

APPENDIX 3:

ADDITIONAL TABLE AND FIGURES

Table A1. Annual rate of change confidence intervals estimated by time frame and warming scenario. Experts were asked for cumulative release; this calculation divided cumulative by numbers of years in a period and assumes a constant rate over each time interval. Rates are shown for emissions that occur within a given time period, rather than cumulative from present (2010). The estimates of release from the permafrost C pool do not strictly represent fluxes to the atmosphere because plant uptake (not estimated by this survey) may offset some portion of C release.

		2010-2040		2040-2100		2100-2300	
		Lower 95% CI	Upper 95% CI	Lower 95% CI	Upper 95% CI	Lower 95% CI	Upper 95% CI
Surface permafrost loss (% yr ⁻¹)	RCP2.6	0.10	0.22	0.13	0.18	0.05	0.06
	RCP4.5	0.18	0.32	0.22	0.31	0.07	0.08
	RCP6.0	0.21	0.35	0.46	0.59	0.08	0.09
	RCP8.5	0.31	0.52	0.64	0.79	0.09	0.09
Total C release (Pg C yr ⁻¹)	RCP2.6	0.2	0.4	0.4	0.6	0.3	0.4
	RCP4.5	0.3	0.6	0.7	1.0	0.4	0.6
	RCP6.0	0.3	0.7	1.1	1.7	0.6	0.8
	RCP8.5	0.5	1.1	1.8	2.7	0.4	1.1
CH₄ release (Tg C yr ⁻¹)	RCP2.6	3	12	9	25	6	16
	RCP4.5	5	17	13	38	8	23
	RCP6.0	5	19	20	56	11	31
	RCP8.5	9	28	30	89	13	40

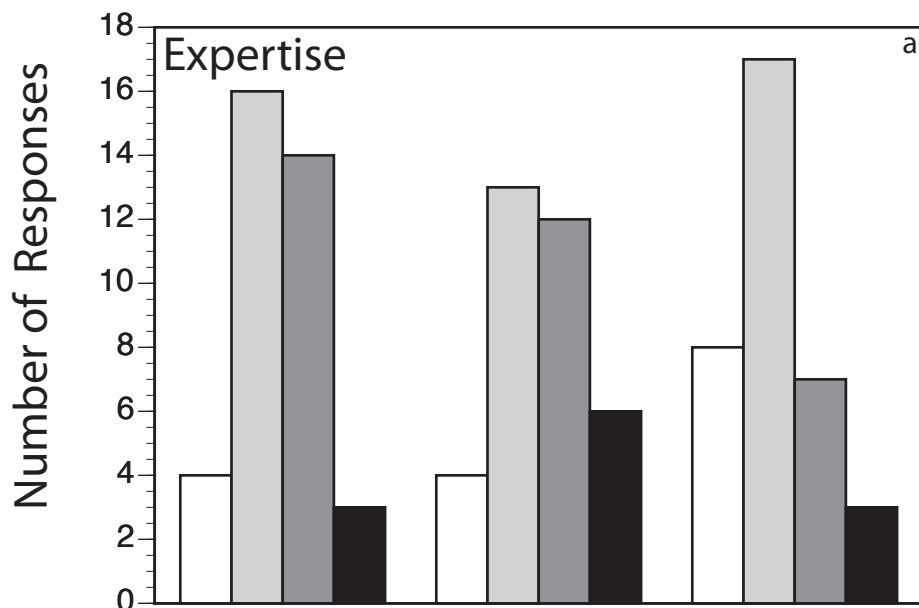
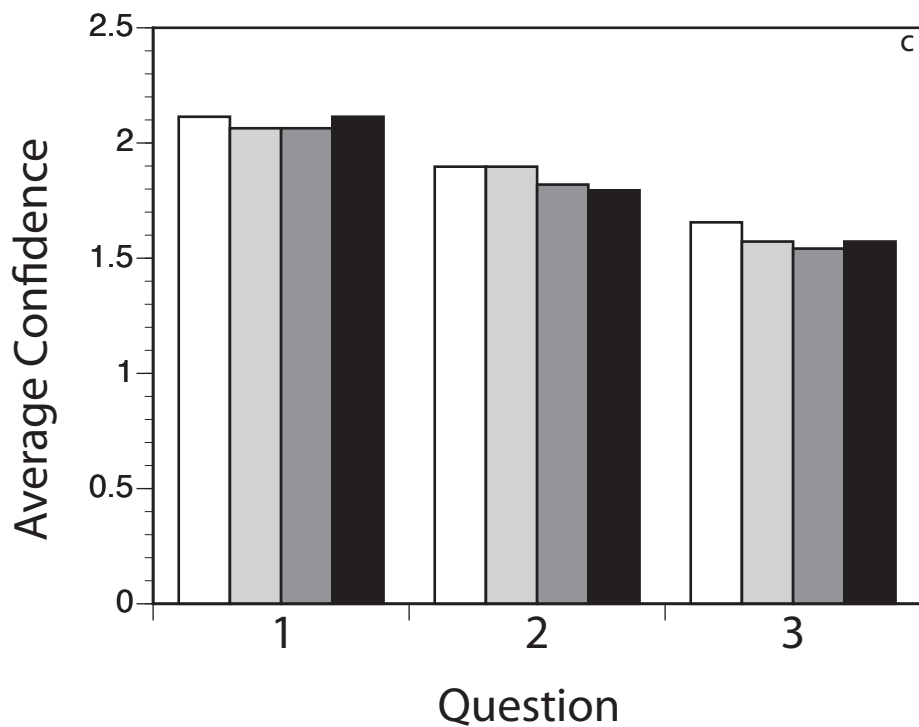
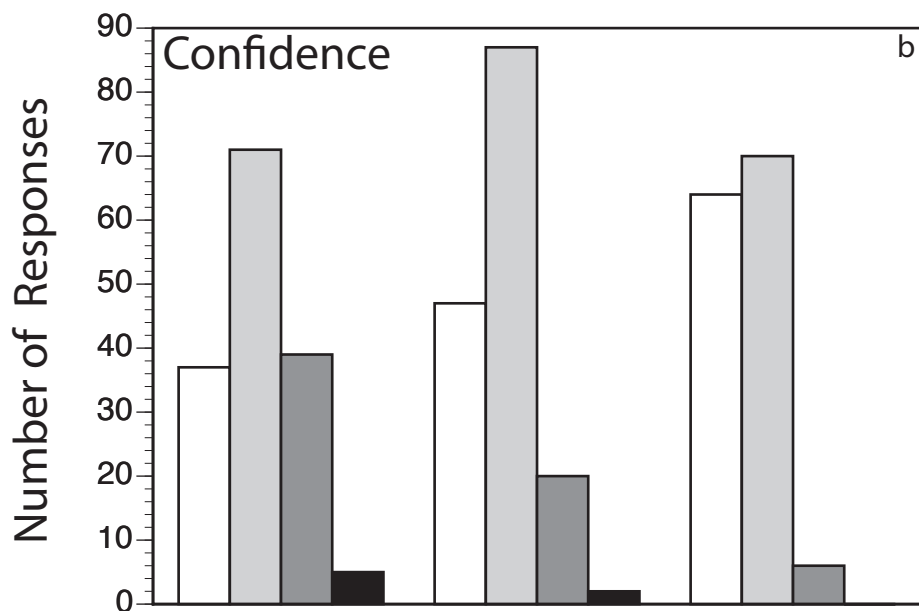


