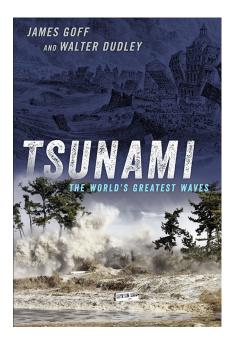






Tsunami: the world's greatest waves, by James Goff and Walter Dudley, 2021. Oxford University Press, USA, 231 pages. Hardback: price 17.24\$, ISBN 0197546129.



Judging by the lifespan of an average human being, devastating tsunamis are not frequent events. However, when putting all the known historical and prehistorical tsunamis together, we are faced with a near-endless list of disasters. A description of 'cherry-picked' events from this list, with the ultimate goal of demonstrating "what tsunamis mean to people", is the main theme of the present book. The authors are world-leading scientists in the field of tsunami research and famous tsunami educators. In addition, both are active in the field of communicating science to society; the main motivation for writing the present tome.

Tsunami is intended mostly for the general public; the use of scientific jargon is kept to a minimum. This fact is probably best illustrated by the glossary that precedes the main body of text and comprises definitions of five terms only. However, the highly accessible writing style does not distract in any way from the scientific quality of the book. Indeed, a deep understanding on the authors' part of the

subject becomes apparent in the descriptions of the processes that operate behind the particular events. Careful readers will find information on all basics of tsunami science, even if these are not provided systematically. For those seeking items of further reading, the authors included a rich list of relevant literature that contains numerous up-to-date scientific papers and a wide array of historical documents.

The present tome comprises a total of 16 chapters, each containing descriptions of one or several devastating tsunamis. As the authors note in the introduction, the order of chapters might seem strange at first glance. This is because the events are not arranged chronologically or according to number of casualties or economic losses; nor do they follow any logical geographical pathway. However, there is an idea behind the actual structure of this book that the authors leave for readers to discover by themselves. In the end, each reader probably will come to the conclusion that the order in the book is perfectly reasonable and enables comprehension of what tsunamis mean to people.

So, what do tsunamis mean to people according to the authors? Well, a lot, both on the level of the individual or civilisation as a whole. In an attempt to demonstrate how a tsunami can influence a single person, Goff and Dudley cite numerous stories of survivors for whom it usually was a life-changing event. The possible impact of tsunamis on civilisations is best illustrated by the history of collapse of Minoan culture following a Thera volcano eruption and associated tsunami around 3,500 years ago. A more recent example is the 1755 AD Lisbon earthquake and tsunami; both of these had a notable impact on western philosophy of the time and on politics in Portugal.

Although numerous well-known tsunamis are covered in the present tome, it should not be seen as a compendium of the most famous events. For instance, the reader will not find any detailed description of the costliest disaster ever (the 2011

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Tohoku-Oki tsunami) or the 1929 Grand Bank tsunami, which was essential to our understanding of turbidity currents. In fact, the authors focus only on carefully selected events, or, in other words, the ones that fit their story best. In this way, the contents are limited to 231 pages; these can be read from cover to cover in one go.

In addition to tsunamis resulting from natural causes, the book describes several human-induced events (Chapter 9). The most thought-provoking part of this description is that of the history of the tsunami bomb, to be developed in secret during World War II by the military in both United States and New Zealand. In the end, this bomb was never used; however, the final report suggests that explosions that are strong enough can produce destructive waves. Hopefully, we will never find ourselves in a position to verify this finding personally.

Overall, the present tome is a masterpiece of popular science writing that will prove a great read to anyone with at least a slight interest in earth sciences. Yet, after all, a tsunami is a serious thing, and the authors do not intend to provide mere entertainment. They share with the readers practical recommendations on how to behave in case of a tsunami, noting that, "tsunamis have happened in the past, and they will happen in the future". I wish, when the next devastating tsunami will occur, that anyone who read the present book knows how to rescue him or herself and other people around.

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