

Working Group

Terrestrial gamma-ray flashes and airplanes

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- High-energy emission from TGFs
- How high ?
- Which particles/photons ?
- How common ?
- Effects on the environment
- Possible effects on avionics/electronics

Necessity of near in-situ measurements

- Measurements on the ground, top of mountains, ...
- Measurements by airplanes with dedicated instruments
 - ADELE in the US
 - Airbus-Dutch group
 - Univ. of Bergen

- Our group (ASI, AGILE, CNR-ISAC, Univ. Padova, Aeronautica Mil.) is leader in TGF studies
- Motivation by AGILE high-energy measurements and studies of possible effects on avionics
- ASI establishes now a Working Group for the study of high-energy phenomena in the atmosphere

Aims of the WG

- study the high-energy TGF-like phenomena in the atmosphere
- having a multidisciplinary approach
- design and implement instrument for airplane measurements
- strengthen the scientific collaboration between the Italian community and ASIM
- occasions for PANGEA ...