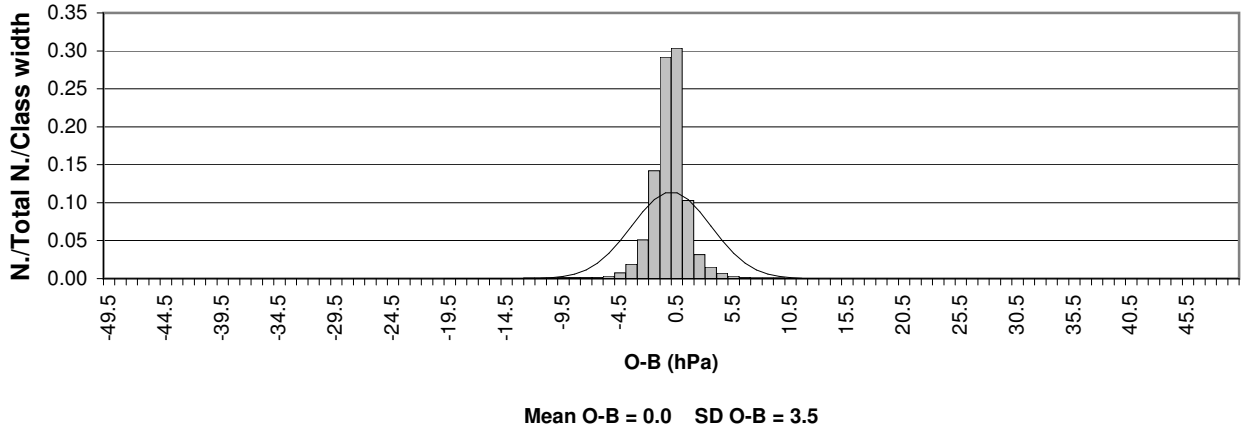
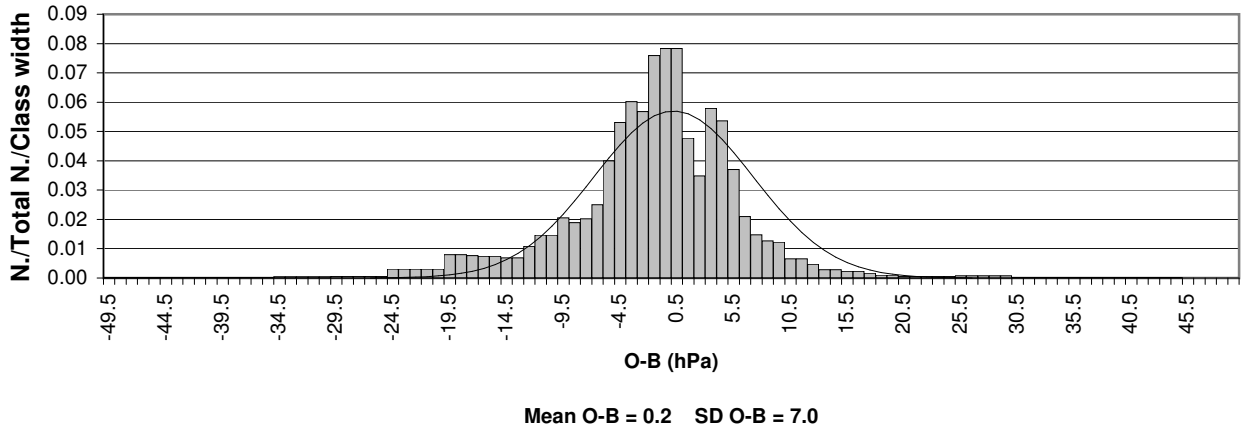


Period	WMO report number	Number of Observations			
		Manual ships	Drifting buoys	Automatic ships	Total
Jan - Jun 1989	1	424087	174971	40082	639140
Jul - Dec 1989	2	421315	151972	58016	631303
Jan - Jun 1990	3	424335	177927	63847	666109
Jul - Dec 1990	4	412430	205488	71146	689064
Jan - Jun 1991	5	364760	177069	64401	606230
Jul - Dec 1991	6	348710	148604	68456	565770
Jan - Jun 1992	7	332443	216872	73893	623208
Jul - Dec 1992	8	336958	247873	80862	665693
Jan - Jun 1993	9	340293	288208	77317	705818
Jul - Dec 1993	10	348082	316261	88650	752993
Jan - Jun 1994	11	334134	279963	111928	726025
Jul - Dec 1994	12	383760	305618	142468	831846
Jan - Jun 1995	13	369781	407111	124537	901429
Jul - Dec 1995	14	394016	528938	138653	1061607
Jan - Jun 1996	15	430162	566035	122909	1119106
Jul - Dec 1996	16	477928	621869	133221	1233018
Jan - Jun 1997	17	446530	623835	122178	1192543
Jul - Dec 1997	18	453399	684292	140227	1277918
Jan - Jun 1998	19	426622	700743	423217	1550582
Jul - Dec 1998	20	443548	700239	497313	1641100
Jan - Jun 1999	21	432506	697983	466311	1596800
Jul - Dec 1999	22	448996	771624	500070	1720690
Jan - Jun 2000	23	443023	772510	455799	1671332
Jul - Dec 2000	24	477828	829588	512338	1819754
Jan - Jun 2001	25	458345	784686	465887	1708918
Jul - Dec 2001	26	473887	914744	554002	1942633
Jan - Jun 2002	27	443876	1111699	517200	2072775
Jul - Dec 2002	28	544433	952313	595959	2092705
Jan - Jun 2003	29	432672	994877	506185	1933734
Jul - Dec 2003	30	473591	1128039	605241	2206871
Jan - Jun 2004	31	435824	1092461	596495	2124780
Jul - Dec 2004	32	434160	1113527	724014	2271701
Jan - Jun 2005	33	471113	1221528	717207	2409848
Jul - Dec 2005	34	472565	1523938	837397	2833900
Jan - Jun 2006	35	456847	1758276	792765	3007888
Jul - Dec 2006	36	447474	1833376	975555	3256405
Jan - Jun 2007	37	410076	1947986	998474	3356536
Jul - Dec 2007	38	454512	2265115	1116750	3836377
Jan - Jun 2008	39	444253	2397246	1156968	3998467
Jul - Dec 2008	40	481513	2605728	1315696	4402937
Jan - Jun 2009	41	466628	2551270	1201762	4219660
Jul - Dec 2009	42	452548	2473739	1381174	4307461
Jan - Jun 2010	43	442069	2606292	1325666	4374027
Jul - Dec 2010	44	534594	2730518	1563232	4828344
Jan - Jun 2011	45	470337	2631956	1608822	4711115
Jul - Dec 2011	46	545536	2651020	1889732	5086288

