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## TGFs observed by the ALOFT 2023 flight campaign during an ISS overpass

**Ingrid Bjørge-Engeland**<sup>1</sup>, Nikolai Østgaard<sup>1</sup>, Timothy Lang<sup>2</sup>, Martino Marisaldi<sup>1</sup>, J. Eric Grove<sup>4</sup>, Mason Quick<sup>2</sup>, Hugh Christian<sup>3</sup>, Christopher Schultz<sup>2</sup>, Richard Blakeslee<sup>2</sup>, Ian Adams<sup>6</sup>, Rachael Kroodsma<sup>6</sup>, Gerald Heymsfield<sup>6</sup>, Andrey Mezentsev<sup>1</sup>, David Sarria<sup>1</sup>, Anders Fuglestad<sup>1</sup>, Nikolai Lehtinen<sup>1</sup>, Kjetil Ullaland<sup>1</sup>, Shiming Yang<sup>1</sup>, Bilal Hasan Qureshi<sup>1</sup>, Jens Søndergaard<sup>1</sup>, and the ALOFT team\*

<sup>1</sup>University of Bergen, Birkeland Centre for Space Science, Department of Physics and Technology, Norway (ingrid.engeland@uib.no)

<sup>2</sup>NASA Marshall Space Flight Center, Huntsville, USA

<sup>3</sup>Department of Atmospheric Science, Earth System Science Center, University of Alabama in Huntsville, Huntsville, USA

<sup>4</sup>U.S. Naval Research Laboratory, Washington DC, USA

<sup>6</sup>NASA Goddard Space Flight Center, Greenbelt, USA

\*A full list of authors appears at the end of the abstract

During the Airborne Lightning Observatory for FECS and TGFs (ALOFT) campaign in July 2023, the International Space Station (ISS), at an altitude of approximately 410 km, passed over the same region as covered by ALOFT within a short time period on the 24th of July. The ALOFT campaign, which carried gamma-ray detectors, photometers, and instruments for characterizing the electrical activity and the cloud environment, flew at an altitude of approximately 20 km and covered thunderstorms over the Gulf of Mexico and Caribbean during its 60 flight hours. The Atmosphere-Space Interactions Monitor (ASIM) is mounted on the ISS, with its Modular X- and Gamma-ray Sensor (MXGS) designed for observing TGFs. During the ISS overpass, ALOFT observed six TGFs within less than two minutes that were all within the field of view of the ASIM instrument. However, none of the TGFs were detected by ASIM. Here we present the six TGFs observed by ALOFT during the ISS overpass and discuss their source properties. The ASIM non-detection provides a strong upper limit on the TGF fluence.

**ALOFT team:** N. Østgaard<sup>1</sup>, T. Lang<sup>2</sup>, M. Marisaldi<sup>1</sup>, J. E. Grove<sup>4</sup>, M. Quick<sup>2</sup>, H. Christian<sup>3</sup>, C. Schultz<sup>2</sup>, R. Blakeslee<sup>2</sup>, I. Adams<sup>6</sup>, R. Kroodsma<sup>6</sup>, G. Heymsfield<sup>6</sup>, A. Mezentsev<sup>1</sup>, D. Sarria<sup>1</sup>, I. Bjørge-Engeland<sup>1</sup>, A. Fuglestad<sup>1</sup>, N. Lehtinen<sup>1</sup>, K. Ullaland<sup>1</sup>, S. Yang<sup>1</sup>, B. Hasan Qureshi<sup>1</sup>, J. Søndergaard<sup>1</sup>, B. Husa<sup>1</sup>, D. Walker<sup>3</sup>, D. Shy<sup>4</sup>, M. Bateman<sup>3</sup>, D. Mach<sup>13</sup>, P. Bitzer<sup>3</sup>, M. Fullekrug<sup>7</sup>, M. Cohen<sup>8</sup>, M. Stanley<sup>9</sup>, S. Cummer<sup>10</sup>, J. Montanya<sup>11</sup>, M. Pazos<sup>12</sup>, C. Velosa<sup>5</sup>, O. van der Velde<sup>11</sup>, Y. Pu<sup>10</sup>, P. Krehbiel<sup>9</sup>, J. A. Roncancio<sup>11</sup>, J. A. Lopez<sup>11</sup>, M. Urbani<sup>11</sup>, A. Santos<sup>5</sup>