**A selectable range of two-dimensional luminescence intensity subtraction to observe changes in luminescence intensity**

% Read the image taken after 120 minutes

aa = imread('10min aligned.jpg');

aa = uint8(aa)

% Extract the green channel of the image

bb = aa(:,:,2);

% Read the image taken at 0 minutes

aa1 = imread('0min.jpg');

aa1 = uint8(aa1);

% Extract the green channel of the image

bb1 = aa1(:,:,2);

% Calculate the intensity difference between the two time points

bb2 = bb - bb1;

bb3 = bb1 - bb;

bb4 = bb3 + bb2;

% Select a specific region of interest

selected\_range = bb4(1000:1800, 1000:1800);

% Display the selected region with the 'jet' colormap

figure

image(selected\_range)

colormap('jet')

colorbar;

title('intensity distribution')