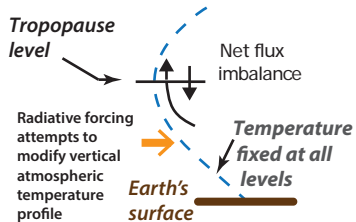


ATMOSPHERE

Altitude ↑

(a)

Instantaneous forcing F_i

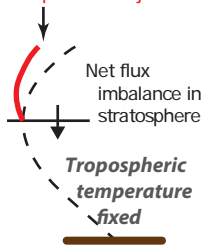


$\Delta t = \text{hours}$

(b)

Adjusted forcing F_a

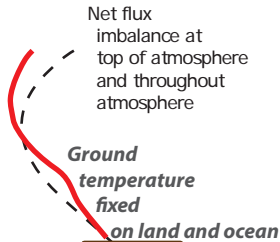
stratospheric temperature adjustment



$\Delta t = \text{days}$

(c)

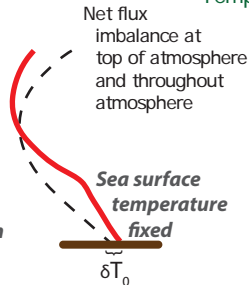
Fixed T_g forcing F_g



$\Delta t = \text{weeks}$

(d)

Fixed SST forcing F_s

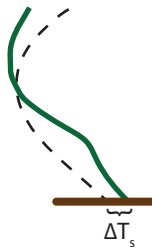


$\Delta t = \text{months}$

(e)

Response with all feedbacks

Temperature adjusts at all levels



Development of feedbacks over longer time scales than Δt

time interval Δt between

t_2 (onset of reference forcing) and t_1 (initial addition of radiative agent)