

James,
make sure Gary & Derek (U Hawaii)
get copies of these logs.
19900820 H1-DROPS

HRD Dropwindsonde Scientist Log (Revised 7/98)

Storm Bonnie
Flight ID 980826H
Mission ID WX02A BONNIE

Dropsonde Scientist(s) ABERSON, WROE
AVAPS Operator(s) McMILLAN

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Takeoff Something UTC
Landing Guantanamo UTC

Drop #	Sonde ID	Time (UTC)	Lat (°)	Lon (°)	Press (mb)	GAlt (m)	MBL		WD/WS (kt)	Comments	Prc ?	Xmt ?
							SST (°C)	TD (°C)				
1	980010040	12 20 34	33 52.1	76 34.1	ramband		28.5 SST=28.5	56	44			11
2	980430012	12 23 05	34 1.4	76 46.5	"			58	45			12
3	981820100	12 25 18	34 2.5	77 0.0	"			51	-	pbias, late launch detect	X	X
4	981820046	12 28 04	34 8.0	77 5.0	"			57	48	pressure bias	X	X
5	981750074	12 32 12	34 3.0	77 44.8	"		SST=27.9	68	57			13
6	981810053	12 34 37	33 55.8	77 56.6	"			64	36			15
7	982010100	12 37 07	33 47.3	78 7.6	"			74	54	pressure bias	X	X
8	981820068	12 39 55	33 35.7	78 17.9	"			85	-	pressure bias	X	X
9	981810048	12 42 29	33 24.2	78 26.5	"			-	-	fast fall	X	X
10	981740054	12 45 30	33 11.1	78 38.9	eyewall NW			-	-	no launch detection	X	X
11	982010046	12 50 06	32 57.9	78 31.2	" "		28.0 SST=27.9	83	-			17
12	982010130	12 52 44	32 55.6	78 19.8	" "			65	54	pressure bias	X	X
13	984910017	12 54 48	32 53.7	78 7.7	" "			39	31			19
14	981750073	12 57 33	32 48.9	77 55.2	" "			26	13	pressure bias	X	X
15	982430185	12 58 51	32 46.4	77 49.0	eye		SST=29.0	-	-	pressure bias	X	X
16	982010132	13 02 00	32 44.8	77 32.2	" E			58	42	pressure bias	X	X
17	981740064	13 04 56	32 44.7	77 17.0	eyewall E			68	48	pressure bias	X	X
18	981820045	13 08 10	32 49.8	77 0.8	" "			-	-	no launch detection	X	X

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Drop #	Sonde ID	Time (UTC)	Lat (°)	Lon (°)	Press (mb)	GAIt (m)	SST (°C)	TD (°C)	WD/WS (kt)	Comments	Prc ?	Xmt ?
19	974530091	13 10 20	32 44.7	76 49.8	" "		^{28.1} SST=28.0	85	—	pressure bias	X	X
20	974510002	13 14 16	32 41.1	76 33.5	rain band			79	—	pressure bias	X	X
21	982430180	13 17 53	32 30.7	76 32.9	"			81	62			25
22	981750085	13 20 58	32 21.6	76 35.8	"			—	—	no launch detect	X	X
23	982430010	13 23 42	32 41.3	76 39.4	"			—	—	data stopped ~750-mb, pressure bias	X	X
24	982010134	13 27 16	32 33.3	76 39.1	"		^{25.1} SST=25.0	72	46			27
25	982430186	13 30 37	31 56.9	76 49.0	"			—	—	no boundary layer winds		28
26	981820063	13 34 31	31 51.2	76 20	"			—	—	no data below 850 mb except winds		33
27	981750016	13 38 00	31 46.4	77 14.0	"			—	—	pressure bias no data below 830 mb	X	X
28	982430182	13 41 31	31 40.2	77 25.0	"			65	50	80 sec of data missing		36
29	982430028	13 45 58	31 31.4	77 39.4	"		^{27.5} SST=27.0	—	—	pressure bias no data below 800 mb	X	X
30	982430011	14 27 41	33 14.9	79 8.9	West side run			—	—	late launch detect	X	X
31	982430008	14 31 23	32 55.4	79 2.5	"			—	—	no launch detect	X	X
32	982430179	14 35 39	32 33.6	78 53.1	"		SST=X	60	52		X	38
33	982430181	14 39 41	32 41.1	78 42.5	"			67	52			39
34	974740061	14 43 38	32 9.7	78 20.0	"			76	66	pressure bias late launch detect	X	X
35	974740045	14 46 55	32 7.5	77 57.7	"			82	73	No winds below 925 mb		40
36	974530092	14 50 30	32 15.6	77 46.8	Eye wall South		^{28.8} SST=28.7	—	—	lost winds		41

