

Sea Level Rise

For New York City, also shown are the NPCC 2019 results for the Antarctic Rapid Ice Melt (ARIM) scenario. ARIM represents a physically plausible upper-end, low probability (significantly less than 10% likelihood of occurring) scenario for the late 21st century, derived from recent modeling of ice sheet–ocean behavior. The ARIM scenario contains uncertainties stemming from incomplete knowledge of ice-sheet processes and atmosphere, ocean, and ice–sheet interactions.

New York City (The Battery) Sea Level Rise (inches)							
SSP245	Decade \ Percentile	10th	25th	50th	75th	90th	
	2030s	6	7	9	11	13	
	2050s	11	13	16	19	22	
	2080s	18	22	26	32	37	
	2100	22	26	32	40	46	
	2150	32	38	50	65	77	
SSP585-med		10th	25th	50th	75th	90th	
	2030s	6	8	9	11	13	
	2050s	13	15	18	21	24	
	2080s	23	27	32	39	45	
	2100	28	32	40	49	57	
	2150	45	52	67	87	102	
SSP585-low		10th	25th	50th	75th	90th	
	2030s	6	8	9	11	13	
	2050s	13	15	17	16	21	
	2080s	23	27	34	43	55	
	2100	28	32	45	66	82	
	2150	45	52	93	186	219	
Across Scenarios		10th	25th	50th	75th	90th	ARIM
	2030s	6	7	9	11	13	
	2050s	12	14	16	19	23	
	2080s	21	25	30	39	45	81
	2100	25	30	36	50	65	114
	2150	38	47	59	89	177	

Note: Scenarios are three used by the IPCC: SSP2-4.5-medium confidence, SSP5-8.5-medium confidence, and SSP5-8.5-low confidence

Like all projections, these climate projections have uncertainty embedded within them. Sources of uncertainty include data and modeling constraints, the random nature of some parts of the climate system, and limited understanding of some physical processes. Levels of uncertainty are characterized using state-of-the-art climate models, multiple scenarios of future greenhouse gas concentrations, and recent peer-reviewed literature. Even so, the projections are not true probabilities, so the specific numbers should not be emphasized, and the potential for error should be acknowledged.