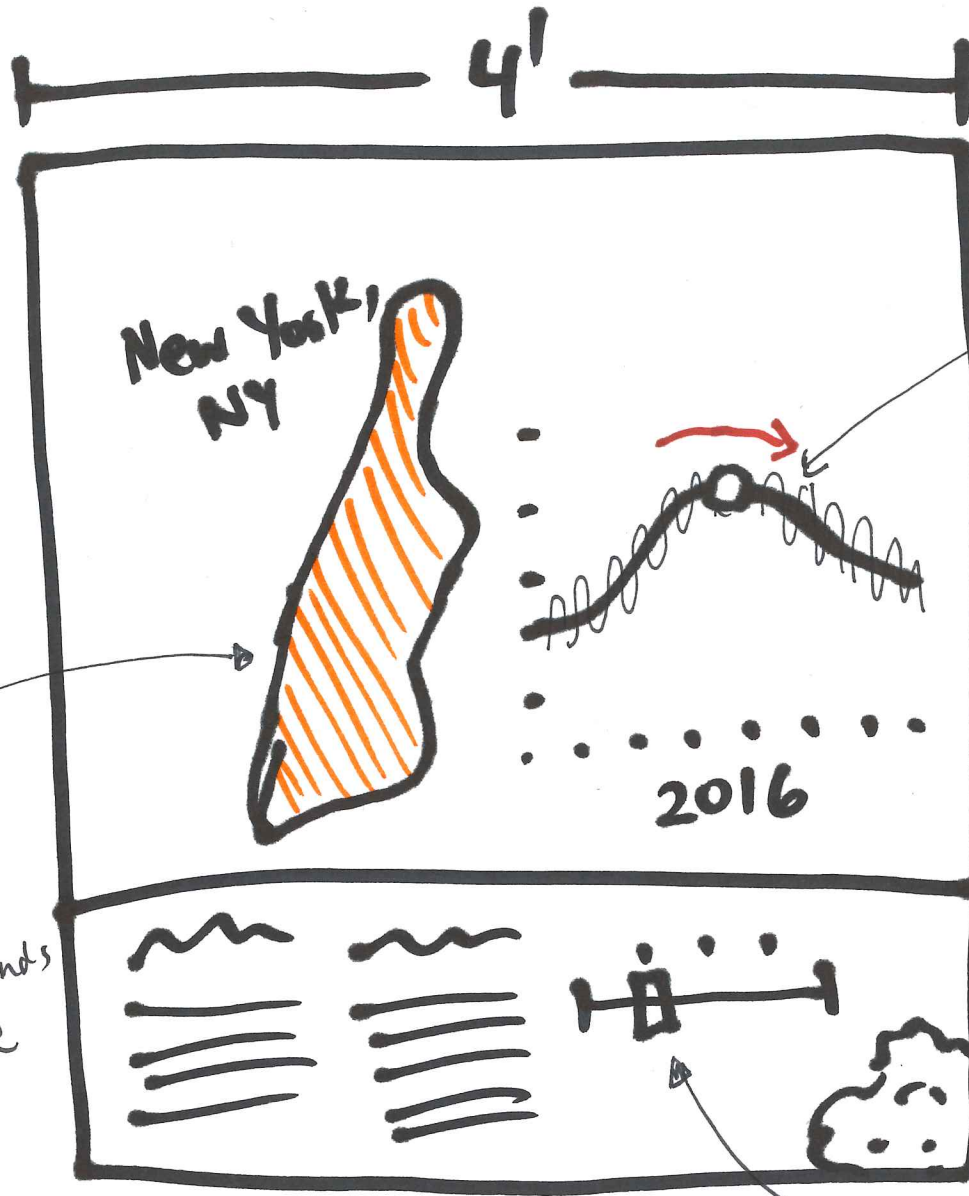


# Climate system

Toggle data layers

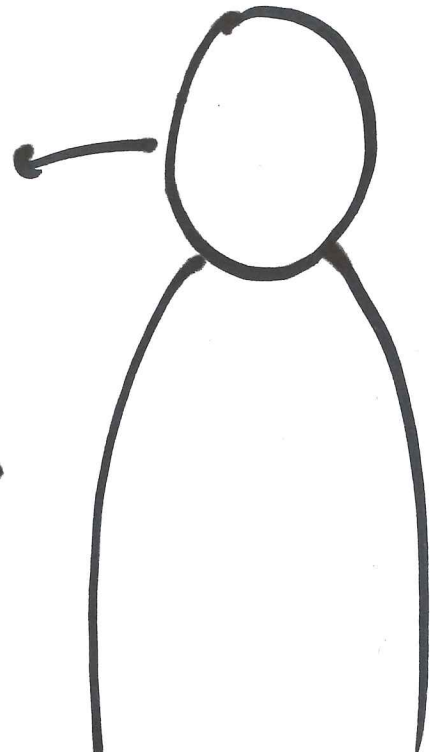
Track ball rotates earth



Local Temperature data:  
 Line animates over one year in location; potential for sound to reinforce seasonal variation

