

Dear Production Editor,

Thank you for your review and correction.

We attached our responses to your queries in the end of this letter. We also attached the comments to each points on my proof.

Regards,

Shohei Goda

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Q1

Please define the acronym RC. (Page 2)

RC time is the time required to charge the circuit capacitor through the circuit resistance.

Q2

Please define the acronym MOS. (Page 2)

MOS stands for metal oxide semiconductor.

Q3

Please clarify; the word “both” is used, but it is followed by 3 items, not 2. (Page 4)

You are correct. Please delete the word, “both,” and insert “, respectively” at the end of sentence.

Q4

Please clarify the following; it is unclear as it stands: “the subtraction of the background component from the object one cannot perfectly remove the offsets on the science data due to the flat-field uncertainty”. (Page 10)

The reason of what you pointed out is written before that sentence on my proof as below.

“Because the background and science spectra are focused at different locations on the detector plane, as shown in Figure 2, ...”

Q5

Please clarify the following; it is unclear as it stands: “This occurs because the shot noise increases for earlier spectral types of stars but the signal-to-noise ratio increases.” (Page 12)

Because we assumed that the shot noise of star signal is equal to the root of signal, the signal-to-noise ratio for earlier spectral type of star, where the signal is high, increases.

Q6

Please clarify what is meant by “black-off pixels”. (Page 17)

The black-off pixel means the pixel that is not illuminated by any photons from outside.

Q7

Please check the details for any journal references that do not have a link; please update with correct details and supply a CrossRef DOI or NASA ADS link if available. (Page 23)

According to your suggestion, I supplied the link on my proof.

Q8

Please update references [Courts et al. 1994, Yeager & Courts 2001] if possible. (Page 23)

Because I could not find how to update these references, I provided the links in the proof.

Q9

Please cite the references [Pipher et al. 2004, Snellen et al. 2015] in the text; alternatively, we can delete it from the reference list. (Page 24)

Please remove both of the two references.