@article{Kretschmer2024,
  abstract = {Research on weather and climate extremes has become integral to climate science due to their increasing societal relevance and impacts in the context of anthropogenic climate change. In this perspective we examine recent changes and evolving paradigms in the study of extreme events, emphasizing the increasingly interdisciplinary nature of research and their societal implications. We discuss the importance of understanding the physical basis of extreme events and its linkages to climate impacts, highlighting the need for collaboration across multiple disciplines. Furthermore, we explore the challenge of big climate data analysis and the application of novel statistical methods, such as machine learning, in enhancing our understanding of extreme events. Additionally, we address the engagement with different stakeholder groups and the evolving landscape of climate services and private-sector involvement. We conclude with reflections on the risks and opportunities for early career researchers in navigating these interdisciplinary and societal demands, stressing the importance of meaningful scientific engagement, and removing barriers to inclusivity and collaboration in climate research.},
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