

## A Possible Interpretation of Burst-Like Characteristics of Explosive Events

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(Received: 2003-9-15; Revised: )

**Abstract:** Explosive events have been observed to occur consecutively in bursts at intermittent locations along the boundary near the opposite polarity. The aim of the present paper is to explore a possible mechanism to interpret this burst-like characteristic of explosive events. The 2D magnetohydrodynamic (MHD) numerical simulations with resistivity have been carried out to reproduce the intermittent spatial-temporal magnetic reconnection events taking place along the long, compressible current sheet. The observed density enhancements in previously published results have been verified to be associated to magnetic reconnection sites. Late observational evidences, which support present attempts, have also been found, at least in morphological evolution of the consecutive explosive events.

PACS: 96.60.Rd, 52.35.Vd, 95.30.Qd, 52.30.Cv, 02.60.Cb

Key words: explosive events, magnetic reconnection, magnetohydrodynamics, solar transition region, numerical simulation

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