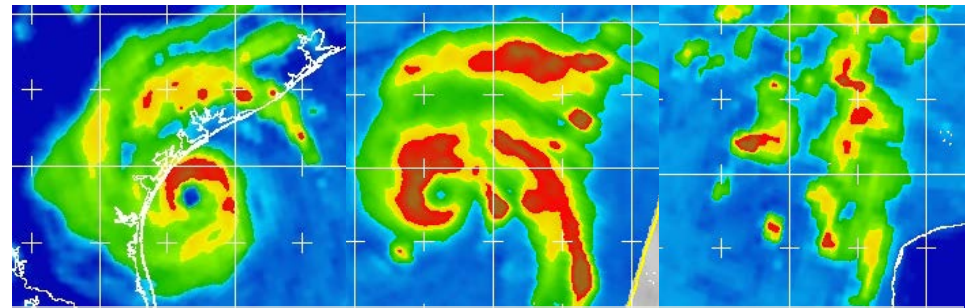




The Relationship Between Precipitation and Environmental Forcing During Tropical Cyclone Formation and Intensification

The goal of this project is to identify the processes that govern an increase in the symmetry of precipitation around tropical cyclones (TCs) as they form and intensify, especially when storms have to overcome less favorable environmental conditions, such as moderate vertical wind shear and the presence of dry air. We examine this problem in both case study and composite frameworks with long-term datasets of satellite and airborne instruments in TCs. We also complement the observational datasets by examining these processes by running real-case simulations and idealized TC experiments.



Intensification of Hurricane Harvey