

CYCLONIC WEATHER

WHAT TYPES OF WEATHER ARE CYCLONIC?



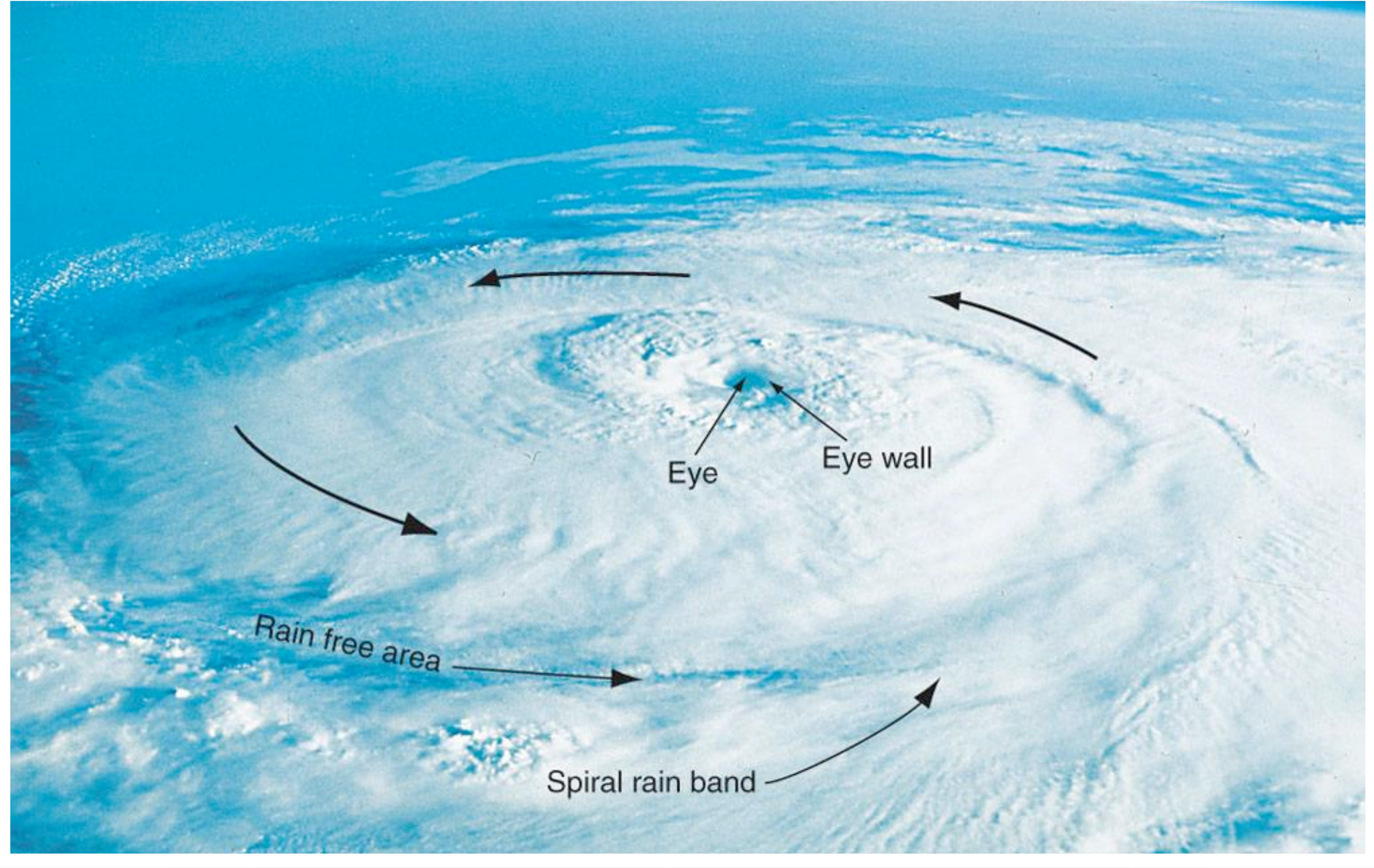
DURING A HURRICANE



CYCLONIC WEATHER

- HURRICANE - LOW PRESSURE TROPICAL STORM THAT STARTS IN THE WESTERN ATLANTIC AND REACHES WINDS ABOVE 74 MPH





HURRICANE TERMINOLOGY

CYCLONIC WEATHER

HURRICANE STATISTICS

- LARGEST OF ALL THE STORMS
- APPROXIMATELY 10 PER YEAR
- NEARLY 400 DEATHS PER YEAR



CYCLONIC WEATHER

- SAFFIR-SIMPSON SCALE - SYSTEM FOR CLASSIFYING HURRICANES

Strength	Wind Speed	Storm Surge
Category 1	74 - 95	4 - 5
Category 2	96 - 110	6 - 8
Category 3	111 - 130	9 - 12
Category 4	131 - 155	13 - 18
Category 5	> 155	> 18

