HoPE - Observation Data

When: August 4, 2017

For how long: 100 minutes, from 3:40 PM to 5:00 PM

Where: Discovery Room (upstairs)

Age group: two 9-year-old child; six young teenagers (16 to 19 years old); five adults. 8 groups.

What we did: We invited visitors to try two updated prototypes for the Climate Wall:
- *How has the average global temperature changed?*
  Version 2.0: https://beefoo.github.io/climate-lab/timescales-temperature-c/

- *Where is climate change most dramatic?*
  Version 2.0: https://beefoo.github.io/climate-lab/zonal-temperature-b/

  During the experience, the facilitator asked questions like: "How do you feel about the tools" "Can you answer the questions on the top?" "Do you have any recommendations?"

Data at different timescales

Number of users: 8 groups of people (13 people in total)

Technical Experience:
- *Did they learn how to use the tools to control the variables?*
  - Yes. All of the eight groups of visitors knew how to use the tools.
    - Two said: "You can figure it out after playing it"
    - Two tapped the screen first.

Content:
- *Did they seem to understand temperature anomaly?*
  - 6 of 8 groups of visitors understood the concept;
  - Another group could describe the graph ("pink is warm, blue is cold"), but could not point out the trend
  - Another group played and left too quickly for us to find out.
- *What questions did they ask?*
  - 2 of 8 groups of visitors asked "What is Fahrenheit?";
  - 3 asked what happened in certain years and what is the reason behind the change of temperature in those years.
  - 2 asked about colors
    - "Why use pink and blue?"

- ■ "Is pink good or blue good?"
- ■ "Which is the normal color? And how do you define normal? "
    - ○ Another two asked questions like "How to continue?" and "Is that all?"
    - ○ Another group asked "What is the average?"

Reaction:
- **Surprising/delightful response?**
    - ○ 4 of 8 groups of visitors said "Wow"/"Ah" when sliding to the right
    - ○ 2 of 8 groups of visitors laughed when hearing the sound and then kept moving the controller back and forth
    - ○ Another 2 groups of visitors said "It is cool/interesting to zoom in"
- **Did visitors interact with others during the game?**
    - ○ 4 of 8 groups of visitors interacted with each other
        - ■ 2 of 4 discussed questions they had
        - ■ Within another group, a boy was taught by his father about the trends and changes in climate
        - ■ Within another group, a boy invited his brother to join

Recommendations:
- **Explanation:**
    - ○ "There should be a pop-up about what's happening in certain years"
    - ○ "Integrating global temperature with global population growth will be interesting "
- **Others:**
    - ○ "Can we change the sound? Otherwise it will be annoying when children are moving back and forth"

Temperature around the world

Number of users: 5 groups (8 people in total)

Technical Experience:
- **Did they learn how to use the tools to control the variables?**
    - ○ 4 of 5 groups of visitors learned how to use it; another child only moved the controller back and forth and didn't respond to the facilitator.
    - ○ One group of visitor said you can figure out how to use the tools by observing, and "It is quite interesting and accessible"

Content:
- **Did they seem to understand that warming is unevenly distributed around the world?**
    - ○ 4 of 5 groups of visitors said it is clear/easy to understand, pointing to the most dramatic changes happening in the north pole; one visitor of them commented "the center of America doesn't have too much changes and South america is hotter"

- *What questions did they ask?*
  - "Does no changes means normal?" "Is steady good?"
  - "What is average"?
  - "Why did you choose these years? Why highlight these years? "
  - "Why do some places only have small changes?"
  - Two visitors asked questions like "What is red and blue?" and "Is red good or blue?"

Reaction:
- *Surprising/delightful response?*
  - One group said: "Wow, it's so sad" when she moved to the red spot
  - Another group said "oh" when moving up
- *Confused response?*
  - "The color didn't show which area changes the most"
  - "The more I played, the more overwhelmed I get"
- *Did visitors interact with others during the game?*
  - 3 of 8 groups of visitors interacted with others
    - One group discussed with others the questions he came up with during the game
    - Another visitor translated the experience to her daughter
    - Another visitor told the facilitator in which year her mom was born

Recommendations from visitors:
- *Explanation*: "More information explaining what average is"
- *Colors:* "Brighter background color. HoPE is already very dark"
- *Zoom in:* Two visitors said they want to zoom in to see more specific area.