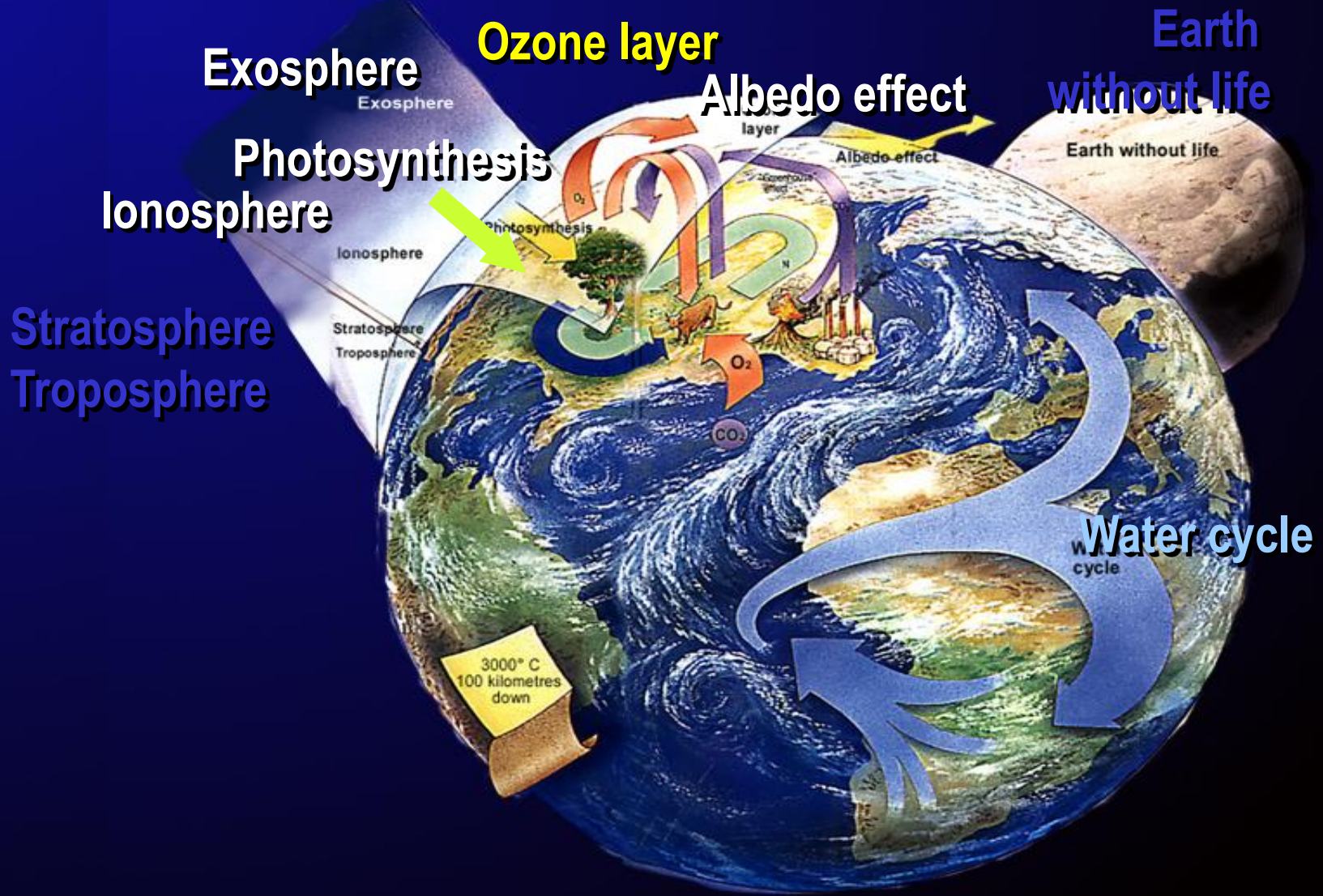
