



*Supplement of*

## **Compound flood potential from storm surge and heavy precipitation in coastal China: dependence, drivers, and impacts**

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# Compound flood potential from storm surge and heavy precipitation in coastal China: dependence, drivers, and impacts

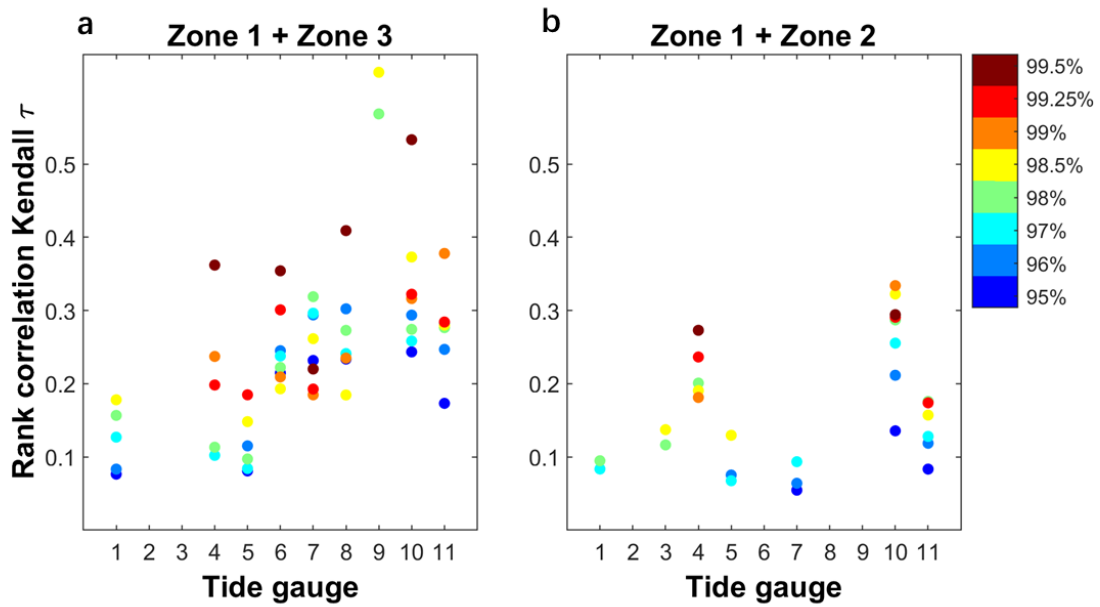


Fig. S1. Kendall's tau between storm surge and precipitation for thresholds from 95% to 99.5% for two cases. Only significant results at the 90% confidence level are shown.

Fig. S2-S10: Meteorology conditions for other 9 TGs: (a, d, g) sea-level pressure (mbar), (b, e, h) wind speed (m/s) and direction (grey arrows), and (c, f, i) precipitable water content ( $\text{kg m}^{-2}$ ) during (a, b, c) joint occurrence events with high storm surge and high precipitation (Zone 1), (d, e, f) for events with high storm surge and low precipitation (Zone 3), and (g, h, i) events with low storm surge and high precipitation (Zone 2).

