Table A1 Average rate of relative land uplift (positive values) or subsidence (negative values) around the coast of the UK for the period 0 to 4 kyr BP, and best estimate of relative uplift/subsidence after allowing for sediment consolidation, based on radiocarbon dating of validated sea level index points, but excluding tidal range correction. Modified from Shennan and Horton (2002). Site 41 includes Broadland and the Blyth Estuary (data of Coles and Funnell, 1981 and Brew *et al* . 1992).

			Relative movement (mm per year)		Net sea level change between 1980 to 1999 and 2090 to 2099 (cm) from IPCC 4th Assessment	
	Site	Name	Per site	Averaged	Low Emissions scenario	High emissions scenario
Global average					18	59
Orkney and Shetlands	1	Shetlands	0.00	0.00	18	59
	2	Orkney	0.00			
NE Scotland	3	Wick	0.42	0.79	10	51
	4	Dornoch Firth	0.65			
	5	Moray Firth	1.11			
	13	NE Scotland	0.61			
	14	Aberdeen	0.69			
	15	Montrose	0.97			
	16	Tay Valley	1.08			
SE Scotland	22	SE Scotland	1.15	1.15	7	48
NE England	23	NE England (North)	0.71	0.21	16	57
	24	NE England (Central)	0.11			
	25	NE England (South)	0.17			
	26	Tees	-0.17			
E England	36	Humber (inner estuary)	-0.86	-0.78	26	67
	37	Humber (outer estuary)	-0.78			
	38	Lincolnshire Marshes	-0.62			
	39	Fens	-0.86			
East Anglia	40	Norfolk	-0.76	-0.74	25	66
	41	East Anglia	-0.61			
	45	Essex	-0.85			
SE England	46	Thames	-0.74	-0.61	24	65
	47	Kent	-0.67			
	48	Sussex	-0.42			
SW England	49	Hampshire	-0.58	-0.84	26	67
	50	Dorset	-0.49			
	51	Devon	-1.23			
	52	Cornwall	-1.12			
	44	Bristol Channel	-0.76			
N Wales	35	Mid Wales	-0.38	-0.34	21	62
	34	North Wales	-0.29			
NW England	33	Mersey	-0.21	0.55	12	53
	32	Lancashire	0.47			
	31	Morecambe Bay	0.69			
	29	Cumbria	0.95			
	28	South Solway Firth	0.87			
Isle of Man	30	Isle of Man	0.45	0.45	14	55
SW Scotland	27	North Solway Firth	1.13	1.56	2	43
	21	Ayr	1.98			
	20	Clyde	1.53			
	18	Islay	1.52			
	17	Forth Valley	1.63			
NW Scotland	12	Kentra	1.00	0.77	10	51
	11	Arisaig	1.01			
	10	Kintail	0.73			
	9	Applecross	0.49			
	8	Skye	0.81			
	6	Coigach	0.56			

Table A2 *Recorded high water levels exceeding 2.0 m OD at Lowestoft (20 km north of Walberswick) between 1964 and 2006. Values for the 1953 storm surge estimated by ROSSITER (1954) are also shown for comparison. The maximum residual is the largest recorded difference between predicted and observed water level during the tide. Positive time differences indicate that high water occurred later than predicted. Primary data source: NTSLF.*

