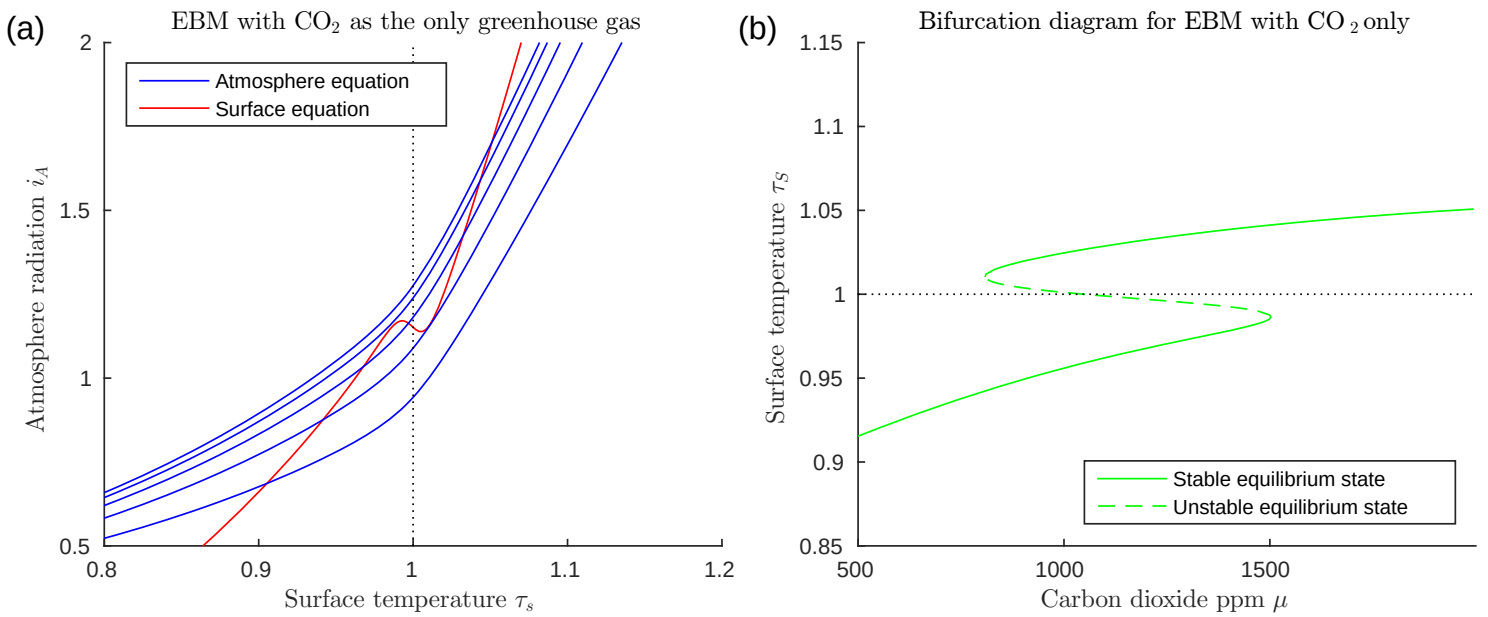
(a)
EBM with CO_2 as the only greenhouse gas
Atmosphere equation
Surface equation
Atmosphere radiation i_A
Surface temperature τ_s
2
1.5
1
0.5
0.8
0.9
1
1.1
1.2
(b)
Bifurcation diagram for EBM with CO_2 only
Stable equilibrium state
Unstable equilibrium state
Surface temperature τ_S
Carbon dioxide ppm μ
1.15
1.1
1.05
1
0.95
0.9
0.85
500
1000
1500