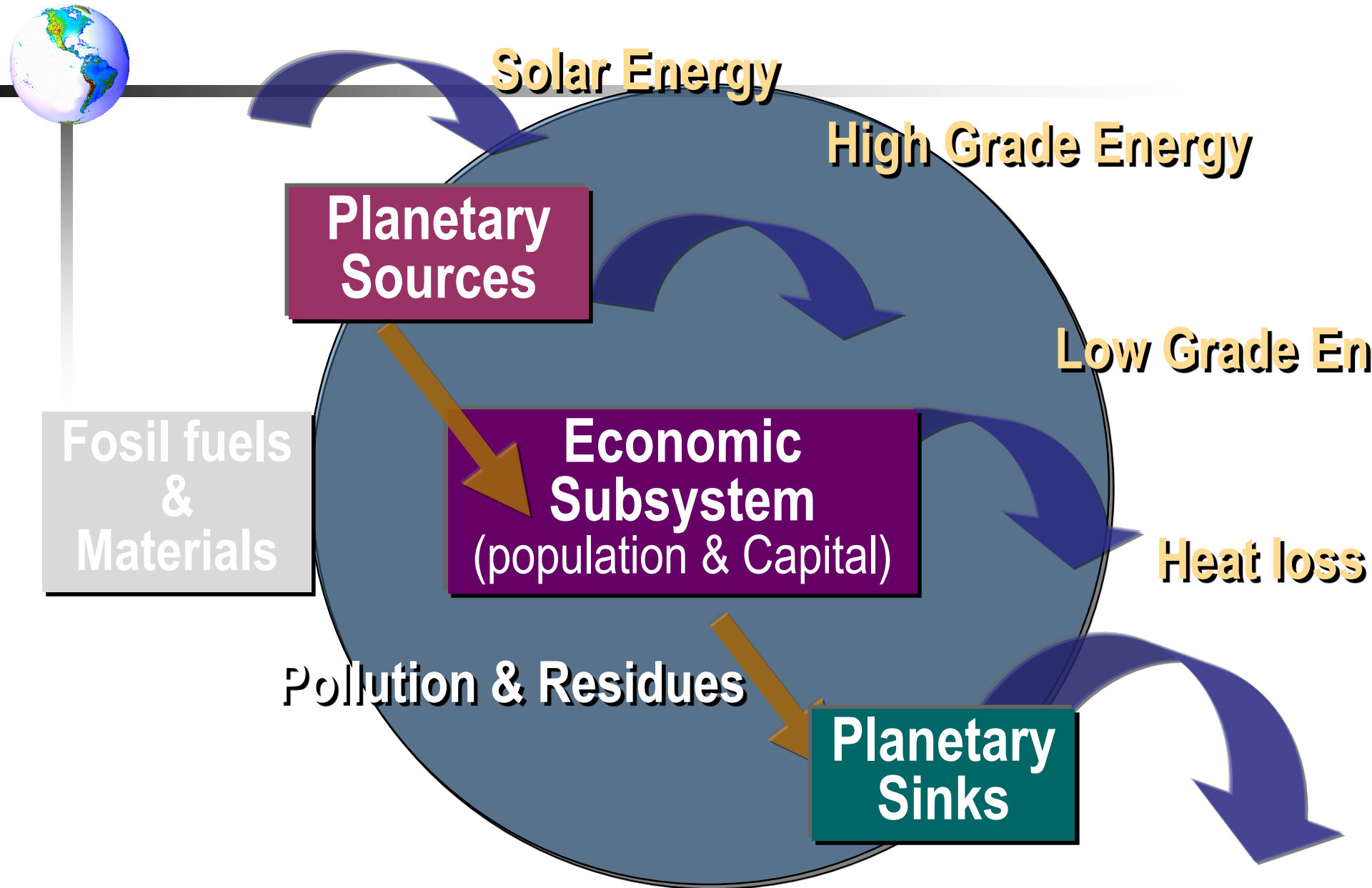


