

Supplementary Material for

Preparing aquatic research for an extreme future: Call for improved definitions and responsive, multidisciplinary approaches

Authors

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This file includes Supplementary Table S1 and Supplementary Figures S1-S5

Table S1. Search terms used to identify relevant literature targeting three categories of aquatic ecosystems (freshwater, coastal, and marine) and four types of extreme events (heatwaves, storms, floods, and drought). The literature search was conducted as follows: (general search terms separated by OR) AND (ecosystem search terms separated by OR) AND (event search terms separated by OR). See main text for other details of the literature search.

General search terms	Ecosystem search terms	Event search terms
extreme event ecology	aquatic freshwater stream lake river creek wetland coast* estuar* *tidal marine ocean	heat* temperature warm* storm wind hurricane typhoon cyclone flood precipitation drought desiccation

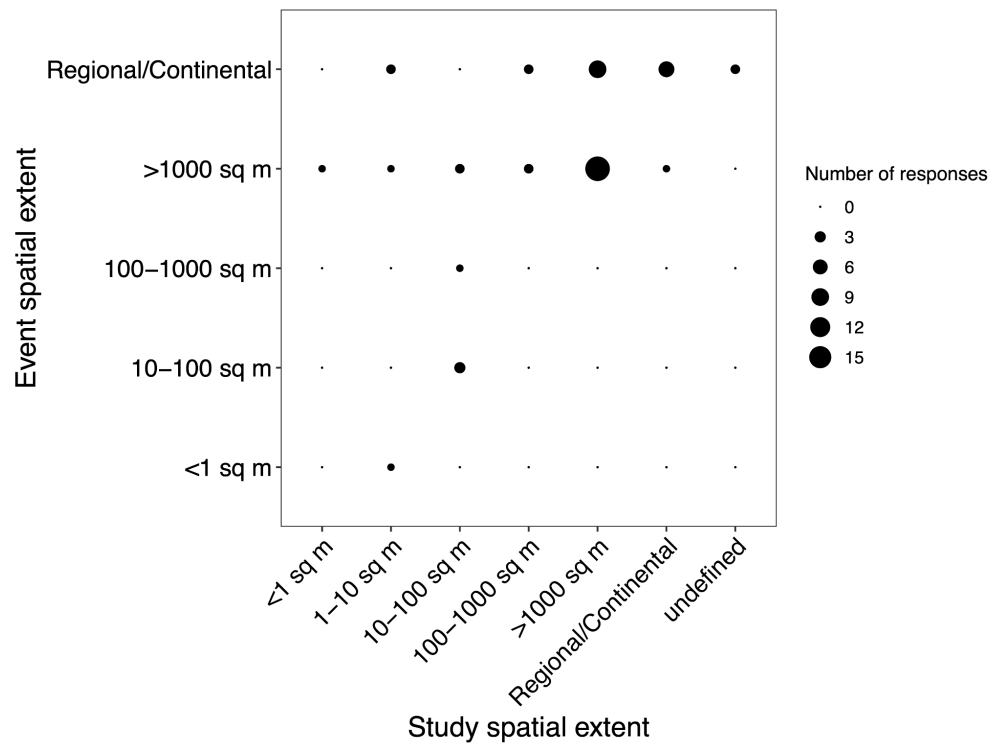


Fig. S1: Number of responses from literature review comparing the spatial extent of the study to the spatial extent of the extreme event across different spatial scales (from < 1 sq m to Regional/Continental). The number of responses is indicated by circle size, which is scaled by area.

