

```

function [ sim_r, sim_g, sim_b ] = imgcompare( img, img_comp )

img_comp_r = img_comp(:,:,1);
img_comp_g = img_comp(:,:,2);
img_comp_b = img_comp(:,:,3);

img_r = img(:,:,1);
img_g = img(:,:,2);
img_b = img(:,:,3);

comp_mat_r = double( img_comp_r ) - double( img_r );
comp_mat_g = double( img_comp_g ) - double( img_g );
comp_mat_b = double( img_comp_b ) - double( img_b );

norm_comp_r = norm( comp_mat_r, 'fro' );
norm_comp_g = norm( comp_mat_g, 'fro' );
norm_comp_b = norm( comp_mat_b, 'fro' );

norm0_r = norm( double(img_r), 'fro' );
norm0_g = norm( double(img_g), 'fro' );
norm0_b = norm( double(img_b), 'fro' );

sim_r = 100*(1 - norm_comp_r/norm0_r);
sim_g = 100*(1 - norm_comp_g/norm0_g);
sim_b = 100*(1 - norm_comp_b/norm0_b);

end

```