

Figure S1. Assessment of wave height impacting on Santa Lucia (Italy); (a) scatter plot of wave height obtained by optical flow; (b) frames of surveillance camera at 38 s from starting video; (c) frames of surveillance camera at 172 s from starting video; (d) frames of surveillance camera at 300 s from starting video; (e) frames of surveillance camera at 451 s from starting video.

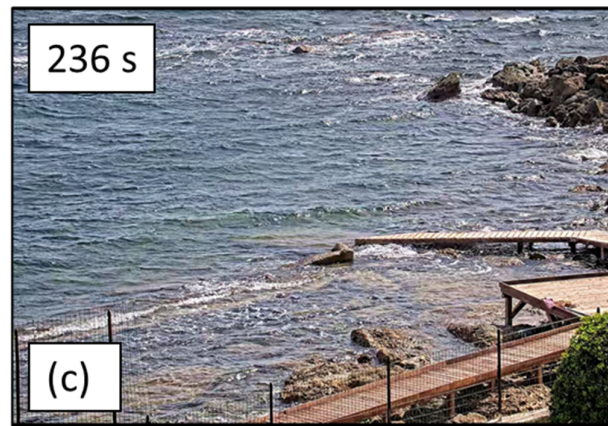
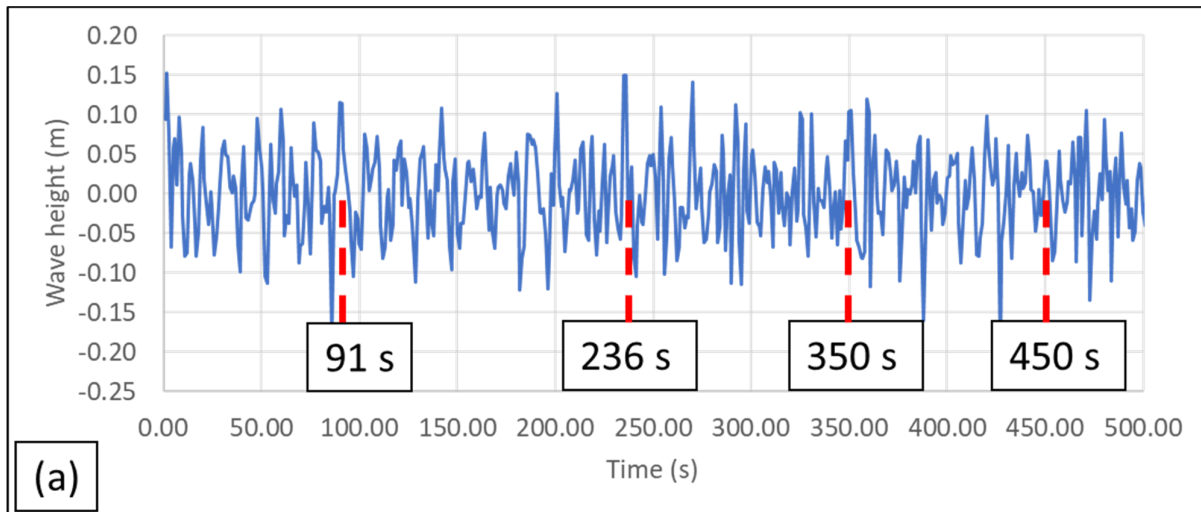


Figure S2. Assessment of wave height impacting on Varco 11 (Italy); (a) scatter plot of wave height obtained by optical flow; (b) frames of surveillance camera at 91 s from starting video; (c) frames of surveillance camera at 236 s from starting video; (d) frames of surveillance camera at 350 s from starting video; (e) frames of surveillance camera at 450 s from starting video.

