The authors present evidence of the effect of the 26 December 2019 solar eclipse on the ionosphere. They showed this using Total Electron Content (TEC) data from Global Navigation Satellite System (GNSS) receivers over the Indonesian region. Also, ionosonde data from Canadian Advanced Digital Ionosonde (CADI) in two locations were used to complement the TEC observation. Using the Solar Dynamics Observatory (SDO), they tracked the umbra of the eclipse spatiotemporally. Their investigation methods are clear. The authors gave much emphasis to the effect of the eclipse on the ionosphere particularly the reduction in the TEC and Ionosonde observations as well as the time delay. This current work contributes to literature by showing how this type of eclipse affects the ionosphere in the Indonesian region. However, the structure of the paper needs to be improved, especially the methodology and the results. Also, there are quite a number of repetitions of some sentences (please kindly rephrase). I, therefore, recommend the work be published after the implementation of the comments and corrections.

Major comments:

Introduction:

Kindly mention clearly what is the new findings of this work.
Figures:

The resolution of some of the labels of some Figures needs to increase, they appear blurred.

Methodology and Results:

Please improve the methodology. I suggest you give more details on how the TEC was estimated with some equations and references. Similarly, the methodology of the keogram should be elaborated in detail. I would like to encourage the authors not to assume, the readers are already familiar with the techniques.

Specific comments:

Figure 2, if it is possible I will suggest the authors improve the resolution.

For the Figures with subpanels, please label them for easy identification. E.g., Figure 14(a(i)).

Minor comments and technical corrections

Abstract:

#1. **Line 10:** Kindly rewrite this sentence for clarity.
#2. **Line 18:** Put "of" before "some''.

**Introduction:**

#1. **Line 36:** Change "solar local time" to "local solar time".

#2. **Lines 45-48:** Please kindly rewrite "For many decades ... ; ...Hairston et al., 2018"

**Instrumentation and Methodology:**

#1. **Line 73:** Please remove "Relatively".

#2. **Lines 92 - 93:** Change (x.xx°S yyy.yy°E) and anywhere in the text to (x.xx°S, yyy.yy°E).

#3. **Line 128:** Kindly rephrase the sentence “Further in the analysis, TEC data detrending was also performed”.

#4. **Lines 128 - 130:** Change “Two types of data detrending were performed: one to derive ∆TEC (general deviations from the normal condition) and another to derive TECP (wavelike perturbations with much smaller 130 amplitudes and finer structures)” to “Two types of data detrending were performed: (1) to derive ∆TEC (general deviations from the normal condition) and (2) to derive TECP (wavelike perturbations with much smaller 130 amplitudes and finer structures)”.

#5. **Lines 133 - 134:** Kindly rephrase the sentence “Only after completing the detrending process on the IPPs did we spatially map the TECP values onto fixed grid point(s) for data display.”
Observation Results:

Ionosonde Observations

#1. Lines 144 - 145: Rewrite as ........: one in the southeast of the solar disk and the other in the northwest of the solar disk.

#2. Lines 188 - 190: Please rephrase as: The recovery phase occurred over a duration of 155 minutes, starting at 06:20 UTC (13:20 LT) until 08:55 UTC (15:55 LT) with an increase in foF2 by 1.23 MHz (from 5.44 MHz to 6.67 MHz).

#3. Lines 195 - 196: change “....... while that over Pontianak was 83 minutes” to “....... whereas that over Pontianak was 83 minutes”.

#4. Line 235: ...... climb ...... to ...... ascent ....

#5. Line 242: ...... climb ...... to ...... ascent ....

GPS TEC Observations

#1. I will suggest the authors “change keogram” plot to “keogram”.

#2. Line 293: Kindly change “....... since at this time of day, ........ maximum level.” to “....... since at this time of the day, ........ maximum level.”

#3. Line 303 - 304: Please rephrase this sentence - “Not until nearing the maximum eclipse did âââTEC started to drop, which eventually reached approximately -6 TECU at its lowest”.
#4. **Line 342 - 343**: Change to: “The further away the striped patterns were from the alignment with the C1/max/C4 epoch lines, the more likely they are to be associated with AGW/TID.”

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**Solar EUV Illumination Variability**

#1. **Line 370**: Please change “Further,……” to “Furthermore, …”

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**Discussion**

#1. **Line 404**: I suggest you change “...... 97 minutes and 83 minutes.” to “...... 97 and 83 minutes.”

#2. **Line 408-409**: Please insert “e.g.,” in the citation as (e.g., Farges et al., 2001; Adeniyi et al., 2007; Goncharenko et al., 2018), .... .

#3. **Line 417**: Same as comment #1, line 404.

#4. **Line 438 - 440**: This overshoot might have been caused by an inward shift of the EIA crest position during the post-eclipse period, after an outward shift that happened earlier during the eclipse (Aa et al., 2020). Please have done any analysis to prove this point in this study?

#5. **Line 469**: Please put a colon after “includes” as ... includes: (1) ....