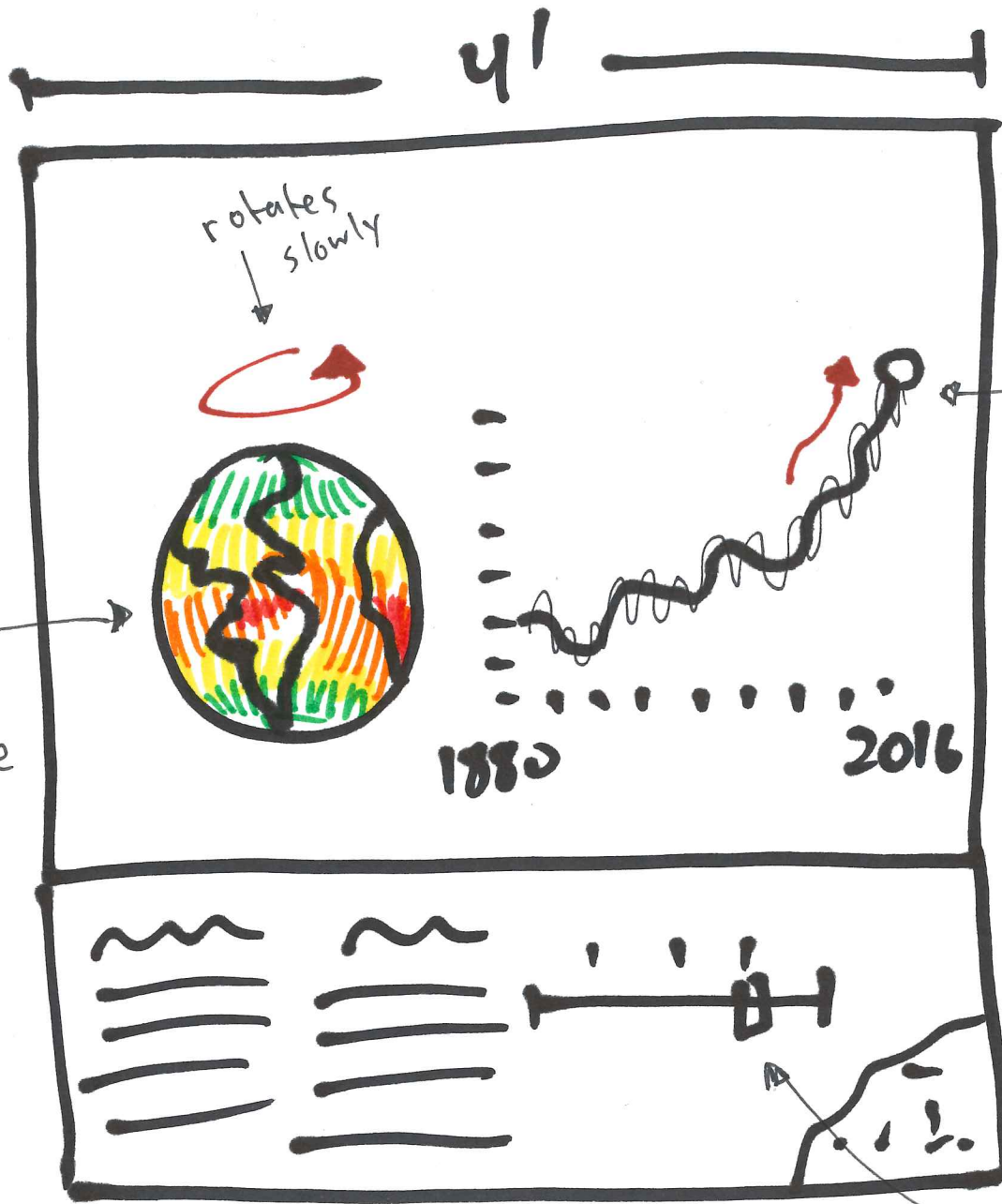
Manhattan; we can loop through diff. cities.

Color corresponds to temperature that day



notched slider changes time scale (days, years, etc.)