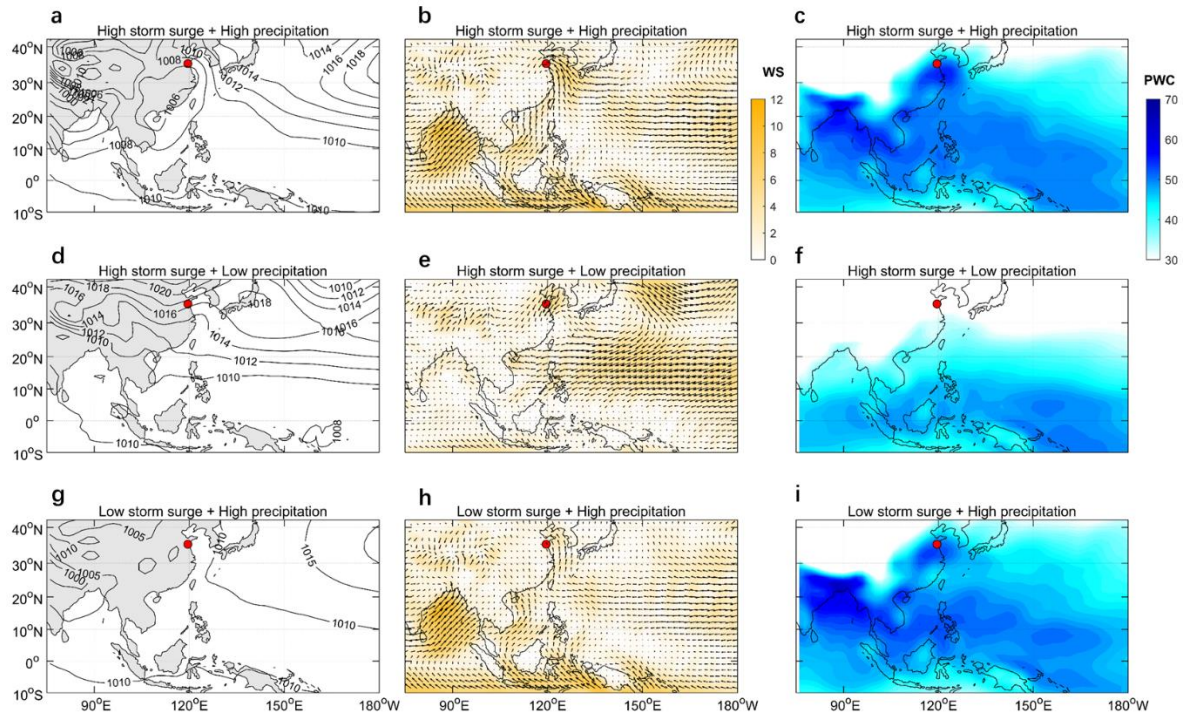


Fig.S2 Shijiusuo (TG1).

