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地球に影響を及ぼす太陽の短期変動に関する国際研究（ISEST)/Minimax24
International Study of Earth-affecting Solar Transients (ISEST)/MiniMax24

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We introduce the project ISEST (International Study of Earth-affecting Solar Transients)/Minimax24 of VarSITI, internationally led by Jie Zhang (USA), Manuela Temmer (Austria), and Nat Gopalswamy (USA). Goals and objectives are to understand the propagation of solar transients through the space between the Sun and the Earth, and develop space weather prediction capability. How do coronal mass ejections (CMEs) and corotating interaction regions (CIRs) propagate and evolve, drive shocks and accelerate energetic particles in the heliosphere? To answer this question, we need data/theory/modeling as follows: Establish a database of Earth-affecting solar transient events including CMEs, CIRs, flares, and energetic particle events based on remote sensing and in-situ observations from an array of spacecraft, run observation campaigns such as MiniMax24, develop empirical, theoretical, and numerical models of CME propagation and prediction, validate models using observations. As anticipated outcome, a comprehensive database of Earth-affecting solar transients will be created, and space weather prediction capability will be significantly improved.

キーワード: コロナ質量放出, 共回転相互作用領域, 太陽フレア, 太陽高エネルギー粒子
Keywords: coronal mass ejection, corotating interaction region, flares, solar energetic particles