

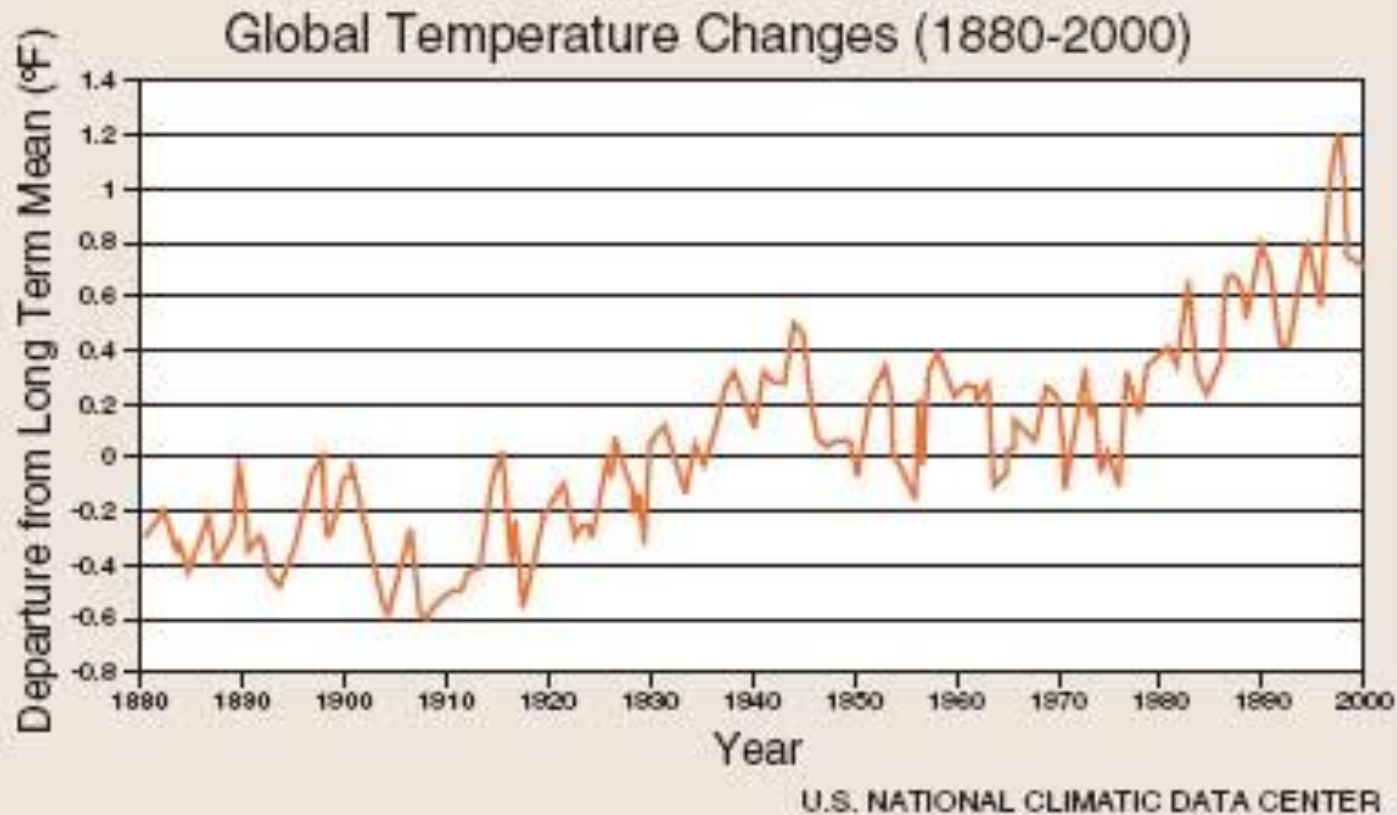


Effects of Global Climate Change

Trends from Data: Increase in Temps.

