



Mean LIS flash properties and their relation to TRMM cloud and rain characteristics

Steffen Beirle and Thomas Wagner

MPI Chemie Mainz, Satellite remote sensing, Mainz, Germany (steffen.beirle@mpic.de)

In a recent study, mean LIS flash properties (like the number of "events" per flash or the flash radiance), which can be associated with the flash "strength", have been analyzed (Beirle et al., NHESS, 2014).

The resulting maps show consistent spatial patterns; most strikingly, oceanic flashes show higher values than continental flashes for all properties observed by LIS.

Over land, regions with high (eastern US) and low (India) flash strength can be clearly identified.

Several possible reasons for the differences in flash properties have been discussed, but a clear explanation, in particular of the land-ocean contrast, is still missing.

Here we analyse how far mean LIS flash properties are related to cloud and rain characteristics as derived from TRMM instruments (PR2a23 algorithm).

This additional data, coincident to but independent from the LIS measurements, will be an important step towards inferring the driving physical mechanisms.