# Weather vs climate (1 of 2)



Zooms out to globe with temperature data layer

notched slider moved to larger scale

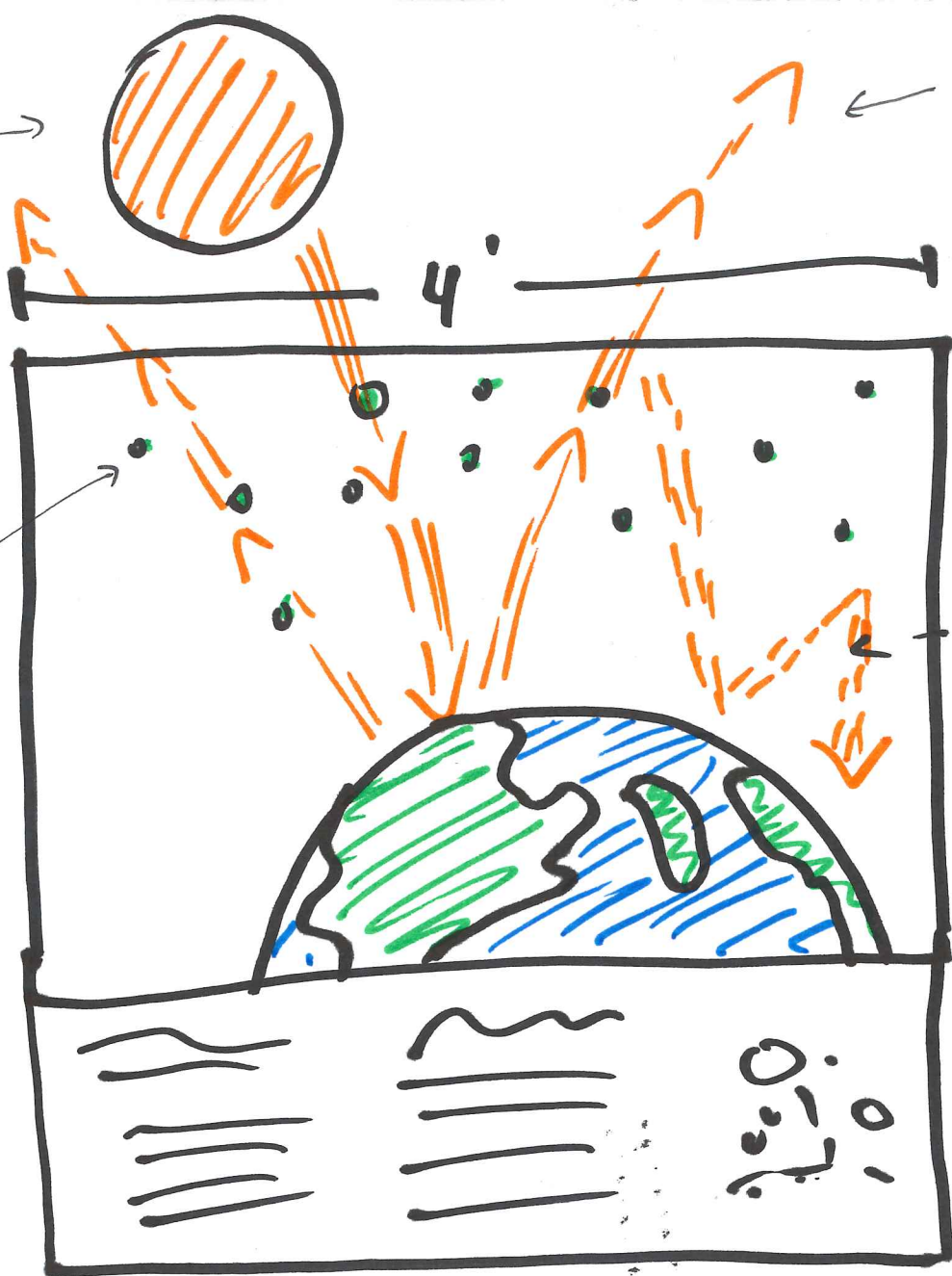
# Weather vs climate (2 of 2)

Sun outside of screen

GHGs

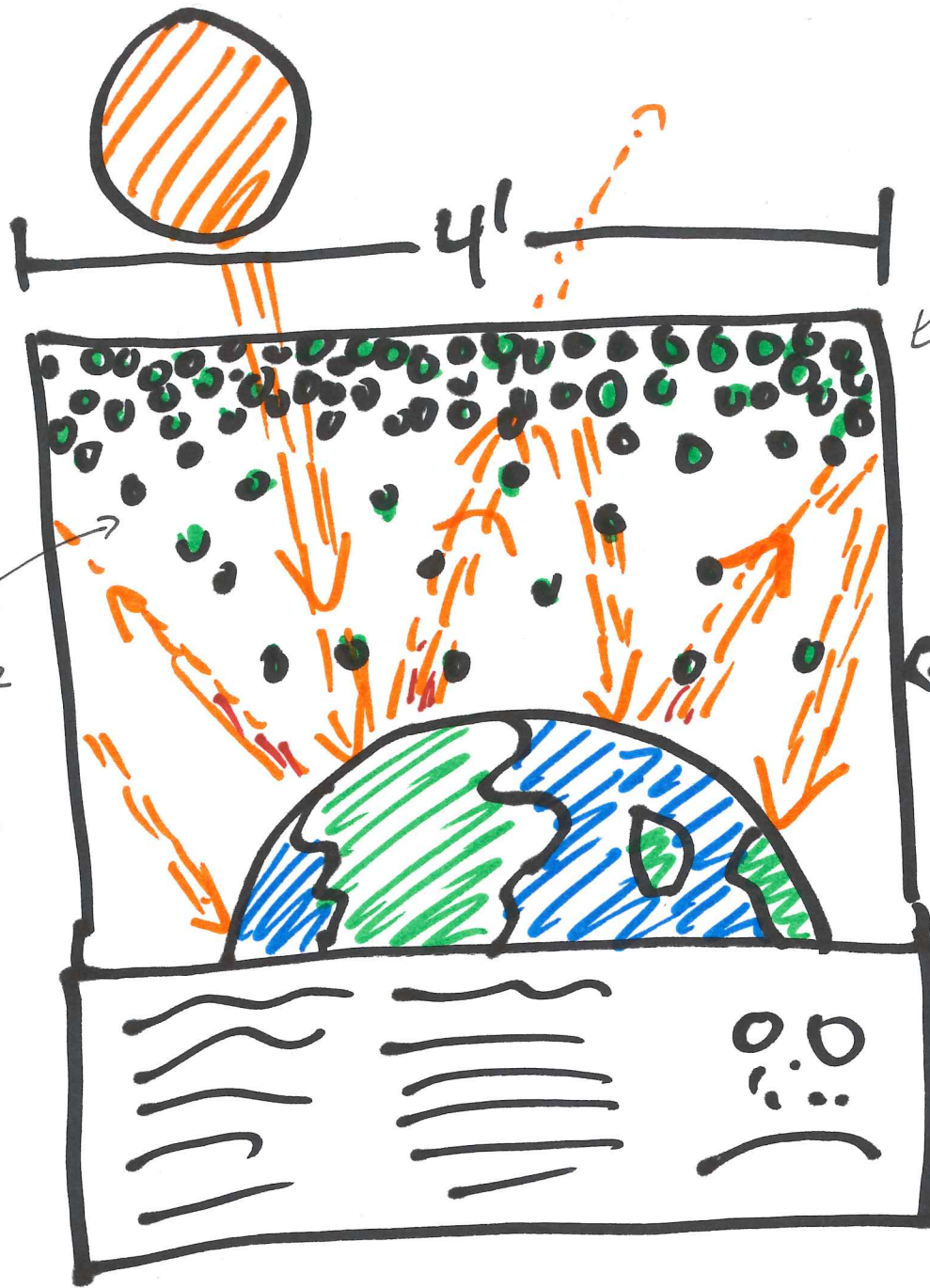
some light is reflected  
some becomes heat

