In order to study spatial and time evolution of Transient Luminous Events (TLEs), such as sprites, elves, and blue jets, we have carry out TLE observations from a jet-aircraft using high-speed Image-Intensified (II) CCD camera, Watec CCD camera, EM-CCD camera and high-vision camera. On November 28, we have carried out a first try of the observation and captured about 30 TLE events successfully. At the presentation, we will show the initial results of the spatial and time evolution of sprites measured by high-speed and high-vision cameras.

Keywords: lightning, sprite, high-speed camera, high-vision camera