Lecture 22a Solar Wind

Wysocki 2014 Lect 21 April 15 Tues

1708 = Ra_c , 10^8 for mantle

Atm

[illegible] of [illegible] of convection!

Ozone controls stable layer — Temp Inversion Stratosphere

$O_2 \leftrightarrow 2O$

$H_2O \rightarrow O_2 + O$ — break up molecules [illegible] ! Ozone

since hot

Solar wind — [illegible] $O^+ \rightarrow O^\circ$

[illegible] cloud [illegible] & ozone cycle

N_2O [illegible]

UV [illegible] ocean [illegible] —

Stratosphere [illegible] vortex — S Hem

Strong wind around antarctica ⇒ vortex

[illegible] up to stratosphere

Restrict mixing —

Chemical Trap [illegible] winter

— Fluoro carbons eat Ozone in winter [illegible] do not [illegible]

Too much mixing to [illegible] ozone in N Hem

↓

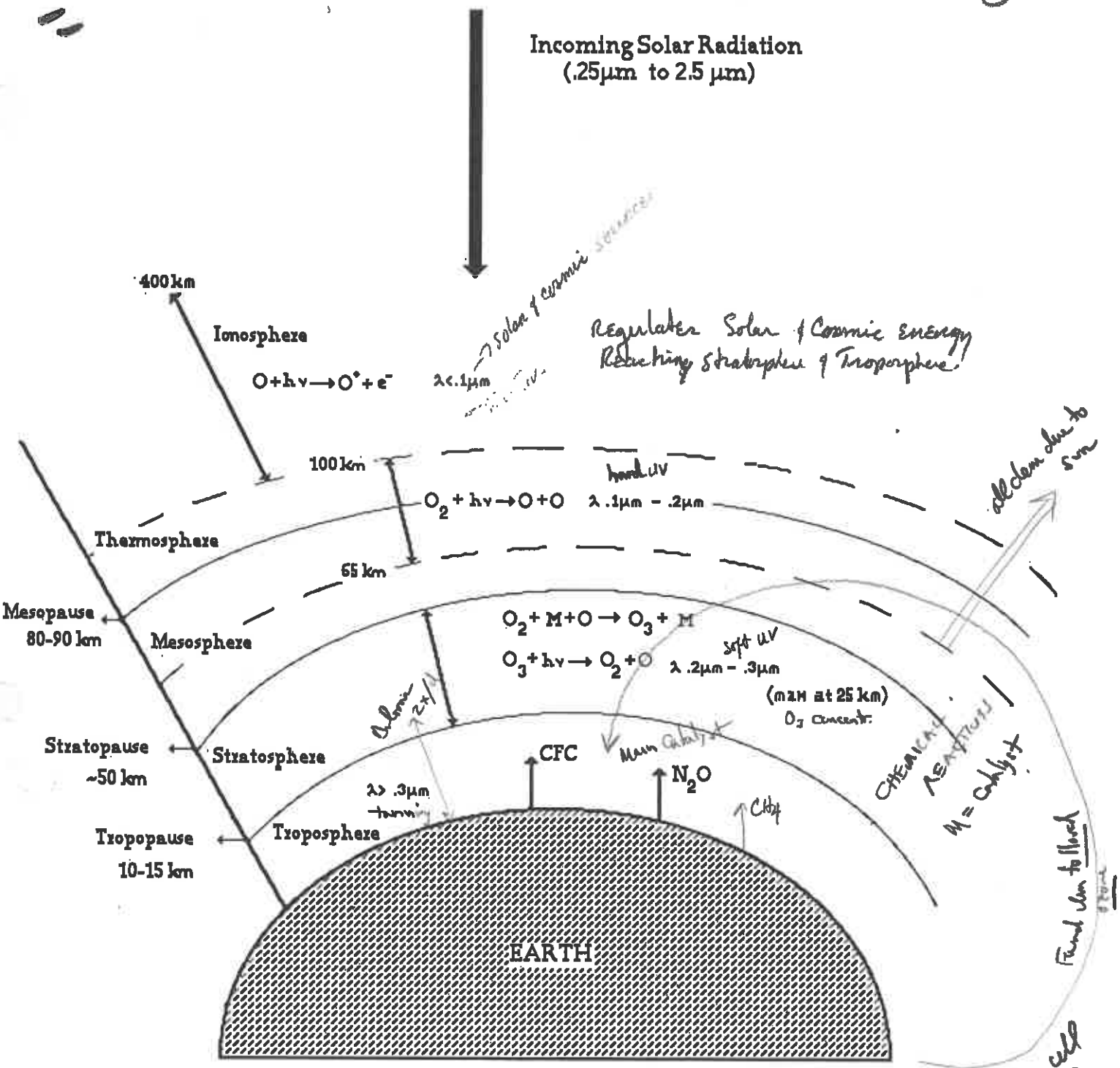

Illustration of the processes that determine the concentration of ozone in the stratosphere.

$NO_2 + h\nu \rightarrow NOx$

w/ eats O_3

N_2O is from cows + beans - N_2 from auto + emit H_2O

Dobson circle ~ Hadley cell