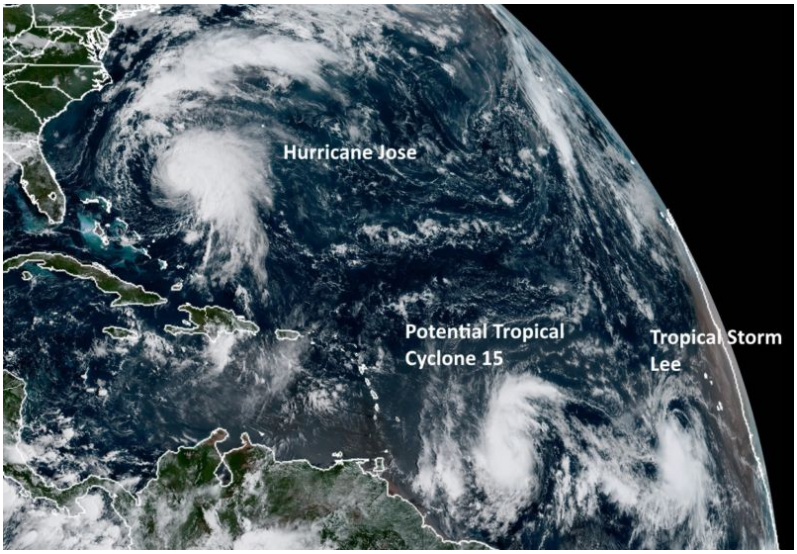
# New Undergraduate Research Position on Hurricane Formation




A hard-working and enthusiastic sophomore or junior undergraduate is sought to join a research team on hurricane formation. The research will contribute to a new National Science Foundation project, which is in collaboration with SUNY / University at Albany.

The research will involve the investigation of the structure of African Easterly Waves, and how they may develop into tropical cyclones. For example, why did Hurricanes Harvey, Irma, Jose, Lee and Maria form from these easterly waves? We will use satellite observations and ensembles of operational model forecasts to address these questions. Cases will be selected together with collaborators at the National Hurricane Center (NHC). The results of the research would be used to inform NHC and the community on the forecast skill and predictability of hurricane formation, and the meteorology behind it.

An interest in mathematics, physics, and computer programming is required. Experience in programming is not necessary – one will be expected to develop familiarity with platforms such as Linux and learn languages including Fortran as part of the project.

The incumbent would sign up for ATM 371 (Readings in Atmospheric Science) in Fall 2018 or Spring 2019 to build background knowledge, followed by ATM 411 (Projects in Atmospheric Science) in subsequent semesters, culminating in a Senior Honors Thesis.

Based on progress, the incumbent will be given opportunities to present their results at the AMS Annual Meeting or the AMS Conference in Hurricanes and Tropical Meteorology, together with research fora at the University of Miami. S/he will also have opportunities to visit collaborating students and faculty in Albany, the state capital of New York.

Please submit a 1-2 page CV with grades and a short statement of interest to Prof. Sharan Majumdar (Department of Atmospheric Sciences) at smajumdar@rsmas.miami.edu. The position will remain open until it is filled.