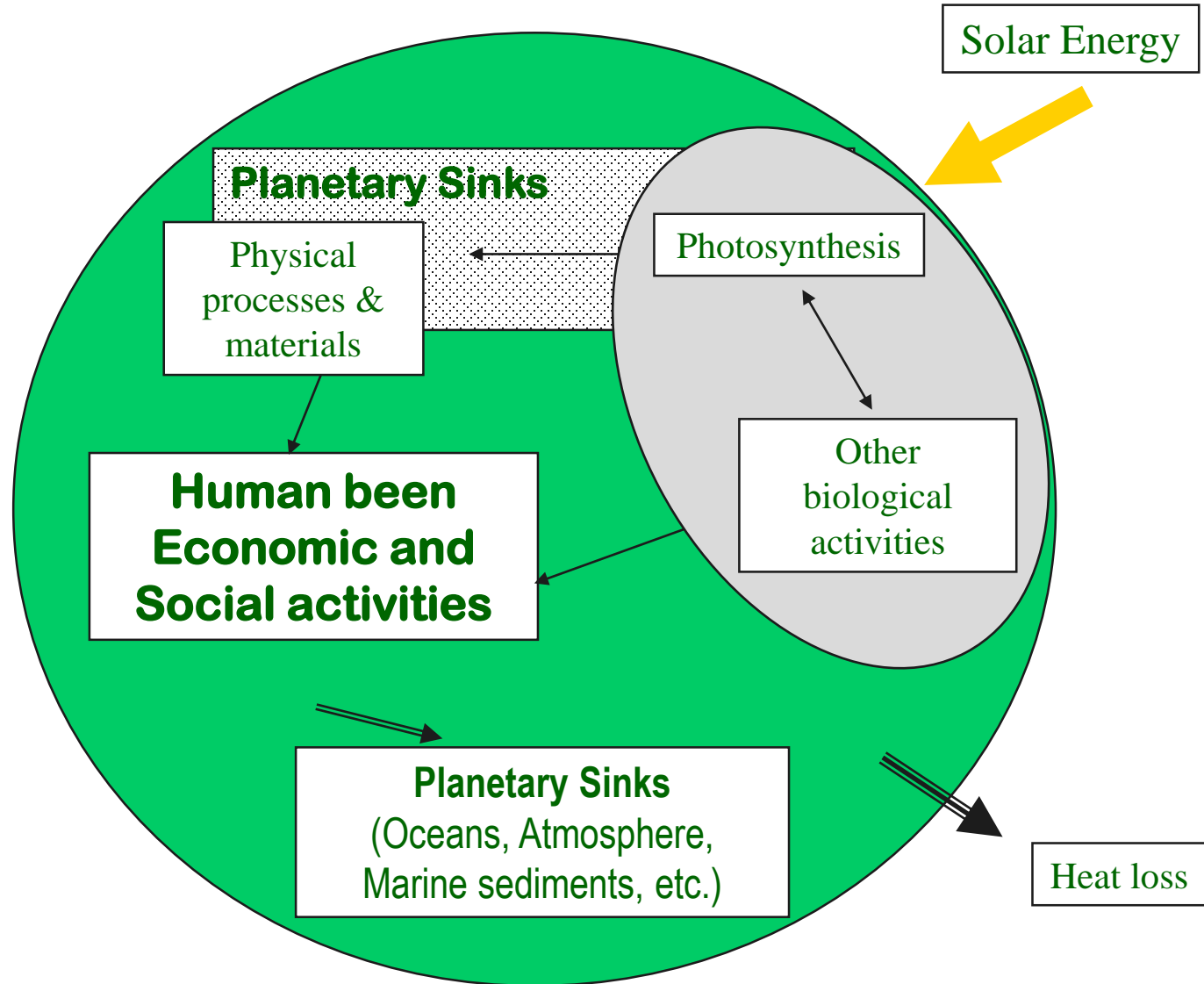
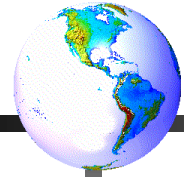
Planetary System



