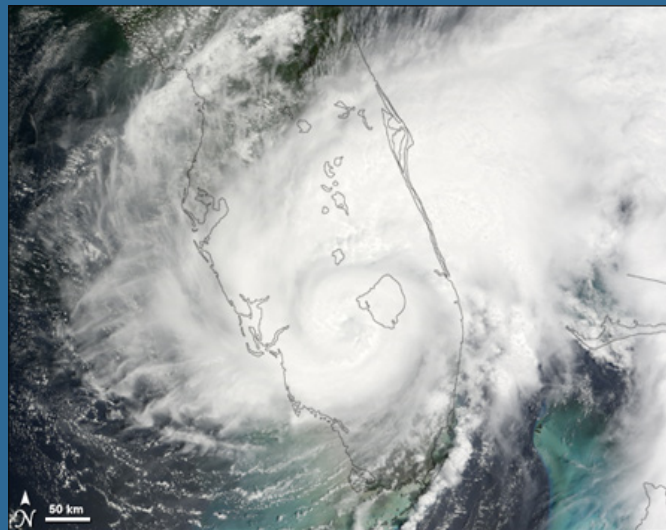


(Experimental) NWS Tropical Cyclone Impacts Graphics

Timothy Schott

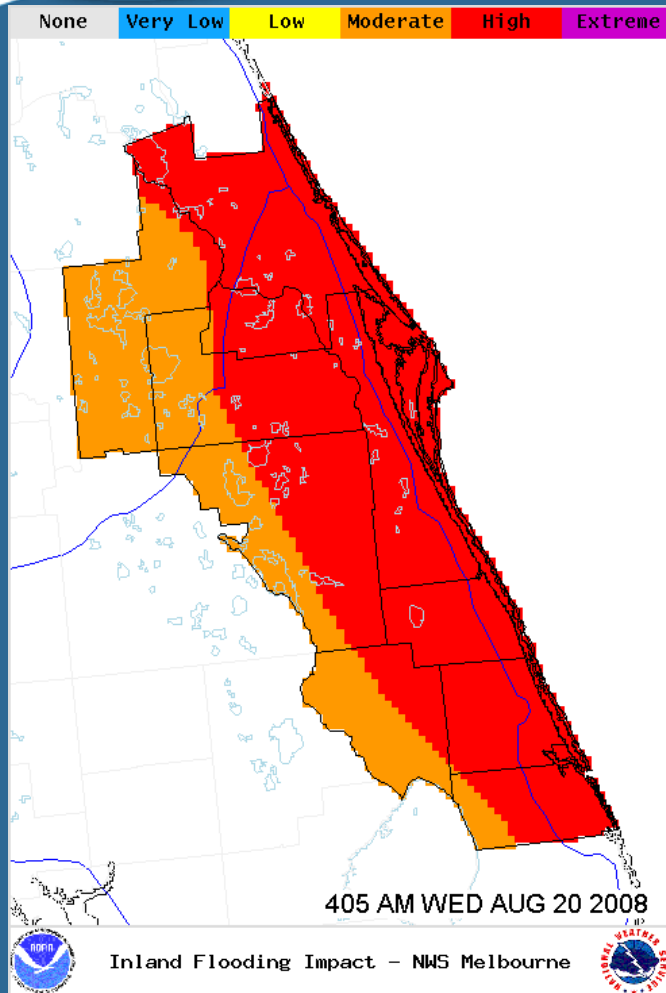
NWS Headquarters/Marine Branch/Silver Spring, MD



Goals for Impacts Graphics

- Local Weather Forecast Offices distill data and forecasts into “at-a-glance” graphics for each of the 4 primary hazards from tropical cyclones:
 - Coastal Flooding
 - Inland Flooding
 - Winds
 - Tornadoes

Inland Flooding*



Impact Levels	Description
None	<ul style="list-style-type: none"> • Threat: No discernible threat to life and property; the likelihood for higher rain totals to remain below flash flood guidance. • Minimum Action: Listen for forecast changes; review flooding safety rules. • Potential Impact: None expected; heavy rain may still occur.
Very Low	<ul style="list-style-type: none"> • Threat: A limited threat to life and property; the likelihood for higher rain totals to approach flash flood guidance. • Minimum Action: Prepare for the likelihood of damage consistent with very minor inland flooding. • Potential Impact: A very low impact to communities within the specified area. Isolated locations may experience minor inland flooding.
Low	<ul style="list-style-type: none"> • Threat: An elevated threat to life and property; the likelihood for higher rain totals to be around flash flood guidance. • Minimum Action: Prepare for the likelihood of damage consistent with minor inland flooding. • Potential Impact: A low impact to communities within the specified area. Isolated to scattered locations may experience minor inland flooding.
Moderate	<ul style="list-style-type: none"> • Threat: A significant threat to life and property; the likelihood for higher rain totals to exceed flash flood guidance. • Minimum Action: Prepare for the likelihood of damage consistent with moderate inland flooding. • Potential Impact: A moderate impact to communities within the specified area. Isolated locations may experience moderate inland flooding, among scattered locations of minor flooding.
High	<ul style="list-style-type: none"> • Threat: A critical threat to life and property; the likelihood for higher rain totals to well exceed flash flood guidance. • Minimum Action: Prepare for the likelihood of damage consistent with major inland flooding. • Potential Impact: A high impact to communities within the specified area. Isolated locations may experience major inland flooding, among scattered locations of minor to moderate inland flooding.
Extreme	<ul style="list-style-type: none"> • Threat: An extreme threat to life and property; the likelihood for higher rain totals to greatly exceed flash flood guidance. • Minimum Action: Prepare for the likelihood of damage consistent with very major inland flooding. • Potential Impact: An extreme impact to communities within the specified area. Scattered locations may experience major inland flooding, among many locations of minor to moderate inland flooding.

