

## Criticality of the complex system and space weather

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Space weather is an attempt to study the complex behavior of the S-M-I coupling system. While the purpose of physical study is to extract the elementary process that rules observed complex phenomena and find basic law of nature, space weather must study complex phenomena as they occur. The most intrinsic problem in the space weather is to clarify the criticality that originates from the combining of different regions having different characteristics. Space weather studies the criticality in the 3-D space based on many hints obtained from observations and the well-studied nature of elementary processes in the magnetosphere and the ionosphere.

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