

Forcings and Feedbacks

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Energy balance at the top of the atmosphere

$$F_{TOA} = F_{Solar} - FIR$$

If the planet is in equilibrium, these two balance at the top of the atmosphere and the net top-of-the-atmosphere flux $F_{TOA} = 0$

Now, F_{TOA} is a function of the surface temperature and many other variables.

$$F_{TOA} = F_{TOA}(T_S, x_1, x_2 \dots x_N)$$