

This study first statistically analyzed the atmospheric conditions related to the fog and mist. Then, they used machine learning to analyze the prevailing patterns associated with the fog and mist. It will be useful for predicting fog and mist and is worthy of publication.

All my previous comments were addressed by the authors well. However, the conclusion part and some other parts need to be improved before publication.

About the conclusion

The conclusion is still not well written. The conclusion should summarize the authors' main findings in the paper, not providing too much new information. For example,

Line 493-498

This paragraph explains the decreasing fog and mist trend and provides some references. It should be moved to the main text. In the conclusion, only use a few sentences to repeat what the authors found.

Line 500 – 508

This is how global warming impacts the SST and then fog and mist. They should be moved to the main text, and a few sentences should be used here to summarize.

The main findings from Figure 4-13 were not summarized in the conclusion. Please use a few sentences to summarize the main findings from Figure 4-13.

Line 510-516

This is related to Figure 14 but too much content. They should be moved to the main text. The authors can use a few sentences here to summarize Figure 14.

Other issues:

Line 168

From here, the authors started to describe the GNG method. It is better to start a new paragraph to improve readability.

Line 184

“ whereas over land, the influence of topography and vegetation introduces noise, masking these processes.”

I don't understand 'masking these processes.' what processes? And why 'masking'
Maybe it is better to use another word.

Line 207

"Airport, 2021-2020."

Should it be 2001-2020?

Line 302

"Fog rarely occurs in calm conditions, suggesting an optimal wind speed range for its formation and warranting further exploration, a "

Which figure justifies this sentence? Figure 6b shows dots when the wind speed is 0. It looks like fog can also occur in calm conditions.

Line 326 Figure 7

It is optional. The authors can consider adding a diagonal line to indicate where $SST = SAT$. So the reader can better visualize the parts where $SST > SAT$ and $SST < SAT$.

Line 329 Figure 8 caption

'without fog or mist'

Please confirm if it is 'Without fog **or** mist' or "without fog **and** mist'

'Without fog **or** mist' means at least one (or both) of these conditions is absent.

"Without fog and mist" means the complete absence of both fog and mist.

Since panels b and c are fog and mist. It looks like panel a means 'without fog **and** mist'.

Line 420

"figure 13g, 13h"

I think it should be "figure 13e, 13f". There are cyclones in Figures 13e and 13f.

Line 506

"Warmer SSTs reduce the temperature gradient required for fog formation and increase evaporation rates, promoting fog advection when winds are favorable."

I think warmer SST increases the temperature gradient between SST and air temperature above if $SST > SAT$. Please explain.