Responses to Comments on the Manuscript:

Water vapor isotopes indicating rapid shift among multiple moisture sources for the 2018/2019 winter extreme precipitation events in Southeast China

(MS No.: hess-2021-269)

Many thanks for the reviewers' comments. Below are our point-to-point responses to the comments. The comments are in black, and our responses are in blue.

Referee #1:

Minor comments

L487 'The projected extreme wind change resembles the mean surface wind change' should be 'The projected extreme wind change resembles the projected mean surface wind change'

Response: Change has been made accordingly in the revision.

L211 The dv value is lower in stage 4 than in stage 3 with no obvious trend, reflecting the stable influence of oceanic water vapor.' Should be 'The dv value is lower in stage 4 than it in stage 3 with no…

Response: Change has been made accordingly in the revision.

L245 Therefore, based on the CWT model, we calculated the dv value concentration fields to…

'CWT model' should be 'HYSPLIT model'

Response: Change has been made accordingly in the revision.

Referee #2:

1) Section 2.4, P5, L110: Reanalysis data is mentioned here without specific information. Please show the spatial resolution, temporal resolution and the specific temporal coverage of the data.

Response: The spatial resolution, temporal resolution, and the specific temporal coverage of the reanalysis data have been added in **Section 2.4**.

2) Global Precipitation Climatology Centre (GPCC) precipitation data is mentioned in Section 2.4, but the use of this data is not explicitly mentioned in the following text. Please add description in relevant text, or you can show the dataset in corresponding figure title.

Response: We have referenced this dataset in the caption of **Figure 1**.

3) Three words “d-excess”, “dv” and “dp” appear in the whole paper for many times. Please clearly explain the meaning of these three words in order to avoid confusion.

Response: Thanks for the reviewer’s comments. Deuterium excess (d-excess), defined as $d = \delta^{2}H - 8 \times \delta^{18}O$. In this study, d_v refers to water vapor d-excess, while d_p refers to precipitation d-excess. We have carefully checked these three words throughout the paper, and explained the meaning of these words at **Line 129**.