System Test Phase II Test Report

RAOB Plots and Supporting Documentation

Flight Log
System Test II – WFO Caribou, ME.
Beginning May 16, 2005

Test #	Flt #		Date	Time (UTC)	Term Press (hPa)		Cld/Wx		Metar	Valid (Y/N)
	ART	RWS			ART	RWS	ART	RWS		
1	1260	1260	05/16/2005	12Z	8.2	7.58	862//0202	872//6161	KCAR 161203Z AUTO VRB04KT 2 1/2SM -RA BR BKN004 OVC008 05/05 A2994 RMK AO2 CIG 002V007 P0000	Y
Comments: Familiarization Flight.										
2	N/A	1261	05/16/2005	15Z	N/A	7.69	N/A	872//6110	KCAR 161521Z AUTO 00000KT 7SM -RA BKN004 OVC009 06/06 A2994 RMK AO2 CIG 003V008 P0001	Y
Comments: Familiarization Flight.										
3	N/A	1262	05/16/2005	21Z	N/A	857.35	N/A	8732/6161	KCAR 162004Z AUTO 00000KT 4SM RA BR SCT006 OVC015 06/06 A2992 RMK AO2 P0002	N
Comments: Familiarization Flight. Balloon burst probably due to icing. No second release required.										

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	ART	RWS			ART	RWS	ART	RWS		
4	1261	1263	05/17/2005	00Z	7.30	7.74	875//6161	8622/6161	KCAR 162254Z AUTO 00000KT 10SM -RA FEW020 OVC044 06/04 A2995 RMK AO2 SLP149 P0005 T00560044	Y
Comments: Familiarization Flight.										
5	1262	1264	05/17/2005	12Z	14.5	8.35	861//0202	871//1010	KCAR 171113Z AUTO 00000KT 5SM BR OVC002 06/05 A3002 RMK AO2 CIG 001V006	Y
Comments: Familiarization Flight.										
6	N/A	2265	05/17/2005	15Z	N/A	8.65	N/A	854//0202	KCAR 171454Z AUTO 00000KT 10SM BKN012 BKN018 OVC023 09/07 A3003 RMK AO2 SLP178 T00890067 51003	N
Comments: Induced 2nd release condition.										

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	ART	RWS			ART	RWS	ART	RWS		
7	1263	1266	05/18/2005	00Z	7.3	7.52	857//0303	757800202	KCAR 172254Z AUTO 12003KT 10SM OVC055 10/07 A3004 RMK AO2 SLP179 T01000067	Y
Comments: Familiarization Flight. Did not accept baseline prior to release so release was detected about 5 mins late but the observer changed the release time to the correct time.										
8	N/A	3267	05/18/2005	02Z	N/A	7.09	N/A	8097/0202	KCAR 180154Z AUTO 00000KT 10SM OVC085 08/07 A3007 RMK AO2 SLP189 T00830072	N
Comments: Induced 3rd release condition. TRS failed warmup on 1st attempt. Rejected 1 radiosonde at baseline.										
9	1264	1268	05/18/2005	12Z	7.6	9.69	8/97/0202	8097/0202	KCAR 181054Z AUTO 00000KT 10SM OVC090 07/05 A3010 RMK AO2 SLP199 T00670050	Y
Comments: Synoptic Flight.										

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	ART	RWS			ART	RWS	ART	RWS		
10	N/A	1269	05/18/2005	15Z	N/A	8.07	N/A	587080202	KCAR 181454Z AUTO VRB03KT 10SM FEW041 BKN100 13/03 A3009 RMK AO2 SLP196 T01330033 58004	Y
Comments: Released with Azimuth 180 degrees out (Test condition). TRS did not initialize successfully.										
11	N/A	1270	05/18/2005	20Z	N/A	7.70	N/A	727081616	KCAR 181954Z AUTO 35007KT 10SM BKN065 OVC080 13/03 A3004 RMK AO2 SLP178 T01330028	Y
Comments: Retransmitted Coded Messages from Rework (Test condition).										
12	1265	1271	05/19/2005	00Z	7.0	5.67	767//0303	797081616	KCAR 182254Z AUTO 33007KT 10SM FEW065 SCT090 11/03 A3005 RMK AO2 SLP184 T01110033	Y
Comments: Synoptic flight.										

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	ART	RWS			ART	RWS	ART	RWS		
13	1266	1272	05/19/2005	12Z	11.0	8.35	861//0202	860//1010	KCAR 191054Z AUTO 36004KT 1/4SM FG OVC001 04/04 A3009 RMK AO2 SLP197 T00440039	Y
Comments: Synoptic flight.										
14	1267	1273	05/20/2005	00Z	5.4	9.53	346010101	356700202	KCAR 192254Z AUTO 36009KT 10SM FEW045 13/04 A3003 RMK AO2 SLP175 T01330044	Y
Comments: Synoptic flight.										
15	1268	1274	05/20/2005	12Z	7.7	7.49	862//0202	854//0202	KCAR 201154Z AUTO 34009KT 10SM -RA BKN012 OVC019 08/06 A2999 RMK AO2 RAB20 SLP164 P0000 T00780061	Y
Comments: Released near end of synoptic window.										

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	ART	RWS			ART	RWS	ART	RWS		
16	N/A	1275	05/20/2005	16Z	N/A	9.12	N/A	864//0202	KCAR 201454Z AUTO 35010KT 10SM OVC020 09/05 A2998 RMK AO2 RAE30 SLP160 P0000 60000 T00890050 58007	Y
Comments: Left the AFC turned off for duration of flight (Test Condition).										
17	N/A	1276	05/20/2005	20Z	N/A	10.69	N/A	7557/6161	KCAR 201954Z AUTO 35013G17KT 10SM FEW020 BKN034 OVC075 11/07 A2996 RMK AO2 RAE27 SLP152 P0002 T01060067	Y
Comments: Left the TRS antenna in Manual Mode at release (Test Condition).										
18	1269	1277	05/21/2005	00Z	7.8	9.38	855//0303	856//0202	KCAR 212254Z AUTO 07007G15KT 030V110 10SM OVC021 07/04 A3009 RMK AO2 SLP198 T00720039	Y
Comments: RRS released near end of synoptic window (Test Condition).										

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	ART	RWS			ART	RWS	ART	RWS		
19	1270	1278	05/21/2005	12Z	9.4	8.74	865//0202	855//8010	KCAR 211106Z AUTO 36006KT 5SM -RA BR FEW009 BKN021 OVC030 06/05 A3004 RMK AO2 P0000	Y
Comments: Synoptic flight.										
20	1271	1279	05/22/2005	00Z	8.2	8.98	864//6161	855//0202	KCAR 212254Z AUTO 07007G15KT 030V110 10SM OVC021 07/04 A3009 RMK AO2 SLP198 T00720039	Y
Comments: Precip ended between ART and RRS release.										
21	1272	1280	05/22/2005	12Z	9.8	9.15	865//8002	865//6161	KCAR 221054Z AUTO 04008G15KT 10SM -RA OVC021 06/03 A3000 RMK AO2 RAB29 SLP165 P0000 T00610028	Y
Comments: TRS did not initialize correctly. Cycled power to UPS corrected problem.										

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	ART	RWS			ART	RWS	ART	RWS		
22	1273	1281	05/23/2005	00Z	11.0	12.37	872//6161	874//6110	KCAR 222303Z AUTO VRB06KT 2 1/2SM -RA BR FEW009 OVC014 07/06 A2994 RMK AO2 P0001	Y
Comments: Light Rain and Mist.										
23	1274	1282	05/23/2005	12Z	7.5	22.03	874//6161	874//6161	KCAR 231101Z AUTO 07006KT 2 1/2SM -RA BR FEW010 OVC015 07/06 A2992 RMK AO2 P0001	Y
Comments: Light Rain and Mist.										
24	N/A	1283	05/23/2005	14Z	N/A	N/A	N/A	854//0202	KCAR 231354Z AUTO VRB06KT 10SM OVC015 08/07 A2996 RMK AO2 SLP151 T00830067	N
Comments: Observer cut the radiosonde thermistor wire during release (Test Condition).										

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	ART	RWS			ART	RWS	ART	RWS		
25	N/A	1284	05/23/2005	20Z	N/A	7.49	N/A	156080202	KCAR 231954Z AUTO 06012G22KT 10SM FEW034 12/04 A2996 RMK AO2 PK WND 06026/1932 SLP152 T01170044	Y
Comments: Used operational train regulator.										
26	1275	1285	05/24/2005	00Z	9.6	7.13	555000101	156080202	KCAR 232254Z AUTO 06008G17KT 10SM CLR 11/04 A2998 RMK AO2 SLP158 T01060039	Y
Comments: Synoptic flight.										
27	1276	1286	05/24/2005	12Z	7.5	7.39	009080202	009080202	KCAR 241054Z AUTO 04005KT 10SM CLR 06/02 A3006 RMK AO2 SLP188 T00610022	Y
Comments: Flight train string tangled during release resulting in a short flight train.										

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	ART	RWS			ART	RWS	ART	RWS		
28	N/A	1287	05/24/2005	15Z	N/A	8.17	N/A	155780202	KCAR 241354Z AUTO 08007G15KT 050V140 10SM CLR 12/02 A3010 RMK AO2 SLP197 T01220022	Y
Comments: Changed sfc press and cloud/wx group before 400hPa.										
29	1277	1288	05/25/2005	00Z	7.1	7.86	009010202	009010202	KCAR 242254Z AUTO VRB05KT 10SM FEW090 15/00 A3008 RMK AO2 SLP193 T01500000	Y
Comments: Synoptic flight.										
30	N/A	1289	05/25/2005	02Z	N/A	35.34	N/A	009080202	KCAR 250054Z AUTO VRB03KT 10SM FEW090 11/01 A3012 RMK AO2 SLP205 T01060011	Y
Comments: Transmitted coded messages from Rework mode.										

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	ART	RWS			ART	RWS	ART	RWS		
31	1278	1290	05/25/2005	12Z	9.1	7.19	454000202	454000202	KCAR 251054Z AUTO 02007KT 10SM BKN019 04/01 A3015 RMK AO2 SLP215 T00440011	Y
Comments: Synoptic flight.										
32	N/A	1291	05/25/2005	15Z	N/A	9.79	N/A	209000202	KCAR 251454Z AUTO VRB06KT 10SM CLR 13/01 A3015 RMK AO2 SLP215 T01280011 58006	Y
Comments:										
33	N/A	1292	05/25/2005	20Z	N/A	8.87	N/A	009040202	KCAR 251954Z AUTO VRB04KT 10SM CLR 18/M02 A3009 RMK AO2 SLP196 T01781022	Y
Comments: TRS did not initialize correctly. Rejected a radiosonde at baseline as a test condition.										

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	ART	RWS			ART	RWS	ART	RWS		
34	1279	1293	05/26/2005	00Z	6.7	6.58	009000202	109340202	KCAR 252254Z AUTO 11007KT 080V150 10SM CLR 16/M09 A3010 RMK AO2 SLP197 T01611089	Y
Comments: TRS did not initialize correctly.										
35	1280	1294	05/26/2005	12Z	8.1	7.31	868//8002	7557/6161	KCAR 261054Z AUTO 02007KT 10SM -RA FEW020 BKN070 BKN080 05/02 A3006 RMK AO2 SLP185 P0001 T00500022	Y
Comments: TRS did not initialize correctly.										
36	1281	1295	5/27/2005	00Z	24.4	10.42	865//6161	855//6161	KCAR 262354Z AUTO 06009G17KT 10SM -RA OVC024 11/09 A2986 RMK AO2 SLP119 P0000 60003 T01060089 10150 20106 56016	N
Comments: The MicroART flight had a slowed ascent rate due to icing. MicroART terminated flight for maximum time reached.										

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	ART	RWS			ART	RWS	ART	RWS		
37	1282	1296	5/27/2005	12Z	8.4	9	865//0202	865//0202	KCAR 271154Z AUTO 02006KT 10SM OVC014 07/06 A2975 RMK AO2 SLP080 60020 70029 T00720061 10089 20072 51003	Y
Comments: Synoptic flight.										
38	N/A	1297	5/27/2005	15Z	N/A	105.42	N/A	864//0202	KCAR 271454Z AUTO 01007KT 10SM OVC012 09/07 A2974 RMK AO2 SLP077 T00940067 56004	N
Comments: Balloon burst early.										
39	N/A	1298	5/27/2005	18Z	N/A	7.67	N/A	855//0202	KCAR 271754Z AUTO 03007G14KT 350V060 10SM OVC018 12/08 A2972 RMK AO2 SLP071 T01220078 10128 20072 58005	Y
Comments:										

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	ART	RWS			ART	RWS	ART	RWS		
40	1283	1299	5/28/2005	00Z	7.1	6.99	7557/0202	7557/0202	KCAR 272254Z AUTO VRB06KT 10SM OVC025 13/08 A2972 RMK AO2 SLP069 T01280083	Y
Comments: Synoptic Flight										
41	1284	1300	5/28/2005	12Z	7.2	10.48	862//5102	862//1002	KCAR 281105Z AUTO 01004KT 2 1/2SM BR BKN005 OVC009 09/09 A2972 RMK AO2 CIG 002V007	Y
Comments: Synoptic Flight										
42	1285	1301	5/29/2005	00Z	7	5.86	8547/0202	8547/0202	KCAR 282254Z AUTO 35003KT 10SM FEW010 BKN027 OVC070 13/11 A2975 RMK AO2 SLP078 T01330111	Y
Comments: Synoptic Flight										

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Test #	Flt #		Date	Time (UTC)	Term Press (hPa)		Cld/Wx		Metar	Valid (Y/N)
	ART	RWS			ART	RWS	ART	RWS		
43	1286	1302	5/29/2005	12Z	10	9.67	860//0202	860//5110	KCAR 291054Z AUTO 00000KT 3/4SM BR VV001 12/11 A2977 RMK AO2 SLP085 T01170111	Y
Comments: Synoptic Flight										
44	1287	1303	5/30/2005	00Z	7.8	7.18	7569/0303	855//0202	KCAR 292354Z AUTO 00000KT 10SM FEW030 BKN048 OVC060 13/13 A2978 RMK AO2 SLP088 60006 T01330128 10139 20122 51002	Y
Comments: Synoptic Flight										
45	1288	1304	5/30/2005	11Z	7.5	6.43	862//0202	862//6161	KCAR 301054Z AUTO 00000KT 10SM OVC004 10/09 A2984 RMK AO2 CIG 003V008 SLP110 P0001 T01000094	N
Comments: Synoptic Flight. The RRS flight was launched in the 11 UTC window (10:59 UTC), as a part of the test scenario. The MicroART flight was launched in the standard synoptic window (12 UTC).										

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	ART	RWS			ART	RWS	ART	RWS		
46	N/A	1305	5/30/2005	15Z	N/A	9.36	N/A	864//0303	KCAR 301454Z AUTO 00000KT 10SM OVC014 13/10 A2989 RMK AO2 SLP125 60000 T01280100 51008	Y
Comments:										
47	N/A	1306	5/30/2005	20Z	N/A	9.56	N/A	756710202	KCAR 301954Z AUTO VRB03KT 10SM OVC044 16/11 A2988 RMK AO2 SLP124 T01560106	Y
Comments:										

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Test #	Flt #		Date	Time (UTC)	Term Press (hPa)		Cld/Wx		Metar	Valid (Y/N)
	ART	RWS			ART	RWS	ART	RWS		
48	1289	1307	5/31/2005	00Z	8.80	9.91	156010101	156010101	KCAR 302354Z AUTO 00000KT 10SM CLR 14/11 A2992 RMK AO2 SLP136 T01390106 10161 20139 53008	Y
Comments: Synoptic Flight										
49	1290	1308	5/31/2005	12Z	9.50	9.66	660//4502	9////4545	KCAR 311054Z AUTO 00000KT ¼SM FG VV001 07/07 A3007 RMK AO2 SLP188 T00720067	Y
Comments: Synoptic Flight										
50	N/A	1309	5/31/2005	15Z	N/A	10.62	N/A	215010202	KCAR 311454Z AUTO 00000KT 10SM CLR 15/11 A3010 RMK AO2 SLP198 T01500111 51005	Y
Comments: Transmitted from Rework within 3 to 6 hours.										

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	ART	RWS			ART	RWS	ART	RWS		
51	N/A	1310	5/31/2005	21Z	N/A	12:46	N/A	2177010202	KCAR 312054Z AUTO 20005KT 10SM FEW060 21/08 A3007 RMK AO2 SLP187 T02110078 56004	Y
Comments: Rejected 2 radiosondes during baseline as a part of a test scenario.										
52	1291	1311	6/1/2005	00Z	9.6	15.88	109300202	146710101	KCAR 312254Z AUTO 17006KT 10SM CLR 19/06 A3009 RMK AO2 SLP193 T01940056	Y
Comments: Synoptic Flight										
53	1292	1312	6/1/2005	12Z	11.4	9.73	009000101	009000110	KCAR 011054Z AUTO 00000KT 10SM CLR 11/08 A3019 RMK AO2 SLP228 T01060083	Y
Comments: Synoptic Flight										

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	ART	RWS			ART	RWS	ART	RWS		
54	N/A	1313	6/1/2005	15Z	N/A	10.20	N/A	009000101	KCAR 011454Z AUTO 18004KT 10SM CLR 19/08 A3019 RMK AO2 SLP226 T01890078 58003	Y
Comments: Prior to flight, replaced the RS232 cable connected to the RSOIS fiber modem.										
55	N/A	1314	6/1/2005	20Z	N/A	10.36	N/A	026000202	KCAR 011954Z AUTO 20006KT 10SM CLR 24/06 A3011 RMK AO2 SLP198 T02440061	Y
Comments: Rejected one radiosonde at the release point as part of a test scenario.										
56	1293	1315	6/2/2005	00Z	9.2	9.59	009000202	016000202	KCAR 012254Z AUTO 19005KT 10SM CLR 24/05 A3009 RMK AO2 SLP193 T02390050	Y
Comments: Synoptic Flight										

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	ART	RWS			ART	RWS	ART	RWS		
57	1294	1316	6/2/2005	12Z	11.1	10.09	009000101	209200202	KCAR 021054Z AUTO 21003KT 10SM CLR 14/10 A3013 RMK AO2 SLP205 T01390100	Y
Comments: Synoptic Flight. Archive Transmission Skipped as a part of a test scenario (Archive will be sent next synoptic).										
58	1295	1317	6/3/2005	00Z	11.4	8.85	109310202	246710101	KCAR 022254Z AUTO 22004KT 10SM FEW120 27/09 A2997 RMK AO2 SLP148 T02670094	Y
Comments: Synoptic Flight.										
59	1296	1318	6/3/2005	12Z	8.5	8.38	709070101	009010202	KCAR 031054Z AUTO 00000KT 10SM CLR 16/11 A2999 RMK AO2 SLP157 T01560111	Y
Comments: Synoptic Flight. Released near the end of the Synoptic window. Transmitted archive files for flights 1318 and 1316.										

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	ART	RWS			ART	RWS	ART	RWS		
60	N/A	1319	6/3/2005	15Z	N/A	10.88	N/A	116060303	KCAR 031454Z AUTO 23007KT 10SM CLR 27/12 A2993 RMK AO2 SLP137 T02670117 56017	Y
Comments: Asynoptic Flight.										
61	N/A	1320	6/3/2005	20Z	N/A	9.55	N/A	227010202	KCAR 031954Z AUTO 25008G15KT 210V280 10SM FEW100 30/07 A2981 RMK AO2 SLP096 T03000072	Y
Comments: Asynoptic Flight.										
62	2297	1321	6/4/2005	00Z	11.3	14.82	326600202	557000202	KCAR 032254Z AUTO 31013G18KT 10SM BKN110 26/09 A2982 RMK AO2 SLP097 T02610094	Y
Comments: Synoptic Flight. MicroART had a second release. 1st release caught in trees.										

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	ART	RWS			ART	RWS	ART	RWS		
63	1298	1322	6/4/2005	12Z	9.8	9.16	709080101	609080202	KCAR 041054Z AUTO 00000KT 10SM CLR 16/12 A2983 RMK AO2 SLP101 T01560122	Y
Comments: Synoptic Flight.										
64	1299	N/A	6/5/2005	00Z	N/A	N/A	N/A	N/A	KCAR 042254Z AUTO 36004KT 8SM CLR 24/09 A2981 RMK AO2 SLP095 T02440094	N
Comments: Skipped a RRS synoptic flight as part of a test scenario. A No Data message was sent during the synoptic window.										
65	1300	1323	6/5/2005	12Z	8.7	9.45	8092/8002	8557/0202	KCAR 051054Z AUTO 00000KT 10SM CLR 11/09 A2988 RMK AO2 RAB0957E42 SLP121 P0000 T01060089	Y
Comments: Synoptic Flight. Retransmitted the coded message in Rework.										

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	ART	RWS			ART	RWS	ART	RWS		
66	1301	1324	6/6/2005	00Z	6.8	7.17	309040202	209210303	KCAR 052254Z AUTO 04003KT 10SM CLR 21/04 A3000 RMK AO2 SLP162 T02110039	Y
Comments: Synoptic Flight.										
67	1302	1325	6/6/2005	12Z	5.8	8.79	756770202	8557/2102	KCAR 061054Z AUTO 15004KT 10SM FEW044 BKN085 08/02 A3016 RMK AO2 RAE53 SLP216 P0000 T00830022	Y
Comments: Synoptic Flight.										

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Beginning May 16, 2005

Test #	Flt #		Date	Time (UTC)	Term Press (hPa)		Cld/Wx		Metar	Valid (Y/N)
	ART	RWS			ART	RWS	ART	RWS		
68	N/A	1326	6/6/2005	15Z	N/A	9.6	N/A	885//6103	KCAR 061454Z AUTO 17005KT 7SM -RA OVC042 09/06 A3012 RMK AO2 RAB07 SLP204 P0000 60000 T00890061 55012	N
Comments: Asynoptic Flight. Surface Observation corrected after reaching 400 hPa.										
69	N/A	1327	6/6/2005	21Z	N/A	7.56	N/A	865//6161	KCAR 062030Z AUTO 16008G16KT 8SM -RA BKN013 OVC023 09/08 A2993 RMK AO2 P0001	Y
Comments: Asynoptic Flight.										
70	1303	1328	6/7/2005	00Z	6.5	8.40	855//0303	865//0261	KCAR 062254Z AUTO 17012G17KT 10SM OVC020 09/07 A2989 RMK AO2 SLP128 T00940067	Y
Comments: Synoptic Flight.										

Flight Log
System Test II – WFO Caribou, ME.
Beginning May 16, 2005

Test #	Flt #		Date	Time (UTC)	Term Press (hPa)		Cld/Wx		Metar	Valid (Y/N)
	ART	RWS			ART	RWS	ART	RWS		
71	1304	1329	6/7/2005	12Z	7.5	8.65	861//0202	861//0202	KCAR 071054Z AUTO 20005KT 8SM OVC002 11/10 A2964 RMK AO2 SLP043 T01060100	Y
Comments: Synoptic Flight. RH Sensor failure at 16 minutes.										
72	N/A	1330	6/7/2005	15Z	N/A	9.26	N/A	265700101	KCAR 071454Z AUTO 17009KT 10SM FEW017 SCT100 18/14 A2957 RMK AO2 SLP018 T01780144 58017	Y
Comments: Asynoptic Flight. No GPS after release.										
73	N/A	1331	6/7/2005	20Z	N/A	6.9	N/A	646280202	KCAR 071954Z AUTO 27010G18KT 10SM BKN080 23/14 A2953 RMK AO2 SLP001 T02280139	N
Comments: Asynoptic Flight. Test case was to fly radiosonde with RH sensor cap on.										

Flight Log
System Test II – WFO Caribou, ME.
Beginning May 16, 2005

Test #	Flt #		Date	Time (UTC)	Term Press (hPa)		Cld/Wx		Metar	Valid (Y/N)
	ART	RWS			ART	RWS	ART	RWS		
74	1305	1332	6/8/2005	00Z	6.8	10.3	861//0202	861//0202	KCAR 072254Z AUTO 28011G19KT 10SM FEW046 22/13 A2954 RMK AO2 SLP004 T02170133	Y
Comments: Synoptic Flight.										
75	1306	1333	6/8/2005	12Z	6.5	7.62	063080303	363000303	KCAR 081054Z AUTO 32006KT 10SM CLR 13/11 A2982 RMK AO2 SLP100 T01330106	Y
Comments: Synoptic Flight. Third dial out used for message transmission.										
76	N/A	1334	6/8/2005	15Z	N/A	6.74	N/A	8557/0603	KCAR 081454Z AUTO 33009KT 6SM HZ BKN038 16/10 A2987 RMK AO2 SLP119 T01610100 53008	Y
Comments: Asynoptic Flight. . Third dial out used for message transmission.										

Flight Log
System Test II – WFO Caribou, ME.
Beginning May 16, 2005

Test #	Flt #		Date	Time (UTC)	Term Press (hPa)		Cld/Wx		Metar	Valid (Y/N)
	ART	RWS			ART	RWS	ART	RWS		
77	N/A	1335	6/8/2005	20	N/A	N/A	N/A	N/A	KCAR 081954Z AUTO 35007KT 6SM HZ SCT065 19/11 A2989 RMK AO2 SLP126 T01890106	N
Comments: Asynoptic Flight. Flight lost										
78	307	1336	6/9/2005	00	7.6	8.0	219100501	155000202	KCAR 082354Z AUTO 32003KT 10SM CLR 16/07 A2993 RMK AO2 SLP140 T01560067 10200 20156 51010	Y
Comments: Synoptic Flight.										
79	308	1337	6/9/2005	12	7.0	8.8	009580202	709350303	KCAR 091054Z AUTO 00000KT 10SM CLR 08/06 A3013 RMK AO2 SLP208 T00780056	Y
Comments: Synoptic Flight. This end ST2										

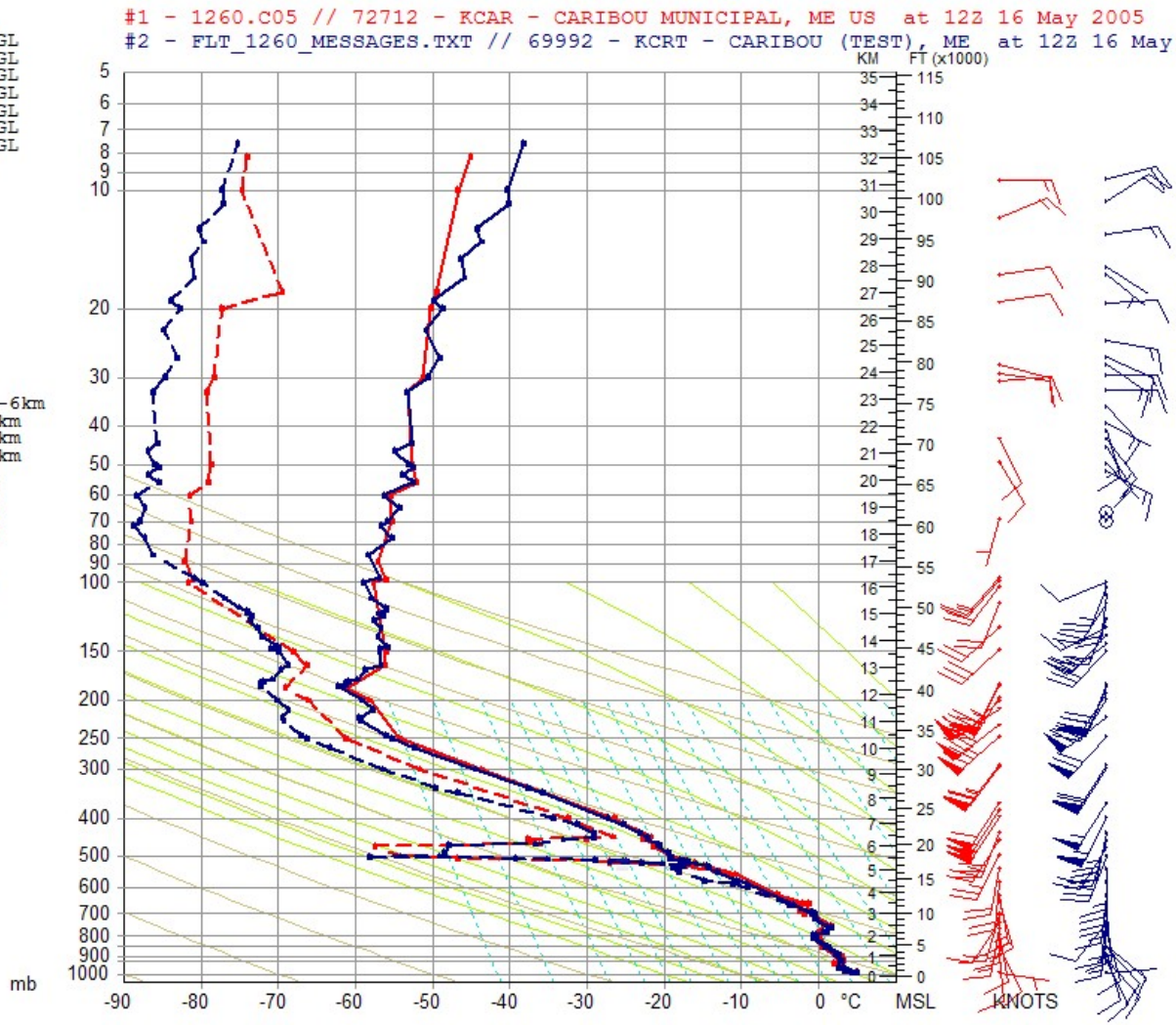
Test # 1 - System Test II – 12 UTC on 5/16/2005
RWS Version 1.0.4.0

TEST # 1			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12134	12165	-31
Freezing Level (m AGL)	1782	1562	220
LFC Height (m AGL)	NC	75	NC
CCL Height (m AGL)	383	1181	-798
LCL Height (m AGL)	63	75	-12
Precipitable Water (cm)	2.21	2.14	0.07
Thickness 1000 - 500 mb (m)	5493	5483	10
Thickness 1000 - 700 mb (m)	2880	2879	1
Thickness 1000 - 850 mb (m)	1319	1318	1
Thickness 850 - 500 mb (m)	4175	4165	10
Thickness 850 - 700 mb (m)	1561	1561	0
Thickness 700 - 500 mb (m)	2614	2604	10
Thickness 600 - 400 mb (m)	3034	3028	6
Wind Shear Below	17	21	-4
Wind Shear Above	33	42	-9
Max Winds Agree (Y/N)	Y		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

