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Table S1: Sources and assumptions used for the high-end estimates shown in Figure 4

Source	Baseline	Median value (m)	Median value description	High-end value (m)	High-end value description
National Research Council (2012) (Darylmple, et al 2012)	2000	0.91	Median projection used 2007 IPCC SRES A1B projections from AR4 using Pardaens et al (2010).	1.40	The high-end steric contribution was determined by scaling the A1B projections for 2100 to high value of SRES A1FI. The cryospheric projection was an extrapolation from recent observed changes, ±1 standard deviation and including an additional dynamic contribution at the high end that increases ice discharge for GIS and AIS (Appendix E of report).
Third National Climate Assessment (2014) (Melillo et al 2014)	1992 (mid-point of the NTDE calculated from TG obs from 1983-2001)	-	Median projection not provided in NCA or Parris et al 2013, source document for SLR chapter.	2.00	High end derived from combination of ocean warming from IPCC AR4 SLR projections and maximum possible glacier and ice sheet loss by 2100 from Pfeffer et al., (2008) as per Parris et al (2013)
IPCC AR5 (Church et al., 2013)	1986-2005	0.74	Median of 5-95% projections for RCP 8.5.	-	No high end shown for reasons of unresolvable ambiguity
Horton et al. (2014)	2000	0.92	Median not shown in Horton et al 2014 but median for RCP 8.5 from Horton et al 2014 is taken from Horton et al 2020.	1.50	High end: 95th percentile projection for RCP 8.5 from expert survey
Sweet et al. (2017)	2000		No median figure was provided, only a median range of 0.5-1.3 m using sources supplementary to those of AR5 (p. 13)	2.50	High end: Authors attributed the high-end projection of 2.5 m ("extreme" scenario) to multiple sources: Sriver et al., 2012; Bamber and Aspinall, 2013; Miller et al., 2013; Rohling et al., 2013; Jevrejeva et al., 2014; Grinsted et al., 2015; Jackson and Jevrejeva, 2016; Kopp et al., 2014; DeConto and Pollard 2016). Analysis of these (Lipscomb et al 2024 in review) indicates primary reliance on Kopp et al 2014, which draws from Bamber and Aspinall 2013 for high end projections, as well as DeConto and Pollard 2016).

UKCP18 (Palmer et al., 2018)	1981-2000	0.78	These scenarios are derived from the AR5 scenarios (Church et al., 2013) for UK application. The global scenarios are updated to reflect larger Antarctic contributions following Levermann et al, (2014). The RCP8.5 global median rise to 2100 is 0.78m.	1.93	High end: Uses the upper end of H++ derived from UKCP09 (Lowe et al., 2009). A range of high-end sea-level increases termed H++ are given from present day (1980–1999) to 2095 for H++, but no time series is presented. The H++ scenarios were created as some potential users of UKCP09 requested a high-end coastal flooding scenario that lies above the best estimates of uncertainty for 21st century sea level rise and storm surges. Two lines of evidence were used to derive these ranges based on palaeo records (Rohling et al., 2008) and dynamic arguments (Pfeffer et al., 2008). The H++ range is intended to provide users with estimates of SLR within physical plausibility. While a likelihood was not assessed it was noted that the upper end of H++ is very unlikely to occur by 2100 and the main application of this scenario was envisaged as vulnerability testing. (see also Nicholls et al., 2014).
IPCC SROCC 2019 (Oppenheimer et al (2019)	1986-2005	0.84	Median RCP 8.5 estimate matching AR5 but with increased contribution from Antarctica from post-AR5 literature	2.00	Derived from Bamber et al 2019 Structured Expert Judgment
Horton et al. (2020)	1986-2005	0.93	Median taken from survey responses for 5-95 percentile range under RCP 8.5.	1.65	95th percentile of range developed from expert survey.
IPCC AR6 medium confidence (Fox-Kemper et al., 2021)	1995-2014	0.77	SSP5-8.5 median for medium confidence.	1.60	High-end is 95th percentile for RCP 8.5 with medium confidence
IPCC AR6 low confidence (Fox-Kemper et al., 2021)	1995-2014	1.00	Low confidence medians for SSP5-8.5 are shown in AR6 for MICI (0.99 m) and SEJ (1.0 m). We use the 1.0 figure here.	2.40	95th percentile of range for RCP 8.5 developed from Bamber et al 2019 Structured Expert Judgement, DeConto and Pollard 2016 and DeConto et al 2021.
Sweet et al. (2022)	2000	0.70	Median is for GMSL under 4°C warming, 2081-2100.	2.00	High end scenario of 2.0 meters GMSL reflects over 80% influence from the simulations combining AR6 low confidence projections based on Bamber et al 2019 and DeConto et al 2021 under high emissions.
Van de Wal et al. (2022)	1995-2014		Not estimated	1.55	High-end of range for 5°C warming by 2100 assuming SLR contributions are perfectly correlated

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