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Nota di contenuto	1. Introductory Chapter: The Magnetosphere. 2. Coupling between Geomagnetic Field and Earth's Climate System. 3. Magnetospheric Current Systems and the Polar Cap Index. 4. The Polar Cap Magnetic Activity (PC Index) as a Tool of Monitoring and Nowcasting the Magnetospheric Disturbances. 5. Ionospheric Electron Density and Electron Content Models for Space Weather Monitoring. 6. Application of Onsager and Prigozhin Variational Principles of Nonequilibrium Thermodynamics to Obtain MHD-Equation Dissipative System in Drift Approximation. 7. Introductory Chapter: The Sun and Its Phenomenal Material Flux. 8. Solar Proton Activity over the Solar Cycle 24 and Associated Space Radiation Doses. 9. Ramjet Acceleration of Microscopic Black Holes within Stellar Material. 10. A New Hypothesis of Spin Supercurrent as Plausible Mechanism of Biological Nonlocal Interaction, Synchronicity, Quantum Communication.
Sommario/riassunto	Magnetosphere and Solar Winds, Humans and Communication consists of ten chapters organized into two sections. The first section presents a full description of the magnetosphere and its effect on the solar wind, climatic modes, the Polar Cap index in relation to magnetosphere disturbances (substorms and magnetic storms), recent developments and challenges in developed ionosphere models, and more. The second section discusses solar flux, solar proton activity over the solar cycle,

temporal variation of the sun's activity, and macroscopic scales of spin.