ABSTRACT

We inhabit the floor of an ocean of air, but we hardly think about the changes that occur within this medium day to day. This installation is a three-dimensional manifestation of the changes that occur in the atmosphere. The proposal is a map of barometric pressure and accumulated precipitation, visualized through a grid of paint dipped plastic panels.

Each panel represents the maximum barometric pressure of the week. A higher barometric pressure is embodied by a longer plastic panel as if the pressure of the air is elongating the plastic. A lower barometric pressure is embodied by a shorter plastic panel which creates voids within the installation intended to be occupied. Each panel is dipped in paint to the level of precipitation for the week.

The installation will visualize the connection between barometric pressure and precipitation as well as highlight annual trends. The observer can occupy and experience the subtle changes in the ocean of air. We collect data and draw graphs to analyze these changes, but how can these numbers visualized as space influence the way we look at data?

PANEL LENGTH EQUATION & EXAMPLE

to convert the barometric pressure from units of pressure (kilopascals) to units of length (inches), use the following:

variables:
L = maximum height of panel in inches defined by site scale factor = 20 inches/kpa
M = maximum barometric pressure in kpa
D = barometric pressure of day in kpa

vertical length of each panel = L - scale factor(M - D)

for example for week 1, 2003:

L = 138 inches is the height of the installation in beckman forum scale factor = 20 inches/kpa
M = 104 kpa as the observed maximum pressure from 2000 - 2016
D = 101.9 kpa

vertical length of each panel = 138 in - 20in/kpa(104 kpa - 101.9 kpa)
vertical length of each panel = 138 in - 20in/kpa (2.1 kpa)
vertical length of each panel = 138 in - 42 in
vertical length of each panel = 96 inches

The vertical length of each unit represents the barometric pressure along the length of a year. The longer units represent higher pressure which create pockets of relieved pressure within the installation.