

***Interactive comment on* “Dynamic mechanism of extremely severe saltwater intrusion in the Changjiang Estuary occurred in February 2014” by Jianrong Zhu et al.**

Anonymous Referee #2

Received and published: 25 July 2020

The authors looked into the salinity intrusion issue in the Changjiang Estuary that occurred in February 2014 and demonstrate that the persistent and strong northerly wind is the cause of this issue. It is significant for studying the water safety of freshwater resources.

However, I have two concerns. 1, According to Figure 5b, the realistic wind can be a cause. However, what is the role of the spring tide (The period from 10 Feb to 18 Feb 2014 according to the lunar calendar) for the intrusion during this issue?

2, Had some issues also happened in the near Hangzhou Bay? Since the wind also causes a rise of residual water level there (Figures 4, 7, 8). If yes please add some de-

[Printer-friendly version](#)

[Discussion paper](#)



tails; if no what caused the different issues between the Changjiang Estuary (saltwater intrusion) and Hangzhou Bay (no issue) since the wind would be equal for these two.

Minor issue: 1, Line 239, Page 14, Check the name.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-277>, 2020.

HESD

[Interactive
comment](#)

[Printer-friendly version](#)

[Discussion paper](#)