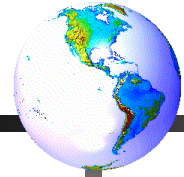
The planetary system that supports life



Interactions: Planetary sinks



Earth: finite system



Solar Energy



Finite Global Ecosystem

Energy



Resources



**Economic Subsystem
(Population, Products
& Capital)**

Energy



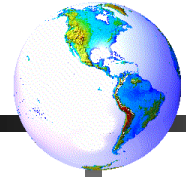
Waste



Recycling



Earth: finite system



Solar Energy



Energy



Resources



Finite Global Ecosystem

Economic Subsystem
(Population, Products & Capital)

Energy



Waste

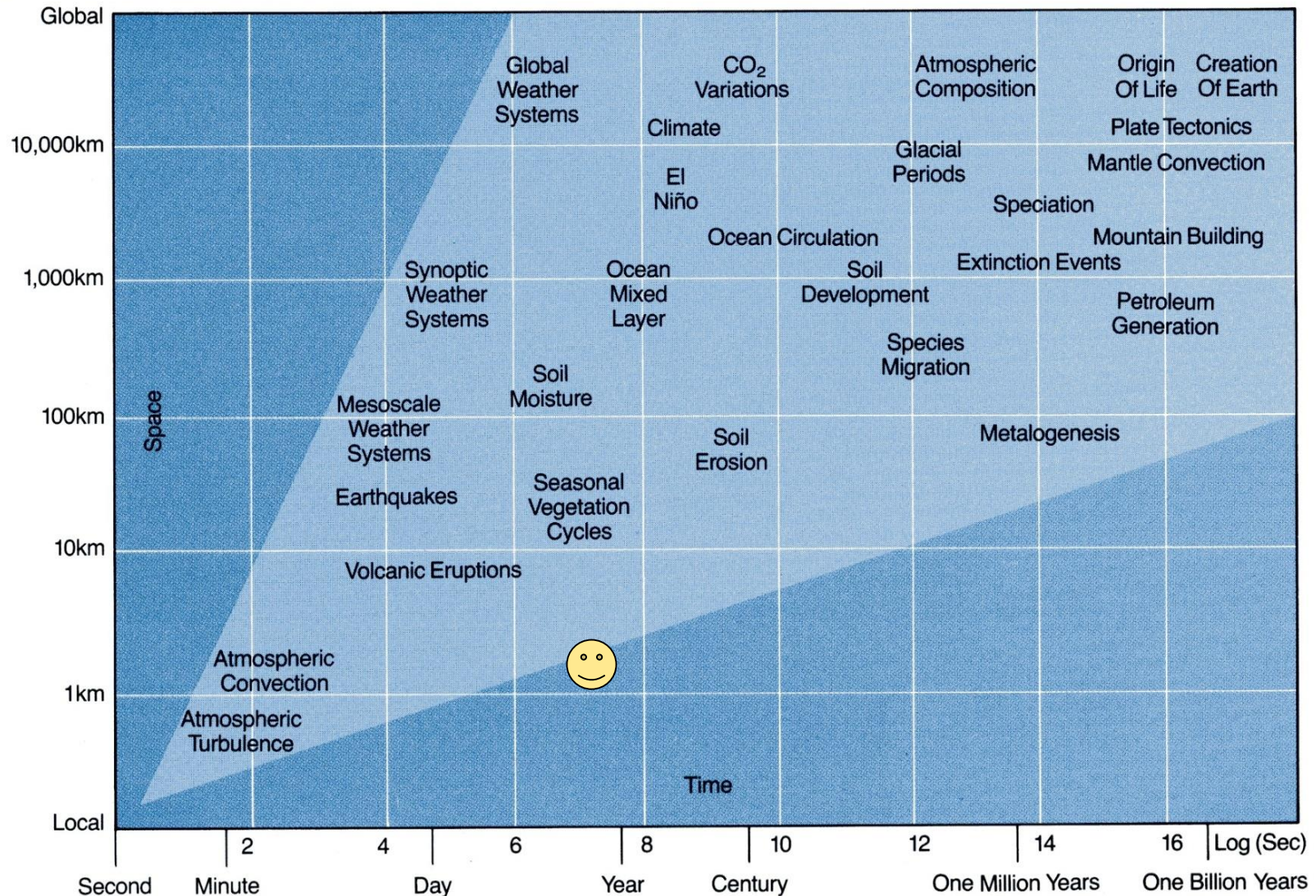


Recycling

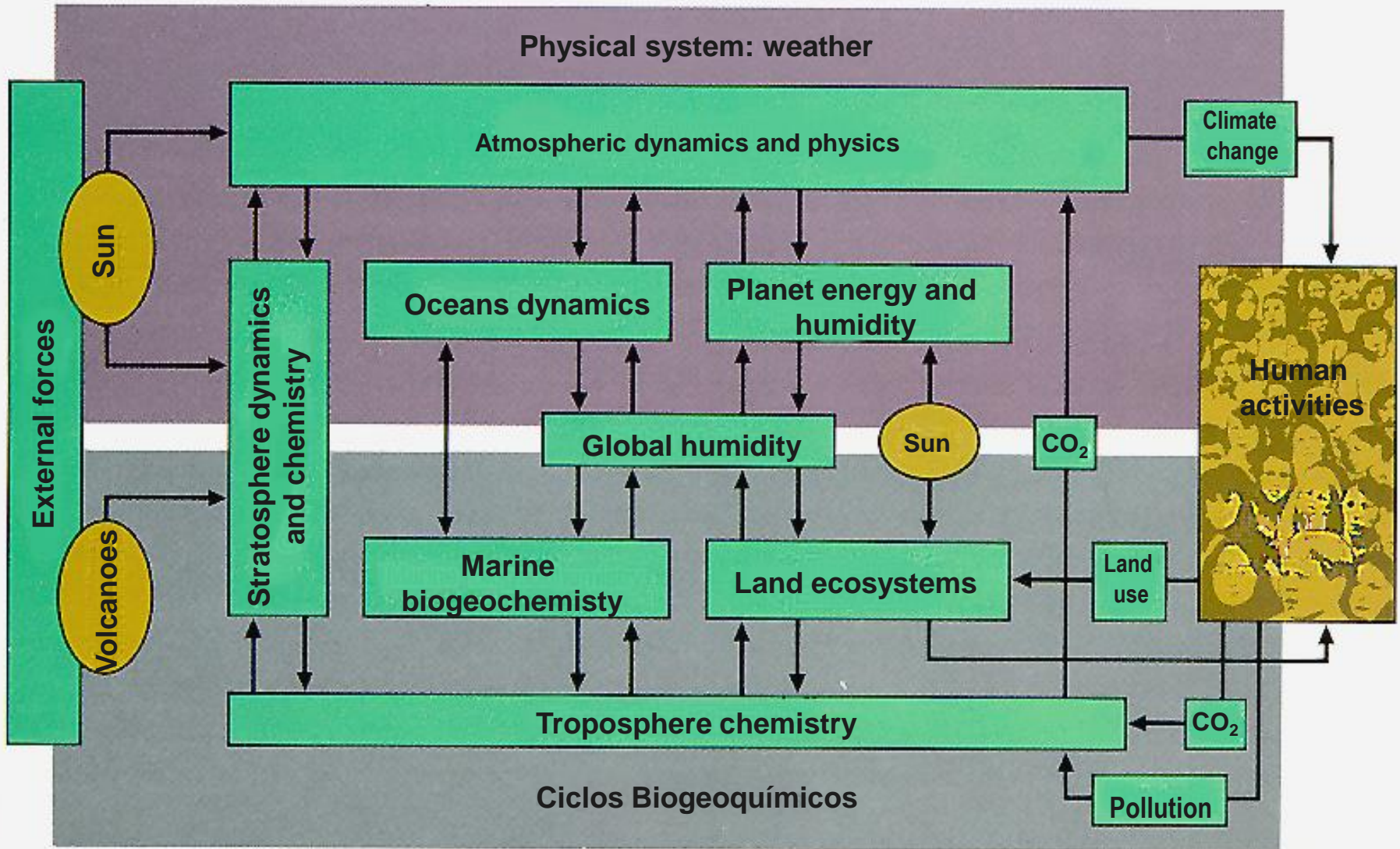


Planetary Processes

Figure 1. EARTH SYSTEM PROCESSES:
