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Supplement of

Importance of tides and winds in influencing the nonstationary behaviour of coastal currents in offshore Singapore

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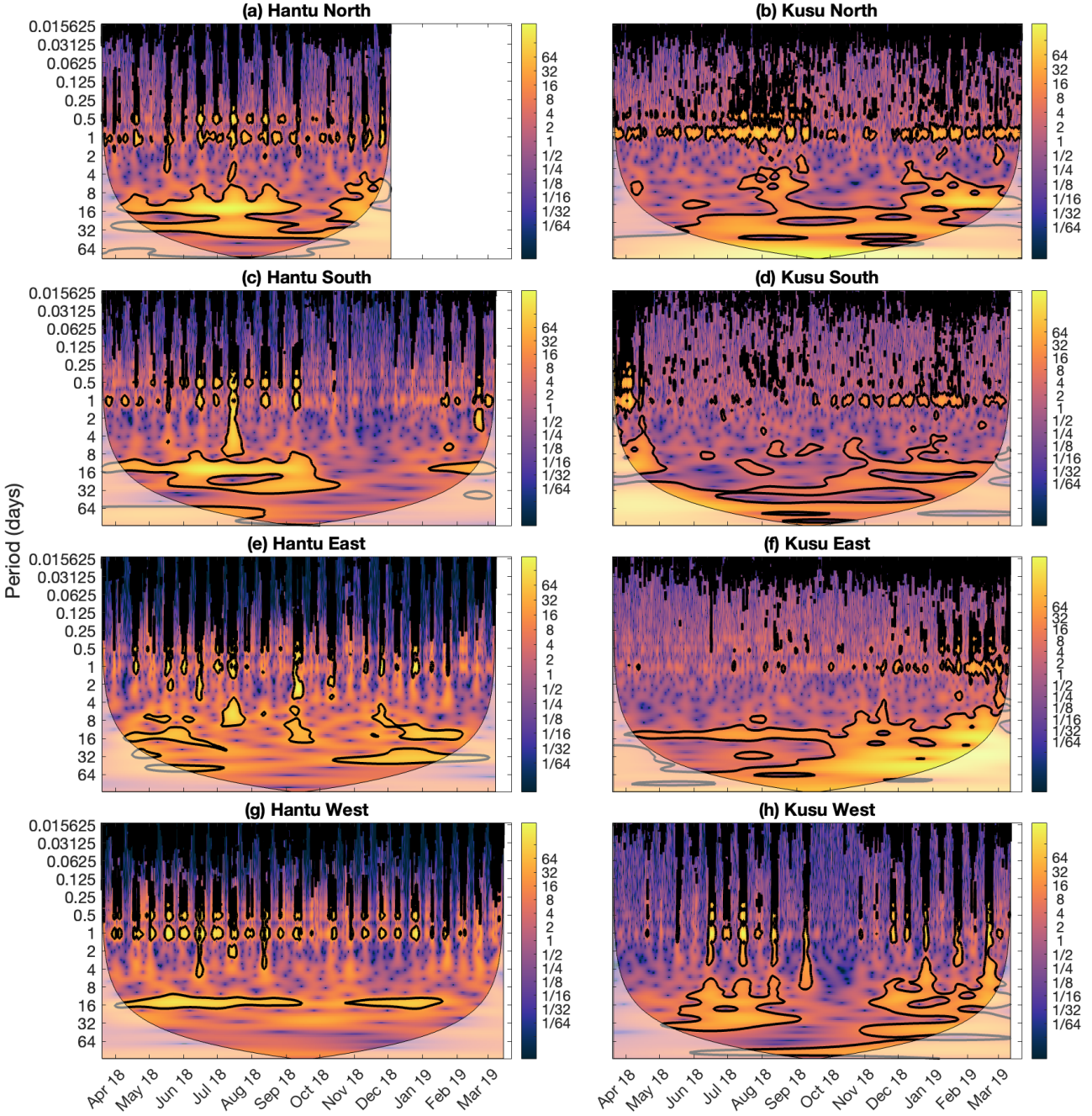

Figure S1. CWT of cross-shore currents at (a) Hantu North, (b) Kusu North, (c) Hantu South, (d) Kusu South, (e) Hantu East, (f) Kusu East, (g) Hantu West and (h) Kusu West. The thick black contour encompasses significant regions against red noise ($p < 0.05$), and the cone of influence (COI) is shown as a lighter shade where edge effects cannot be ignored. The wavelet power is $\log_2(A^2\ v^{-1})$, where A is the wavelet amplitude, and v is the variance of the entire signal.

