

INFRASOUND STATION 132KE, MONITORING, PERFORMANCE AND DETECTION IMPROVEMENT

Wednesday, 6 November 2024 16:30 (10 minutes)

The infrasound station I32KE installed in 2002 at Karura in Kenya, was composed of seven array elements equipped with 18-meter wind noise reducing system (WRNS). Each WRNS is supported by four rosettes of twenty-four inlet ports combined with galvanized pipes, brass summing manifolds and resonance suppressors. Despite high data availability, this system experienced data quality problems affecting its monitoring capabilities. The challenges included blocked inlet ports, leaking junctions, faulty connections to the micro barometer's nozzles and deterioration due to old age. Based on data analysis by the local NDC as well as quality follow up by the CTBTO, IDC, helped in detecting data quality problems which triggered timely intervention in 2019.

This presentation work therefore aims to produce statistics on events from before and after the replace met of the galvanized WRNS with stainless steel. The data also makes comparison on the detection capabilities, Buffering and performance from the station for both the old and the new sensors.

E-mail

opiyomakakech@gmail.com

Primary author: AKECH, John Opiyo (National Council for Science & Technology)

Co-author: Dr MULWA, Josphat (University of Nairobi)

Session Classification: Poster

Track Classification: Poster session