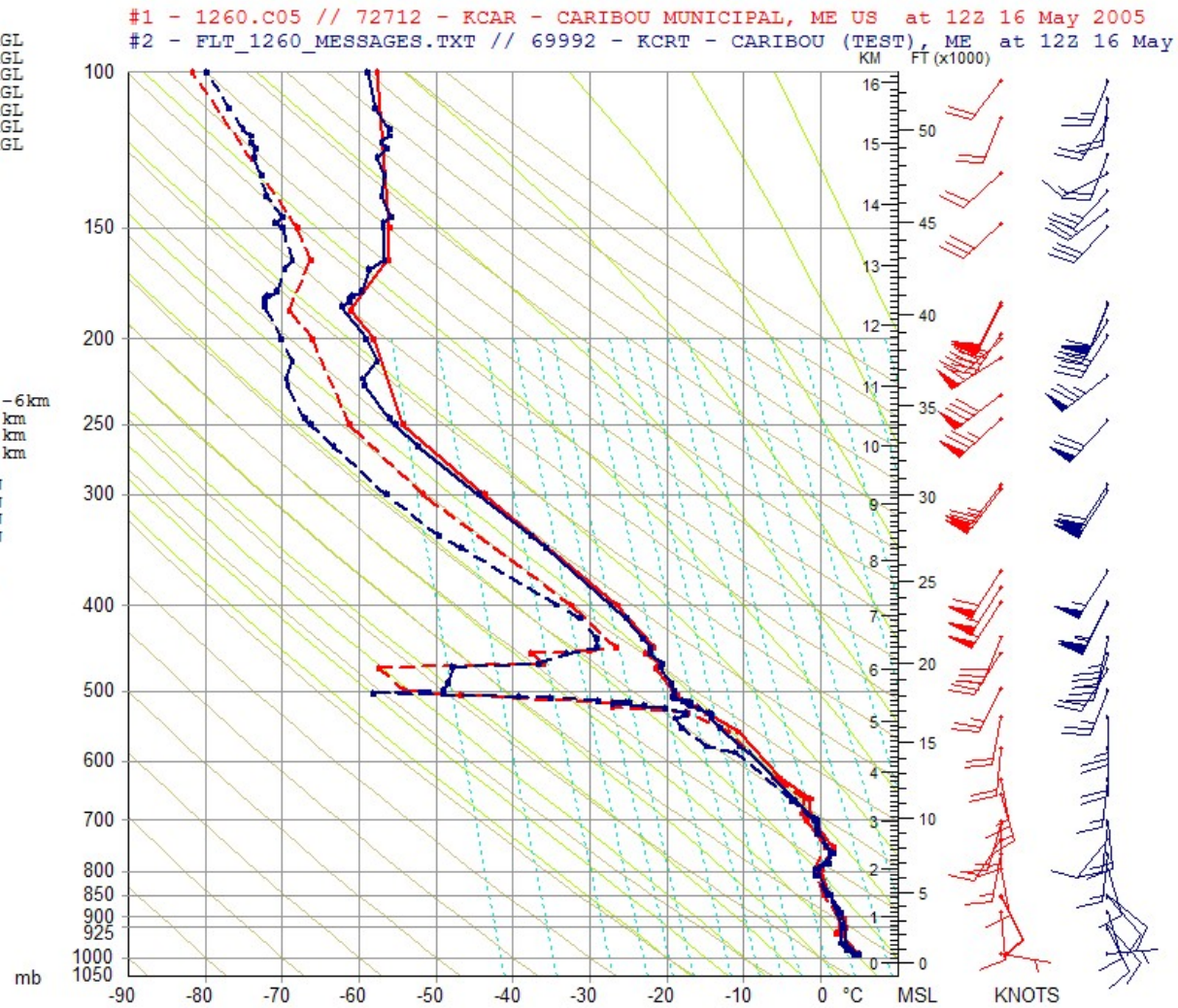
Test # 1 - System Test II – 12 UTC on 5/16/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12134	12165	m AGL
FRZG Lvl:	1782	1562	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	75	m AGL
CCL Hgt:	383	1181	m AGL
LCL Hgt:	63	75	m AGL
Water:	2.21	2.14	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	46.8	51.6	
CAP:	--	-0.2	
Boyden:	88.9	88.4	
S{TT}:	32.8	34.0	
KO:	15.6	16.2	
LI:	14.8	14.6	
TT:	39.8	40.2	
KI:	19.7	20.9	
Tc:	6.5	13.1	°C
Storm:	250/15	256/10	0-6km
s-rH:	61	57	0-3km
s-rH:	49	45	0-2km
s-rH:	35	36	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.2	17.8	
Threat:	9.4	9.1	
Point:	4.4	4.9°C	
1000 - 500 mb:	5493	5483 m	
1000 - 700 mb:	2880	2879 m	
1000 - 850 mb:	1319	1318 m	
850 - 500 mb:	4175	4165 m	
850 - 700 mb:	1561	1561 m	
700 - 500 mb:	2614	2604 m	
600 - 400 mb:	3034	3028 m	



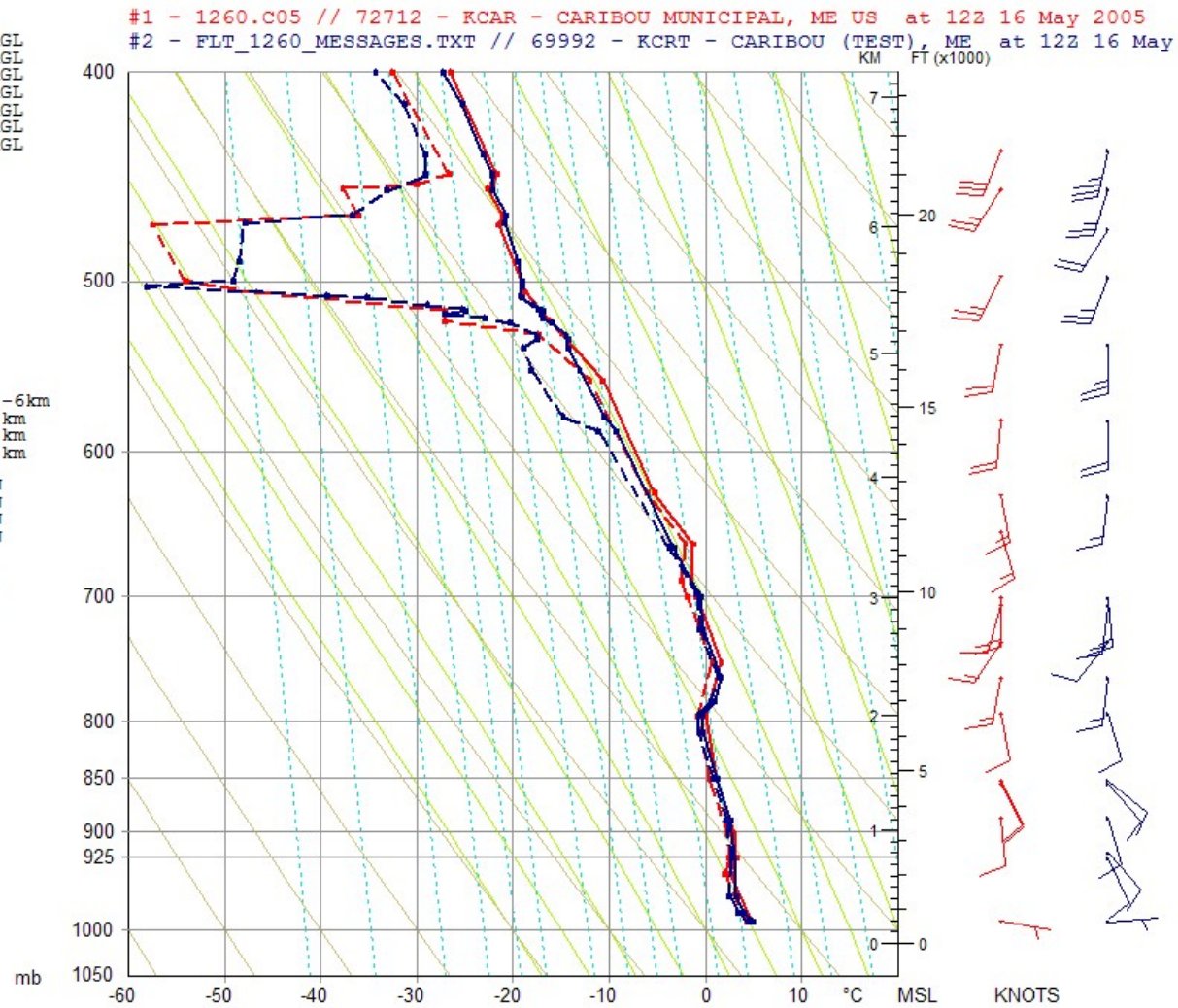
Test # 1 - System Test II – 12 UTC on 5/16/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12134	12165	m AGL
FRZG Lvl:	1782	1562	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	75	m AGL
CCL Hgt:	383	1181	m AGL
LCL Hgt:	63	75	m AGL
Water:	2.21	2.14	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	46.8	51.6	
CAP:	--	-0.2	
Boyden:	88.9	88.4	
S{TT}:	32.8	34.0	
KO:	15.6	16.2	
LI:	14.8	14.6	
TT:	39.8	40.2	
KI:	19.7	20.9	
Tc:	6.5	13.1	°C
Storm:	250/15	256/10	0-6km
s-rH:	61	57	0-3km
s-rH:	49	45	0-2km
s-rH:	35	36	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.2	17.8	
Threat:	9.4	9.1	
Point:	4.4	4.9	°C
1000 - 500 mb:	5493	5483	m
1000 - 700 mb:	2880	2879	m
1000 - 850 mb:	1319	1318	m
850 - 500 mb:	4175	4165	m
850 - 700 mb:	1561	1561	m
700 - 500 mb:	2614	2604	m
600 - 400 mb:	3034	3028	m



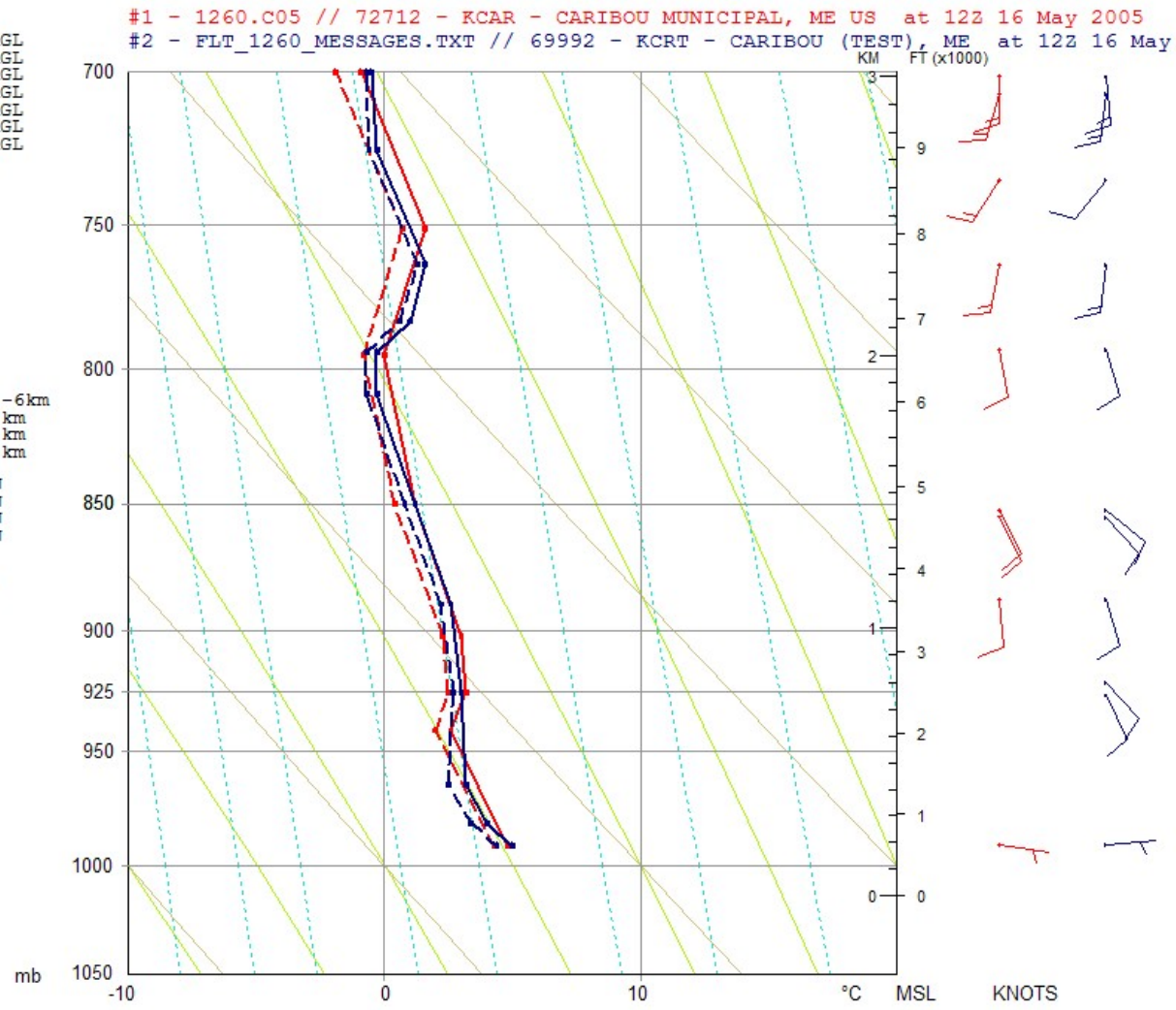
Test # 1 - System Test II – 12 UTC on 5/16/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12134	12165	m AGL
FRZG Lvl:	1782	1562	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	75	m AGL
CCL Hgt:	383	1181	m AGL
LCL Hgt:	63	75	m AGL
Water:	2.21	2.14	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	46.8	51.6	
CAP:	--	-0.2	
Boyden:	88.9	88.4	
S{TT}:	32.8	34.0	
KO:	15.6	16.2	
LI:	14.8	14.6	
TT:	39.8	40.2	
KI:	19.7	20.9	
Tc:	6.5	13.1	°C
Storm:	250/15	256/10	0-6km
s-rH:	61	57	0-3km
s-rH:	49	45	0-2km
s-rH:	35	36	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.2	17.8	
Threat:	9.4	9.1	
Point:	4.4	4.9°C	
1000 - 500 mb:	5493	5483 m	
1000 - 700 mb:	2880	2879 m	
1000 - 850 mb:	1319	1318 m	
850 - 500 mb:	4175	4165 m	
850 - 700 mb:	1561	1561 m	
700 - 500 mb:	2614	2604 m	
600 - 400 mb:	3034	3028 m	

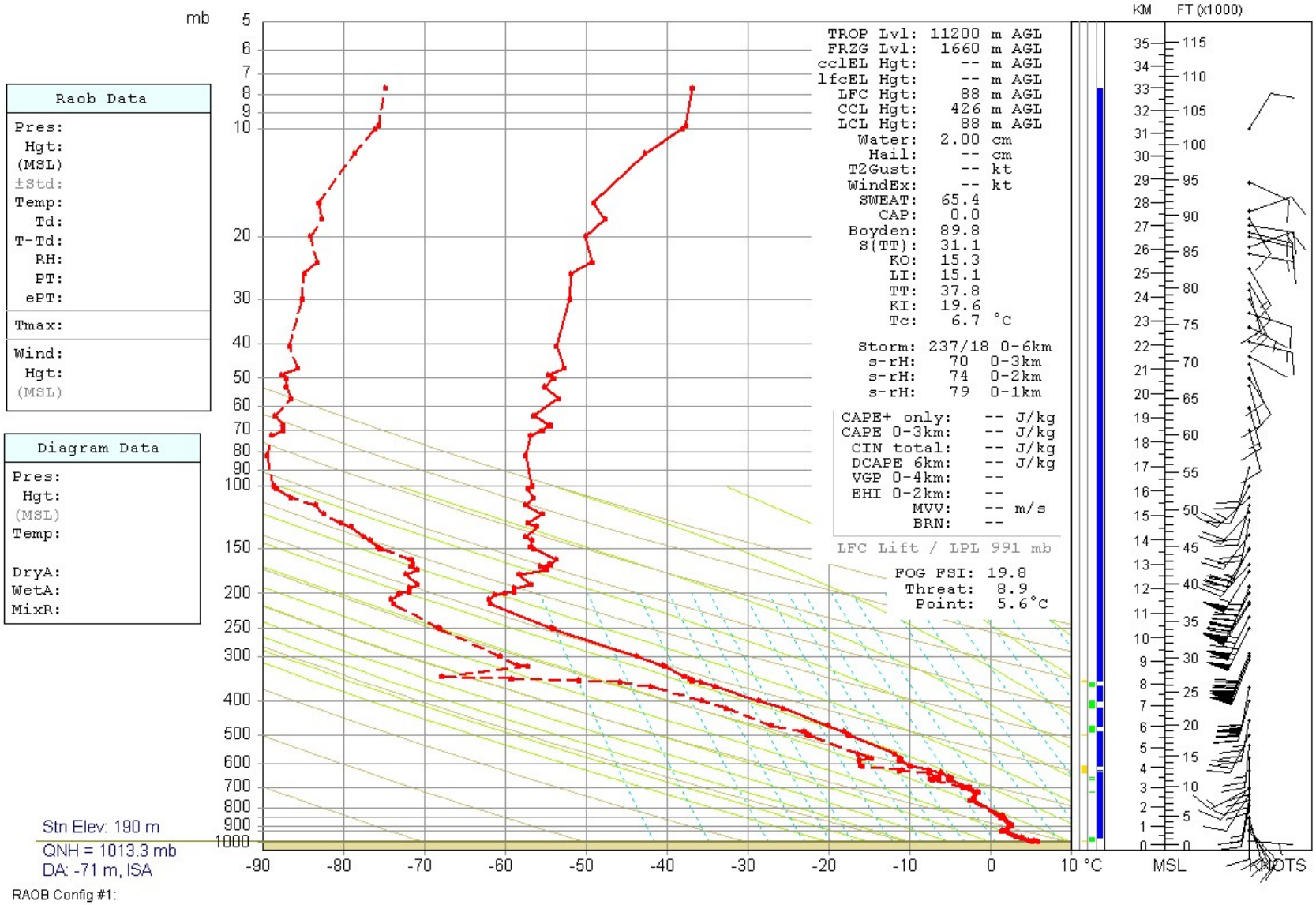


Test # 1 - System Test II – 12 UTC on 5/16/2005
RWS Version 1.0.4.0

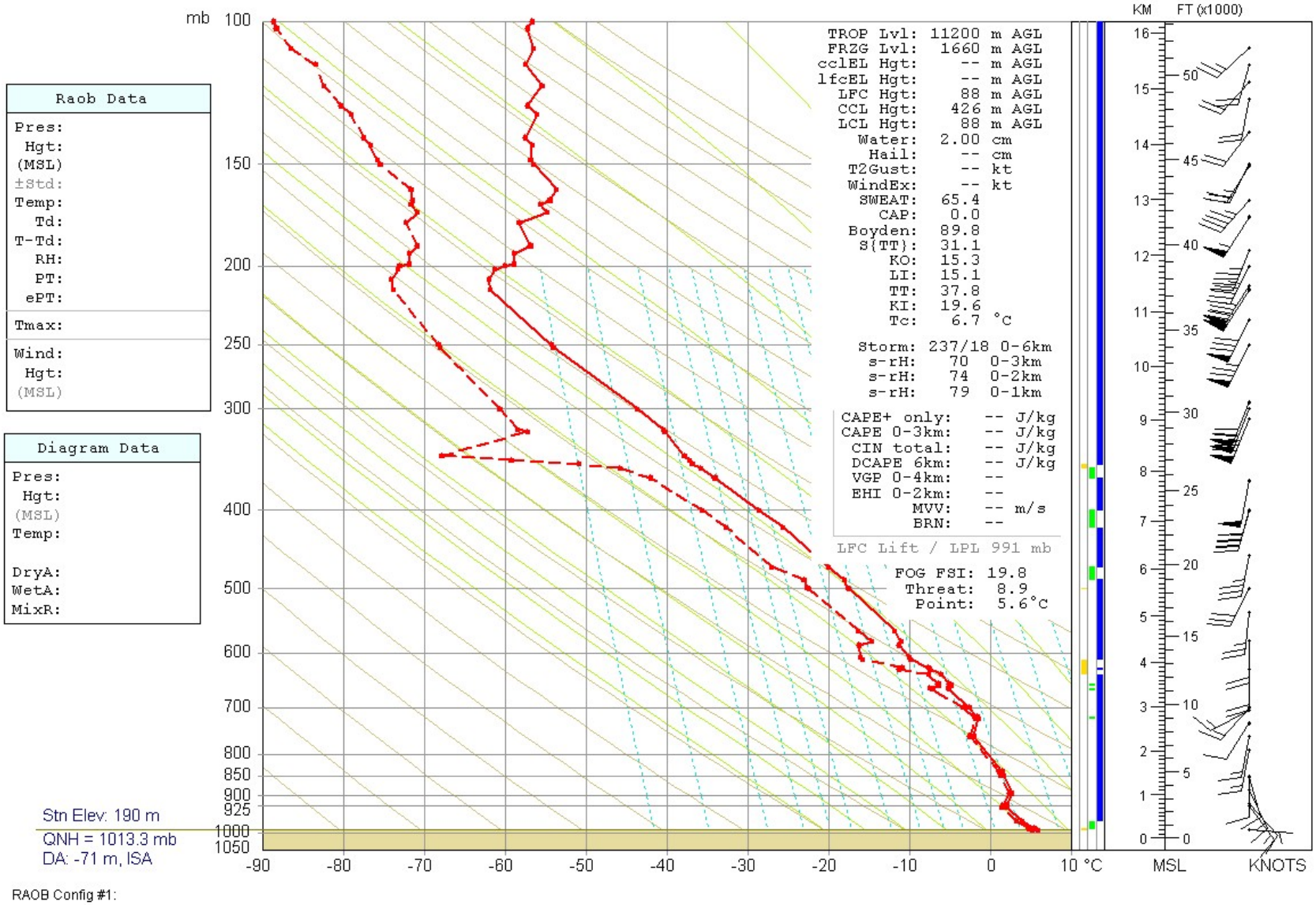
	#1	#2	
TROP Lvl:	12134	12165	m AGL
FRZG Lvl:	1782	1562	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	75	m AGL
CCL Hgt:	383	1181	m AGL
LCL Hgt:	63	75	m AGL
Water:	2.21	2.14	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	46.8	51.6	
CAP:	--	-0.2	
Boyden:	88.9	88.4	
S{TT}:	32.8	34.0	
KO:	15.6	16.2	
LI:	14.8	14.6	
TT:	39.8	40.2	
KI:	19.7	20.9	
Tc:	6.5	13.1	°C
Storm:	250/15	256/10	0-6km
s-rH:	61	57	0-3km
s-rH:	49	45	0-2km
s-rH:	35	36	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.2	17.8	
Threat:	9.4	9.1	
Point:	4.4	4.9°C	
1000 - 500 mb:	5493	5483	m
1000 - 700 mb:	2880	2879	m
1000 - 850 mb:	1319	1318	m
850 - 500 mb:	4175	4165	m
850 - 700 mb:	1561	1561	m
700 - 500 mb:	2614	2604	m
600 - 400 mb:	3034	3028	m



Test #2 - System Test II – 15UTC on 05/16/2005
RWS Version 1.0.4.0

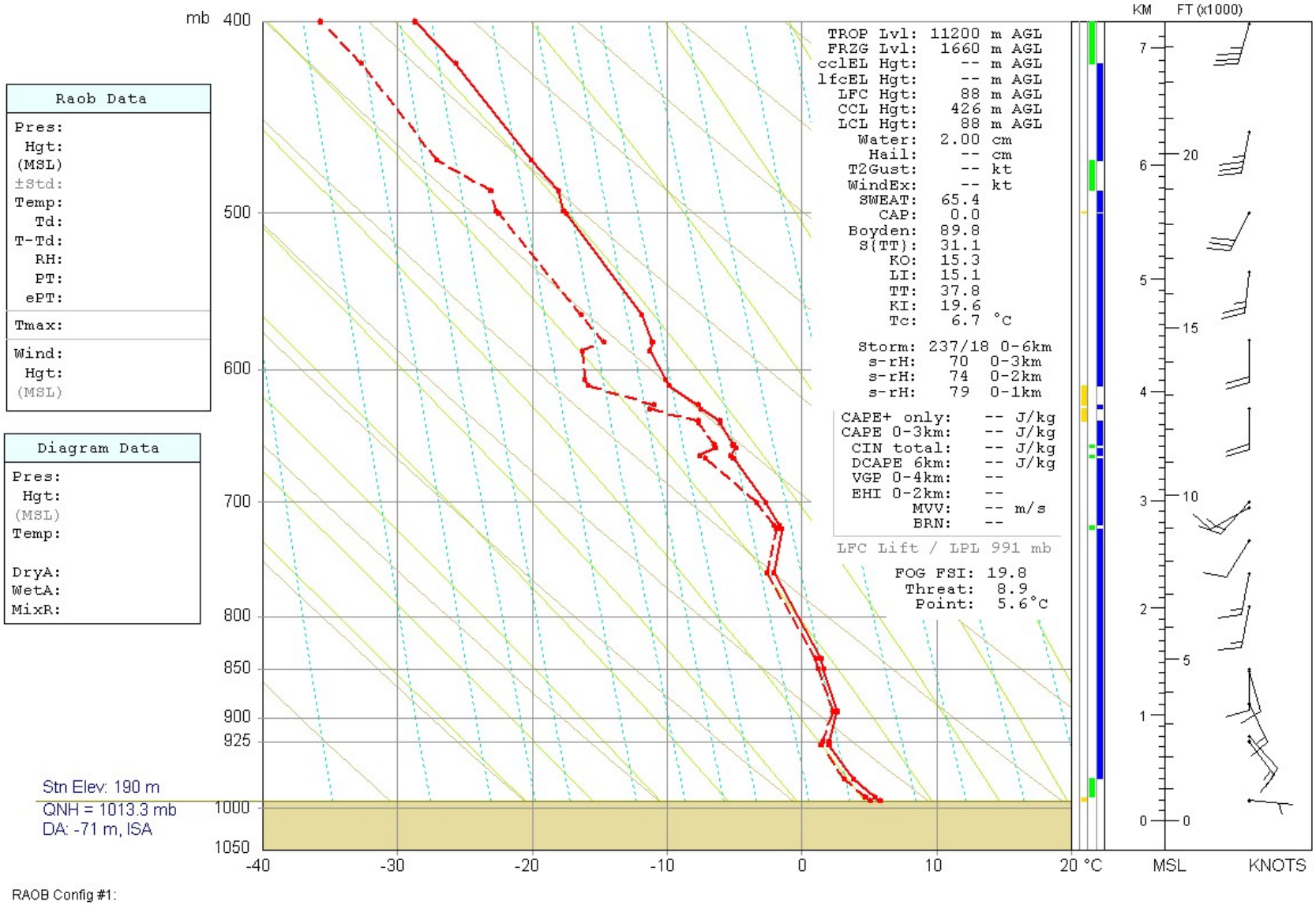


Test #2 - System Test II – 15UTC on 05/16/2005
RWS Version 1.0.4.0

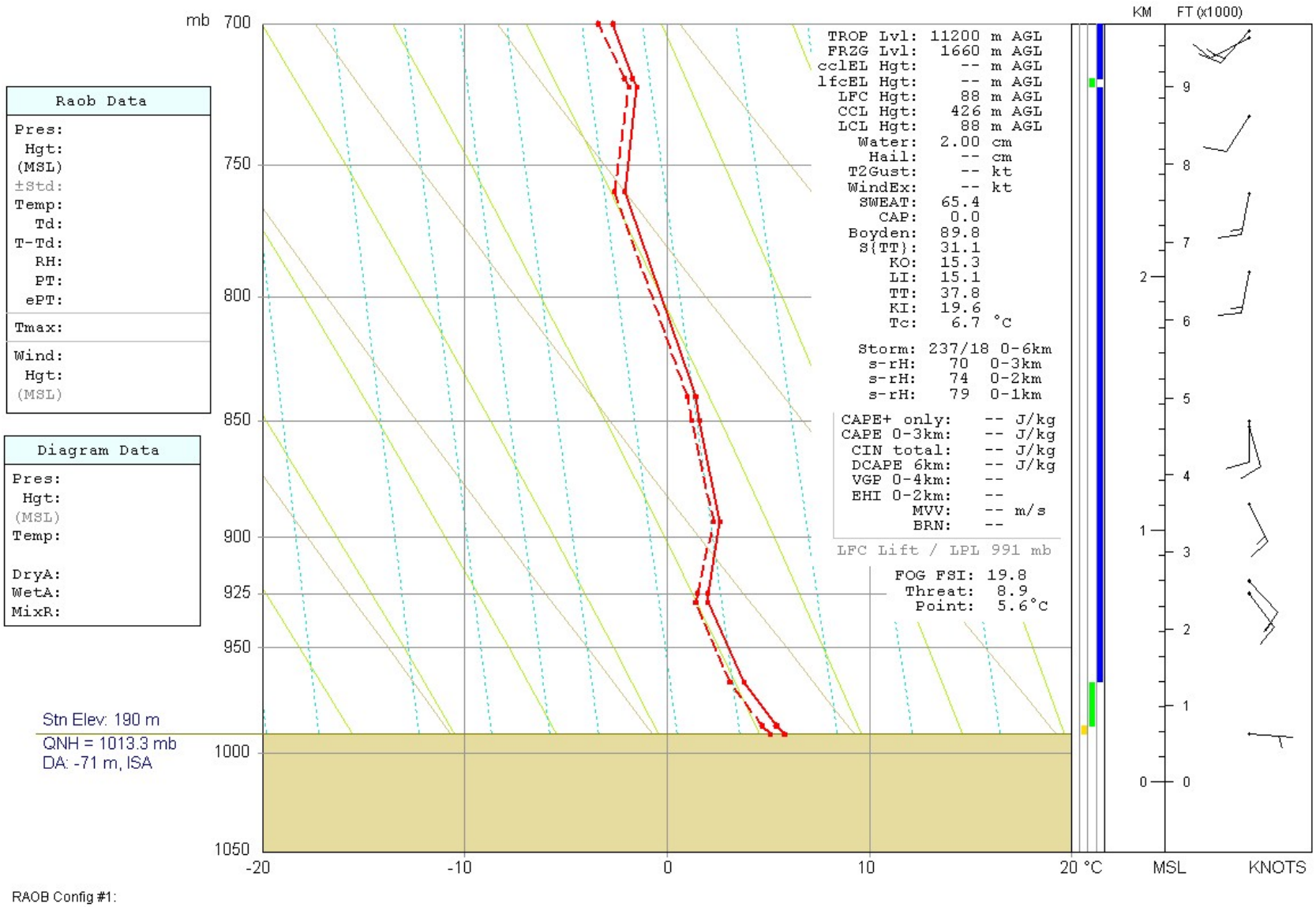


RAOB Config #1:

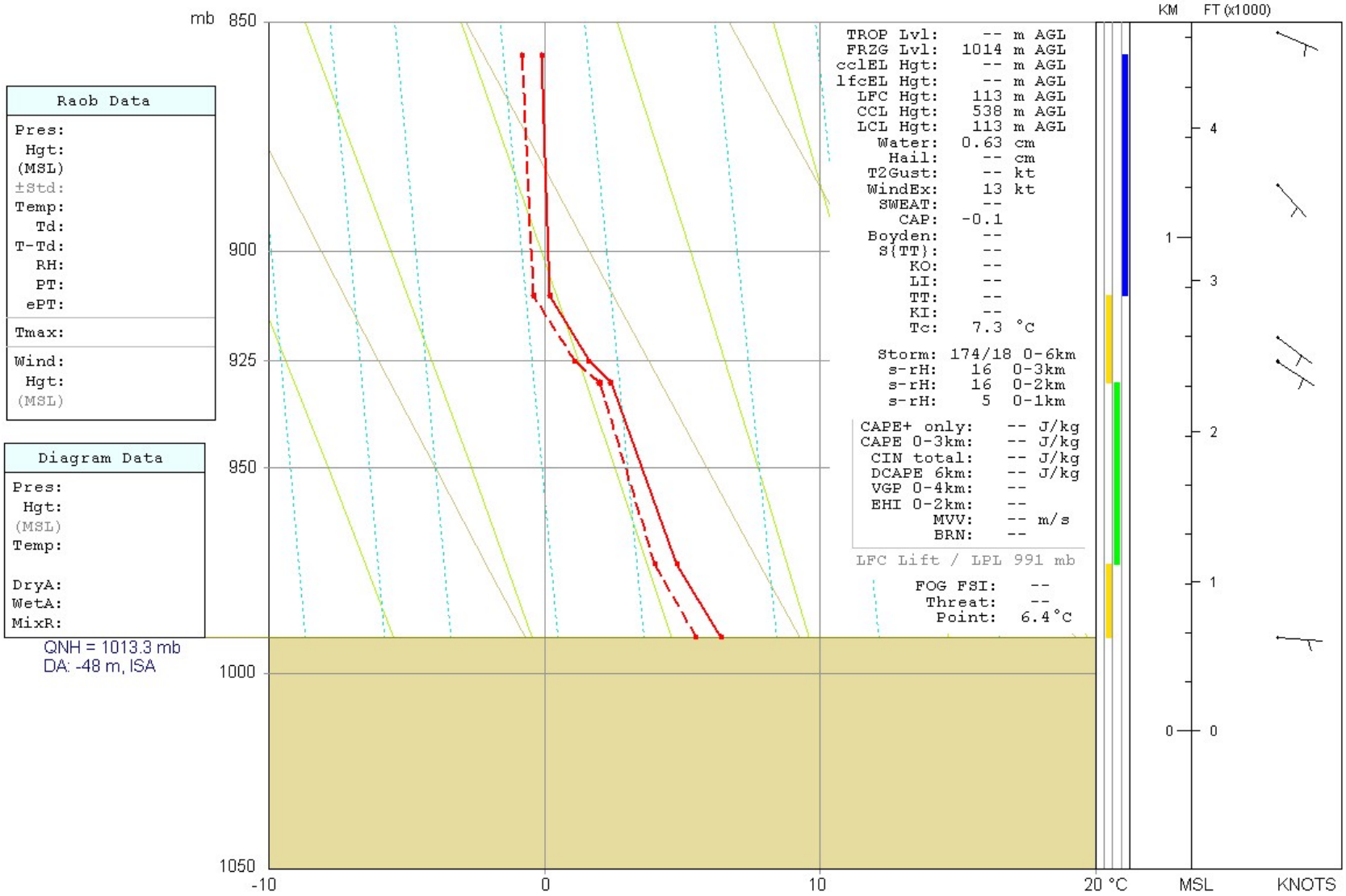
Test #2 - System Test II – 15UTC on 05/16/2005
RWS Version 1.0.4.0