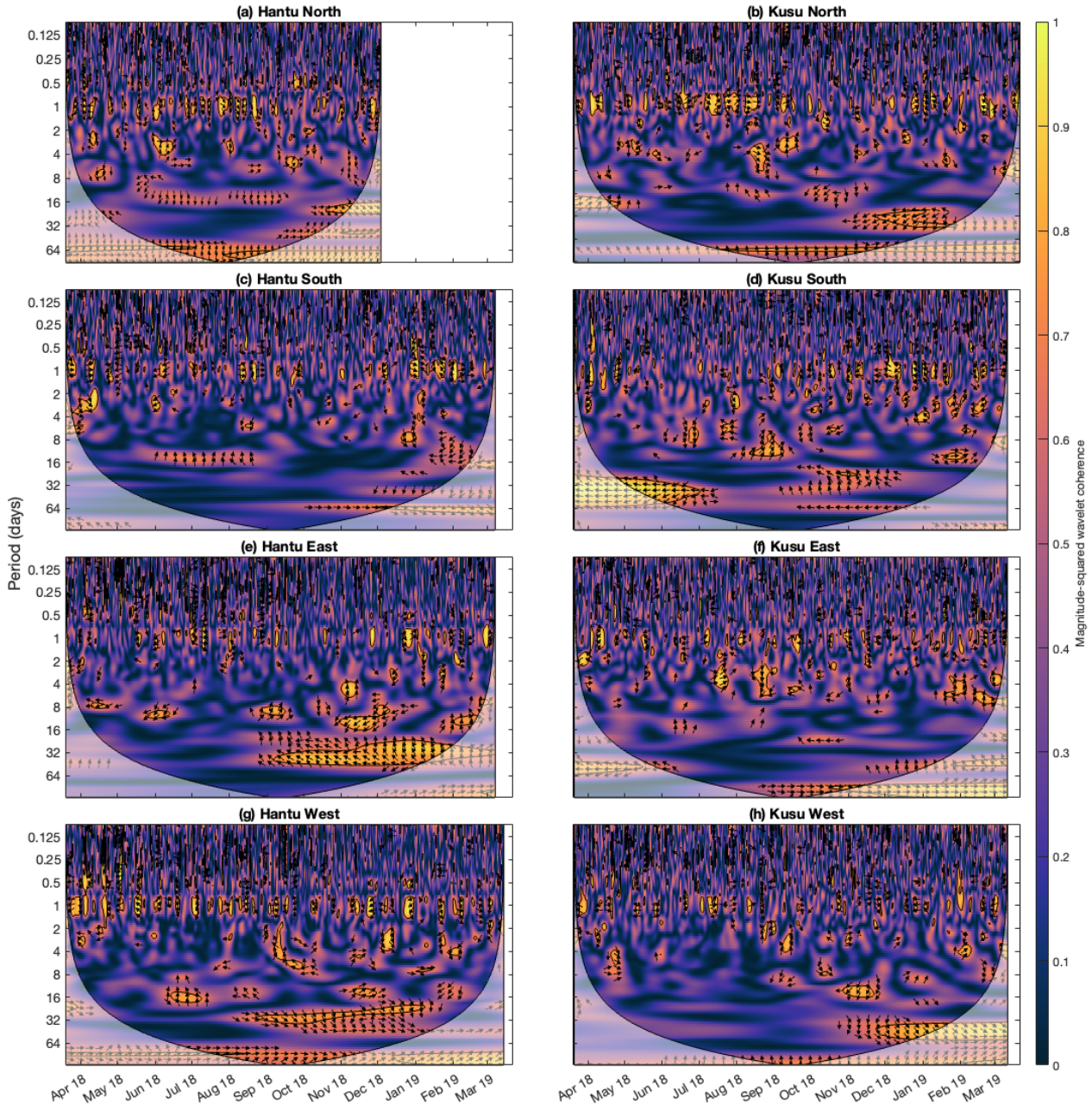

Figure S2. Wavelet coherence between cross-shore currents and major axis wind stress at (a) Hantu North, (b) Kusu North, (c) Hantu South, (d) Kusu South, (e) Hantu East, (f) Kusu East, (g) Hantu West and (h) Kusu West. The black contours indicate significant regions and the cone of influence (COI). The area that lies outside the COI has a lighter shade and information in this area should be treated with caution. The arrows represent the relative phase relationship, with arrows pointing right and left indicating in-phase and antiphase respectively, and winds leading currents by 90° pointing down.