CYCLONIC WEATHER

HURRICANE DANGERS

- SEVERE WINDS FROM 74 - 155 MPH



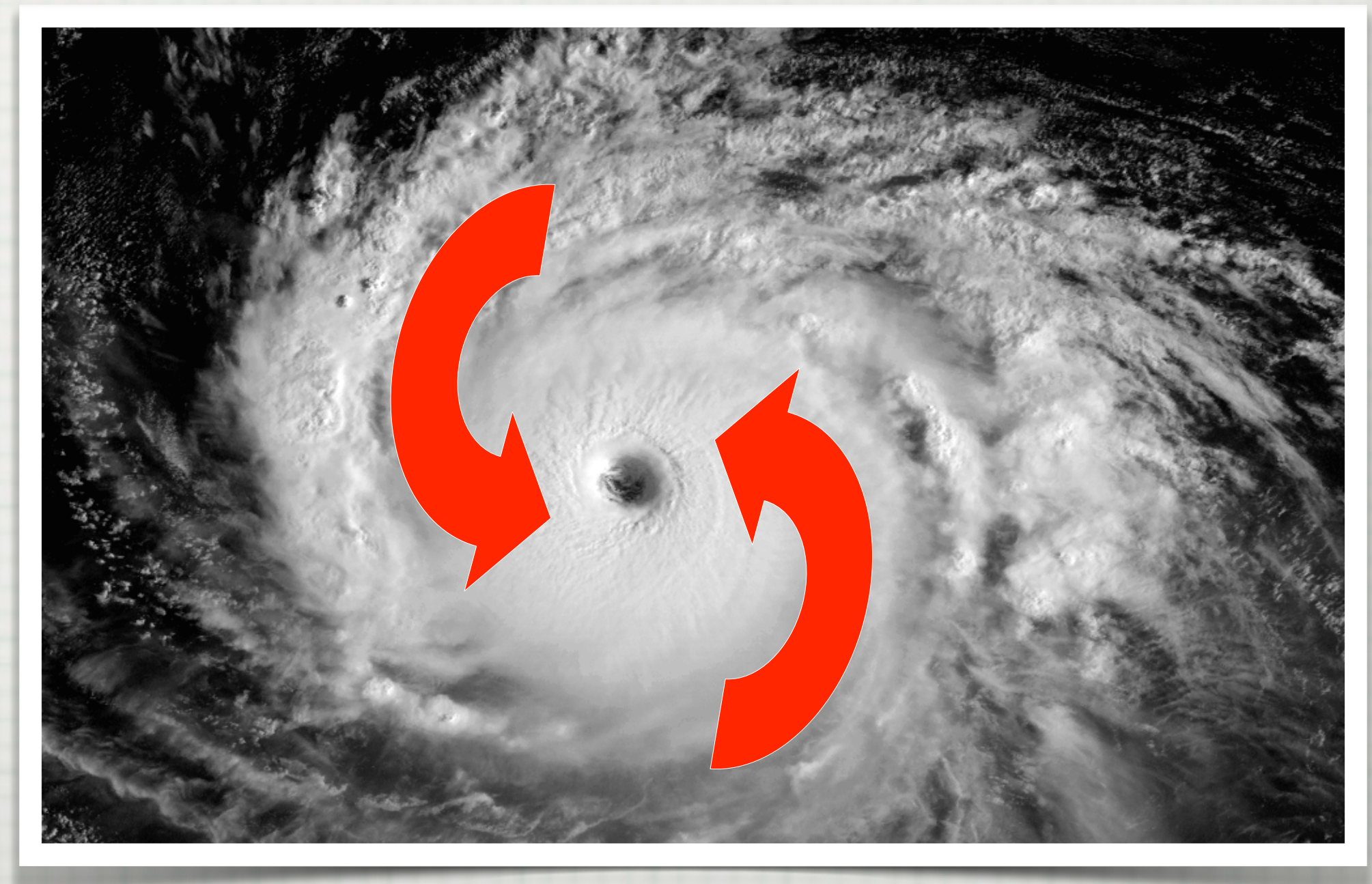


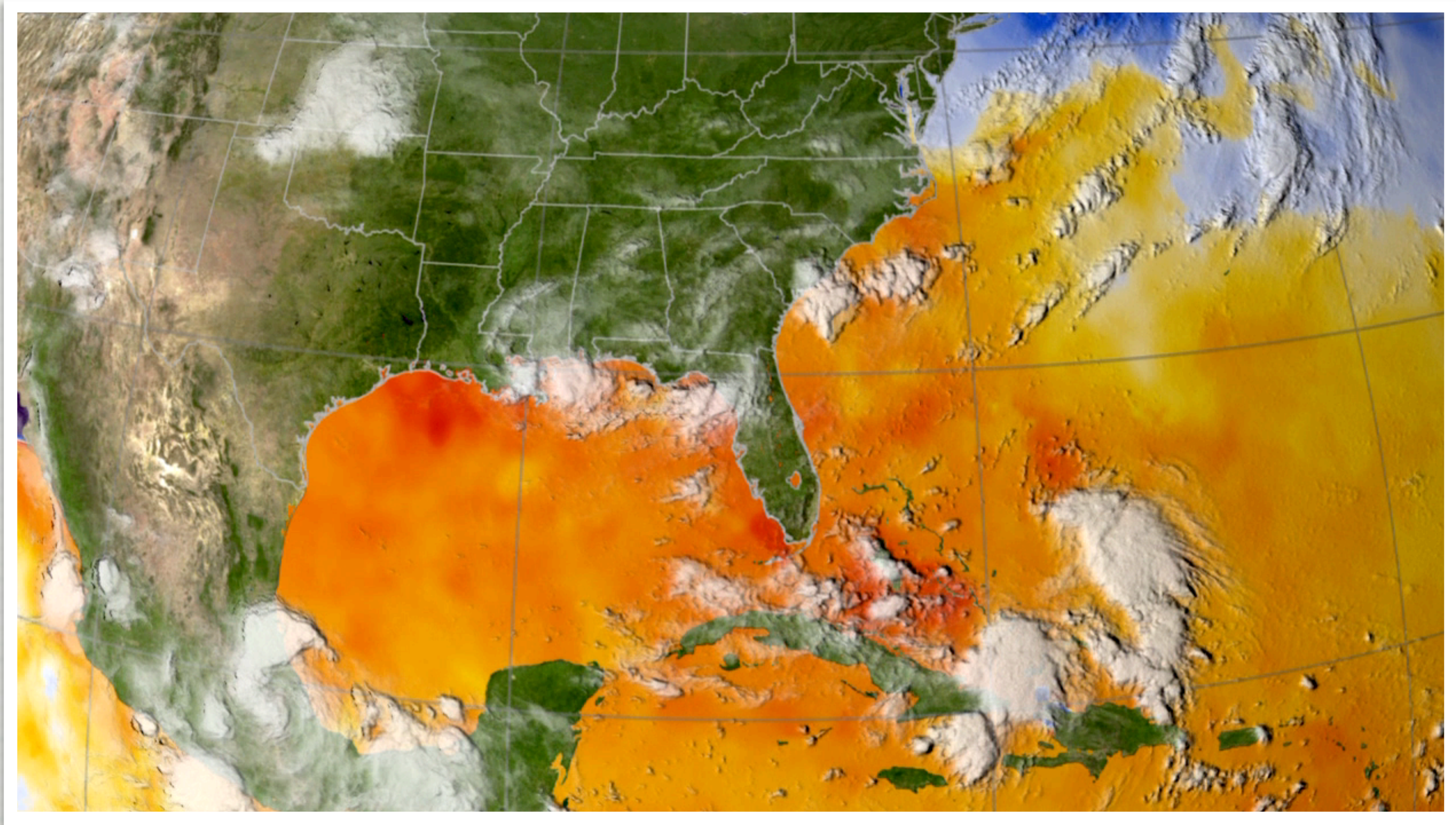
SAFFIR-SIMPSON SCALE

CYCLONIC WEATHER

HURRICANE DANGERS

- WIND DIRECTION IS COUNTERCLOCKWISE AND INWARD



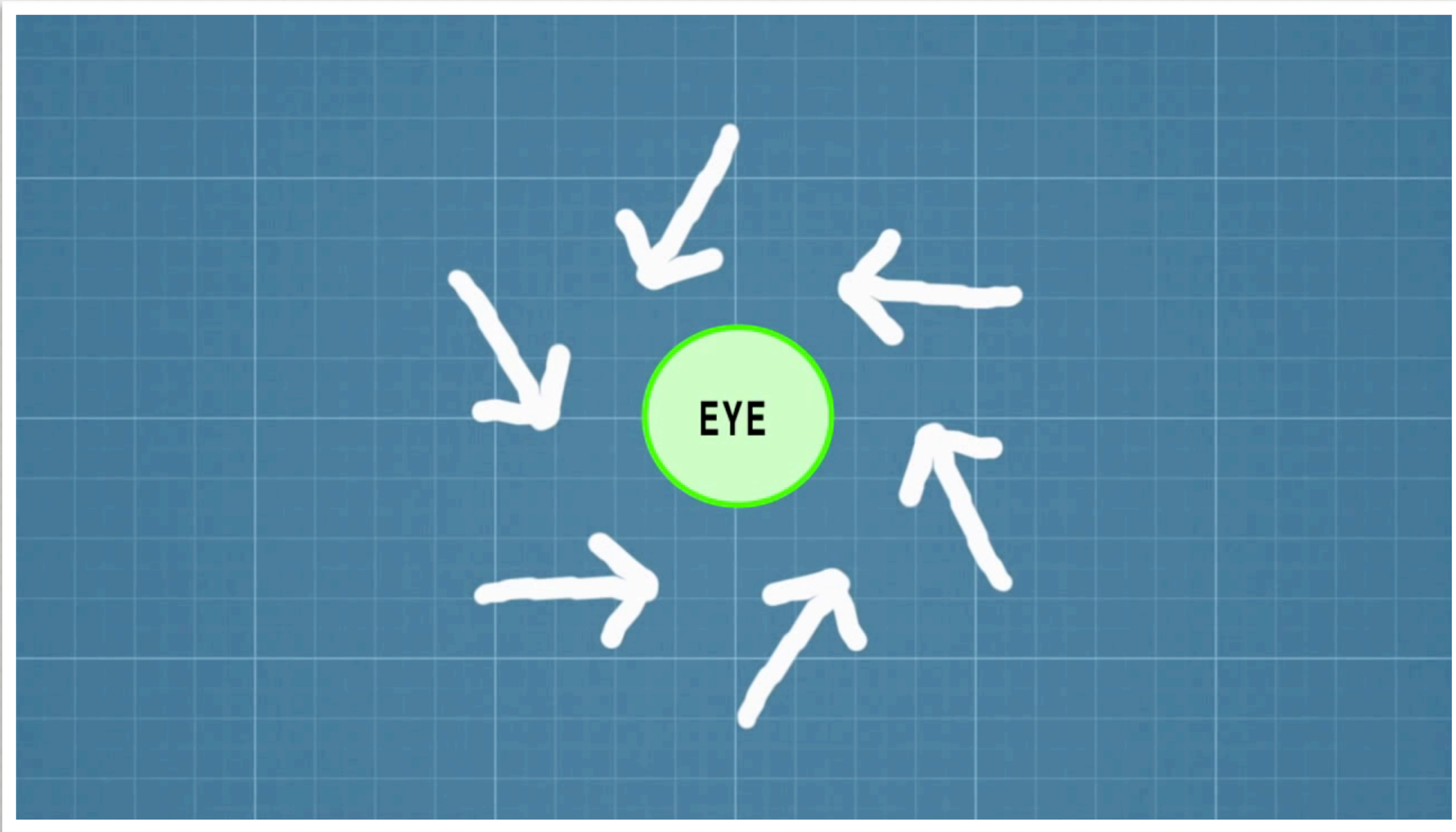


INWARD COUNTERCLOCKWISE MOTION





DRAW THE WIND PATTERNS



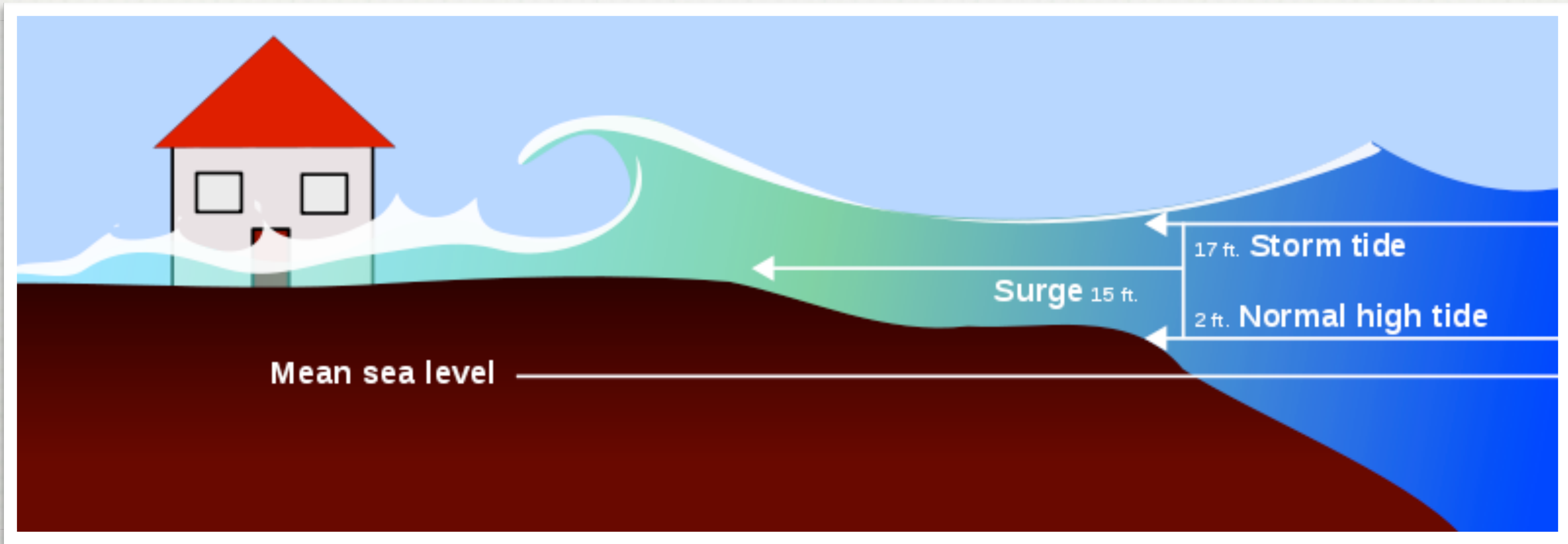
INWARD COUNTERCLOCKWISE MOTION



CYCLONIC WEATHER

HURRICANE DANGERS

