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Nota di contenuto	Editoria: 1. The Ecosystem of Kongsfjorden, Svalbard -- PART I: Atmospheric conditions. 2. The atmosphere above Ny-Ålesund - Climate and global warming, ozone and surface UV radiation -- PART II: Oceanography, sea ice and underwater light regime. 3. The Kongsfjorden Transect: seasonal and inter-annual variability in hydrography -- 4. Changes in sea-ice extent and thickness in Kongsfjorden, Svalbard (2003-2016) -- 5. Underwater light regime in Kongsfjorden and its ecological implications -- PART III: Pelagic production, phytoplankton and zooplankton. 6. Phytoplankton seasonal dynamics in Kongsfjorden, Svalbard and the adjacent shelf -- 7. Zooplankton in Kongsfjorden (1996-2016) in relation to climate change -- PART IV: Benthic microbes, macroalgae and fauna. 8. Living on cold substrata – new approaches to study microphytobenthos ecophysiology and ecology in Kongsfjorden -- 9. Biodiversity of benthic macro- and microalgae from Svalbard with special focus on Kongsfjorden -- 10.

Kelp and environmental changes in the Kongsfjorden: Stress perception and responses -- 11. Ecological drivers of and responses by Arctic benthic communities, with an emphasis on Kongsfjorden, Svalbard -- PART V: Arctic fjord ecosystem model and autonomous marine observatories. 12. Outline of an Arctic fjord ecosystem model for Kongsfjorden-Krossfjorden, Svalbard -- 13. Autonomous marine observatories in Kongsfjorden, Svalbard -- PART VI: Kongsfjorden as harbinger of the future Arctic. 14. Kongsfjorden as harbinger of the future Arctic: knowns, unknowns and research priorities.

Sommario/riassunto

This book focuses in detail on all ecologically important aspects of the Kongsfjorden system such as the marine and atmospheric environment including long-term monitoring, Ecophysiology of individual species, structure and function of the ecosystem, ecological processes and biological communities. The contributed articles include review articles and research articles that have a wider approach and bring the current research up-to-date. This book will form a baseline for future work.