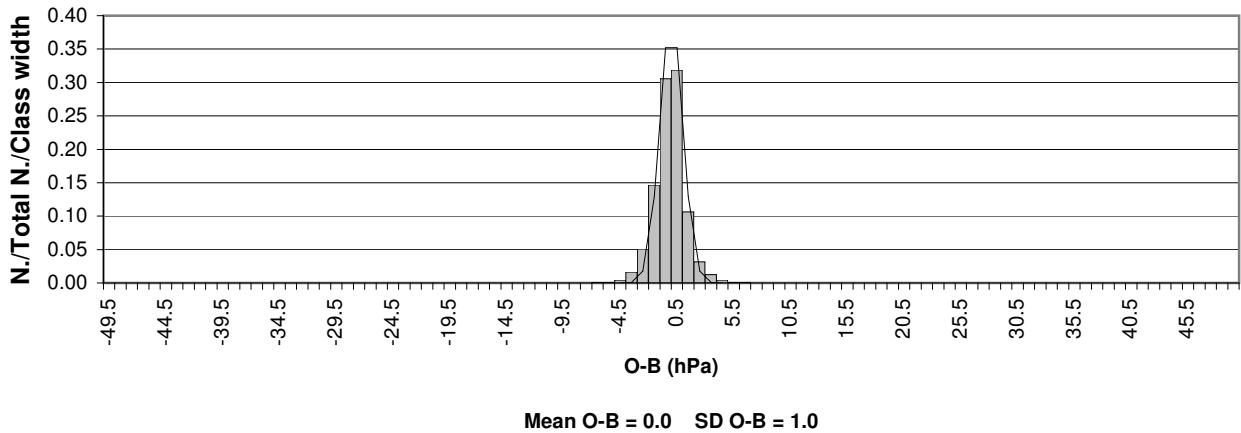
**Figure 2a: Distribution of ship O-B pressure (hPa)**  
Period of data: JUL-DEC 2011 Data used: All observations



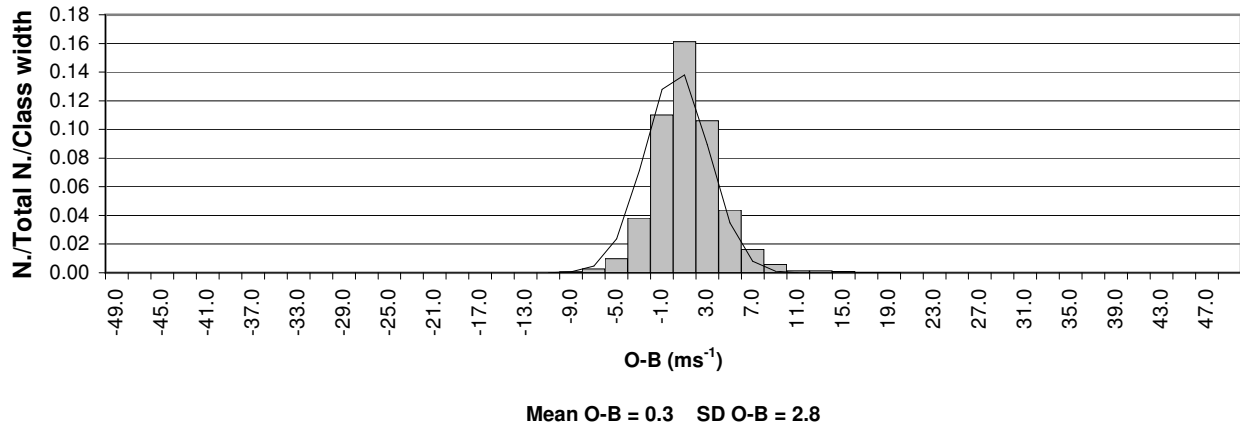
**Figure 2b: Distribution of ship O-B pressure (hPa)**  
Period of data: JUL-DEC 2011 Data used: Flagged observations



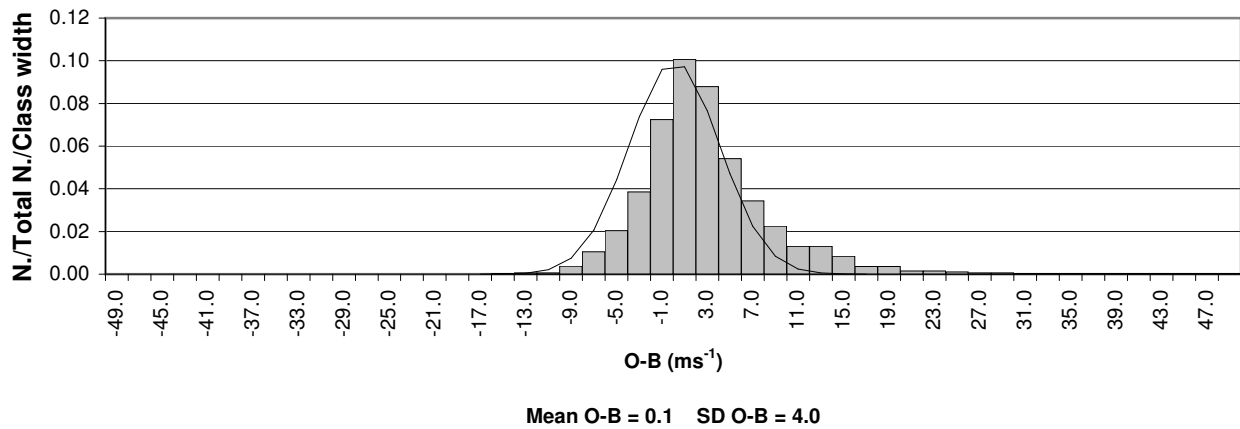
**Figure 2c: Distribution of ship O-B pressure (hPa)**  
Period of data: JUL-DEC 2011 Data used: Unflagged observations