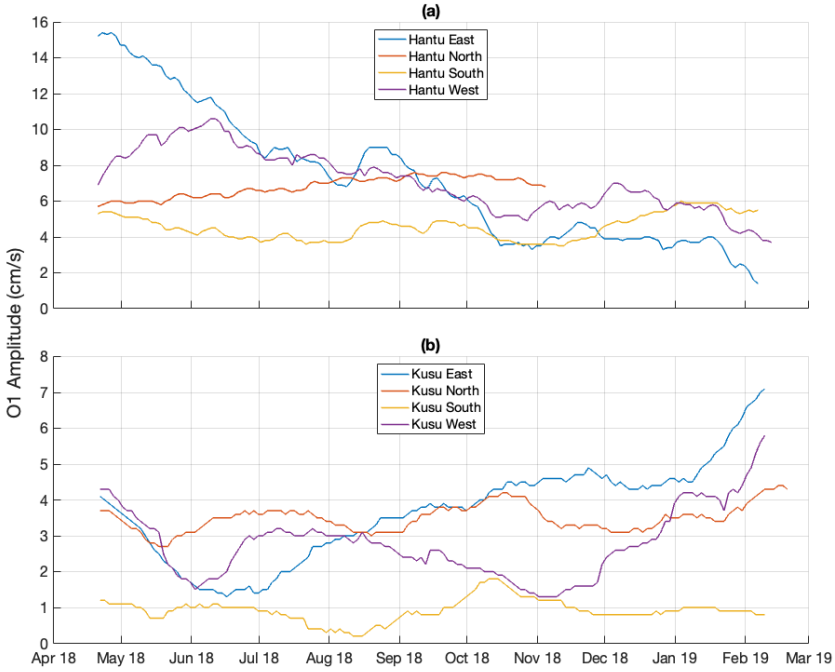

Figure S3. O_1 tidal amplitudes of all sites in (a) Pulau Hantu and (b) Kusu Island, derived from STHA.

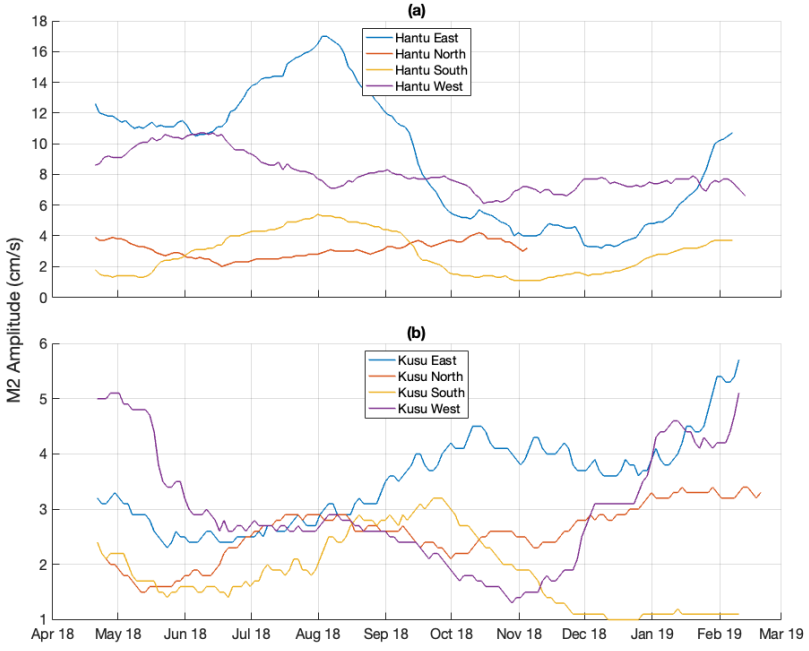

Figure S4. M_2 tidal amplitudes of all sites in (a) Pulau Hantu and (b) Kusu Island, derived from STHA.

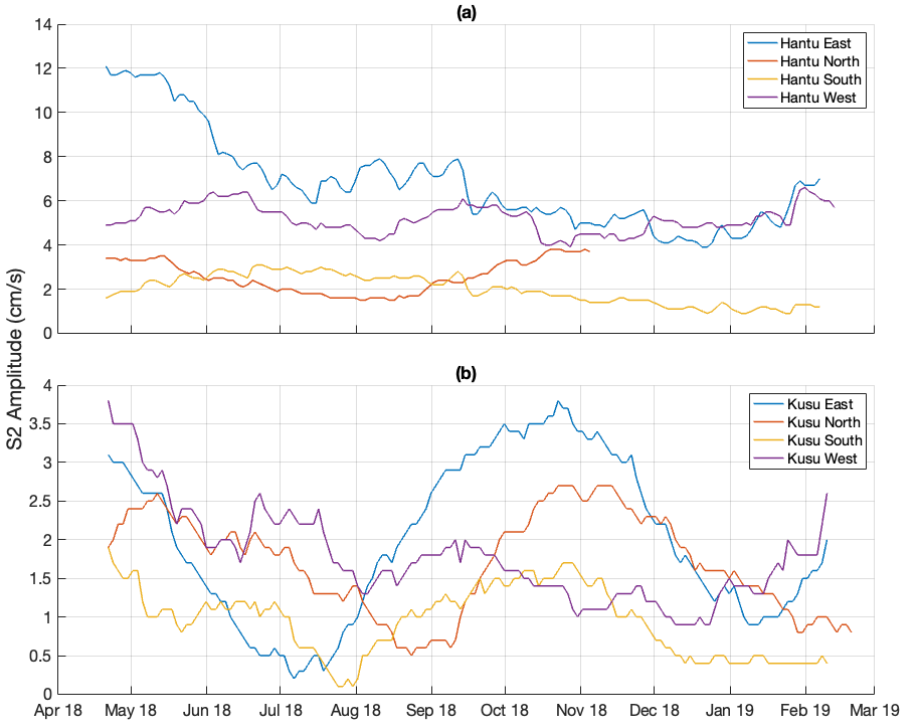

Figure S5. S_2 tidal amplitudes of all sites in (a) Pulau Hantu and (b) Kusu Island, derived from STHA.