

Þórður Arason (1998), Initial results of the Icelandic lightning location system, *Proceedings of 24th International Conference on Lightning Protection (ICLP)*, Birmingham, England, 14-18 September 1998, 241-244.

A lightning location system has been operational in Iceland since the summer of 1997. In this paper we describe the system and our initial results of winter-lightnings between 60°N and 67°N. Although the high latitude winter thunderstorms that we have observed give only a few lightnings per storm, we are observing more thunderstorms than previous estimates from human observations have indicated. Usually we observe only one stroke per lightning. Furthermore, the data indicate that positive-lightnings are more abundant than the negative ones. Our lightning current estimates are extremely high, or on the average close to 100 kA.