

Lecture 29 Tropical Cyclones

Tropical weather systems in which winds spiral into a low pressure center.

Type	Wind circulation
Tropical depression	25-39 mph (12-18 m/s)
Tropical storm	39-74 mph
Hurricane/Typhoon	>74 mph (>35 m/s)

Saffir-Simpson hurricane damage categories

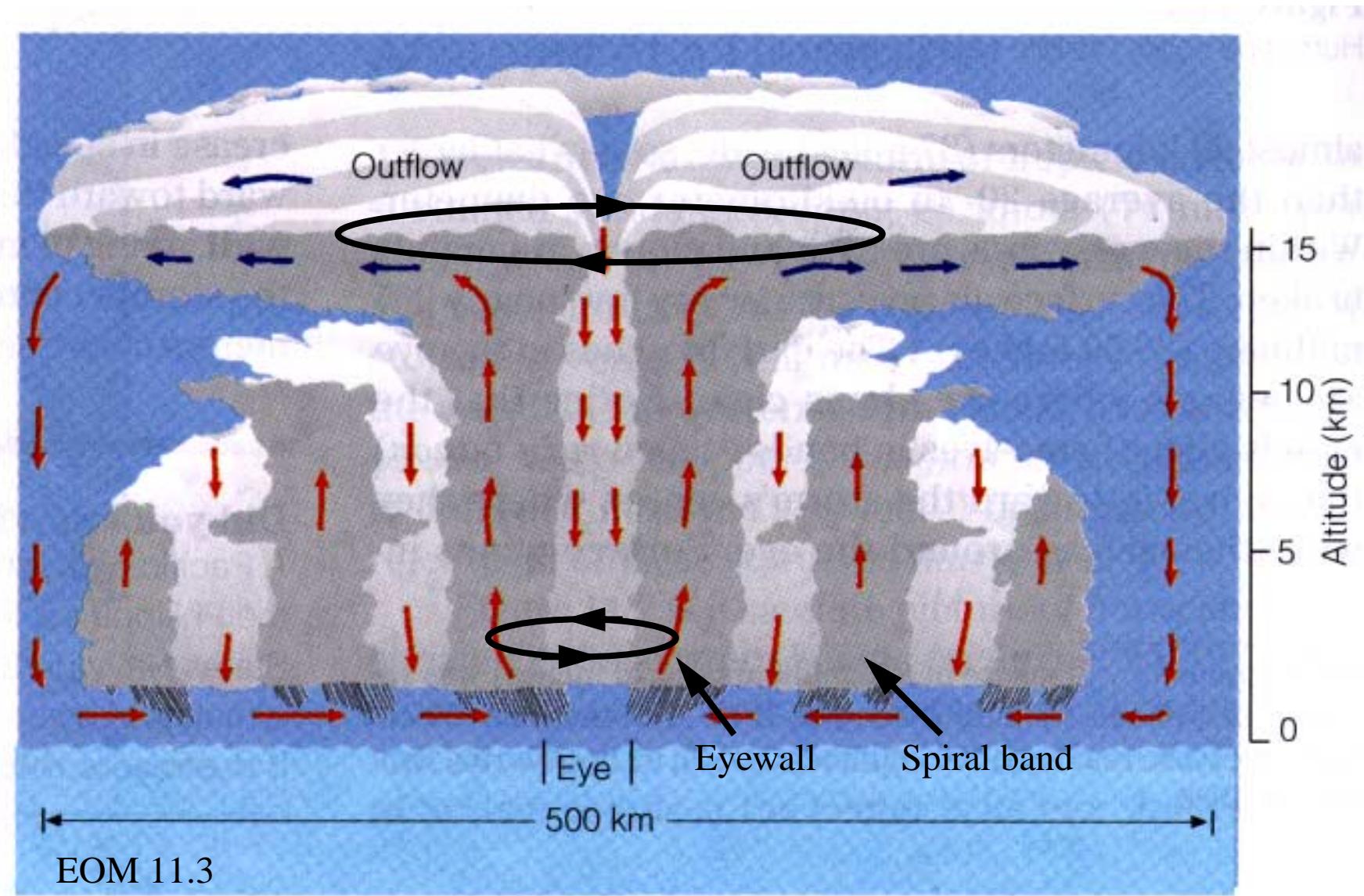
Category	Damage	Winds	Pressure	Surge
1	Minimal	74- 95 mph	> 980 mb	1-2 m
2	Moderate	96-110	965-979	2-2.5
3	Extensive	111-130	945-964	2.5-4
4	Extreme	131-155	920-944	4-5.5
5	Catastrophic	> 155	< 920	> 5.5

Lowest central pressure: Pacific: Typhoon Tip (870 mb, 1979)

 Atlantic: Hurricane Gilbert (888 mb, 1988)

Damage: Hurricane Andrew (1992): \$25 billion damage
 Bangladesh (1970): 300,000 dead.

Anatomy of a tropical cyclone



Film: *Cyclone, second segment (20 min).*