Date	Time	Height (m OD)	Difference between observed and predicted high water		Maximum residual (m)
			Height (m)	Time	
31/01/1953	22:19	3.44	2.21	-00:51	2.53
10/12/1965	10:00	2.13	1.09	00:00	1.18
29/09/1969	10:00	2.71	1.54	-01:00	1.72
19/10/1970	12:00	2.00	1.02	00:00	1.11
21/11/1971	23:00	2.27	1.29	00:00	1.60
02/04/1973	20:00	2.19	1.27	-01:00	1.31
19/11/1973	18:00	2.14	1.40	00:00	1.58
25/11/1973	21:00	2.02	1.03	-01:00	1.08
06/12/1973	19:00	2.06	1.32	00:00	1.45
14/12/1973	00:00	2.47	1.34	00:00	1.34
03/01/1976	10:00	2.20	1.30	-01:00	1.58
03/01/1976	21:00	2.68	1.61	-02:00	1.97
20/01/1976	23:00	2.04	0.89	-01:00	1.28
11/01/1978	23:00	2.33	1.11	00:00	1.49
24/11/1981	20:00	2.01	1.14	-01:00	1.60
01/02/1983	23:00	2.69	1.53	-01:00	1.68
03/01/1984	21:00	2.05	1.09	-01:00	1.51
14/02/1989	06:00	2.31	1.52	03:00	2.51
26/02/1990	22:00	2.14	1.01	00:00	1.21
07/10/1990	10:00	2.18	0.91	-01:00	1.26
12/12/1990	06:00	2.02	1.25	01:00	2.02
12/12/1990	19:00	2.24	1.55	00:00	2.02
25/01/1993	11:00	2.10	1.33	-00:15	1.46
21/02/1993	09:00	2.68	1.91	-00:45	2.37
14/11/1993	21:00	2.33	1.23	-00:30	1.38
20/12/1993	00:45	2.06	1.13	-00:45	1.17
28/01/1994	09:30	2.41	1.54	-00:30	1.60
13/03/1994	21:30	2.06	1.06	-00:45	1.14
01/01/1995	20:30	2.36	1.28	-00:45	1.38
10/01/1995	05:15	2.17	1.45	01:45	1.92
29/10/1996	10:30	2.30	1.19	-00:30	1.22
04/02/1999	23:30	2.13	1.10	-00:30	1.75
30/01/2000	04:15	2.18	1.52	00:15	1.61
11/02/2000	00:15	2.02	1.04	-00:30	1.07
15/12/2003	00:45	2.20	1.33	-00:15	1.36
08/02/2004	22:00	2.00	0.96	-01:00	1.50
12/01/2005	22:30	2.18	1.07	-00:15	1.35
14/02/2005	00:15	2.04	0.94	-00:15	0.96
31/10/2006	20:15	2.04	1.30	03:15	1.87
01/11/2006	05:15	2.24	1.46	00:45	1.62
12/01/2007	02:45	2.14	1.38	00:15	1.46
18/03/2007	20:30	2.16	1.14	-00:15	1.29
08/11/2007	21:00	2.04	1.13	00:00	2.09
09/11/2007	08:15	2.63	1.64	-00:30	2.09

Table A3 Predictions of mean global sea level rise (cm) to 2100, relative to 1961-1990, indicated by successive reports of the Intergovernmental Panel on Climate Change. Allowances for regional sea level rise in Eastern and South Eastern England recommended by DEFRA (2006) are shown for comparison.

		Low	High	Average
IPCC First Assessment (1990)	Business As Usual	**31**	**110**	**66**
IPCC Second Assessment (1995)	IS92a	**20**	**86**	**49**
	All models, scenarios and uncertainties	13	94	49
IPCC Third Assessment (2001)	IS92a	**11**	**77**	**44**
	A1B	12.9	69.4	38.7
	A1T	18.2	85.9	36.7
	A1FI	11.1	67.1	49.1
	A2	15.5	74.3	42.4
	B1	92	56.7	31
	B2	11.4	64.6	35.8
	All models and scenarios	9*	69*	39*
	All models, scenarios and uncertainties	9	88	48
IPCC Fourth Assessment (2007)	A1B	21	48	35
	A1T	20	45	33
	A1FI	26	59	43
	A2	23	51	37
	B1	18	38	28
	B2	20	43	32
UKCIP prediction of changes by 2080s based on the IPCC Third Assessment:				
	Eastern England	22*	82*	52*
	South Eastern England	19*	79*	49*
DEFRA Allowances (1991) for England				66
DEFRA Allowances (2006) for Eastern England				98

Note:
Business As Usual, IS92a and A1B scenarios are roughly comparable
Figures in bold are values highlighted in the Executive Summaries of the Assessment Reports
*Figures quoted by Hulme et al., 2002.

