

Understanding the sedimentary and geophysical archive of glaciated margins is a complex task that requires integration and analysis of disparate sedimentological and geophysical data. Their analysis is vital for understanding the dynamics of past ice sheets and how they interact with their neighbouring marine basins, on timescales that cannot be captured by observations of the cryosphere today. As resources, sediments deposited on the inner margins of glaciated shelves also exhibit resource potential where more sand-dominated systems occur, acting as reservoirs for both hydrocarbons and water. This book surveys the full gamut of glaciated margins, from deep time (Neoproterozoic, Ordovician and Carboniferous–Permian) to modern high-latitude margins in Canada and Antarctica. This collection of papers is the first attempt to deliberately do this, allowing not only the similarities and differences between modern and ancient glaciated margins to be explored, but also the wide spectrum of their mechanisms of investigation to be probed. Together, these papers offer a high-resolution, spatially and temporally diverse blueprint of the depositional processes, ice sheet dynamics, and basin architectures of the world's former glaciated margins; a vital resource in advancing understanding of our present and future marine-terminating ice sheet margins.