Screen boundary is metaphor for atmosphere



GH Effect (1 of 2)

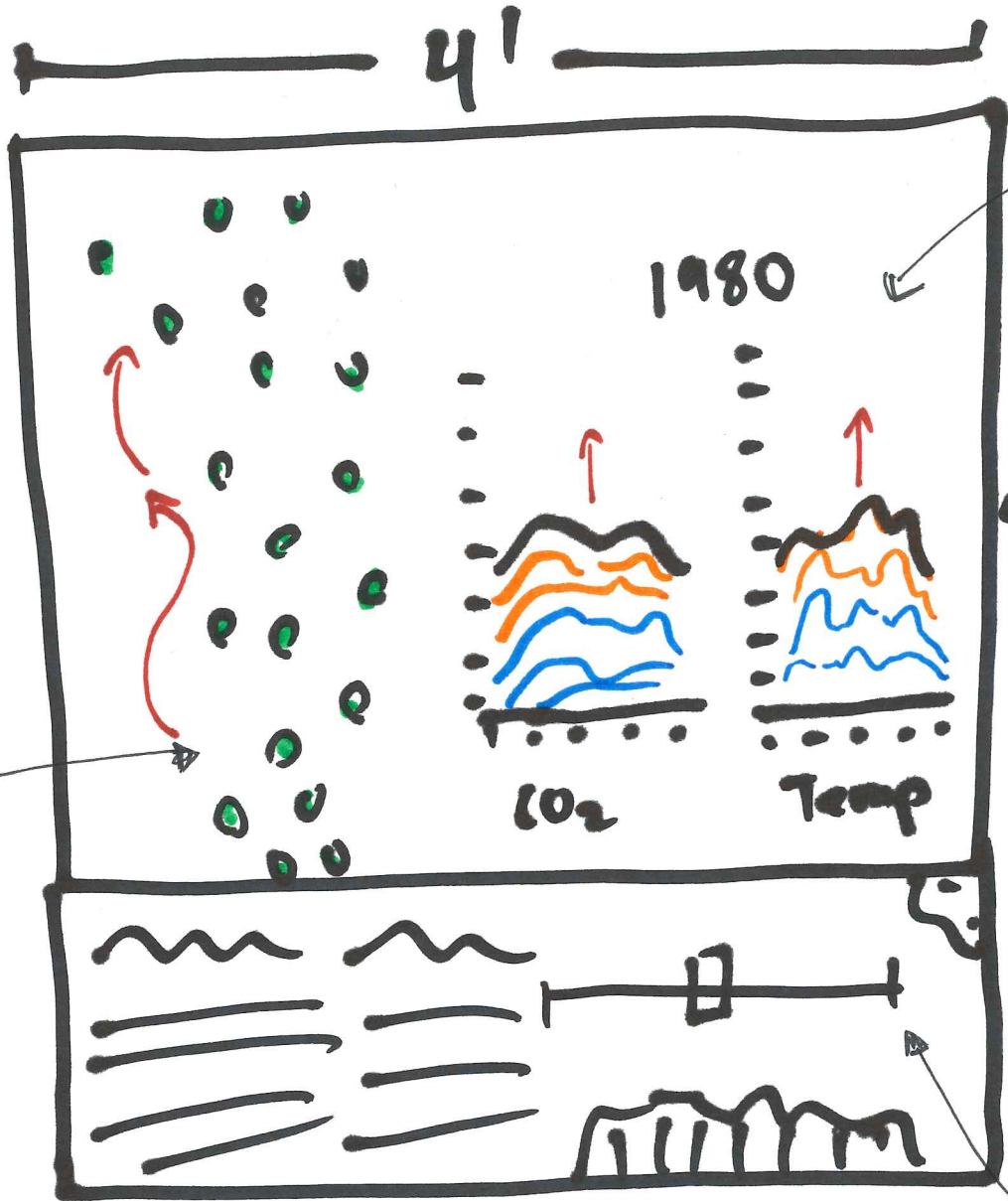
GHG emissions  
animation/viz  
based on  
actual data



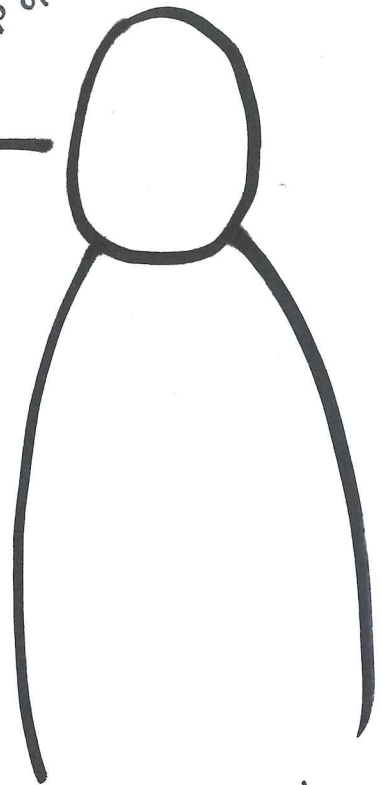
As GHG emissions  
increase, they  
trap heat in  
the atmosphere,  
warming the  
Earth

