

Teaching Guide: Weather Watchers



Thank you for choosing our Weather Watchers program! During this program students join our Weather Watchers team where they consult on weather related issues. They work in teams to analyze data and make safety predictions based on past hurricanes in South Carolina. This fun and fast paced weather VFT is sure to be a favorite among students.

Pre Activities:

- Vocabulary to review- climate, hurricane, safety, barometric pressure
- Record weather data for your area and compare with historical data
- Weather Watchers Application

Before the Program Instructions:

- Print out copies of each storm. Each group will receive data from **one** storm. PLEASE NOTE- DO NOT pass these out until instructed to do so. Also please do not let the students see the pages.
- Each group will need copies of the Prepare sheet.

Instructions for Day of the Program:

- Arrange students in 3 groups – assign each group a storm- Please don't tell them 😊.
- Each group and student will ideally be visible from the webcam.
- Please assign a spokesperson for each group

Post Activities

- Review SC Hurricane Guide: <https://www.scmd.org/stay-informed/publications/hurricane-guide/>
- <https://www.nhc.noaa.gov/>
- Develop letter to the Mayor to include a pamphlet about safety during a hurricane.
- <http://www.weather.gov/jetstream/> (further information for teachers)
- Reflect on hurricane season- why is it June-November?
 - Observe hurricane graphics over years to see when most hurricanes hit
- **Career Connection**
 - Meteorologist
 - Storm analyst
 - Data analyst



Bonnie

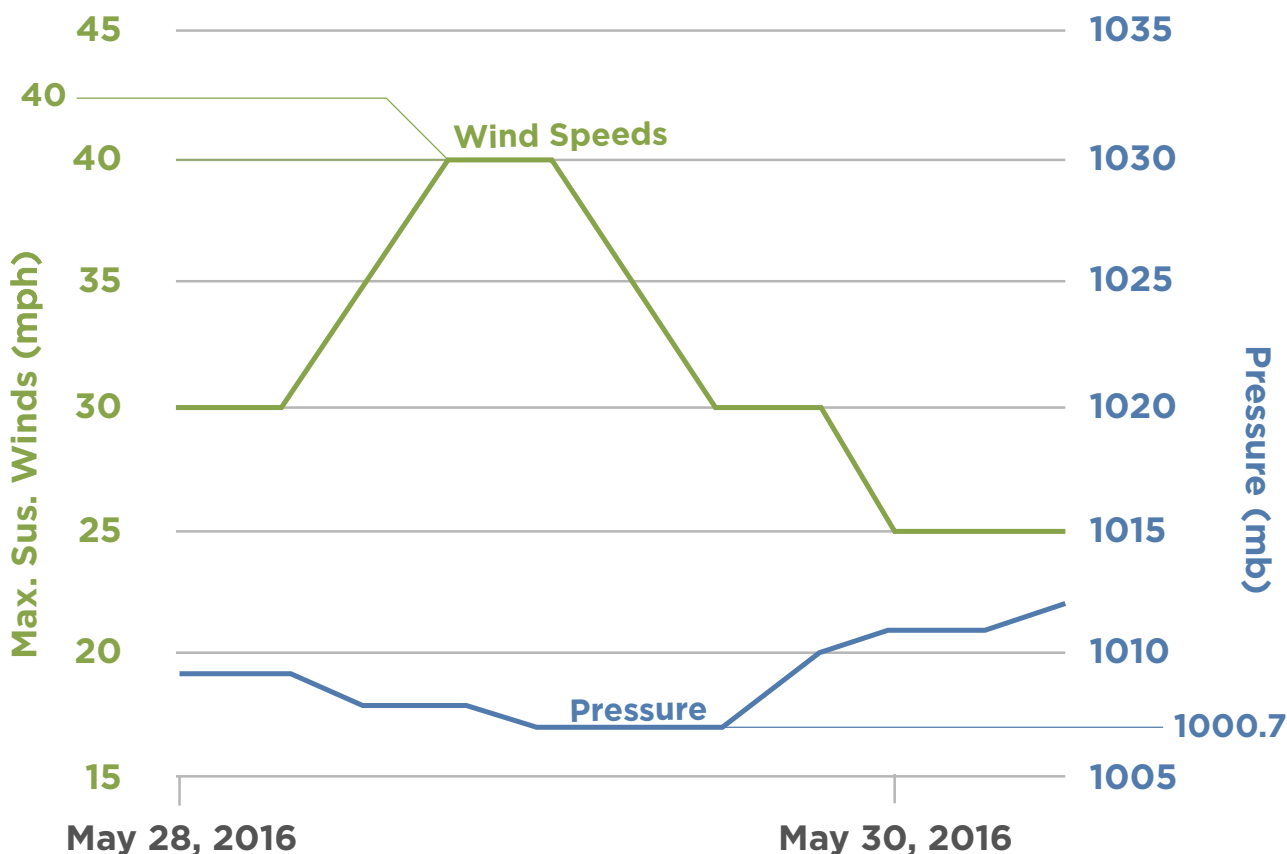
May 28-30, 2016

Total Rainfall: 4.84in

Category: _____



Type	Category	Pressure (mb)	Winds (mph)
Depression		-	<39
Tropical Storm	TS	-	39-73
Hurricane	1	>980	74-95
Hurricane	2	965-980	96-110
Hurricane	3	945-965	111-130
Hurricane	4	920-945	131-155
Hurricane	5	<920	>155



