Geophysical Research Abstracts Vol. 16, EGU2014-1039, 2014 EGU General Assembly 2014 © Author(s) 2013. CC Attribution 3.0 License.



The European VLF/LF Radio Network: the current status

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Since 2009 a network of VLF (20-60 kHz) and LF (150-300 kHz) radio receivers has been put into operation in Europe in order to study earthquakes precursors. At the moment the network consists of eleven receivers four of which are located in Italy, two in Greece and one in Portugal, Romania, Malta, Cyprus and Turkey. The data (sampling rate of 1min) are downloaded automatically at the end of each day and they are stored in the server located at the Department of Physics of the University of Bari (Italy), that is the central node of the network. Still, in some case, problems of connection exist. The different trends are open and visible on the web site: http://beta.fisica.uniba.it/infrep/Home.aspx. The data files can be downloaded by the same web site but they are protected by username and password. Among the different methods of data analysis the Wavelet spectra appear to be the most sensitive ones. The software able to apply this technique on the radio data automatically at the end of each day has been planned and realized. At the moment it operates on four signals collected by one of the Italian receivers; if an anomaly stands up and it is over a fixed threshold a warning advise appears. In the web site, this activity is protected by a specific username and password.