GH Effect (2 of 2)

Viz of fossil fuel emissions increasing over time

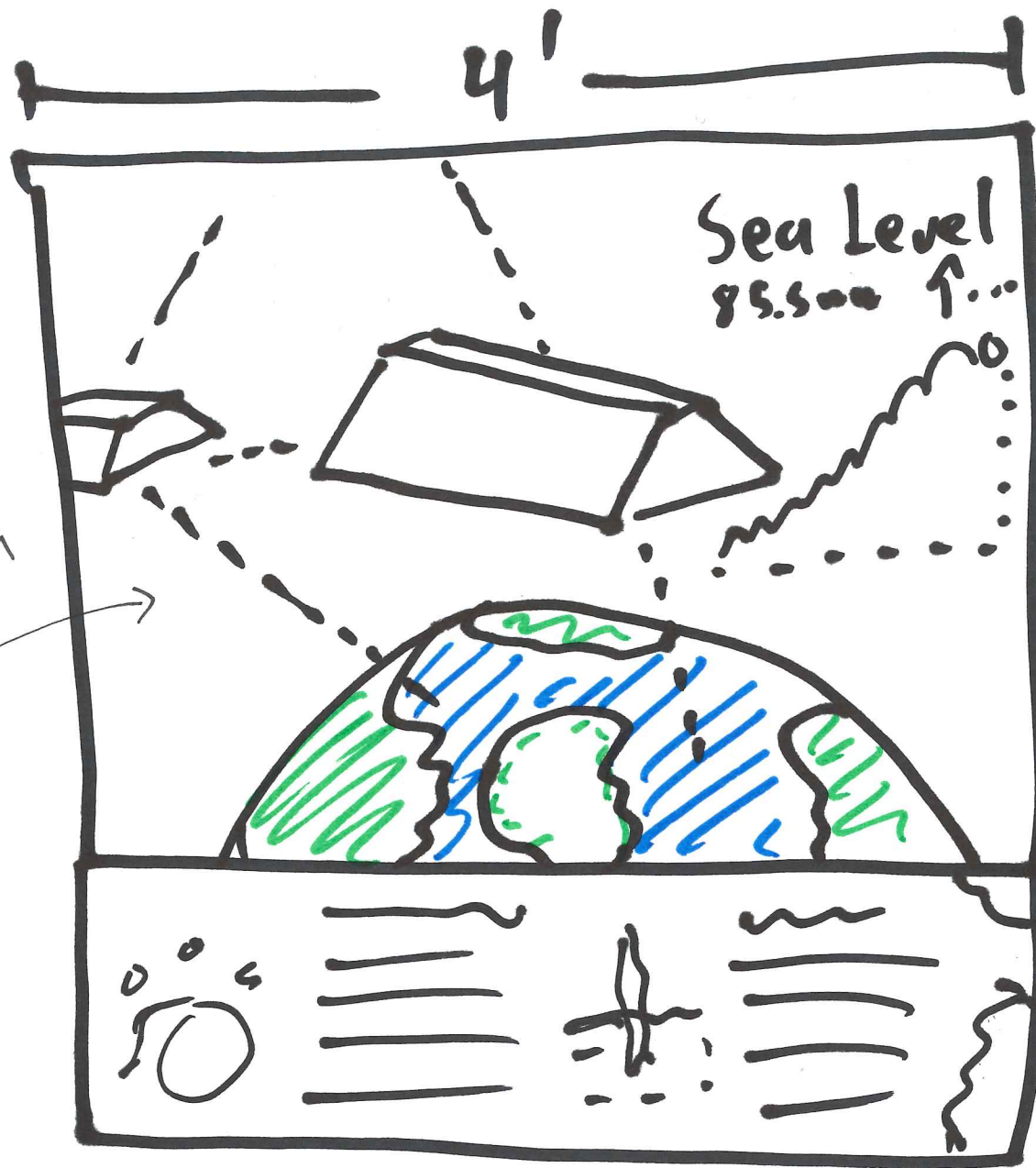


Graphs of CO2 concentration and global temperature from 1750-present (Annual data overlaid on top of each other)



