

N49RF HRD GPS Dropwindsonde Scientist Log (Revised 5/2002)

Storm Helene Dropwindsonde Scientists Jason Dunion / Pete Black Page 1 of 2
 Flight ID 060916N Flight Director Barry Damiano Takeoff from Barbados at 1430 UTC
 Mission ID WXWXA SALEX AVAPS Operators Mark Rogers / John Hill Recovery at Barbados at 2130 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd hgt (kt) (m)	DLM wind (kt)	Comments photos ~ 19Z	Processed	SATCOM tries	Ob #
01	034 135 047	145318	15.2	57.0	1014.0	050/13 10	070/15	SAL 5-10% RH 300-700mb 23kt @ 750mb 20-45% RH 700-850			01
02	030 815 041	151347	16.8	55.0	1013.6	035/18 10	060/18	SAL 10-20% RH 200-850mb 25kt + 725-900mb			02
03	013 635 258	153122	18.0	53.0	1012.9	020/18 10	no DLM?	SAL ~ same, except 26kt @ 900mb - 10 T inv @ 825mb			03
04	013 635 012 (1)	155310	20.0	51.0	1012.5	015/23 10	030/14	SAL moist below 600mb 5% RH 200-600mb			04
05	013 635 254	160522	21.5	51.2	1013.2	040/21 10	060/17	SAL 5-20% RH 200-850mb 30kt jet 825-875mb			05
06	013 635 281	161332	22.5	51.5	1014.5	NA NA	060/14	SAL 5-10% RH 200-850mb lost winds @ 12 T inv 925 + 825mb ~ 925mb			06
07	013 215 160	162159	23.5	51.7	1014.8	070/13 12	060/11	SAL lost RH 500-800mb winds			07
08	000 715 294 (4)	162639	24.0	51.9	1015.4	NA NA	055/05	SAL 10-40% RH 200-725mb T inv 750mb moist below, but lower below ~ 975mb			08
09	034 555 224	163039	24.5	52.0	1015.1	035/09 10	050/04	SAL 10-30% RH 200-700mb T inv 775mb moist below 800mb 16kt @ 900mb			09
10	000 715 019	163541	25.1	52.1	NA NA	NA NA	280/03	SAL Fluky below ~ 900mb			10
11	013 635 068	165013	24.4	50.3	1014.7	070/14 10	070/07	SAL 5-10% RH 200-800mb lost winds 525-650mb			11
12	013 635 253	165902	24.0	49.2	1013.8	050/17 10	085/11	SAL 5-10% RH 200-750mb 25kt jet 925mb moist below			12
13	013 635 256	170849	23.6	47.9	1013.3	075/25 10	090/16	5-10% RH 200-550mb 34kt @ 925mb moist below			13
14	030 815 135	172455	22.9	45.9	1012.6	080/26 10	100/25	5-10% RH 300-450mb 40kt jet 675mb moist below 500mb			14
15	001 115 231	174005	22.2	44.0	1011.7	NA NA	120/27	Dry slot 750mb + 500-450mb lost winds moist below 850mb below ~ 925mb			15
16	013635 252	175000	21.7	42.8	1011.9	100/26 10	110/30	hit 700mb dry intrusion from South			16
17	013215171	180325	21.0	41.1	1013.1	120/22 11	200/25	700mb dry slot dominates no more dry slot			17



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18	013215166	181129	20.0	41.4	1012.1	115/24 10	120/27	dry air < 60% below 700mb			18
19		1815						no winds backed up			X
20		1817						no winds backed up			X
19	21 013635061	182055	18.9	41.8	1012.1	130/18 10	180/25	RH large fluctuations < 600mb			P1
20	22 013215177	183655	17.0	42.5	1010.8	160/23 9	200/24	20% RH 600-800mb + wind MAX, large 45 kt			20
21	23 013635188	184645	16.0	43.2	1009.6	190/21 9	210/27	650-850: 20% RH 600-850: wind MAX			21
22	24 013215156	185719	14.9	44.1	1010.0	220/22 8	215/22	500-800: moist dry 5% 600-850: jet 32 kt			22
23	25 025618024	190705	14.0	45.0	1010.3	225/19 9	215/18	850-800: RH 10-30%			23
24	26 000715103	192350	13.1	47.0	1009.4	230/12 8	225/15	350-800: RH 10-20%			24
25	27 000745091	193636	14.5	47.6	1009.2	—	—	NO WINDS, 350-500: RH 10% 1700 ft below			25
26	28 013 215 173	1943	15.2	47.9	1008.2	255/15 10	260/14	Dry above 550mb moist below 42-10% RH			26
29	000 715 377	195415	16.4	48.5	1008.0	315/16 10	300/15	moist below 500, dry above as low as 5-10%			27
30	000 715 289	200302	16.7	49.7	1008.3	325/15 10	320/08	35% RH 700-850mb moist above, dry above that (above 600mb)			28
31	600 745 030	201430	15.7	51.2	1010.2	345/12 10	355/06	moist below 600mb, dry above (~2-5% RH)			29
32	033 415 335	202005	15.5	51.9	1009.1	355/12 10	025/05				30
33	034 135 053	202605	15.3	52.7	1011.0	015/14 10	035/06	SAL dry 200-800mb 3.5C T ₂ /inv 825mb			31
34	034 325 005	203642	14.9	54.0	1011.0	025/13 10	045/07	Same smaller T ₂ inv. though (-1°C)			32