Climate Feedbacks

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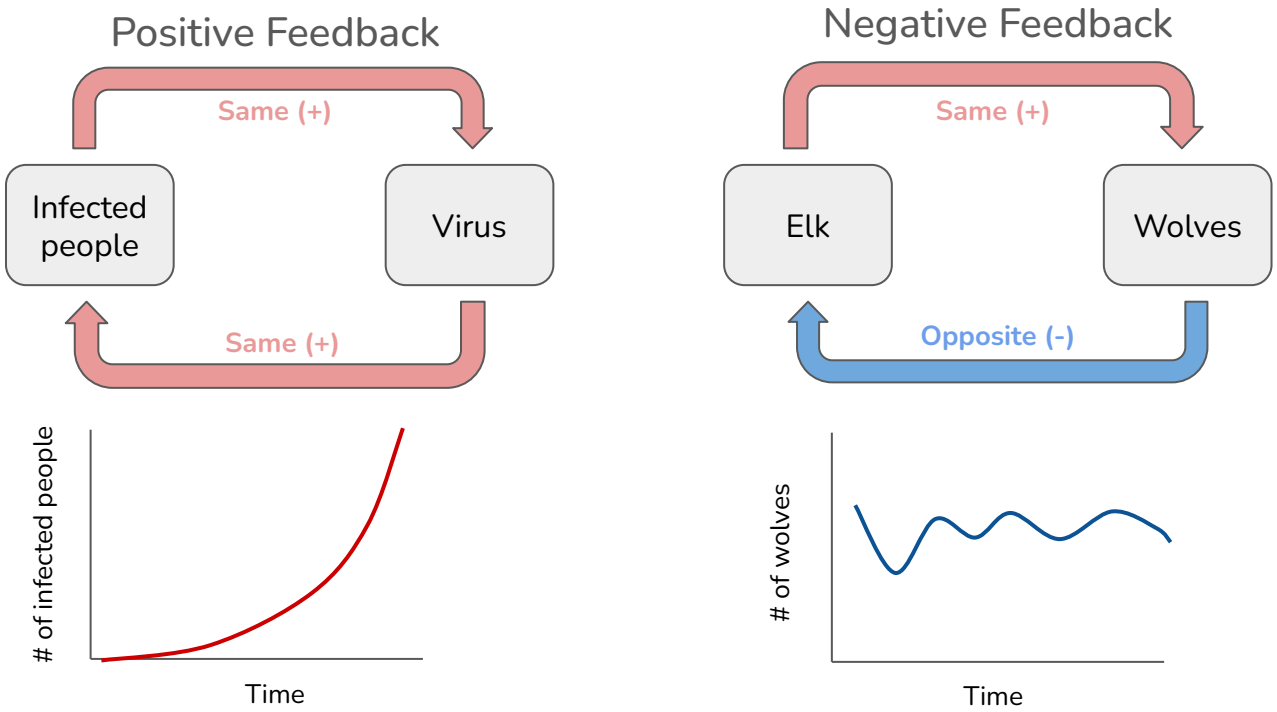
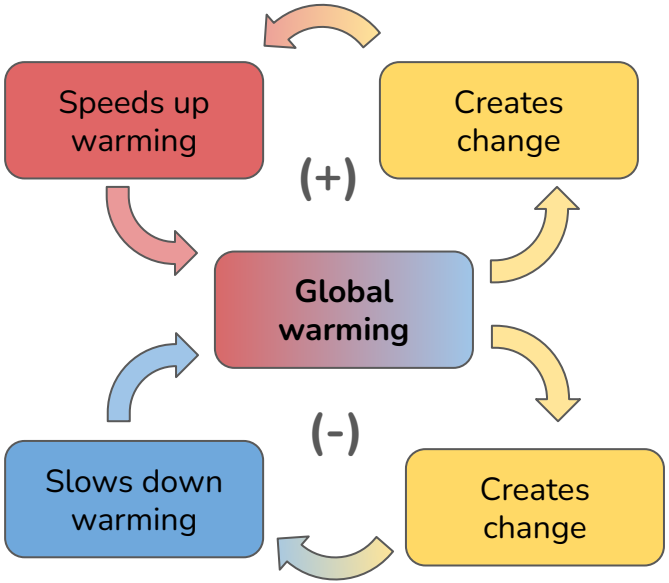
What is a feedback?

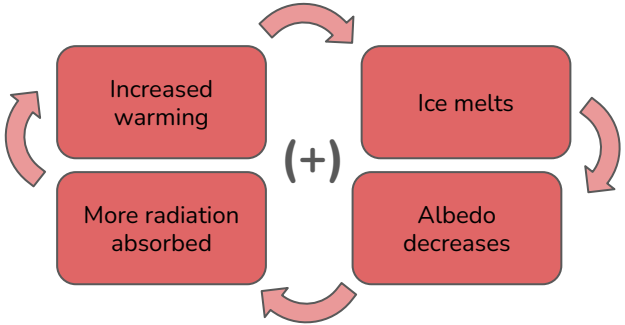


Positive Feedback: Change in A causes a change in B, which in turn causes a change in A in the same direction as the initial change

Negative Feedback: Change in A causes a change in B, which in turn causes a change in A in the opposite direction as the initial change

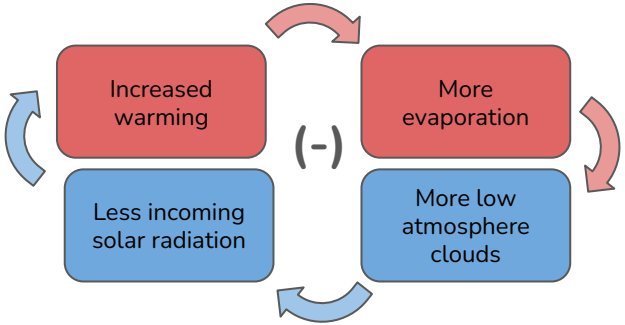
Climate Feedback Loops





Ice-Albedo Feedback → causes more warming

Cloud Feedback → causes cooling



Tutorial 8: Masking with One Condition

- One important climate feedback is the ice-albedo feedback, yet this feedback is rapidly changing in response to melting ice, particularly in regions where temperatures were previous cool enough to sustain ice (i.e., high latitudes)
- In this tutorial, we'll explore SST maps and use masking tools to analyze parts of the map where SST is below 0°C (i.e., where changes in the ice-albedo feedback are most apparent today)