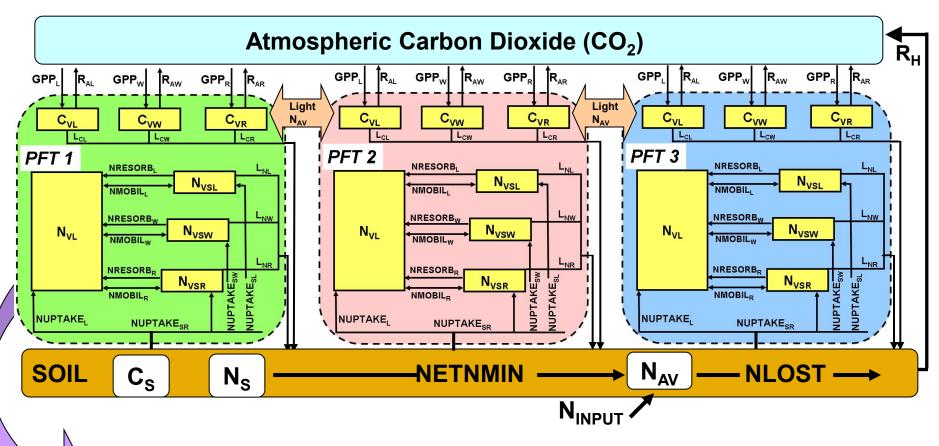
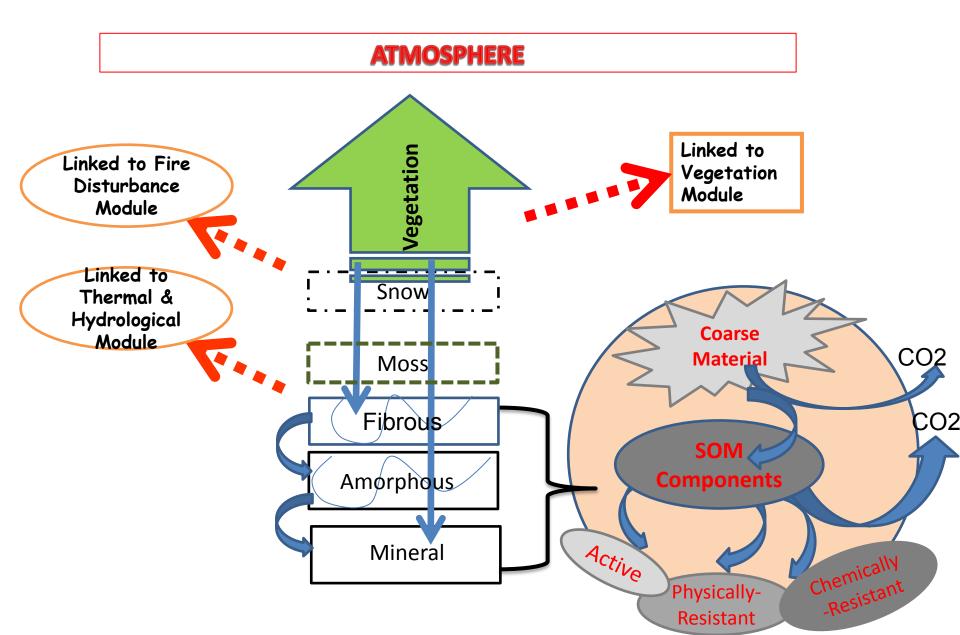
### **TEM-DVM**

#### Dynamic Vegetation Model of the Terrestrial Ecosystem Model



Linked to other submodels including a soil thermal model (permafrost dynamics; Zhuang et al., 2001) and hydrology model (snow dynamics; Euskirchen et al., 2007)

# **DOS-TEM**



# **DVM-DOS-TEM**

Growth & Disturbance Effect Module

#### Life cycle/Landscape processes

Micrometeorological Module

Thermal & Hydrological Module

**ATMOSPHERE** Vegetation PFT3 Snow Moss **Fibrous** Amorphous Mineral Parent Material

Vegetation Biogeochemical Module

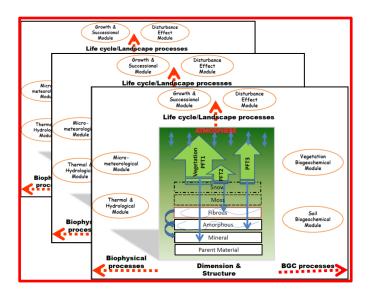
Soil Biogeochemical Module

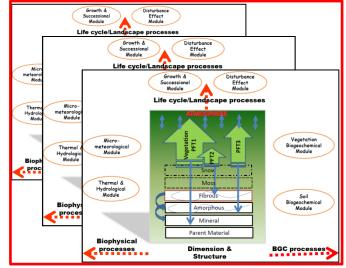
Biophysical processes

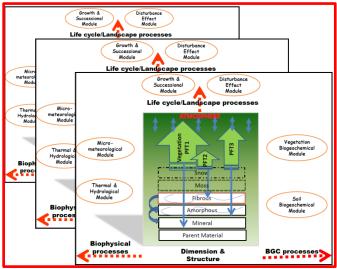
Dimension & Structure

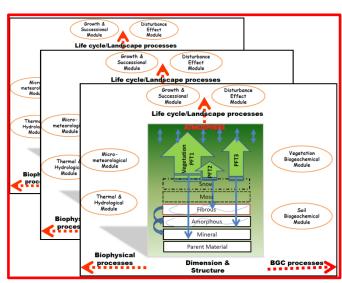


## **Geo-referenced Grids**











### **TEM Cores**

Life cycle /Landscape processes

Ecosystem
Dimension &
Structure

Biophysical processes

Biogeochemical processes