1. Record Nr. UNINA9910877354903321

Titolo	The Stromboli volcano : an integrated study of the 2002-2003 eruption / / Sonia Calvari ... [et al.], editors
Pubbl/distr/stampa	Washington, D.C., : American Geophysical Union, c2008
ISBN	1-118-66634-8 1-118-67244-5
Descrizione fisica	1 online resource (411 p.)
Collana	Geophysical Monograph Series ; ; 182
Altri autori (Persone)	CalvariSonia <1962->
Disciplina	551.210945 551.210945/811
Soggetti	Volcanism - Italy - Stromboli Stromboli (Italy) Eruption, 2002 Stromboli (Italy) Eruption, 2003
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Title Page; Contents; Preface; The Stromboli Volcano: An Integrated Study of the 2002-2003 Eruption-Introduction; Section I: The Volcanic System of Stromboli; Geological-Structural Framework of Stromboli Volcano, Past Collapses, and the Possible Influence on the Events of the 2002-2003; Volcanology and Magma Geochemistry of the Present-Day Activity: Constraints on the Feeding System; Dynamics of Strombolian Activity; Fluid Geochemistry of Stromboli; Crater Gas Emissions and the Magma Feeding System of Stromboli Volcano; Upper Conduit Structure and Explosion Dynamics at Stromboli Section II: Eruption OnsetVolcanic and Seismic Activity at Stromboli Preceding the 2002-2003 Flank Eruption; The Eruptive Activity of 28 and 29 December 2002; Geochemical Prediction of the 2002-2003 Stromboli Eruption From Variations in C02 andRn Emissions and in Helium and Carbon Isotopes; Section III: Landslides, Tsunami, and the Sciara del Fuoco Instability; Slope Failures Induced by the December 2002 Eruption at Stromboli Volcano; The Double Landslide-Induced Tsunami; Deep-Sea Deposits of the Stromboli 30 December 2002 Landslide

Integrated Subaerial-Submarine Morphological Evolution of the Sciara del Fuoco After the 2002 LandslideMovements of the Sciara del Fuoco; Section IV: The Lava Flow Emission on the Sciara Del Fuoco; Evolution of the Lava Flow Field by Daily Thermal and Visible Airborne Surveys; Textural and Compositional Characteristics of Lavas Emitted During the December 2002 to July 2003 Stromboli Eruption (Italy): In; 2002-2003 Lava Flow Eruption of Stromboli: A Contribution to Understanding Lava Discharge Mechanisms Using Periodic Digital Phot; Gas Flux Rate and Migration of the Magma Column
Variations of Soil Temperature, CO2 Flux, andMeteorological ParametersSeismological Insights on the Shallow Magma System; Fluid Circulation and Permeability Changes in the Summit Area of Stromboli Volcano; Section V: The 5th April Paroxysmal Explosive Event; The 5 April 2003 Explosion of Stromboli: Timing of Eruption Dynamics Using Thermal Data; The Paroxysmal Event and Its Deposits; Mineralogical, Geochemical, and Isotopic Characteristics of the Ejecta From the 5 April 2003 Paroxysm at Stromboli, Italy: Infer; The 5 April 2003 Paroxysm at Stromboli: A Review of Geochemical Observations
Ground Deformation From Ground-Based SAR InterferometrySection VI: Risk Management; Stromboli (2002-2003) Crisis Management and Risk Mitigation Actions; Stromboli 2002-2003 Eruption; Index

Sommario/riassunto

Published by the American Geophysical Union as part of the Geophysical Monograph Series, Volume 182.This book presents a study of the ""eruptive crisis"" that took place at the Stromboli volcano from December 2002 to July 2003. It features an integrative approach to the monitoring of eruptive activity, including lava flow output, explosive activity, flank instability, submarine and subaerial landslides, tsunami, paroxysmal explosive events, and mitigation strategies. The book comes with a DVD with spectacular photos and video of The landslide and the tsunami that hit t