HoPE - Observation Data, teachers group

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.
 - o 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?"
- o 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:
 - o "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"
 - o "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.