the 'Get Layers' button in the 'Select Ground Truth Layer' section.