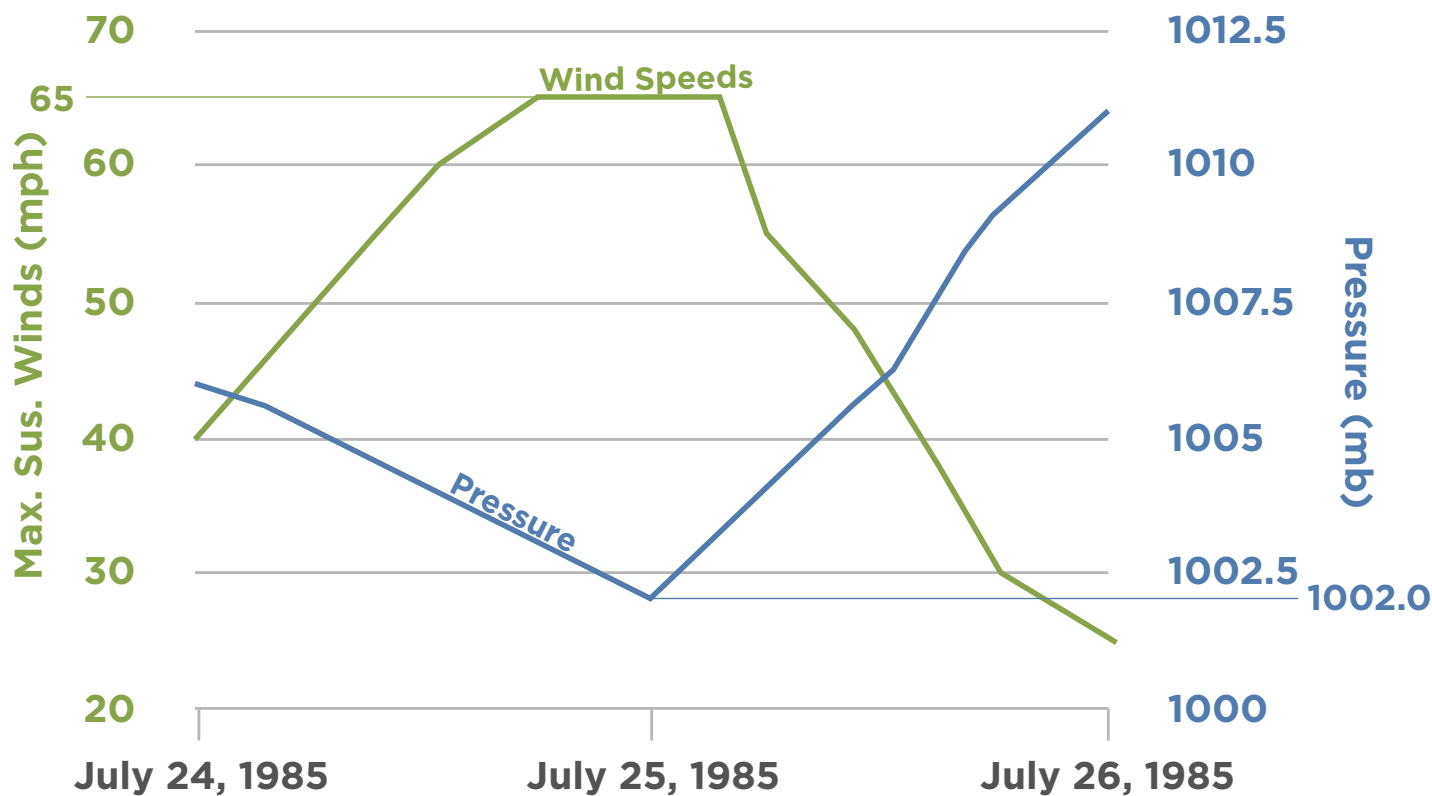


Bob

July 25-25, 1985
 Total Rainfall: 5in
 Category: _____



Type	Category	Pressure (mb)	Winds (mph)
Depression		-	<39
Tropical Storm	TS	-	39-73
Hurricane	1	>980	74-95
Hurricane	2	965-980	96-110
Hurricane	3	945-965	111-130
Hurricane	4	920-945	131-155
Hurricane	5	<920	>155