CHARACTERISTIC SPACE AND TIME SCALES



Planetary Interactions



Planetary Interactions

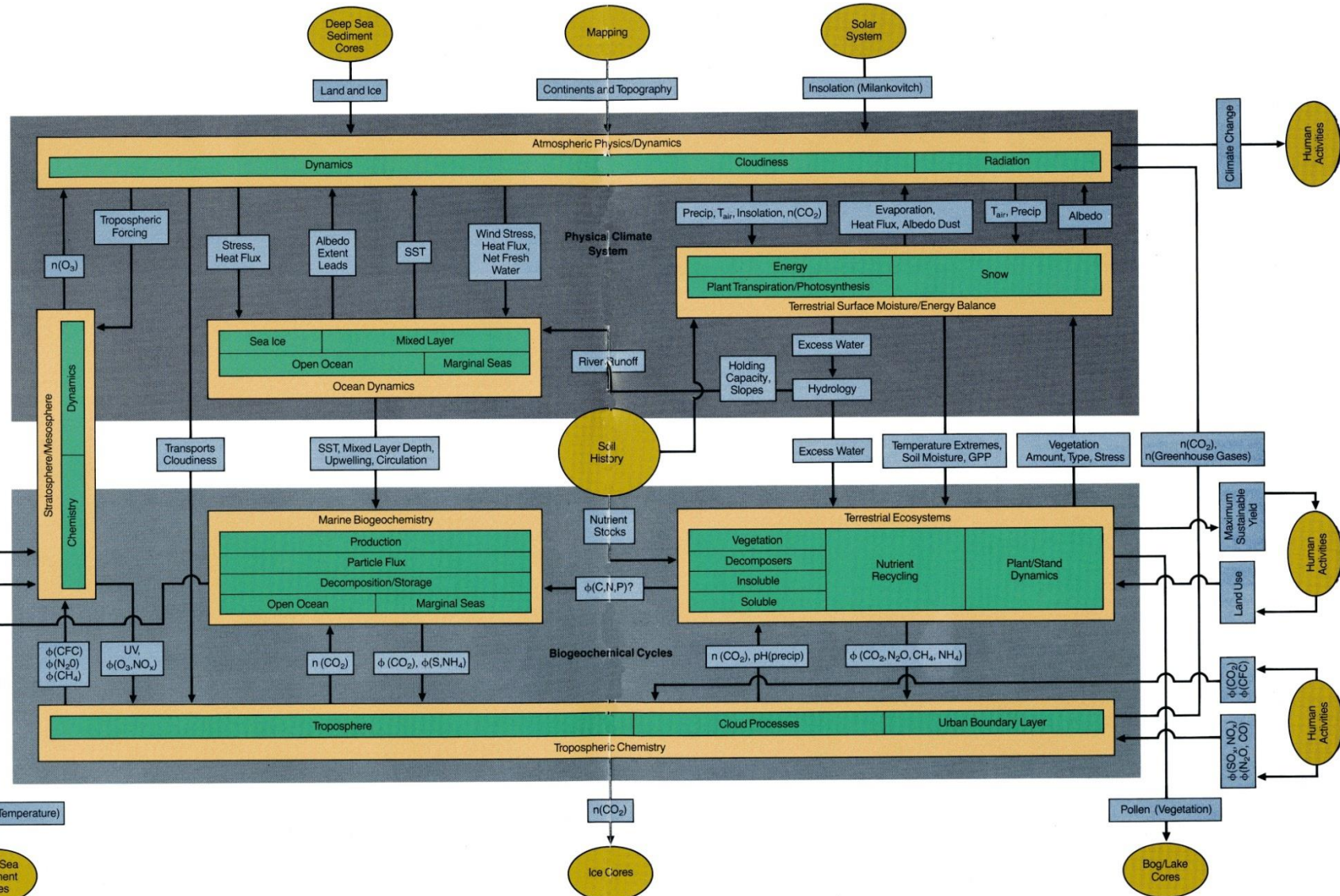
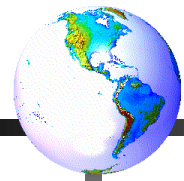


Figure 3. FLUID AND BIOLOGICAL EARTH PROCESSES:
DETAILED INFORMATION FLOW
[$\phi(\dots)$ = flux, $n(\dots)$ = concentration]