Test #2 - System Test II – 15UTC on 05/16/2005
RWS Version 1.0.4.0



Test #3 - System Test II – 21UTC on 05/16/2005
RWS Version 1.0.4.0



RAOB Config #1:

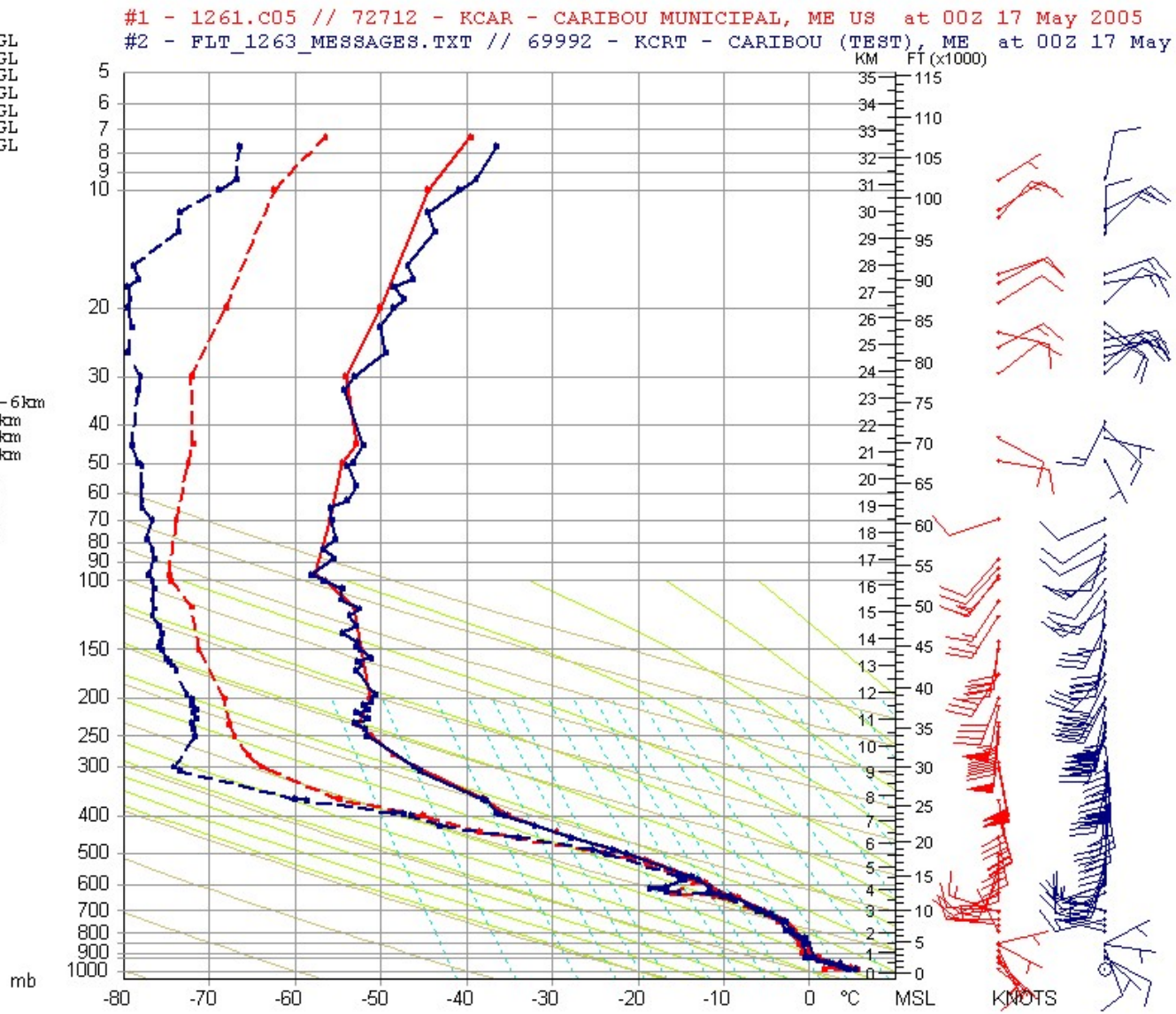
Test #4 - System Test II – 00UTC on 05/17/2005
RWS Version 1.0.4.0

TEST # 4			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10549	10596	-47
Freezing Level (m AGL)	815	1149	-334
LFC Height (m AGL)	266	357	-91
CCL Height (m AGL)	573	482	91
LCL Height (m AGL)	137	113	24
Precipitable Water (cm)	1.76	1.75	0.01
Thickness 1000 - 500 mb (m)	5425	5423	2
Thickness 1000 - 700 mb (m)	2856	2856	0
Thickness 1000 - 850 mb (m)	1312	1312	0
Thickness 850 - 500 mb (m)	4113	4111	2
Thickness 850 - 700 mb (m)	1544	1544	0
Thickness 700 - 500 mb (m)	2569	2567	2
Thickness 600 - 400 mb (m)	2973	2970	3
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

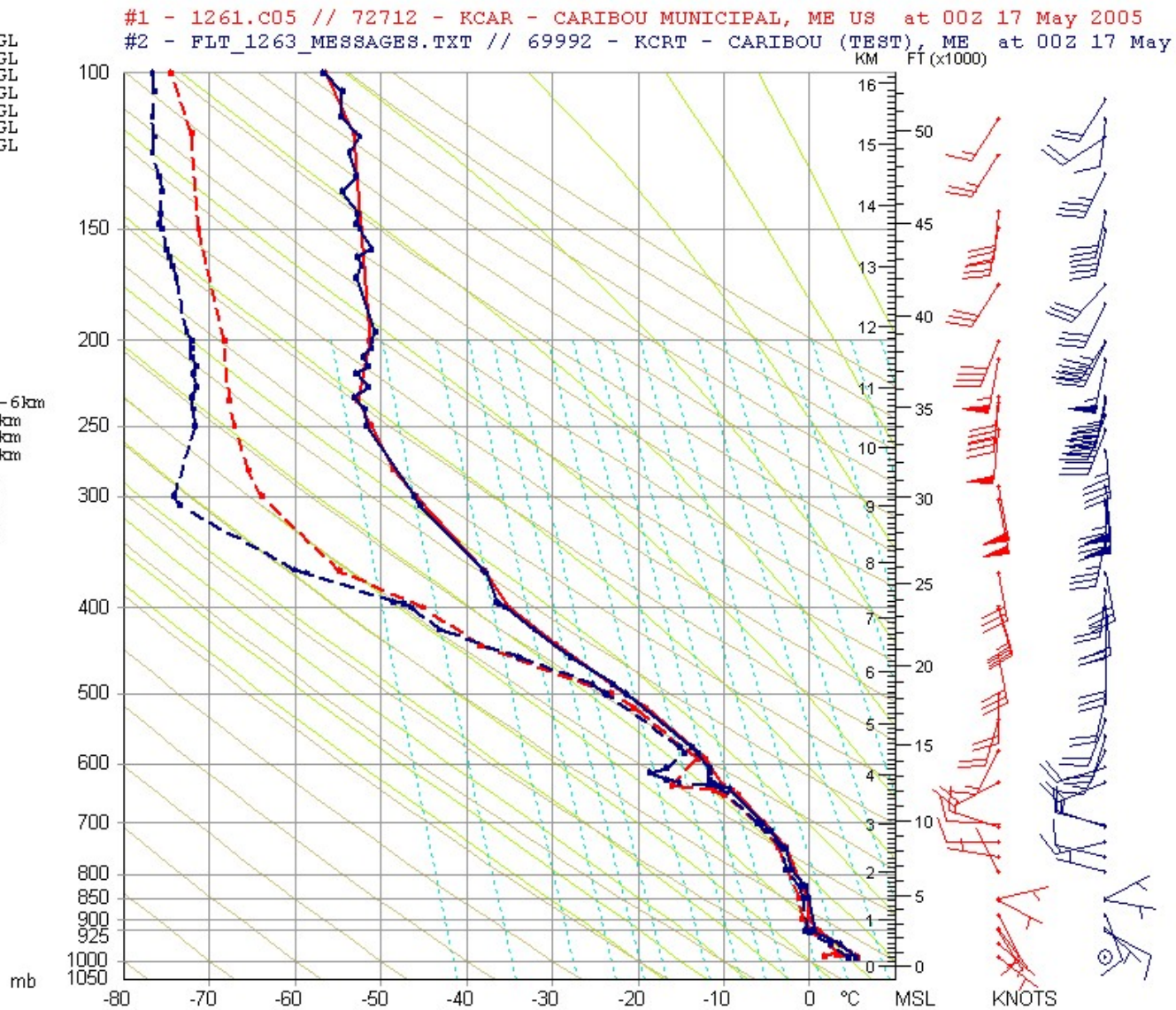
Test #4 - System Test II – 00UTC on 05/17/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10549	10596	m AGL
FRZG Lvl:	815	1149	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	266	357	m AGL
CCL Hgt:	573	482	m AGL
LCL Hgt:	137	113	m AGL
Water:	1.76	1.75	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	17	--	kt
SWEAT:	30.0	26.0	
CAP:	0.3	0.4	
Boyden:	90.9	91.1	
S(TT):	34.7	35.6	
KO:	12.6	12.2	
LI:	11.7	11.9	
TT:	41.5	42.2	
KI:	19.2	20.1	
Tc:	6.6	6.0	°C
Storm:	244/21	256/21	0-6km
s-rH:	-65	-34	0-3km
s-rH:	-37	-11	0-2km
s-rH:	39	59	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.0	15.8	
Threat:	6.9	7.8	
Point:	5.3	4.8°C	
1000 - 500 mb:	5425	5423	m
1000 - 700 mb:	2856	2856	m
1000 - 850 mb:	1312	1312	m
850 - 500 mb:	4113	4111	m
850 - 700 mb:	1544	1544	m
700 - 500 mb:	2569	2567	m
600 - 400 mb:	2973	2970	m



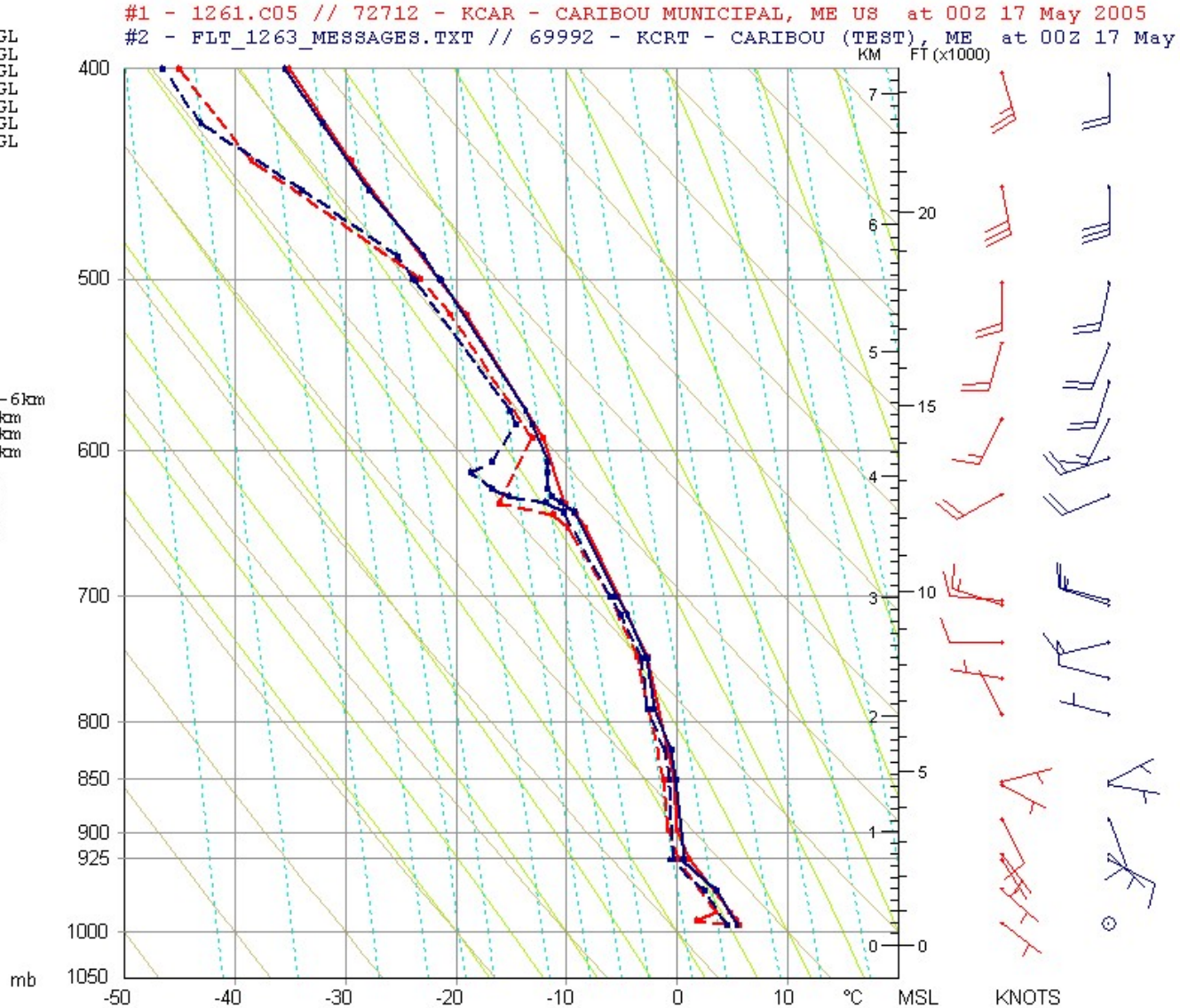
Test #4 - System Test II – 00UTC on 05/17/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10549	10596	m AGL
FRZG Lvl:	815	1149	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	266	357	m AGL
CCL Hgt:	573	482	m AGL
LCL Hgt:	137	113	m AGL
Water:	1.76	1.75	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	17	--	kt
SWEAT:	30.0	26.0	
CAP:	0.3	0.4	
Boyden:	90.9	91.1	
S(TT):	34.7	35.6	
KO:	12.6	12.2	
LI:	11.7	11.9	
TT:	41.5	42.2	
KI:	19.2	20.1	
Tc:	6.6	6.0	°C
Storm:	244/21	256/21	0-6km
s-rH:	-65	-34	0-3km
s-rH:	-37	-11	0-2km
s-rH:	39	59	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.0	15.8	
Threat:	6.9	7.8	
Point:	5.3	4.8°C	
1000 - 500 mb:	5425	5423 m	
1000 - 700 mb:	2856	2856 m	
1000 - 850 mb:	1312	1312 m	
850 - 500 mb:	4113	4111 m	
850 - 700 mb:	1544	1544 m	
700 - 500 mb:	2569	2567 m	
600 - 400 mb:	2973	2970 m	



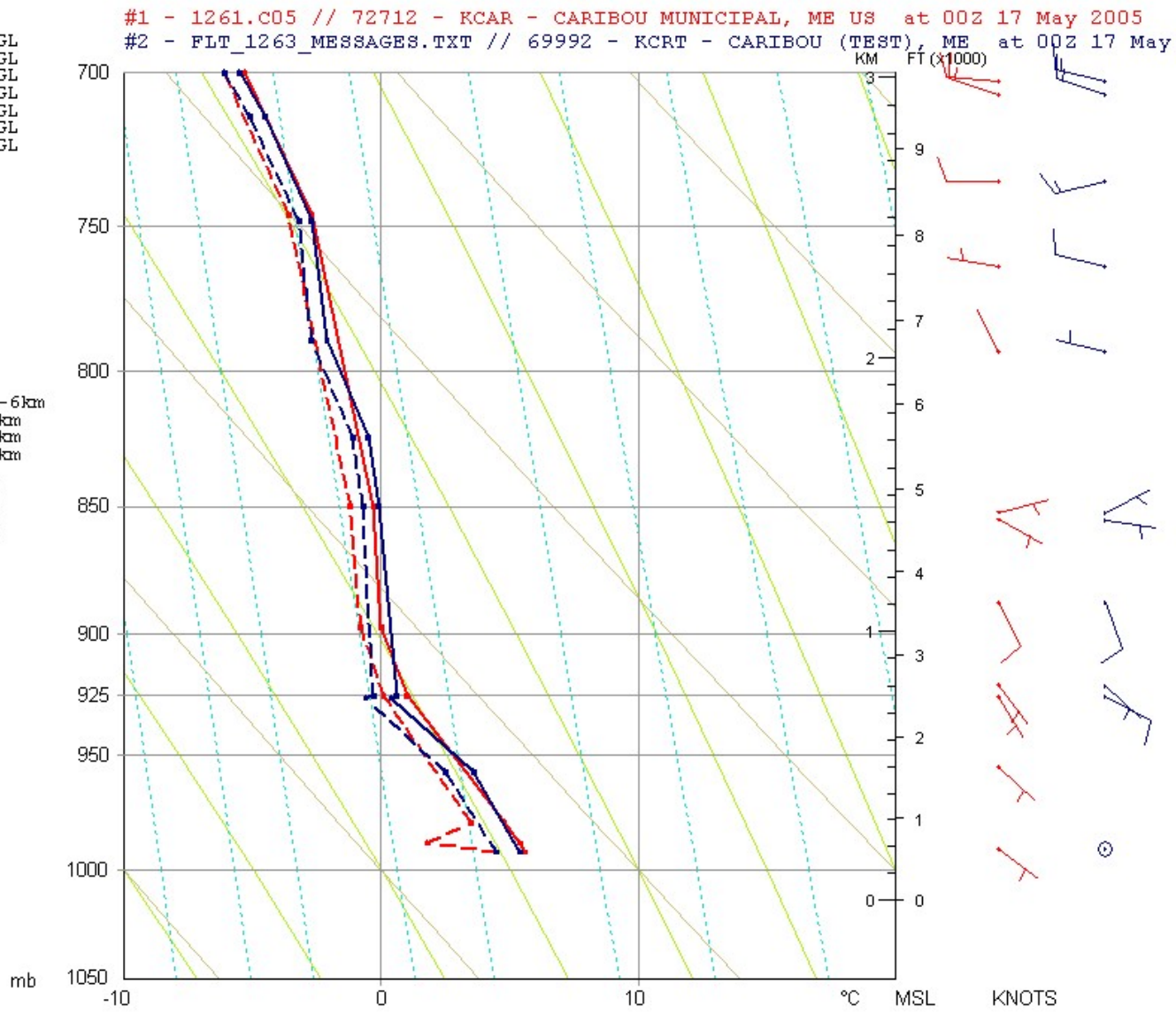
Test #4 - System Test II – 00UTC on 05/17/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10549	10596	m AGL
FRZG Lvl:	815	1149	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	266	357	m AGL
CCL Hgt:	573	482	m AGL
LCL Hgt:	137	113	m AGL
Water:	1.76	1.75	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	17	--	kt
SWEAT:	30.0	26.0	
CAP:	0.3	0.4	
Boyden:	90.9	91.1	
S(TT):	34.7	35.6	
KO:	12.6	12.2	
LI:	11.7	11.9	
TT:	41.5	42.2	
KI:	19.2	20.1	
Tc:	6.6	6.0	°C
Storm:	244/21	256/21	0-6km
s-rH:	-65	-34	0-3km
s-rH:	-37	-11	0-2km
s-rH:	39	59	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.0	15.8	
Threat:	6.9	7.8	
Point:	5.3	4.8°C	
1000 - 500 mb:	5425	5423	m
1000 - 700 mb:	2856	2856	m
1000 - 850 mb:	1312	1312	m
850 - 500 mb:	4113	4111	m
850 - 700 mb:	1544	1544	m
700 - 500 mb:	2569	2567	m
600 - 400 mb:	2973	2970	m



Test #4 - System Test II – 00UTC on 05/17/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10549	10596	m AGL
FRZG Lvl:	815	1149	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	266	357	m AGL
CCL Hgt:	573	482	m AGL
LCL Hgt:	137	113	m AGL
Water:	1.76	1.75	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	17	--	kt
SWEAT:	30.0	26.0	
CAP:	0.3	0.4	
Boyden:	90.9	91.1	
S(TT):	34.7	35.6	
KO:	12.6	12.2	
LI:	11.7	11.9	
TT:	41.5	42.2	
KI:	19.2	20.1	
Tc:	6.6	6.0	°C
Storm:	244/21	256/21	0-6km
s-rH:	-65	-34	0-3km
s-rH:	-37	-11	0-2km
s-rH:	39	59	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.0	15.8	
Threat:	6.9	7.8	
Point:	5.3	4.8°C	
1000 - 500 mb:	5425	5423	m
1000 - 700 mb:	2856	2856	m
1000 - 850 mb:	1312	1312	m
850 - 500 mb:	4113	4111	m
850 - 700 mb:	1544	1544	m
700 - 500 mb:	2569	2567	m
600 - 400 mb:	2973	2970	m



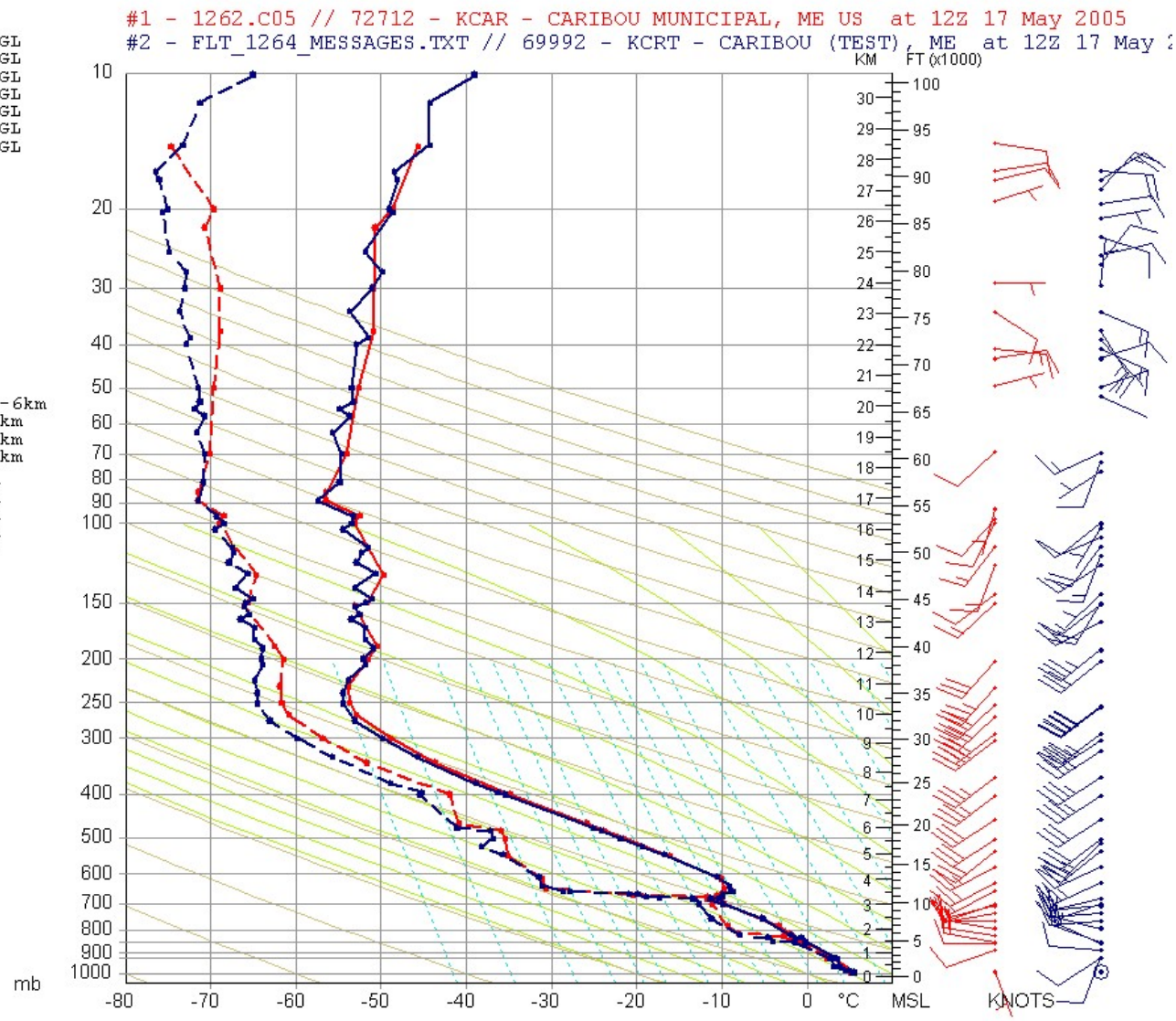
Test #5 - System Test II –12 UTC on 05/17/2005
RWS Version 1.0.4.0

TEST # 5			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10088	10021	67
Freezing Level (m AGL)	1247	1240	7
LFC Height (m AGL)	NC	61	NC
CCL Height (m AGL)	635	794	-159
LCL Height (m AGL)	63	50	13
Precipitable Water (cm)	1.34	1.26	0.08
Thickness 1000 - 500 mb (m)	5407	5408	-1
Thickness 1000 - 700 mb (m)	2847	2848	-1
Thickness 1000 - 850 mb (m)	1318	1318	0
Thickness 850 - 500 mb (m)	4090	4089	1
Thickness 850 - 700 mb (m)	1529	1529	0
Thickness 700 - 500 mb (m)	2560	2560	0
Thickness 600 - 400 mb (m)	2976	2970	6
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Warmer	Colder	

NC= Not Calculated

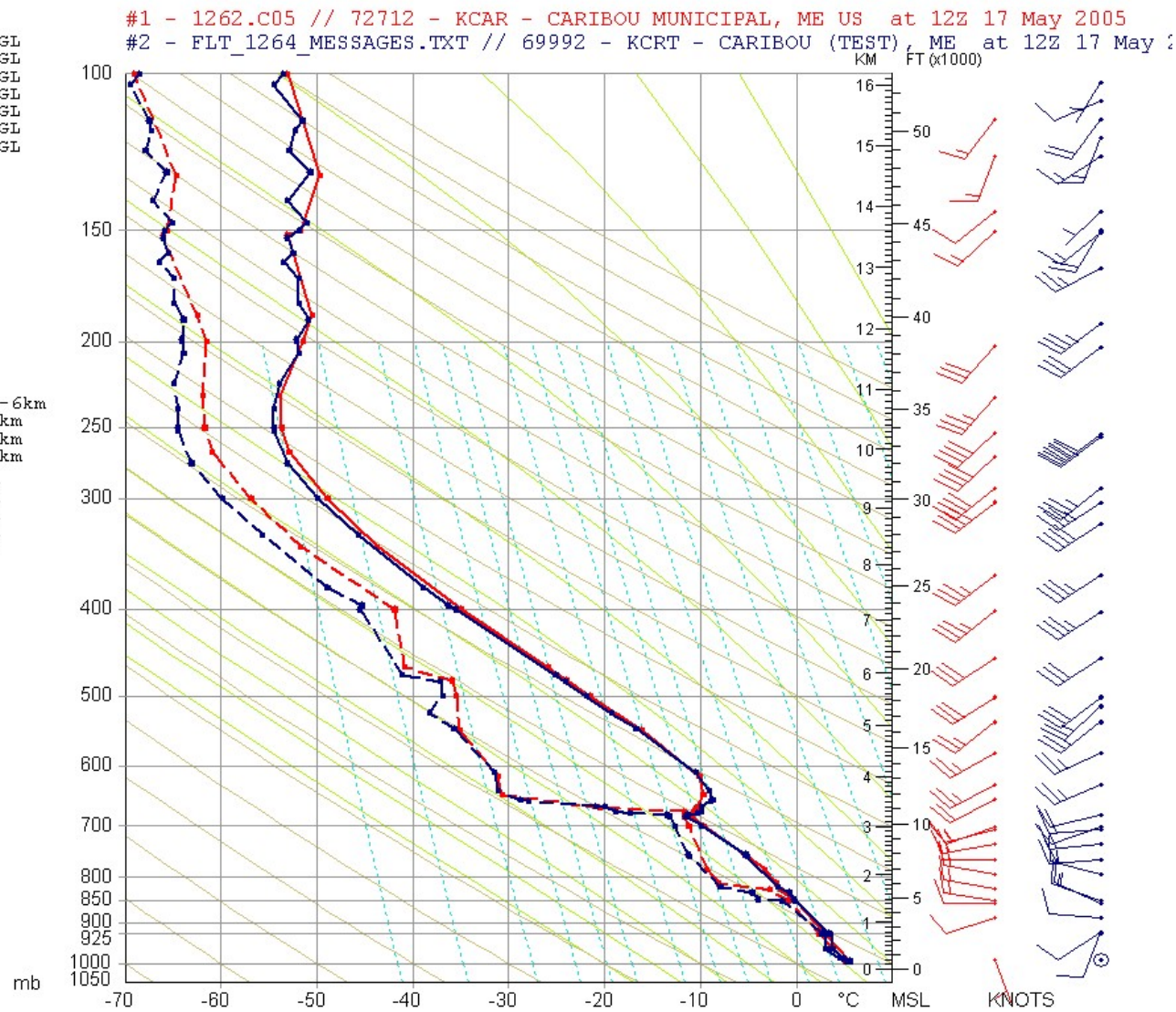
Test #5 - System Test II –12 UTC on 05/17/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10088	10021	m AGL
FRZG Lvl:	1247	1240	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	61	m AGL
CCL Hgt:	635	794	m AGL
LCL Hgt:	63	50	m AGL
Water:	1.34	1.26	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	56.0	56.0	
CAP:	--	0.0	
Boyden:	94.4	94.7	
S{TT}:	34.6	33.4	
KO:	6.4	5.9	
LI:	11.4	11.0	
TT:	42.1	42.2	
KI:	19.1	17.5	
Tc:	9.0	10.1	°C
Storm:	279/26	281/26	0-6km
s-rH:	26	21	0-3km
s-rH:	7	11	0-2km
s-rH:	23	19	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.4	26.2	
Threat:	7.3	6.8	
Point:	5.2	5.4	°C
1000 - 500 mb:	5407	5408	m
1000 - 700 mb:	2847	2848	m
1000 - 850 mb:	1318	1318	m
850 - 500 mb:	4090	4089	m
850 - 700 mb:	1529	1529	m
700 - 500 mb:	2560	2560	m
600 - 400 mb:	2976	2970	m