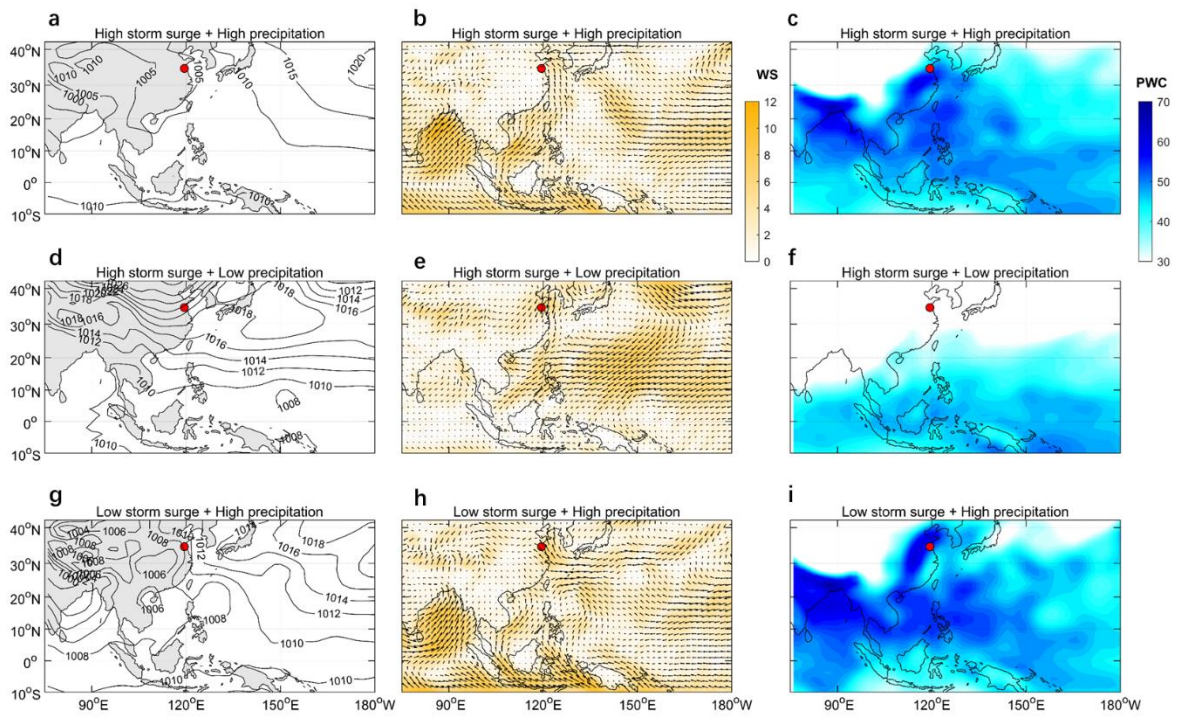


Fig.S3 Lianyungang (TG2).



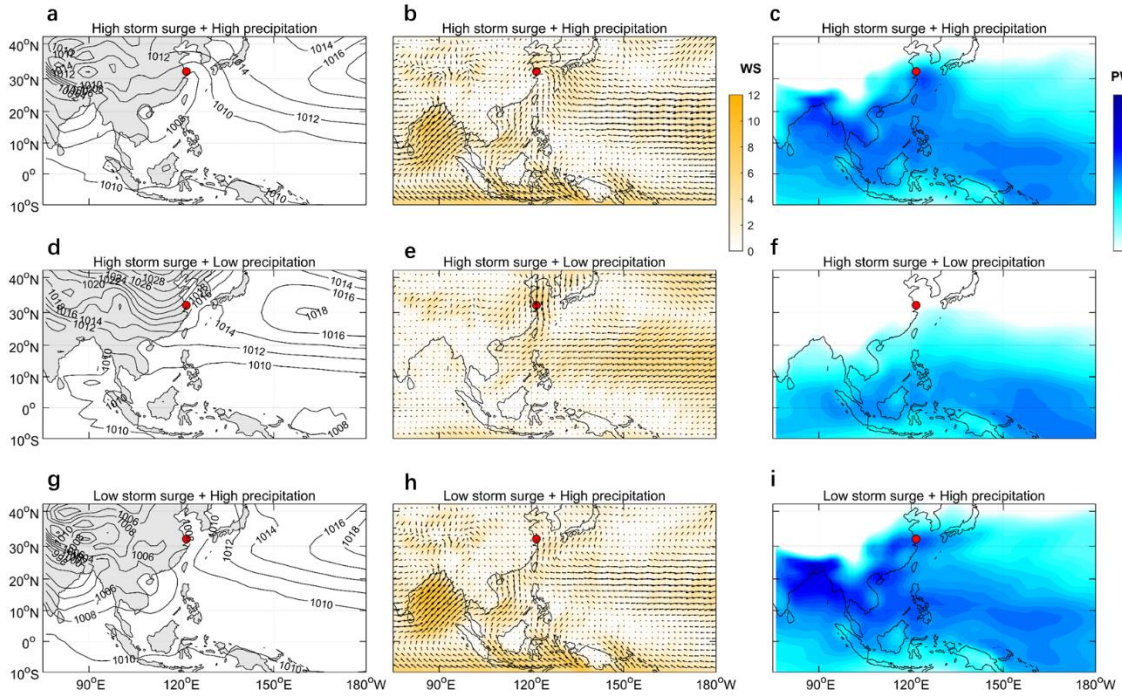


Fig.S4 Lusi (TG3).

