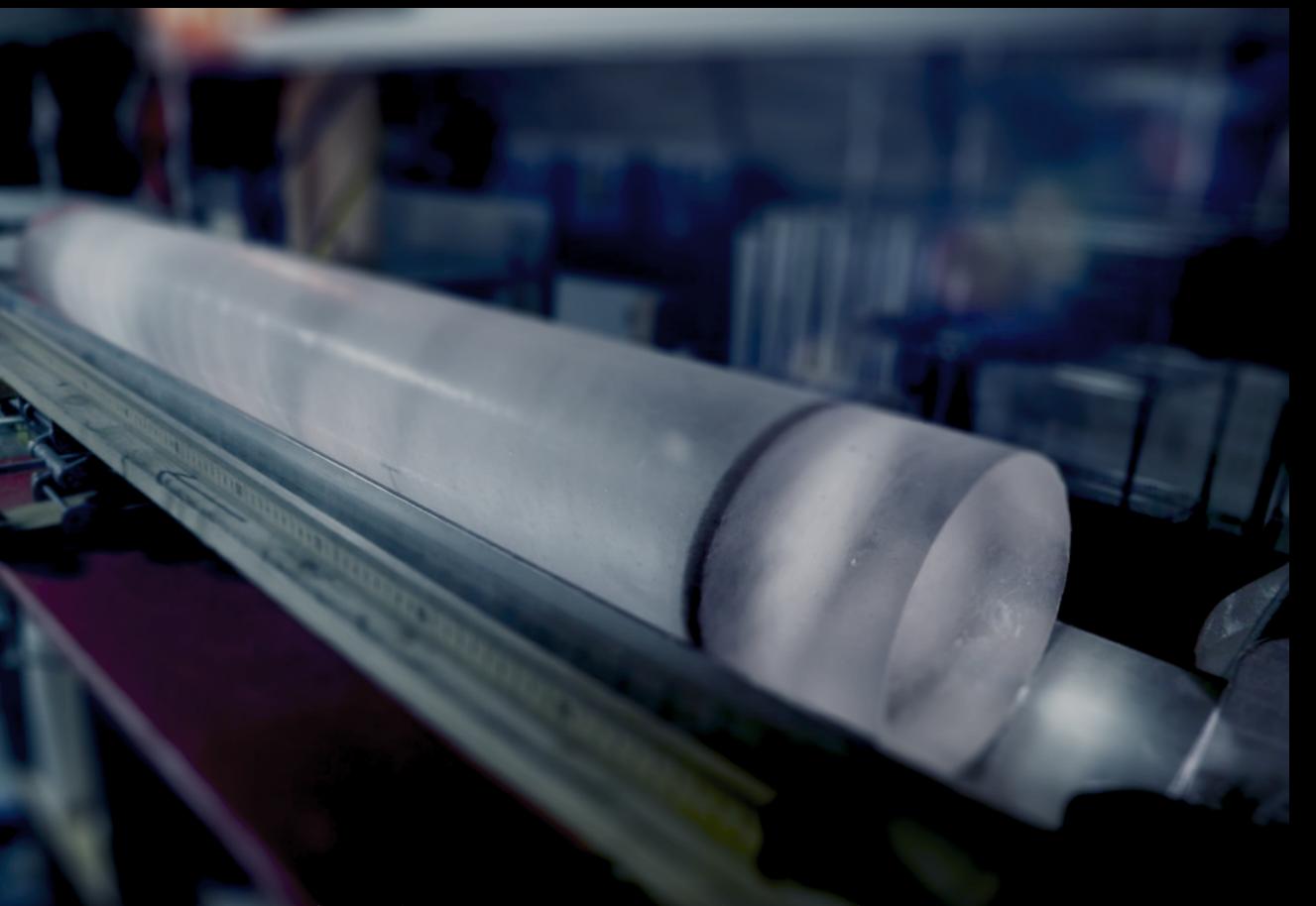


A tangible interface for displaying the change of the polar ice cap over the past 40 years.

 \checkmark



An ice core from the West Antarctic Ice Sheet Divide project – Heidi Roop, NSF "An ice core is a core sample that is typically removed from an ice sheet or a high mountain glacier. [...] The physical properties of the ice and of material trapped in it can be used to reconstruct the climate over the age range of the core."