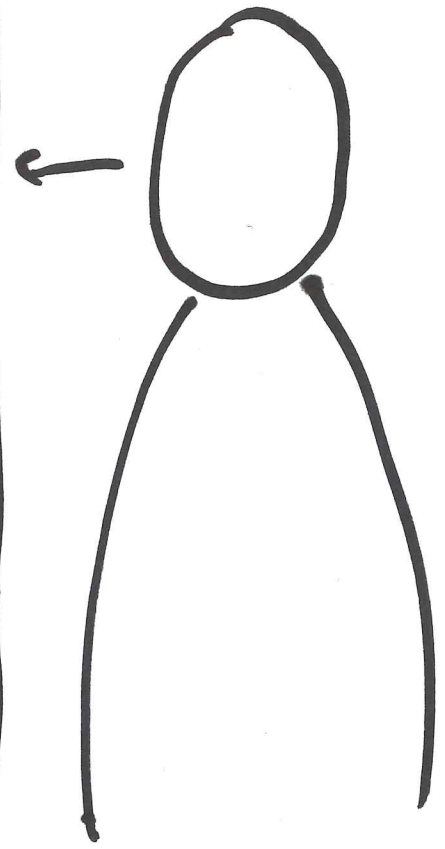
slider controls speed through time

Fossil fuel emissions → CO2 conc. → warming

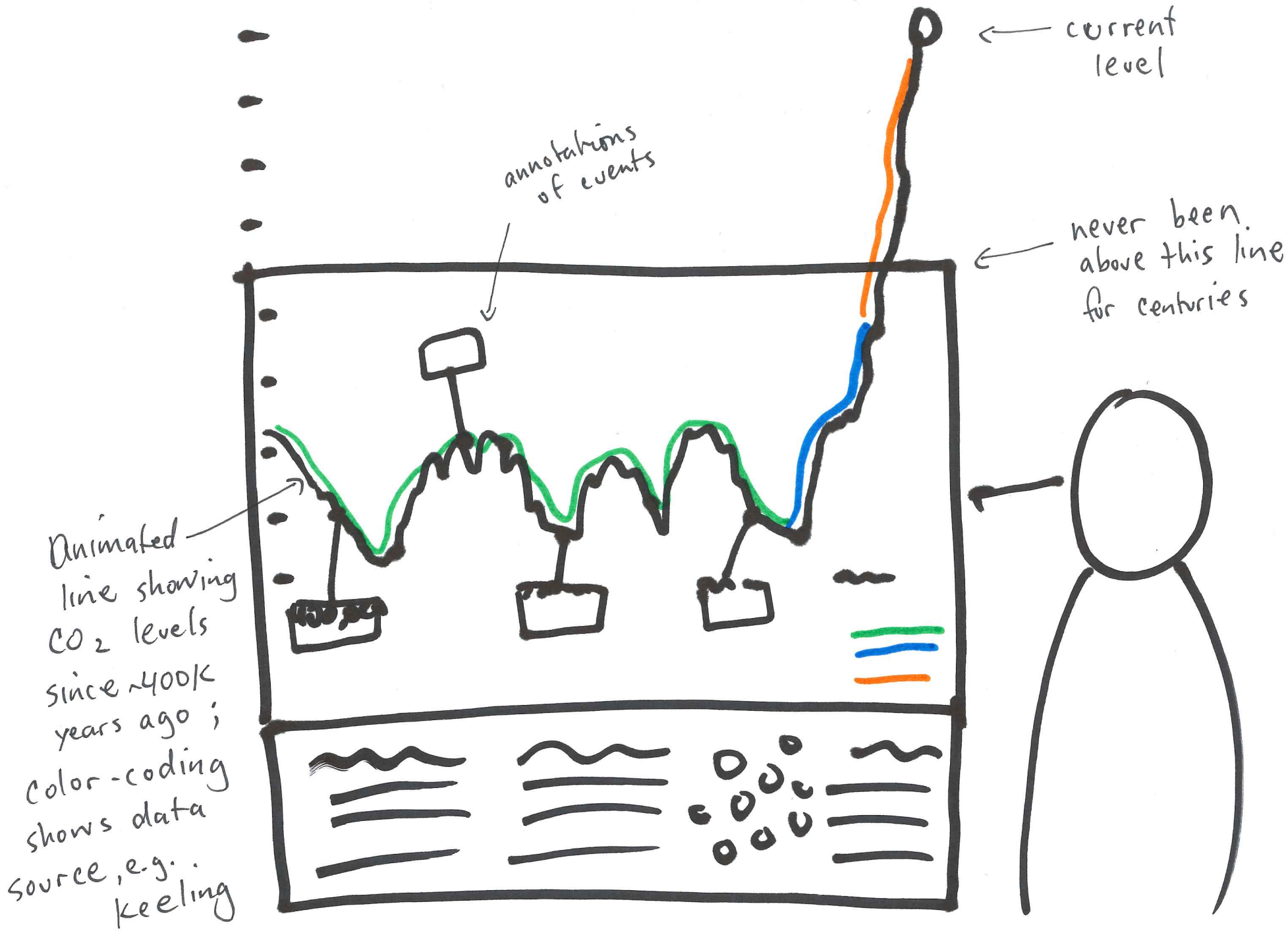


shows current measurement and trend

Cycles through vital signs: CO<sub>2</sub>, temp, sea level, sea ice, land ice and shows how they are measured