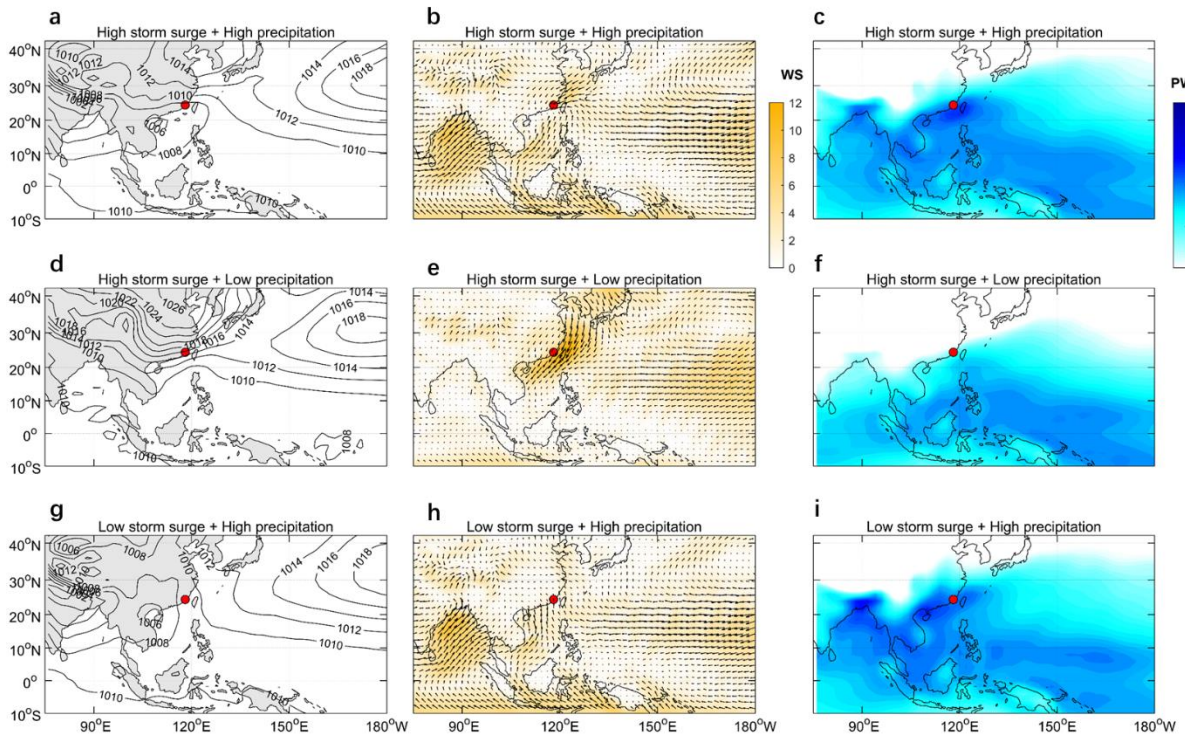


Fig.S5 Xiamen (TG5).