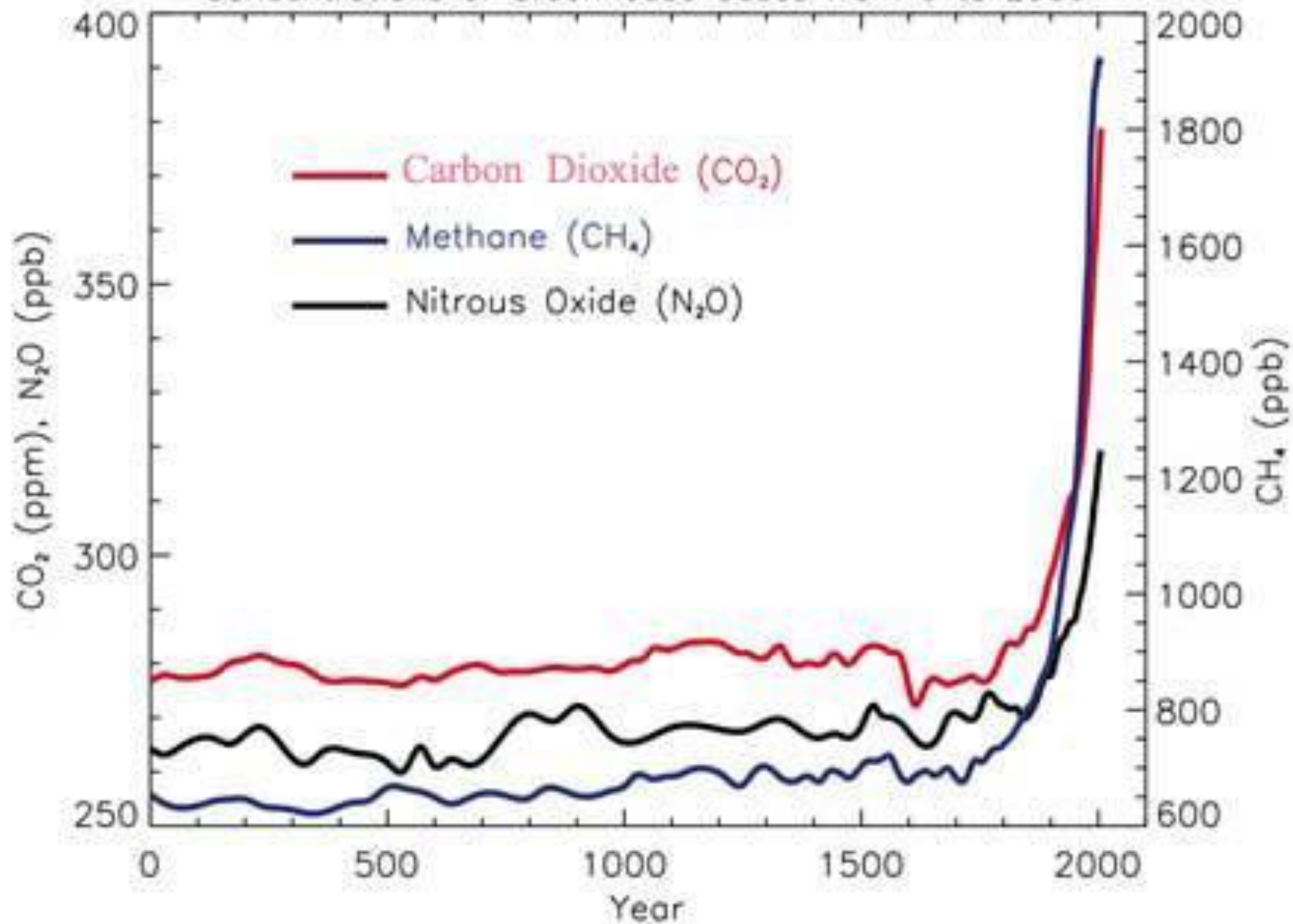
FIGURE 2

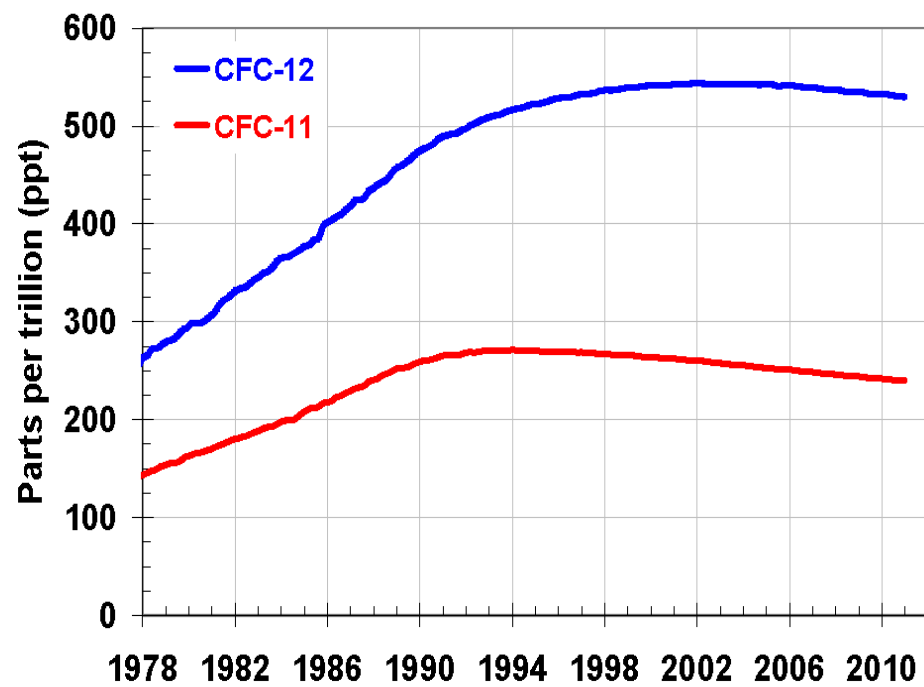
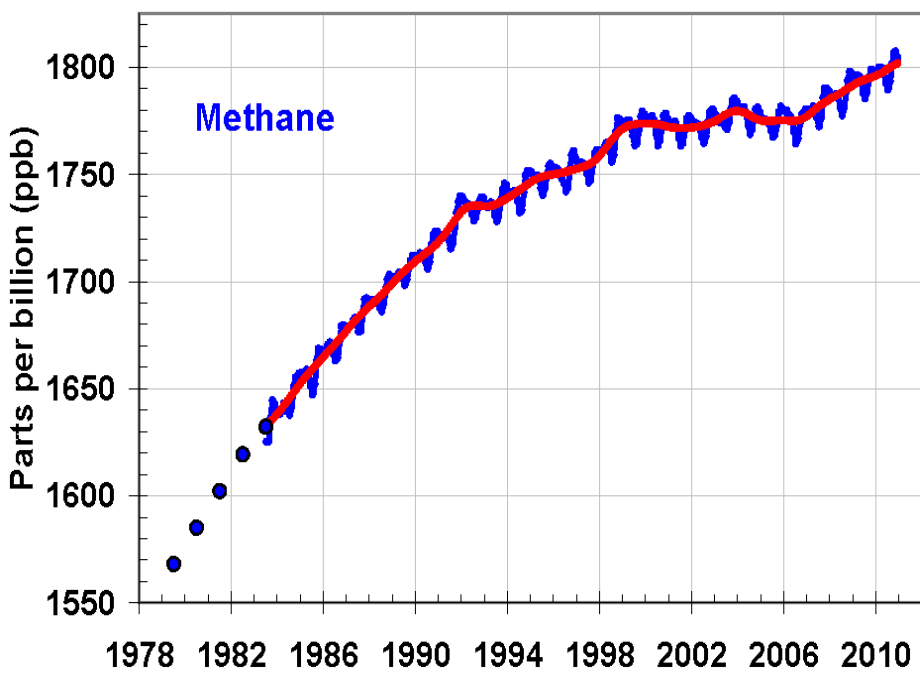
