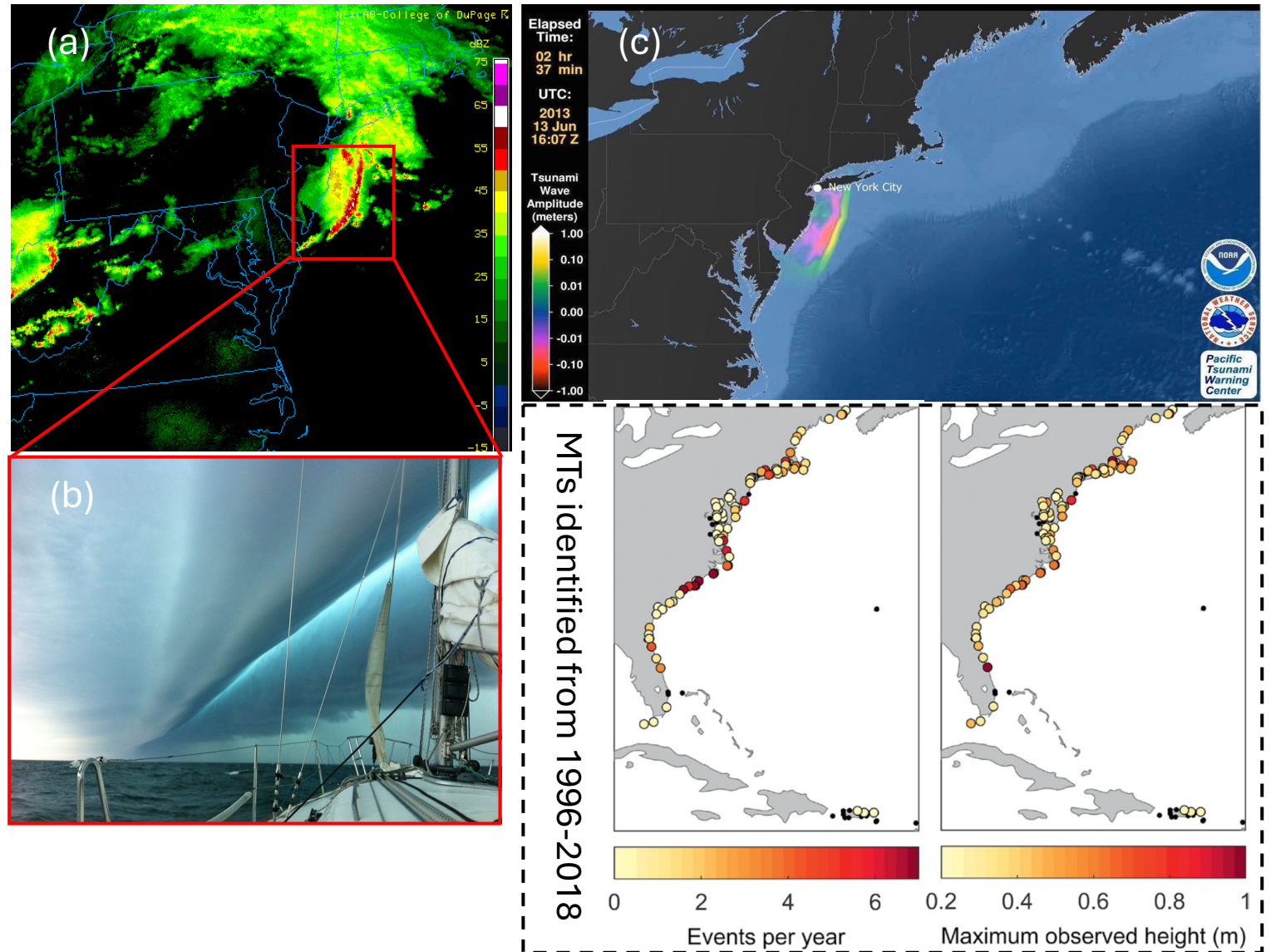


# Identify Meteorological Tsunamis Along the New Jersey Coast

Advisor: Dr. Cheng Zhang

- Sudden changes in atmospheric pressure (Figures a & b), moving at high speeds, can generate significant tsunamis (Figures c).
- This clinic team will collect oceanic and meteorological data from NOAA tide stations and identify meteorological tsunamis (MTs) that have occurred along the New Jersey coastline since 2018.
- This project will be supported by National Oceanic and Atmospheric Administration (NOAA)



# Evaluate the Vulnerability of WWTPs in Southern New Jersey

Dr. Cheng Zhang and Dr. Kauser Jahan

- Utilize Google Earth Engine to access and analyze historical flood data near Wastewater Treatment Plants (WWTPs)
- Simulate flood extents using hydrodynamic models to evaluate impacts on nearby WWTPs
- Predict flood return periods at the locations to support risk assessment under climate change
- This project funded by New Jersey Water Resources Research Institute (NJWRRRI)

