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## The Hessdalen Phenomena

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The Hessdalen Phenomena are lights of unknown origin, showing up in the Hessdalen valley, in the southern part of Norway. The lights can be split in three main types:

1) White or blue flashed, with a lifetime of maximum 2-3 seconds. Mostly the time is a fraction of a second, and can due to that be difficult to see. 2) Big yellow lights, which can stand still for minutes, or move around in the valley. The size can be up to approx 10 meter in diameter. The lifetime has been measured up to two hours. The intensity can be so strong that the ground, more than 20 m beneath it, can be seen is illuminated. 3) Several light together, organized, and move such that they all seem to be connected to one common object. Each of these lights seems to live their own life, by turning itself on and off independent.

The Hessdalen valley is 15 km long, V shaped, with the smallest width of 2 km in the north and up to 9 km in the south. The valley is located 120 km south of Trondheim city, at latitude 62,8 and longitude 11.2. The valley is part of the Røros mining district, with several old mines. None of these mines are running now. There have been mines for copper, sulfur and iron.

The amount of sightings has one big pike, which lasted from the end of 1981 to the end of 1984. At the most there were 20 observations a week, in that period. Based on stories from the inhabitants, it is from 10 to 20 observations a year now.

A 5 weeks field investigation was run from late January to February 1984. 53 lights of unknown origin occurred during that period. The following instruments were used: Spectrographic still camera, seismograph, radar, spectrum analyzer, magnetometer, Geiger counter, laser, IR viewer. The phenomena were captured on radar, also when no lights was seen. 40% of the sightings occurred during a magnetic pulsation. A magnetic storm seems to increase the probability for a sighting.

No heat has ever been recorded. There are no burn marks on the ground where the phenomena have touched the ground. Bacteria in the snow have been killed where the light has hit the snow, which could indicate a high energy radiation.

Østfold College put up an automatic station in Hessdalen, August 1998. This station has recorded the phenomena on pictures and videotape. No unexplained low frequency EM radiation has been recorded.