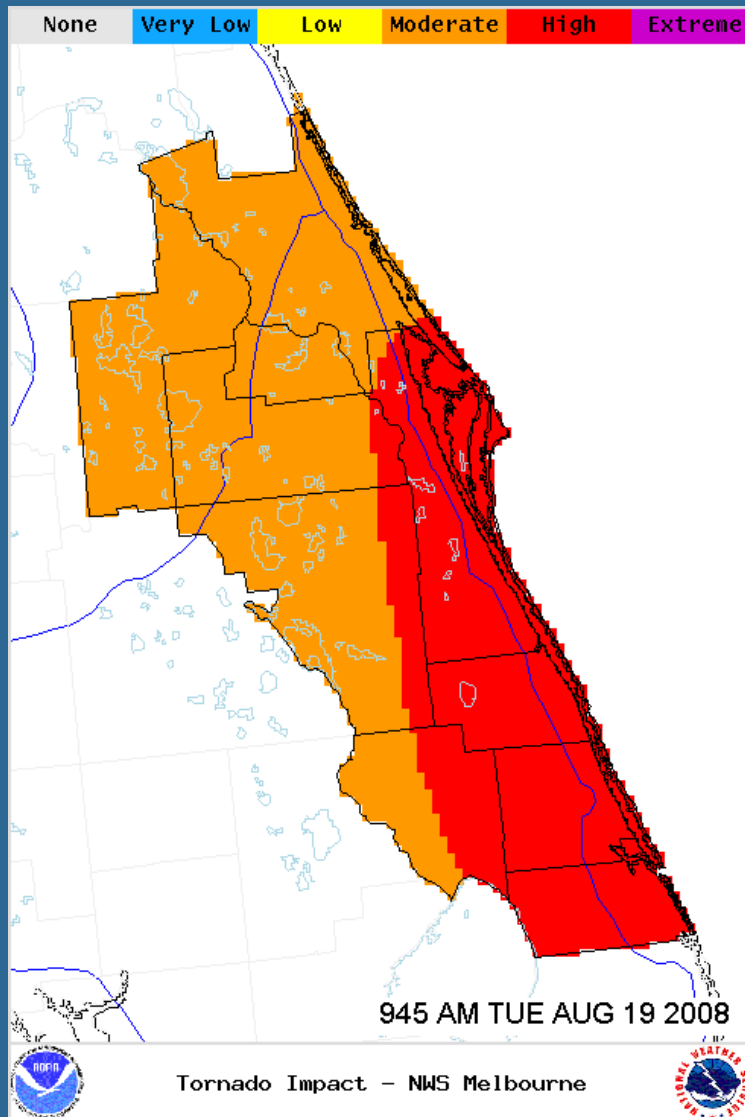
* All graphics from WFO
Melbourne, Florida

Impacts Realized: Inland Flooding



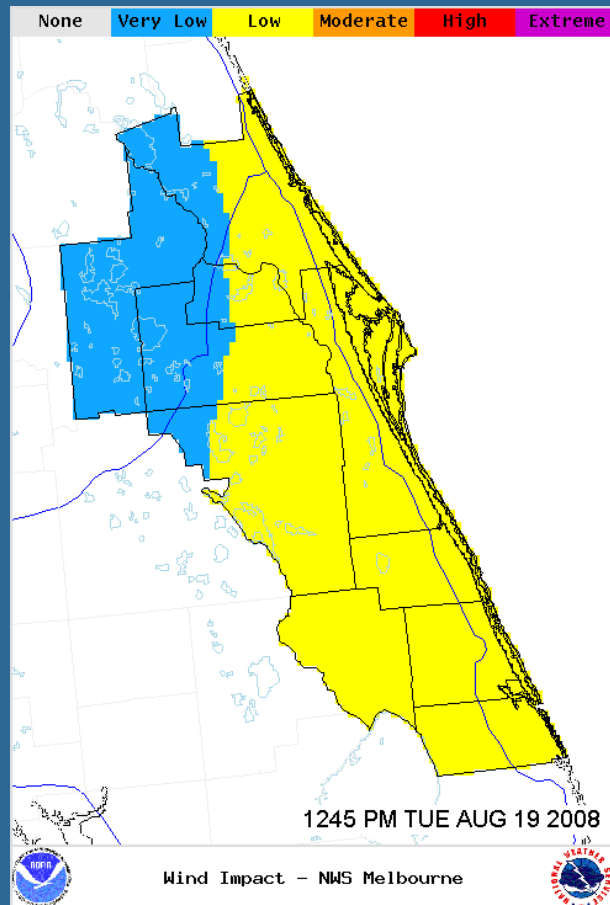
“Working Together To Save Lives”

