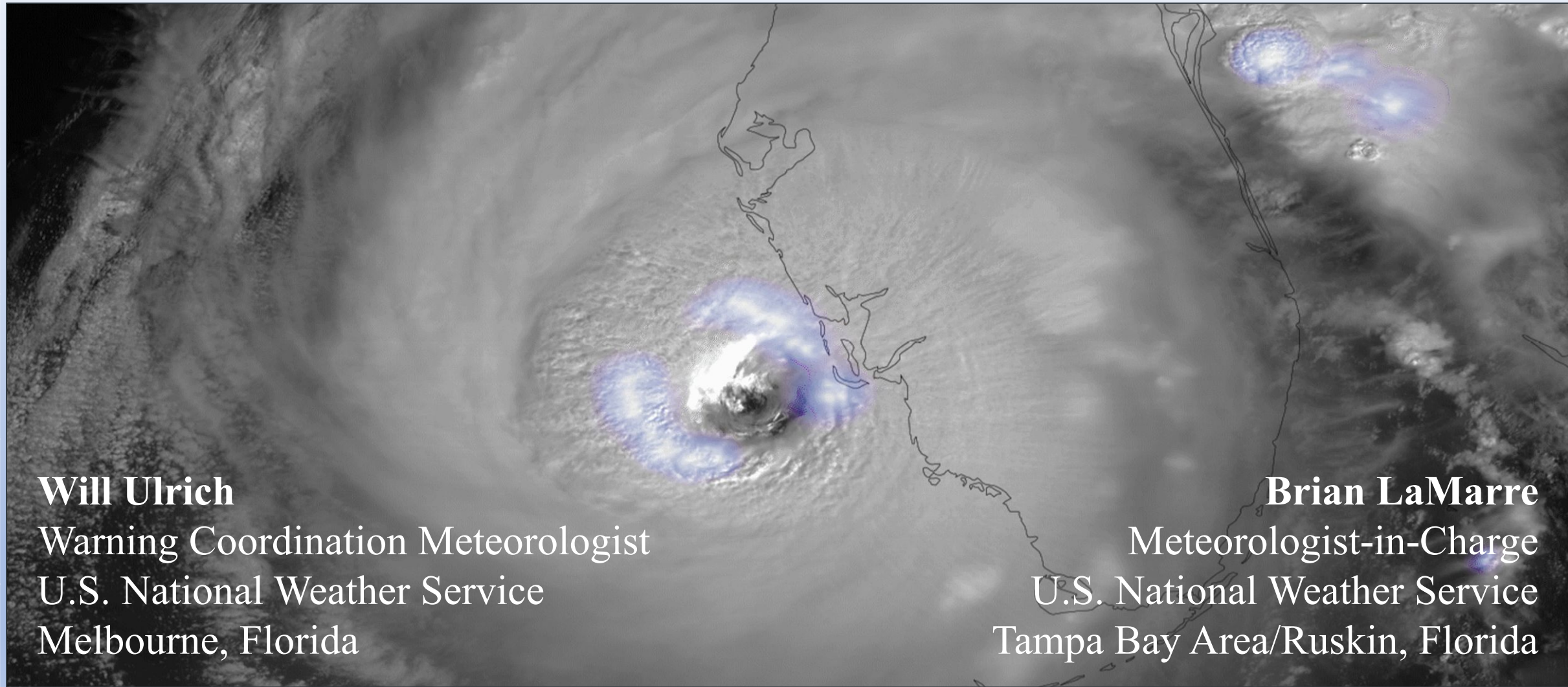




Hurricane Ian: Decision Support at the Local Level

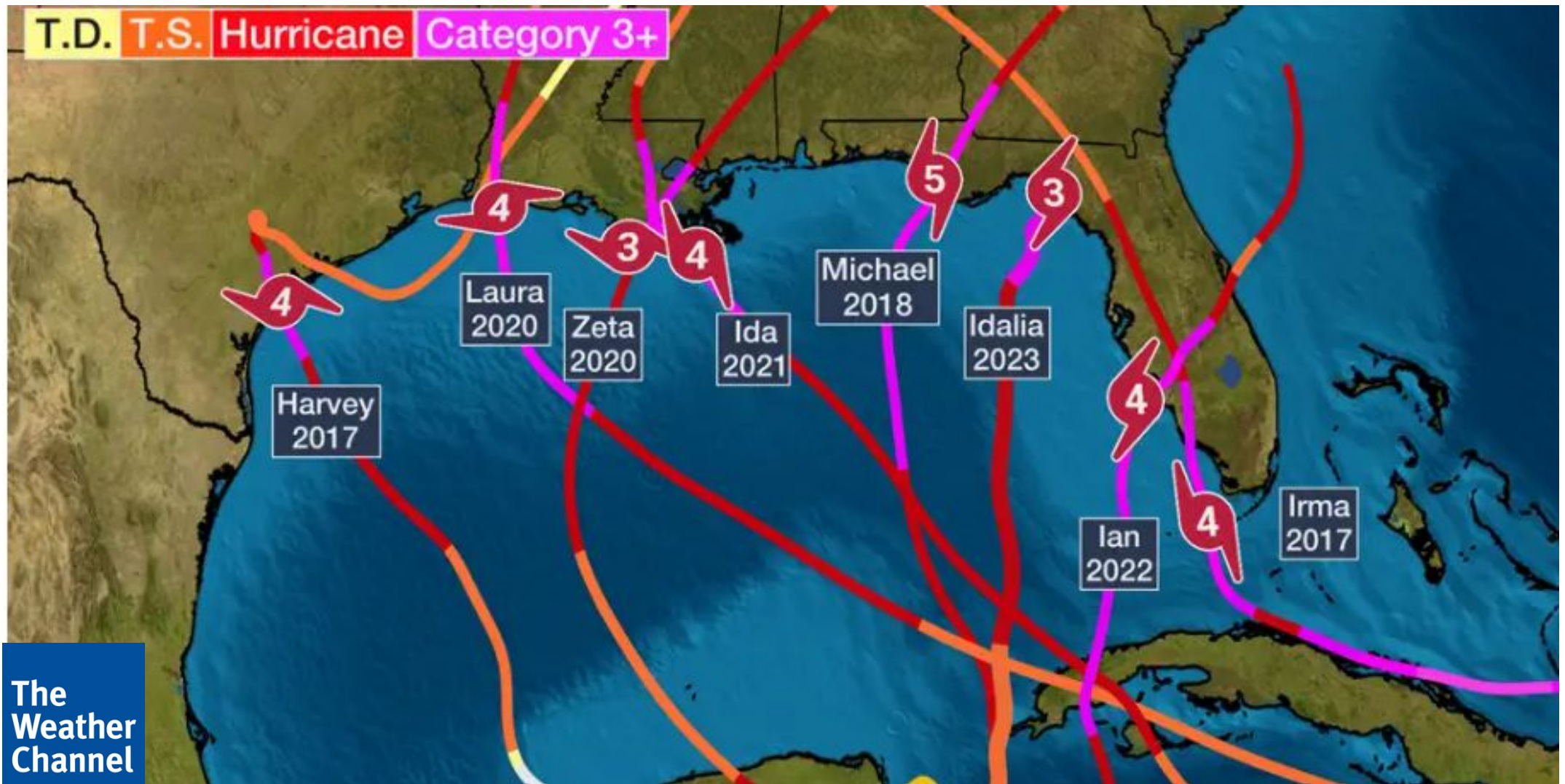


Will Ulrich
Warning Coordination Meteorologist
U.S. National Weather Service
Melbourne, Florida

Brian LaMarre
Meteorologist-in-Charge
U.S. National Weather Service
Tampa Bay Area/Ruskin, Florida