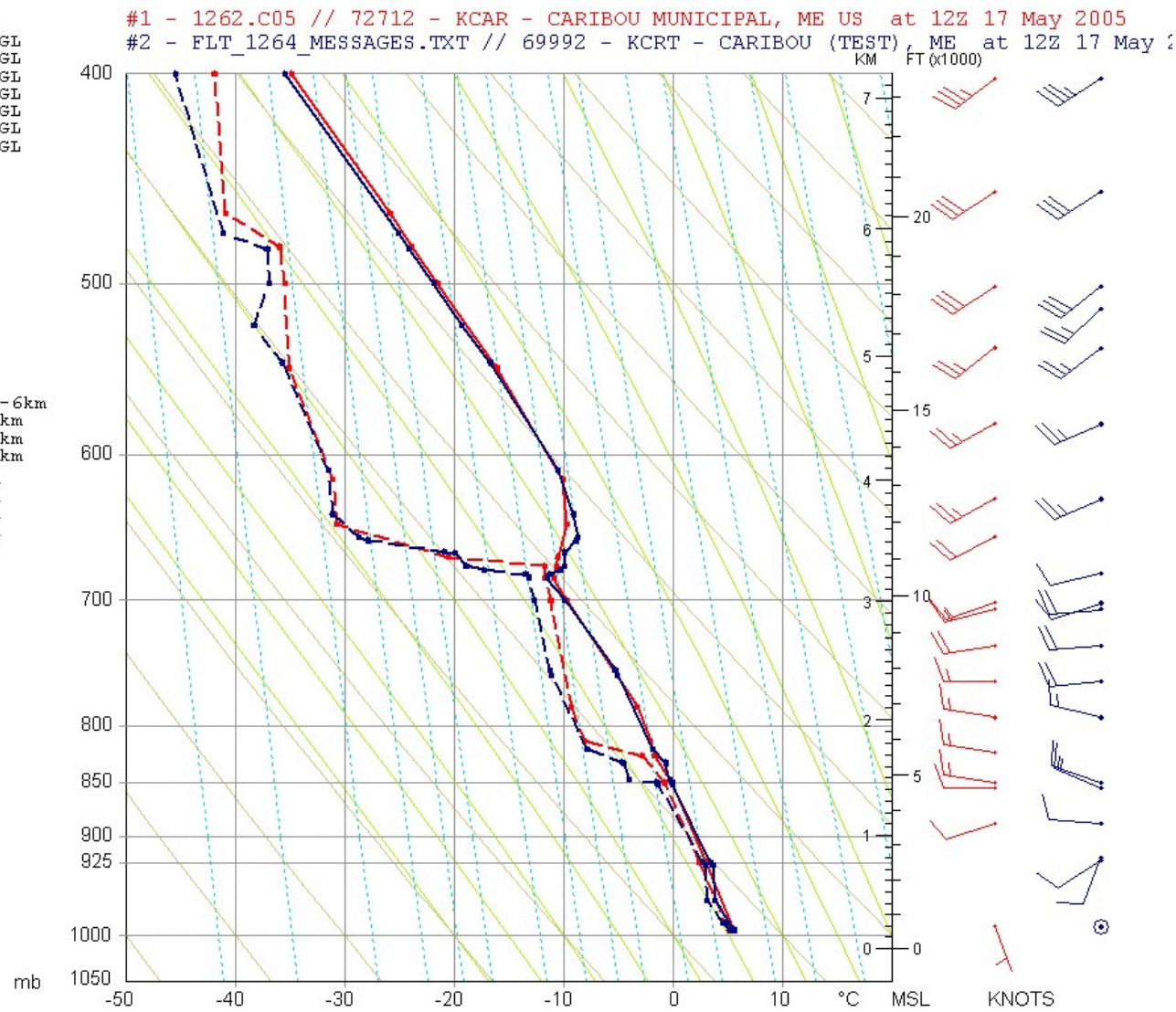
Test #5 - System Test II –12 UTC on 05/17/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10088	10021	m AGL
FRZG Lvl:	1247	1240	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	61	m AGL
CCL Hgt:	635	794	m AGL
LCL Hgt:	63	50	m AGL
Water:	1.34	1.26	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	56.0	56.0	
CAP:	--	0.0	
Boyden:	94.4	94.7	
S{TT}:	34.6	33.4	
KO:	6.4	5.9	
LI:	11.4	11.0	
TT:	42.1	42.2	
KI:	19.1	17.5	
Tc:	9.0	10.1	°C
Storm:	279/26	281/26	0-6km
s-rH:	26	21	0-3km
s-rH:	7	11	0-2km
s-rH:	23	19	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.4	26.2	
Threat:	7.3	6.8	
Point:	5.2	5.4	°C
1000 - 500 mb:	5407	5408	m
1000 - 700 mb:	2847	2848	m
1000 - 850 mb:	1318	1318	m
850 - 500 mb:	4090	4089	m
850 - 700 mb:	1529	1529	m
700 - 500 mb:	2560	2560	m
600 - 400 mb:	2976	2970	m



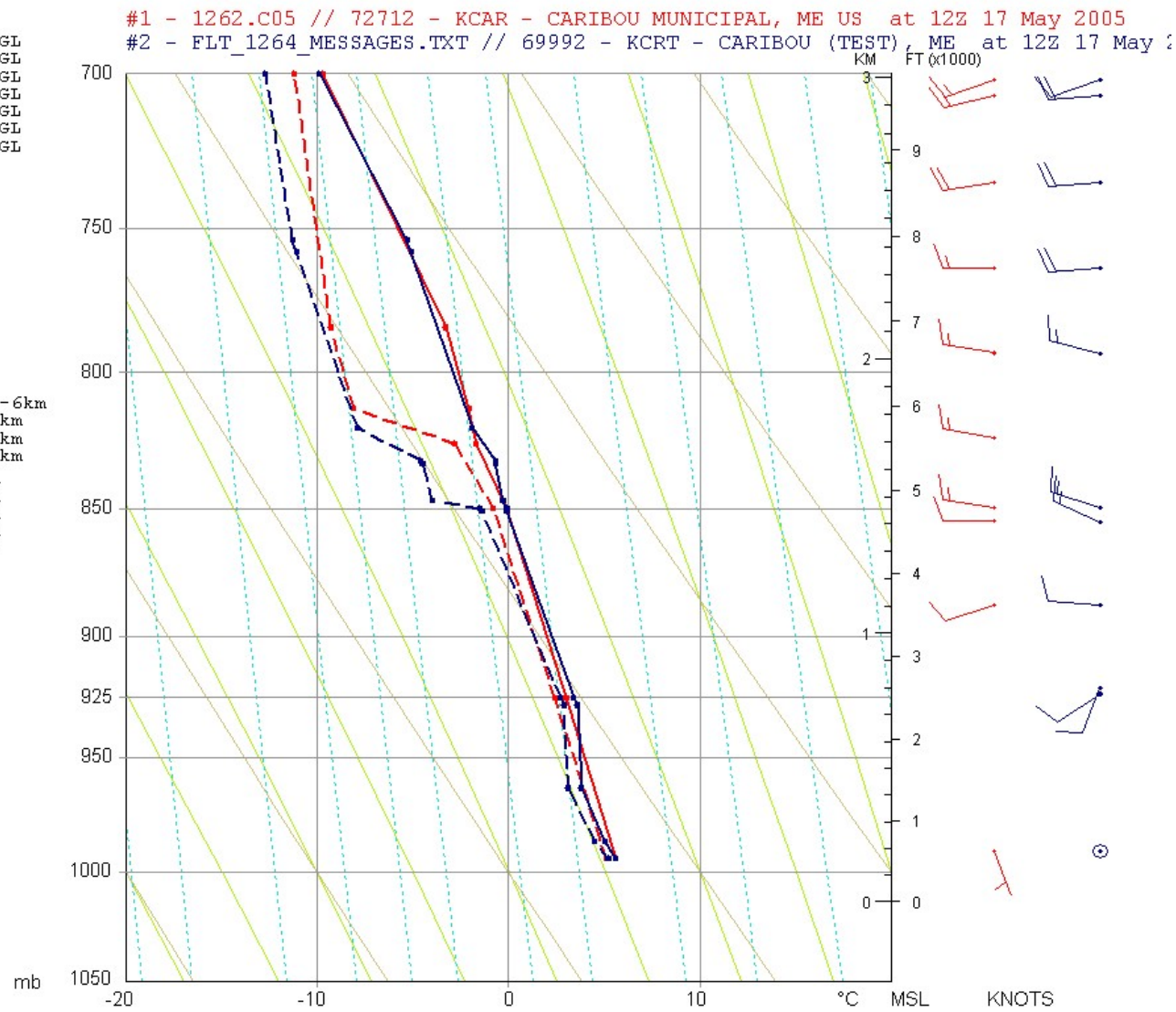
Test #5 - System Test II –12 UTC on 05/17/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10088	10021	m AGL
FRZG Lvl:	1247	1240	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	61	m AGL
CCL Hgt:	635	794	m AGL
LCL Hgt:	63	50	m AGL
Water:	1.34	1.26	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	56.0	56.0	
CAP:	--	0.0	
Boyden:	94.4	94.7	
S{TT}:	34.6	33.4	
KO:	6.4	5.9	
LI:	11.4	11.0	
TT:	42.1	42.2	
KI:	19.1	17.5	
Tc:	9.0	10.1	°C
Storm:	279/26	281/26	0-6km
s-rH:	26	21	0-3km
s-rH:	7	11	0-2km
s-rH:	23	19	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.4	26.2	
Threat:	7.3	6.8	
Point:	5.2	5.4	°C
1000 - 500 mb:	5407	5408	m
1000 - 700 mb:	2847	2848	m
1000 - 850 mb:	1318	1318	m
850 - 500 mb:	4090	4089	m
850 - 700 mb:	1529	1529	m
700 - 500 mb:	2560	2560	m
600 - 400 mb:	2976	2970	m

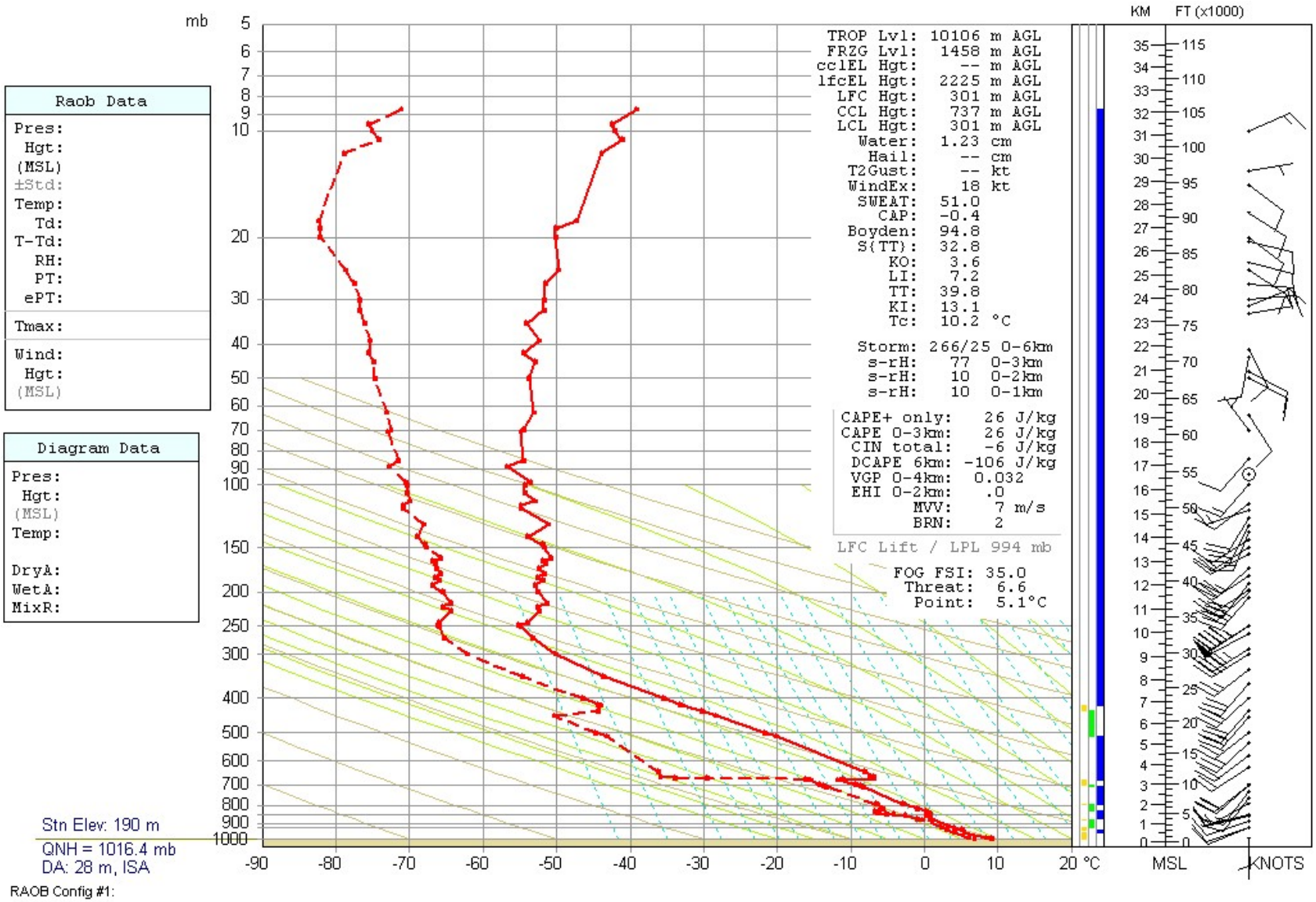


Test #5 - System Test II –12 UTC on 05/17/2005
RWS Version 1.0.4.0

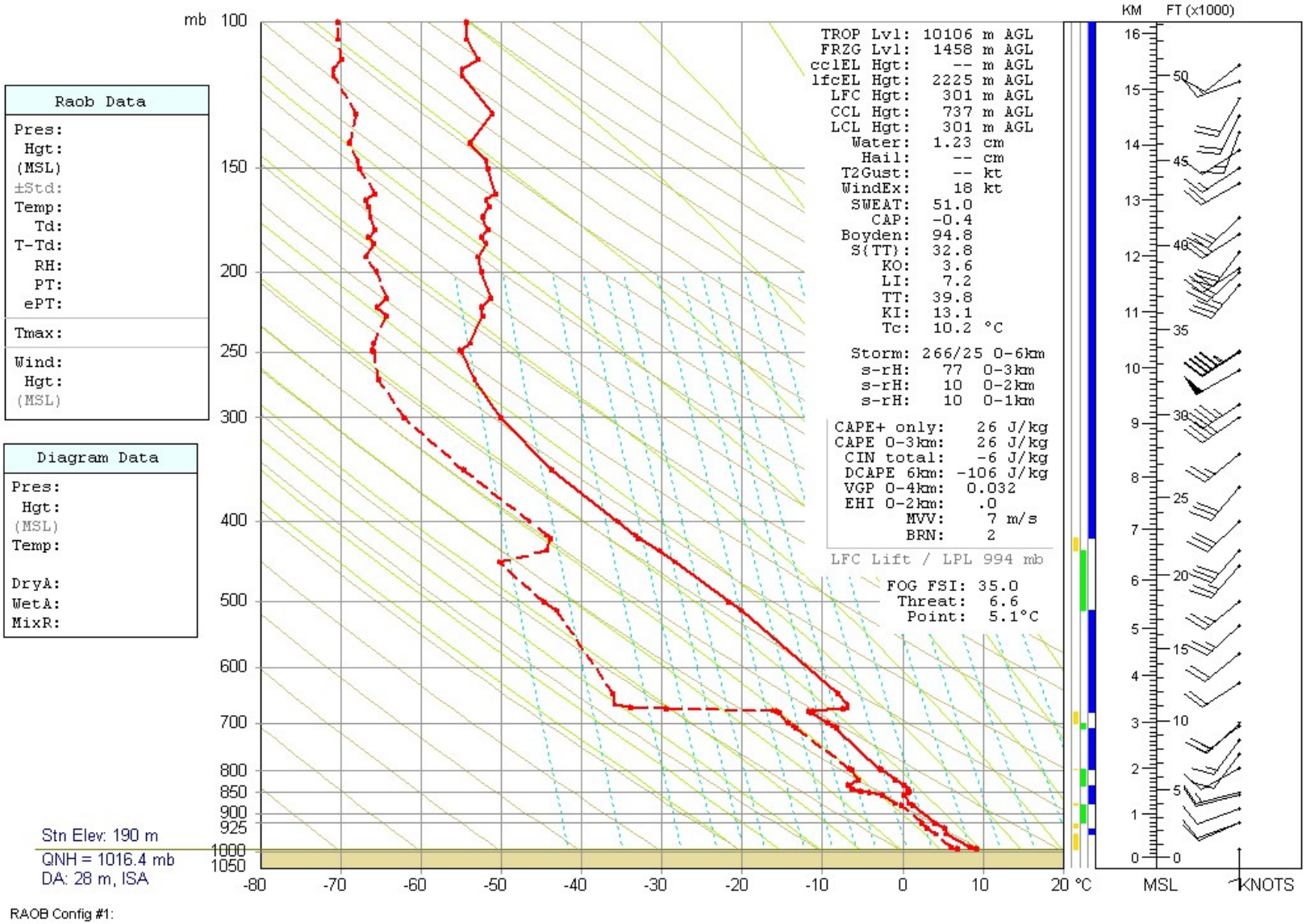
	#1	#2	
TROP Lvl:	10088	10021	m AGL
FRZG Lvl:	1247	1240	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	61	m AGL
CCL Hgt:	635	794	m AGL
LCL Hgt:	63	50	m AGL
Water:	1.34	1.26	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	56.0	56.0	
CAP:	--	0.0	
Boyden:	94.4	94.7	
S{TT}:	34.6	33.4	
KO:	6.4	5.9	
LI:	11.4	11.0	
TT:	42.1	42.2	
KI:	19.1	17.5	
Tc:	9.0	10.1	°C
Storm:	279/26	281/26	0-6km
s-rH:	26	21	0-3km
s-rH:	7	11	0-2km
s-rH:	23	19	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.4	26.2	
Threat:	7.3	6.8	
Point:	5.2	5.4	°C
1000 - 500 mb:	5407	5408	m
1000 - 700 mb:	2847	2848	m
1000 - 850 mb:	1318	1318	m
850 - 500 mb:	4090	4089	m
850 - 700 mb:	1529	1529	m
700 - 500 mb:	2560	2560	m
600 - 400 mb:	2976	2970	m



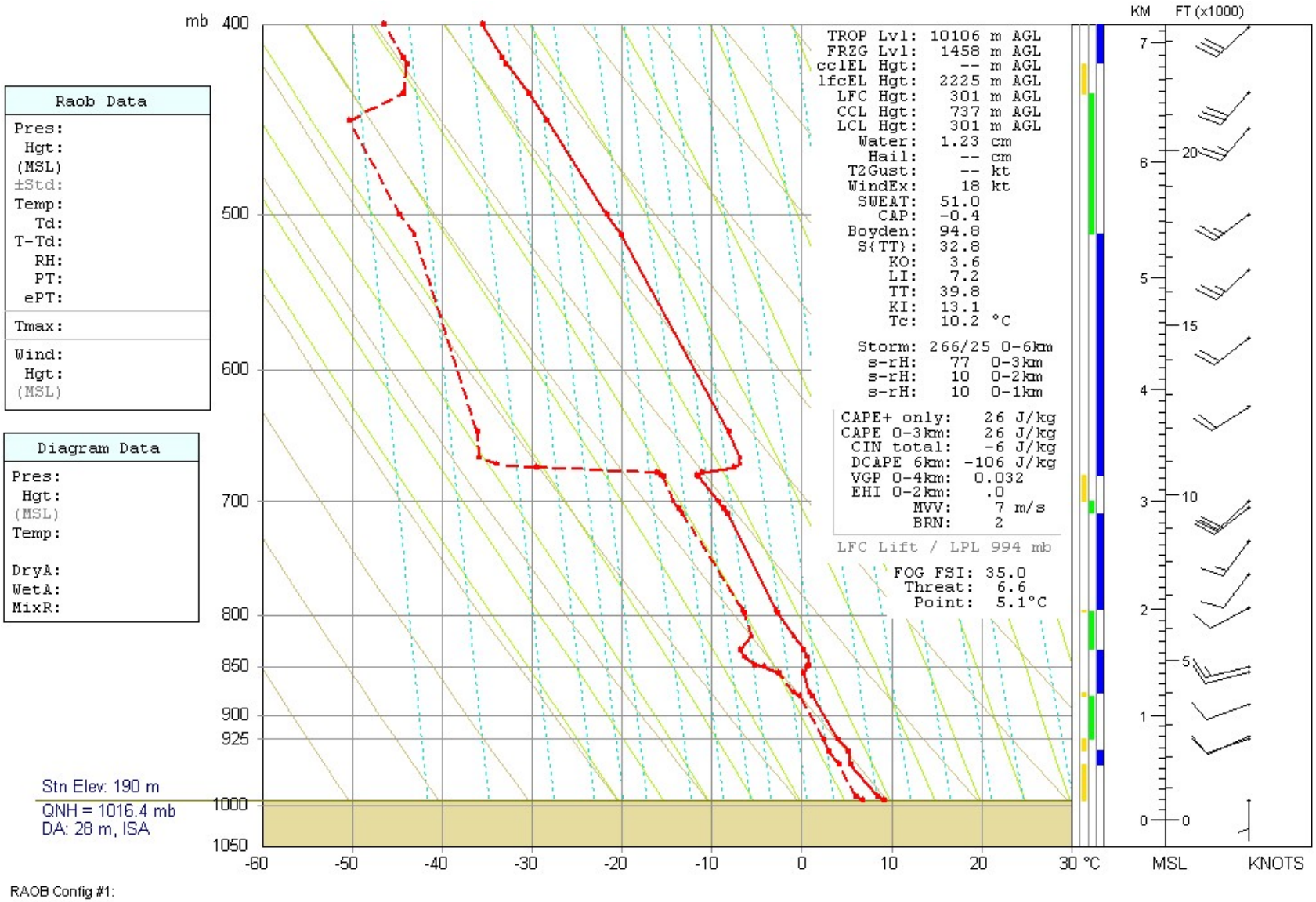
Test #6- System Test II – 15UTC on 05/17/2005
RWS Version 1.0.4.0



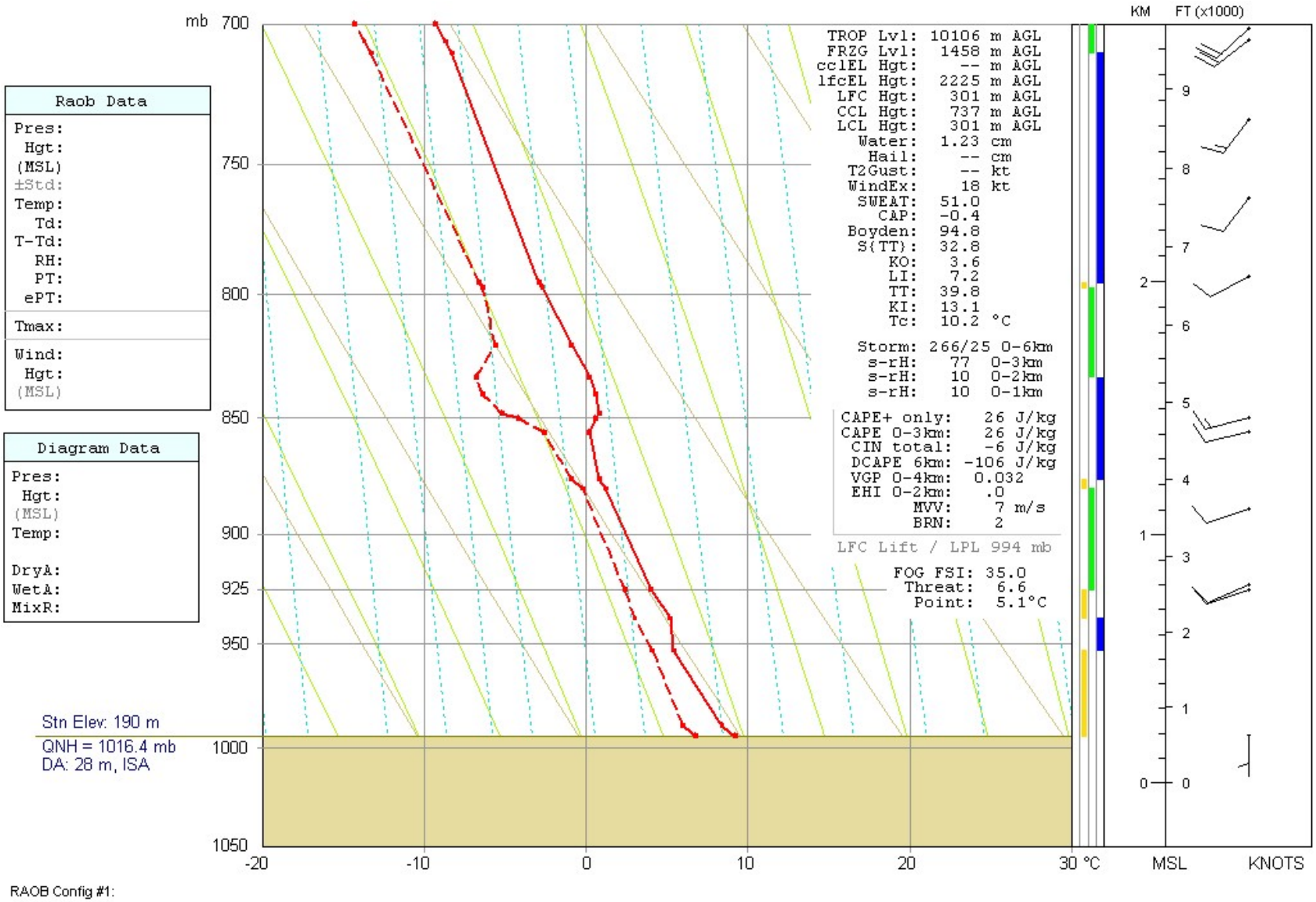
Test #6- System Test II – 15UTC on 05/17/2005
RWS Version 1.0.4.0



Test #6- System Test II – 15UTC on 05/17/2005
RWS Version 1.0.4.0



Test #6- System Test II – 15UTC on 05/17/2005
RWS Version 1.0.4.0



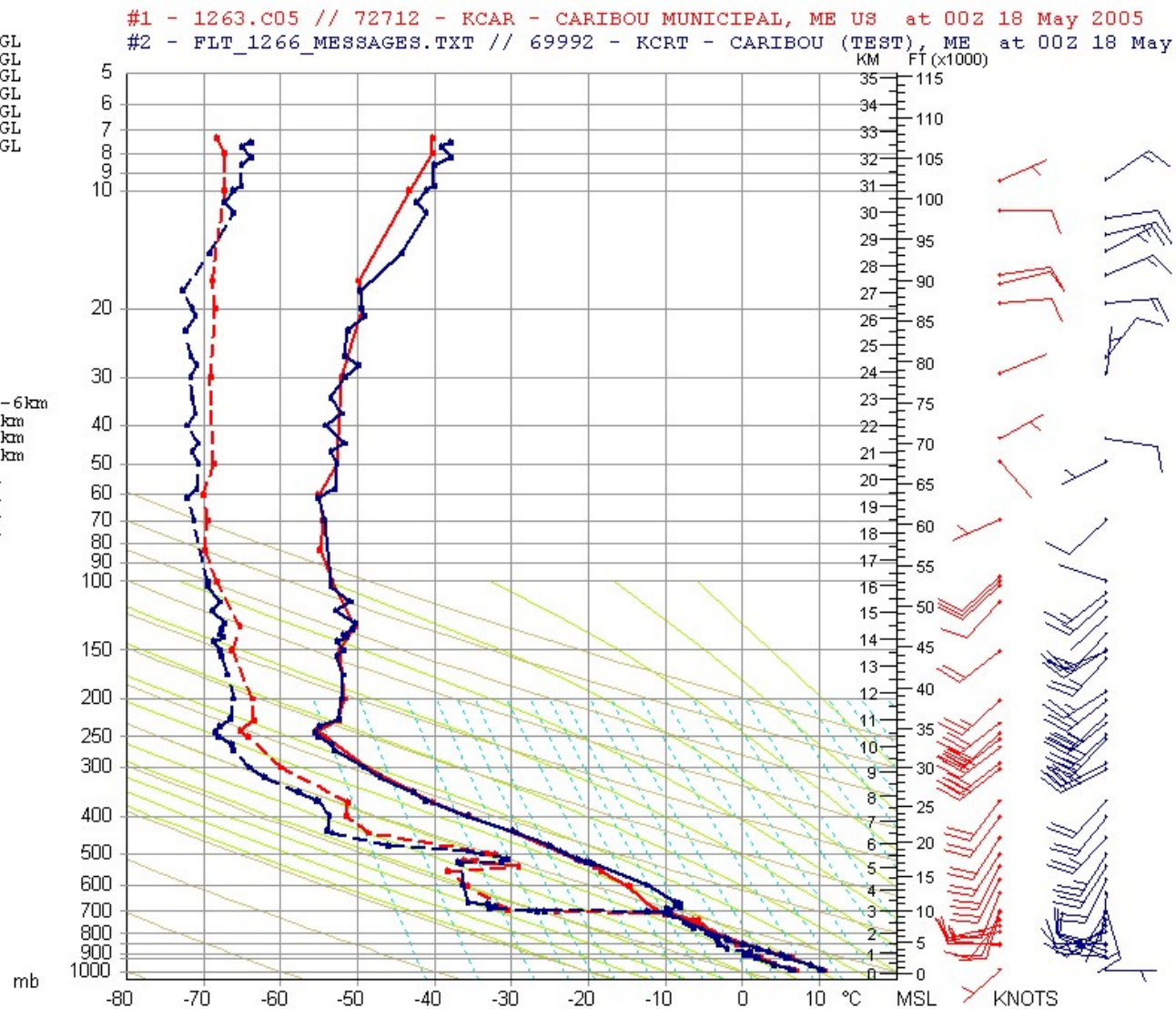
Test #7- System Test II – 00UTC on 05/18/2005
RWS Version 1.0.4.0

TEST # 7			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10281	10239	42
Freezing Level (m AGL)	1317	1290	27
LFC Height (m AGL)	918	923	-5
CCL Height (m AGL)	996	1051	-55
LCL Height (m AGL)	452	465	-13
Precipitable Water (cm)	1.37	1.27	0.1
Thickness 1000 - 500 mb (m)	5394	5410	-16
Thickness 1000 - 700 mb (m)	2862	2856	6
Thickness 1000 - 850 mb (m)	1333	1331	2
Thickness 850 - 500 mb (m)	4061	4078	-17
Thickness 850 - 700 mb (m)	1529	1525	4
Thickness 700 - 500 mb (m)	2532	2553	-21
Thickness 600 - 400 mb (m)	2954	2962	-8
Wind Shear Below	N/C	N/C	N/C
Wind Shear Above	N/C	N/C	N/C
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

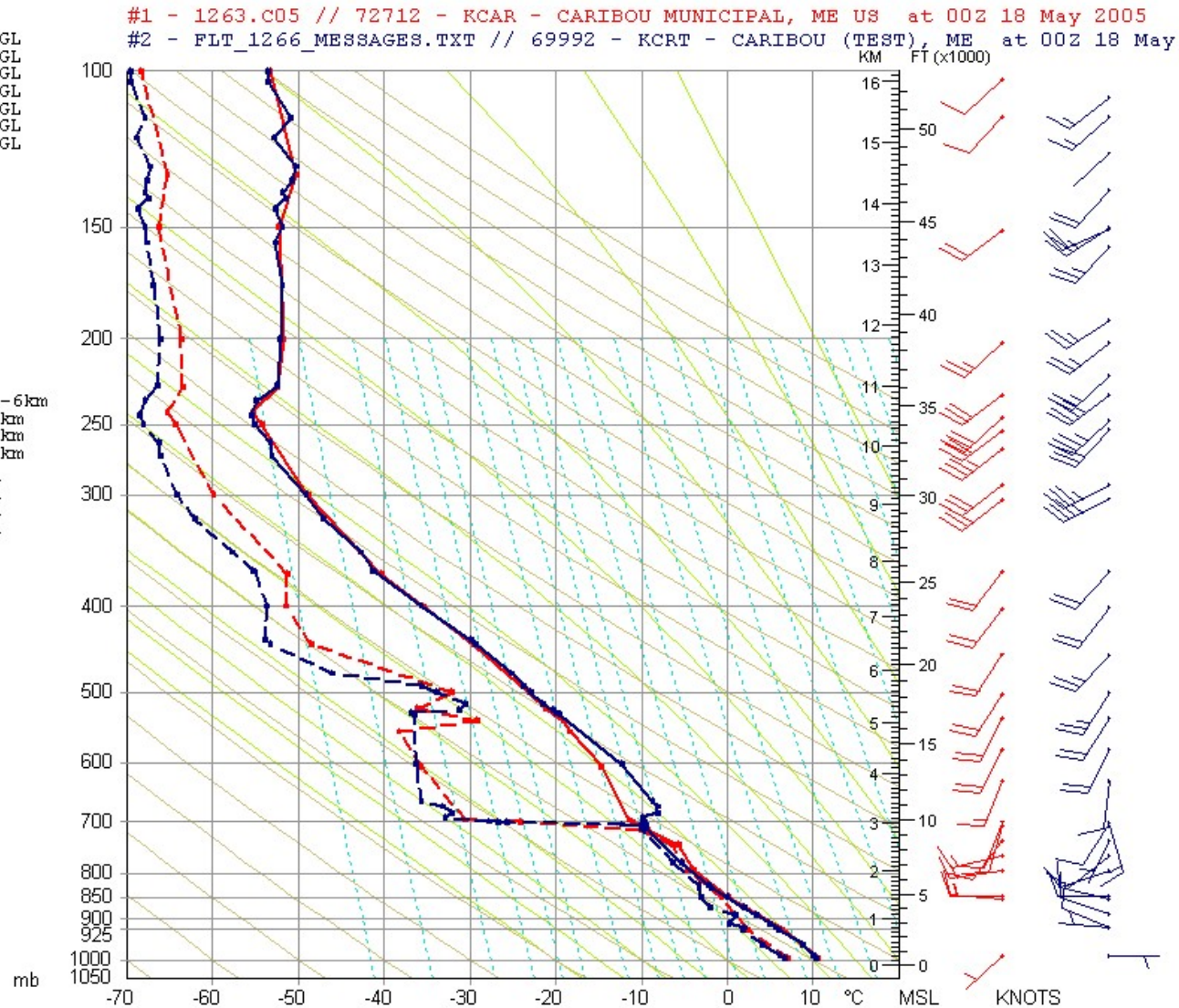
Test #7- System Test II – 00UTC on 05/18/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10281	10239	m AGL
FRZG Lvl:	1317	1290	m AGL
cclEL Hgt:	3466	2906	m AGL
lfcEL Hgt:	3543	2925	m AGL
LFC Hgt:	918	923	m AGL
CCL Hgt:	996	1051	m AGL
LCL Hgt:	452	465	m AGL
Water:	1.37	1.27	cm
Hail:	--	--	cm
T2Gust:	--	21	kt
WindEx:	32	33	kt
SWEAT:	47.0	46.0	
CAP:	1.2	1.3	
Boyden:	97.3	95.3	
S{TT}:	30.7	23.7	
KO:	-1.4	.6	
LI:	4.6	5.2	
TT:	45.7	42.7	
KI:	9.6	2.8	
Tc:	12.6	12.4	°C
Storm:	253/24	259/22	0-6km
s-rH:	1	9	0-3km
s-rH:	-23	-17	0-2km
s-rH:	0	-37	0-1km
CAPE+ only:	127	107	J/kg
CAPE 0-3km:	104	107	J/kg
CIN total:	-21	-24	J/kg
DCAPE 6km:	-177	-139	J/kg
VGP 0-4km:	0.056	0.1	
EHI 0-2km:	--	.0	
MVV:	16	15	m/s
BRN:	11	5	
FOG FSI:	41.0	38.2	
Threat:	8.3	7.9	
Point:	4.5	3.7	°C
1000 - 500 mb:	5394	5410	m
1000 - 700 mb:	2862	2856	m
1000 - 850 mb:	1333	1331	m
850 - 500 mb:	4061	4078	m
850 - 700 mb:	1529	1525	m
700 - 500 mb:	2532	2553	m
600 - 400 mb:	2954	2962	m



