## **HoPE - Observation Data**

When: August 10, 2017

For how long: 60 minutes, from 2:15 PM to 3:15 PM

Where: Discovery Room (upstairs)

Age group: 3 nine-year-old children; 7 young teenagers (11 to 17 years old); one adult.

What we did: We invited visitors to try the updated prototype for the Climate Wall:

What's warming the planet?
Version 2.0: <a href="https://beefoo.github.io/climate-lab/forcings-c/">https://beefoo.github.io/climate-lab/forcings-c/</a>

During the experience, the facilitator asked questions like: "Can you answer the questions on the top?" "Did you learn anything new?" "Do you have any recommendations?"

## 1. What's warming the planet?

Number of users: 11 people

#### Technical Experience:

- Did they learn how to use the tools to control the variables?
  - 9 of 11 visitors figured out how to use the controls. They clicked and then held the buttons to read.
  - Another 2 visitors only clicked the buttons to make sound without holding the buttons to read.
- How did they interact with multiple buttons?
  - 4 of 11 visitors pressed more than one button at once
  - 2 of 11 visitors tried to answer the prompt first and then pressed the button to confirm their assumptions.

#### Content:

- Did they seem to understand the concept?
  - 10 of 11 visitors answered questions correctly
  - 4 of 10 visitors said they got the answer from the graphs: the line of greenhouse gases goes up and higher than others
  - Another 2 visitors said they knew the answer before this experience
- Did they learn new things?
  - 5 of 11 visitors said they learned new things
    - All 5 of them said they learned that volcanos have a cooling effect on the planet

- 3 of 5 visitors said they learned that deforestation has a cooling effect on the planet
- One visitor said he learned that greenhouse gases warm the planet
- One visitor said he learned that the sun is not the one warming the planet

#### Reaction:

- Surprising/delightful response?
  - 4 of 11 visitors said "Wow"/"Ah" at the appearance of the line of greenhouse gases
  - 2 of 11 visitors said "Wow"/ "Wow, I don't know it before" at the appearance of the line of volcano
  - 2 of 11 visitors laughed when pressing all the buttons
  - One visitor said "Wow" at the appearance of the line of deforestation and read the text out
- Confused/ Frustrated response?
  - One visitor didn't know what the graphs said and didn't know what to do at first
  - 2 visitors were confused with the prompt.
    - When asked "what's warming the planet", one visitor said: "sun". Then the facilitator asked "warm the planet more than usual?", she said "might be greenhouse gases"
    - Another visitor said: "I know you are talking about global warming but other people may not"
  - Another visitor asked: "Why did volcanos cool the planet? What happened in that year?"
- Did visitors interact with others during the game?
  - o 2 of 11 visitors interacted with each other
    - One visitor's friend said: "make music"
    - One visitor's friend said: "try sun"

## Recommendations from visitors:

- Controls:
  - "You need to tell people to hold them. I figured it out after experiencing it. They disappear quicker than I expected"
- Prompt:
  - Two visitors suggested to rephrase the prompt.

## 2. Temperature around the world

Number of users: 2 people

#### Overall Comment:

• "Controls are intuitive"

• "Simple, interesting and intriguing"

# Recommendations from visitors:

- Explanation: "Why do some areas have more dramatic changes?"
- Zoom in: Wanted to zoom in to see more specific areas, such as some major cities.