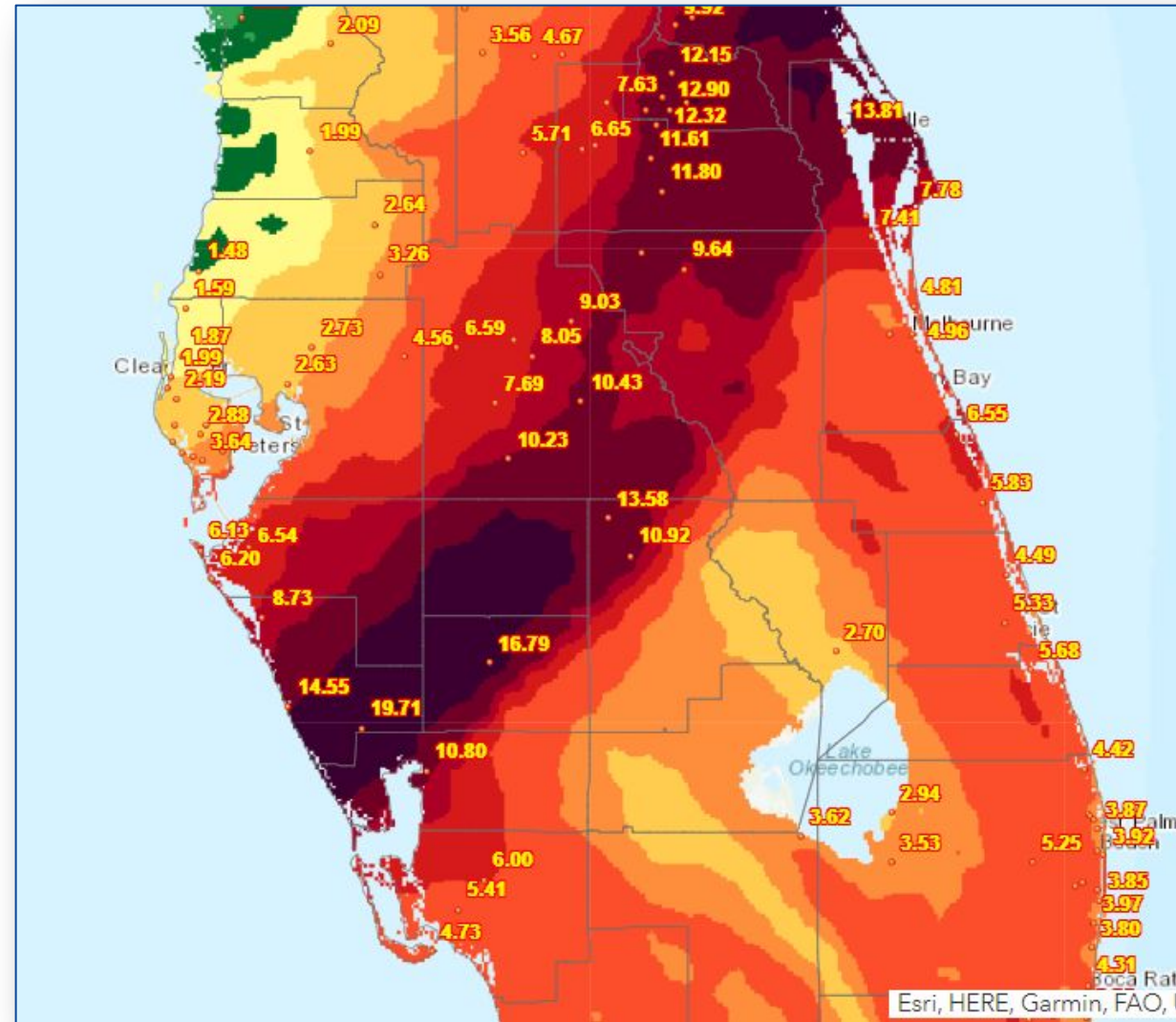
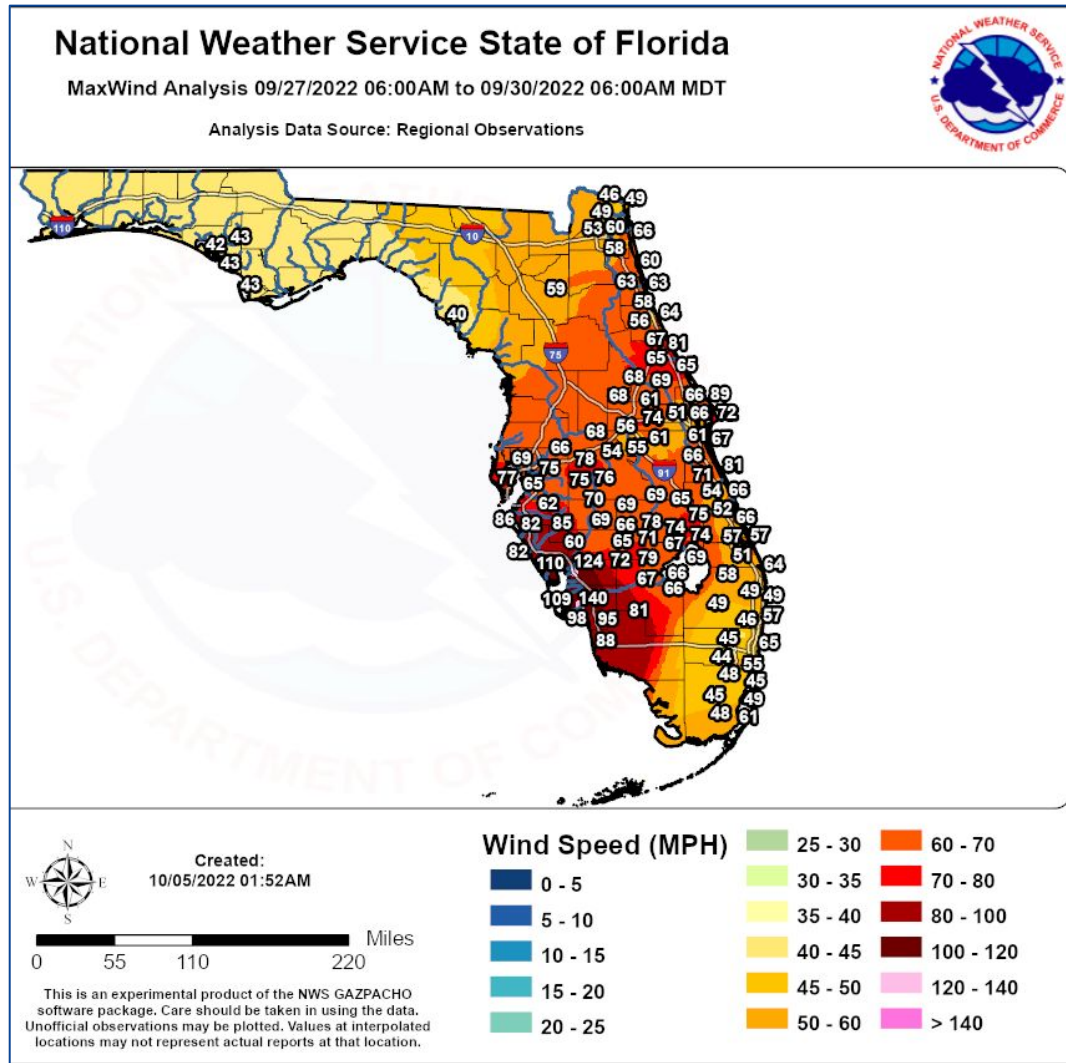
Gulf of Mexico: Category 4 and 5 Hurricanes Since 2017



