

# Grid cell

## Fixed

Longitude

Latitude

Soil Texture

## Patches (*age-classes, land use*)

### Abiotic Processes

Soil hydrology and thermodynamics

Freeze/thaw dynamics

Fire

### Biotic/Ecological Processes

Plant Functional Types

photosynthesis and respiration

establishment, growth, mortality

competition for space, light, water

Heterotrophic Respiration

litter and soil dynamics

Annual

CO<sub>2</sub>

Land Use Change

Land Mgmt.

Monthly/Daily

Climate

PAR