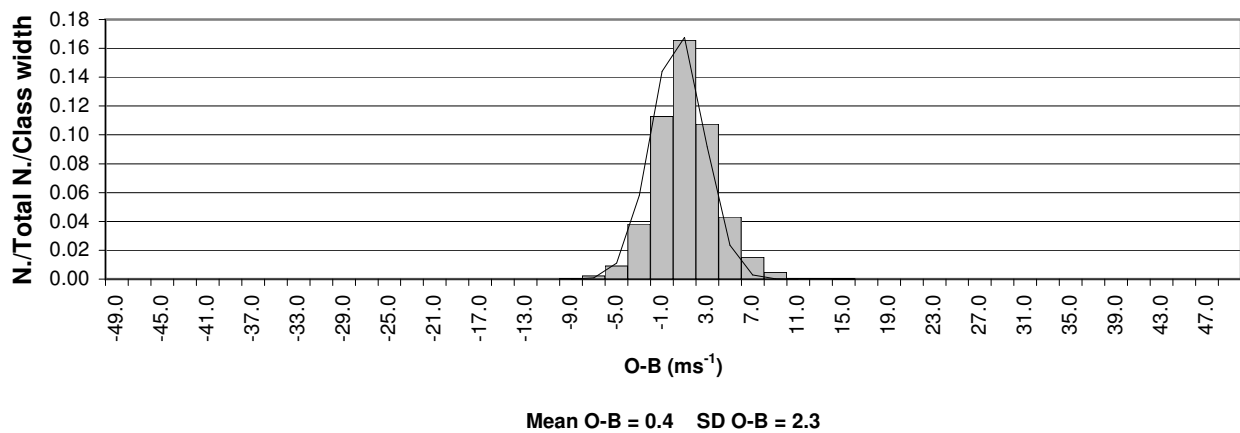
**Figure 2d: Distribution of ship O-B wind speed ( $\text{ms}^{-1}$ )**  
Period of data: JUL-DEC 2011 Data used: All observations



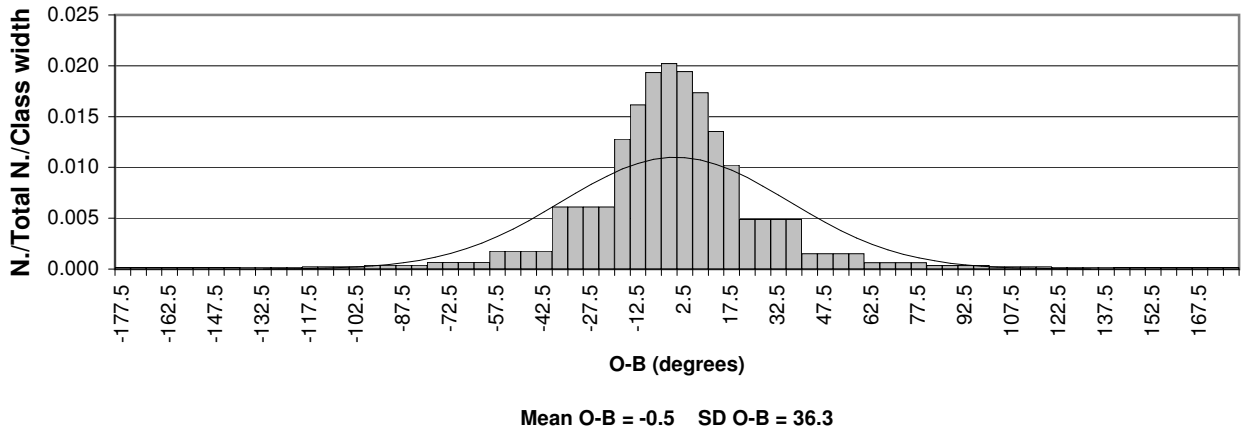
**Figure 2e: Distribution of ship O-B wind speed ( $\text{ms}^{-1}$ )**  
Period of data: JUL-DEC 2011 Data used: Flagged observations



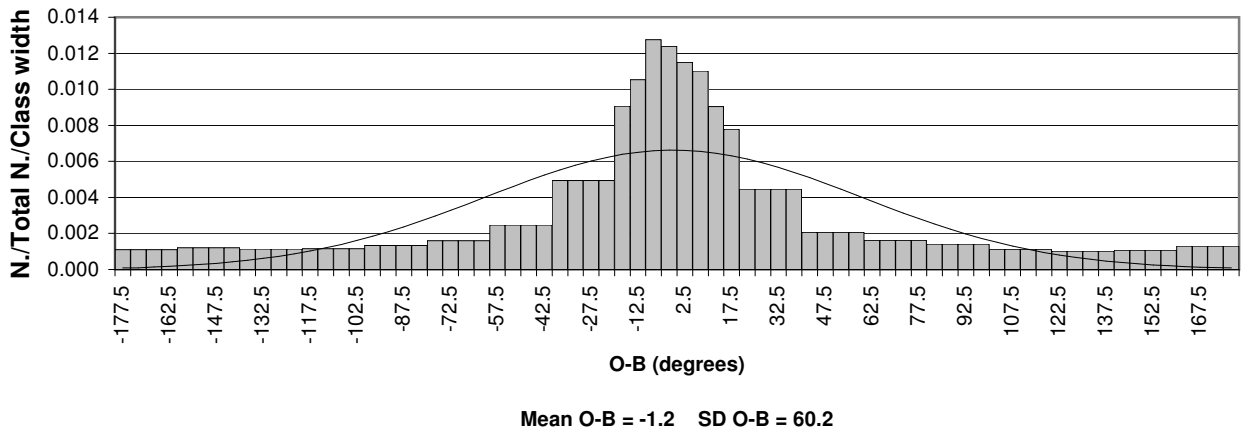
**Figure 2f: Distribution of ship O-B wind speed ( $\text{ms}^{-1}$ )**  
Period of data: JUL-DEC 2011 Data used: Unflagged observations



