Geophysical Research Abstracts Vol. 17, EGU2015-10136, 2015 EGU General Assembly 2015 © Author(s) 2015. CC Attribution 3.0 License.



Improvements of wind noise reduction systems in the International Monitoring System infrasound network

Alfred Christian Kramer (1) and Julien Marty (2)

(1) Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), (2) Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO)

The objective of this poster is to present the efforts made by the PTS over the last four years to assess and improve the robustness and efficiency of wind noise reduction systems. This work includes the improvement of the design of the pipe arrays by modelling the frequency response of the different types of filtering systems used within the IMS (International Monitoring System) infrasound network. It also includes the investigation and testing of new acoustic filtering system materials / components to improve the robustness of the pipe arrays. Efforts were also put into the improvement of pipe array design in order to enhance their flexibility to adapt to the station environmental conditions. Finally wind noise reduction system design was also enhanced to reduce maintenance activities and costs, as well as to extend their life cycle.