



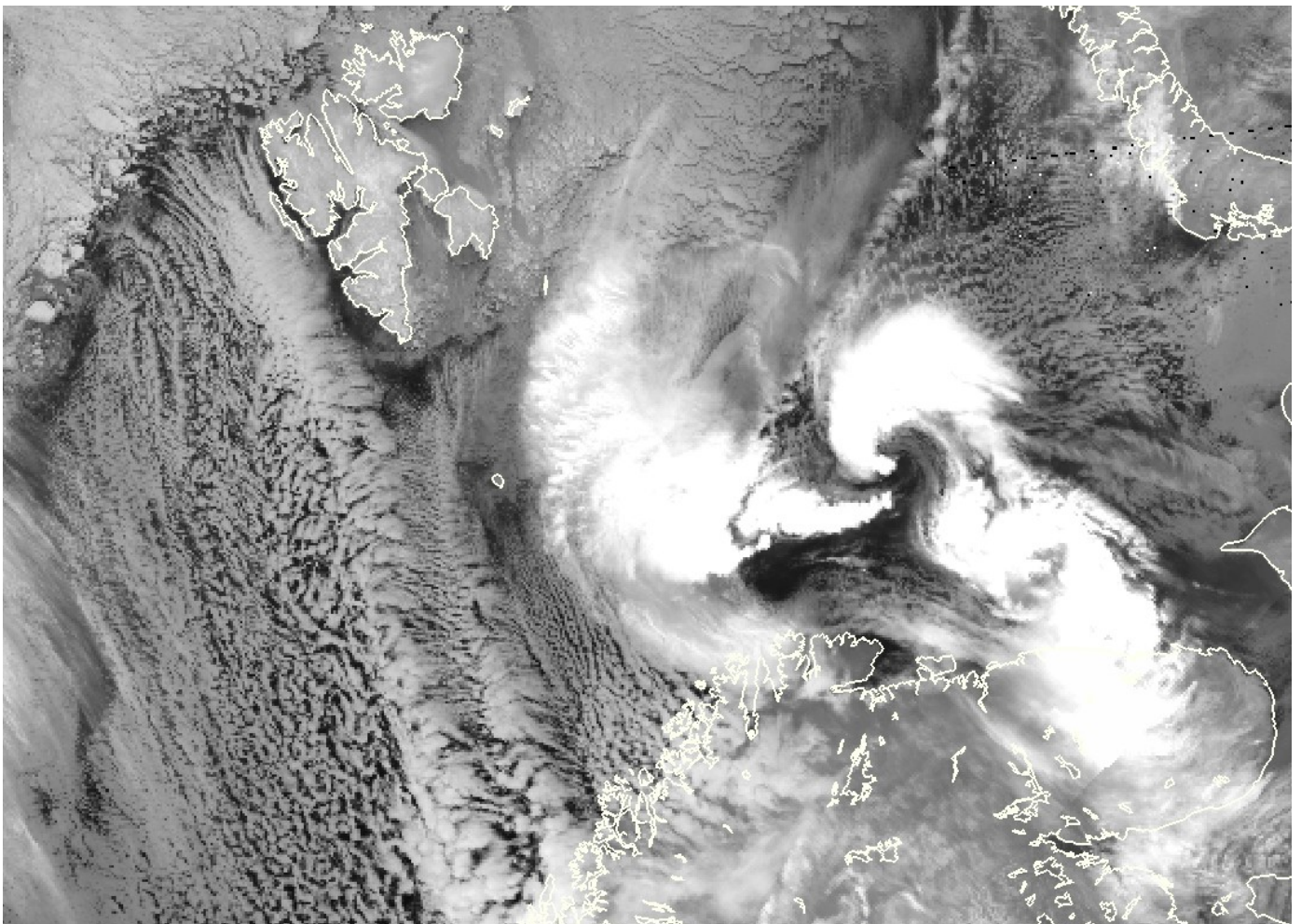
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Polar Lows

Dates and Positions of Polar lows over the Nordic Seas between 2000 and 2010

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Abstract Based on NOAA AVHRR, synoptic observations and daily registrations at the Norwegian Meteorological Institute (met.no) in Tromsø. Focus of registrations are mainly from the Greenland east coast to Novaya Zemlja, and from 65N – the arctic ice edge. The list contains most, but not all, of the polar lows in this area. The selection of the polar lows are based on the definition of the European Polar Low Working Group (EPLWG): A small but fairly intense low in cold air outbreaks well north of the polar front, with a cyclonic cloud structure and a diameter of 100-500km. Wind data is taken from synoptic observations of past max 10 minute 10m wind, or from Qscat/Ascat. When synoptic observations are not available, the low is identified from visual appearance. The cases marked by ** are added on a recent revision from visual inspection of NOAA AVHRR channel 4 images stored at the met.no. Dates and positions refer to the time when the low is first identified as a fully developed polar low, i.e. early in the life span of the low. Minimum pressure and maximum wind is taken from analysis made at the Norwegian Meteorological Institute in Tromsø, covering the entire lifespan of the low. The extreme values typically occur some 3 – 9 hrs after first identification. Because of the scarcity of observations, the pressure estimate is	
Keywords Polar lows, Nordic Seas	

