



NOAA P-3 N43RF Hurricane Research TS LILI HAIRSIN



Flight ID: I020929

<u>Sensor or system</u>	<u>Number or Name</u>
INE	1
Accelerometer	1
Temperature Probe	1
Dew Point Probe	3 (Buck Research)
Altitude (for vertical wind)	Radar Altitude (RA-159)
Static Pressure	Rosemount Fuselage
Dynamic Pressure	Rosemount Fuselage
Time Source	Micro 99
Constants File	CO3022.CON

Notes:

There were several time/data gaps related to major data system problems:

170941Z - 170950Z, 221321Z - 222100Z, 222151Z - 222210Z, 233611Z - 234450Z, 001141Z - 001400Z, 002001Z - 002020Z, 002311Z - 002340Z and 002431Z - 002500Z.

The radar altimeter 159, RA159, had numerous spikes during the following time frames: 1724Z - 1732Z, 1814Z - 1825Z, 1851Z - 1853Z, 1918Z - 1921Z, 1931Z - 1935Z, 1954Z - 1956Z, 2028Z - 2030Z, 2104Z - 2106Z, 214031Z - 214230Z, 2223Z - 2225Z, 2256Z - 2258Z, 2351Z - 2358Z, 235808Z - 000903Z, and 0034Z - 0037Z. These spikes were removed and patched over using the RA232 (radar altimeter 232) and pressure altitude as references.

The Buck Research dewpoint sensor, DW3, incurred some problems during the following time frames: 1921Z - 1923Z, 2143Z - 2146Z, 2246Z - 2248Z and 000531Z - 005400Z. The erroneous values were removed and patched using the EdgeTech dewpoint sensor as a reference.

The King liquid water probe was not operating for the entire mission.

There were several occurrences during the flight where dewpoint temperature exceeded ambient temperature from heavy precipitation events.

All other instruments worked optimally during the flight.

The aircraft INE positions were renavigated with respect to GPS.

SPECIAL NOTE!!! Locations 80, 81 and 82 of record five on the standard tape contain vertical ground, vertical air and vertical speeds, respectively, computed using Dave Jorgensen's vertical wind algorithm.

It is recommended that these values be used for vertical wind analysis.

	Takeoff	Landing
Aircraft Static Pressure	1015.7 mb	1014.7 mb
Corrected Tower Pressure	1015.7 mb	1015.1 mb
Flight Director:	A. Barry Damiano	(813) 828-3310 ext. 3073

U.S. Dept. of Commerce/NOAA/Aircraft Operations Center

AOCWF2

Flt ID: *D020929*Time Off: *1707Z*Time On: *0104Z*

	A/C (Take Off)	Wx Stn (Take Off)	A/C (Land)	Wx Stn (Land)
Pressure	<i>1015.7</i>	<i>30.01 / 1015.7</i>	<i>1014.7</i>	<i>1015.1 / 29.99</i>

	Number	Data Disposition/Date/Quality
Slow/Fast Flt Lvl Tapes		
Radar Tapes	<i>1</i>	
Cloud Physics Tapes		
Video Tapes	<i>3</i>	
AXBT	<i>34</i>	
AXCP		
AXCTD		
Dropsondes	<i>23</i>	<i>8 bad; 20 messages sent + 3 cor</i>

Video

	Forward	Left Side	Right Side	Down	Remarks
Time On					
Time Off					
Rate					

Remarks

Marathon 182 1014 mb

Flight ID:

Page 2 of 2

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Time	Lat	Long	Trk	Hdg	Wind Dir	Wind Spd	T _a	T _s	Press. Alt.	Geo. Alt.	Slc Press.	Press. Slc	Dyn. Press	Remarks
215817	1919	7550			179	25	10.1	7.1			1008.7			BT/Sound
221305	1906	7654			155	33	9.7	9.0			1007.2			BT/Sound
223118	18	77												sound
223157	1856	7744												sound
223430	1855	7759												246 K
224812	1913	7857			46	22					1005.2			BT 14
225748	1917	7912			27	22					1006.2			BT 12/20
225619	1925	7930			19	23					1006.0			BT/Sound
232120	1955	8014												BT 14
232740	2021	8120			36	11					1008.1			BT 14
234600	2140	8126	5	9	81	15	13	-28.01	4892	5764	1007.3	548.0	93.3	BT 14
002000	2439	8129	352	356	92	17	2							BT 14
004600	2654	8152	324	325	107	18	2	-	4895	5173	1001.3	547.9	96.3	Q LR