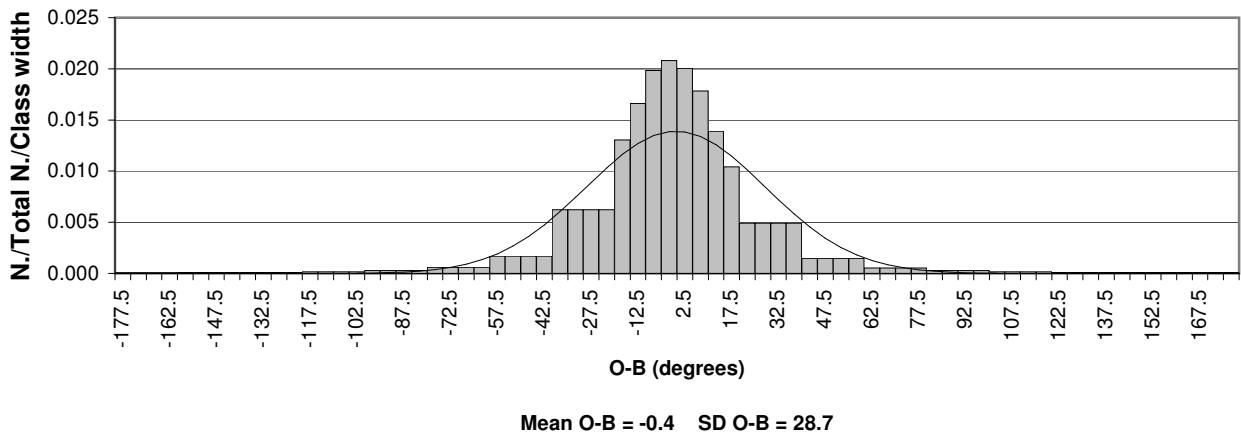
**Figure 2g: Distribution of ship O-B wind direction (degrees)**  
Period of data: JUL-DEC 2011 Data used: All observations



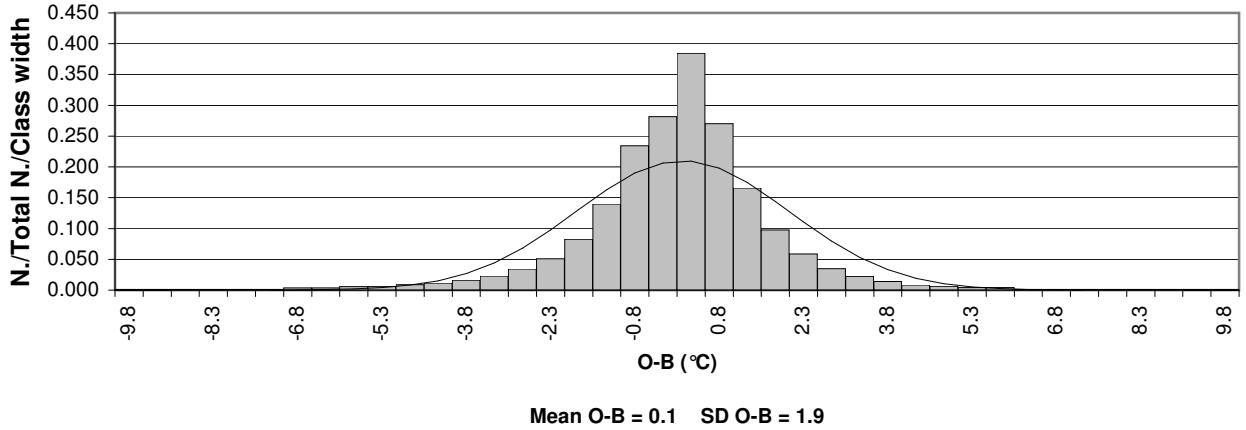
**Figure 2h: Distribution of ship O-B wind direction (degrees)**  
Period of data: JUL-DEC 2011 Data used: Flagged observations



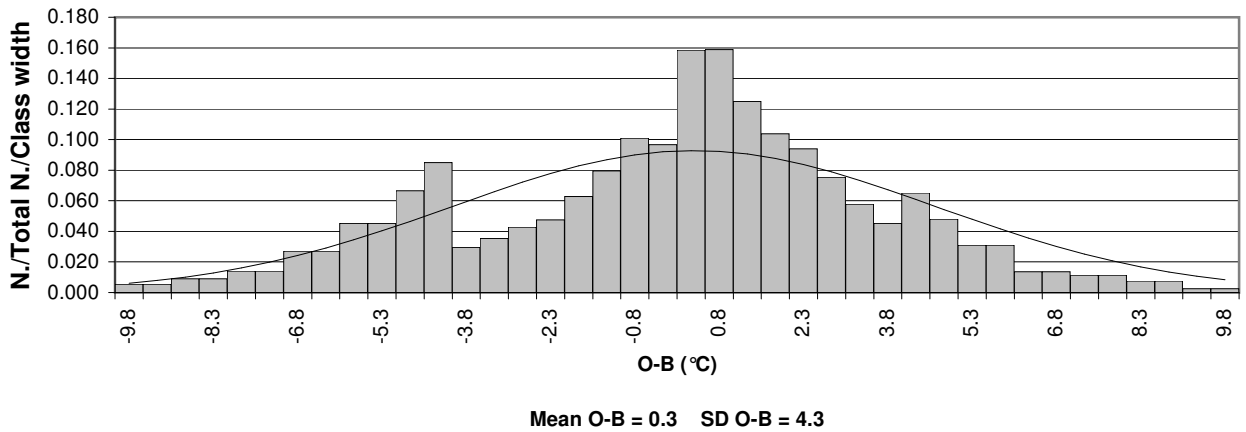
**Figure 2i: Distribution of ship O-B wind direction (degrees)**  
Period of data: JUL-DEC 2011 Data used: Unflagged observations



