



The consequences of erosion in modeling the shape of the CMEs and its influence on the magnetosphere

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On 2015 January 6 - 7 an interplanetary coronal mass ejection (ICME) was observed at L1. A fast stream from a solar coronal hole was surrounding this ICME. In this communication we show that the stealth CME on January 3, while travelling away from the Sun embeded in this fast solar wind, modifies its magnetic topology. Erosion, at least at the front boundary of the ICME, produces a disappearance of a large part of the southern component in the MC. This interaction not only results in a decrease of the expected geoeffectiveness, but also in inaccurate estimations of the flux rope axis when not considered in theoretical models.