Visualizing Earth Systems

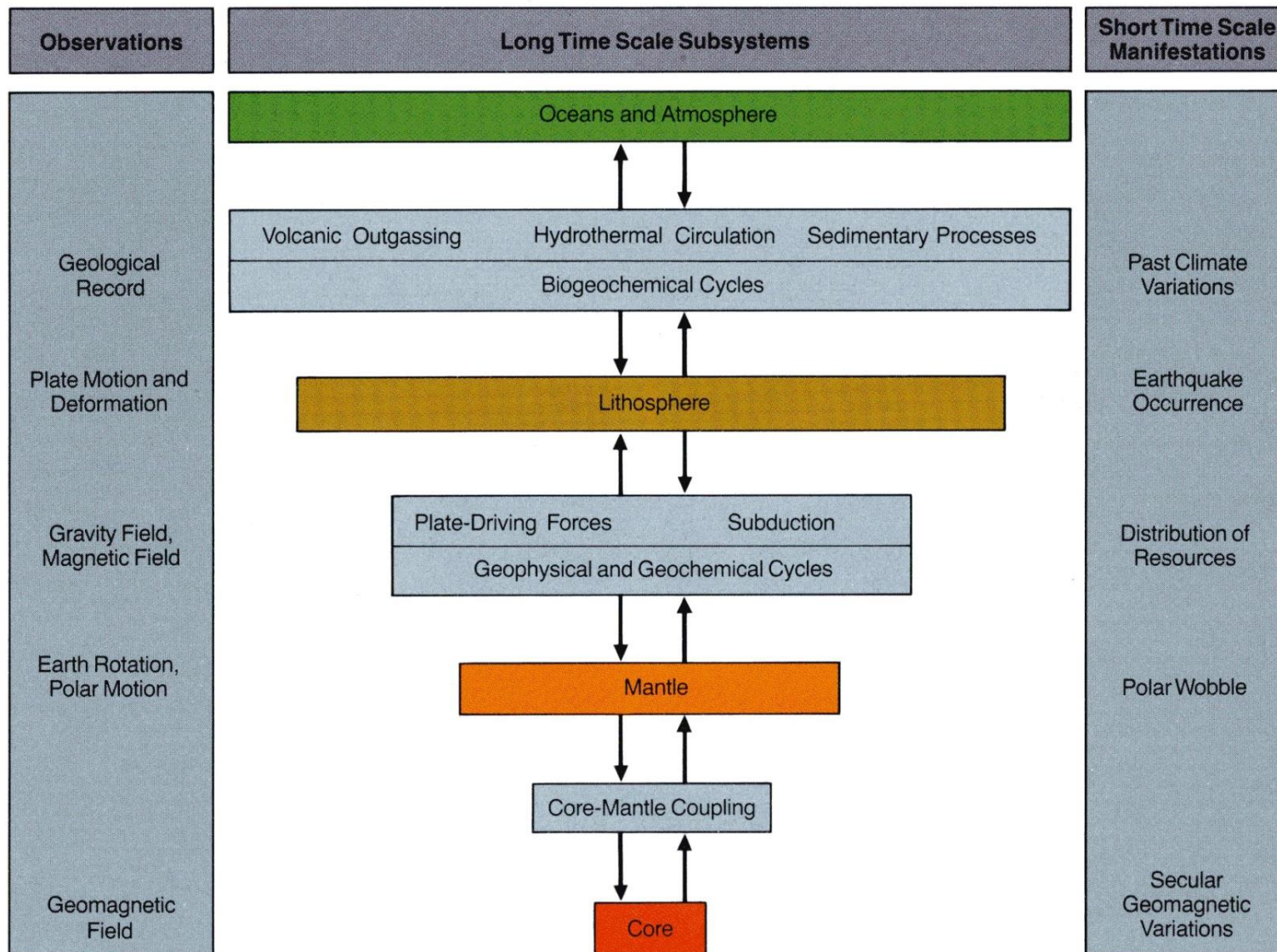
Ocean dynamic, the green planet and Planet on Fire