Tornadoes



Impact Levels	Description
None	<ul style="list-style-type: none"> • Threat: No discernible threat to life and property; the probability of tornadoes is less than 2%. • Minimum Action: Listen for forecast changes; review tornado safety rules. • Potential Impact: None expected; strong wind gusts may still occur.
Very Low	<ul style="list-style-type: none"> • Threat: A limited threat to life and property; a 2 to 4% probability of tornadoes. • Minimum Action: Prepare for the likelihood of isolated tornadoes of EF-0 intensity. • Potential Impact: A very low impact to communities within the specified area. Isolated locations may experience minor tornado damage.
Low	<ul style="list-style-type: none"> • Threat: An elevated threat to life and property; a 5 to 14% probability of tornadoes. • Minimum Action: Prepare for the likelihood of isolated to scattered tornadoes of EF-0 to EF-1 intensity. • Potential Impact: A low impact to communities within the specified area. Isolated to scattered locations may experience minor to moderate tornado damage.
Moderate	<ul style="list-style-type: none"> • Threat: A significant threat to life and property; a 15 to 29% probability of tornadoes. • Minimum Action: Prepare for the likelihood of scattered tornadoes of EF-0 to EF-1 intensity. However, the likelihood of an isolated EF-2 tornado is increasing. • Potential Impact: A moderate impact to communities within the specified area. Scattered locations may experience minor to moderate tornado damage. Some tornadoes may have longer damage tracks.
High	<ul style="list-style-type: none"> • Threat: A critical threat to life and property; a 30 to 44% probability of tornadoes. • Minimum Action: Prepare for the likelihood of scattered tornadoes with isolated tornadoes of EF-2 to EF-5 intensity. • Potential Impact: A high impact to communities within the specified area. Isolated locations may experience major tornado damage, among scattered locations of minor to moderate tornado damage. Some tornadoes may have longer damage tracks.
Extreme	<ul style="list-style-type: none"> • Threat: An extreme threat to life and property; a 45% probability (or greater) of tornadoes. • Minimum Action: Prepare for the likelihood of many tornadoes (even families) with scattered tornadoes of EF-2 to EF-5 intensity. • Potential Impact: An extreme impact to communities within the specified area. Scattered locations may experience major tornado damage, among many locations of minor to moderate tornado damage. Some tornadoes may have longer damage tracks.

Wind



Impact Levels	Description
None	<ul style="list-style-type: none"> • Threat - No discernable threat to life and property; winds to remain below tropical storm-force, but windy conditions may still be present. • Minimum Action - Evaluate personal and community disaster plans and ensure seasonal preparedness activities are complete. • Potential Impact - Wind damage is not expected; impact should be negligible.
Very Low	<ul style="list-style-type: none"> • Threat - A limited threat to life and property; the likelihood for tropical storm-force winds (39 to 57 mph). • Minimum Action - Prepare for the likelihood of minor wind damage. • Potential Impact - A very low impact to communities within the specified area. Winds capable of causing damage to carports, awnings, and pool enclosures. Some damage to unanchored mobile homes. Small branches break off trees and loose objects are blown about. Winds becoming dangerous on bridges and causeways, especially for high profile vehicles. Isolated to scattered power outages, especially in areas with above ground lines.
Low	<ul style="list-style-type: none"> • Threat - An elevated threat to life and property; the likelihood for strong tropical storm-force winds (58 to 73 mph). • Minimum Action - Prepare for the likelihood of minor to locally moderate wind damage. • Potential Impact - A low impact to communities in the specified area. Winds capable of causing damage to unanchored mobile homes, porches, carports, awnings, pool enclosures and with some shingles blown from roofs. Large branches break off trees, but several shallow-rooted and diseased trees blown down. Loose objects are easily blown about and become dangerous projectiles. Winds dangerous on bridges and causeways, especially for high profile vehicles. Scattered power outages, except pockets of widespread outages in areas with above ground power lines.

2009 Effort

- All 23 coastal Weather Forecast Offices along Atlantic and Gulf coasts will issue graphics when their area is under a tropical cyclone watch and/or warning
- Products will link to WFO's companion (text) Hurricane Local Statement
- For more information (by May 1)
<http://www.weather.gov/os/tropical>