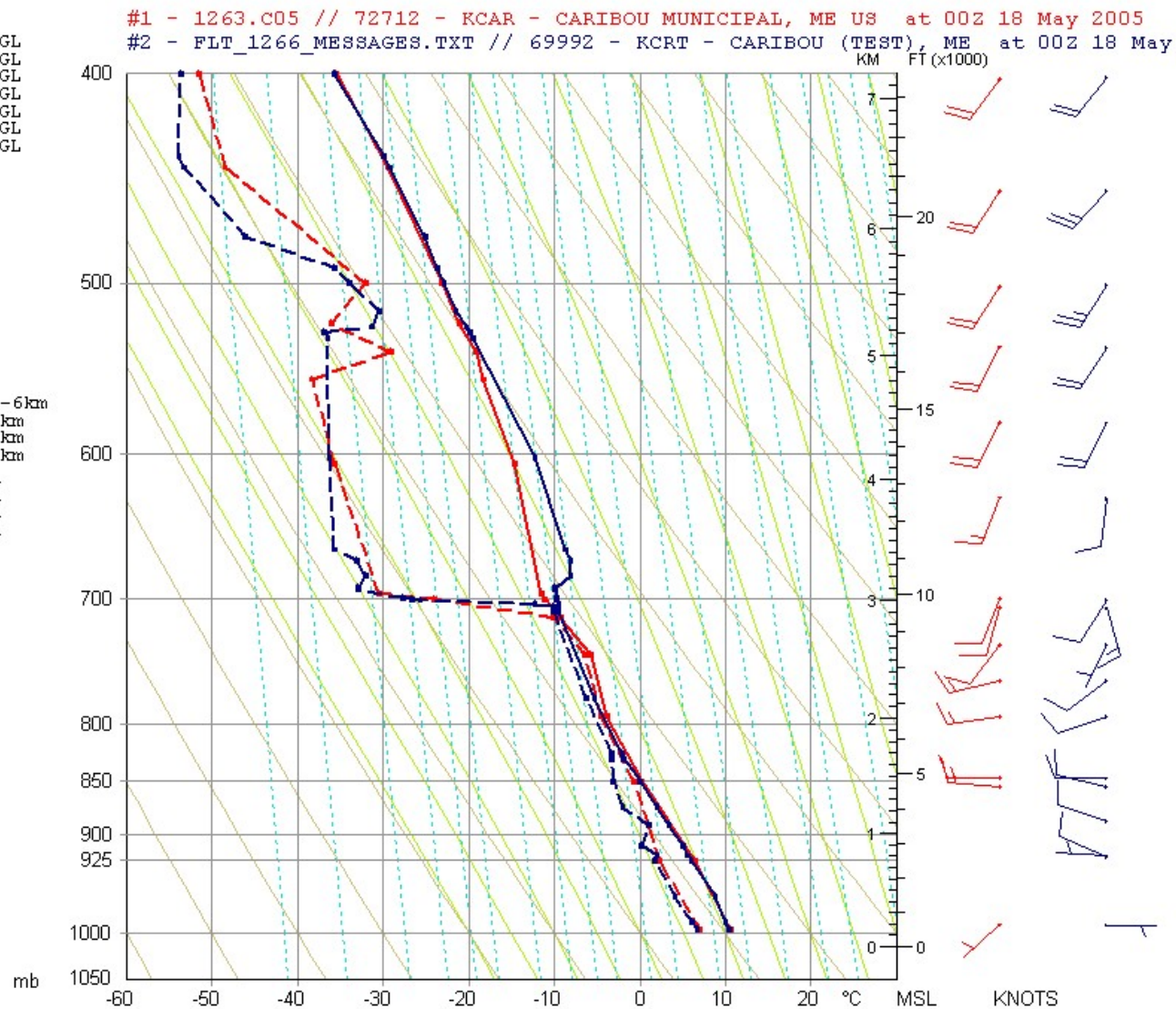
Test #7- System Test II – 00UTC on 05/18/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10281	10239	m AGL
FRZG Lvl:	1317	1290	m AGL
cclEL Hgt:	3466	2906	m AGL
lfcEL Hgt:	3543	2925	m AGL
LFC Hgt:	918	923	m AGL
CCL Hgt:	996	1051	m AGL
LCL Hgt:	452	465	m AGL
Water:	1.37	1.27	cm
Hail:	--	--	cm
T2Gust:	--	21	kt
WindEx:	32	33	kt
SWEAT:	47.0	46.0	
CAP:	1.2	1.3	
Boyden:	97.3	95.3	
S{TT}:	30.7	23.7	
KO:	-1.4	.6	
LI:	4.6	5.2	
TT:	45.7	42.7	
KI:	9.6	2.8	
Tc:	12.6	12.4	°C
Storm:	253/24	259/22	0-6km
s-rH:	1	9	0-3km
s-rH:	-23	-17	0-2km
s-rH:	0	-37	0-1km
CAPE+ only:	127	107	J/kg
CAPE 0-3km:	104	107	J/kg
CIN total:	-21	-24	J/kg
DCAPE 6km:	-177	-139	J/kg
VGP 0-4km:	0.056	0.1	
EHI 0-2km:	--	.0	
MVV:	16	15	m/s
BRN:	11	5	
FOG FSI:	41.0	38.2	
Threat:	8.3	7.9	
Point:	4.5	3.7	°C
1000 - 500 mb:	5394	5410	m
1000 - 700 mb:	2862	2856	m
1000 - 850 mb:	1333	1331	m
850 - 500 mb:	4061	4078	m
850 - 700 mb:	1529	1525	m
700 - 500 mb:	2532	2553	m
600 - 400 mb:	2954	2962	m



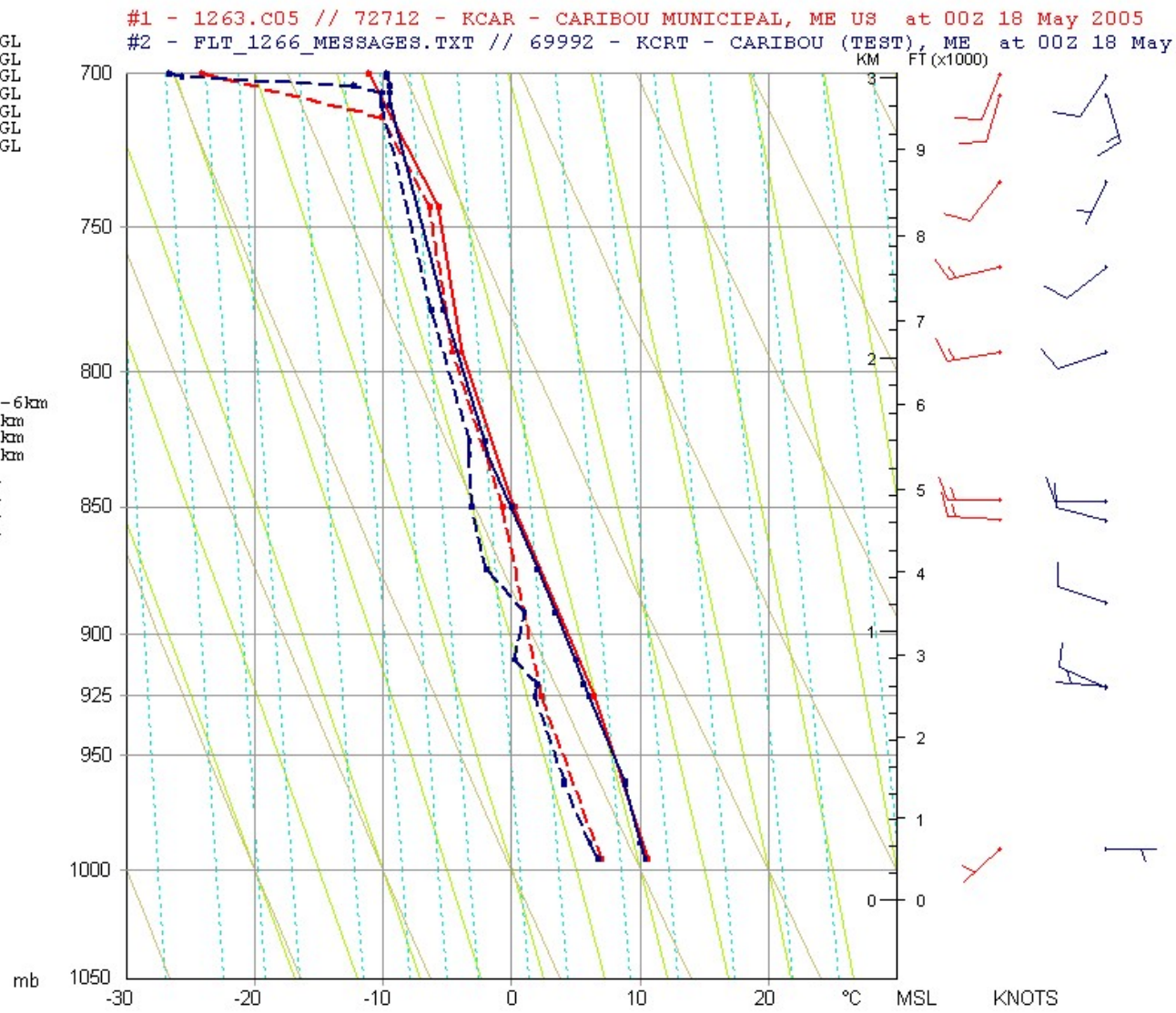
Test #7- System Test II – 00UTC on 05/18/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10281	10239	m AGL
FRZG Lvl:	1317	1290	m AGL
cclEL Hgt:	3466	2906	m AGL
lfcEL Hgt:	3543	2925	m AGL
LFC Hgt:	918	923	m AGL
CCL Hgt:	996	1051	m AGL
LCL Hgt:	452	465	m AGL
Water:	1.37	1.27	cm
Hail:	--	--	cm
T2Gust:	--	21	kt
WindEx:	32	33	kt
SWEAT:	47.0	46.0	
CAP:	1.2	1.3	
Boyden:	97.3	95.3	
S{TT}:	30.7	23.7	
KO:	-1.4	.6	
LI:	4.6	5.2	
TT:	45.7	42.7	
KI:	9.6	2.8	
Tc:	12.6	12.4	°C
Storm:	253/24	259/22	0-6km
s-rH:	1	9	0-3km
s-rH:	-23	-17	0-2km
s-rH:	0	-37	0-1km
CAPE+ only:	127	107	J/kg
CAPE 0-3km:	104	107	J/kg
CIN total:	-21	-24	J/kg
DCAPE 6km:	-177	-139	J/kg
VGP 0-4km:	0.056	0.1	
EHI 0-2km:	--	.0	
MVV:	16	15	m/s
BRN:	11	5	
FOG FSI:	41.0	38.2	
Threat:	8.3	7.9	
Point:	4.5	3.7	°C
1000 - 500 mb:	5394	5410	m
1000 - 700 mb:	2862	2856	m
1000 - 850 mb:	1333	1331	m
850 - 500 mb:	4061	4078	m
850 - 700 mb:	1529	1525	m
700 - 500 mb:	2532	2553	m
600 - 400 mb:	2954	2962	m

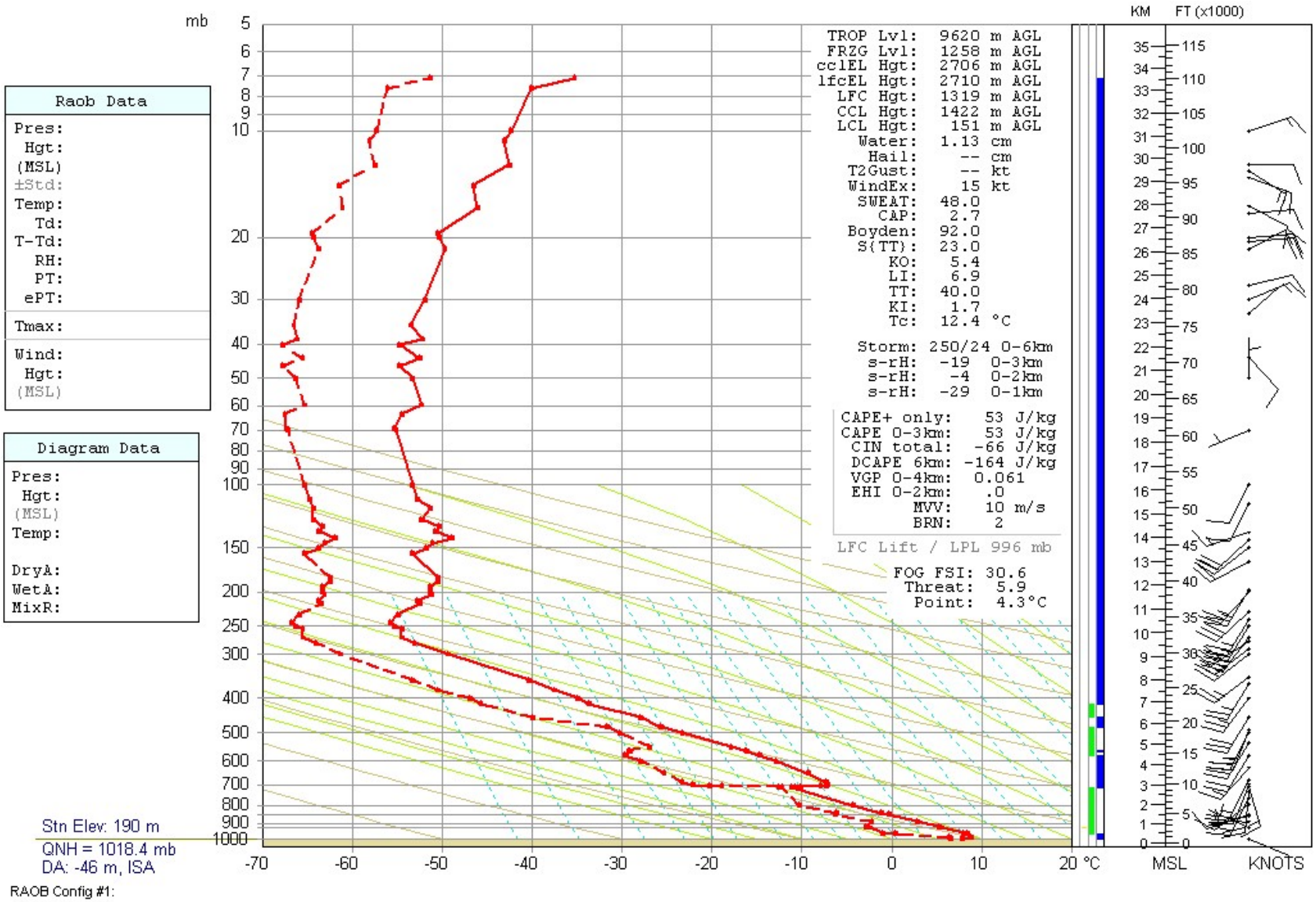


Test #7- System Test II – 00UTC on 05/18/2005
RWS Version 1.0.4.0

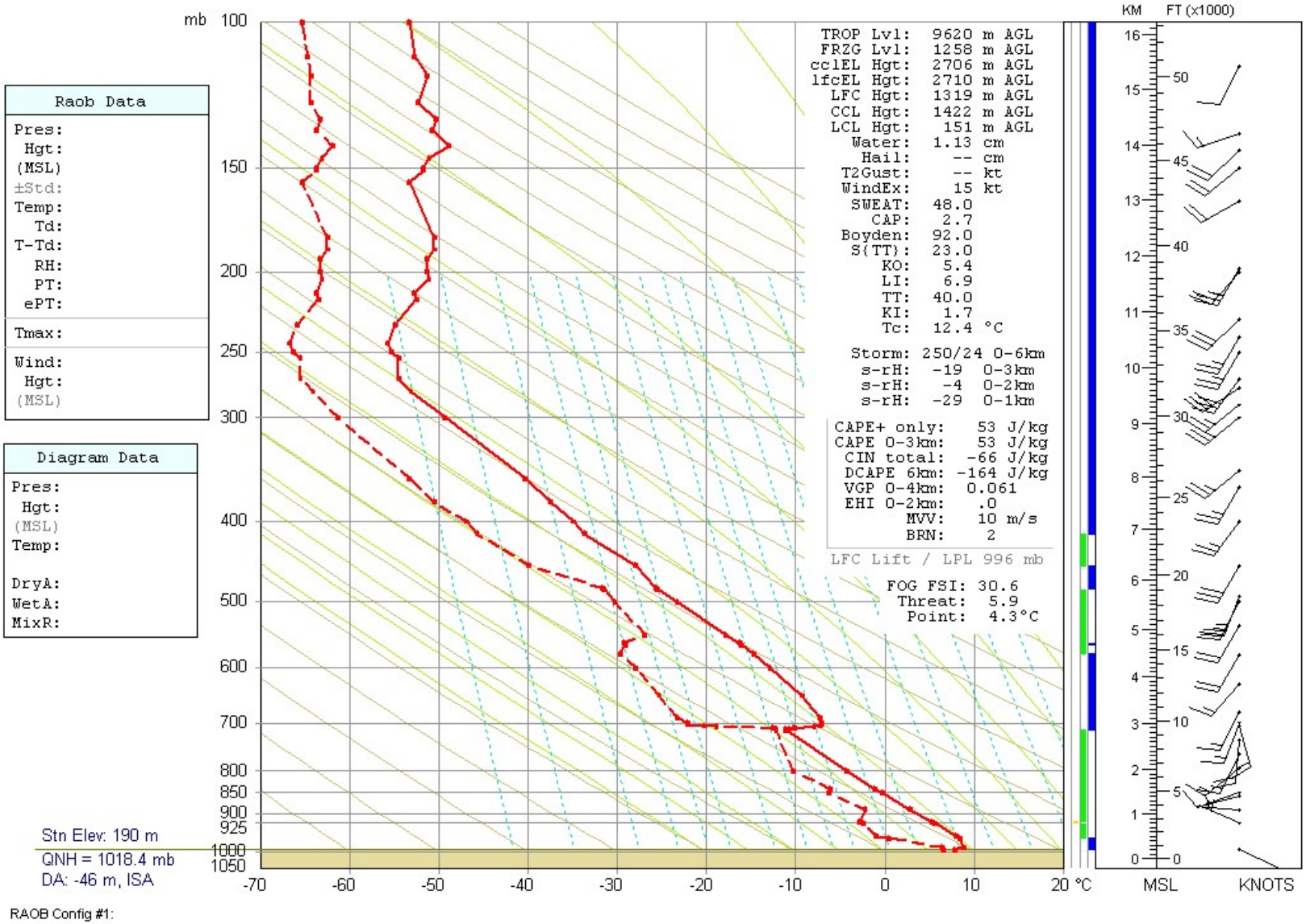
	#1	#2	
TROP Lvl:	10281	10239	m AGL
FRZG Lvl:	1317	1290	m AGL
cclEL Hgt:	3466	2906	m AGL
lfcEL Hgt:	3543	2925	m AGL
LFC Hgt:	918	923	m AGL
CCL Hgt:	996	1051	m AGL
LCL Hgt:	452	465	m AGL
Water:	1.37	1.27	cm
Hail:	--	--	cm
T2Gust:	--	21	kt
WindEx:	32	33	kt
SWEAT:	47.0	46.0	
CAP:	1.2	1.3	
Boyden:	97.3	95.3	
S{TT}:	30.7	23.7	
KO:	-1.4	.6	
LI:	4.6	5.2	
TT:	45.7	42.7	
KI:	9.6	2.8	
Tc:	12.6	12.4	°C
Storm:	253/24	259/22	0-6km
s-rH:	1	9	0-3km
s-rH:	-23	-17	0-2km
s-rH:	0	-37	0-1km
CAPE+ only:	127	107	J/kg
CAPE 0-3km:	104	107	J/kg
CIN total:	-21	-24	J/kg
DCAPE 6km:	-177	-139	J/kg
VGP 0-4km:	0.056	0.1	
EHI 0-2km:	--	.0	
MVV:	16	15	m/s
BRN:	11	5	
FOG FSI:	41.0	38.2	
Threat:	8.3	7.9	
Point:	4.5	3.7	°C
1000 - 500 mb:	5394	5410	m
1000 - 700 mb:	2862	2856	m
1000 - 850 mb:	1333	1331	m
850 - 500 mb:	4061	4078	m
850 - 700 mb:	1529	1525	m
700 - 500 mb:	2532	2553	m
600 - 400 mb:	2954	2962	m



Test #8 System Test II – 02UTC on 05/18/2005
RWS Version 1.0.4.0

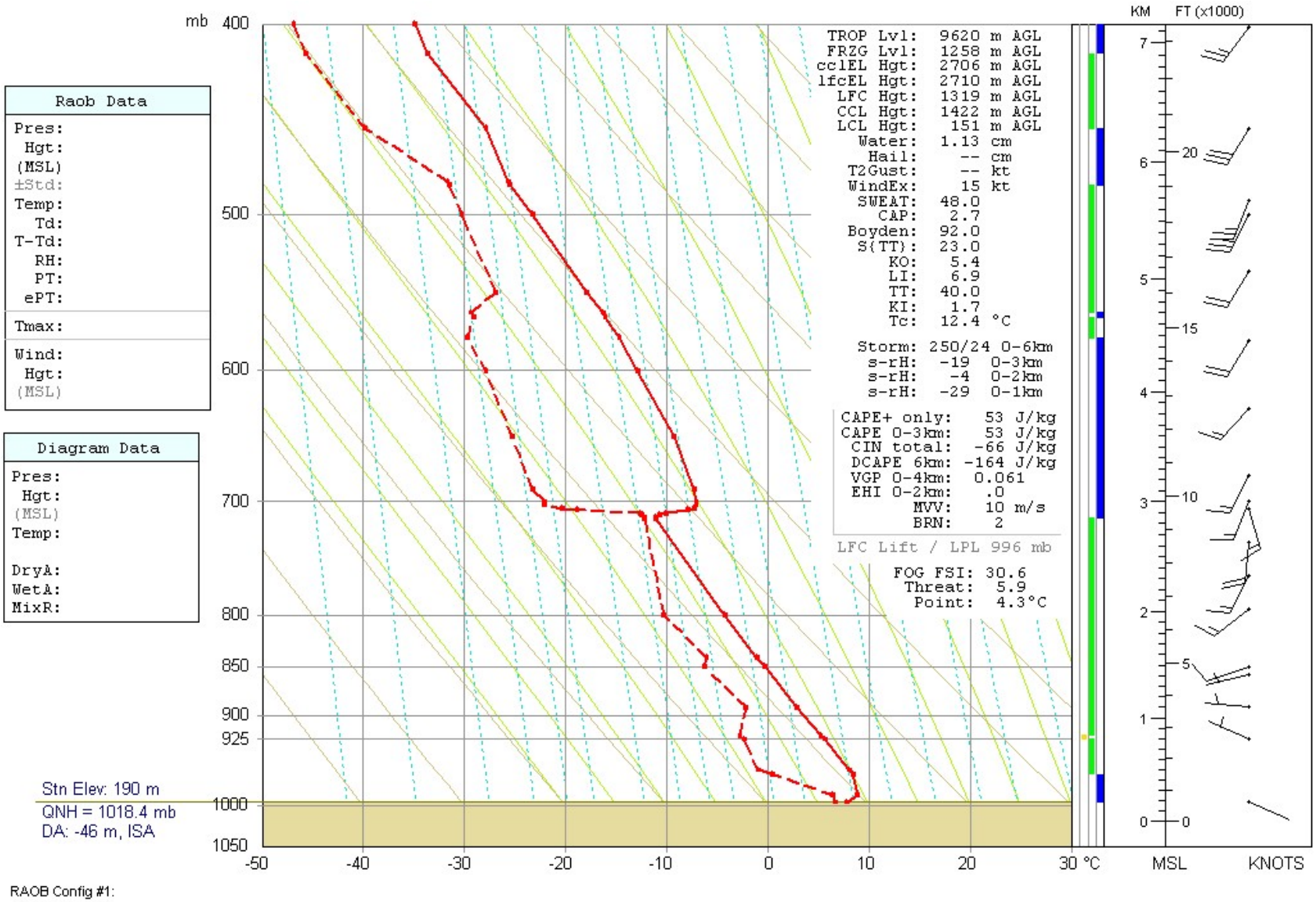


Test #8 System Test II – 02UTC on 05/18/2005
RWS Version 1.0.4.0

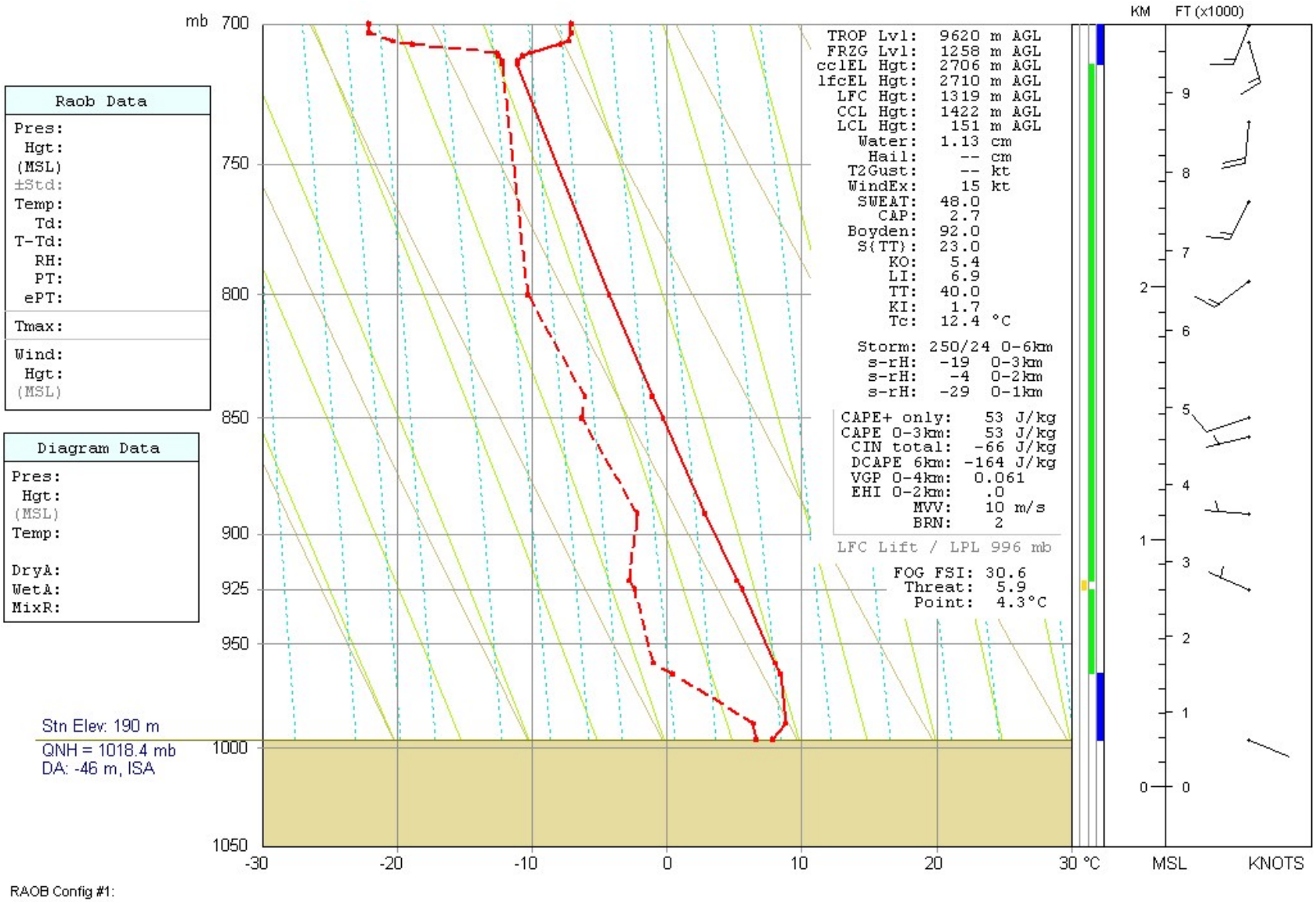


RAOB Config #1:

Test #8 System Test II – 02UTC on 05/18/2005
RWS Version 1.0.4.0



Test #8 System Test II – 02UTC on 05/18/2005
RWS Version 1.0.4.0



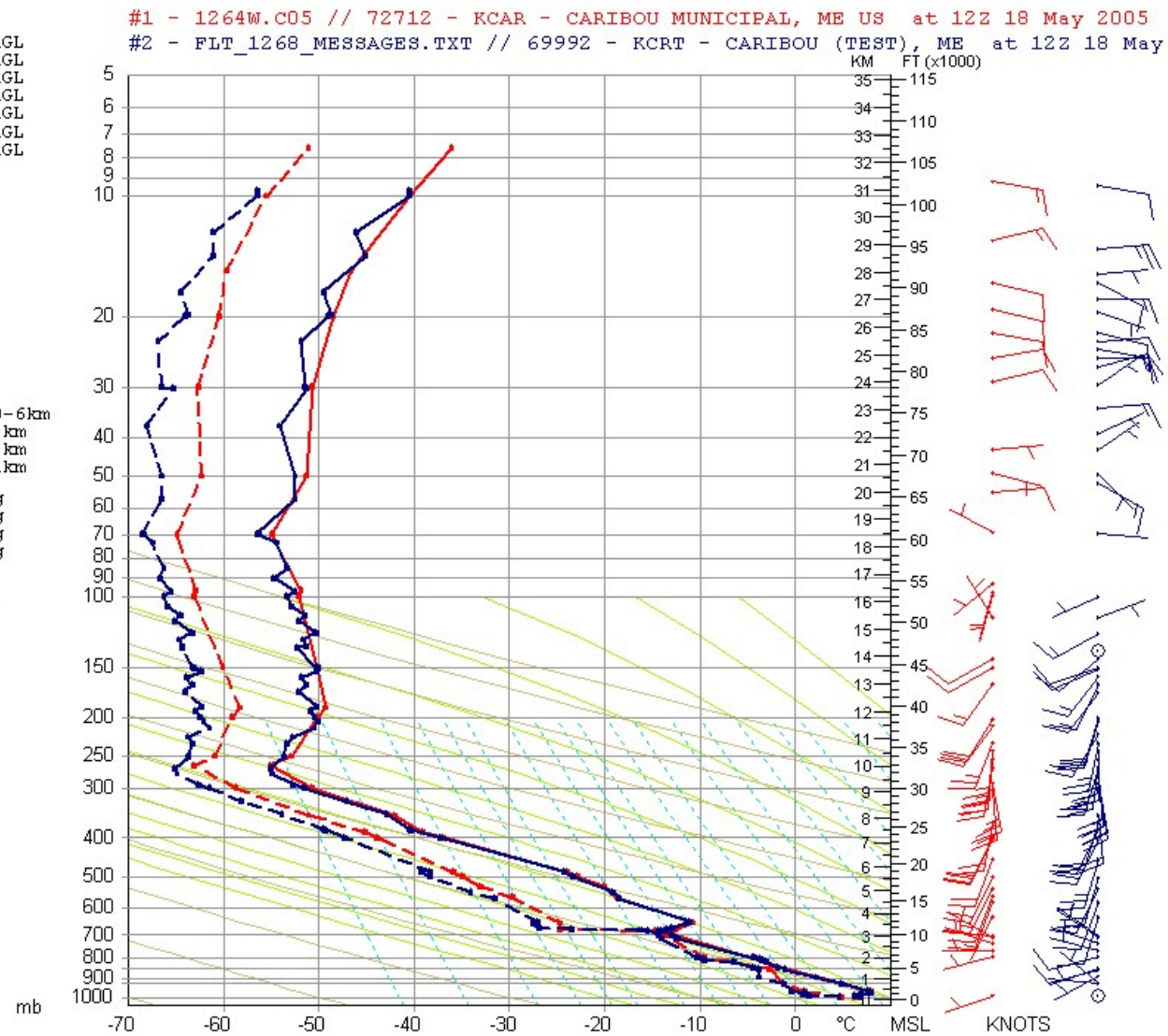
Test # 9 - System Test II – 12UTC on 05/18/2005
RWS Version 1.0.4.0

