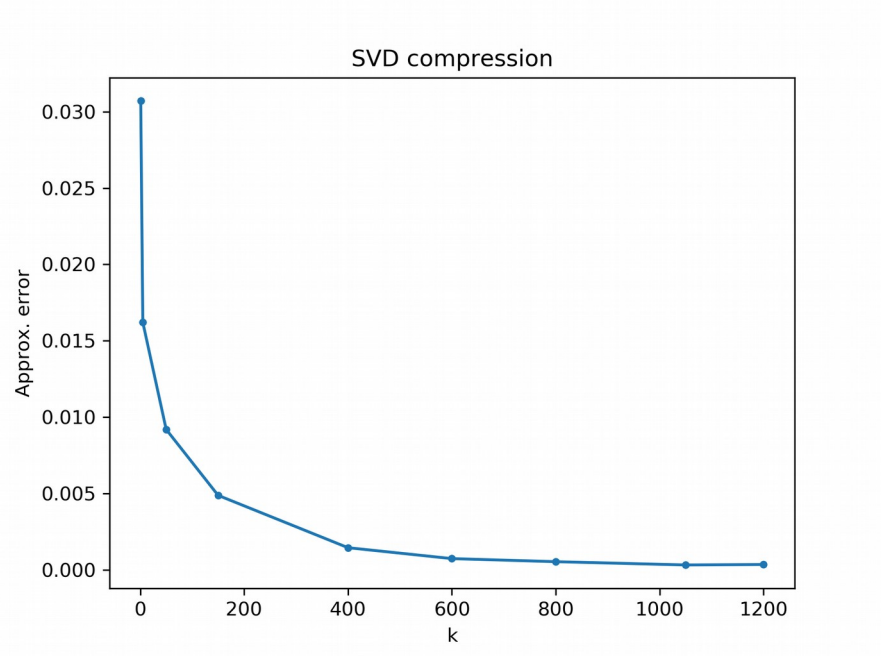
Q1: A plot includes curve describing the relation of k and approximation error.

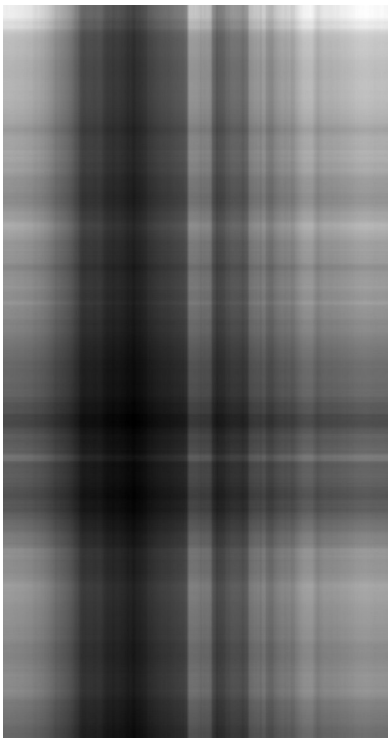


Q2: Analyze the rank of R channel of the provided image and explain how you analyze.
A2: The rank of R channel is approximately 754. By increasing the value of k and compute the approximation error on R channel, the approximation error when k=754 is 0.000994, which is smaller than the specified threshold 0.001(0.1%). Therefore, the rank of R channel is about 754.

Q3: Plots in page 6 but on G channel.

Original G channel

$A_{1,G}$ $A_{2,G}$ $A_{3,G}$



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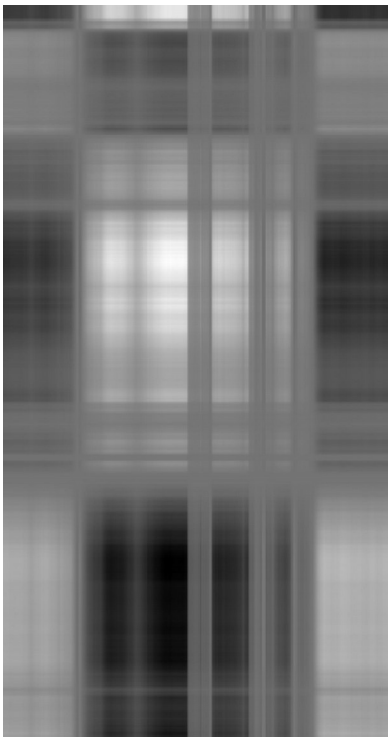

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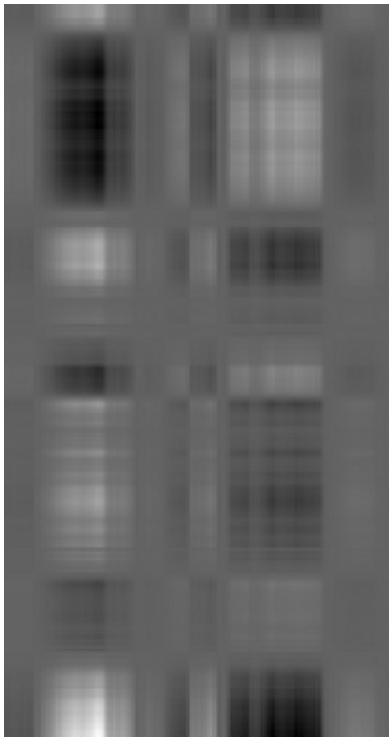

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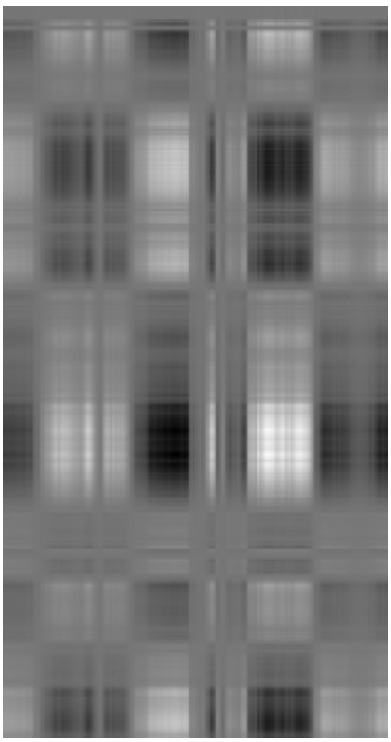
$A_{4,G}$ $A_{5,G}$



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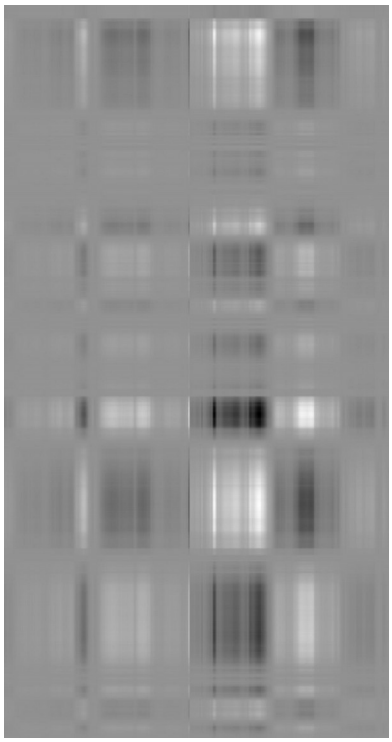

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