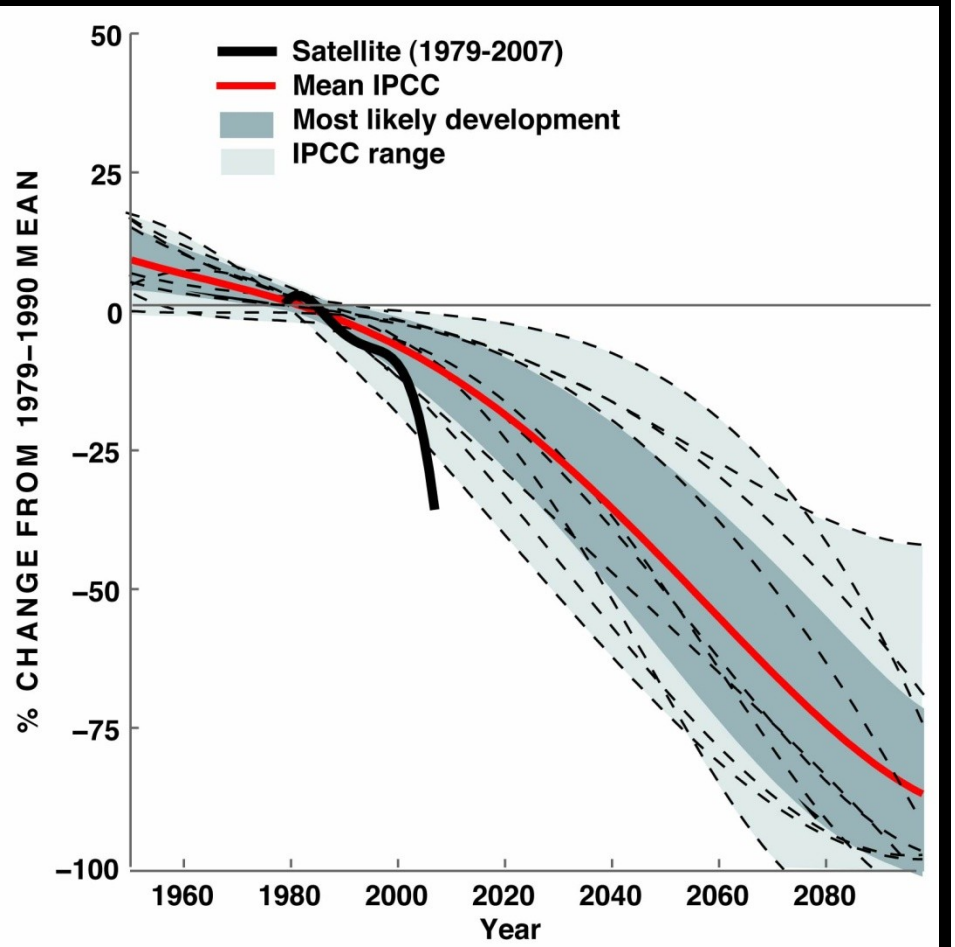
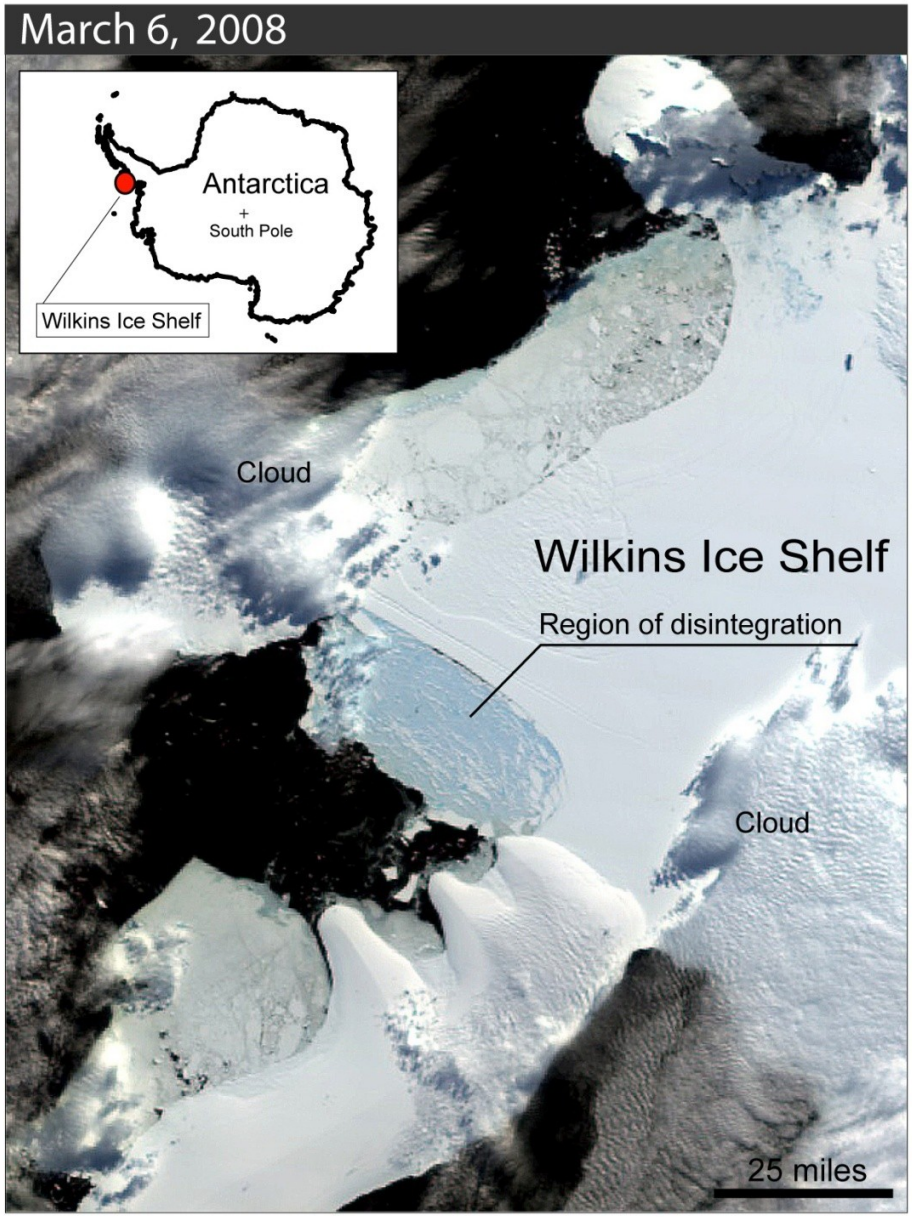
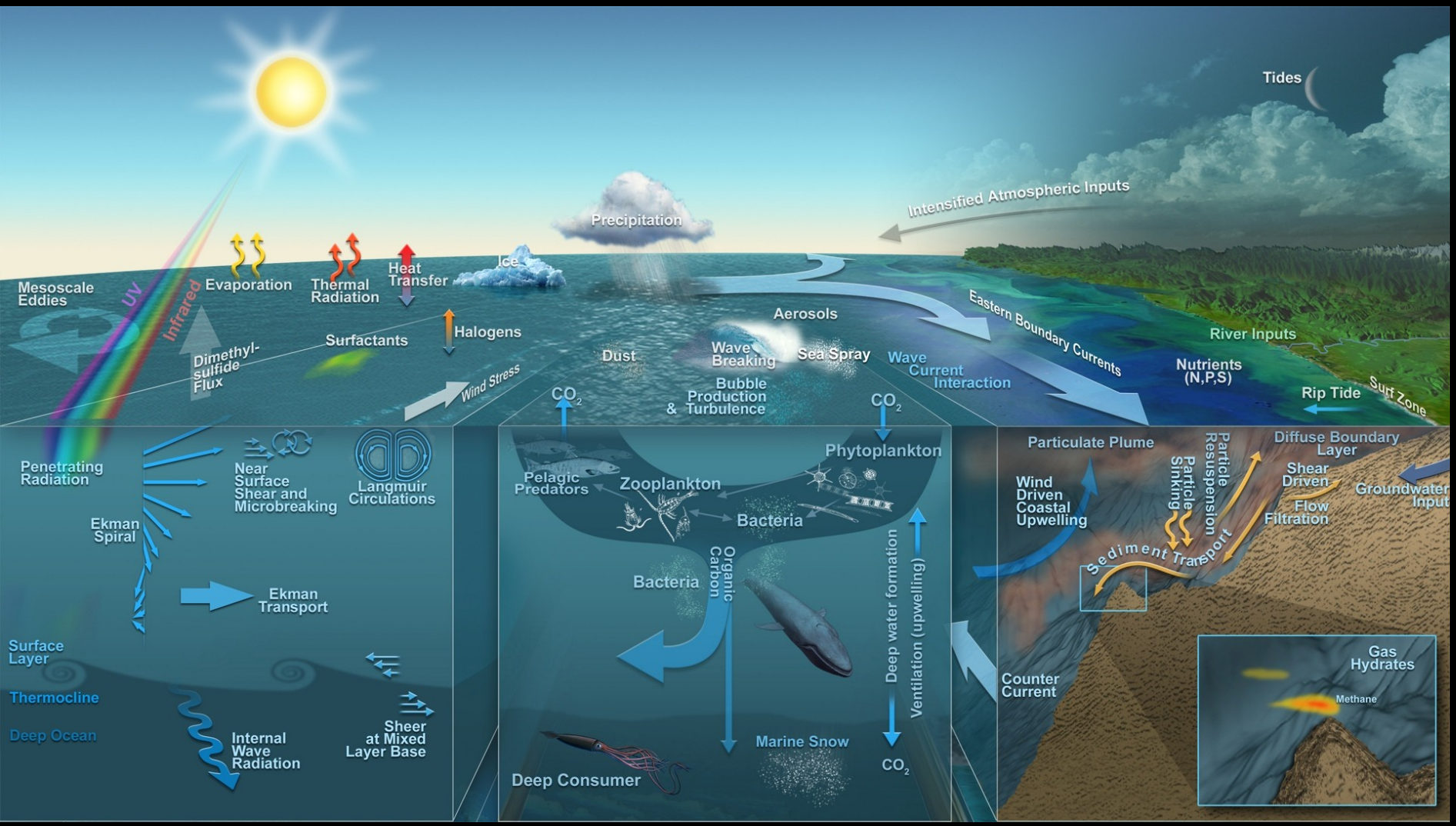


Arctic sea ice loss compared to IPCC models

Arctic ice extent loss to September 2007 compared to IPCC modelled changes using the SRES A2 CO2 scenario (IPCC high CO2 scenario). September loss data from satellite observations. Data smoothed with a 4th order polynomial to smooth out the year-to-year variability. Chart courtesy Dr Asgeir Sorteberg, Bjeknes Centre for Climate Research and University Center at Svalbard, Norway.