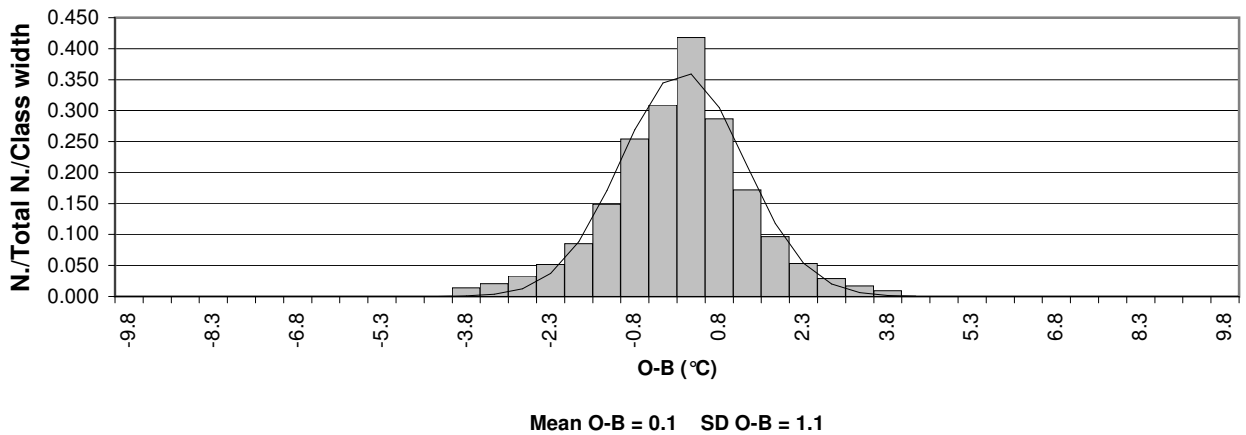
**Figure 2j: Distribution of ship O-B SST (°C)**  
Period of data: JUL-DEC 2011 Data used: All observations



**Figure 2k: Distribution of ship O-B SST (°C)**  
Period of data: JUL-DEC 2011 Data used: Flagged observations



**Figure 2l: Distribution of ship O-B SST (°C)**  
Period of data: JUL-DEC 2011 Data used: Unflagged observations

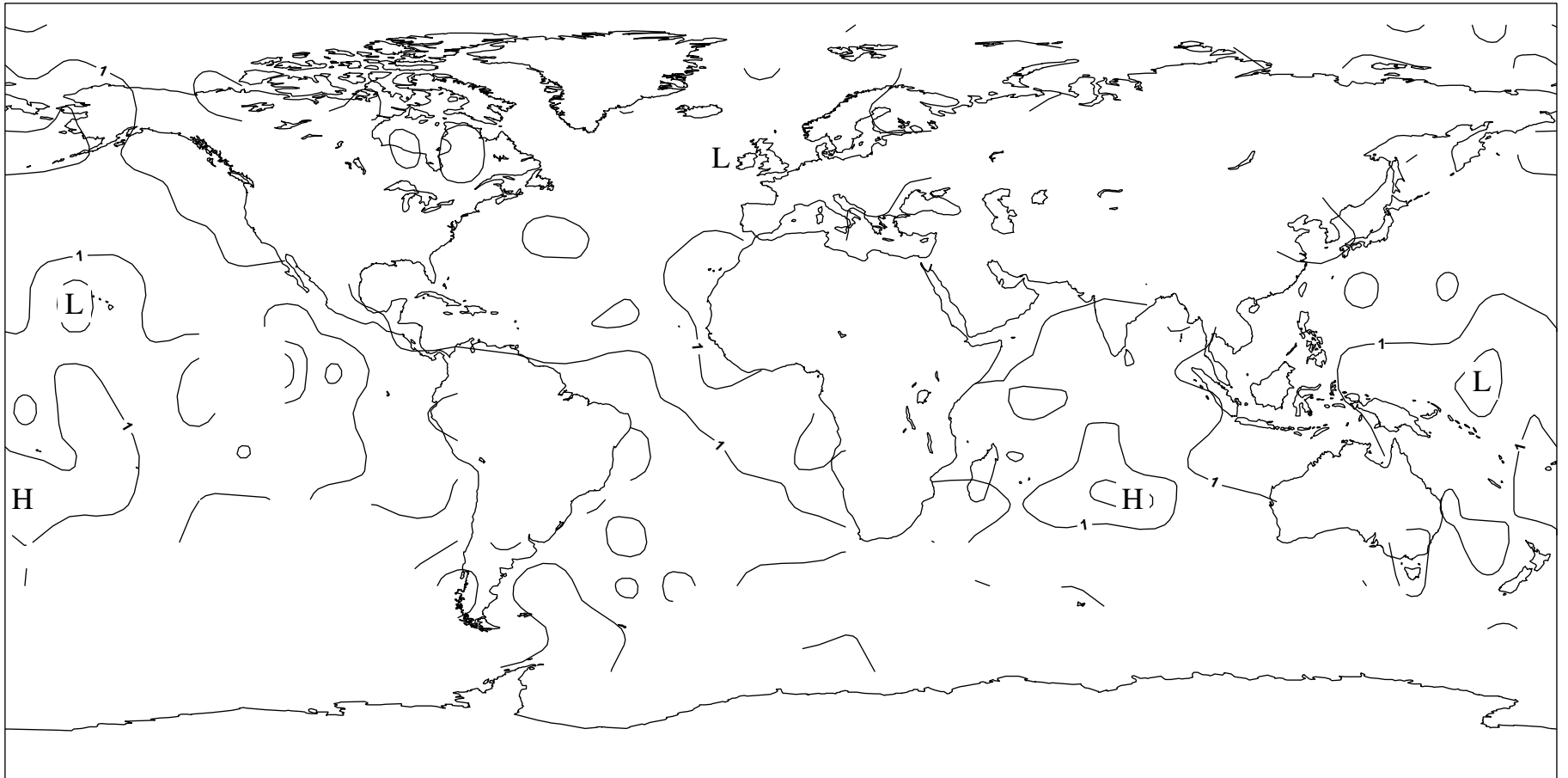




**Figure 3: Bias of Ship O-B Pressure (hPa). Date:- July - December 2011**  
**Only observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a bias of magnitude greater than 1.0 hPa**