- STORM SURGE - A DOME OF WATER 40 TO 60 MILES LONG THAT MOVES ONTO SHORE NEAR THE LANDFALL POINT OF THE HURRICANE



STORM SURGE



Hurricane Storm Surge

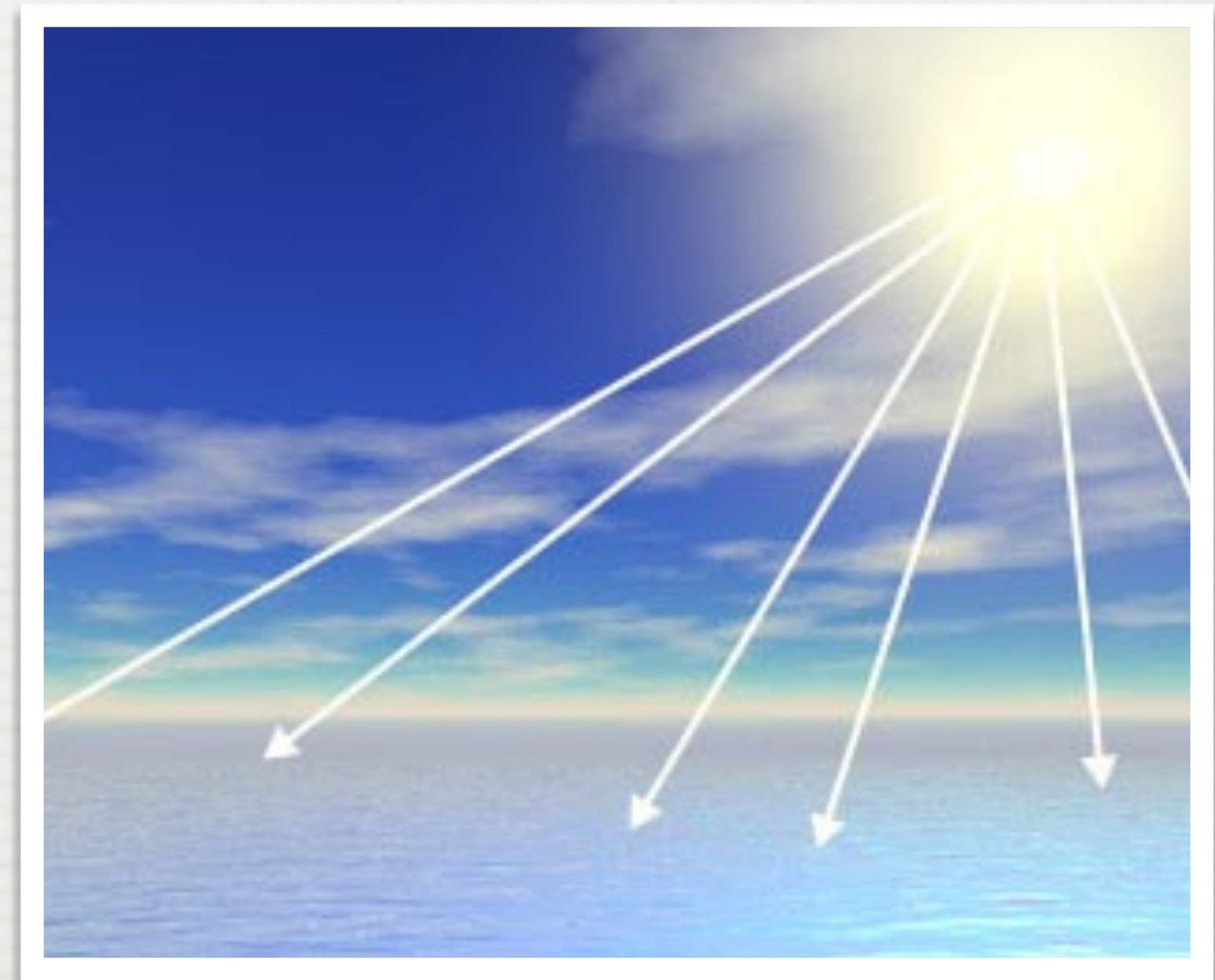
STORM SURGE



CYCLONIC WEATHER

HURRICANE FORMATION

1. THE SUN HEATS UP OCEAN WATER (ESPECIALLY NEAR THE EQUATOR)
2. BY THE END OF SUMMER, OCEAN TEMPERATURES REACH INTO THE 80'S



CYCLONIC WEATHER

HURRICANE FORMATION

3. A THUNDERSTORM MOVES WESTWARD OFF OF AFRICA AND INTO THE ATLANTIC OCEAN