TEST # 9			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	9703	9378	325
Freezing Level (m AGL)	1171	1159	12
LFC Height (m AGL)	2697	2275	422
CCL Height (m AGL)	1290	1449	-159
LCL Height (m AGL)	176	277	-101
Precipitable Water (cm)	1.22	1.09	0.13
Thickness 1000 - 500 mb (m)	5375	5369	6
Thickness 1000 - 700 mb (m)	2841	2839	2
Thickness 1000 - 850 mb (m)	1324	1323	1
Thickness 850 - 500 mb (m)	4051	4046	5
Thickness 850 - 700 mb (m)	1518	1516	2
Thickness 700 - 500 mb (m)	2534	2530	4
Thickness 600 - 400 mb (m)	2953	2949	4
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Warmer	Colder	

NC= Not Calculated

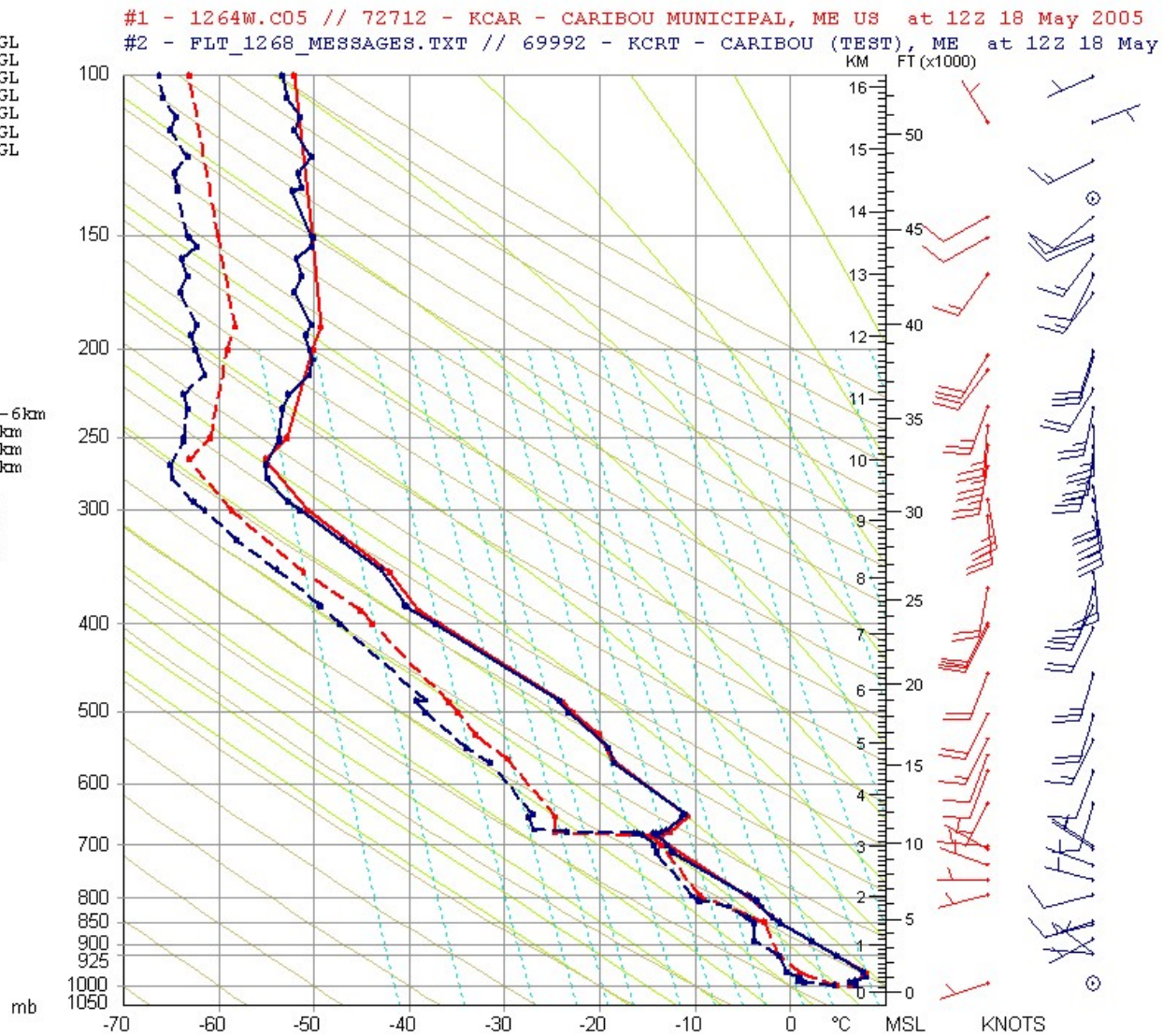
Test # 9 - System Test II – 12UTC on 05/18/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9703	9378	m AGL
FRZG Lvl:	1171	1159	m AGL
cclEL Hgt:	3043	--	m AGL
lfcEL Hgt:	2871	3043	m AGL
LFC Hgt:	2697	2275	m AGL
CCL Hgt:	1290	1449	m AGL
LCL Hgt:	176	277	m AGL
Water:	1.22	1.09	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	31.6	35.0	
CAP:	3.9	3.5	
Boyden:	97.0	96.8	
S{TT}:	35.3	38.2	
KO:	4.6	4.3	
LI:	10.0	9.3	
TT:	42.0	41.6	
KI:	18.4	16.9	
Tc:	11.6	11.9	°C
Storm:	259/20	258/20	0-6km
s-rH:	-5	-16	0-3km
s-rH:	1	2	0-2km
s-rH:	0	3	0-1km
CAPE+ only:	1	13	J/kg
CAPE 0-3km:	1	13	J/kg
CIN total:	-156	-126	J/kg
DCAPE 6km:	-318	-304	J/kg
VGP 0-4km:	0.002	0.016	
EHI 0-2km:	--	.0	
MVV:	1	5	m/s
BRN:	0	1	
FOG FSI:	23.2	28.2	
Threat:	8.5	10.4	
Point:	2.6	.3	°C
1000 - 500 mb:	5375	5369	m
1000 - 700 mb:	2841	2839	m
1000 - 850 mb:	1324	1323	m
850 - 500 mb:	4051	4046	m
850 - 700 mb:	1518	1516	m
700 - 500 mb:	2534	2530	m
600 - 400 mb:	2953	2949	m



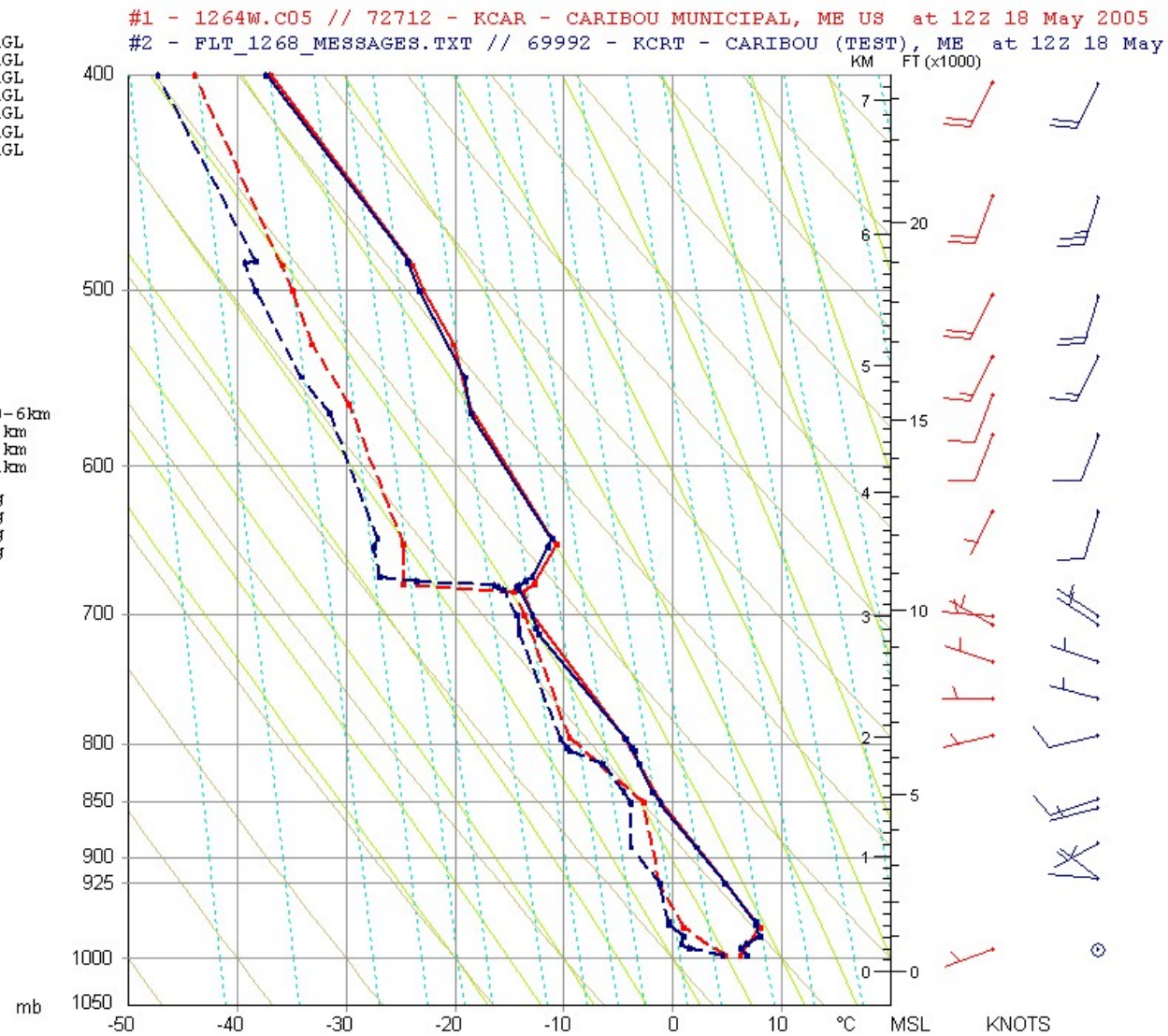
Test # 9 - System Test II – 12UTC on 05/18/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9703	9378	m AGL
FRZG Lvl:	1171	1159	m AGL
cclEL Hgt:	3043	--	m AGL
lfcEL Hgt:	2871	3043	m AGL
LFC Hgt:	2697	2275	m AGL
CCL Hgt:	1290	1449	m AGL
LCL Hgt:	176	277	m AGL
Water:	1.22	1.09	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	31.6	35.0	
CAP:	3.9	3.5	
Boyden:	97.0	96.8	
S{TT}:	35.3	38.2	
KO:	4.6	4.3	
LI:	10.0	9.3	
TT:	42.0	41.6	
KI:	18.4	16.9	
Tc:	11.6	11.9	°C
Storm:	259/20	258/20	0-6km
s-rH:	-5	-16	0-3km
s-rH:	1	2	0-2km
s-rH:	0	3	0-1km
CAPE+ only:	1	13	J/kg
CAPE 0-3km:	1	13	J/kg
CIN total:	-156	-126	J/kg
DCAPE 6km:	-318	-304	J/kg
VGP 0-4km:	0.002	0.016	
EHI 0-2km:	--	.0	
MVV:	1	5	m/s
BRN:	0	1	
FOG FSI:	23.2	28.2	
Threat:	8.5	10.4	
Point:	2.6	.3	°C
1000 - 500 mb:	5375	5369	m
1000 - 700 mb:	2841	2839	m
1000 - 850 mb:	1324	1323	m
850 - 500 mb:	4051	4046	m
850 - 700 mb:	1518	1516	m
700 - 500 mb:	2534	2530	m
600 - 400 mb:	2953	2949	m



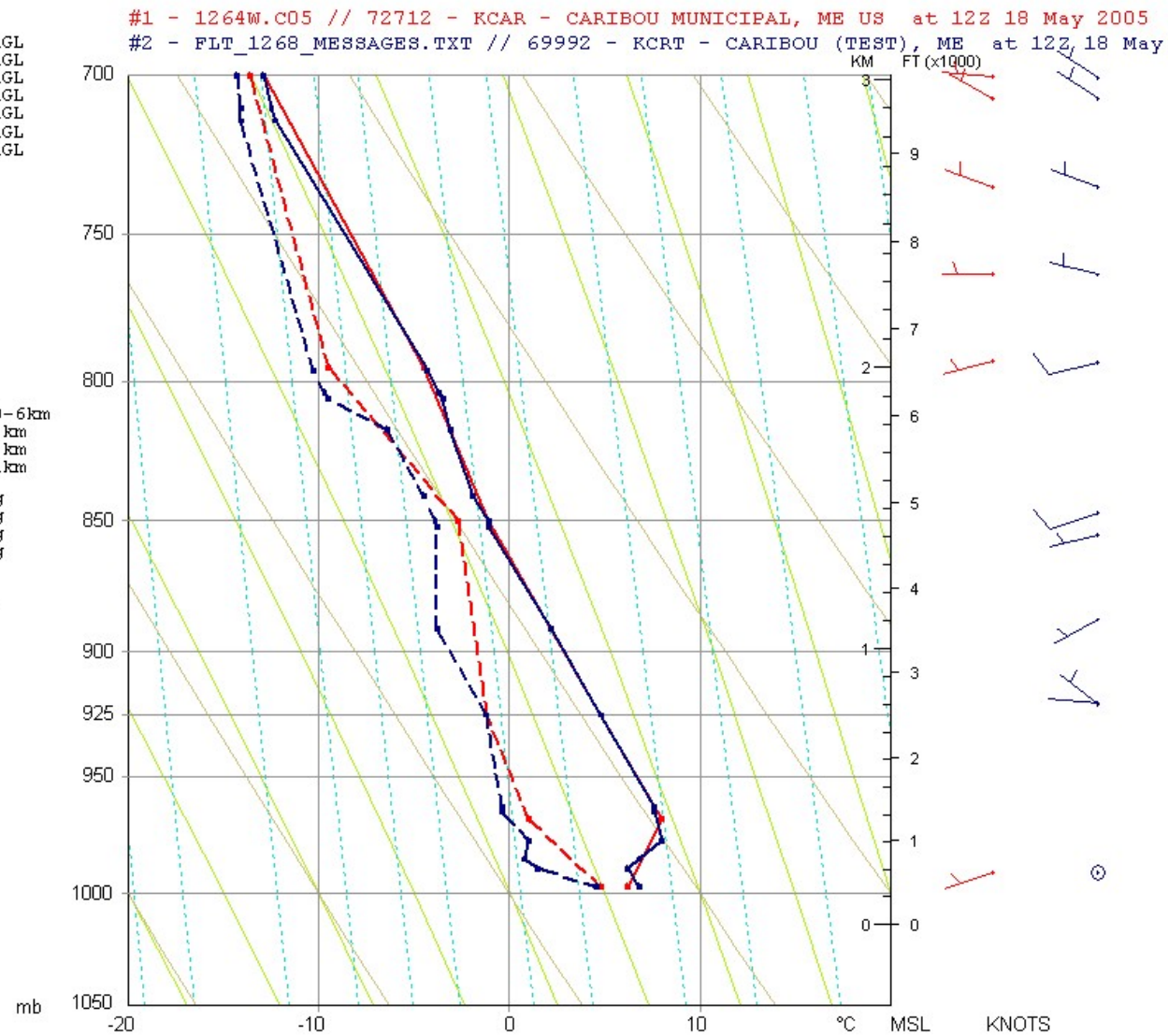
Test # 9 - System Test II – 12UTC on 05/18/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9703	9378	m AGL
FRZG Lvl:	1171	1159	m AGL
cclEL Hgt:	3043	--	m AGL
lfcEL Hgt:	2871	3043	m AGL
LFC Hgt:	2697	2275	m AGL
CCL Hgt:	1290	1449	m AGL
LCL Hgt:	176	277	m AGL
Water:	1.22	1.09	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	31.6	35.0	
CAP:	3.9	3.5	
Boyden:	97.0	96.8	
S{TT}:	35.3	38.2	
KO:	4.6	4.3	
LI:	10.0	9.3	
TT:	42.0	41.6	
KI:	18.4	16.9	
Tc:	11.6	11.9	°C
Storm:	259/20	258/20	0-6km
s-rH:	-5	-16	0-3km
s-rH:	1	2	0-2km
s-rH:	0	3	0-1km
CAPE+ only:	1	13	J/kg
CAPE 0-3km:	1	13	J/kg
CIN total:	-156	-126	J/kg
DCAPE 6km:	-318	-304	J/kg
VGP 0-4km:	0.002	0.016	
EHI 0-2km:	--	.0	
MVV:	1	5	m/s
BRN:	0	1	
FOG FSI:	23.2	28.2	
Threat:	8.5	10.4	
Point:	2.6	.3	°C
1000 - 500 mb:	5375	5369	m
1000 - 700 mb:	2841	2839	m
1000 - 850 mb:	1324	1323	m
850 - 500 mb:	4051	4046	m
850 - 700 mb:	1518	1516	m
700 - 500 mb:	2534	2530	m
600 - 400 mb:	2953	2949	m

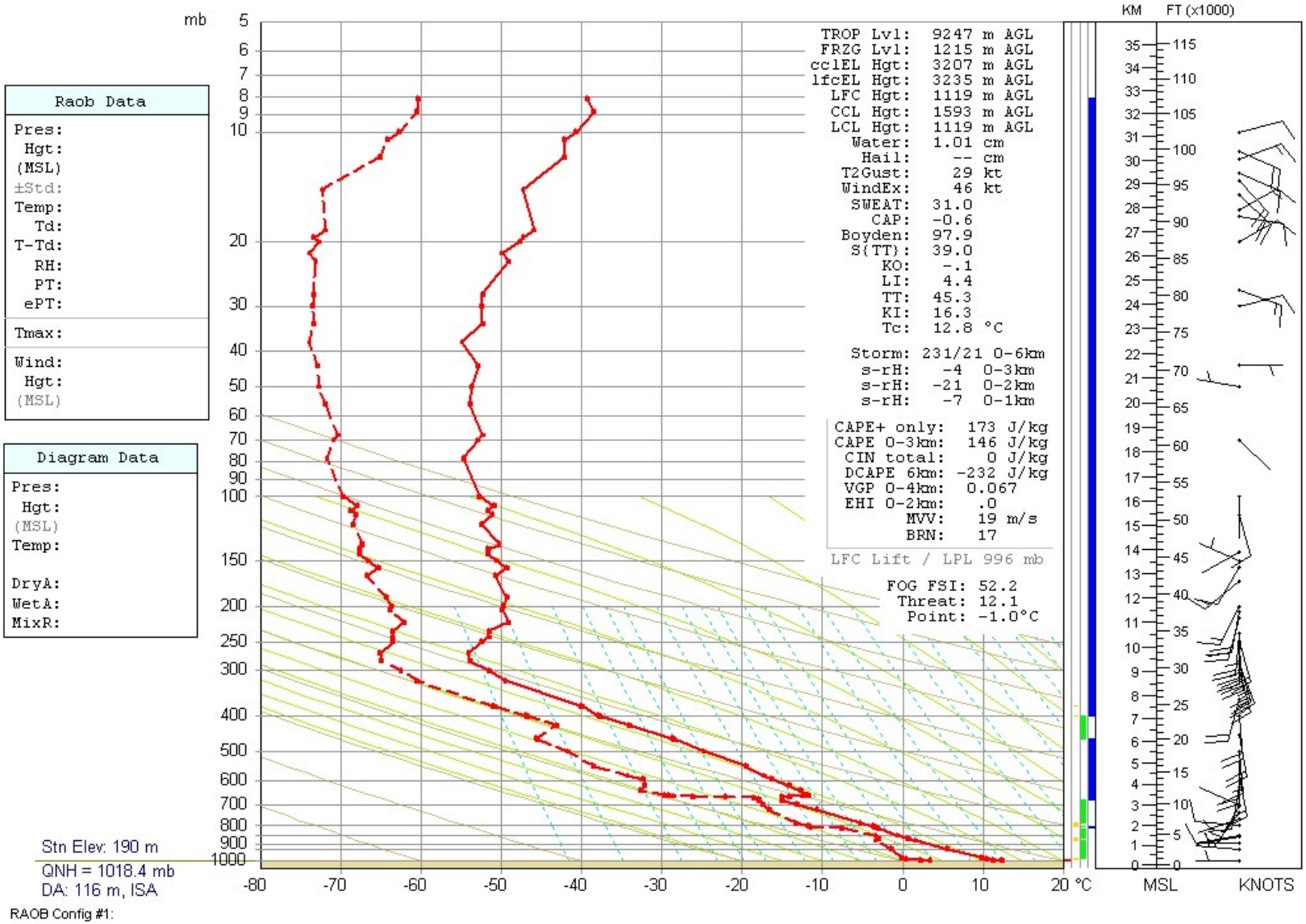


Test # 9 - System Test II – 12UTC on 05/18/2005
RWS Version 1.0.4.0

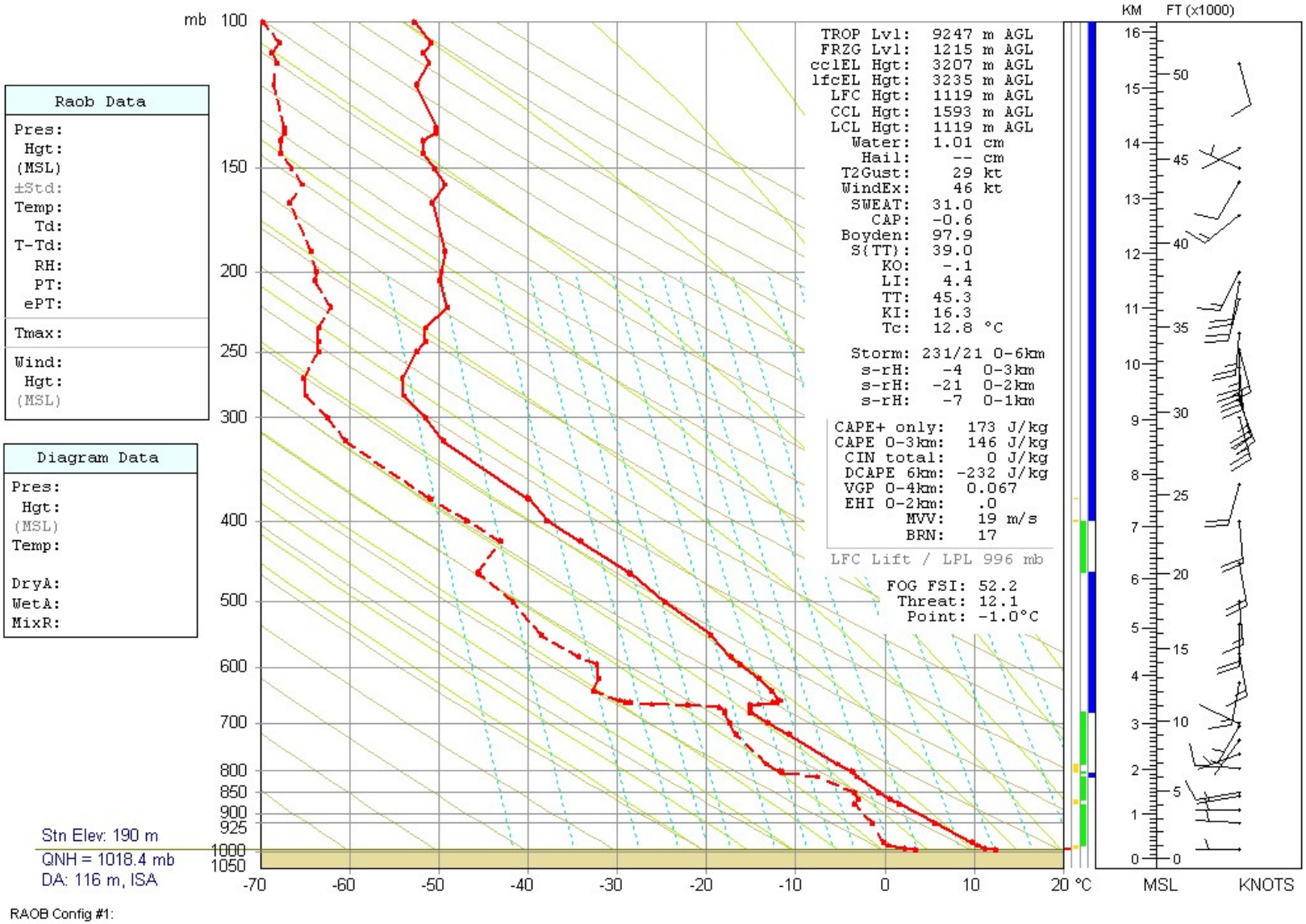
	#1	#2	
TROP Lvl:	9703	9378	m AGL
FRZG Lvl:	1171	1159	m AGL
cclEL Hgt:	3043	--	m AGL
lfcEL Hgt:	2871	3043	m AGL
LFC Hgt:	2697	2275	m AGL
CCL Hgt:	1290	1449	m AGL
LCL Hgt:	176	277	m AGL
Water:	1.22	1.09	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	31.6	35.0	
CAP:	3.9	3.5	
Boyden:	97.0	96.8	
S{TT}:	35.3	38.2	
KO:	4.6	4.3	
LI:	10.0	9.3	
TT:	42.0	41.6	
KI:	18.4	16.9	
Tc:	11.6	11.9	°C
Storm:	259/20	258/20	0-6km
s-rH:	-5	-16	0-3km
s-rH:	1	2	0-2km
s-rH:	0	3	0-1km
CAPE+ only:	1	13	J/kg
CAPE 0-3km:	1	13	J/kg
CIN total:	-156	-126	J/kg
DCAPE 6km:	-318	-304	J/kg
VGP 0-4km:	0.002	0.016	
EHI 0-2km:	--	.0	
MVV:	1	5	m/s
BRN:	0	1	
FOG FSI:	23.2	28.2	
Threat:	8.5	10.4	
Point:	2.6	.3	°C
1000 - 500 mb:	5375	5369	m
1000 - 700 mb:	2841	2839	m
1000 - 850 mb:	1324	1323	m
850 - 500 mb:	4051	4046	m
850 - 700 mb:	1518	1516	m
700 - 500 mb:	2534	2530	m
600 - 400 mb:	2953	2949	m



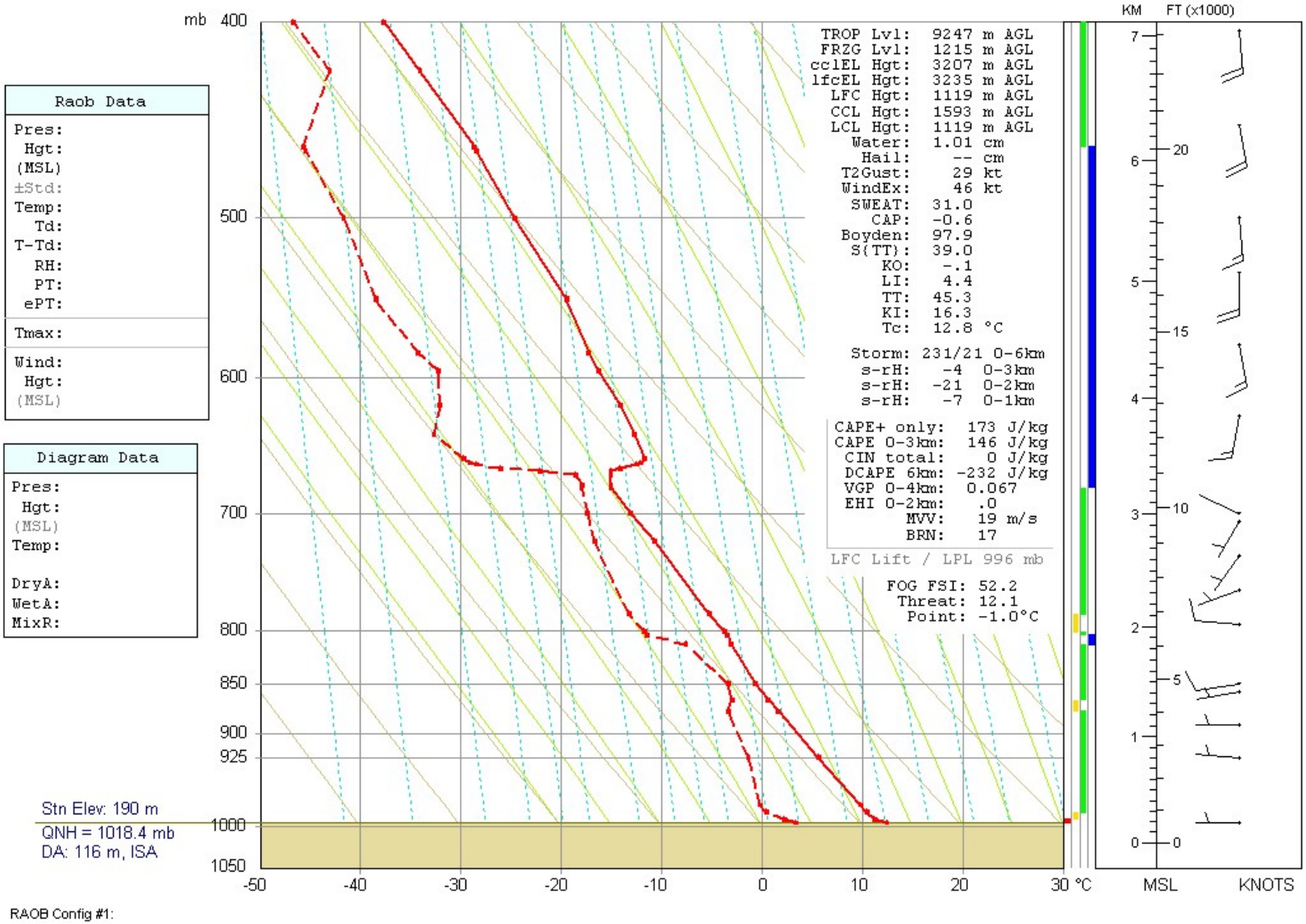
Test #10 System Test II – 15UTC on 05/18/2005
RWS Version 1.0.4.0