Small Track Shifts Can Have Huge Impact on Landfall Point!

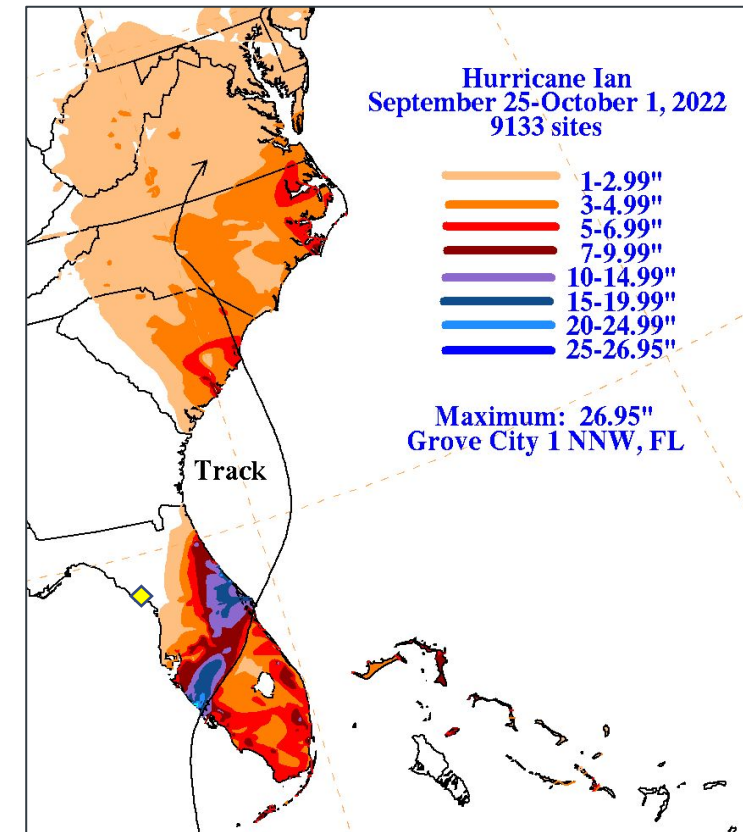
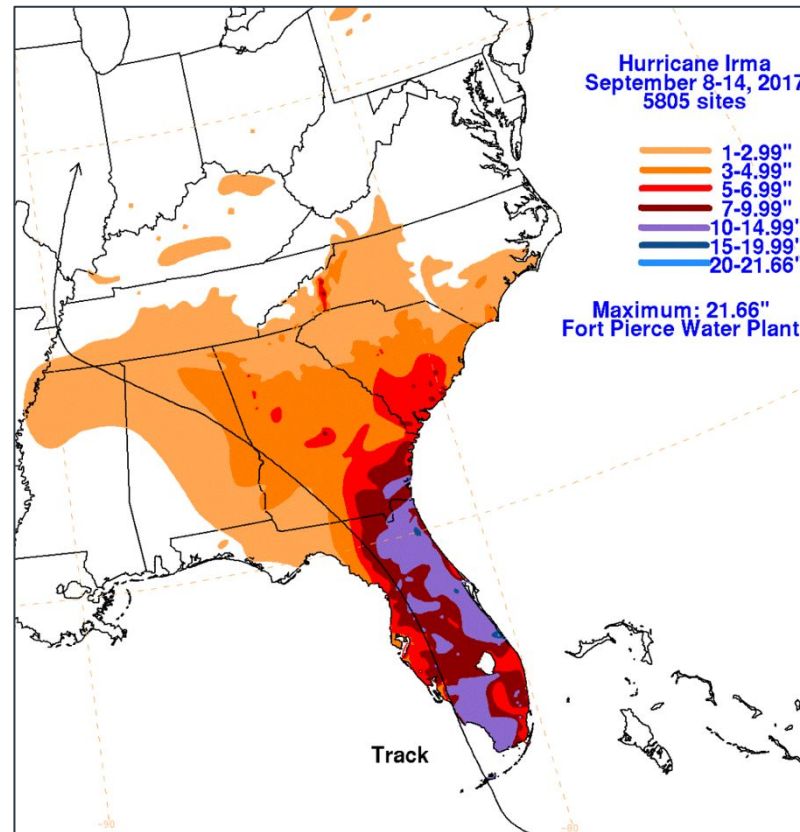
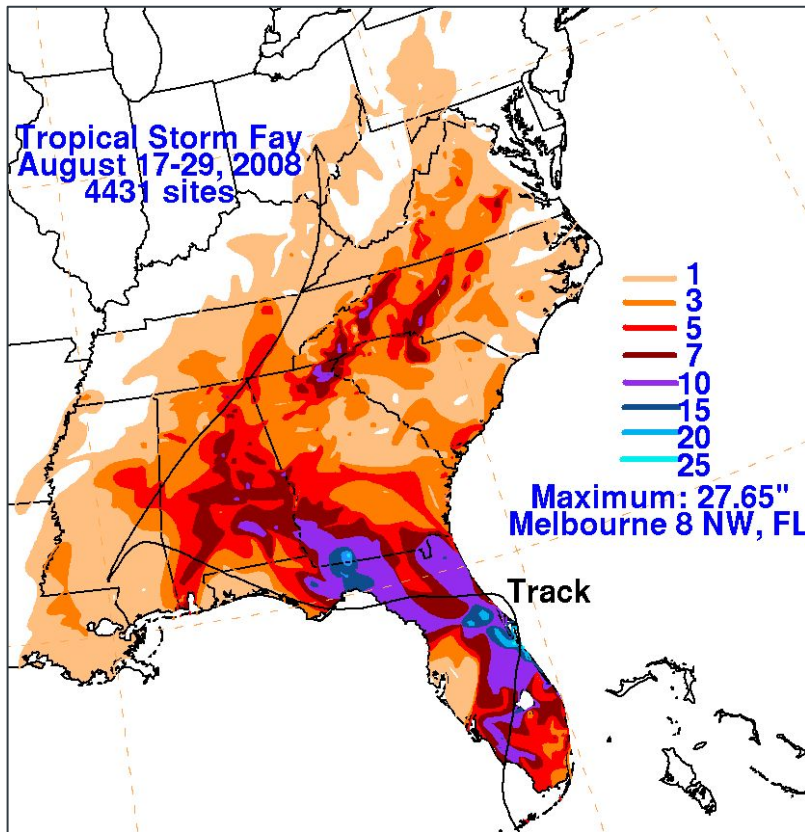


Hurricane Ian: Wind & Rainfall Impacts



Fay, Irma, & Ian: Rainfall Impacts

When It Comes to Flooding, The Category Simply Doesn't Matter!



Tropical Rainfall Distribution: *Fay* - heaviest along track; *Irma* - heaviest right of track; *Ian* - heaviest left of track.

