

## **wind influence to the detection ability of permanent and mobile infrasound station.**

The theory of the infrasound wave propagation states that the acoustic waves of infrasound sources, related with wind and temperature conditions, can be detected in distance of 200-250 km (McKenna, 2005; Golden et al., 2007). From our seasonal observations (winter and summer monitoring) and research studies, we would like to determine a detection level of infrasound waves in the north hemisphere at a distance of 250 kilometers from the source, because of topography, continental location and height, and it is much windy in the territory of Mongolia. Therefore, the goal of our study is to reduce the wind noise detected in the array station, and then to improve the detection ability of the infrasound array stations. In the context of the above study, we will determine the noise level by spectrum analysis of the mobile barometer without any filters on two different sites' deployment: nearby the infrasound array station and in a forest. Also, we will determine seasonal variations depending on the site's position, by using comparable data of mobile infrasound station in the forest and IS34MN infrasound mini array during 6 to 12 months.

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