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Supplement of

Tropical cyclone storm surge probabilities for the east coast of the United States: a cyclone-based perspective

Katherine L. Towey et al.

Correspondence to: Katherine L. Towey (ktowey@gradcenter.cuny.edu)

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Supplemental Figures

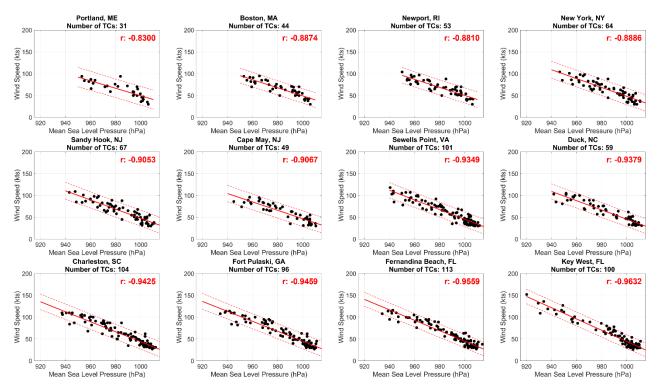


Figure S1. Linear (red solid line) fit between wind speed (kts) and mean sea-level pressure (hPa) with 95 % confidence intervals (dashed lines) for all TCs within 500 km. Correlation coefficients (r) is provided for the fit.

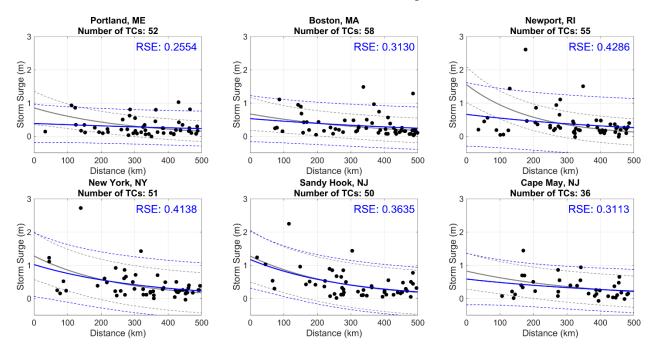


Figure S2. Exponential fit (blue solid line) between storm surge (m) and TC proximity (km) for ET TCs within 500 km with 95 % confidence intervals (dashed blue line). Exponential fit (gray solid line) and 95 % confidence intervals (dashed gray line) from figure 2 is also included for comparison to non-ET TCs. Residual standard error (RSE) is provided for the exponential fit for ET TCs.

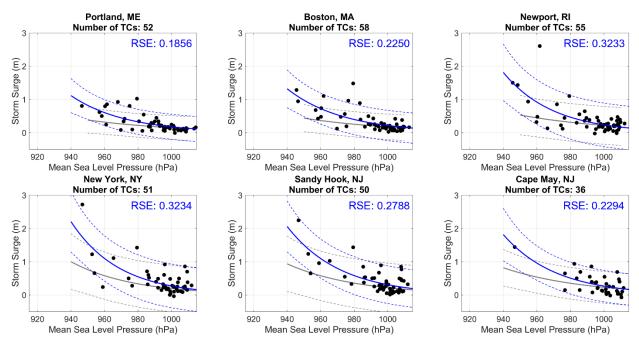


Figure S3. Exponential fit (blue solid line) between storm surge (m) and TC intensity (hPa) for ET TCs within 500 km with 95 % confidence intervals (dashed blue line). Exponential fit (gray solid line) and 95 % confidence intervals (dashed gray line) from figure 3 is also included for comparison to non-ET TCs. Residual standard error (RSE) is provided for the exponential fit for ET TCs.

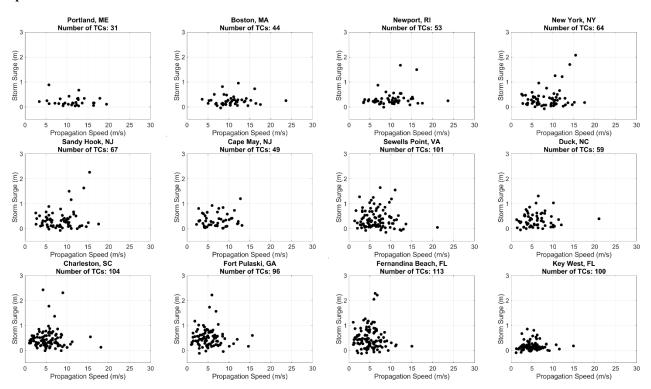


Figure S4. Relation between storm surge (m) and TC propagation speed (m/s).

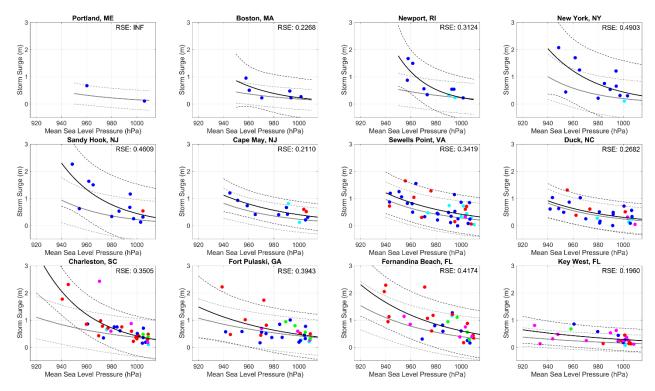


Figure S5. Exponential fit (black solid line) between storm surge (m) and TC intensity (hPa) for only close TCs within 250 km with 95 % confidence intervals (dashed black line). Exponential fit (gray solid line) and 95 % confidence intervals (dashed gray line) from figure 3 is also included for comparison to all TCs regardless of proximity. Data points are color coded based on average track path angle as outlined in figure 4. Residual standard error (RSE) is provided for the exponential fit for close TCs.