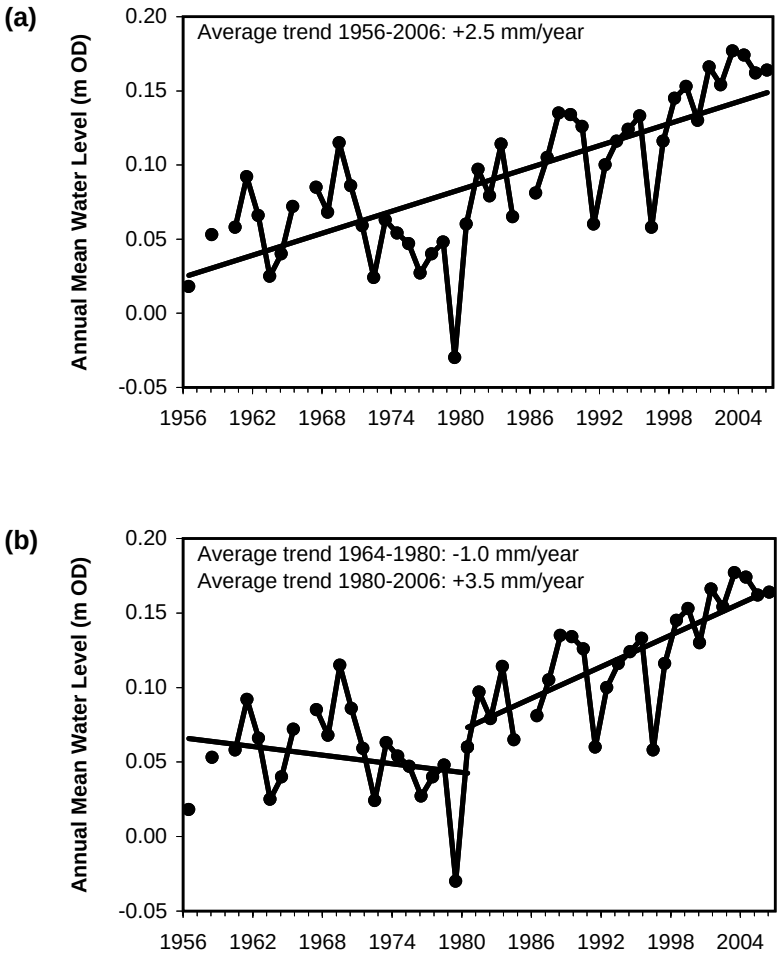

Figure A1 Trends in mean sea level at Lowestoft, based on tide gauge records for the period 1956-2006. Date source: PSMSL.

