

Haraldur Ólafsson, Þórður Arason & Trausti Jónsson (2004), Seasonal and interannual variability of thunderstorms in Iceland and the origin of airmasses in the storms, Í: *Proceedings Volume I, 27th International Conference on Lightning Protection (ICLP 2004)*, Centre International de Congres du Palais des Papes, Avignon, France, 13-16 September 2004, 217-221.

Variability and the meteorological conditions of thunder in Iceland are explored. Most thunderstorms occur in winter, where arctic air moves rapidly from N-America over a relatively warm sea towards Iceland. A secondary maximum in the thunderstorm frequency is in summer. The summertime thunderstorms are formed within an airmass that has been advected from Britain and/or continental Europe. These thunderstorms tend to be associated with a frontal or a convergence zone. There is substantial interannual variability in the frequency of thunderstorms at the south coast of Iceland, but there is not a sign of a long-term trend.