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Political Innovation -- Part II: Volcanic Processes, Eruptions, & Hazards  
-- Volcano Seismology: An Introduction -- Source Quantification of  
Volcanic-Seismic Signals -- Volcanoes, Non-linear Processes --  
Volcano Deformation: Insights into Magmatic Systems -- Volcanoes in  
Iceland and Crustal Deformation Processes -- Volcanic Eruptions,  
Explosive: Experimental Insights -- Volcanic Eruptions: Cyclicity During  
Lava Dome Growth -- Volcanic Eruptions: Stochastic Models of  
Occurrence Patterns -- Volcanic Hazards and Early Warning -- Volcanic  
Hazards Warnings: Effective Communications.

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#### Sommario/riassunto

This volume of the Encyclopedia of Complexity and Systems Science, Second Edition is an authoritative single source for understanding and applying the basic tenets of complexity and systems theory, as well as the tools and measures for analyzing complex systems, to the prediction, monitoring, and evaluation of earthquakes, tsunamis, and volcanoes. Early warning, damage, and the immediate response of human populations to these extreme environmental events are also covered from the point of view of complexity and nonlinear systems. In authoritative, state-of-the art articles, world experts in each field apply such complexity tools and concepts as fractals, cellular automata, solitons game theory, network theory, and statistical physics to an understanding of these complex geophysical phenomena.

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