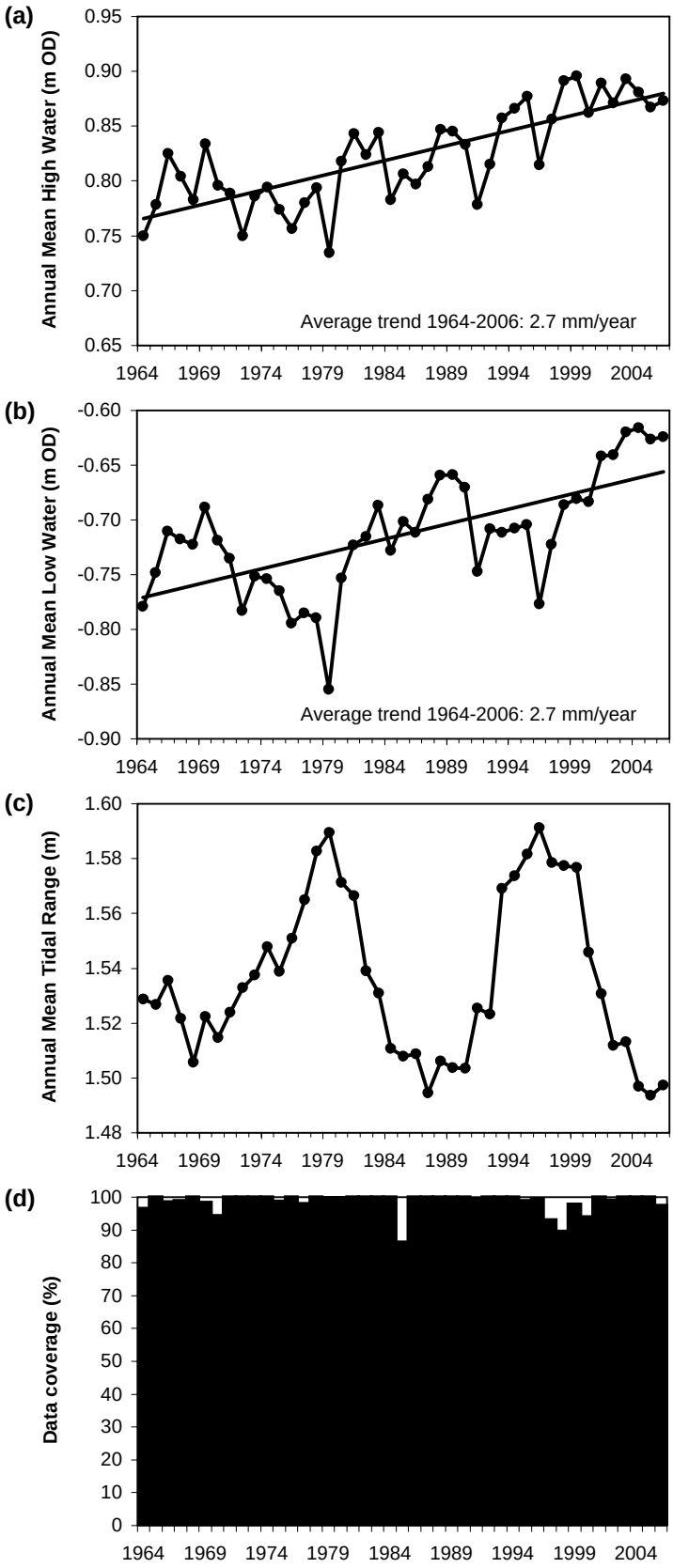

Figure A2 Trends in (a) annual mean high water, (b) annual mean low water, and (c) annua mean tidal range at Lowestoft during the period 1964-2006. The completeness o the data record is shown in (d). Variation due to the 18.6 year lunar nodal tidal cycle shown in (c) are relatively small (< 9 cm). Primary data source: NTSLF.

