Major Comments:

Author has responded to each of the reviewers' comments.

In the conclusion section be sure to state how the spatial distributions of the LLC(>9ms) and LLC(>18ms) distributions differ from the spatial distribution of total lightning.

Minor Comments:

I would also prefer LLC9 and LLC18 as acronyms.

L196: It is a bit confusing when you state that the ratio is assumed to be zero for fluxes greater than 0.5 (0.3). → State that the ratio is unchanged and equal to 0 for fluxes greater than 0.5 (0.3).

L241: Output every 5 hours is unusual because 24 /5 is not an integer.   Do you mean 3 or 6?

L379: How many more years of data are needed before robust conclusions can be obtained for LCC (>18 ms) flashes can be obtained?

Figure 1 caption: Explain why the ratio plots are undefined over a portion of the globe.

Figure 7 caption: Seasonal observed (top panel) and simulated (rest of panels) ratio → Seasonal observed (left panels) and simulated (right panels) ratio

Figure 8 caption: See correction for Figure 7 caption.

Grammatical Suggestions:

L22: during more than → for more than

L58: Why do you use a different font for LNOX?

L65: and in the range of latitudes → for latitudes

L80: replaced it for a 4 years mission starting in March 2017 … → replaced it in March 2017 and is still sampling latitudes between 54.3 N and 54.3S (Blakeslee et al., 2020) as of January 2022

L85: What does typical mean? Is this the ratio of LCC/(All_Flashes) or LCC/(All_Flashes – LCC)? I'm guessing the latter but am uncertain.

L91: activity coincides → activity coincide

L92: distributions more → distributions is more

L99-100: high production of LCC(>9 ms)-lightning respect to all lightning → high ratio of LCC (> 9 ms) to total lightning.

L106: nearly similar → similar

L108: indicates that → is not surprising as

L108: the subset → a subset

L110: obtained total → total

L160 → lightning parameterizations and scaling factors used in this study are summarized in Table 1.

L165: combination → combining

L268: choice lightning → choice of lightning

L303: LIS missing → LIS to miss

L327: spatial distribution → spatial distributions

L328: comparing with observation → comparing with observations