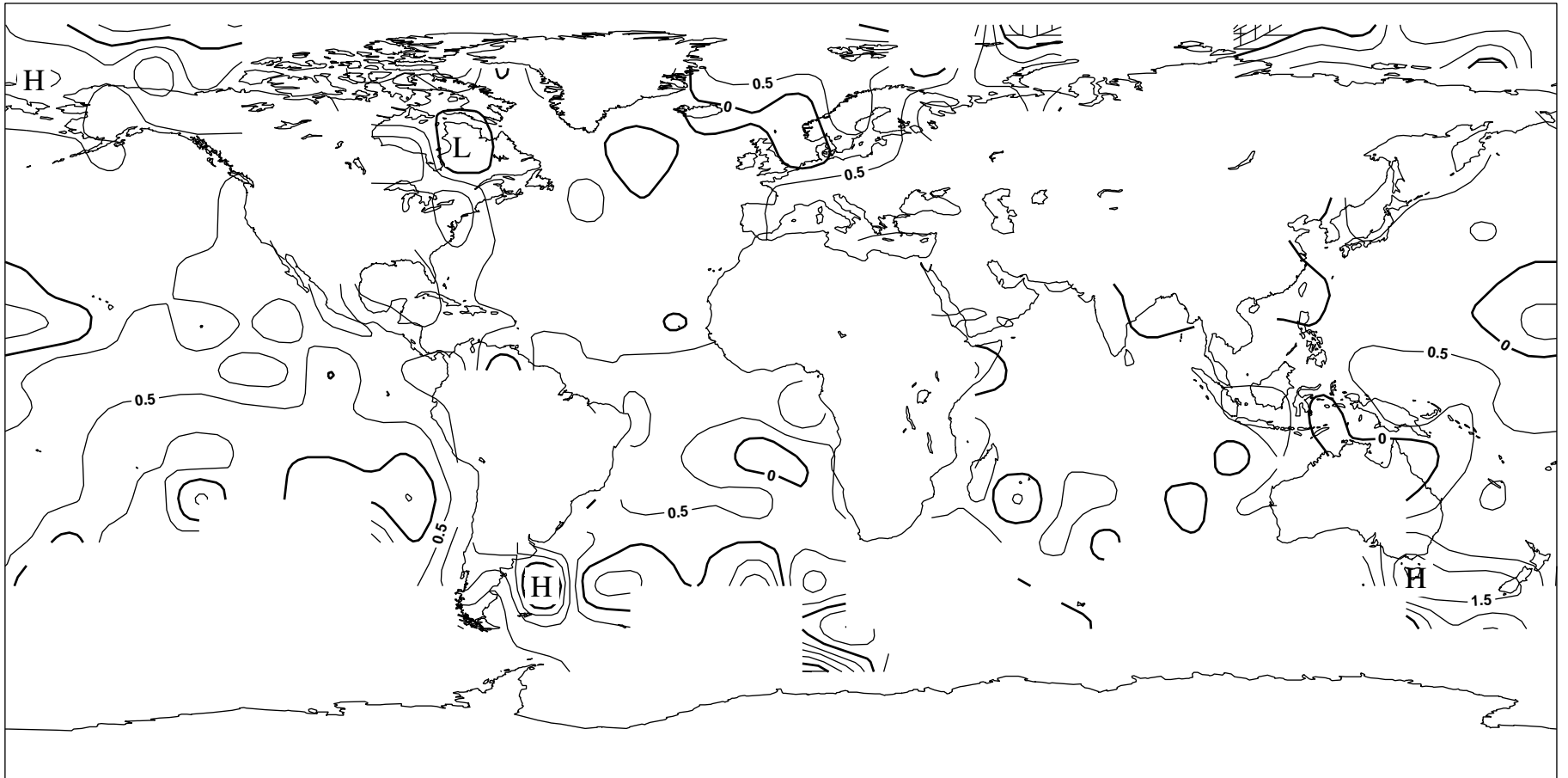
**Figure 4: Standard Deviation of Ship O-B Pressure (hPa). Date:- July - December 2011**  
**Only Observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a standard deviation of greater than 2.0 hPa**