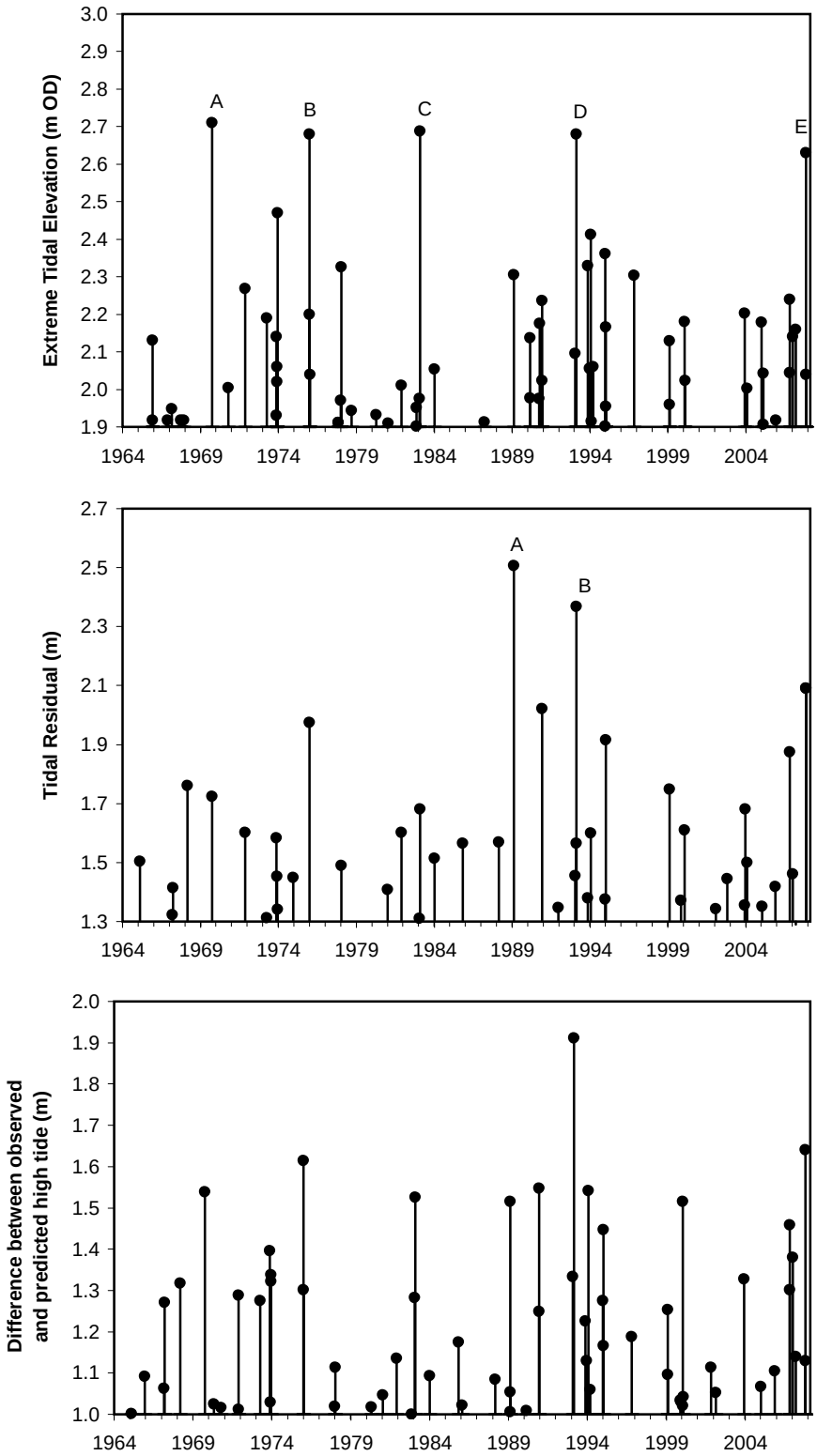

Figure A3 Occurrence of extreme high waters due to storm surges indicated by the Lowestoft tide gauge record for the period 1964-2007: (a) Extreme high water, the five highest occurring on (A) 29 September 1969, (B) 3 January 1976, (C) 1 February 1983, (D) 21 February 1993 and (E) 9 November 2007; (b) Extreme tidal residuals, the two highest residuals occurred on (A) 14 February 1989, and (B) 21 February 1993; (c) Differences between observed and predicted high waters, the largest difference occurred on 21 February 1993. Primary data source: NTSLF.

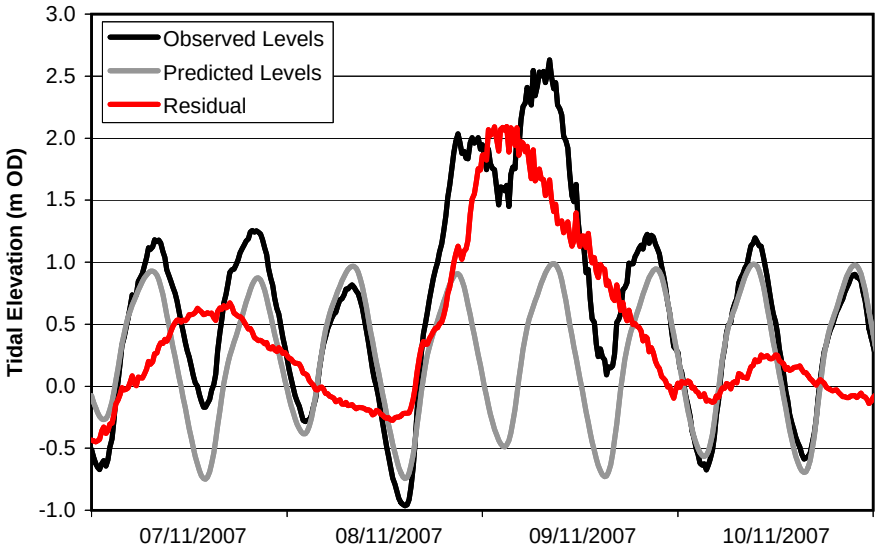

Figure A4 Predicted and observed tidal levels at Lowestoft on 8-9 November 2007. The maximum residual occurred at the time of low water between the two high waters. Primary data source: NTSLF.