#### **Comments Editor**

Thank you very much for your revised paper. The new version is a very significant improvement\_and you have solved all major issues. There are only a few minor changes necessary, that are listed in report #1, and a last language check as proposed in report #2.

#### **Reply to Editor**

We greatly appreciate the editor for carefully reading and commenting on our manuscript. In the following, we reply to reviewer's comments point by point. We marked up manuscript version the changes comments indicated by red colors. In addition, we have checked English explanation again. We have changed several English explanations showing the changes by blue colors.

#### **Reviewer1 General comments:**

1. The methodology is neatly described. Analysis of "modern" meteorological data is used to describe the spatial patterns of precipitation and atmospheric pressure and temperature associated to the occurrences of winter monsoon outbreak days. These are used to identify the occurrence of these events during the middle XIX century.

#### Author: reply to General comments

We greatly appreciate for your comments, we have checked and corrected manuscript following your comments and suggestions.

#### **Reviewer1 Minor observations:**

Line 21-22: Change "was agreement" to "was in agreement"

#### Author: reply to comment 1:

Thank you for this helpful suggestion. In the revised manuscript, we have changed "was agreement" to "was in agreement" in line 22-23.

#### Reviewer1 comment 2:

Line 38: Yoshimura (2007) is not in the reference list.

#### Author: reply to comment 2:

Apologies for this mistake. We have added Yoshimura (2007) in the reference list. Line 424 of the revised manuscript.

# **Reviewer1 comment 3:**

Line 63: Abdillah et al, 2021 appears as Abdillah et al, 2014 in the reference list.

### Author: reply to comment 3:

Thank you for noting this. We have changed Abdillah et al, 2014 to Abdillah et al, 2021 in the reference list. Line 332 of the revised manuscript.

# Reviewer1 comment 4:

Line 163: Change "the daily temperature anomaly in Tokyo was below its climatology" to "the daily temperature anomaly in Tokyo was negative"

# Author: reply to comment 4:

Thank you very much for your helpful comment. In the revised manuscript, we have changed "the daily temperature anomaly in Tokyo was below its climatology" to "the daily temperature anomaly in Tokyo was negative" in line 164 of the revised manuscript.

## Reviewer1 comment 5:

Line 193: Yamazaki et al., 2015 is not in the reference list.

# Author: reply to comment 5:

Apologies for this mistake. We have added Yamazaki (2015) in the reference list. Line 420-421 of the revised manuscript.

# Reviewer1 comment 6:

Line 200: Figure8. A space is missing before 8.

# Author: reply to comment 6:

Thank you for noting this. We have added space before 8 in line 201 of the revised manuscript.

#### **Reviewer1 comment 7:**

Abdillah et al, 2021 appears as Abdillah et al, 2014 in the reference list

#### Author: reply to comment 7:

Thank you for noting this. We have changed Abdillah et al, 2014 to Abdillah et al, 2021 in the reference list. Line 332 of the revised manuscript.

## **Reviewer1 comment 8:**

Lines 208 – 209: "Intra-seasonal variations in  $\Delta$ SLP and WMDs for a cold winter year (1976/7) are presented in Fig. 9, and those for a warm winter year (1978/9) are presented in Fig. 10.". This is not what it is presented in Fig. 9 and Fig. 10. Each figure contains information for the winter years 1976/7 and 1978/9. Besides, figure captions of Fig. 9 and Fig. 10 are not consistent with the content of the two figures.

#### Author: reply to comment 8:

Thank you for this helpful suggestion. Apologies for incorrect explanations. In the revised manuscript, we have changed explanations in line 209-213. We also corrected figure captions of Fig. 9 and Fig. 10 of the revised manuscript.

#### Reviewer1 comment 9:

Line 343: Change "593. 1992." To "593, 1992."

#### Author: reply to comment 9:

Thank you for noting this. We have changed "593. 1992." To "593, 1992." in the reference list. Line 352 of the revised manuscript.

# **Reviewer1 comment 10:**

Line 345: Add a space before 2011

#### Author: reply to comment 10:

Thank you for noting this. We have added a space before 2011 in the reference list. Line 354 of the revised manuscript.

Reviewer1 comment 11: Line 347: Add a space before 2008

## Author: reply to comment 11:

Thank you for noting this. We have added a space before 2008 in the reference list. Line 356 of the revised manuscript.

# Reviewer1 comment 12:

Line 387: Add a space before 2009

# Author: reply to comment 12:

Thank you for noting this. We have added a space before 2009 in the reference list. Line 397 of the revised manuscript.

# Reviewer1 comment 13:

Line 390: Add a space before 2021.

# Author: reply to comment 13:

Thank you for noting this. We have added a space before 2021 in the reference list. Line 399 of the revised manuscript.

# Reviewer1 comment 14:

Line 406: Add a space before 2015.

# Author: reply to comment 14:

Thank you for noting this. We have added a space before 2015 in the reference list. Line 415 of the revised manuscript.

# Reviewer1 comment 15:

Line 414: Change "68. 2013" to "68, 2013"

# Author: reply to comment 15:

Thank you for noting this. We have changed "68. 2013" to "68, 2013" in line 426 of the revised manuscript.

# **Reviewer1 comment 16:**

Lines 518 - 520: Indicate in the figure caption the period used to calculate the temperature anomalies.

# Author: reply to comment 16:

Thank you for this helpful suggestion. We have indicated the period used to calculate the temperature anomalies in line 532 of the revised manuscript.

# **Reviewer1 comment 17:**

Line535: I suggest in each panel to indicate by dot or a circle the position of Japan.

# Author: reply to comment 17:

Thank you for this helpful suggestion. We have indicated the position of Japan by a circle in Fig.6 of the revised manuscript.

#### **Reviewer1 comment 18:**

Line548: I suggest in each panel to indicate by dot or a circle the position of Japan.

#### Author: reply to comment 18:

Thank you for this helpful suggestion. We have indicated the position of Japan by a circle in Fig.7 of the revised manuscript.

#### **Reviewer2 General comments:**

The paper has great potential to be published in the journal. According to the current version, the authors have done lots of effort to revise the manuscript according to the comments from reviewers. The authors have provided a good reason on selecting location for their analysis considering both climate system and records condition. Not only the location, the selection of study period and comparison with 1976-1977 has been explained well in this revision. I am also glad to see the vivid examples of Japanese records, which will provide the audience more information. From these examples, the audience should be more familiar with the Japanese records for studying past climate.

Overall, the revision is satisfied to me. The language is also acceptable, but still has room to be improved. To make it more readable, I suggest the author to make a list for abbreviation because there are so many abbreviations in the paper.

# Author: reply to reviewer 2:

We greatly appreciate valuable comments and suggestions. We have checked language of manuscript again and made a list for abbreviation in line 303 - 309 of the revised manuscript.