# Vital Signs / measuring climate data

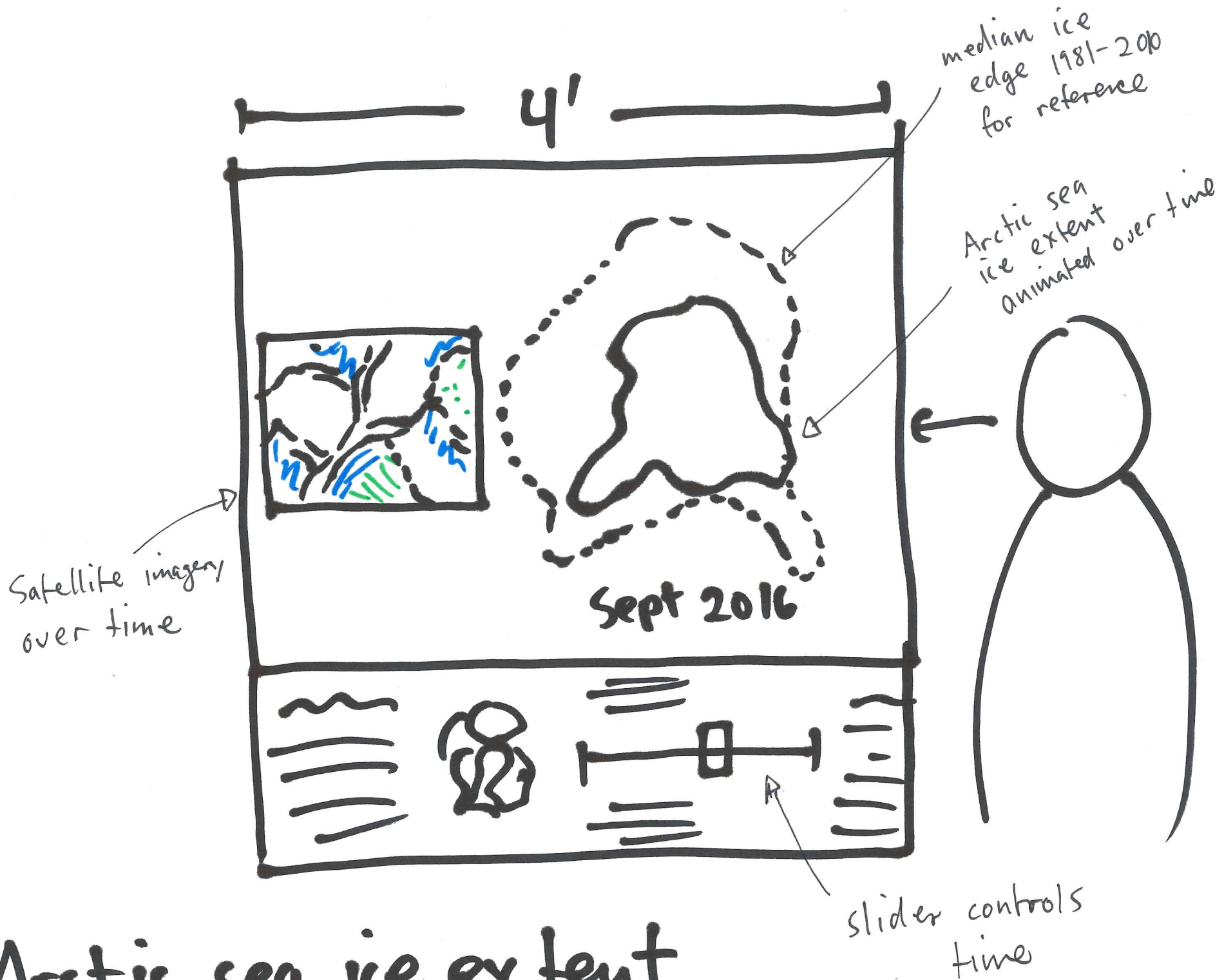


Animated line showing CO<sub>2</sub> levels since ~400k years ago; color-coding shows data source, e.g. Keeling