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Date	Time (utc)	Lat.	Long.	Remark	Min.SLP (hPa)	Max wind (kt)
19.12.99	1340	72N	18E		989	45
22.01.00	0250	72,5N	29E	Old Erik	990	42
31.01.00	0610	65N	04E	Cirrus on top	978	50
08.03.00	1900	69N	4E		992	35
24.03.00	1230	72N	21E	Most beautiful	997	35-40
01.01.01	1500	75N	22E	**		
04.02.01	1540	62,5N	03W	Pre Mike		
05.02.01	1600	65N	01E	The Mike Low	998	35
02.03.01	0600	75N	41E	**		
19.03.01	1400	75N	08E	**		
24.03.01	0730	74,5N	09E	Marginal	1020	40
10.04.01	0650	71N	02E	Baroclinic	1000	58
27.10.01	1700	74N	09W	**		
01.11.01	0200	71N	19E	The Torsvåg case, Cirrus outflow	992	50
04.11.01	1900	67N	02E	**		
09.11.01	1700	74N	25E	**		
12.11.01	0700	67,5N	07E		990	45
31.12.01	0400	73N	38E	Dual **		
12.01.02	1200	73N	21E		979	35
19.01.02	0400	70N	47E		989	35
22.01.02	1100	75N	28E	Dual systems	985	50
23.01.02	1200	71N	17E	Multiple	978	35
26.01.02	0600	72N	12E	Most beautiful		
19.02.02	1300	74N	34E	Most beautiful	968	55
22.02.02	0000	74N	33E	Dual **		
23.02.02	1140	67,5N	07E		958	45
01.03.02	1200	68N	10E	The polar storm **		50
09.03.02	1100	70N	05W	**		
20.05.02	1436	7320N	1530E	Dual systems	1010	35
19.12.02	1200	74N	47E	Ivans low **		
20.12.02	1200	6820N	1100E		999	30
31.12.02	1100	73N	38E	Multiple **		
16.01.03	1400	72N	0730E			
17.01.03	0000	73,5N	25,5E	Slow moving	985	35
23.01.03	1500	73N	10E	Multiple **	995	53
29.01.03	0700	73,5N	0,5E	Reversed shear	997	50
30.01.03	0700	64N	05E	**		35
11.03.03	0000	72N	16,5E		979	45
23.03.03	0300	68,5N	12,5E	Comma in SW		45

24.10.03	0600	71,5N	18E	Reversed shear	990	45
05.12.03	1320	72N	14E	Reversed shear	990	40
08.12.03	1320	71N	31E	Reversed, secondary	985	44
17.12.03	1300	72N	38E		988	45
27.12.03	1200	73N	18E			38
29.12.03	1200	69N	13E	**		54
27.01.04	0900	71N	12E	Widespr. conv., -50@500hpa	988	45
30.01.04	0700	70N	08W	Short lived	**	
06.02.04	1300	71N	12E	**		
21.02.04	1000	68,5N	03E	Neutral (no) shear	990	55
01.03.04	1200	70N	06,5E	Direct shear, fast moving, dual	999	44
27.03.04	1200	65N	05E	**		53
30.03.04	1800	69N	09E	**		
15.11.04	1400	70N	00E	Dual, neutral, secondary	1002	42
16.11.04	0120	69N	15E	Reversed, secondary	982	44G72
16.11.04	1600	69N	37E	Reversed	987	40
18.11.04	0400	74N	45E	Dual **		
23.11.04	1200	72,5N	46E	Small **		
10.12.04	1700	63N	04W	Secondary, direct shear	1003	50
18.12.04	0700	70N	06E	Secondary, reversed, Radar, Soundings	981	52
13.01.05	1640	68N	07E	Primary, neutral, poor models	1002	55
18.01.05	1800	72N	03W	Large system **		
23.01.05	1320	67N	13E		1003	43
27.02.05	0500	69N	37E	**		
01.03.05	1500	76N	35E	**		
07.03.05	0700	72N	18E	The Brümmer case		35
15.03.05	0900	64N	04E	Direct, primary	999	48
17.03.05	0140	72N	48E	Direct/neutral		
02.04.05	0900	75N	2430E	Secondary, strong reversed.	994	70
26.04.05	1700	74N	25E	Cirrus shield **		
12.10.05		76N	00E	**		50
23.11.05	1500	74N	18E	Double-system/Comma in SW		44
29.11.05	1700	66N	04E	Sounding LDWR, Radar		50
19.12.05	03-06	Vest-	Finnmark	Small (130km)		36
29.01.06	15-21	Hopen		Shear vorticity (Bear Island-Spitsbergen)		35
06.03.06	18-24	Lofoten -	Vesterålen	From a CB-cluster		30G48
20-22.03 .06		67N	00E	Multiple, widespread conv. JM sound.1005		40
29.10.06	1200	72N	16E	Primary, good models	992	38G54
08.11.06	1800	63N	07W		998	45
22.12.06	12-18	7150N	17E	Secondary, baroclinic, poor mod.	979	48G61
26.12.06	03-18	7230N	18-22E	Secondary, inst. Occ., reversed	977	49G63