"Ice Core" – Wikipedia

INSTALLATION

Wireless Mouse

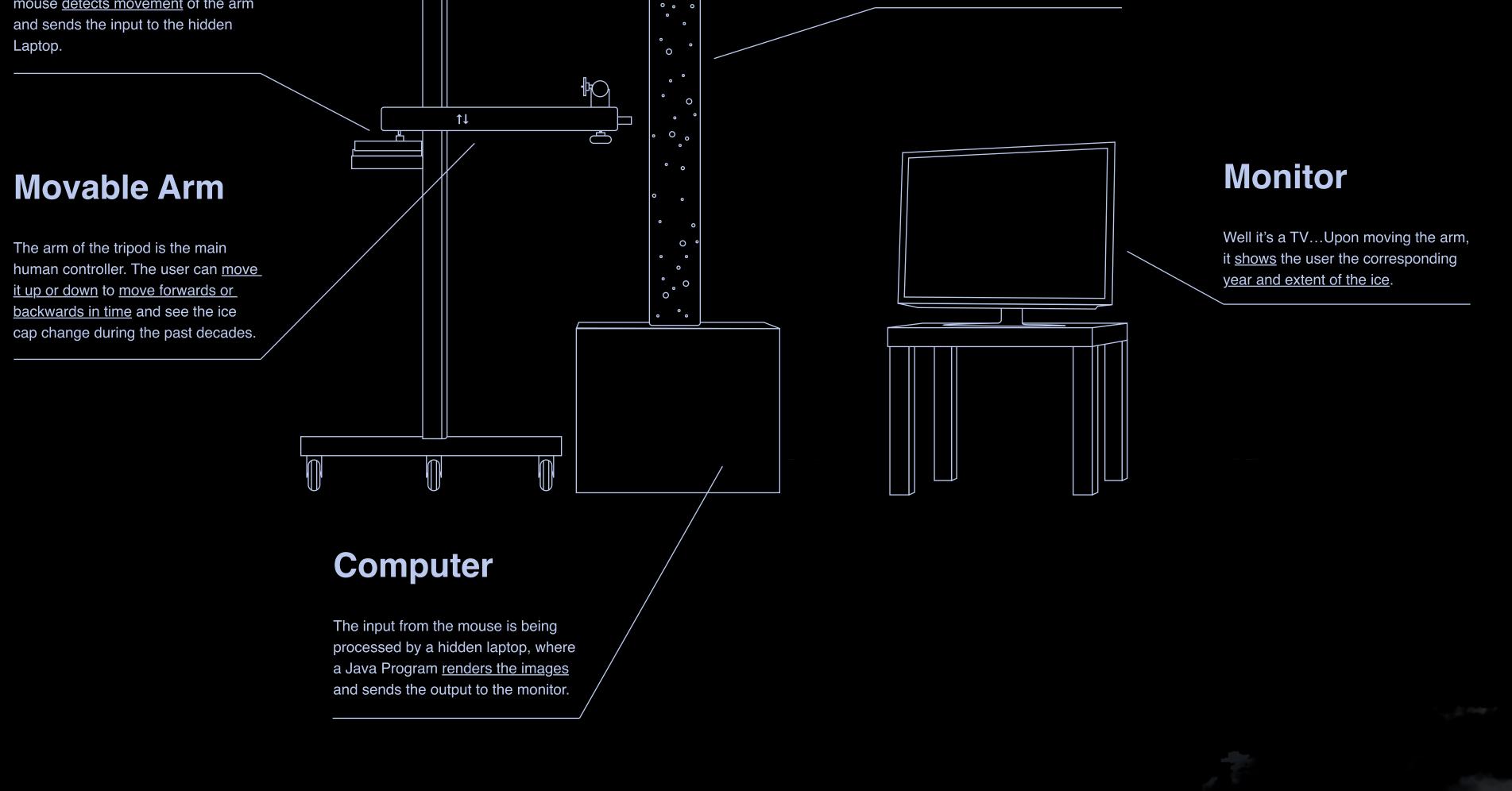
The optical sensor of the hidden mouse <u>detects movement</u> of the arm

•

• •

Ice Core Sculpture

30 Liters of molten candle gel were poured in a 1,80m tall plexiglas cylinder. The sculptur looks identical to real ice cores, used in scientific research for climate change.



ABSTRACT

This is (not) a drill is an interactive installation, designed to **give amateurs an interface for checking the reality of climate change.** They can shine light through a 1.8 meter tall sculpture of an ice core. A wireless mouse detects the vertical movement of the arm and sends the input to a hidden laptop, connected to the monitor. Moving the arm and the lamp closer to the top of the ice core will show the data from recent years, while **moving the arm down will take you back in time.**

The real ice cores are drilled out of arctic ice or glaciers to **inspect gases** or other materials trapped in it, which tell stories about the climate from decades ago. The ice core is the main visual metaphor and shapes an emotional and logical connection between the user and the data. In times of political polarization and a tendency to extremism, sharing neutral data without manipulating the message was a main focus in this project. Aiming for a sceptical target group, that prefers facebook over scientific portals as a source of information, may be much more challenging, but is ultimately more useful than explaining a convinced group something they already know.

This is (not) a drill is trying to be an answer to the question how design and art could be used to **transfer scientific information in a time of disinformation and emotional thinking.**



PROJECTION The satellite images are being distorted to fit the globe background.