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Drop #	Sonde ID	Time (UTC)	Lat (°)	Lon (°)	Press (mb)	GAIt (m)	SST (°C)	TD (°C)	WD/WS (kt)	Comments	Prc ?	Xmt ?
37	974730023	14 54 58	32 35.4	77 46.8	"			50	2	pressure bias	X	X
38	974740032	14 59 02	32 53.5	77 49.2	"			44	1	gaps in winds; pressure ^{offset}	X	X
39	982010107	15 02 02	33 5.6	77 54.7	EYE			-	-	no data below 720 mb	X	X
40	974530041	15 05 41	33 21.4	77 56.2	eyewall North			-	-	no data below 920 mb pressure bias	X	X
41	974940043	15 09 55	33 39.1	77 55.5	"			-	-	no data below 680 mb	X	X
42	974530048	15 14 43	33 55.3	77 46.1	"			-	-	no data	X	X
43	974940040	15 20 12	33 14.2	77 33.1	"			-	-	no data below 720 mb	X	X
44	974730126	15 26 44	34 10.9	77 8.1	rainband NE			-	-	no data	X	X
45	974740137	15 33 08	34 5.4	76 43.4	"		SST=X	-	-	no data	X	X
46	974150033	15 38 04	33 55.5	76 31.3	"			-	-	pressure bias	X	X
47	974940057	15 44 18	33 37.8	76 25.3	"			-	-	no data	X	X
48	974510004	16 01 48	34 11.0	76 45.0	rainband			60	42	next to supercell		50
49	974730041	16 19 40	33 58.0	77 27.7	eye, not center		27.1 SST=27.0	79	-	pressure bias	X	X
50	974730062	16 25 15	33 39.1	77 39.3	eye, not center		27.4 SST=27.2	-	-	pressure bias no winds below 925 mb	X	X
51	974740049	16 40 36	32 38.2	78 8.6	S eye wall		28.3 SST=28.2	-	-	pressure bias	X	X
52	974730123	16 52 17	31 58.7	78 17.4	SSW eye wall		26.7 SST=26.8	54	50			63
53	974940035	17 07 49	32 19.9	77 5.6	outside SE eye wall			66	53			65
54	974740059	17 16 44	32 51.1	77 32.2	eye wall SE		SST=X	101	77	strong convection		66
55	974730042	17 59 13	32 48.6	78 16.5	eyewall South			80	67			74

AVAPS report
Solved data problem

late launch detect may be due to too tightly wrapped ladder. When loosened, they worked.