21.01.07	0600	73N	41E	Primary, Stockman, widespread	993	50
22.01.07	1500	76N	04E	Primary, direct, widespread		
26.01.07	04-12	7030N	1430E	Primary, cold, cirrus shield, case	974	51
27.01.07	0000	Vest-	Finnmark	Primary, cold, cirrus shield	982	51
05.02.07	00-06	6430N	09E	2 small polar lows	994	41
13.02.07	0600	7130N	23E	Small PL	1004	40
06.04.07	00-24	7330N	11E	Strong PL, long life time, baroclinic	986	53
29.04.07	01-05	Berlevåg-	Vadsø	Baroclinic PL	1001	51
03.09.07	0500	64N	07E	Season start !	993	40
11.12.07	1930	71N	31E			35
25.01.08	1700	6730N	08E	Comma		35
31.01.08	04-24	74N	11E	Primary		40
14.02.08	2330	69N	38E	Primary, Reversed ?	1012	45
29.02.08	1030	74N	24 E	Dual	950	40
02.03.08	2100	75/69N	09/10E	Dual, small		35
04.03.08	0130	71N	03E	The Thorpex Low	990	45
16.03.08	0830	7140N	12E	Baroclinic		35
18.03.08	1500	7330N	2830E	Dual, reversed		35
20.03.08	0700	72N	43 E			35
04.04.08	0100	72N	01E	Primary, reversed		45
24.04.08	1200	71N	41E			40
27.10.08	2300	6540N	04E	Secondary, reversed, NE of Scotland		50
17.11.08	0700	75N	25E		990	35
18.11.08	0200	75N	02E		980	40
18.11.08	2030	71N	14E	Baroclinic,	971	55
20.11.08	0600	69N	08E	Secondary, reversed, good models	967	65
28.11.08	0900	70N	00E	Secondary, reversed, dual	988	40
29.11.08	1900	73N	01W	Convergence, baroclinic	1004	35
30.12.08	1200	72N	34E	Marginal	995	40
07.01.09	0300	72N	28E	Multiple		50
15.01.09	0100	76N	53E	*		
16.01.09	1200	71N	57E	Baroclinic, Kara Sea	990	40
05.02.09	0300	72N	03W		1008	33
05.02.09	1800	69N	40E	Small, dual	1010	30
07.02.09	1800	72N	43E	Dual	1005	
25.02.09	2100	7130N	22E	*		
26.02.09	1800	70N	13E	Dual, reversed, Baroclinoc	985	40
27.02.09	1800	7230N	3230E	Neutral, baroclinic	1000	30
27.03.09	2300	69N	07W		995	35
02.04.09	0900	73N	3530E	Baroclinic, reversed	1008	35
05.04.09	0000	72N	43E	Baroclinic, reversed	990	40
05.04.09	0700	73N	25E	Cirrus waves on top !	1008	30

08.01.10	1200	8030N	1630E	Small, N of Spitsbergen, conv.		30
29.01.10	1800	68N	08E	In SE off Scandinavian mainland		45
30.01.10	1800	62N	04E		977	36
02.02.10	1600	61N	02E	Convective, marginal	990	35
16.02.10	0900	71N	04E	No observations		
23.02.10	1800	67N	17W		1011	55
02.03.10	0800	6330N	04E	Small, dual, U~20, B, Neutral, Florø	1005	39
04.03.10	1800	73N	42E	Small	1000	40
10.03.10	1600	76N	41E		985	35
12.03.10	1200	72N	19E	Multiple	991	35
14.03.10	1200	73N	16E	No observations	996	
19.03.10	1200	7430N	18E	Dual	994	35
21.03.10	0300	67N	12E	Short lifespan, Neutral, U~20	995	39
24.03.10	1800	72N	18E	Comma, later PL	1012	
27.03.10	0100	7230N	1930E	Baroclinic, reversed, U~20	1005	35
23.04.10	0900	71N	02E	Baroclinic, reversed	1005	35
31.05.10	1800	7030N	1930E	One fatality, baroclinic, neutral	1008	40

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