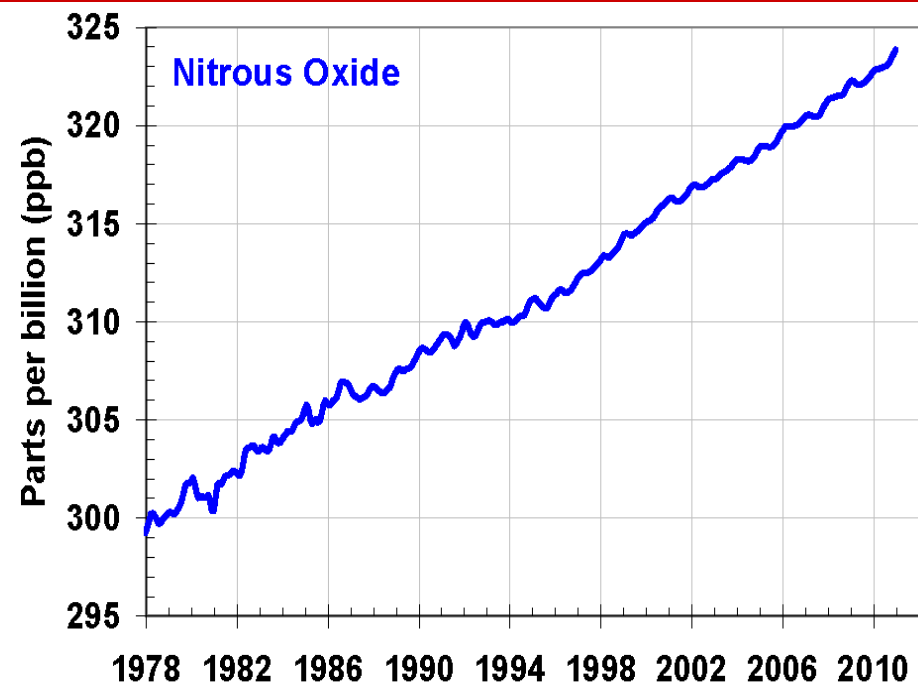
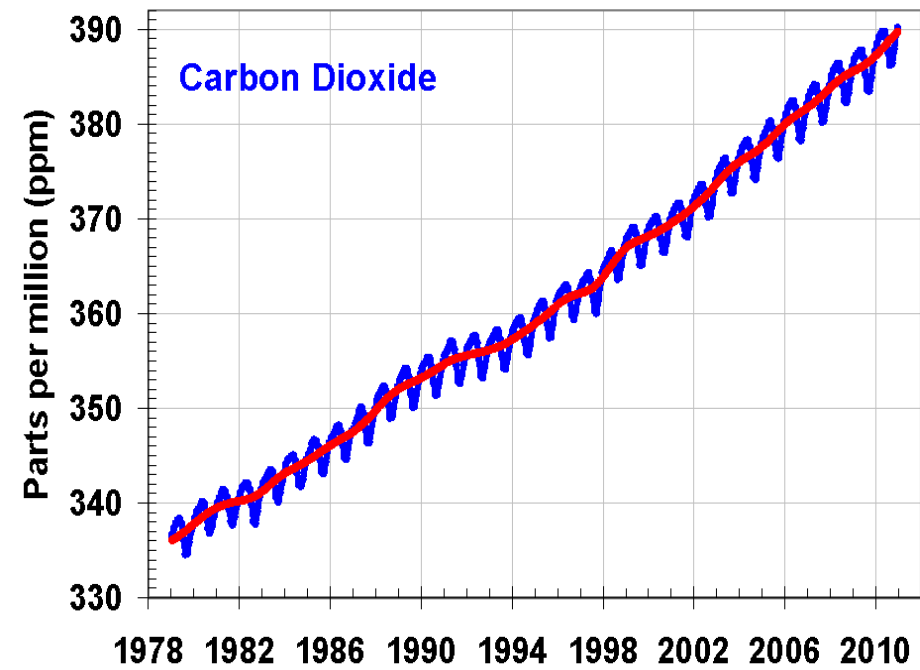
**Global temperature changes,
1880–2000**



