



## **Events related to lithosphere-atmosphere-ionosphere-magnetosphere coupling observed by DEMETER**

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There are several models of Lithosphere-Atmosphere-Ionosphere-Magnetosphere (LAIM) coupling to explain ionospheric perturbations which are observed prior to earthquakes. In 2013 an ISSI Team led by S. Pulinets (RU) and D. Ouzounov (US) started to work with the following aim: “Multi-instrument Space-Borne Observations and Validation of the Physical Model of the LAIM Coupling” (see <http://www.issibern.ch/teams/spaceborneobserve/>). In the frame of this model validation several events have been studied with the DEMETER satellite data. It concerns the effects of (i) the ancient natural nuclear reactor located at Oklo (Gabon), (ii) the sand storms in Sahara, (iii) the volcanic activity, (iv) the lightning activity, and (v) the hurricanes. The main signature of these events in the ionosphere will be shown in this presentation.