

Thank you for your valuable comments. We fully acknowledge your suggestions and have revised the paper accordingly. On behalf of all the authors, I would like to respond to you as follows:

RC2

Question 1:

Observation points are located in the earthquake preparation zone according to the Dobrovolsky formula $R=\exp(M)$ (Dobrovolsky et al., 1979). The distance between the observation point and the time between the anomaly and the earthquake is very close to Sidorin's formula $\log(\Delta T \times R)=0.72M-0.72$, where ΔT is the time in days, and R is the distance in kilometers (Sidorin, 1979).

Reply:

Thank you for pointing out the two formulas that significantly enhance the robustness of our article. In reference to Dobrovolsky's formula, we determined the study area's extent by considering the radius derived from this formula. While not explicitly mentioned in the article, we will include this formula in the 'Study Area' section of the manuscript. As for Sidorin's formula, we employed it to conduct certification calculations for the relevant results, leading to improved outcomes. **However, we analyzed the pre-seismic anomalies of the Luding EQ in this study, and its results had limited generalizability, hindering accurate validation of the formula. Consequently, we have refrained from citing this reference in this context.**

Revised version (Line 91):

The study area was selected as [99°~106° E, 28°~32° N] in consideration of the Dobrovolsky formula (Dobrovolsky et al., 1979) and the geographical locations of the AEF observatories.

Dobrovolsky, I.R., Zubkov, S.I., and Myachkin, V.I.: Estimation of the size of earthquake preparation zones, Pure. Appl. Geophys., 117, 1025-1044, <https://doi.org/10.1007/BF00876083>, 1979.

Question 2:

line 34, to clarify that the upper atmosphere is positively charged.

Reply:

The presence of a consistent atmospheric electrostatic field oriented vertically downward during fair weather conditions, along with the existence of opposite charges carried by the atmosphere and Earth, constitutes the cause of the FW-AEF. In accordance with well-established principles of electrical physics, it is acknowledged that electric field lines originate from positive charges and terminate at negative charges.

Revised version (Line 34):

This electric field, also known as the fair-weather atmospheric electric field (FW-AEF), is oriented vertically downwards, which means that the atmosphere is positively charged relative to the Earth, while the Earth carries a negative charge (Li et al., 2022).

Li, L., Chen, T., Ti, S., Wang, S. H., Song, J. J., Cai, C. L., Liu, Y. H., Li, W., and Luo, J.: Fair-

weather near-surface atmospheric electric field measurements at the Zhongshan Chinese Station in Antarctica. Appl Sci, 12, 9248, <https://doi.org/10.3390/app12189248>, 2022.

Question 3:

line 155, to clarify approximately what time the sun rises and sets in this area according to UTC for the specified period of research.

Reply:

Thank you for your valuable suggestions. Upon reviewing the timetable, we have identified that the sunrise time (UTC) within the designated study area during the specified period ranges from 22:41 to 22:50, while the sunset time spans from 11:24 to 11:30. It is crucial to note that all temporal data presented in this paper has been adjusted to local time (LT). Consequently, our manuscript employs local time (LT), signifying that the sunrise occurs between 06:41 and 06:50, with the sunset taking place between 19:24 and 19:30.