Due to the code is still incomplete, we can't test our code with the method of taking noised images, demosaic on it then compare to the raw image. Instead, we wanted to know how much will the low-pass filter that were used to reduce the noise affect the result of our method, and is there a optimal filter that can be applied on any image.
Though testing, we found out that different filters can create very different results, this is because the Y^s value is used in predicting both $E[\Delta_{g,r}]$ and $Var(\Delta^i_{g,r})$, and they are important parts used to predict the missing value, and we also found out that for each different image, the optimal filter could be different, thus, we have to find a method to find the optimal filter. For our next step, we are going to try to find a method to find the optimal filter, since this filter will affect the quality of the prediction by a large amount.