

Summary for Final Exam for Met 100 Fall 2011

Chapter 8 Atmospheric-Ocean Interactions

- Upwelling
- Southern Oscillation
- El Nino and La Nina
 - Pressure changes
 - Water changes
 - Precipitation location changes
 - Consequences
- Tropical Cyclones
 - Necessary conditions
 - Hurricane growth
 - What they are like
 - Death of a hurricane
 - Damage from hurricanes
 - Location and frequency of storms

Chapter 9 Air Masses and Fronts

- Air Masses (cP, mP, cT, cP)
- Source regions
- Weather associated with their movement (air mass modification)
- Lake-effect snow
 - How it forms
 - Conditions favorable
- Fronts (warm, cold, stationary, occluded)
 - What they are like (isobars, winds, slope, clouds, vertical cross-section)
 - Weather associated with them
 - Dry lines

Chapter 10 Extratropical Cyclones

- Norwegian Cyclone model
- Regions of cyclogenesis
- Major storm tracks
- Surface vs upper air divergence

Chapter 11 Thunderstorms and Tornadoes

- Thunderstorms
 - Where they occur
 - Initial setting
 - Development
 - Description
 - Squall Line
 - Dry Line
 - Severe Thunderstorm
- Tornadoes
 - Initial setting
 - Appearance
 - Pressure

- Wall cloud
- RadAR views (Hook echo)
- Location
- Damage
- Suction Vortices

Microbursts

Water spouts

Dust Devils

Lightning

- Electric Field

- Parts of lightning stroke

- Thunder

- Heat lightning

- Precautions

Hail