Figure A1. Distribution of survey respondents self-rated **a)** expertise and **b)** confidence reported by question, and **c)** average confidence reported by scenario. For a) and b), 1 is low and 4 is high.



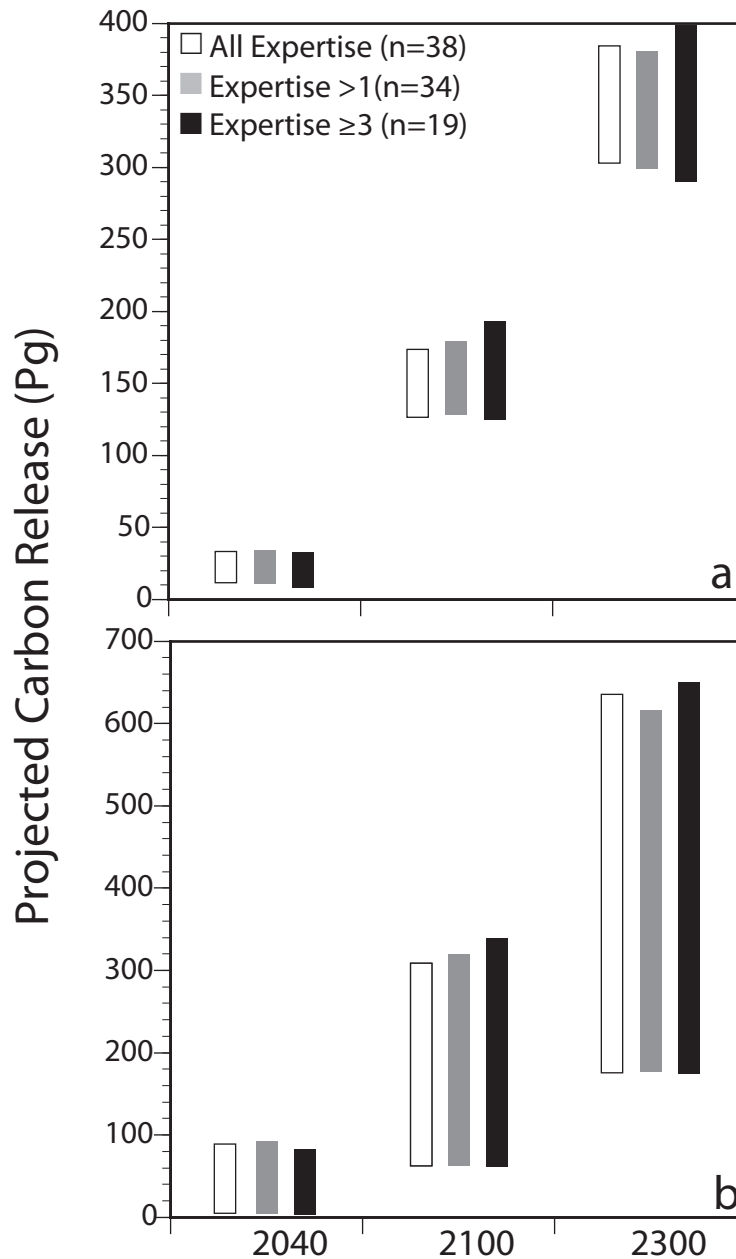


Figure A2. Total carbon released projected by experts cumulative for three time periods. Bars represent the In-transformed mean response plus and minus **a)** one standard error and **b)** one standard deviation for the experts stratified based on self-reported expertise level on a scale of 1-4 (low-high). This projection is for the high warming scenario, but the lack of large differences with stratification is representative of other warming scenarios and other survey questions.