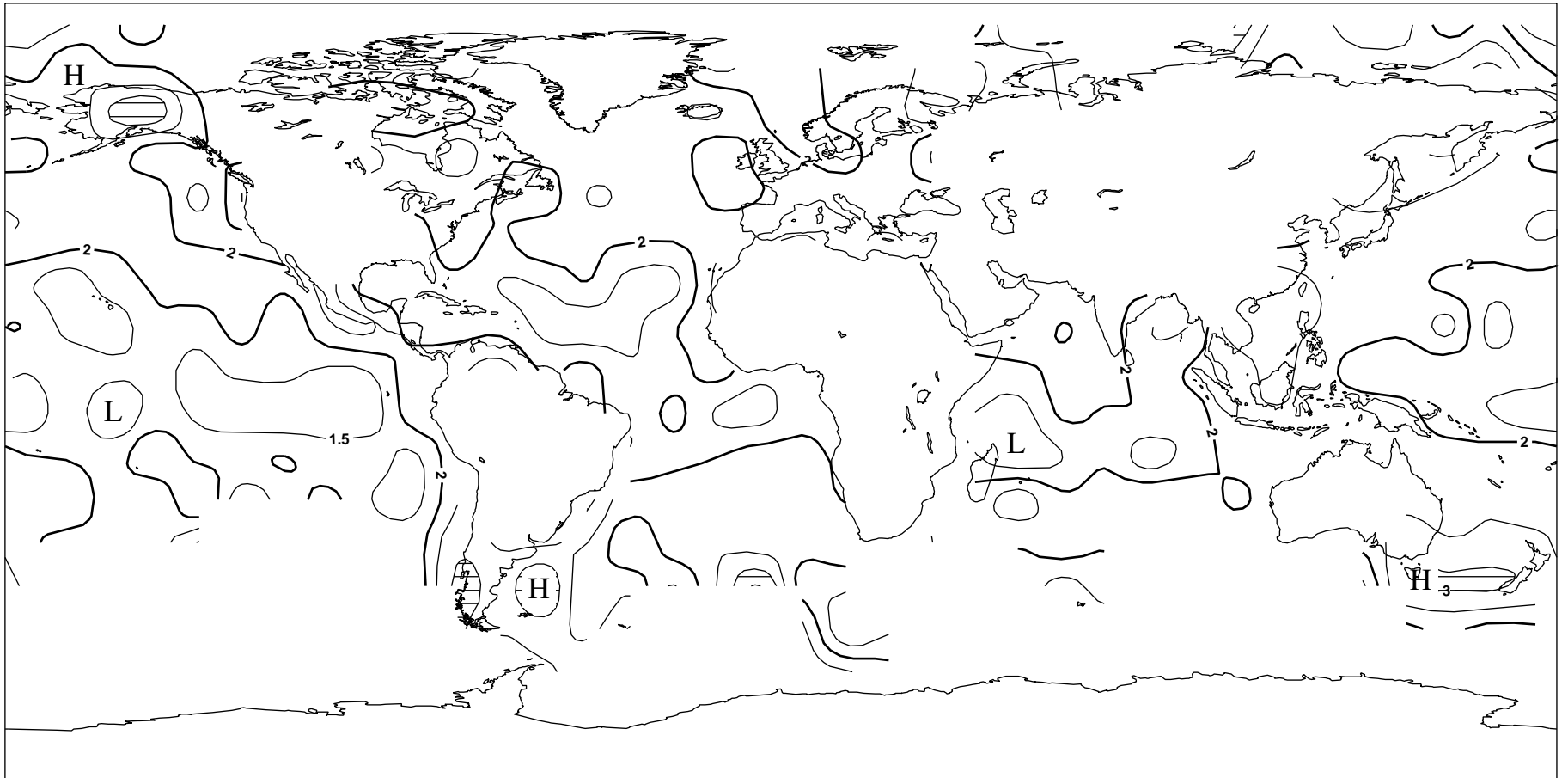




**Figure 6: Bias of Ship O-B Wind Speed (ms-1). Date:- July - December 2011**  
**Only observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a bias of magnitude greater than 2.0 ms-1**

