**Dataset associated with ‘Framing Climate Uncertainty: Frame Choices Reveal and Influence Climate Change Beliefs’**

The public debate around the changing climate is growing increasingly polarized, posing challenges for mitigation and resilience efforts, regardless of the scientific consensus about causes and consequences of climate change being increasingly high. The way how uncertain numerical climate projections are translated into simpler but ambiguous verbal frames might contribute to this polarization: Underlying beliefs of individuals about climate and the environment likely shape public communication about climate in a subtle way. Replicating two pilot studies, we investigate in two pre-registered studies (1) how ‘communicators’ verbally frame a confidence interval regarding projected change in winter precipitation due to climate change (N = 512, dataset 1). We assessed this by asking study participants to choose one of two different verbal frames for communicating the above projection (a ‘concerned’ compared to an ‘unconcerned’ frame). Using a five-item scale, we measured their perceived severity of consequences of this projection (including health, financial and property losses and one general severity item) as main predictor, and environmental values (New Ecological Paradigm-scale by Dunlap et al., 2000), political affiliation (7-point scale ranging from ‘strong democrat’ to ‘strong republican’), levels of numeracy (using the adaptive version of the Berlin Numeracy Test, BNT, Cokely et al., 2012), age, gender, and levels of education.

We investigated (2) how ‘listeners’ interpret the two different verbal frames (N = 385). Listeners were randomly allocated to two different experimental groups. As main dependent variable, we measured their perceived severity of consequences of precipitation change, and as covariates environmental values, levels of numeracy, and demographic variables, all as described for study 1. Samples for both studies were recruited via Amazon Mechanical Turk in spring 2017. Answers of participants were collected using the survey software Unipark. Both studies were preregistered at the Open Science Framework, and all materials and measures used can be found at [osf.io/3tr4h](http://osf.io/3tr4h).

References

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