Test #10 System Test II – 15UTC on 05/18/2005
RWS Version 1.0.4.0

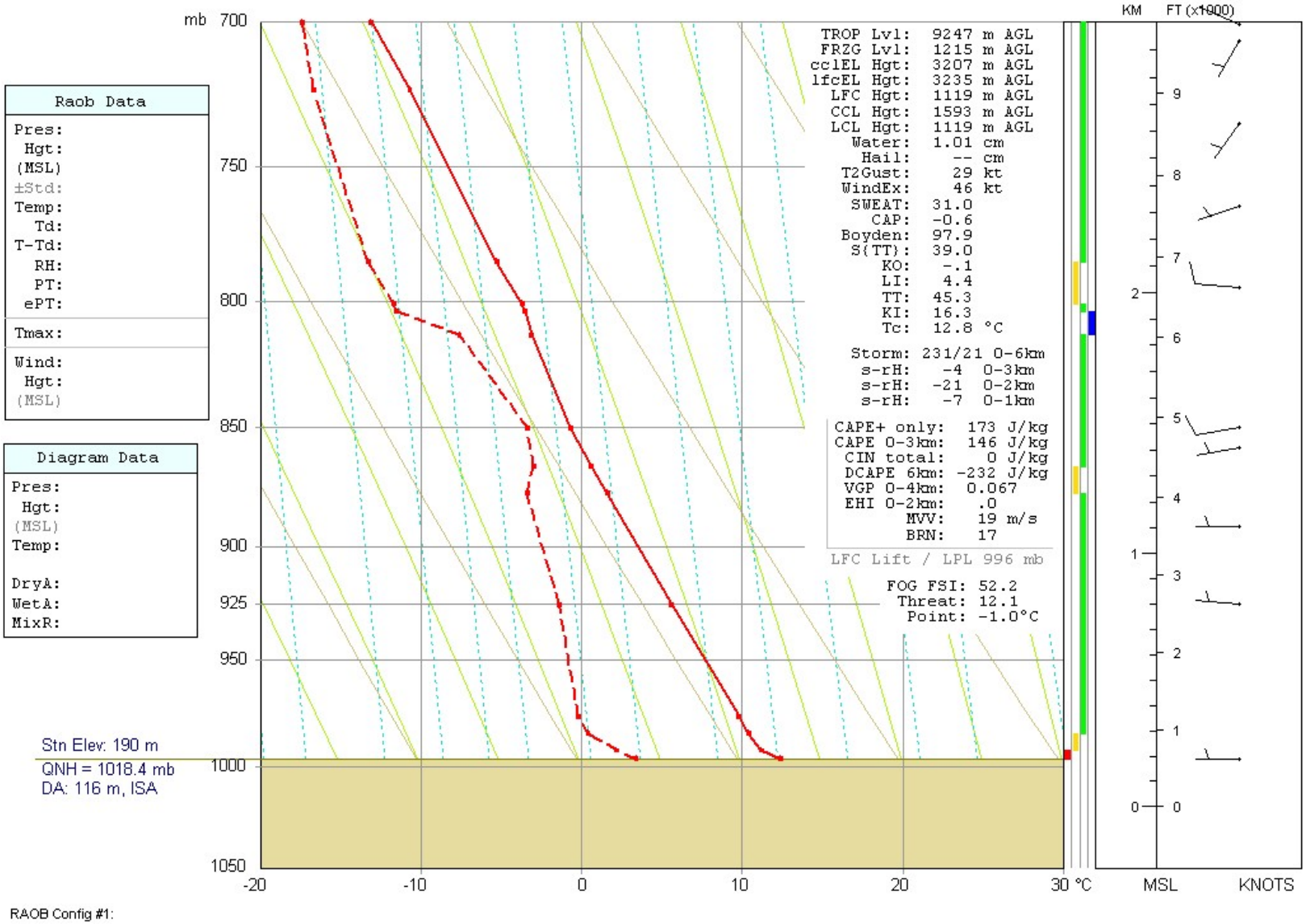


Test #10 System Test II – 15UTC on 05/18/2005
RWS Version 1.0.4.0



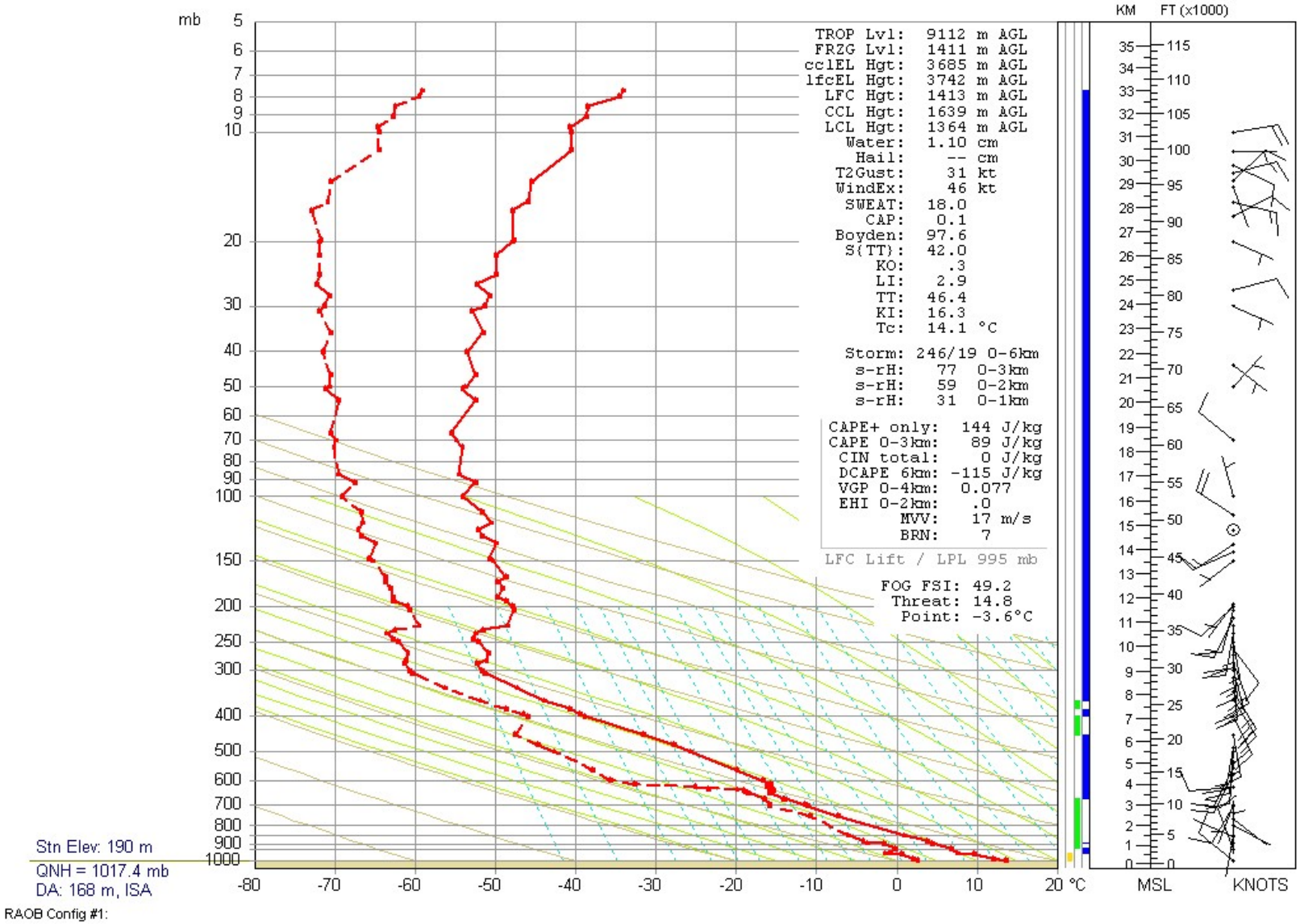
RAOB Config #1:

Test #10 System Test II – 15UTC on 05/18/2005
RWS Version 1.0.4.0

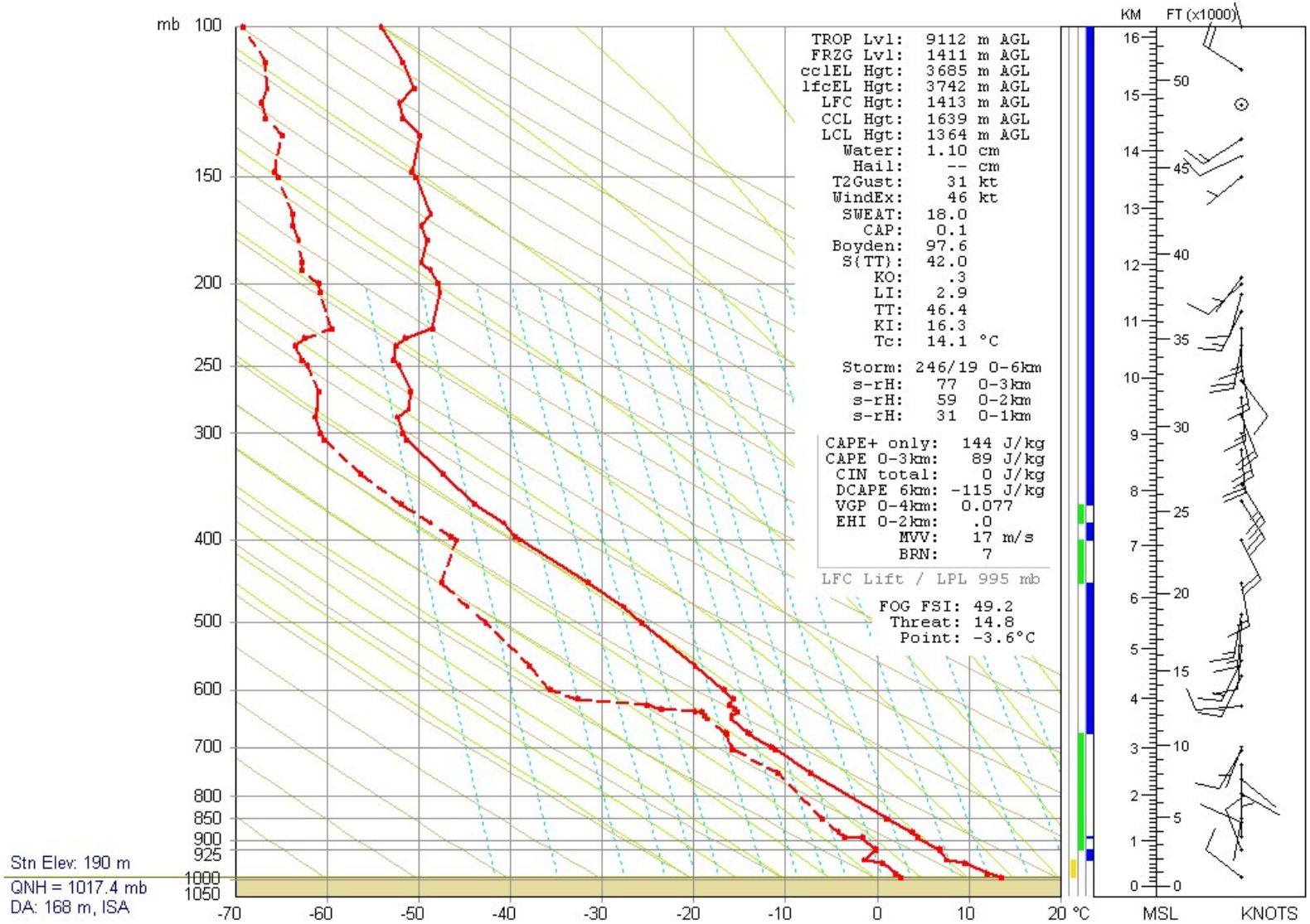


RAOB Config #1:

Test #11 System Test II – 20 UTC on 05/18/2005
RWS Version 1.0.4.0

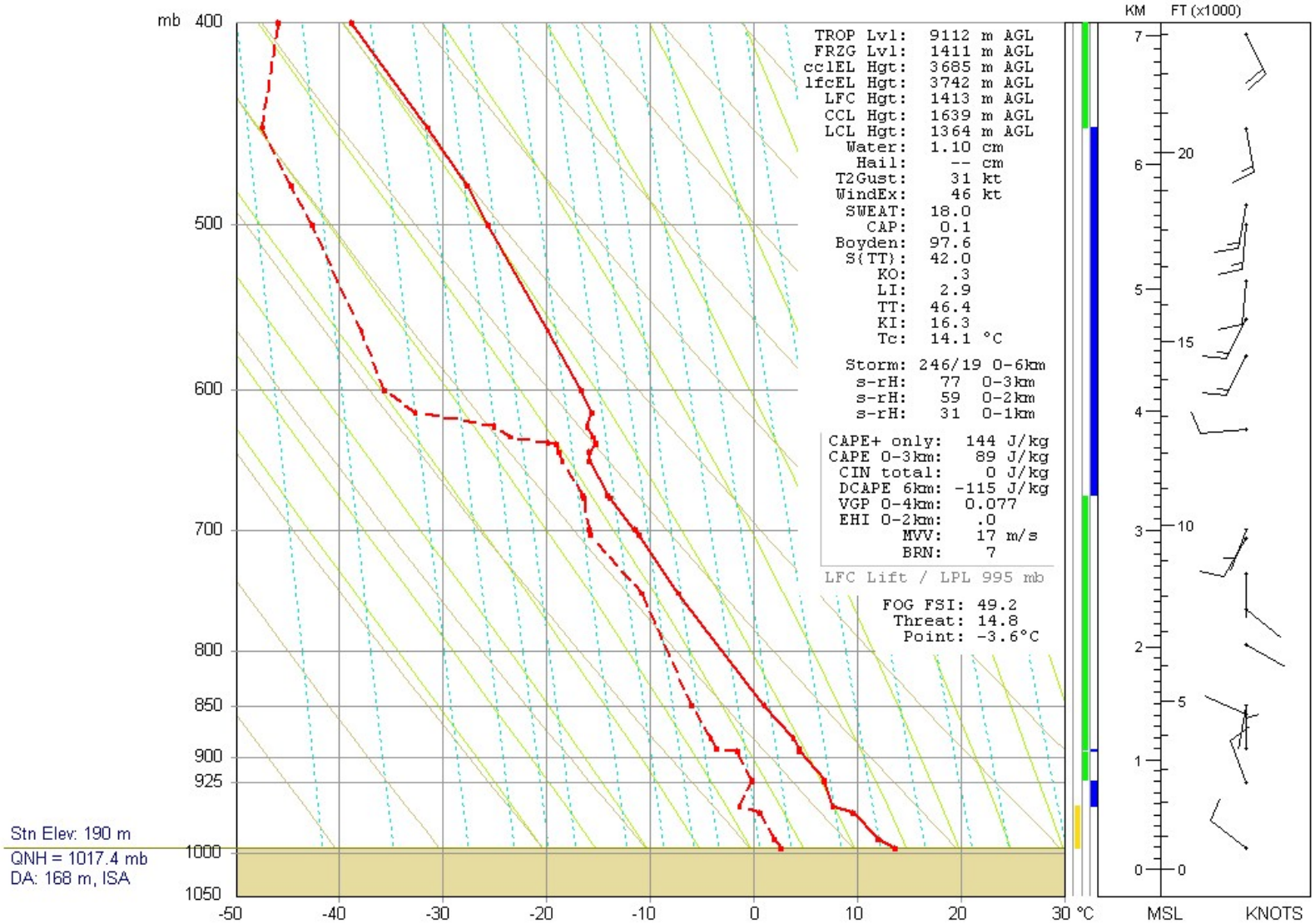


Test #11 System Test II – 20 UTC on 05/18/2005
RWS Version 1.0.4.0



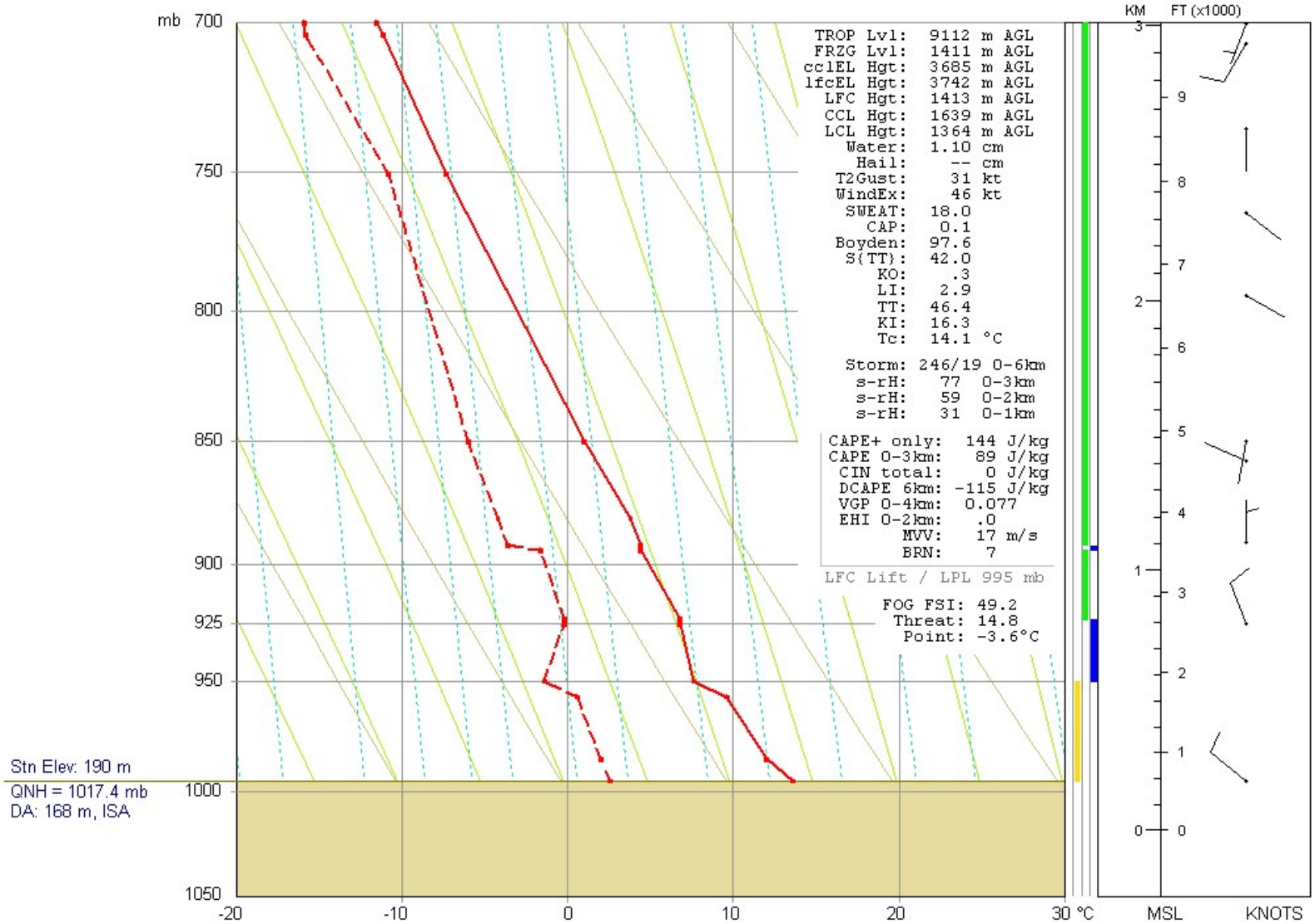
RAOB Config #1:

Test #11 System Test II – 20 UTC on 05/18/2005
RWS Version 1.0.4.0



RAOB Config #1:

Test #11 System Test II – 20 UTC on 05/18/2005
RWS Version 1.0.4.0



RAOB Config #1:

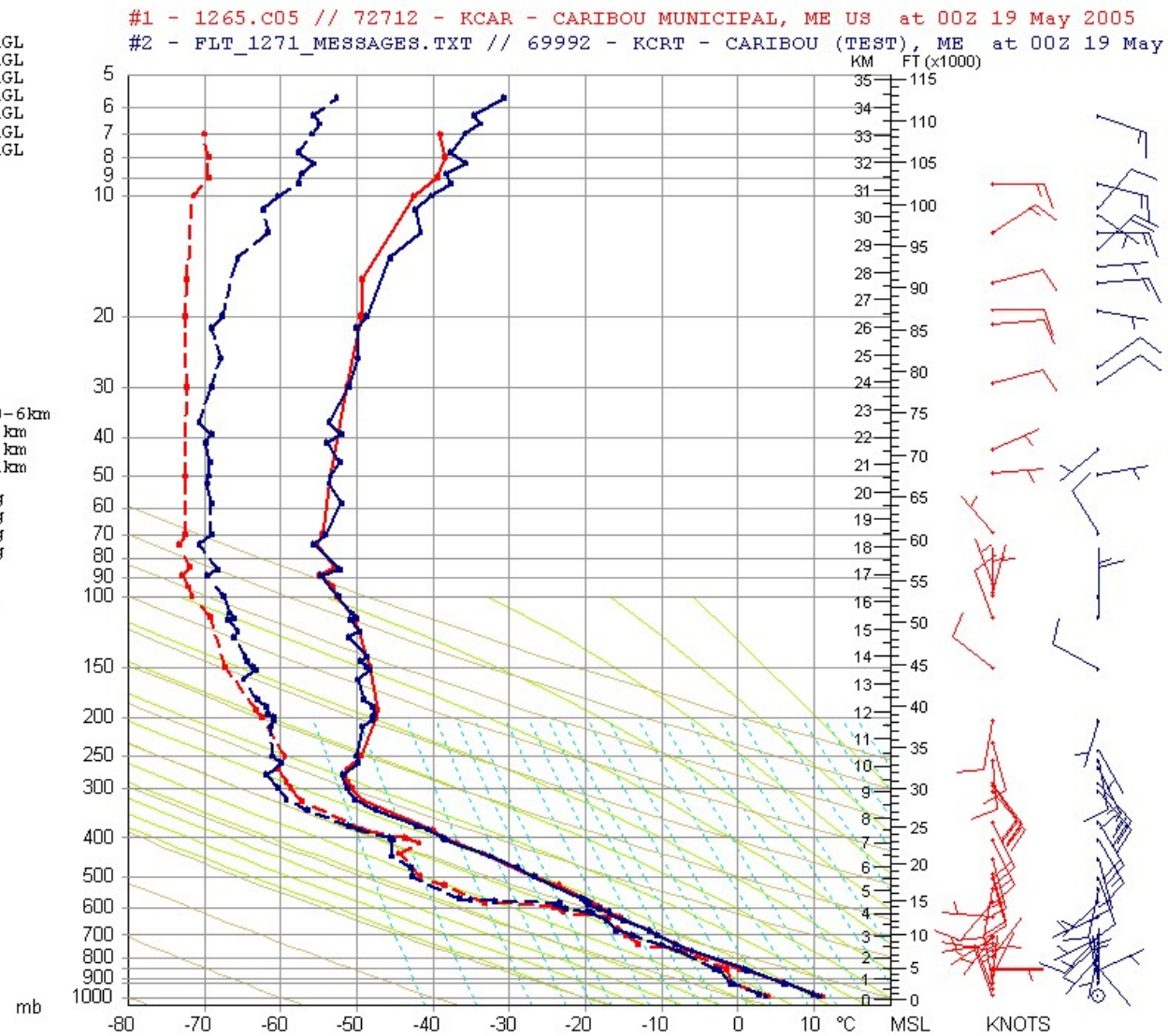
Test #12 - System Test II – 00UTC on 05/19/2005
RWS Version 1.0.4.0

TEST # 12			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	9042	8812	230
Freezing Level (m AGL)	1316	1387	-71
LFC Height (m AGL)	1410	1924	-514
CCL Height (m AGL)	1413	1538	-125
LCL Height (m AGL)	875	875	0
Precipitable Water (cm)	1.3	1.28	0.02
Thickness 1000 - 500 mb (m)	5369	5366	3
Thickness 1000 - 700 mb (m)	2857	2857	0
Thickness 1000 - 850 mb (m)	1332	1332	0
Thickness 850 - 500 mb (m)	4037	4034	3
Thickness 850 - 700 mb (m)	1525	1526	-1
Thickness 700 - 500 mb (m)	2512	2509	3
Thickness 600 - 400 mb (m)	2916	2913	3
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

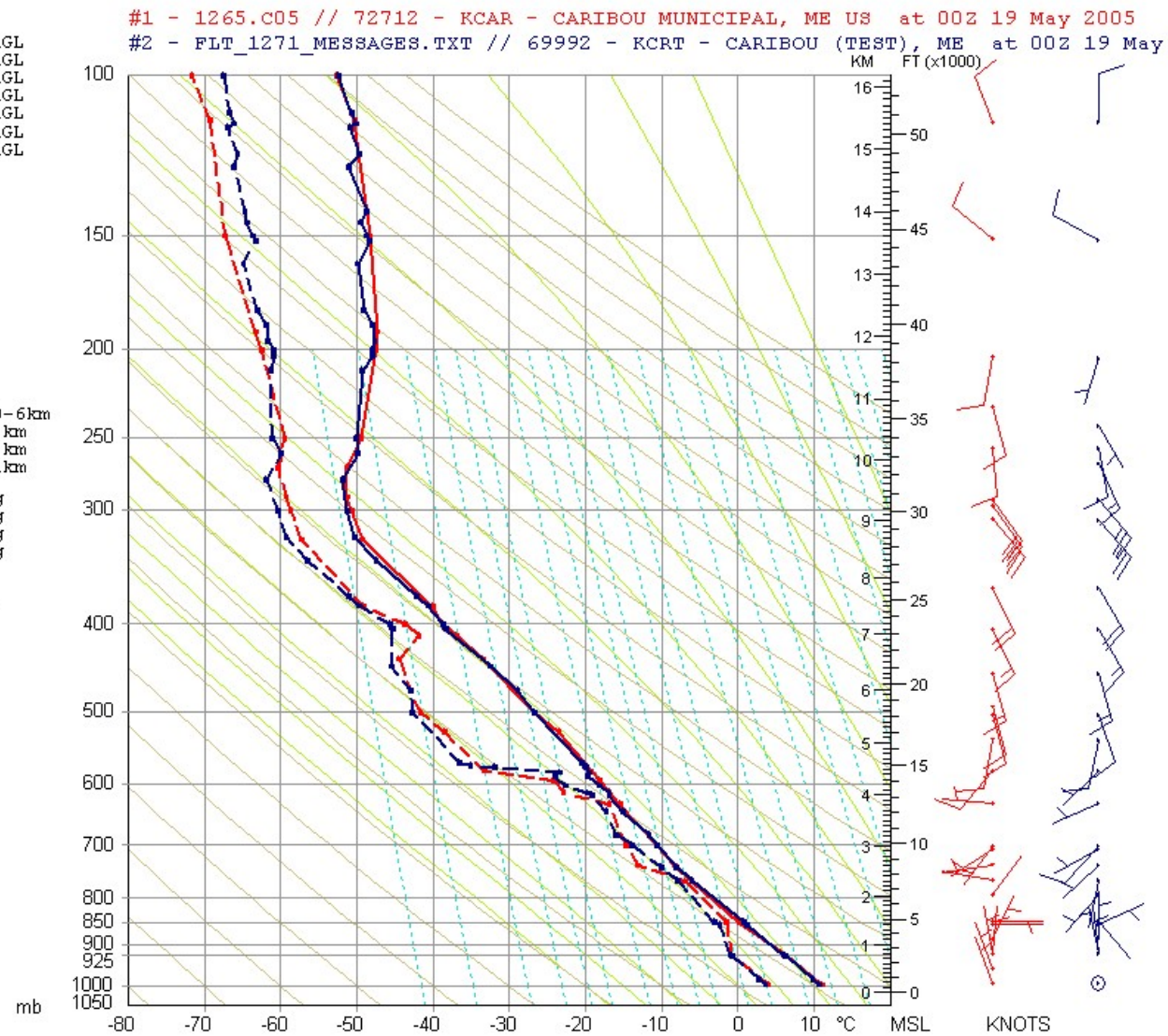
Test #12 - System Test II – 00UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9042	8812	m AGL
FRZG Lvl:	1316	1387	m AGL
cclEL Hgt:	3399	3801	m AGL
lfcEL Hgt:	3403	2903	m AGL
LFC Hgt:	1410	1924	m AGL
CCL Hgt:	1413	1538	m AGL
LCL Hgt:	875	875	m AGL
Water:	1.30	1.28	cm
Hail:	--	--	cm
T2Gust:	22	21	kt
WindEx:	34	30	kt
SWEAT:	80.0	57.0	
CAP:	1.3	1.8	
Boyden:	96.4	96.4	
S{TT}:	48.1	47.9	
KO:	-.4	.6	
LI:	3.0	3.5	
TT:	52.1	51.1	
KI:	21.4	21.2	
Tc:	13.0	13.8	°C
Storm:	245/17	241/18	0-6km
s-rH:	32	22	0-3km
s-rH:	21	14	0-2km
s-rH:	16	-16	0-1km
CAPE+ only:	42	12	J/kg
CAPE 0-3km:	39	12	J/kg
CIN total:	-34	-65	J/kg
DCAPE 6km:	7	-134	J/kg
VGP 0-4km:	0.031	0.018	
EHI 0-2km:	.0	.0	
MVV:	9	5	m/s
BRN:	5	2	
FOG FSI:	38.6	35.6	
Threat:	11.7	11.9	
Point:	.7	.2	°C
1000 - 500 mb:	5369	5366	m
1000 - 700 mb:	2857	2857	m
1000 - 850 mb:	1332	1332	m
850 - 500 mb:	4037	4034	m
850 - 700 mb:	1525	1526	m
700 - 500 mb:	2512	2509	m
600 - 400 mb:	2916	2913	m



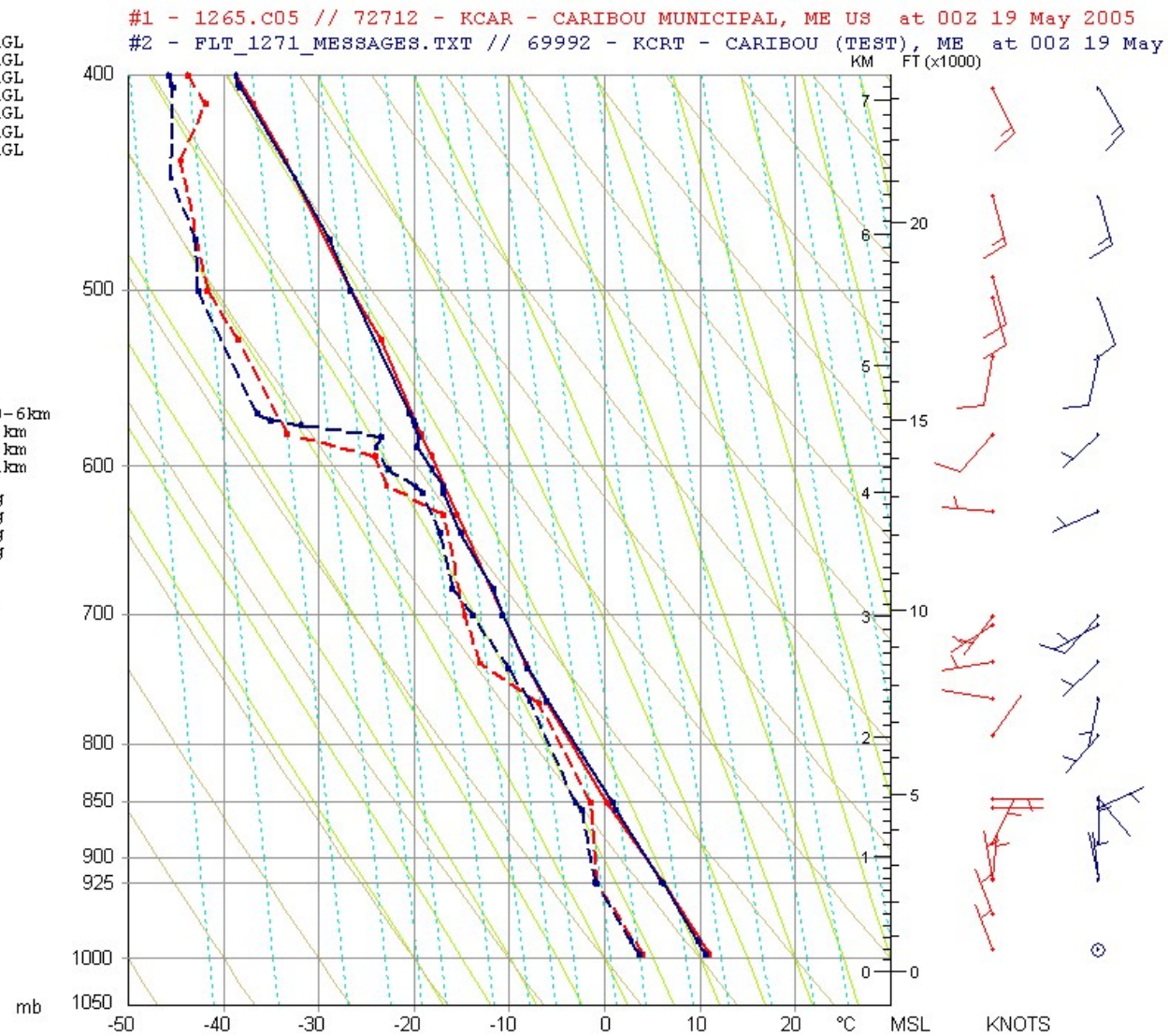
Test #12 - System Test II – 00UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9042	8812	m AGL
FRZG Lvl:	1316	1387	m AGL
cclEL Hgt:	3399	3801	m AGL
lfcEL Hgt:	3403	2903	m AGL
LFC Hgt:	1410	1924	m AGL
CCL Hgt:	1413	1538	m AGL
LCL Hgt:	875	875	m AGL
Water:	1.30	1.28	cm
Hail:	--	--	cm
T2Gust:	22	21	kt
WindEx:	34	30	kt
SWEAT:	80.0	57.0	
CAP:	1.3	1.8	
Boyden:	96.4	96.4	
S{TT}:	48.1	47.9	
KO:	-.4	.6	
LI:	3.0	3.5	
TT:	52.1	51.1	
KI:	21.4	21.2	
Tc:	13.0	13.8	°C
Storm:	245/17	241/18	0-6km
s-rH:	32	22	0-3km
s-rH:	21	14	0-2km
s-rH:	16	-16	0-1km
CAPE+ only:	42	12	J/kg
CAPE 0-3km:	39	12	J/kg
CIN total:	-34	-65	J/kg
DCAPE 6km:	7	-134	J/kg
VGP 0-4km:	0.031	0.018	
EHI 0-2km:	.0	.0	
MVV:	9	5	m/s
BRN:	5	2	
FOG FSI:	38.6	35.6	
Threat:	11.7	11.9	
Point:	.7	.2	°C
1000 - 500 mb:	5369	5366	m
1000 - 700 mb:	2857	2857	m
1000 - 850 mb:	1332	1332	m
850 - 500 mb:	4037	4034	m
850 - 700 mb:	1525	1526	m
700 - 500 mb:	2512	2509	m
600 - 400 mb:	2916	2913	m



