

Applications for Aircraft Infrasound Detections

A number of sources on the earth and in atmosphere can produce the low frequency infrasound atmospheric waves. Infrasound waves are generated by the regular air traffic subsonic signals. On quiet nights when the measurement conditions are ideal, near infrasound arrays airplanes can be detected at high altitudes. Infrasound signals from aircrafts are characterized by rapid variation in azimuth and increase in the apparent velocity while the craft approaches the station and the signals are rich in high frequency content. In this study the Algerian aircraft (Trip No.5017) of 24, October, 2014 which fall down in the vicinity of Gao city in Mali is tracked and collocated at the crises site. Another example of such application is the detection of the take-off and landing of aircrafts using infrasound array nearby airports which could be utilized to make a signature of infrasound aircraft events that could improve the detection of airplanes accidents.

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