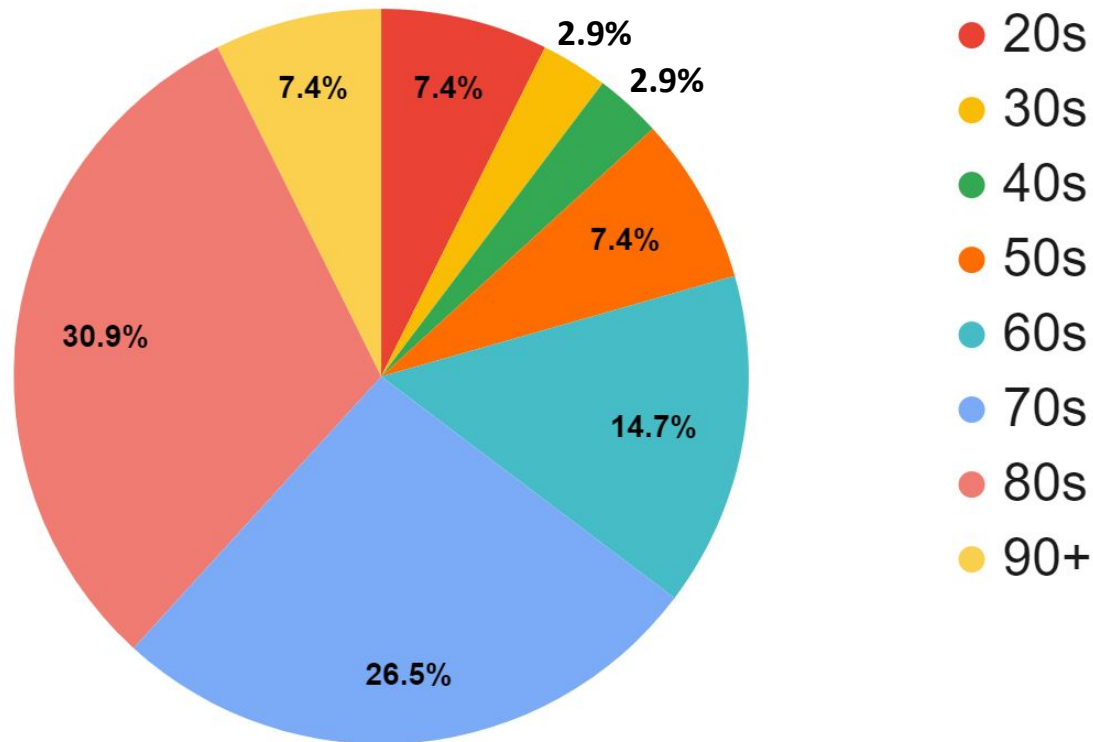
Hurricane Ian: Storm Surge



Ian Direct Fatalities

Demographics

74% of direct fatalities were 60+
52% were 70+



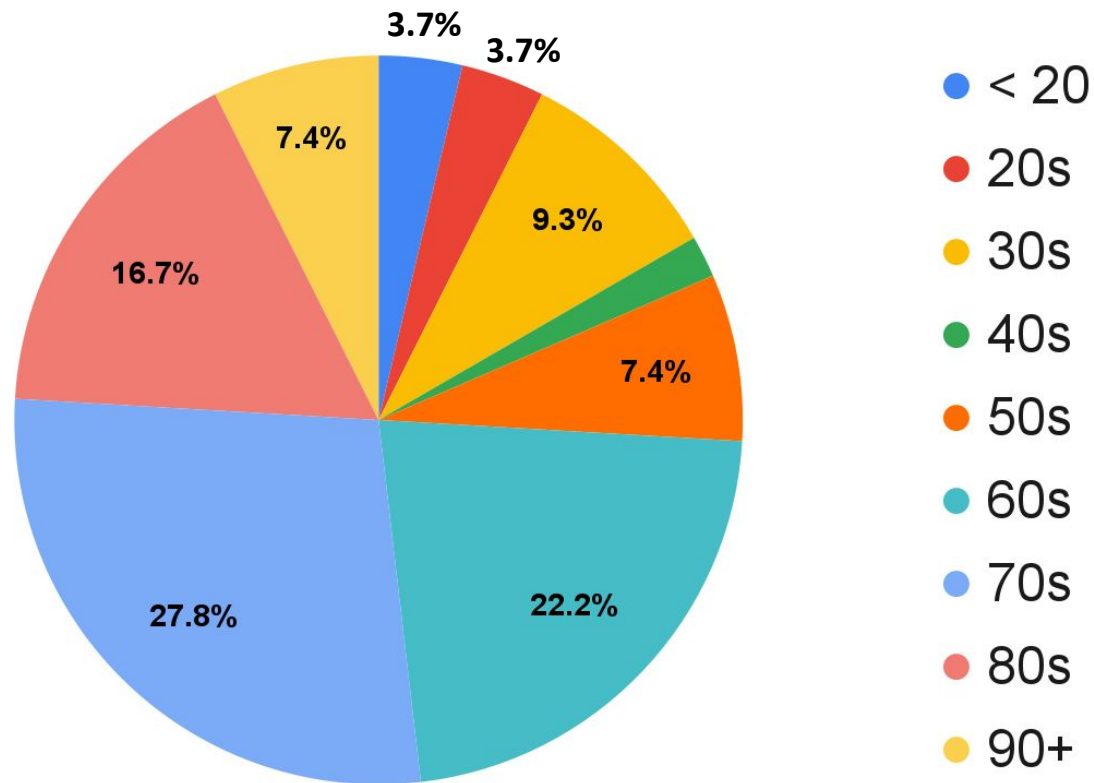
- Ian was responsible for 66 direct deaths - all in Florida
- Deadliest hurricane to affect the CONUS since Sandy (2012)
- Storm Surge: 41
- Freshwater Flooding: 12
- Marine: 8
- Wind: 4
- Surf: 1