**IPCC: 1.33
F (0.74 C)
2007**

Concentrations of Greenhouse Gases from 0 to 2005

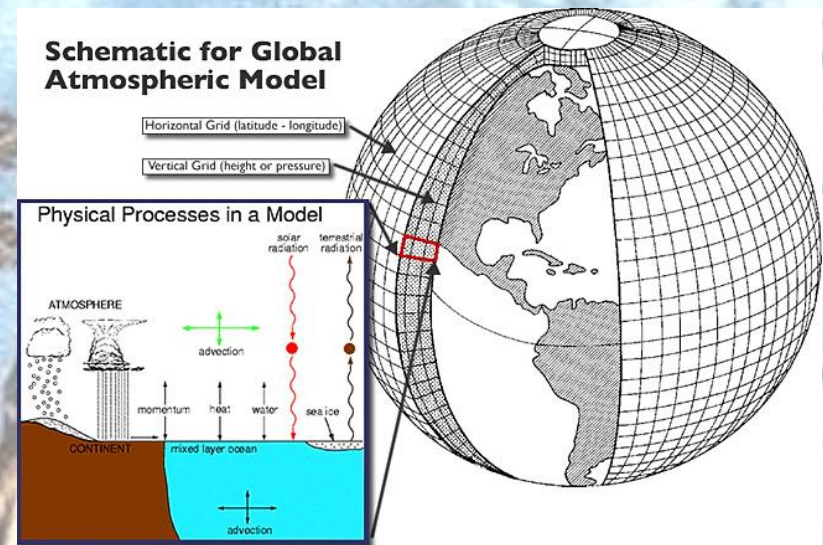




Global Warming 101 Video Clip

Case Study: GCM's

- **General Circulation Models: comp. software that uses data on water vapor, temp, greenhouse gases, circulation patterns, heat exchange, etc. in order to predict global warming.**



1) Extreme Weather



2) GLACIAL DiSappearance



3) Sea Level Rise (Thermal Expansion of Water)



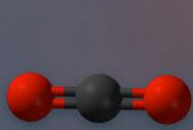


4) Ocean Acidification

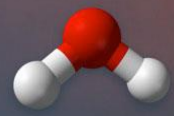
OCEAN ACIDIFICATION

HOW WILL CHANGES IN OCEAN CHEMISTRY AFFECT MARINE LIFE?

