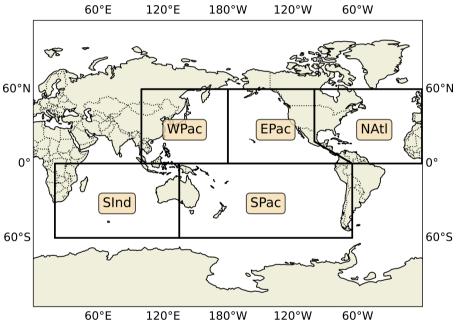
## Appendix B Supplementary figures



 ${f Fig.~B1}~$  Geographical basins definition. Adapted from Knutson et al (2020)

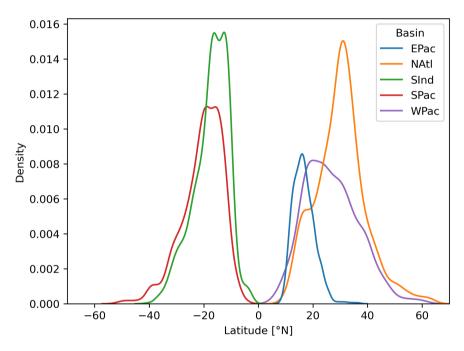


Fig. B2 Estimated PDFs of the latitudes of the IBTrACS systems matched with ERA5 tracks that are removed by the VTU post-processing for each basin of interest.

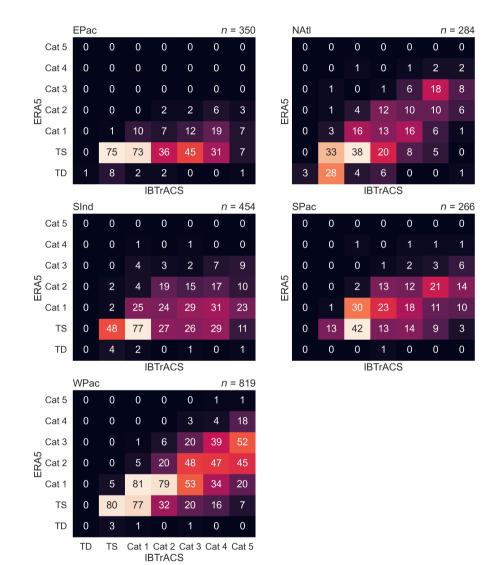


Fig. B3 Per basin contingency crosstables between ERA5 and IBTrACS pressure-based intensity classes.

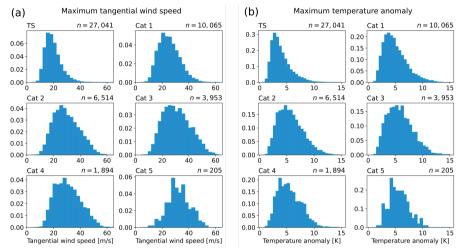


Fig. B4 Distributions of (a) the maximum tangential wind speed per composited radius-height cross-section for each observed SSHWS intensity class, and for the maximum temperature anomaly (b).