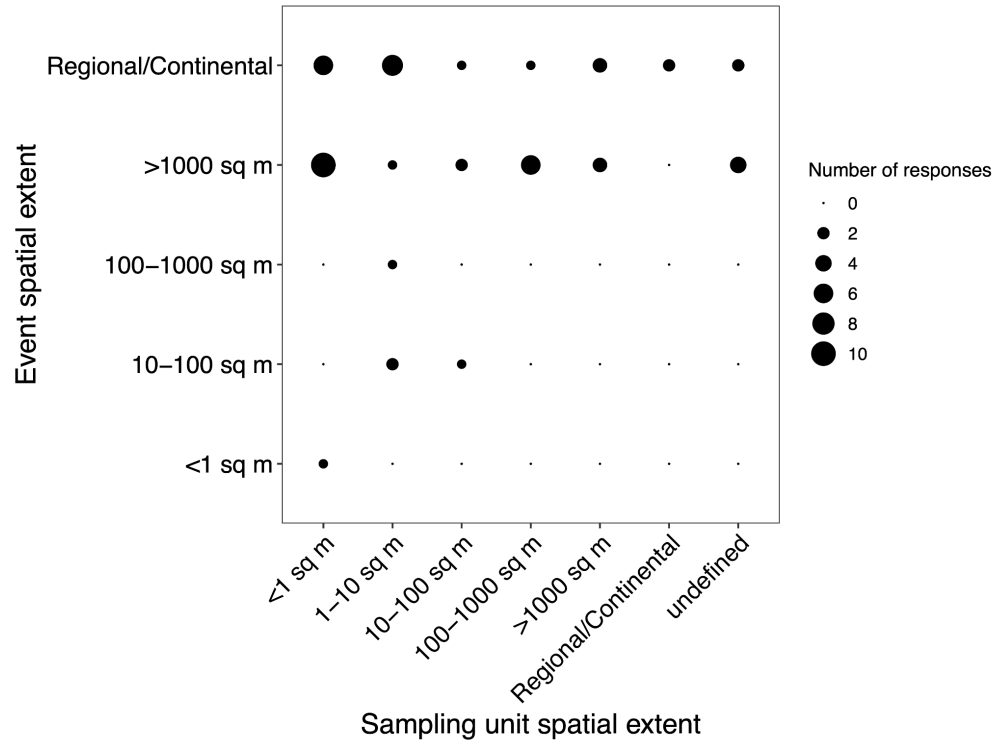


Fig. S2: Number of responses from the literature review comparing the sampling unit spatial extent and the extreme event spatial extent across different spatial scales (from < 1 sq m to Regional/Continental). The number of responses is indicated by circle size, which is scaled by area.

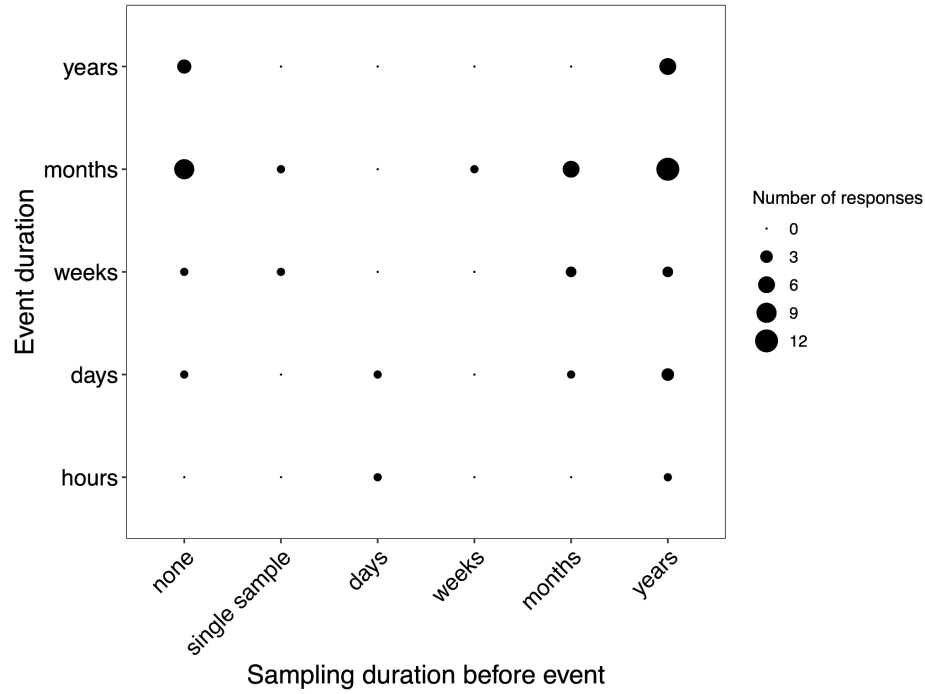


Fig. S3: Number of responses from literature review comparing the sampling duration before an extreme event and the event duration across different temporal scales (from no sampling to years). The number of responses is indicated by circle size, which is scaled by area.

