

- [Answers in blue](#)
- Original comments in black

Overall recommendation: A minor revision

This manuscript has been greatly improved compared to its first revision. However, I still found that there are some minor issues in this revised version that should be revised.

[Thank you for taking the time to review this manuscript again \(and so fast!\). We took care to incorporate all last points into the final manuscript.](#)

Minor comments:

☒(1) "Summer (1963)" on lines 40-45 of page 2 should be changed into "Summer (1959)"

- [Answer: Changed](#)

☒(2) "Luo and Zhang (2020)" on lines 50-55 of page 2 should be changed into "Luo et al. (2019)".

- [Answer: Changed](#)

☒(3) "Where Sousa et al. (2021) " on lines 105-110 of page 4 should be changed into "While Sousa et al. (2021)".

- [Answer: Changed](#)

☒(4) "this distance" on lines 160-165 of page 6 should be changed into "this zonal distance".

- [Answer: Changed](#)

☒(5) "geopotential height" on lines 420-425 of page 20 should be changed into "geopotential height anomalies".

- [Answer: Changed](#)

☒(6) "Another noteworthy discovery..." on lines 515-520 of page 24. These results are consistent with the observational and theoretical findings of Zhang and Luo (2020). Please read their paper in detail. Maybe, the authors can use the theoretical results of Zhang and Luo (2020) to make a physical explanation about the author's results. Zhang and Luo (2020) found that a smaller meridional basic potential vorticity gradient (PVy) background favors westward-moving blocking with both larger size and intensity. For this case, the blocking system has weaker dispersion and stronger nonlinearity. Thus, there is a nonlinear relationship among the blocking size, intensity and westward-moving velocity. A large PVy condition favors eastward-moving blocks. For this case, the blocking system has stronger dispersion and weaker nonlinearity. Thus, the relationship among the blocking size, intensity and eastward-moving velocity is approximately linear. Of course, PVy can be influenced by sea-ice extent, SST anomalies and other climatic factors.

- [Answer: We added this extra explanation at the end of Section 3.2, where we think it is more fitting.](#)

☒(7) "Zhang and Luo (2019)" on lines 525-530 of page 24 should be changed into "Zhang and Luo (2020)".

- [Answer: Changed](#)

☒(8) Line 645, "1963" should be changed into "1959"

- Answer: Changed

☒(9) Line 655, "2019" should be changed into "2020".

- Answer: Changed