


Hurricanes

Unit 7 - 21.1

A satellite image of a hurricane, showing a distinct eye and spiral cloud bands, positioned over the Atlantic Ocean. The continent of Africa is visible on the left side of the image. The text "Hurricane Season" is overlaid in a large, white, italicized font.

***Hurricane
Season***

June 1 - November 30

Cyclones



- Large, rotating, ***low pressure*** storms formed over ***warm water***



Formation of Hurricanes

- Necessary Ingredient:
 - 1. Abundant supply of *warm ocean water*

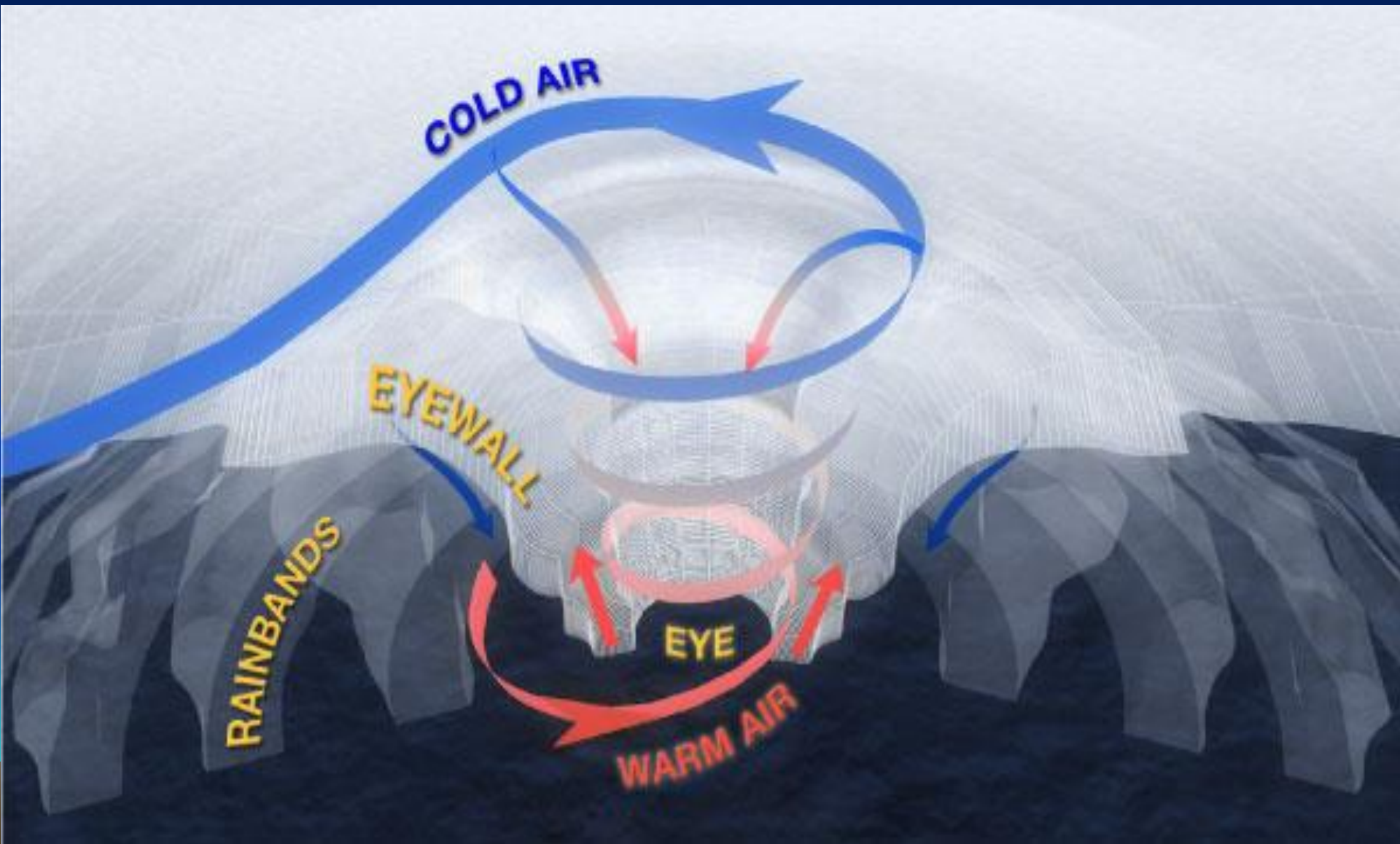


Formation of Hurricanes

- Rising Air → Creates **low pressure** at ocean surface
- Rotates **counter-clockwise** as warm air moves **inward** toward **center**



Stages of Hurricanes



1. Tropical *Depression*



- Water *disturbance* at *low pressure* center - *(20-40 mph)*



2. Tropical Storm

- Air/winds flow ***inward*** toward ***low pressure*** center
- Formal ***name*** given - ***(40-75 mph)***



3. Cyclone (Hurricane)



- Air pressure drops
– **>75 mph** winds
- Eye: Calm
- Eye Wall: **Fastest** winds
- Outer Rainband: Heavy precip

Dissipation of Hurricanes

- **How is it weakened?:**
 - 1. **Frictional** contact with **land**
 - 2. **Loss** of supply of **warm ocean water**



Classifying Hurricanes

- Saffir-Simpson Scale: *Category 1-5*
 - Wind *speed*
 - Air *pressure* in center
 - *Potential* for property damage
- *Weakens* as it comes over land:
 - Due to *friction* with coast & *lack of warm water*



Hurricane Hazards

- Storm Surge – *Wind* driven water washing over *coasts*, destroying ecosystems/property

