

## **ACOUSTICS2008/1765 Monitoring hurricanes using infrasound**

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In spite of recent technological advances, forecasting the intensity of a hurricane remains a challenging problem. Knowledge of the location and the strength of the storm at the moment where it makes landfall is critical for civil defense planning and public safety. Part of the reason for this is that storms that are well away from land can only be monitored intermittently (e.g., 3 times per day). Infrasound signals are produced by the interaction of the hurricane with the sea-state and hold promise for characterizing sudden changes in hurricane strength on a time scale not possible with current sensing technologies. The University of Mississippi is leading a US national collaboration to monitor hurricanes using infrasound in the Gulf of Mexico and in the Western Atlantic Ocean. The results of measurements by from our group will be summarized, and the technical challenges associated with these measurements will be discussed.