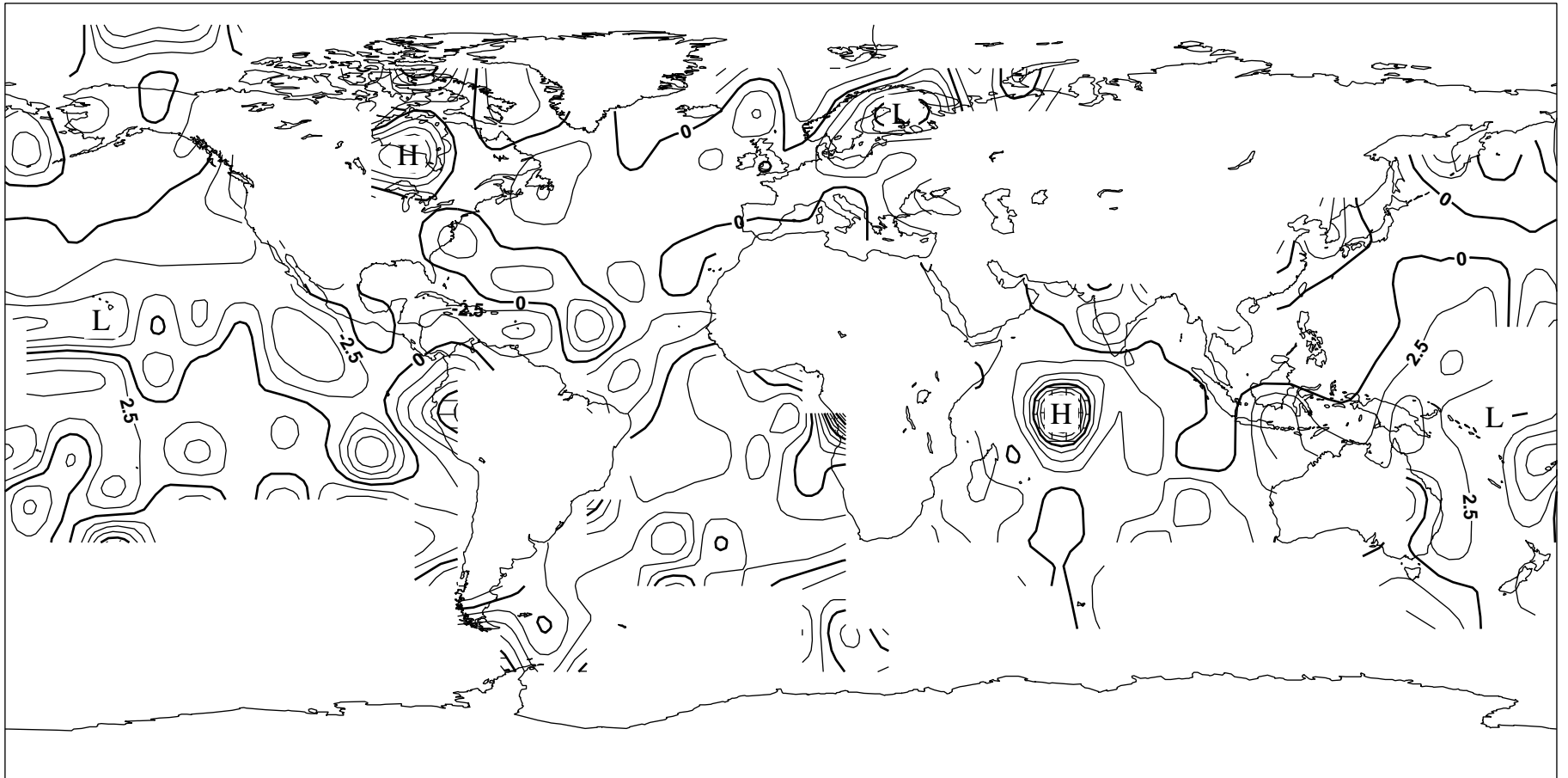


**Figure 7: Standard Deviation of Ship O-B Wind Speed (ms-1). Date:- July - December 2011**  
**Only Observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a standard deviation of greater than 4.0 ms-1**

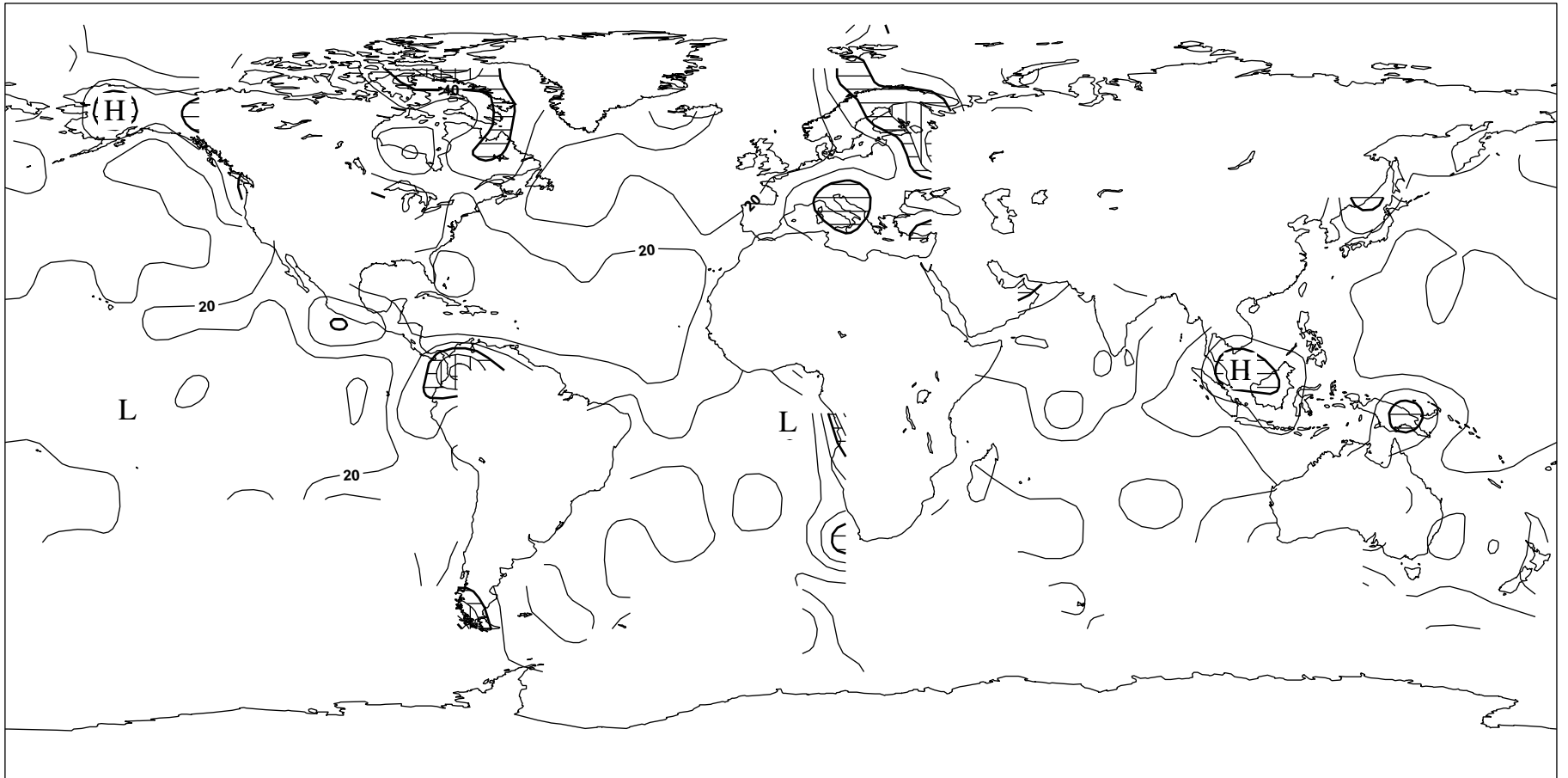




**Figure 9: Bias of Ship O-B Wind Direction (degrees). Date:- July - December 2011**  
**Only observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a bias of magnitude greater than 10 degrees**



**Figure 10: Standard Deviation of Ship O-B Wind Direction (degrees). Date:- July - December 2011**  
**Only Observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a standard deviation of greater than 40 degrees**





**Figure 12: Bias of Ship O-B SST (degrees C). Date:- July - December 2011**  
**Only observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a bias of magnitude greater than 1.0 degree C**





**Figure 13: Standard Deviation of Ship O-B SST (degrees C). Date:- July - December 2011**  
**Only Observations passing quality control used in statistics**  
**Contours drawn to 10 degree boxes, if the number of observations is greater than 10**  
**Shaded areas have a standard deviation of greater than 2.0 degrees C**