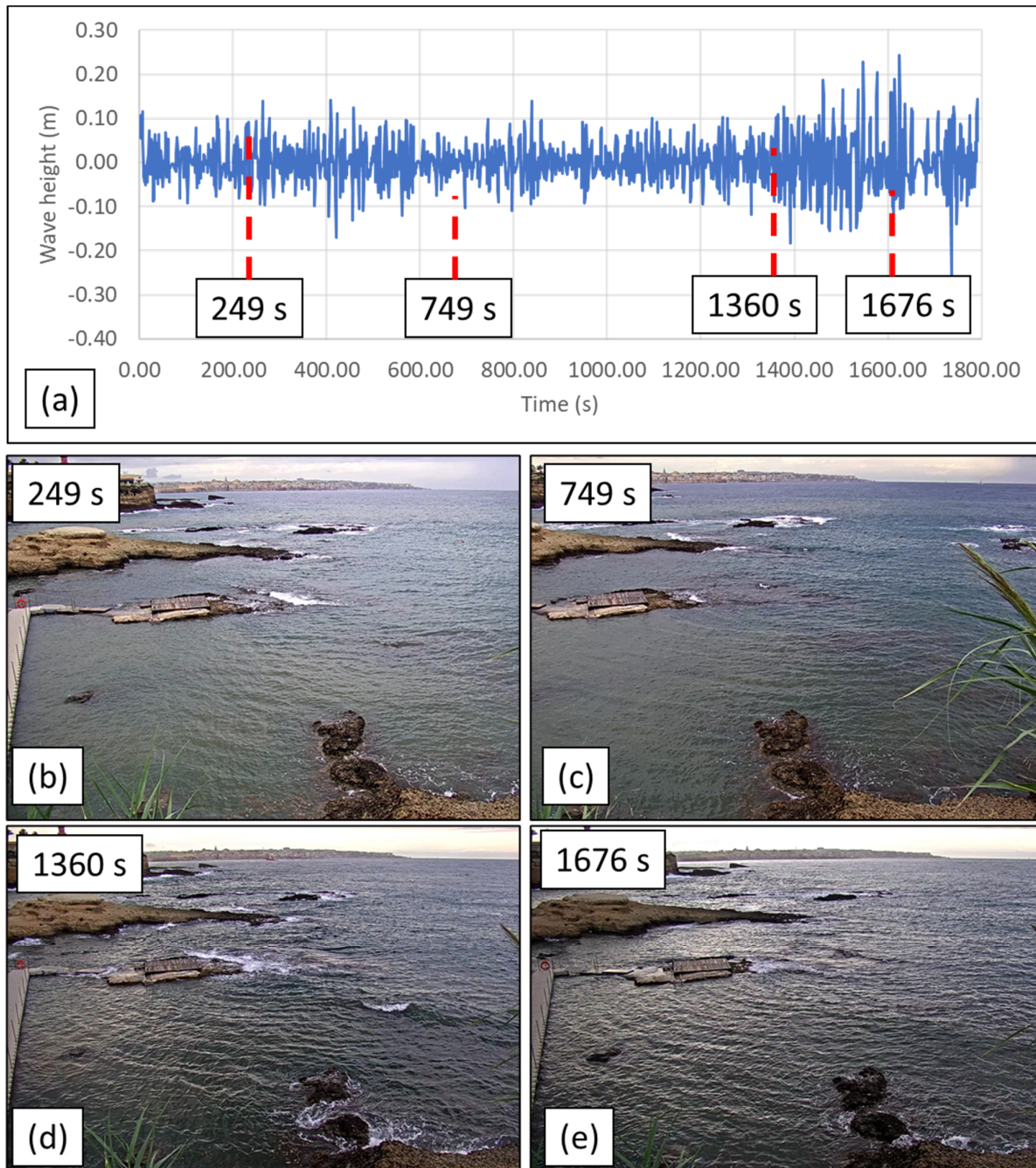


Figure S3. Assessment of wave height impacting on Massolivieri (Italy); (a) scatter plot of wave height obtained by optical flow; (b) frames of surveillance camera at 249 s from starting video; (c) frames of surveillance camera at 749 s from starting video; (d) frames of surveillance camera at 1360 s from starting video; (e) frames of surveillance camera at 1676 s from starting video.

