



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

- no SAL/NOU SAL plots, only Jordan
- why last level $\rightarrow$ GA(m) = -68
- Nominal, (Z=7m) sea surf?
- hard to exit early on (opt 16)

Storm DPHELIA Dropwindsonde Scientist JASON DUNION Page 1 of 2
 Flight ID 050913N Flight Director PAUL FLAHERTY Takeoff from MACDILL at 1759 UTC
 Mission ID 2216AOPHELIA AVAPS Operators DAVE BROGAN/MARK ROGERS Recovery at SAVANNAH at 0220 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kt)	hgt (m)	DLM wind (kt)	Comments	Processed	SATCOM tries	Ob #
1	011118003	183445	28.006	77.945	1013.2	245/14	7	265/22	(RH heating cycles except as noted) dry cont. air		1	01
2	010715223	185848	28.976	75.074	—	—	—	—	~5-20% RH 500-900mb 1st winds moist above ~270-380s		1	X
3	000345258	190125	29.152	74.702	1014.3	195/15	8	225/21	Time synchronization problem on channel #1 - okay on channel #5 but no winds below 215mb		1	02
4	000345288	191537	29.906	73.016	1015.6	165/15	8	215/16	dry cont 5-30% RH 300-700mb (ind moist) 50-70% RH below		1	03
5	000335248	193238	N/A	N/A	—	—	—	—	5-10% RH 350-600mb T inversions at top and base of dry air Heaters off		1	X
6	000745023	193411	27.858	72.290	1015.7	130/16	4	235/10	Heaters off NO LAUNCH DETECT - (backed up) No winds - telemetry weak at low levels		1	04
7	000345292	194801	26.970	73.959	1015.3	170/12	9	240/12	moist (like Jordan) Heaters off		1	05
8	010715176	200412	25.023	73.952	1014.3	137/5	20	245/04	~10% RH 250-500 Heaters off moist (Jordan above + below)		1	06
9	011245335	202148	24.045	71.993	—	—	—	—	moist (Jordan) Weak PTH telemetry near EOD readjusted end of file to 1902		1	X
10	000335250	202617	24.263	71.482	1016.4	116/17	27	065/03	Bad T, RH above 360mb; RH cutting out and not responding until 510mb; 137-910 mb, affecting heating cycles; no winds 235-256mb		1	07
11	002525273	203937	25.039	70.038	1017.3	125/07	8	240/02	moist (non SAL) Heaters off		1	08
12	000335244	205613	26.944	69.926	—	—	—	—	No winds NO SATELLITES BACKED UP			X
13	044135102	205750	27.002	69.763	1017.5	91/16	29	265/06	moist Heaters off		1	09
14	051926218	211033	27.067	68.063	1017.5	075/09	7	310/05	Heaters off		1	10
15	000345297	212817	29.016	67.988	1017.5	155/03	4	270/04	getting into orpheus outflow 60kt N 175mb, 30kt NW 200mb		1	11
16	000345290	214735	30.983	67.085	—	—	—	—	No winds above 550mb + 735-930mb			X
17	000345294	215009	31.164	67.319	NA	NA	NA	315/08	~10% RH 300-500mb sporadic moist above + below telemetry at no heights; heaters off 909MB		1	12



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 Mission ID 2216A OPHELIA AVAPS Operators DAVE BROGAN/MARK ROGERS Recovery at SAVANNAH at 0220 UTC

Drop #	Sonde ID #	Time (UTC)	Lat (°N)	Lon (°W)	Surface Pressure (mb)	Wind closest to surface dir/spd (kt)	hgt (m)	DLM wind (kt)	Comments	Processed	SATCOM tries	Ob #
18	000345390	220504	32.039	68.961	1017.5	180°/06	24	275/04	shallow outflow again (~FL-250mb) Heaters off ~10% RH 350-500mb DPHelia outflow moist above + below 45kt NW 175mb 25kt NW 200mb	1		13
19	002615566	222309	34.002	69.000	1017.6	150/05	7	310/05	10% RH 260-500mb had to set moist below last line	1		14
20	000335176	224131	36.000	68.999	1017.5	045/03	8	330/08	10-20% RH 200-850mb outflow 50kt NW 175mb 25kt NW 200mb	1		15
21	000335249	225850	37.889	69.094	1017.7	345/04	7	345/10	dry 400-SFC no winds ~50-180S	1		16
22	000345289	231351	36.999	71.000	NA	NA	NA	340/05	10-30% RH 400-800mb no data below ~425 35-40kt outflow (NE) 175-200mb	1		17
23	000335245	232939	35.946	72.833	—	—	—	—	Late winds 77S; no winds 225-300mb			X
24	000335177	233229	35.740	72.470	1016.9	125°/13	60	150/06	10-20% RH FL-600mb; PTH telemetry dropouts + spotty winds 620-825mb; heaters	1		18
25	043845076	234326	34.964	71.039	1015.4	NA	8	185/01	300-700= dry; weak telemetry 805-835mb; moist below; no winds below 950mb; heaters	1		19
26	000335175	235840	33.016	71.054	—	—	—	—	Late winds 152S; no winds 430mb-520mb below 655mb			X
27	000345266	000058	32.840	71.328	1017.2	160/12	5	175/07	~50% RH 400-700mb noisy GPS signal; weak moist above + below; telemetry 900mb to 1000	1		20
28	000345295	001338	32.115	72.924	NA	NA	NA	190/14	~50% RH 400-700mb SAME DRY moist above + below; INTRUSION AS no heights 1000ft 1-2 no heaters off	1		21
29	043615021	003000	33.973	73.057	NA	NA	NA	160/13	RH variable thru drop; telemetry dropouts no winds below 924mb; no heights	1		22
30	012615198	004602	34.651	75.156	1013.4	120/20	8	140/21	5% RH 400-600mb Some dry air intr. moist above + below us drops 1, 2, 2, 2 no winds 115-155mb; 180S winds	1		23
31	012225172	010016	32.997	74.715	1012.3	145/21	7	170/25	weak outflow (10-20kt) 175-200mb			24
32	012615179	011534	31.232	75.292	1012.2	175/19	7	310/24		1		25
33	012848003	012936	30.170	76.784	1012.4	215/25	8	245/25	10-40% RH FL-600mb	1		26
34	012615009	014247	30.178	78.629	1010.1	245/25	4	280/31	5% RH FL-550mb late winds 81S	1		27