Dropwindsonde Log

#	Sonde ID	Time (UTC)	Latitude (°)	Longitude (°)	Location	SST (°C)	MBL winds (kts)	SFC Winds (kts)	Comments
1	982010048	12:20:34	33.868	-76.568	rainband	28.5	56	44	
2	982430016	12:23:05	34.023	-76.775	rainband		58	45	
3	971720128	12:25:18	31.042	-77.000	rainband		51		p bias, late launch
4	981820032	12:28:04	34.267	-77.083	rainband		57	48	p bias
5	981750080	12:32:12	34.050	-77.747	rainband	27.9	68	57	
6	981810048	12:34:37	33.930	-77.943	rainband		64	36	
7	982010112	12:37:07	33.788	-78.127	rainband		74	54	p bias
8	981820096	12:39:55	33.595	-78.298	rainband		85		p bias
9	981810048	12:42:29	33.403	-78.442	rainband				fast fall
10	981740032	12:45:30	33.185	-78.648	eyewall NW				no launch detection
11	982010048	12:50:06	32.965	-78.520	*****	28	83		
12	982010112	12:54:44	32.927	-78.297	*****		65	54	p bias
13	974910016	12:54:48	32.895	-78.128	*****		39	31	
14	981750080	12:57:33	32.815	-77.920	*****		26	13	p bias
15	982430208	12:58:51	32.777	-77.817	eye	29			p bias
16	982010112	13:02:00	32.747	-77.537	eye E		58	42	p bias
17	981740032	13:04:56	32.745	-77.283	eyewall E		68	48	p bias
18	981820032	13:08:10	32.747	-77.013	*****				no launch detection
19	974530048	13:10:20	32.745	-76.830	*****	28.1	85		p bias
20	974510016	13:14:16	32.685	-76.558	rainband		79		p bias
21	982430208	13:17:53	32.512	-76.548	rainband		81	62	
22	981750080	13:20:58	32.360	-76.597	rainband				no launch detection
23	982430016	13:23:42	32.238	-76.657	rainband				p bias, data stopped
24	982010112	13:27:16	32.055	-76.652	rainband	25.1	72	46	
25	982430208	13:30:37	31.948	-76.817	rainband				no boundary layer wind
26	981820032	13:34:31	31.853	-77.033	rainband				no data below 850mb
27	981750016	13:38:00	31.773	-77.233	rainband				p bias, no data below
28	982430208	13:41:31	31.670	-77.417	rainband		65	50	80 sec of missing data
29	982430016	13:45:58	31.523	-77.657	rainband	27.5			p bias
30	982430016	14:27:41	33.238	-79.148	W side				late launch detect,
31	982430016	14:31:23	32.923	-79.042	W side				no launch detection
32	982430208	14:35:39	32.560	-78.885	W side	-99	60	52	
33	982430208	14:39:41	32.235	-78.708	W side		67	52	
34	974740032	14:43:38	32.162	-78.333	W side		76	66	p bias, late launch
35	974940032	14:46:55	32.125	-77.962	W side		82	73	no winds below ~925
36	974530112	14:50:30	32.260	-77.780	eyewall S	28.8			lost winds
37	974730048	14:54:58	32.590	-77.780	*****		50	20	p bias
38	974740032	14:59:02	32.892	-77.820	*****		44		gaps in winds, p off
39	982010112	15:02:02	33.093	-77.912	eye				no data below 720 mb
40	974530048	15:05:41	33.357	-77.937	eyewall N				p bias, no data below
41	974940032	15:09:55	33.652	-77.925	*****				no data below 680 mb
42	974530048	15:14:43	33.922	-77.768	*****				no data
43	974940032	15:20:12	33.237	-77.552	*****				no data below 720 mb
44	974730112	15:26:44	34.182	-77.135	rainband NE				no data
45	974740160	15:33:08	34.090	-76.723	rainband NE	-99			no data
46	974150016	15:38:04	33.925	-76.522	rainband NE				
47	974940032	15:44:18	33.630	-76.422	rainband NE				
48	974510016	16:01:48	34.300	-76.750	rainband		60	42	drop next to supercell
49	974730048	16:19:40	33.967	-77.462	eyewall NE	27.1	79		p bias
50	974730048	16:25:15	33.652	-77.652	eye (not center)	27.4			
51	974740096	16:40:36	32.637	-78.143	eyewall S	28.3			p bias
52	974730112	16:52:17	31.645	-78.290	eyewall SSW	28.7	56	50	
53	974940032	17:07:49	32.332	-77.093	outside SE eyewall	26.7	66	53	
54	974740032	17:16:44	32.852	-77.537	eyewall SE	-99	101	77	strong convection
55	974736832	17:59:13	32.810	-78.275	eyewall S		86	67	