



## Overview of acoustic measurements in South-East of France in 2012 during severe weather

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CEA (Commissariat à l'Energie Atomique et aux Energies Alternatives) installed two acoustic networks in South-East of France. The first one was located in Observatoire Haute Provence in the framework of the ARISE European design project ([arise-project.eu](http://arise-project.eu)). It was composed of 4 microbarometers set in an equilateral triangle. The other network was located close to Uzès in the frame of the HyMeX ([www.hymex.org](http://www.hymex.org)) Special Operational Period from August 27th to November 16th. It was composed of 4 microbarometers and 4 microphones. From August to November 2012, several thunderstorms occurred close to these stations. The global thunder spectrum from 0.01 Hz to 250 Hz is studied using the microbarometer and microphone recordings. A very large thunderstorm, in August 30th-31st, produced more than 100 sprites over the south-western part of the Mediterranean Sea. Ten of them were dancing sprites. This kind of sprites can produce infrasound. This experiment offers a unique to triangulate sprites with infrasound measurements. Lastly, a tornado occurred in October 14th. This event will be analyzed with the data of both networks.