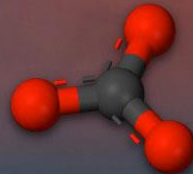
CO₂ absorbed from the atmosphere



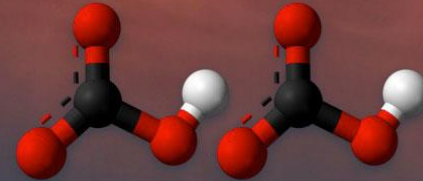
carbon dioxide



water



carbonate ion



2 bicarbonate ions

consumption of carbonate ions impedes calcification

5) Methane Release



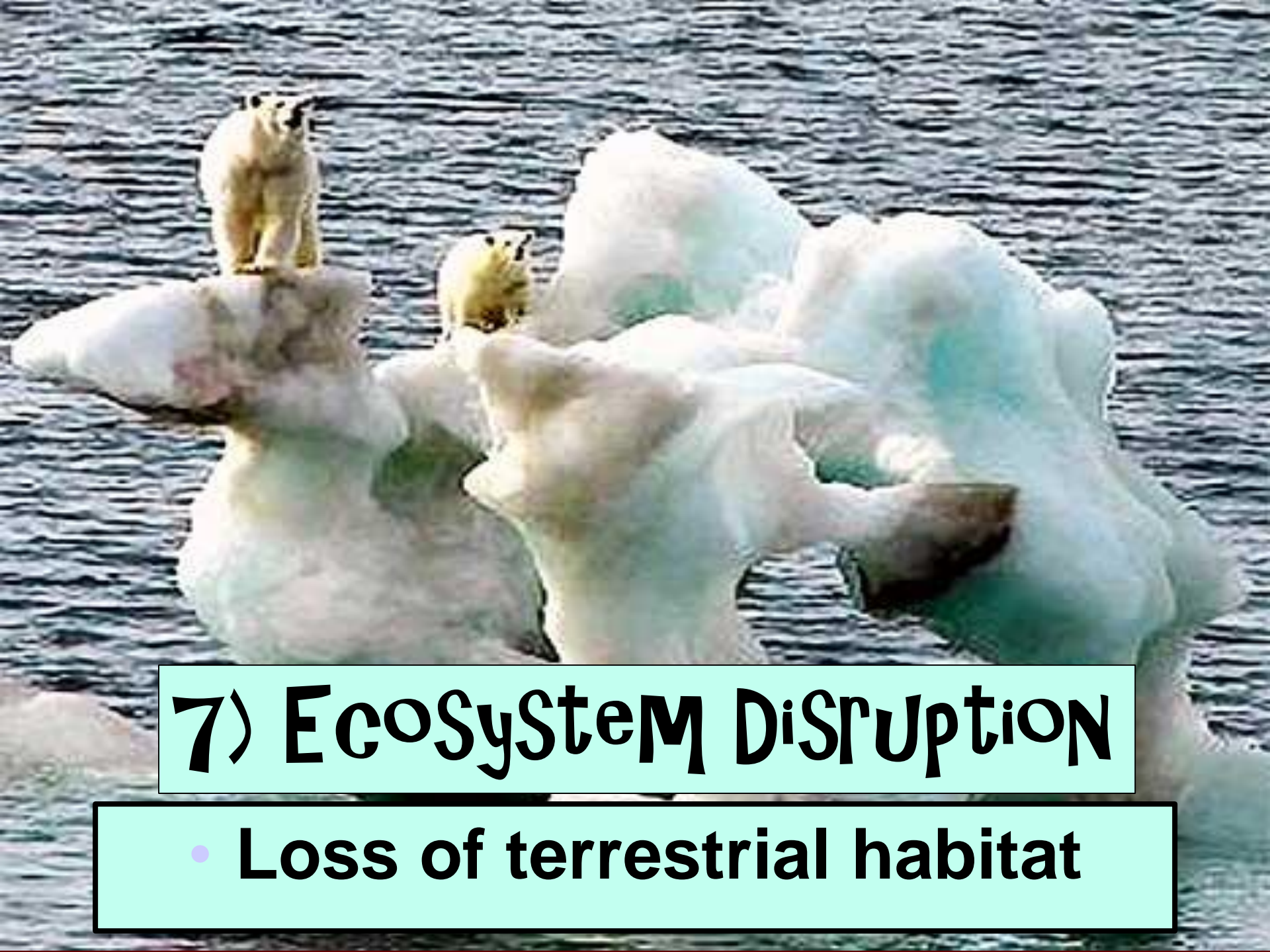
6) INCREASE IN DISEASE



7) ECoSyStEm DiSrUption

Shifts in geological ranges





7) ECoSyStEm DiSrUptiOn

- Loss of terrestrial habitat