

We thank the referees for their helpful comments. We respond to each specific comment below. The referee comments are shown in red italics. Our replies are shown in black and the corresponding text are shown in blue.

1. Section 2.2 line 172. Did the Authors include all the pixels in the analysis, including those in which the zero-wind and wind-corrected pixel differed in more than 1 km? If so please state.

Thank you for the comment. We included all the pixels in the analysis. We modified the text to make this point clear:

Section 2.2: “Only 2% of all the analyzed pixels had wind-corrected stereo-heights and zero-wind stereo-heights differing by more than 1 km, and these pixels were not excluded from the analysis.”

2. Section 2.2 line 175. The horizontal and vertical resolutions for MINX stereo-height retrievals are 1.1 km and 275 m, respectively. Please, cite Nelson et al. (2013) for MINX: Nelson, D.L.; Garay, M.J.; Kahn, R.A.; Dunst, B.A. Stereoscopic Height and Wind Retrievals for Aerosol Plumes with the MISR Interactive eXplorer (MINX). Remote Sens. 2013, 5, 4593-4628.

Thank you for the suggestion. We cited Nelson et al. (2013) and updated the resolutions for MINX stereo-height retrievals as suggested.

Section 2.2: “The horizontal and vertical resolutions for the pixel stereo-height retrieved by MINX were 1.1 km and 275 m, respectively (Nelson et al., 2013).”

3. Section 2.5 line 243. Please, define STP.

Thank you for the suggestion. We added the definition of STP to the text.

Section 2.5: “...and converting to standard temperature and pressure conditions (298 K, 1013 hPa, STP).”

4. Section 3.1 line 270. Please, note if the height range from 0 to 6 km refers to above sea level or terrain.

Thank you for the suggestion. The smoke pixel heights are defined relative to the local terrain, as specified in Section 2.2. We modified the text here to make this point clear:

Section 3.1: “Retrieved smoke pixel heights ranged from 0 to 6 km above the local terrain.”

5. Section 3.1 line 285. My understanding is that agricultural fires dominate over the peninsular Southeastern Asia. I am wondering why the Authors identified more fires over forests than croplands. Are forest fires easier to detect and retrieve with MINX than over croplands? If so, the Authors should clarify that point since their results may be biased towards forest smoke plumes, which typically reach higher altitudes than crop fire plumes.

Thank you for the comment. We added text in Section 3.1 to hypothesized that there is either (1)

extensive slashing and burning of forested areas for agriculture in the PSEA region, or (2) an under-detection of smaller-scale fires over croplands:

Section 3.1: “Out of the 607 smoke plumes identified during 2001-2010, 64% were over evergreen and deciduous broadleaf forests, 30% were over woody savanna, and 6% were over cropland or cropland/natural vegetation mosaic. This likely indicates extensive slashing and burning of forested areas for agriculture in the PSEA region. Alternatively, the smaller scale fires over croplands may be under-detected, and we will return to this point in Section 3.2.”

6. Section 3.1 lines 288-291. The Authors state that smoke heights were higher over forests and savanna than over croplands. I am wondering if they analyzed MODIS fire radiative power provided within the MINX plume dataset to determine if forest fires were more energetic than croplands.

Thank you for the suggestion. We have analyzed several cases of plumes and the MODIS fire radiative power is stronger in the forest fires than cropland fires. We added it in Section 3.1:

Section 3.1: “We analyzed several cases of MODIS fire radiative power within the smoke plumes and found that the fires were less energetic over croplands than over forests and savanna.”

7. Section 4.2 line 427. Figures 5 ”b-d”.

Fixed as suggested to “Figures 5 b-e”. Thank you.