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TROPOMAG - Influence of geomagnetic storms on the TROPOsphere dynamics: Can the Earth's MAGnetic field be considered a proxy of climate changes? Some results

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The TROPOMAG project investigates the possible effects of changes of the Earth's magnetic field on the atmosphere and weather conditions with the aim to better quantify the natural sources of the atmospheric variability. This need raises to assess the observed climate trends more correctly, with a consequent better understanding of manmade effects on climate. Specifically, this work explores possible connections between atmospheric pressure anomalies and the occurrence of geomagnetic storms. To accomplish this task pressure data, recorded over some Italian volcanic areas, are analysed according to different methods and considering geomagnetic indexes. This work describes and discusses corresponding preliminary results.