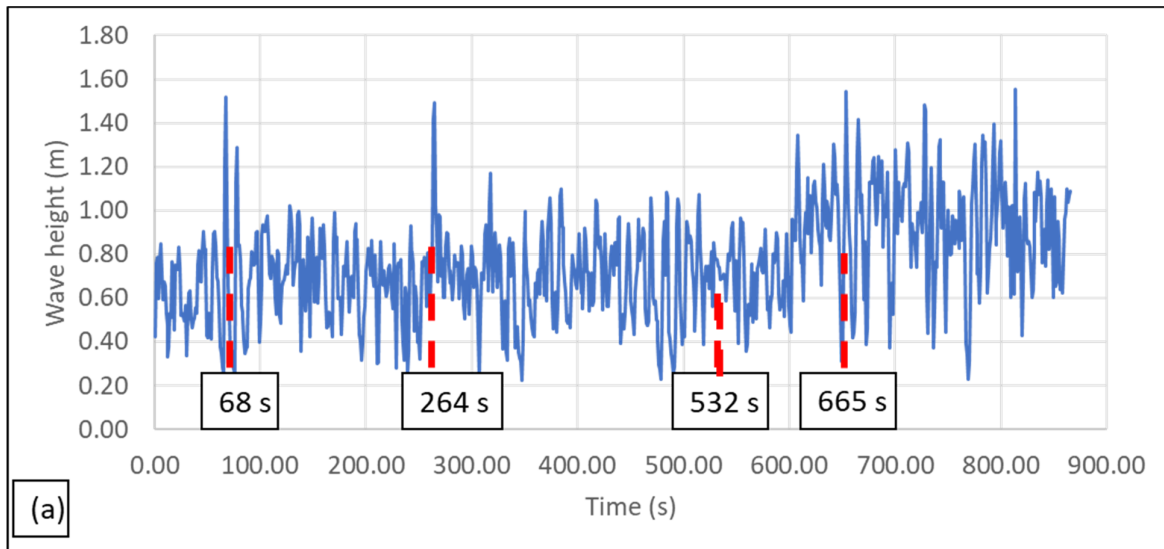


Figure S4. Assessment of wave height impacting on Coxos (Portugal); (a) scatter plot of wave height obtained by optical flow; (b) frames of action camera at 69 s from starting video; (c) frames of action camera at 264 s from starting video; (d) frames of action camera at 532 s from starting video; (e) frames of action camera at 665 s from starting video.

