

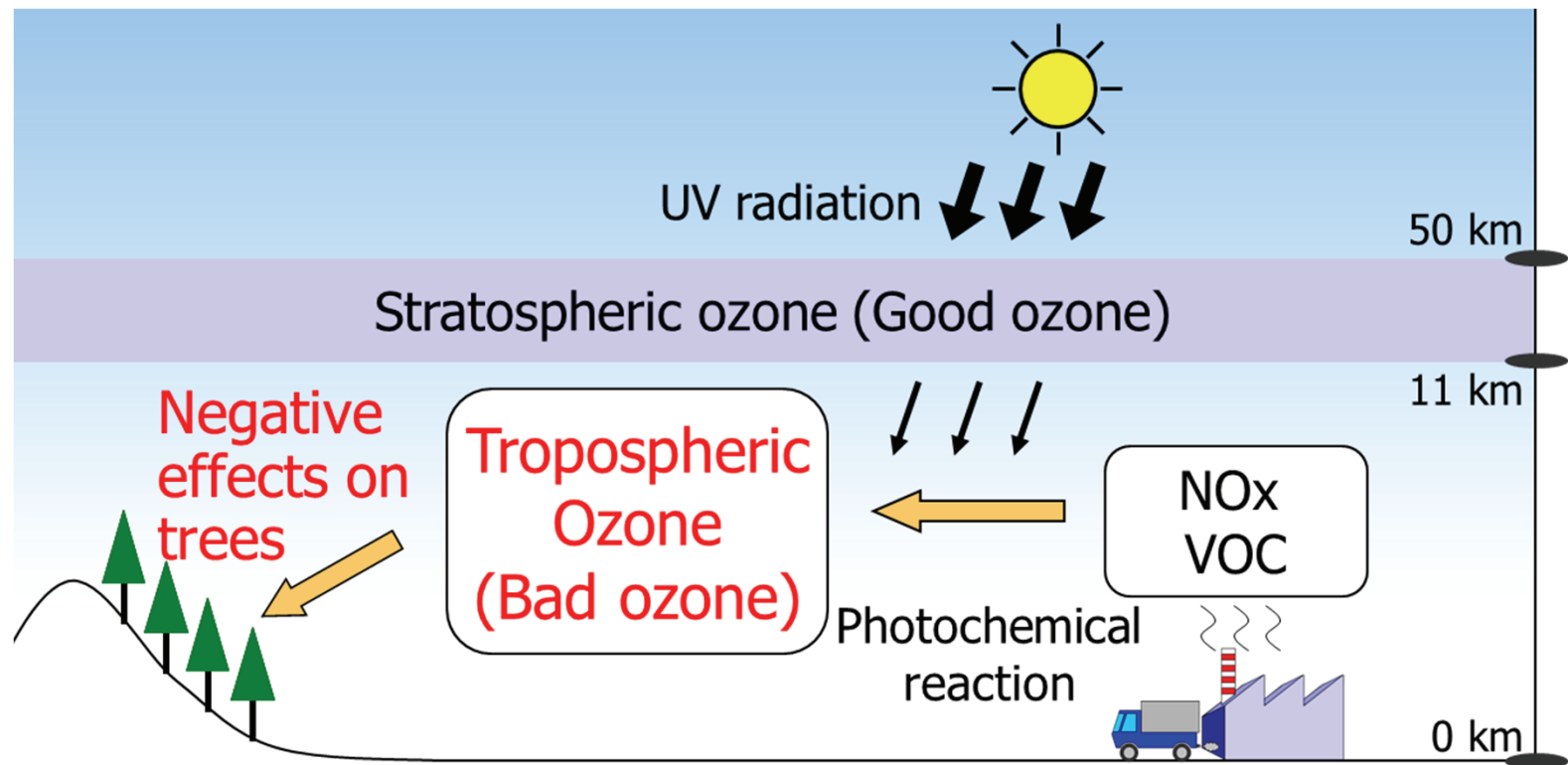
Background (Good ozone and Bad ozone)

Stratospheric ozone (Good ozone)

Protect us from harmful UV radiation as ozone layer

Tropospheric ozone (Bad ozone)

Main component of photochemical smog
Biologically damaging gas (strong oxidant)



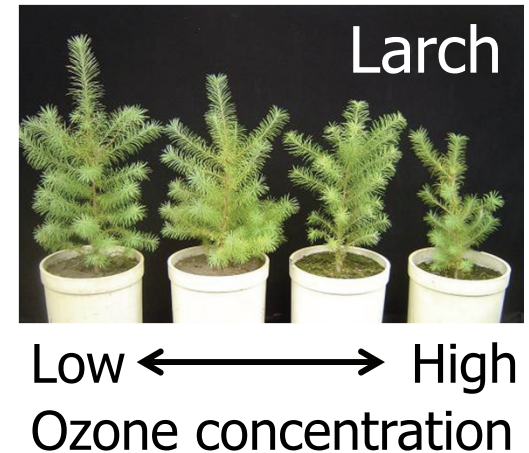
Carbon fixation by forest trees and negative effects of ozone

Carbon fixation by forest trees

- Mitigation of global warming
- Resource production (esp. woody biomass)

Negative effects of ozone on tree species

- Visible injury
- Photosynthesis and Growth reduction
- Shortening of leafy period
- Decline in frost hardiness etc.

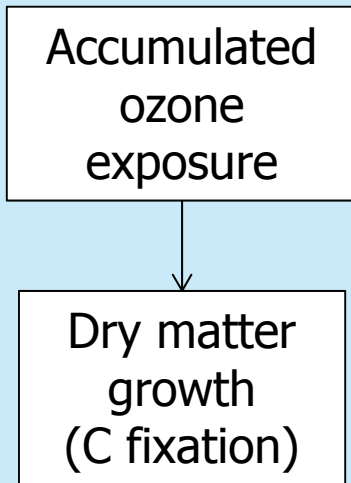


Need of risk assessment for ozone impacts on carbon fixation by tree species

Objective

Establishment process-based model of carbon fixation of tree species

Current model



Many uncertainty in application to fields

An example of process-based model