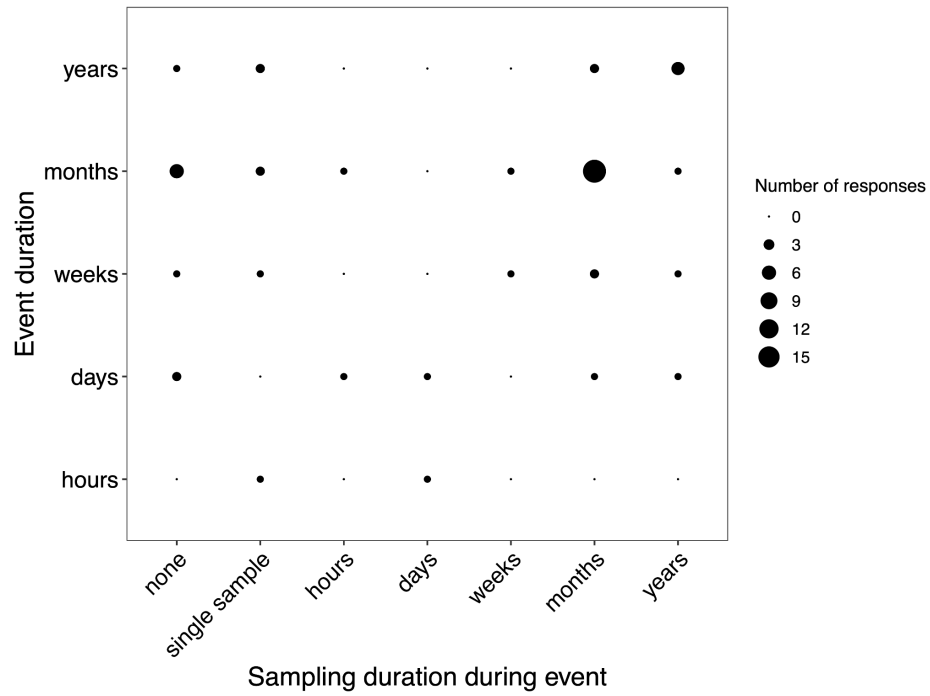


Fig. S4: Number of responses from literature review comparing the sampling duration during an extreme event and the event duration across different temporal scales (from no sampling to years). The number of responses is indicated by circle size, which is scaled by area.

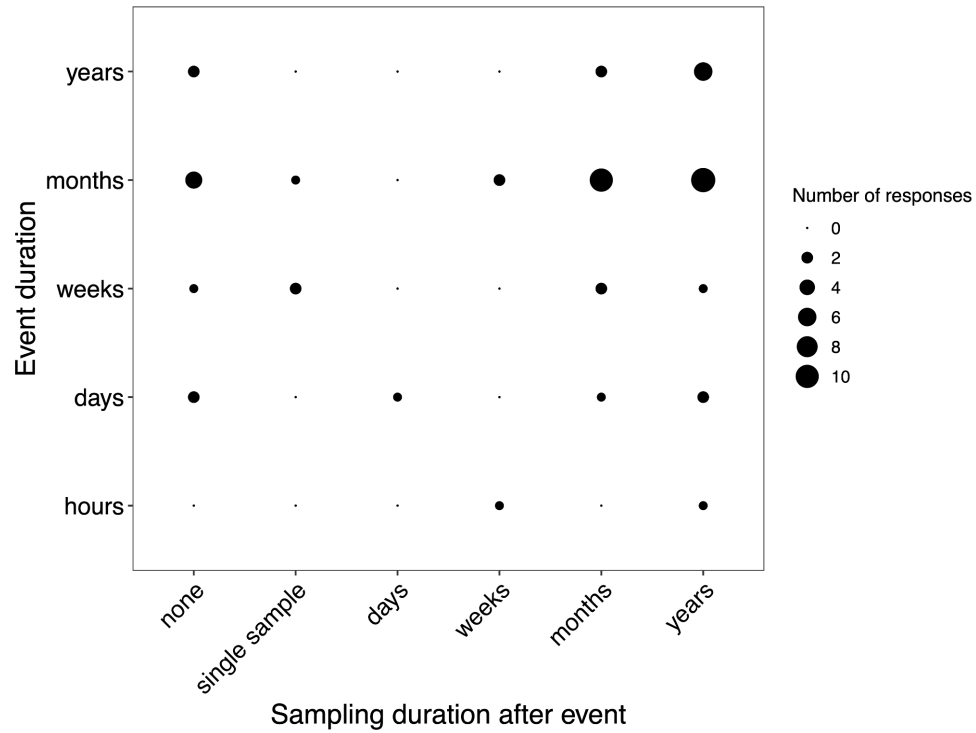


Fig. S5: Number of responses from literature review comparing the sampling duration after an extreme event and the event duration across different temporal scales (from no sampling to years). The number of responses is indicated by circle size, which is scaled by area.