



## **Conditions of the magnetotail around substorm onset: a preliminary systematic study based on the data obtained multi-spacecraft THEMIS mission.**

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The THEMIS mission includes 5 spacecraft. Their orbits are designed for primarily studying the origin of and history of substorm. The THEMIS probes are radially aligned every 4 days. AMDA is a web-based service (<http://cdpp-amda.cesr.fr>) which allows to perform automated or semi-automated analysis of the data. In this paper we present the preliminary results of a statistical study of measurement (field and particles) obtained by the THEMIS mission around substorm onset as inferred from ground data. The identified statistical trends have been then used as search criteria in order to test if they are systematically associated with substorm onsets or if they can be encountered in other situations. This study has been performed with the help of AMDA applied on the THEMIS data obtained during in its first tail pass.