Date: 23 September 2007 www.carbonequity.info/images/seaice07.jpg




Tides
Intensified Atmospheric Inputs
Precipitation
Ice
Heat Transfer
Thermal Radiation
Evaporation
Mesoscale Eddies
UV
Infrared
Dimethyl-sulfide Flux
Surfactants
Halogens
Wind Stress
Aerosols
Dust
Wave Breaking
Sea Spray
Bubble Production & Turbulence
Wave Current Interaction
Eastern Boundary Currents
River Inputs
Nutrients (N,P,S)
Rip Tide
Surf Zone
CO_2
CO_2
Penetrating Radiation
Near Surface Shear and Microbreaking
Langmuir Circulations
Ekman Spiral
Ekman Transport
Surface Layer
Thermocline
Deep Ocean
Internal Wave Radiation
Sheer at Mixed Layer Base
Phytoplankton
Pelagic Predators
Zooplankton
Bacteria
Bacteria
Organic Carbon
Deep water formation
Ventilation (upwelling)
Marine Snow
Deep Consumer
CO_2
Particulate Plume
Wind Driven Coastal Upwelling
Particle Sinking
Particle Resuspension
Diffuse Boundary Layer
Shear Driven
Flow Filtration
Groundwater Input
Sediment Transport
Counter Current
Gas Hydrates
Methane

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