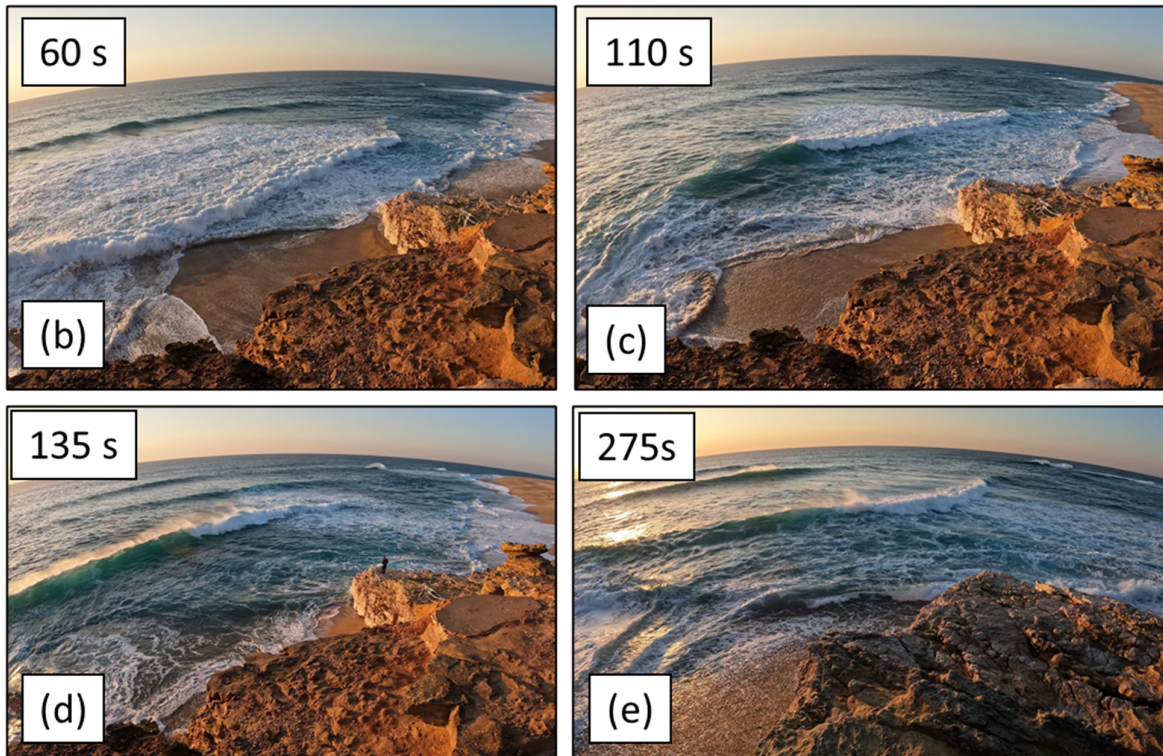
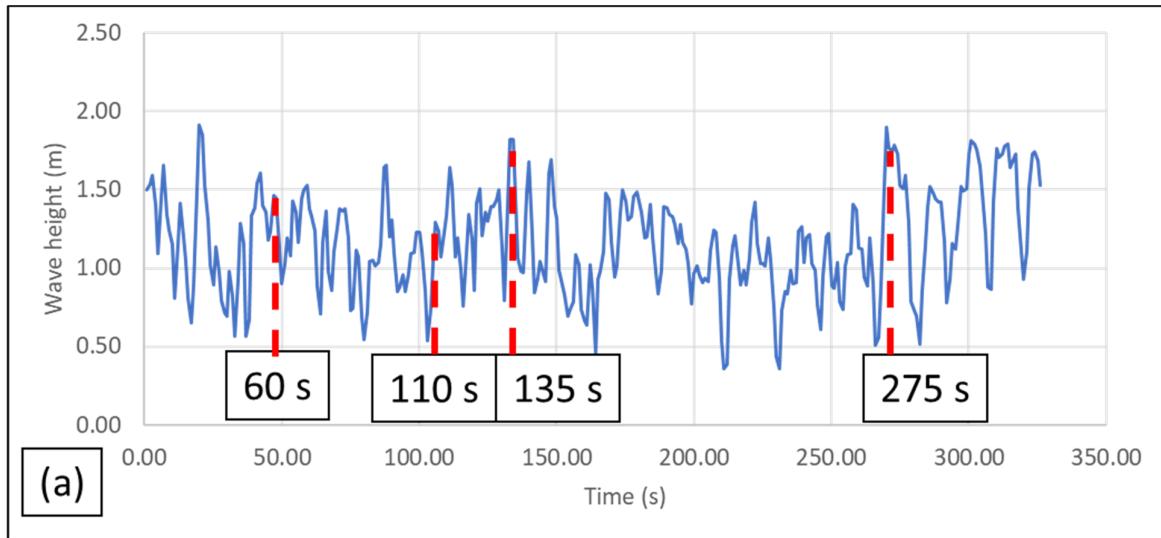


Figure S5. Assessment of wave height impacting on Nazaré (Portugal); (a) scatter plot of wave height obtained by optical flow; (b) frames of action camera at 60 s from starting video; (c) frames of action camera at 110 s from starting video; (d) frames of action camera at 135 s from starting video; (e) frames of action camera at 275 s from starting video.

