

## **Experiencing Earth's inaudible symphony**

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Everyday the human body is exposed to thousands of different sounds; smartphones, music, cars and overhead aircraft to name a few. There are some sounds however which we cannot hear as they are below our range of hearing, sound at this level is known as infrasound and is of very low frequency. Such examples of infrasound are the sounds made by glaciers and volcanos, distant mining activities and the sound of the ocean. These sounds are emitted by these sources constantly all over the world and are recorded at infrasound stations, thus providing a recording of Earth's inaudible symphony. The aim of this collaboration between artists and scientists is to create a proof of concept immersive experience in which members of the public are invited to experience and understand infrasound.

Participants will sit in an installation and be shown images of natural infrasound sources whilst their seat is vibrated at with an amplitude modulated version of the original infrasound wave. To further enhance the experience, subwoofers will play the same amplitude modulated soundwave to place the feeling of the infrasound wave passing through the installation. Amplitude modulation is performed so that a vibration is played at a frequency that can be felt by the human body but its amplitude varies at the frequency of the infrasound wave. The aim of the project is to see how humans perceive sounds that can't be heard and many did not know were there. The second part of the project is educational in which that this installation can be used to educate the general public about infrasound and its scientific uses.

A simple demonstration for this session could be the playing of amplitude modulated infrasound wave that can be heard as opposed to felt as the transport of an installation at this is not possible and the associated imagery.