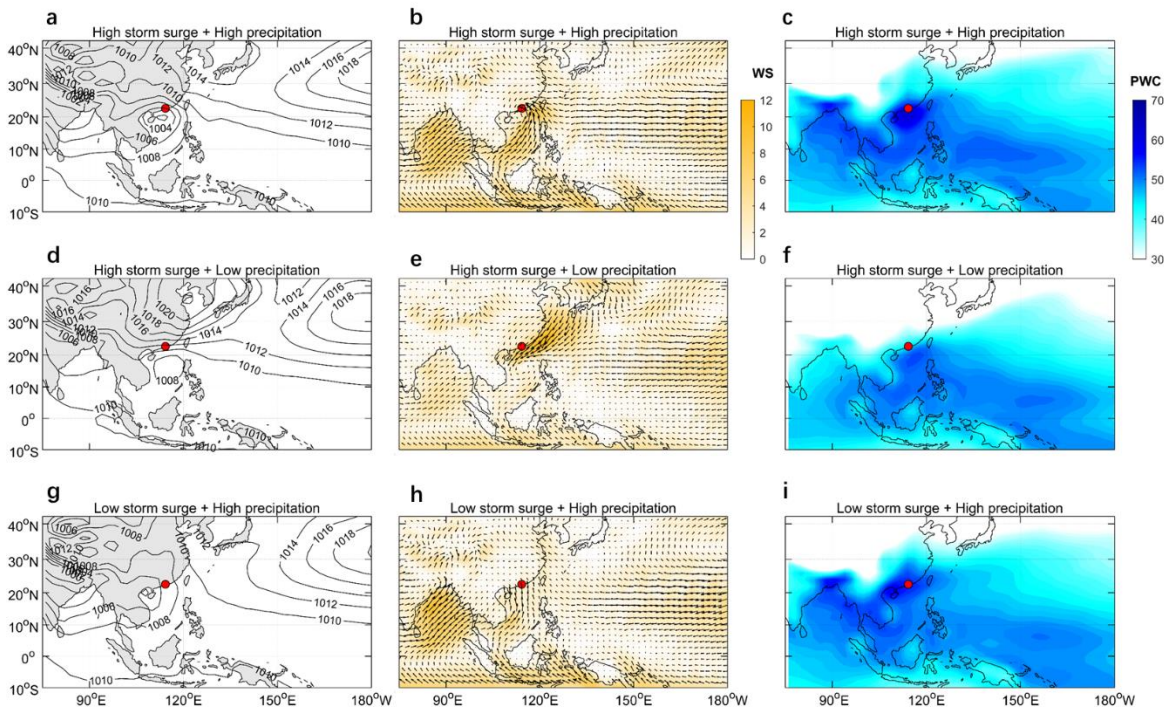


Fig.S6 Hong Kong (TG7).

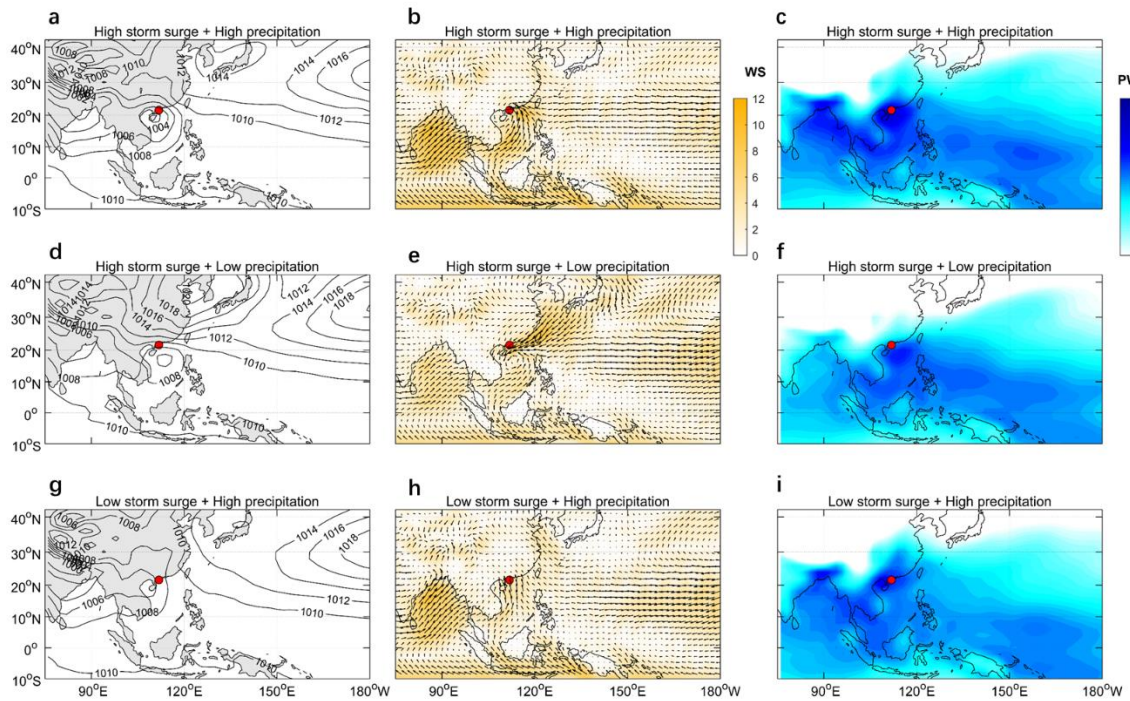


Fig.S7 Zhapo (TG8).



