

## Radiative Transfer (Moist air) (1 FILM)

Outgoing radiative flux at level 2:

$$R_{o,2} = (\tau(\sigma T_0^4 + dR_{0-1}) + dR_{1-2}) + \beta \sigma T_L^4 + \alpha \sigma T_L^4$$

$$R_{o,2} \approx \tau \sigma T_0^4 + dR_{0-1} + dR_{1-2} + \beta \sigma T_L^4 + \alpha \sigma T_L^4$$

Incoming radiative flux at level 0:

$$R_{i,0} = \alpha \sigma T_0^4 + \beta \sigma T_L^4 + \tau \sigma T_L^4$$

Film Optics

$\alpha$  Reflection

$\beta$  Absorption

$\tau$  Transmission

