

1. Record Nr.	UNINA9910555064703321
Titolo	Iceland within the Northern Atlantic . Volume 2 Interactions between volcanoes and glaciers // edited by Brigitte Van Vliet-Lanoe
Pubbl/distr/stampa	London, England : , : Wiley-ISTE, , [2021] ©2021
ISBN	1-119-85087-8 1-119-85089-4 1-119-85088-6
Descrizione fisica	1 online resource (269 pages)
Disciplina	554.912
Soggetti	Geology - Iceland Volcanoes - Iceland Glaciers - Iceland
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover -- Half-Title Page -- Title Page -- Copyright Page -- Contents -- List of Abbreviations -- Preface -- Introduction -- 1. Young Icelandic Volcanism and its Implications -- 1.1. Introduction -- 1.2. Icelandic magma series -- 1.2.1. Lava types -- 1.2.2. Geochemical diversity of young Icelandic basalts and their sources -- 1.2.3. Some geochemical constraints concerning the origin and geodynamic evolution of Iceland -- 1.3. Central volcanoes and active fissural systems -- 1.3.1. Central volcanoes -- 1.3.2. Fissural volcanism and subaerial lava flows -- 1.3.3. Hydromagmatism -- 1.4. Volcanic hazards in Iceland -- 1.4.1. Hazards related to lava flows -- 1.4.2. Hazards related to explosions and gas emissions -- 1.4.3. Jokulhlaups and associated hazards -- 1.4.4. Icelandic dust: a consequence of volcanism -- 1.5. References -- 2. Volcanism and Glaciations: Forcings and Chronometers -- 2.1. Subglacial volcanic landforms -- 2.1.1. Subglacial isolated volcanoes or tuyas -- 2.1.2. Hyaloclastite ridges or tindar -- 2.2. Volcanism, deglaciation and climate -- 2.2.1. General features: deglaciation, discharge and partial melting -- 2.2.2. Deglaciation and climate feedback -- 2.3. The hypothesis of a link

between volcanism and climate and its test by dating -- 2.3.1. The K-Ar chronometer -- 2.3.2. The combination of K-Ar and $^{40}\text{Ar}/^{39}\text{Ar}$ methods for dating Icelandic volcanism -- 2.3.3. A link between volcanism and climate according to K-Ar ages? -- 2.3.4. A rhyolitic volcanism synchronous with deglaciations? -- 2.4. References -- 3. Cenozoic Evolution of Iceland and the Cryosphere -- 3.1. Ice ages and the opening of the Atlantic -- 3.1.1. The Middle and Final Miocene cooling -- 3.1.2. The acceleration of the Middle Pliocene -- 3.1.3. The Middle Pleistocene Transition -- 3.1.4. The initiation of thermohaline circulation -- 3.2. Iceland's Quaternary glaciations. 3.2.1. Conditions for the development and functioning of ice caps -- 3.2.2. Glacio-isostasy -- 3.2.3. Icelandic data -- 3.2.4. The Icelandic record -- 3.3. The last glacial episode and its deglaciation -- 3.3.1. The Weichselian -- 3.3.2. The Last Glacial Maximum -- 3.3.3. Deglaciation and the Holocene -- 3.4. Iceland today, its climate and vegetation -- 3.4.1. The climate -- 3.4.2. Ocean circulation and climate -- 3.4.3. Soil, people and climate -- 3.4.4. Soils and erosion -- 3.5. References -- Conclusion -- References -- List of Authors -- Index -- Summary of Volume 1 -- EULA.