Ian Indirect Fatalities

Demographics

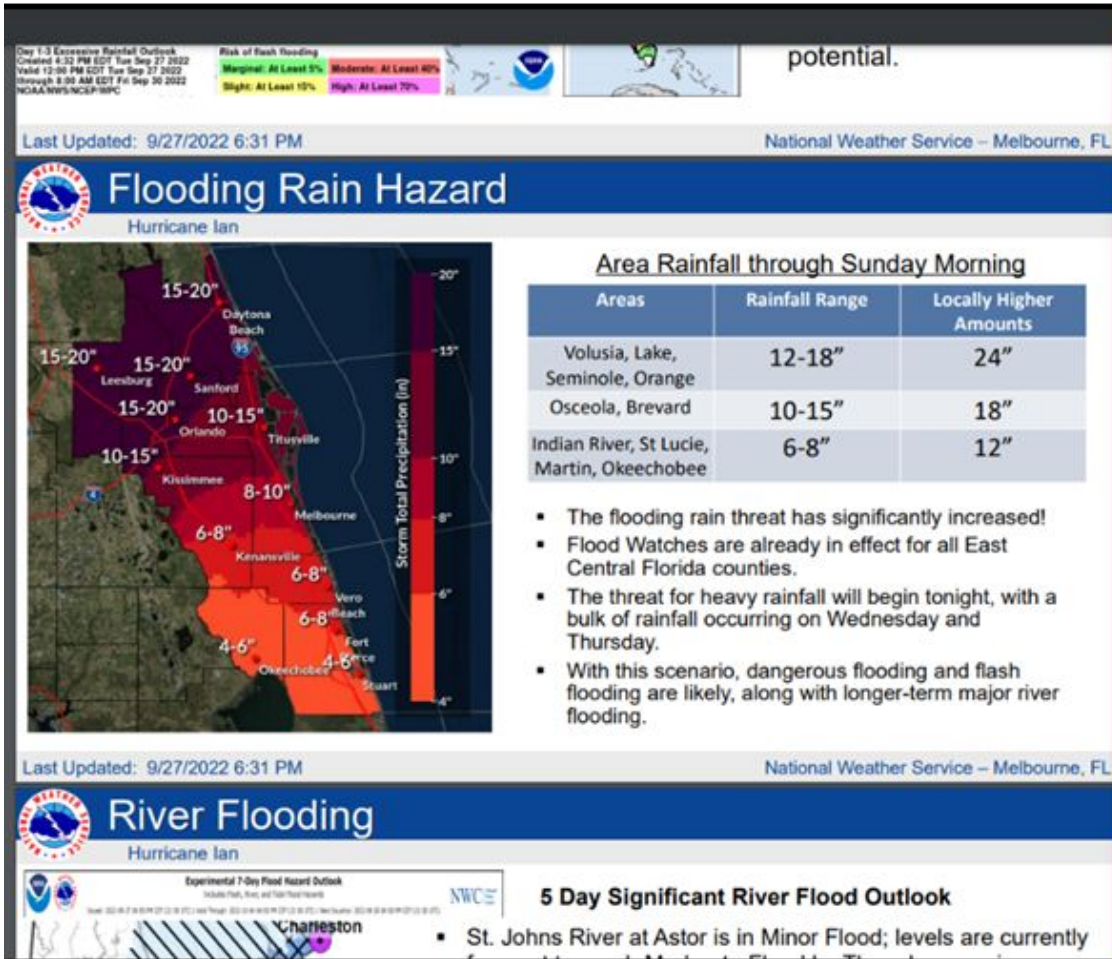
80% of indirect fatalities were 60+

65% were 70+



- Ian responsible for 90 indirect deaths
 - Florida: 84
 - North Carolina: 3
 - Virginia: 1
- Major Causes
 - Medical Care Related: 18
 - Cardiac: 16
 - Accidents: 16