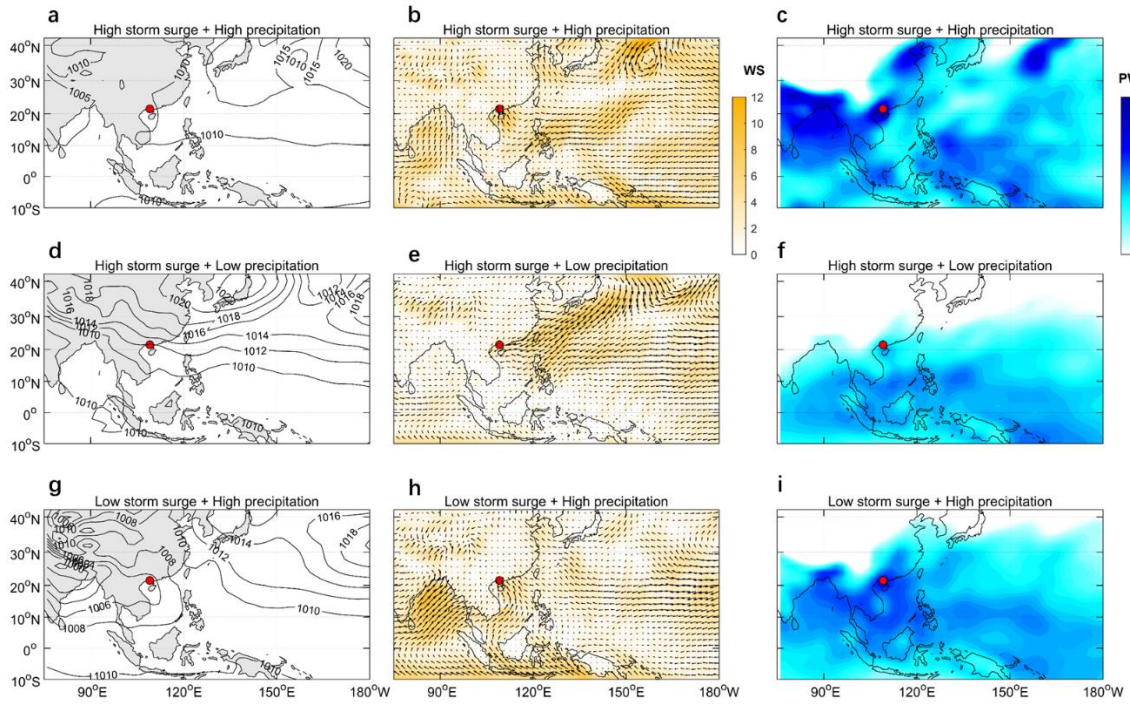


Fig.S8 Beihai (TG9).

