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Lightning Detection with VLF/LF and VHF Networks

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During the past decades automated lightning detection has made tremendous progress and numerous systems have been set up in many parts of the world. Both scientific and commercially operating networks deliver massive amounts of data and contribute to the understanding of basic discharge processes. Many details involved in lightning production have been clarified, but the underlying mechanisms are sufficiently intricate to require continued research efforts.

Different techniques for large-scale lightning detection are described, with emphasis on those, which utilize the VLF/LF and VHF band. Results from different networks are commented and compared with each other. Open questions are addressed and discussed in view of lightning data obtained from the various sources. Advantages and prominent features of the different techniques are scrutinized.