



Are the transient luminous phenomena in Hessdalen (Norway) related to build-up of static charge in the low atmosphere?

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Transient luminous phenomena has been seen in the low atmosphere over the Hessdalen valley, Norway for several decades. Light balls of different shapes and colour, with life time from seconds up to two hours have been reported. Electrical field mills have been utilized to measure the static electrical field in the low atmosphere at two mountain tops, at 1000m altitude. Data from the magnetic field mills suggest localized static charge build up on one of the mountain tops of over 20KV/m during a period of not more than an hour. There are also indications of high aerosol concentrations (above the detection limit of the utilized air ion counters). This charge build up is detected in an area with several sightings, suggesting the detection of a birth place for the phenomena and a possible trigger mechanism.