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Autore	Rozelot Jean-Pierre
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Nota di contenuto	Frontmatter -- Preface -- Table of contents -- Section 1. Solar Physics -- Helioseismology in Uzbekistan: past and present -- Local Helioseismology of Emerging Active Region: A Case Study -- Realistic Simulations of Stellar Radiative MHD -- Advances in Realistic MHD Simulations of the Sun and Stars -- A brief history of the solar diameter measurements: a critical quality assessment of the existing data -- Solar sunspot-forming activity and its development on the reliable Wolf numbers series -- Wave instabilities in an anisotropic magnetized space plasma -- Section 2. From Helioseismology to Asteroseismology -- Asteroseismology with solar-like oscillations -- Section 3. Cosmic rays and space weather -- Cosmic Rays and other Space Weather Phenomena Influenced on Satellites Operation, Technologies, Biosphere and People Health -- Cosmic Rays and other Space Phenomena Dangerous for the Earth's Civilization: Beginning Steps for Founding Cosmic Ray Warning System -- Space Weather Effects on Human Health -- Section 4. Impact of the Sun on Earth climatology -- Cosmic Rays and other Space Phenomena Influenced on the Earth's Climate -- Does climatic changes could have destroyed great civilizations? -- Influence of orbital forcing and solar activity on climate change in the past
Sommario/riassunto	This book is based on contributions presented at the first International

Conference on Solar Physics which was organized in Baku, Azerbaijan in July 06–08, 2015, by the Science Development Foundation under the President of the Republic of Azerbaijan. The primary goals were to highlight specific aspects of modern solar physics research, including observation and theory that span from the interior of the Sun out into the wider heliosphere, as well as solar-terrestrial physics and particularly, sun-like stars. The Sun is a variable star. However, we are still far from fully understanding what and how causes this variability. Why does the Sun continue to go on, on a rhythmic scale, the so-called solar cycle, without damping? How to better understand the complicated relationships between the Sun, the heliosphere and the many proxies of long-term solar activity? How the data could be fully exploited for a better understanding of solar changes on the longest possible time scales? How our knowledge on the Sun can be transfer to other stars? What are the impacts on our terrestrial environment? These questions shape the architecture of the book. It will be of interest and useful to scientists and graduate level readers who would like to better master such up-to-date topics.
