

1.1-P14. Kazakhstan Infrasound Network: Source Localization

Kazakhstan Data Center (NDC) has bulletins of infrasound detections constantly calculated with the use of the data of two infrasound stations: IS31- Aktyubinsk – since 2001 and Kurchatov – since 2011. IS31- Aktyubinsk has been installed to the north-west of Kazakhstan, Kurchatov infrasound array – to the east of Kazakhstan. However, during more than two years the data of Kazakhstan infrasound arrays have been processed independently. At least two arrays are required for the localization of infrasound event epicenter. In presence of two or more arrays the location is determined as per cross-bearing. First experiments of application of the cross-bearing with the use of IS46-Zalesovo and Kurchatov stations bulletins have shown that solving the task of localization of epicenters is complicated due to greater number of false solutions. This results were presented at the Infrasound Technology Workshop 2012 in Korea. NDC of France has offered assistance in solving the tasks. At the end of 2013, KNDC received adapted version of “Locinfra” software from NDC of France. The paper presents technology of source localization implemented in “Locinfra”. Even first results of source localization show that Kazakhstani infrasound array network has got very promising monitoring capability.

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