



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

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CEA (Commissariat à l'Énergie Atomique et aux Énergies 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). 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) 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.