

effect on MAWs from Drakensberg Mountain using IS35 and IS47

IMS Infrasound stations detect mostly signals from Mountain Associated Waves at frequency range [0.015 - 0.1Hz]. MAWs are generated as hydrodynamic oscillation in the turbulent wind-stream in the lee of high mountain ranges (Meecham, 1971). Amplitude attenuation of MAWs from Drakensberg Mountain range is studied. Observed attenuation at two IMS infrasound stations IS35 and IS47 was compared with Raytracing technique using Bass & Sutherland, 2003 absorption model. PMCC method is used to process infrasound data. IS47 detects signal from Drakensberg Mountain almost over the year. However, in IS35 bulletin this source is observed only from December to March and between June and July. Amplitude attenuation is due to atmospheric absorption of acoustic energy along its propagation. At first approximation, amplitude decreases with range.

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Track Classification: 5. Analysis of Infrasound Sources and Scientific Applications of Infrasound