4. WHEN UPPER WIND VELOCITIES ARE LOW, THUNDERSTORMS ARE GIVEN A CHANCE TO GAIN STRENGTH

CYCLONIC WEATHER

HURRICANE FORMATION

5. THE FAST RISING AIR (SUPPLIED BY THE WARM OCEAN) ALLOWS THE THUNDERSTORM TO GAIN STRENGTH
6. AS IT GROWS, EARTH'S ROTATION CAUSES IT TO SPIN COUNTERCLOCKWISE (CORIOLIS EFFECT)

CYCLONIC WEATHER

HURRICANE FORMATION

7. AS THEY BUILD A THUNDERSTORM CHANGES TO A TROPICAL DEPRESSION, THEN A TROPICAL STORM, AND FINALLY A HURRICANE



A HURRICANES AFTERMATH



CYCLONIC WEATHER

WHAT WOULD YOU DO TO PREPARE FOR A HURRICANE?

1.

2.

CYCLONIC WEATHER

- TORNADO - A ROTATING COLUMN OF AIR RANGING IN WIDTH FROM A FEW YARDS TO MORE THAN A MILE AND WHIRLING AT DESTRUCTIVELY HIGH WINDS



CYCLONIC WEATHER

TORNADO STATISTICS

- MOST VIOLENT STORMS
- APPROXIMATELY 1000 PER YEAR
- NEARLY 50 DEATHS PER YEAR



CYCLONIC WEATHER

TORNADO DANGERS

- SEVERE WINDS FROM 250 MPH AND ABOVE
- WIND DIRECTION IS COUNTERCLOCKWISE AND INWARD





DRAW THE WIND PATTERNS

H

DRAW THE WIND PATTERNS



TORNADO



CYCLONIC WEATHER

TORNADO FORMATION

1. DEVELOP FROM AN INTENSE THUNDERSTORM
2. HEATING IS VERY INTENSE AND WARM AIR RISES IN STRONG CONVECTION CURRENTS

CYCLONIC WEATHER

TORNADO FORMATION

3. THE RISING AIR CAUSES A LOW PRESSURE CENTER
4. AS AIR RUSHES INTO THE CENTER IT STARTS TO SPIN UPWARD

CYCLONIC WEATHER

WHAT WOULD YOU DO IF A TORNADO SIREN SOUNDS?

1.

2.

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