



Supplement of

The impact of long-term changes in ocean waves and storm surge on coastal shoreline change: a case study of Bass Strait and south-east Australia

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Figure S1 a-c: Trends in: significant wave height, ΔH_s shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (a) 138E°-140E°, (b) 140E°-142E°, (c) 142E°-144E°.



Figure S1 d-f: Trends in: significant wave height, ΔH_s shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (d) 144E°-146E°, (e) 146E°-148E° and (f) 148E°-150E°.



Figure S2 a-c: Trends in: 95th percentile significant wave height, ΔH_s^{95} shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (a) 138E°-140E°, (b) 140E°-142E°, (c) 142E°-144E°.



Figure S2 d-f: Trends in: 95th percentile significant wave height, ΔH_s^{95} shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (d) 144E°-146E°, (e) 146E°-148E° and (f) 148E°-150E°.



Figure S3 a-c: Trends in: mean wave period, ΔT_m shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (a) 138E°-140E°, (b) 140E°-142E°, (c) 142E°-144E°.



Figure S3 d-f: Trends in: mean wave period, ΔT_m shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (d) 144E°-146E°, (e) 146E°-148E° and (f) 148E°-150E°.



Figure S4 a-c: Trends in: number of extreme significant wave height events, $\Delta N_{H_s^{95}}$ shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (a) 138E°-140E°, (b) 140E°-142E°, (c) 142E°-144E°.



Figure S4 d-f: Trends in: number of extreme significant wave height events, $\Delta N_{H_s^{95}}$ shown as colour shaded values over the domain, storm surge, $\Delta \eta^{95}$ shown as colour shaded squares at coastal model locations and shoreline progradation/recession, ΔC_{GA} shown as colour shaded circles at beach locations. Results shown for sections (d) 144E°-146E°, (e) 146E°-148E° and (f) 148E°-150E°.