

Coast	Date	Tide gauges	Storm surge	Downscaling	ECMWF reanalyses
Atlantic	8 October 1924	*	*	D1	ERA-20C
	14 March 1937	*	*	D1	ERA-20C
	31 January–1 February 1953	*	> 3	D1	ERA-20C
	13 February 1972	10	1.83	D1	ERA-40
	30 November–2 December 1976	12	1.36	D1	ERA-40
	11–13 January 1978	7	1.65	D1	ERA-40
	15–16 October 1987	12	1.72	D1	ERA-Interim
	26 February–1 March 1990	6	1.67	D1	ERA-Interim
	2–4 January 1998	5	1.60	D1/D2	ERA-Interim
	6 November 2000	8	1.00	D1/D2	ERA-Interim
	17 December 2004	7	1.30	D1/D2	ERA-Interim
	9 November 2007	2	2.20	D1/D2	ERA-Interim
	10 March 2008 (Johanna)	7	1.30	D1/D2	ERA-Interim
	23–24 January 2009 (Klaus)	10	1.29	D1	ERA-Interim
28 February 2010 (Xynthia)	8	> 1.60	D1/D2	ERA-Interim	
Mediterranean	6 November 1982	*	*	D1	ERA-Interim
	6–7 February 2009	7	0.60	D1/D2	ERA-Interim
	24–25 December 2009	6	0.50	D1/D2	ERA-Interim
	19 February 2010	6	0.50	D1/D2	ERA-Interim
Atl–Med	27 December 1999 (Martin)	4	1.60	D1/D2	ERA-Interim
Bulgarian	5–21 October 1976	2	1.00	D1	ERA-40
	16–21 January 1977	1	0.60	D1	ERA-40
	13–23 February 1979	3	1.43	D1	ERA-Interim
	7–10 January 1981	0	*	D1	ERA-Interim
	24–31 December 1996	2	1.00	D1	ERA-Interim
	15–19 December 1997	1	1.30	D1	ERA-Interim
	20–27 January 1998	2	0.90	D1	ERA-Interim
	1–3 July 2006	2	0.60	D1	ERA-Interim
	8–11 March 2010	2	0.90–1.00	D1	ERA-Interim
	7–9 February 2012	2	*	D1	ERA-Interim