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**Decade of narrow-band VLF observations in Hungary – first results
of an automated detection algorithm of enhanced ionization patches
in the mesosphere**

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Narrow band VLF recording network has been set up in Hungary, 1996, dedicated to monitor transient ionization enhancements in the mesosphere. They may be formed e.g. by wave induced energetic particle precipitation, intense cloud-to-ionosphere discharges. The measuring system is based on Omnipal and UltraMSK equipment setup, logging amplitude and phase data of received narrow-band signals, sampled at frequencies of selected VLF transmitters. The collected recording set is almost continuous.

Mass data processing on archived recordings has been started using our newly developed signal analyzer procedure, detecting and classifying different sort of VLF perturbations automatically. Occurrence rates and statistics of induced ionization enhancements, their geographic distribution along the surveyed transmitter-receiver paths is presented.