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## Analysis of an upward discharge above a thundercloud over Mediterranean Sea

Serge Soula<sup>1</sup>, Gabriel Hausknost<sup>1</sup>, Axel Ventre<sup>1</sup>, Sylvain Coquillat<sup>1</sup>, Janusz Mlynarczyk<sup>2</sup>, and Alex Hermant<sup>3</sup>

<sup>1</sup>Laboratoire d'Aérodynamique, OMP, Toulouse Cedex, France (serge.soula@aero.obs-mip.fr)

<sup>2</sup>Institute of Electronics, AGH University of Science and Technology, Krakow, Poland

<sup>3</sup>Storm chaser, freelance photographer, Moissac-Bellevue, France

On the night of November 1<sup>st</sup>, 2022, several weather photographers obtained remarkable photos showing a jet-like phenomenon with long blue filaments above a Mediterranean storm. An unprecedented set of optical and electrical data, including two pictures, one movie, VHF sources from a Lightning Mapping Array (LMA), detections from a LLS and Current Moment Waveforms from an ELF detection, makes it possible to characterize this event. It consists of a two-part upward luminous channel emerging from the cloud top at 11.8 km of altitude, developing up to 14.2 km and topped with blue streamers up to 17.2 km. It is embedded in a flash which starts with a positive 25 kA-discharge followed by a continuing current during 75 ms associated with VHF sources at 10 km. Contrary to blue jets and blue starters which have a positive polarity, the luminous event above the cloud is identified as a negative leader followed by three channel brightenings linked to the negative charge of a positive cloud dipole. The luminous event-producing flash is preceded by a convective surge and a production of positive flashes within the same region of the cloud. The triggering conditions and mechanisms of the event share similarities with gigantic jets, especially its polarity and a reduced upper positive charge.