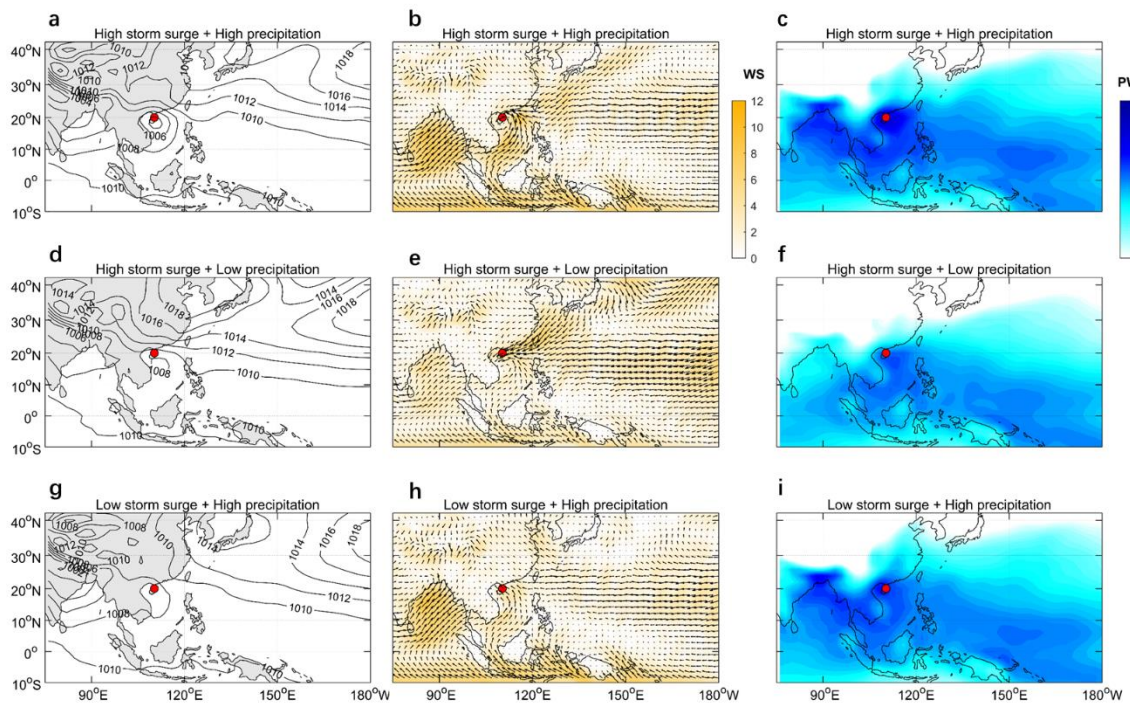


Fig.S9 Haikou (TG10).

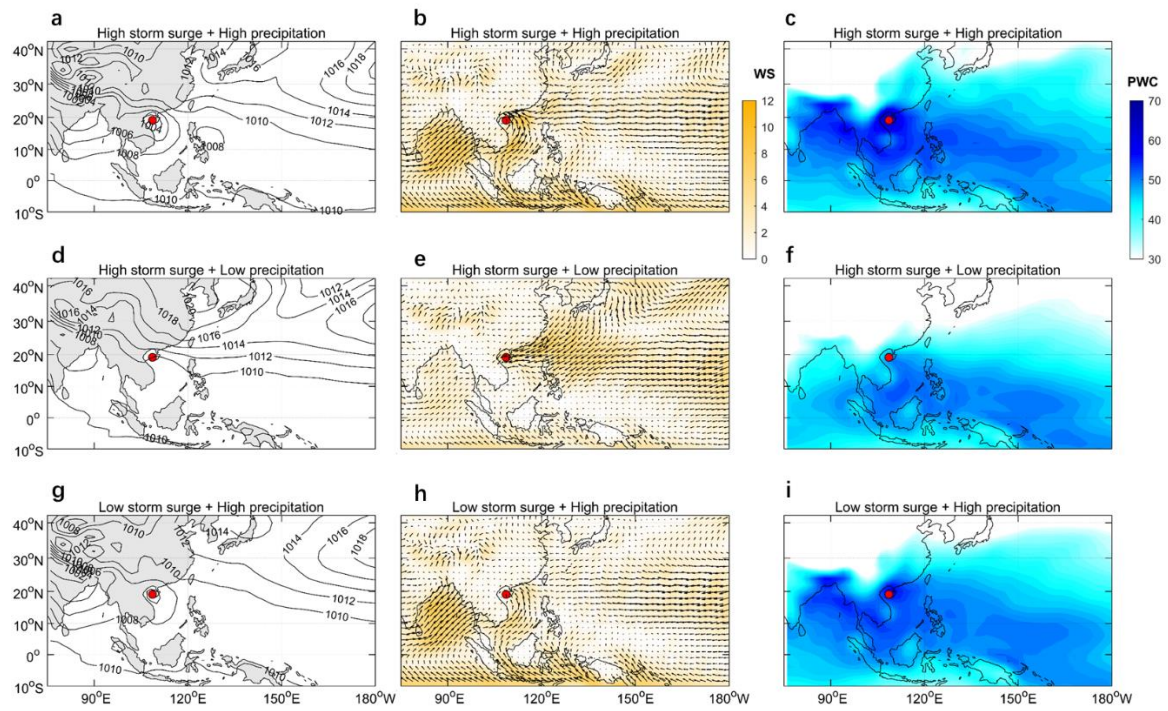


Fig.S10 Dongfang (TG11).