# Long term carbon cycle



# Arctic sea ice extent

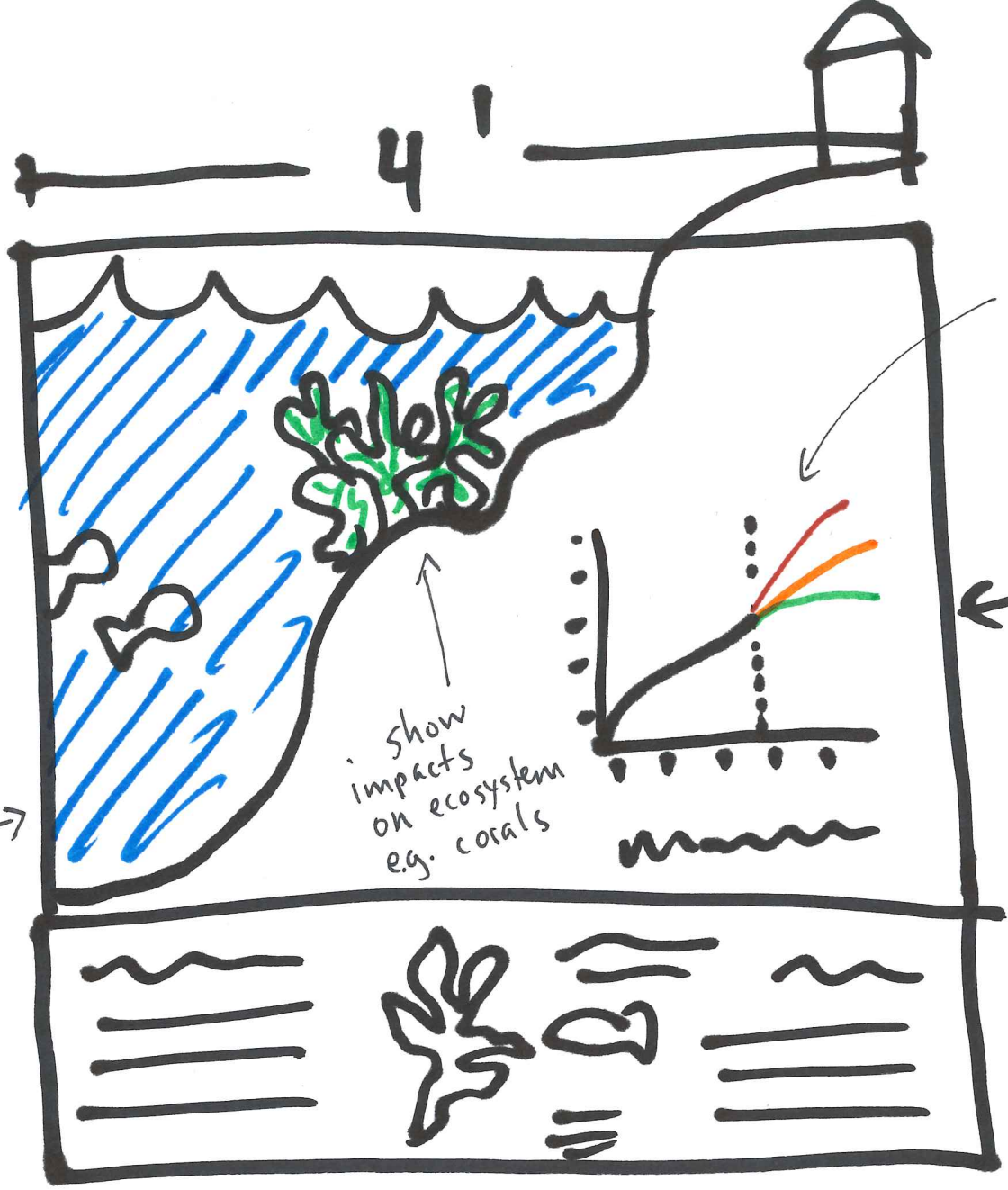


metaphor for MHHW

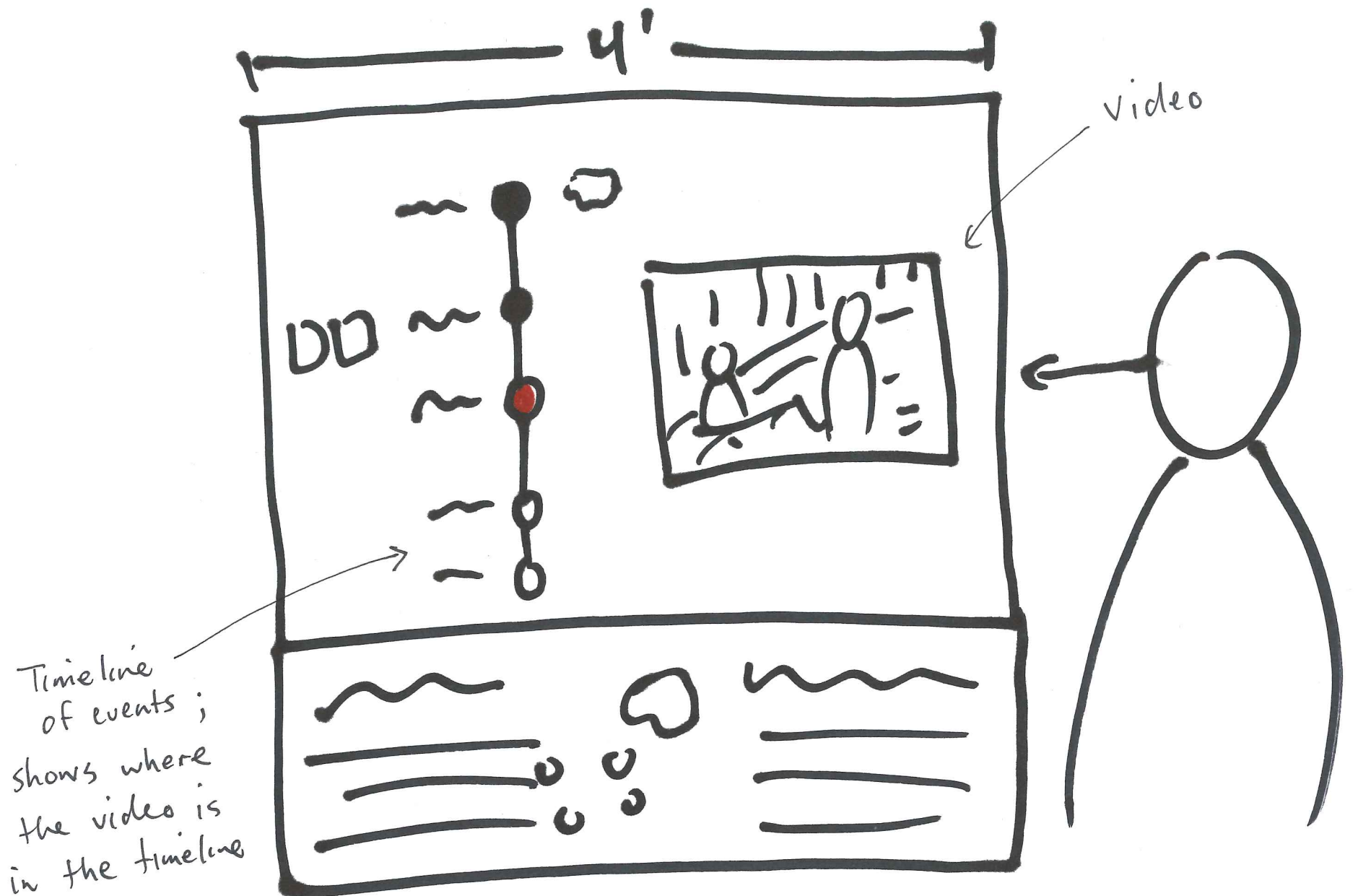
viz of SLR

SLR projections

show impacts on ecosystem e.g. corals



SLR → impacts on ecosystems



Timeline of events; shows where the video is in the timeline

# Case study of cascading consequence