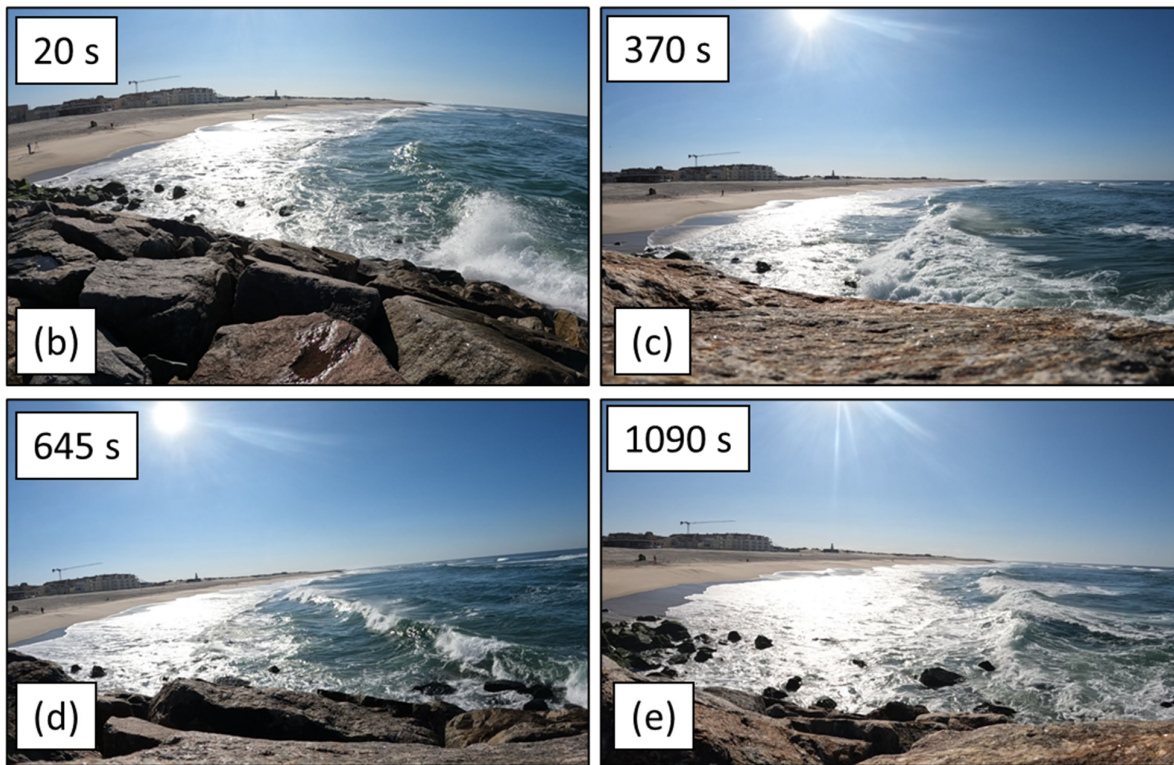
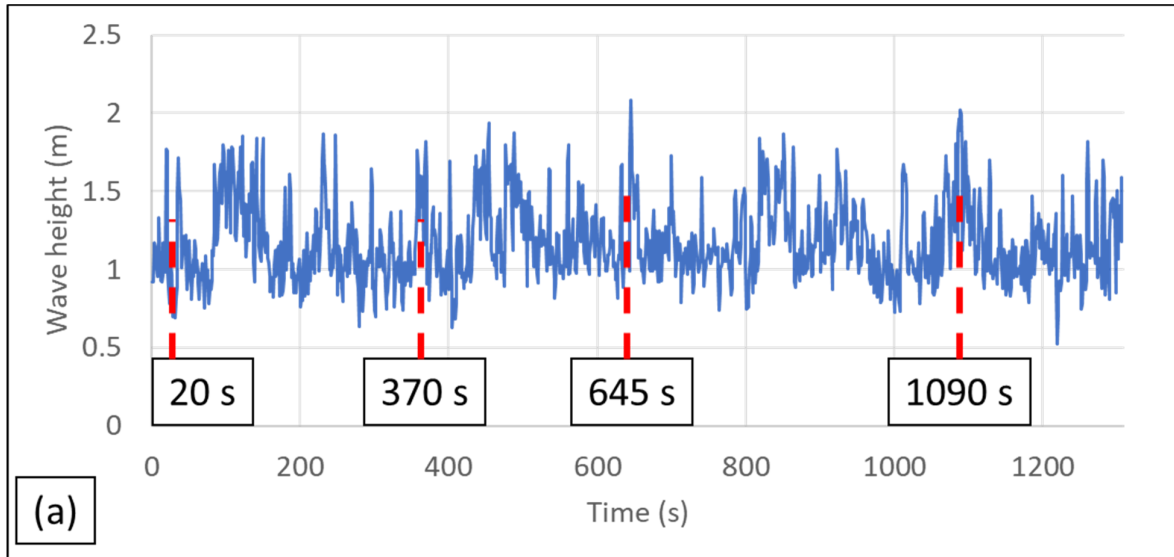


