Response to Referee #3:

We appreciate the very helpful feedback from the referee. The referee's comments are listed in *italics*, followed by our response in blue. New/modified text in the manuscript is in **bold**.

1. Spectral pixels vs. central wavelength: From line 11 the term central wavelength is taken to be that of the test laser source, where spectral pixel is a coordinate on the 2-D detector (spatial pixel being the other coordinate). However, Fig. 14 seems to use both central wavelength and spectral pixel inter-changeably. The abscissa of the plots is labeled Central wavelength, but the caption mentions spectral pixels..

"Spectral pixel" does refer to a coordinate on the detector. In the original figure, "central wavelength" was used to label the spectral dimension because it is more meaningful than the spectral pixel index. Fig. 14 has been updated with Gouraud shading, effectively bridging the gaps between the central wavelengths. As such, the abscissa label has been updated to simply "wavelength". The following sentence has been added to the caption of Fig. 14 for clarification.

"Gouraud shading is applied to render smooth ISRF variation across the FPA. Wavelength labels have been projected to the abscissa in order to provide more context compared to the spectral pixel index."

2. Median filtering, Lines 245-256: It is not clear to what dimension of the table in line 250 the median filter is applied.

The median filter is applied to each element in the 3D table. The input to the filter at each element consists of 5 elements in the spatial dimension, 3 elements in the spectral dimension, and 1 element in the relative wavelength dimension. The sentence at original line 249-250 has been revised, and further clarification has been added.

"To remove the effects of these remaining anomalous pixels, a median filter was first applied to the spatial and spectral dimensions of all ISRFs, which are assembled to a table defined in spatial, spectral, and relative wavelength dimensions. The median filter window sizes are 5 elements in the spatial and 3 elements in the spectral dimension."

3. Line 264: Again confused by the reference to "all spectral pixels" when I thought the ISRF was only measured/derived for specific "central wavelengths" where the laser source operated.

The ISRF was indeed only derived for specific central wavelengths. The phrase "all spectral pixels" referenced all possible positions in the spectral dimension corresponding to the full wavelength range. The text at original line 264 has been revised for clarification.

"The spectral variation of the ISRF at ~10 central wavelength positions is smooth, making it possible to interpolate the ISRF along the spectral dimension to all possible wavelengths. However, the spatial variation of the ISRF is significant due to the slit width irregularity."

4. Table 2: The footnote #6 is missing, but referenced in the last column.

The footnotes have been corrected, where "7" is changed to "6".

5. Line 343: From what was presented in the article it is not definitive that the possible inhomogeneous illumination of the slit produced asymmetric spectral response functions.

This sentence has been removed, and the sentence following it has been revised:

"In future stray light measurements, the pinhole will be replaced with a thin slit in order to fully illuminate the width of the spectrometer slit and hence avoid distorting the spectral response."