An important part of **evolving IDSS** is contributing to, and participating in, emergency management exercises in pre-season. On the right is a graphic that recently challenged emergency personnel to respond to excessive flooding rain from a passing hurricane in exercise mode. Ironically, Hurricane Ian roughly played out the exercise for Lake County.

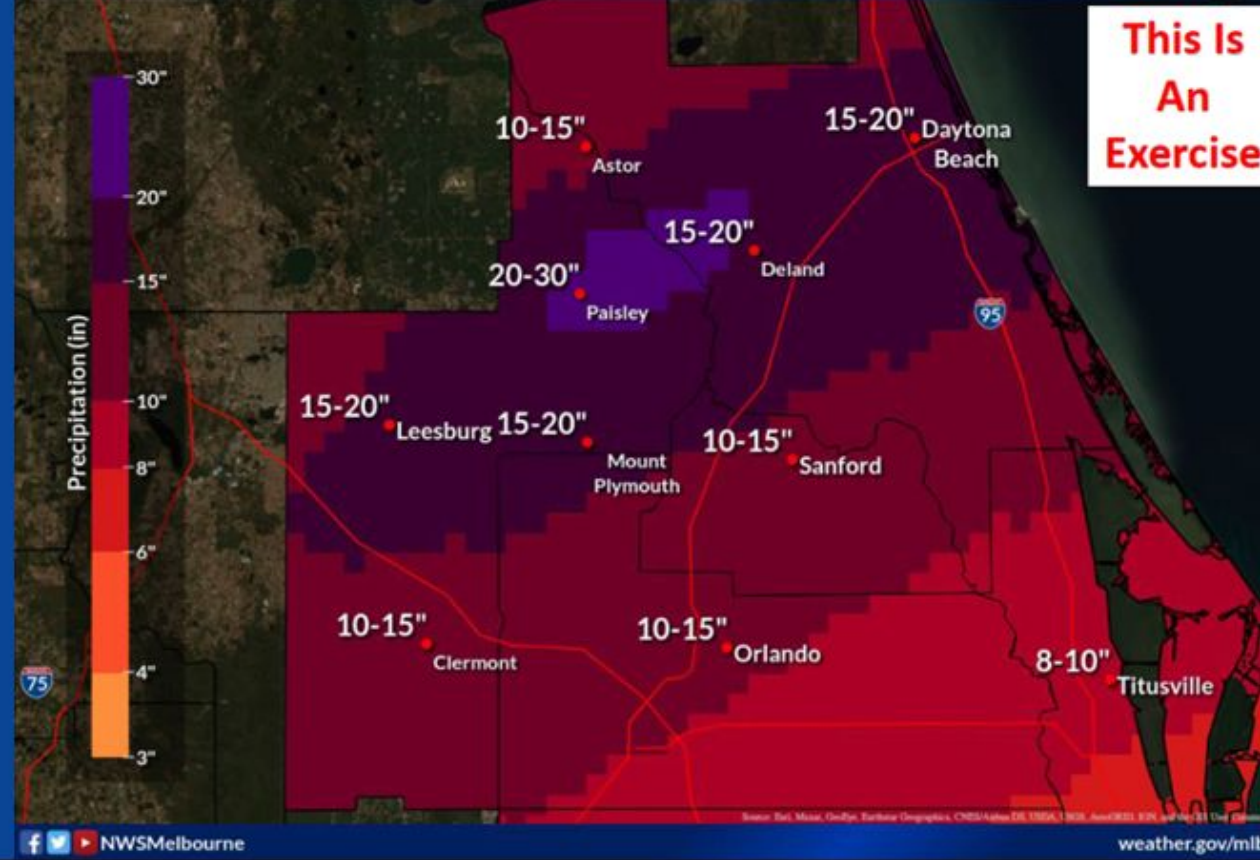


Flooding Rain Threat: Hurricane Ian (2022)

Event Total Rainfall (5-Day Total)

From 8 AM Monday May 2nd through 8 AM Friday May 6th

Weather Forecast Office
Melbourne, FL



Recent Lake County Hurricane Exercise