Figure S6. Assessment of wave height impacting on Costa Nova (Portugal); (a) scatter plot of wave height obtained by optical flow; (b) frames of action camera at 20 s from starting video; (c) frames of action camera at 370 s from starting video; (d) frames of action camera at 645 s from starting video; (e) frames of action camera at 1090 s from starting video.

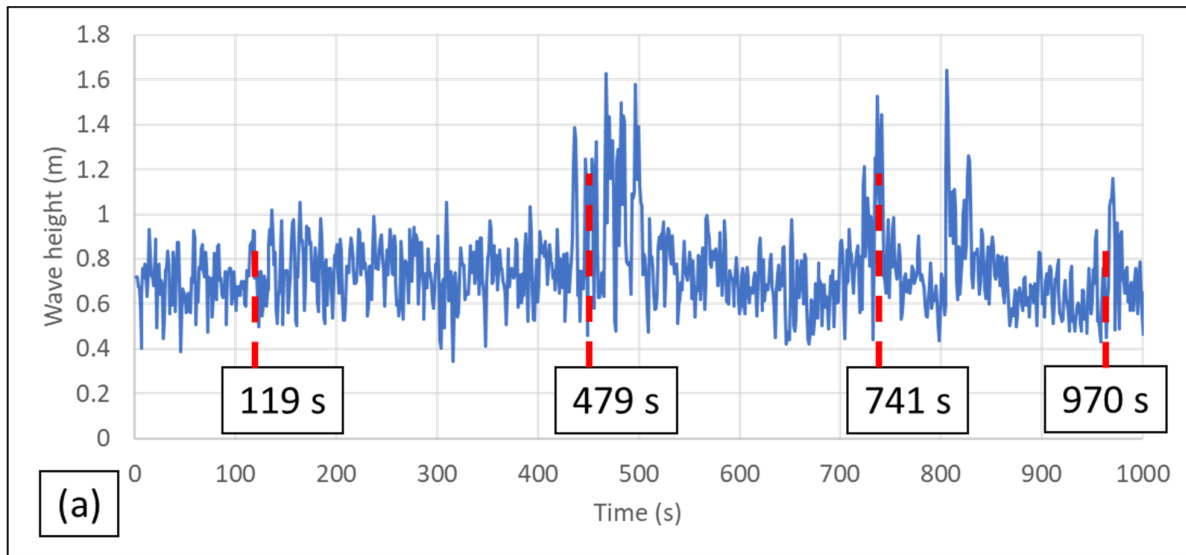


Figure S7. Assessment of wave height impacting on Cova Gala (Portugal); (a) scatter plot of wave height obtained by optical flow; (b) frames of action camera at 119 s from starting video; (c) frames of action camera at 479 s from starting video; (d) frames of action camera at 741 s from starting video; (e) frames of action camera at 970 s from starting video.