RAW DATA

First, satellite images from NASA and NSIDC are being scraped. The data consists of every years' maximum at 1st March and minimum at 1st September.



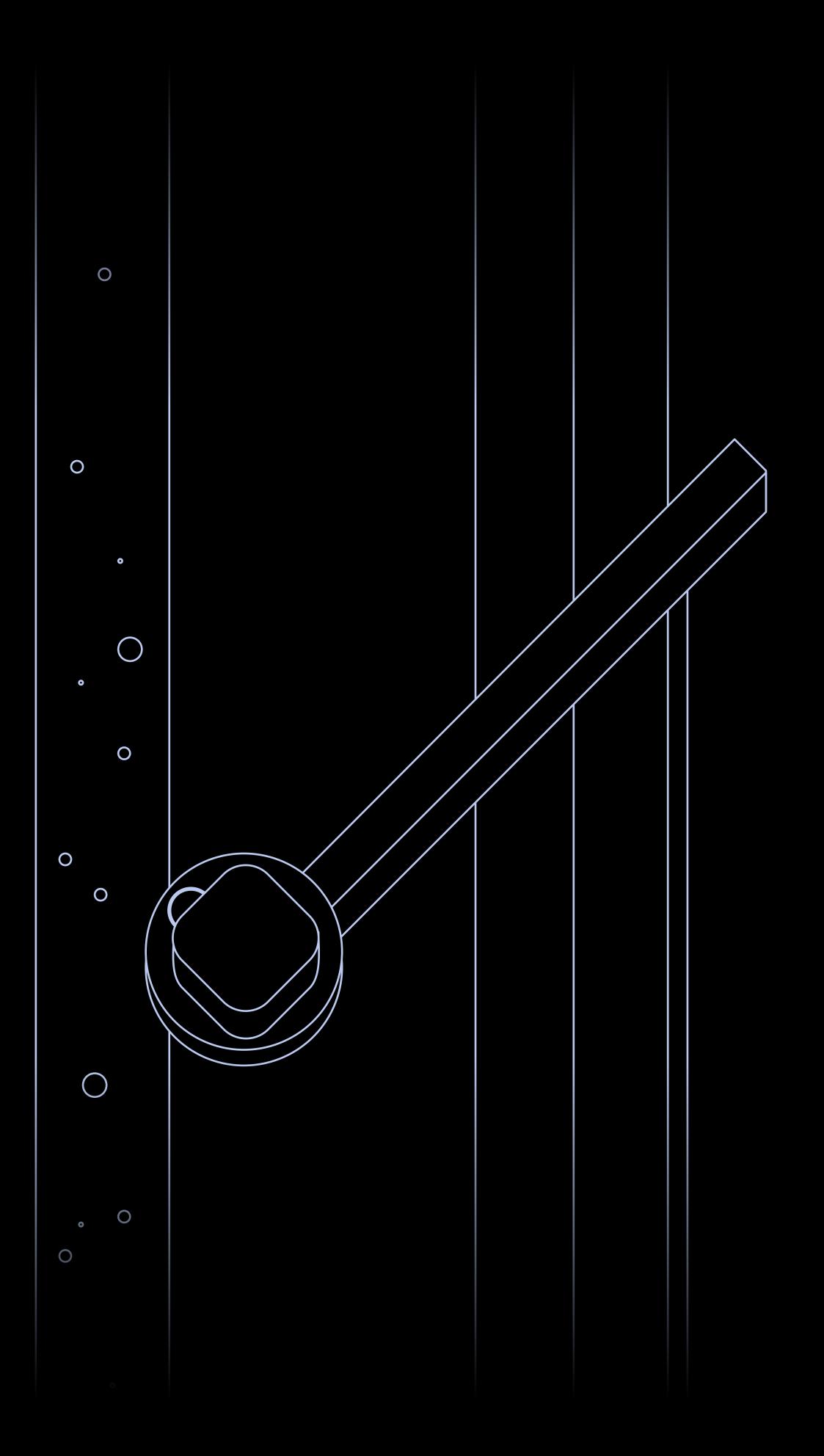
RETOUCHING

To emulate a realistic view on planet earth, the data is being manually enhanced by re-painting it digitally. Extent and density are conserved to ensure accuracy.



INTERPOLATION

Finally, the minima and maxima are being interpolated with motioninterpolation-software according to a curve from the NASA. The interpolated frames result in several hundred accurate depictions of the polar ice cap from 1979 until just weeks before the projects publication.



OPERATION PRINCIPLE

By moving the arm up and down the user shines light into newer or older parts of the ice. This move in time results in the monitor showing the extent of the polar ice cap in it's respective month and year. The user can scrub through whole decades to see broader changes or move the arm gently to closely inspect certain years.