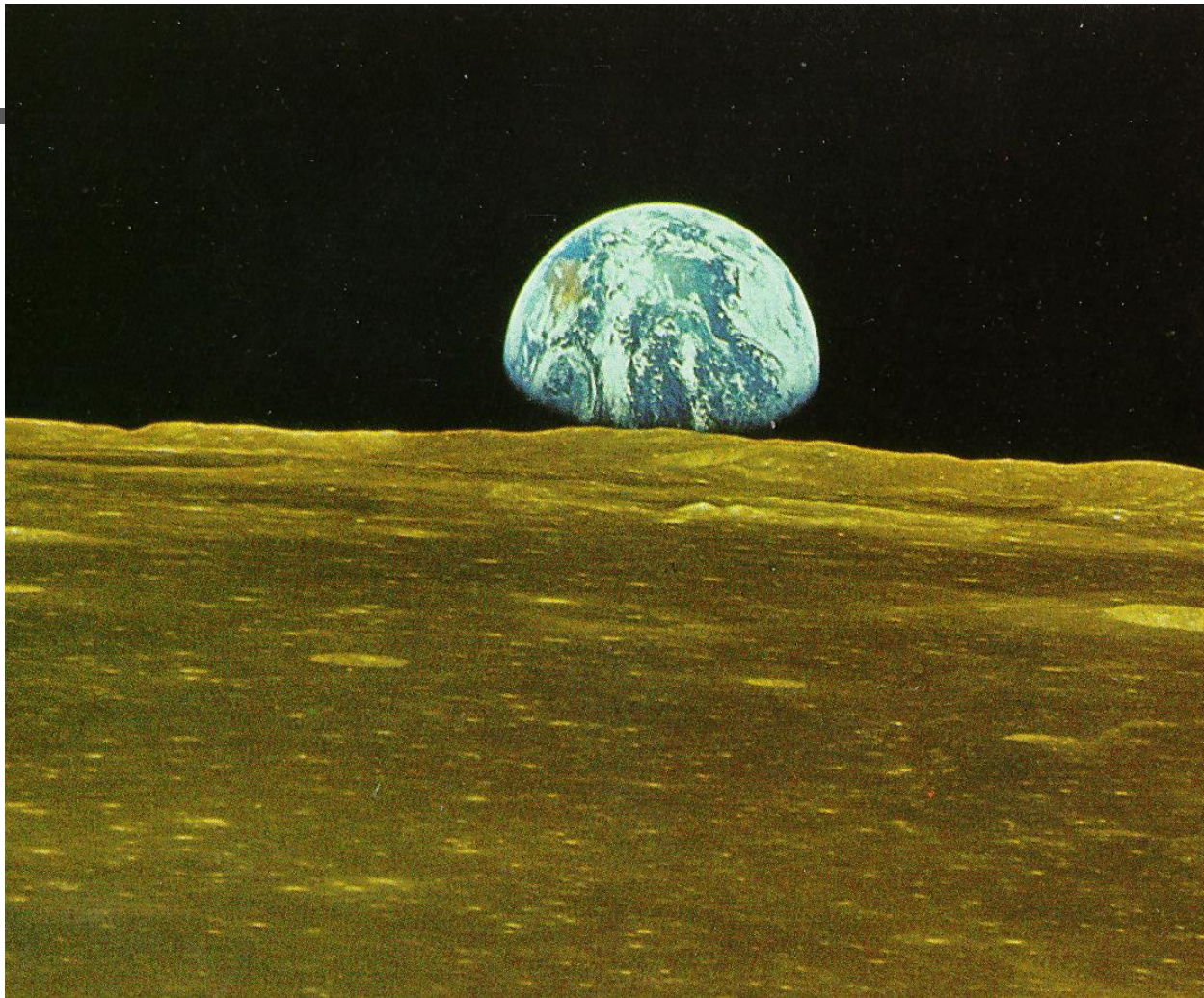
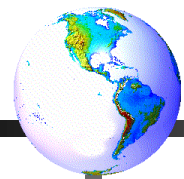




Planetary Processes

Figure 2a: SOLID EARTH PROCESSES





"We are the first generation to see and study planet earth as system".

Robert A. Frosch