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DSC 640

Climate Facts Documentation

February 2021

In many ways this was the most challenging assignment on the climate project to date. Real estate on the infographic was at a premium. A balance had to be struck between gestalt and other visualization best practices while at the same time coming up with a final product that is both adequately informational, appealing overall and attention grabbing. Making a change on a single panel often had to be balanced with how it detracted from the visual overall. Any deviations from core principles were often made with that purpose in mind. The key challenge was almost always balance.

The text was kept intentionally short while balancing adequate topic coverage given the audience. I implemented three primary sized fonts outside of the title using two colors. White and a dark navy blue were selected. One size for sub headers, one size for providing information and a small sized font for graph labels were implemented. Three shades were selected from a complimentary color palette and used for the backgrounds of the panels. In all but one case, a single sub-topic was covered by a panel. Given the likely causal relationship, the rising coastal sea levels graph and the oceans absorbing heat graph were combined as the best compromise for covering both concerns and allowing for a full six metrics given the infographic size limitations in the free version of the Canva product. Tableau was used to create the line graphs. The waffle chart was created using the Canva interface. Earth tone colors were selected to garner attention in a visually appealing style that felt in line with the theme of the topic. Some of the immutable graphics found in the free version of Canva broke slightly with the color palette, but all were within acceptable tolerances. The red of the thermometer initially posed problems as it was far too bright, but red is often tied to the concept. I used a custom red that muted it enough to still be descriptive, but not overwhelm the other colors. The related pictorial elements were used to garner interest and attention and to soften the harshness of a visual consisting only of numbers and graphs. A PDF file was selected from the free options of the online Canva product. A SVG file can be purchased if any application requires more detail.

The data for the first section about the last 800,000 years of carbon dioxide levels was provided by our World in Data (2020). The data on climate expert consensus was provided by John Cook et al. and found at IOP Science (2016). Data for the line graphs on increasing ocean temperatures and rising water levels were gathered by the EPA (2016). The data from ice extents in the arctic was collected by the National Snow and Ice Data Center (2020). The data for the acidification of ocean water which was a new source and concern in the project was provided by the European Environment Agency (2020). Given the logarithmic nature of PH change, an online calculator provided by [Rechner Online](#) was used to calculate the percent change in acidity.

References:

Cook, J. et al. (2016, April 13). Consensus on consensus: a synthesis of consensus estimates on human-caused global warming. Retrieved from [https://iopscience.iop.org/article/10.1088/1748-](https://iopscience.iop.org/article/10.1088/1748-9326/11/4/048002)

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European Environment Agency (2020, June 24). Ocean Acidification. Retrieved from <https://www.eea.europa.eu/data-and-maps/indicators/ocean-acidification-3/assessment>

National Snow and Ice Data Center (2020). Arctic Sea Ice News and Analysis. Retrieved from <https://nsidc.org/arcticseaicenews/>

Our World in Data (2020, August). Atmospheric concentrations of CO2 continue to rise. Retrieved from <https://ourworldindata.org/co2-and-other-greenhouse-gas-emissions>