Hugo

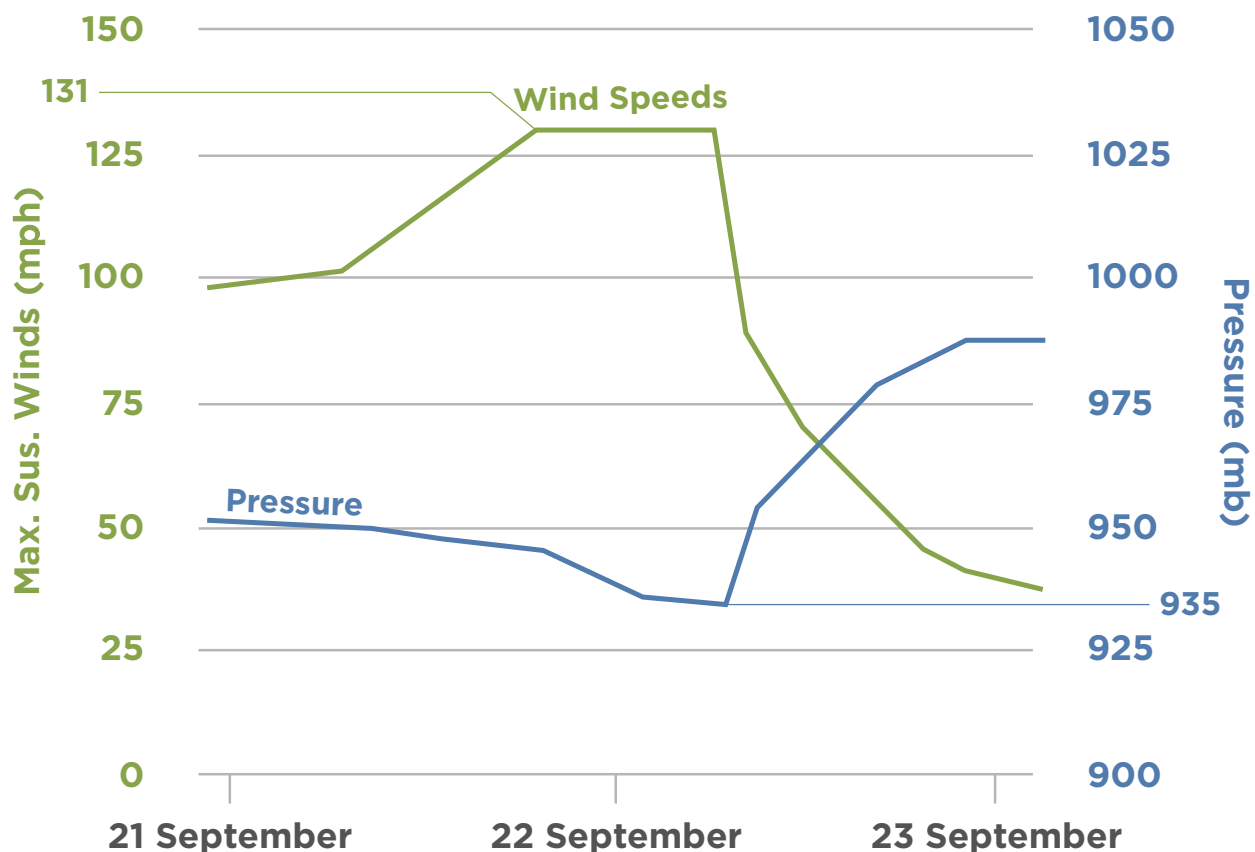
September 21-22, 1989

Total Rainfall: 8.1in

Category: _____



Type	Category	Pressure (mb)	Winds (mph)
Depression		-	<39
Tropical Storm	TS	-	39-73
Hurricane	1	>980	74-95
Hurricane	2	965-980	96-110
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Hide from the wind...

The Saffir-Simpson Hurricane Wind Scale estimates potential property damage based on a hurricane's sustained wind speed. Hurricanes reaching Category 3 and higher are considered major because of their potential for significant loss of life and property damage. Category 1 and 2 storms are still dangerous, and require preventative measures.

Category 1



Category 1: Very Dangerous Winds will Produce Some Damage

Winds: 74-95 mph

Buildings could have damage to roof, siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles can result in power outages that could last for several days.

Category 2



Category 2: Extremely Dangerous Winds will Cause Extensive Damage

Winds: 96-110 mph

Buildings could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.

Category 3



Category 3: Devastating Damage will Occur

Winds: 111-129 mph

Buildings may sustain major damage, including loss of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.

Category 4



Category 4: Catastrophic Damage

Winds: 130-156 mph

Buildings can sustain severe damage with loss of roof structure and some exterior walls. Trees will be snapped or uprooted and power poles downed, isolating residential areas.

Catastrophic Damage: Power outages will last weeks to possibly months. Most of the area may be uninhabitable for weeks or months.

Category 5



Category 5: Catastrophic Damage

Winds: More than 157 mph

A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas.

Catastrophic Damage: Power outages will last weeks to possibly months. Most of the area may be uninhabitable for weeks or months.



Weather Watchers Job Application

Thank you for your interest in Weather Watchers! We are a group of dedicated scientists working to support our clients with weather related issues. We pride ourselves on providing thorough advice to our clients by using multiple tools and previous data to support our suggestions.

Name:	
Age:	<input type="checkbox"/> Male <input type="checkbox"/> Female

What is a meteorologist?

What is your favorite type of weather?



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