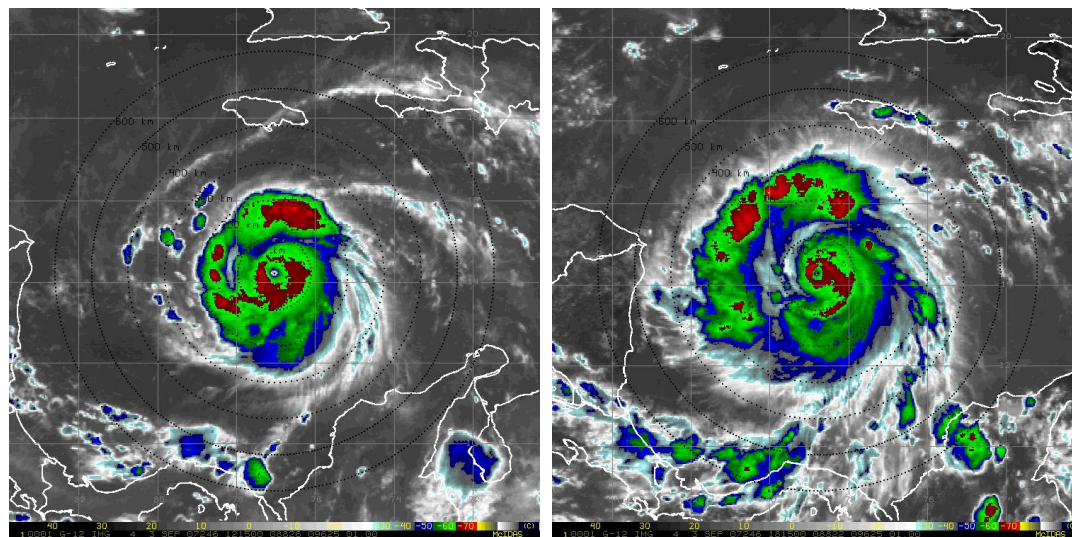


Tropical Cyclone Rapid Intensity Change

Interactions between the Inner-Core & Environment

How is the thermodynamic and kinematic variability in the near-environment of a tropical cyclone communicated to the storm's inner-core? The Ph.D. student will use aircraft observations, satellite data, and diagnostic tools to investigate this question.



The tropical cyclone diurnal cycle for Hurricane Felix (Sep 3, 2007) showing a rapidly expanding cloud field from the morning to early afternoon. These recently discovered TC diurnal pulses move out from the inner core to the near environment each day. From Dunion et al. (2014, MWR)