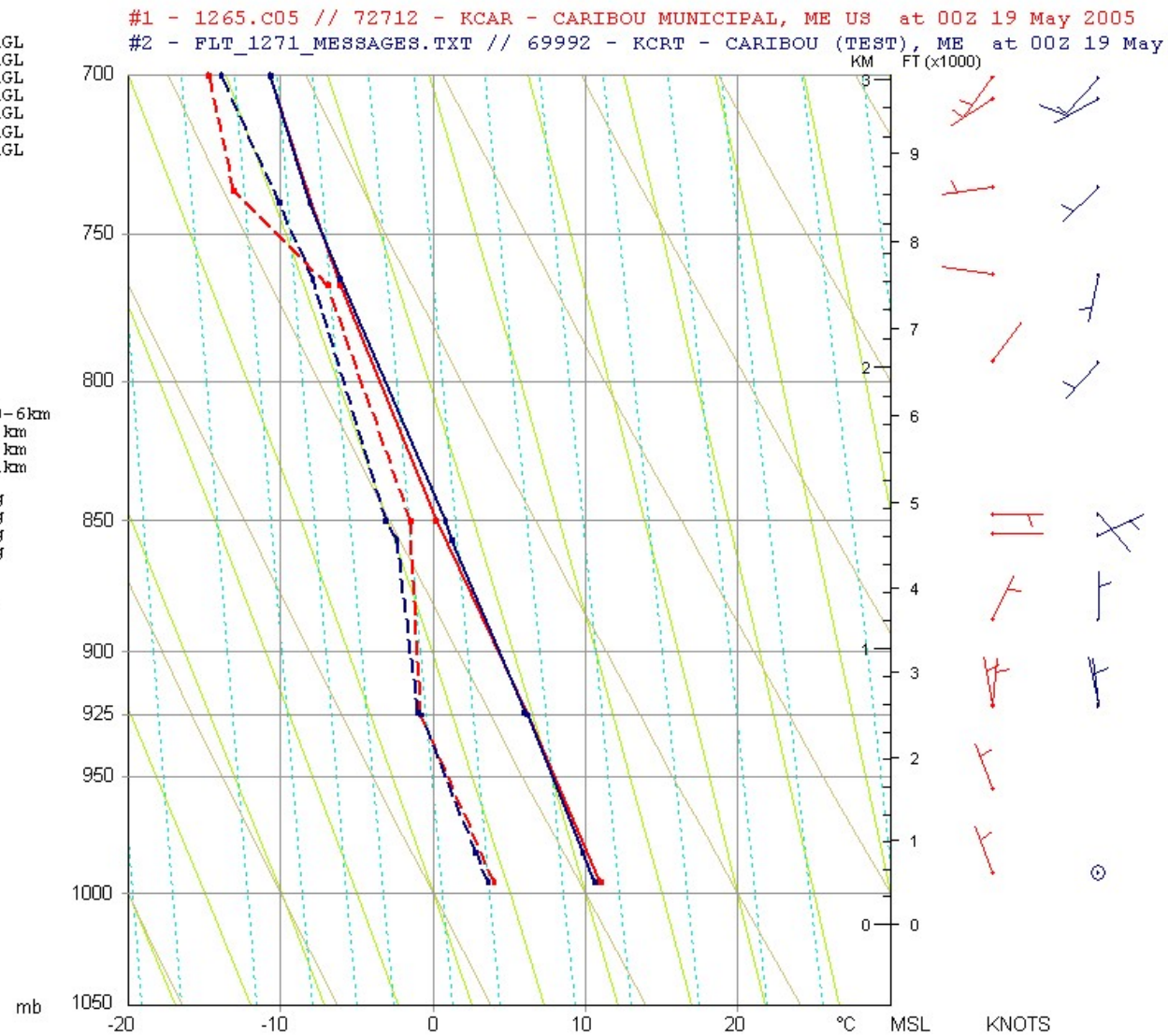
Test #12 - System Test II – 00UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9042	8812	m AGL
FRZG Lvl:	1316	1387	m AGL
cclEL Hgt:	3399	3801	m AGL
lfcEL Hgt:	3403	2903	m AGL
LFC Hgt:	1410	1924	m AGL
CCL Hgt:	1413	1538	m AGL
LCL Hgt:	875	875	m AGL
Water:	1.30	1.28	cm
Hail:	--	--	cm
T2Gust:	22	21	kt
WindEx:	34	30	kt
SWEAT:	80.0	57.0	
CAP:	1.3	1.8	
Boyden:	96.4	96.4	
S{TT}:	48.1	47.9	
KO:	-.4	.6	
LI:	3.0	3.5	
TT:	52.1	51.1	
KI:	21.4	21.2	
Tc:	13.0	13.8	°C
Storm:	245/17	241/18	0-6km
s-rH:	32	22	0-3km
s-rH:	21	14	0-2km
s-rH:	16	-16	0-1km
CAPE+ only:	42	12	J/kg
CAPE 0-3km:	39	12	J/kg
CIN total:	-34	-65	J/kg
DCAPE 6km:	7	-134	J/kg
VGP 0-4km:	0.031	0.018	
EHI 0-2km:	.0	.0	
MVV:	9	5	m/s
BRN:	5	2	
FOG FSI:	38.6	35.6	
Threat:	11.7	11.9	
Point:	.7	.2	°C
1000 - 500 mb:	5369	5366	m
1000 - 700 mb:	2857	2857	m
1000 - 850 mb:	1332	1332	m
850 - 500 mb:	4037	4034	m
850 - 700 mb:	1525	1526	m
700 - 500 mb:	2512	2509	m
600 - 400 mb:	2916	2913	m



Test #12 - System Test II – 00UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9042	8812	m AGL
FRZG Lvl:	1316	1387	m AGL
cclEL Hgt:	3399	3801	m AGL
lfcEL Hgt:	3403	2903	m AGL
LFC Hgt:	1410	1924	m AGL
CCL Hgt:	1413	1538	m AGL
LCL Hgt:	875	875	m AGL
Water:	1.30	1.28	cm
Hail:	--	--	cm
T2Gust:	22	21	kt
WindEx:	34	30	kt
SWEAT:	80.0	57.0	
CAP:	1.3	1.8	
Boyden:	96.4	96.4	
S{TT}:	48.1	47.9	
KO:	-.4	.6	
LI:	3.0	3.5	
TT:	52.1	51.1	
KI:	21.4	21.2	
Tc:	13.0	13.8	°C
Storm:	245/17	241/18	0-6km
s-rH:	32	22	0-3km
s-rH:	21	14	0-2km
s-rH:	16	-16	0-1km
CAPE+ only:	42	12	J/kg
CAPE 0-3km:	39	12	J/kg
CIN total:	-34	-65	J/kg
DCAPE 6km:	7	-134	J/kg
VGP 0-4km:	0.031	0.018	
EHI 0-2km:	.0	.0	
MVV:	9	5	m/s
BRN:	5	2	
FOG FSI:	38.6	35.6	
Threat:	11.7	11.9	
Point:	.7	.2	°C
1000 - 500 mb:	5369	5366	m
1000 - 700 mb:	2857	2857	m
1000 - 850 mb:	1332	1332	m
850 - 500 mb:	4037	4034	m
850 - 700 mb:	1525	1526	m
700 - 500 mb:	2512	2509	m
600 - 400 mb:	2916	2913	m



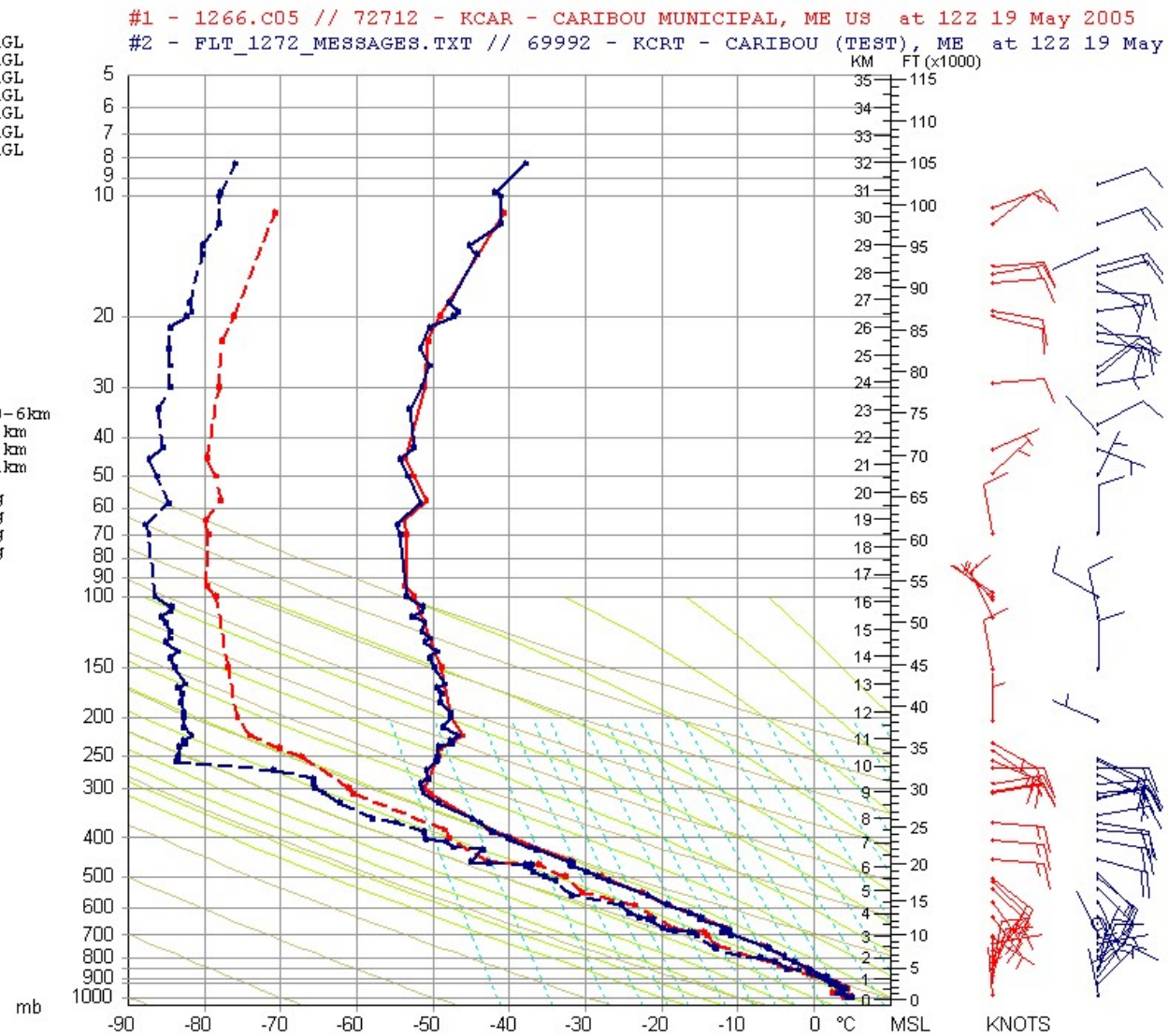
Test #13 - System Test II – 12UTC on 05/19/2005
RWS Version 1.0.4.0

TEST # 13			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	8797	8605	192
Freezing Level (m AGL)	1134	1177	-43
LFC Height (m AGL)	NC	97	NC
CCL Height (m AGL)	173	812	-639
LCL Height (m AGL)	63	75	-12
Precipitable Water (cm)	1.32	1.28	0.04
Thickness 1000 - 500 mb (m)	5351	5350	1
Thickness 1000 - 700 mb (m)	2842	2842	0
Thickness 1000 - 850 mb (m)	1316	1317	-1
Thickness 850 - 500 mb (m)	4035	4033	2
Thickness 850 - 700 mb (m)	1526	1526	0
Thickness 700 - 500 mb (m)	2509	2507	2
Thickness 600 - 400 mb (m)	2905	2899	6
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

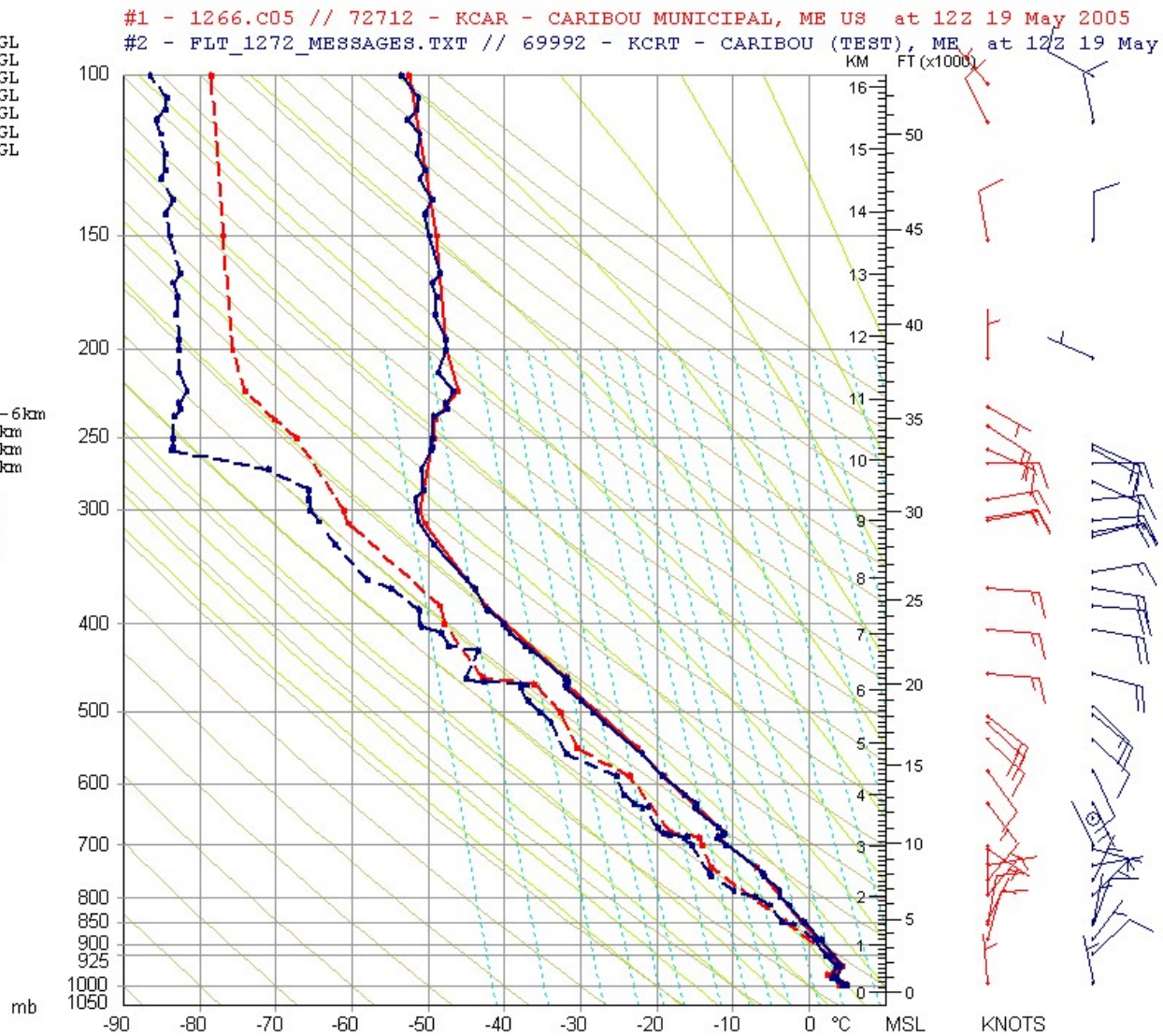
Test #13 - System Test II – 12UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	8797	8605	m AGL
FRZG Lvl:	1134	1177	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	97	m AGL
CCL Hgt:	173	812	m AGL
LCL Hgt:	63	75	m AGL
Water:	1.32	1.28	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	85.0	95.0	
CAP:	--	0.1	
Boyden:	95.1	95.1	
S{TT}:	48.6	47.8	
KO:	4.1	3.0	
LI:	7.0	5.8	
TT:	51.8	52.3	
KI:	20.7	19.5	
Tc:	4.9	10.1	°C
Storm:	202/13	212/13	0-6km
s-rH:	24	19	0-3km
s-rH:	21	21	0-2km
s-rH:	10	23	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.6	18.6	
Threat:	7.2	6.3	
Point:	3.9	4.7°C	
1000 - 500 mb:	5351	5350	m
1000 - 700 mb:	2842	2842	m
1000 - 850 mb:	1316	1317	m
850 - 500 mb:	4035	4033	m
850 - 700 mb:	1526	1526	m
700 - 500 mb:	2509	2507	m
600 - 400 mb:	2905	2899	m



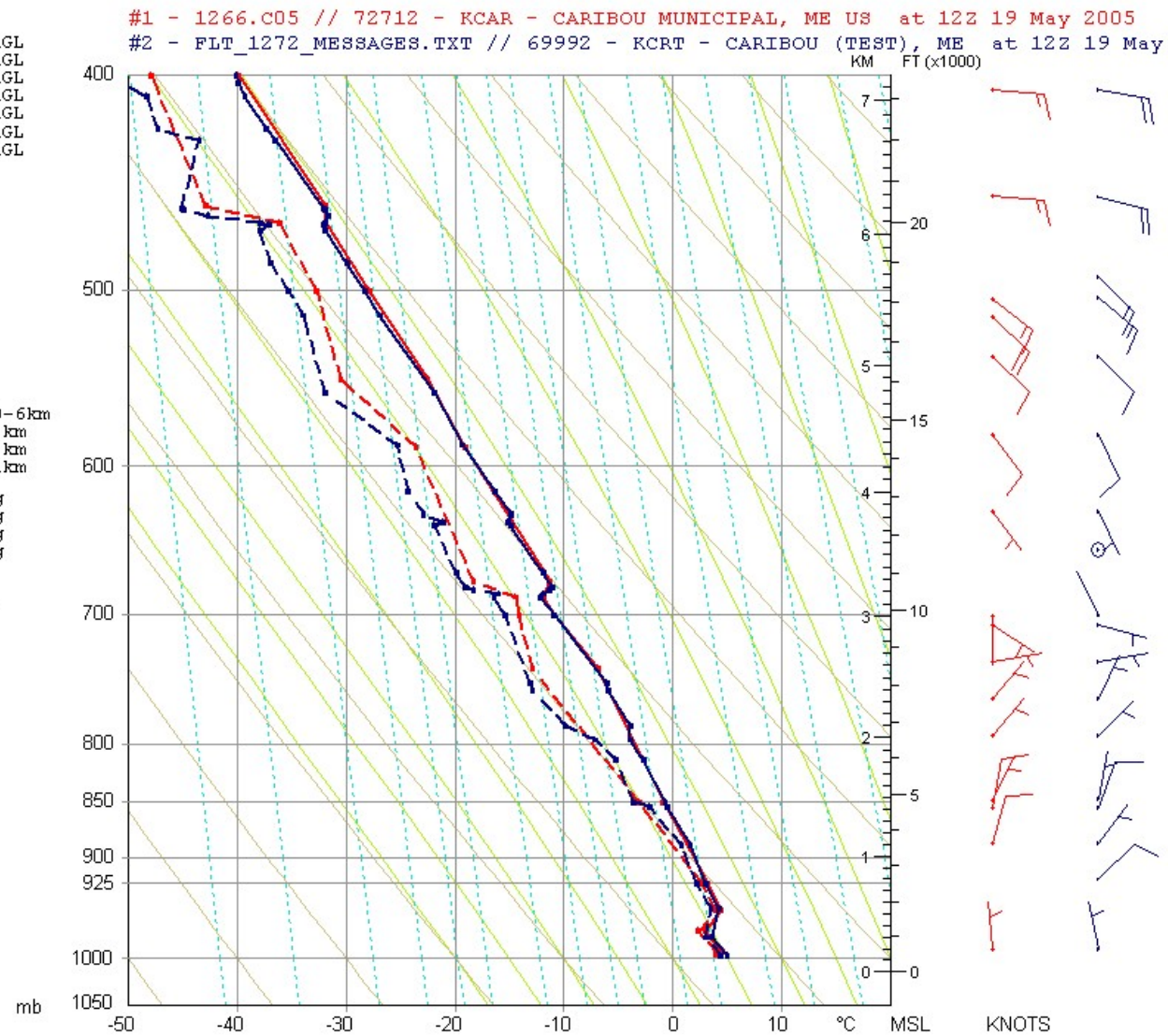
Test #13 - System Test II – 12UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	8797	8605	m AGL
FRZG Lvl:	1134	1177	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	97	m AGL
CCL Hgt:	173	812	m AGL
LCL Hgt:	63	75	m AGL
Water:	1.32	1.28	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	85.0	95.0	
CAP:	--	0.1	
Boyden:	95.1	95.1	
S{TT}:	48.6	47.8	
KO:	4.1	3.0	
LI:	7.0	5.8	
TT:	51.8	52.3	
KI:	20.7	19.5	
Tc:	4.9	10.1	°C
Storm:	202/13	212/13	0-6km
s-rH:	24	19	0-3km
s-rH:	21	21	0-2km
s-rH:	10	23	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.6	18.6	
Threat:	7.2	6.3	
Point:	3.9	4.7°C	
1000 - 500 mb:	5351	5350	m
1000 - 700 mb:	2842	2842	m
1000 - 850 mb:	1316	1317	m
850 - 500 mb:	4035	4033	m
850 - 700 mb:	1526	1526	m
700 - 500 mb:	2509	2507	m
600 - 400 mb:	2905	2899	m



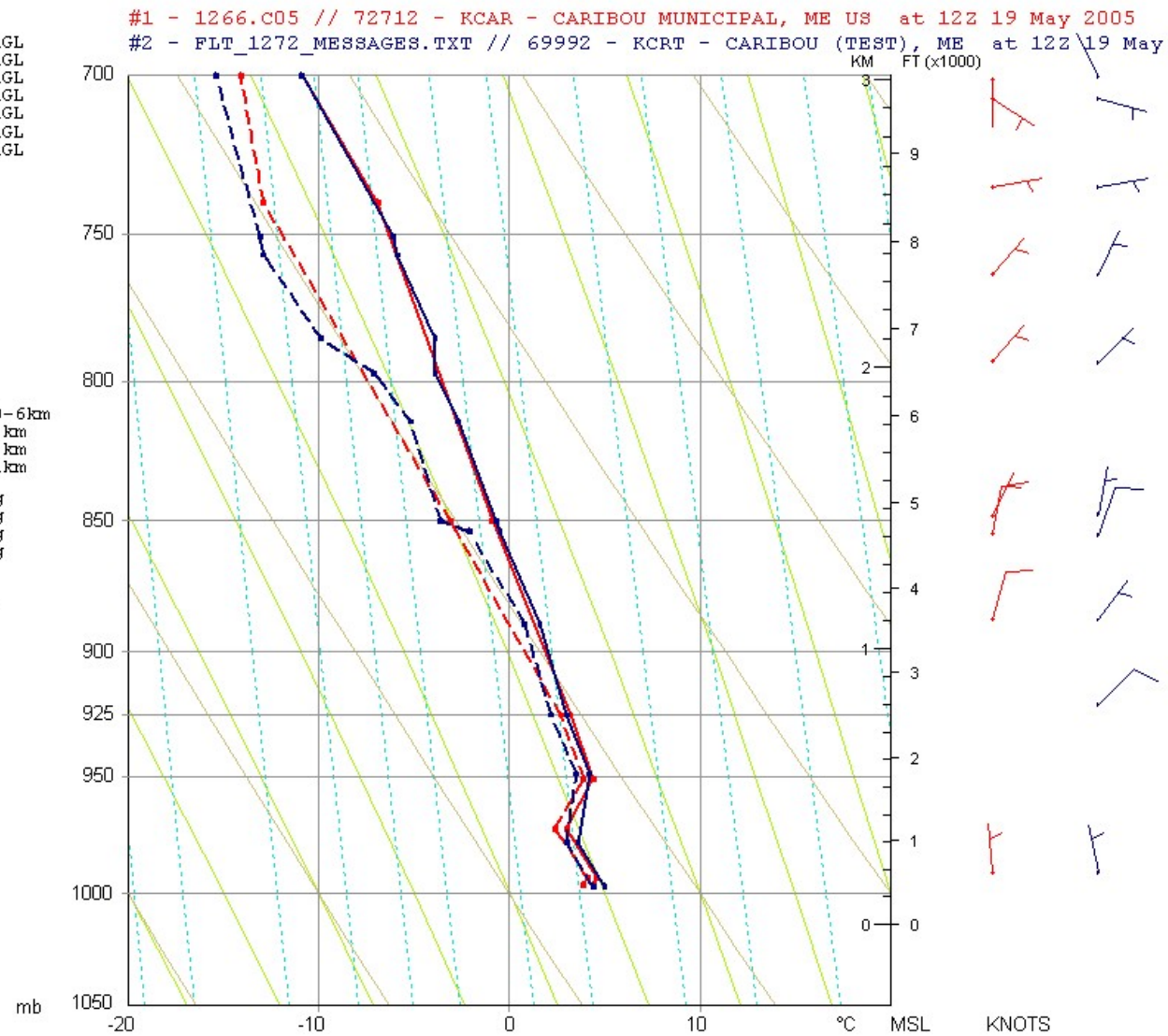
Test #13 - System Test II – 12UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	8797	8605	m AGL
FRZG Lvl:	1134	1177	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	97	m AGL
CCL Hgt:	173	812	m AGL
LCL Hgt:	63	75	m AGL
Water:	1.32	1.28	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	85.0	95.0	
CAP:	--	0.1	
Boyden:	95.1	95.1	
S{TT}:	48.6	47.8	
KO:	4.1	3.0	
LI:	7.0	5.8	
TT:	51.8	52.3	
KI:	20.7	19.5	
Tc:	4.9	10.1	°C
Storm:	202/13	212/13	0-6km
s-rH:	24	19	0-3km
s-rH:	21	21	0-2km
s-rH:	10	23	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.6	18.6	
Threat:	7.2	6.3	
Point:	3.9	4.7°C	
1000 - 500 mb:	5351	5350	m
1000 - 700 mb:	2842	2842	m
1000 - 850 mb:	1316	1317	m
850 - 500 mb:	4035	4033	m
850 - 700 mb:	1526	1526	m
700 - 500 mb:	2509	2507	m
600 - 400 mb:	2905	2899	m



Test #13 - System Test II – 12UTC on 05/19/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	8797	8605	m AGL
FRZG Lvl:	1134	1177	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	97	m AGL
CCL Hgt:	173	812	m AGL
LCL Hgt:	63	75	m AGL
Water:	1.32	1.28	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	85.0	95.0	
CAP:	--	0.1	
Boyden:	95.1	95.1	
S{TT}:	48.6	47.8	
KO:	4.1	3.0	
LI:	7.0	5.8	
TT:	51.8	52.3	
KI:	20.7	19.5	
Tc:	4.9	10.1	°C
Storm:	202/13	212/13	0-6km
s-rH:	24	19	0-3km
s-rH:	21	21	0-2km
s-rH:	10	23	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	17.6	18.6	
Threat:	7.2	6.3	
Point:	3.9	4.7°C	
1000 - 500 mb:	5351	5350	m
1000 - 700 mb:	2842	2842	m
1000 - 850 mb:	1316	1317	m
850 - 500 mb:	4035	4033	m
850 - 700 mb:	1526	1526	m
700 - 500 mb:	2509	2507	m
600 - 400 mb:	2905	2899	m



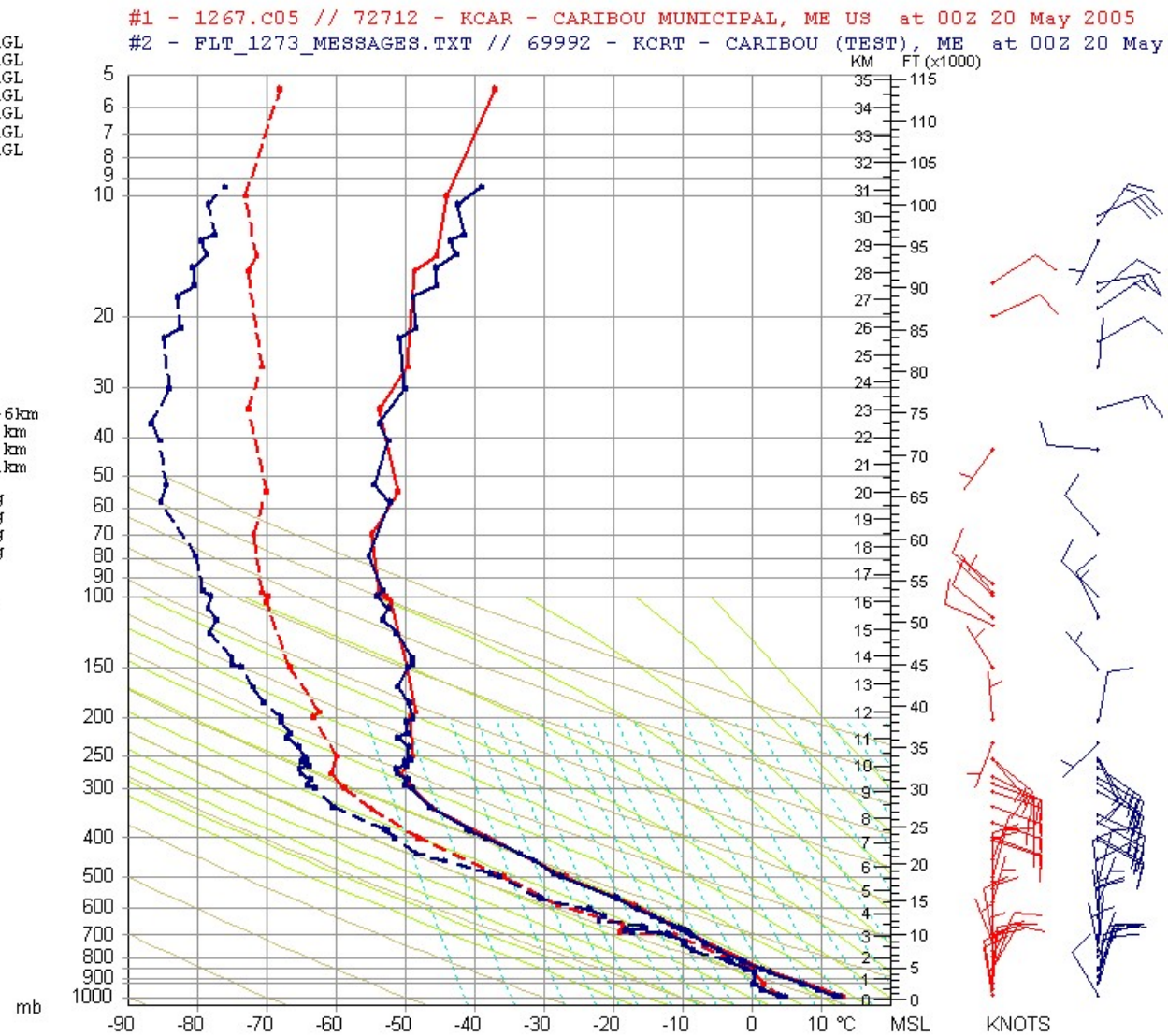
Test #14 - System Test II – 00UTC on 05/20/2005
RWS Version 1.0.4.0

TEST # 14			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	9373	9361	12
Freezing Level (m AGL)	1501	1465	36
LFC Height (m AGL)	1504	1291	213
CCL Height (m AGL)	1383	1512	-129
LCL Height (m AGL)	1123	999	124
Precipitable Water (cm)	1.45	1.35	0.1
Thickness 1000 - 500 mb (m)	5401	5392	9
Thickness 1000 - 700 mb (m)	2876	2871	5
Thickness 1000 - 850 mb (m)	1340	1337	3
Thickness 850 - 500 mb (m)	4061	4055	6
Thickness 850 - 700 mb (m)	1536	1533	3
Thickness 700 - 500 mb (m)	2525	2521	4
Thickness 600 - 400 mb (m)	2920	2916	4
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (No Max Winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

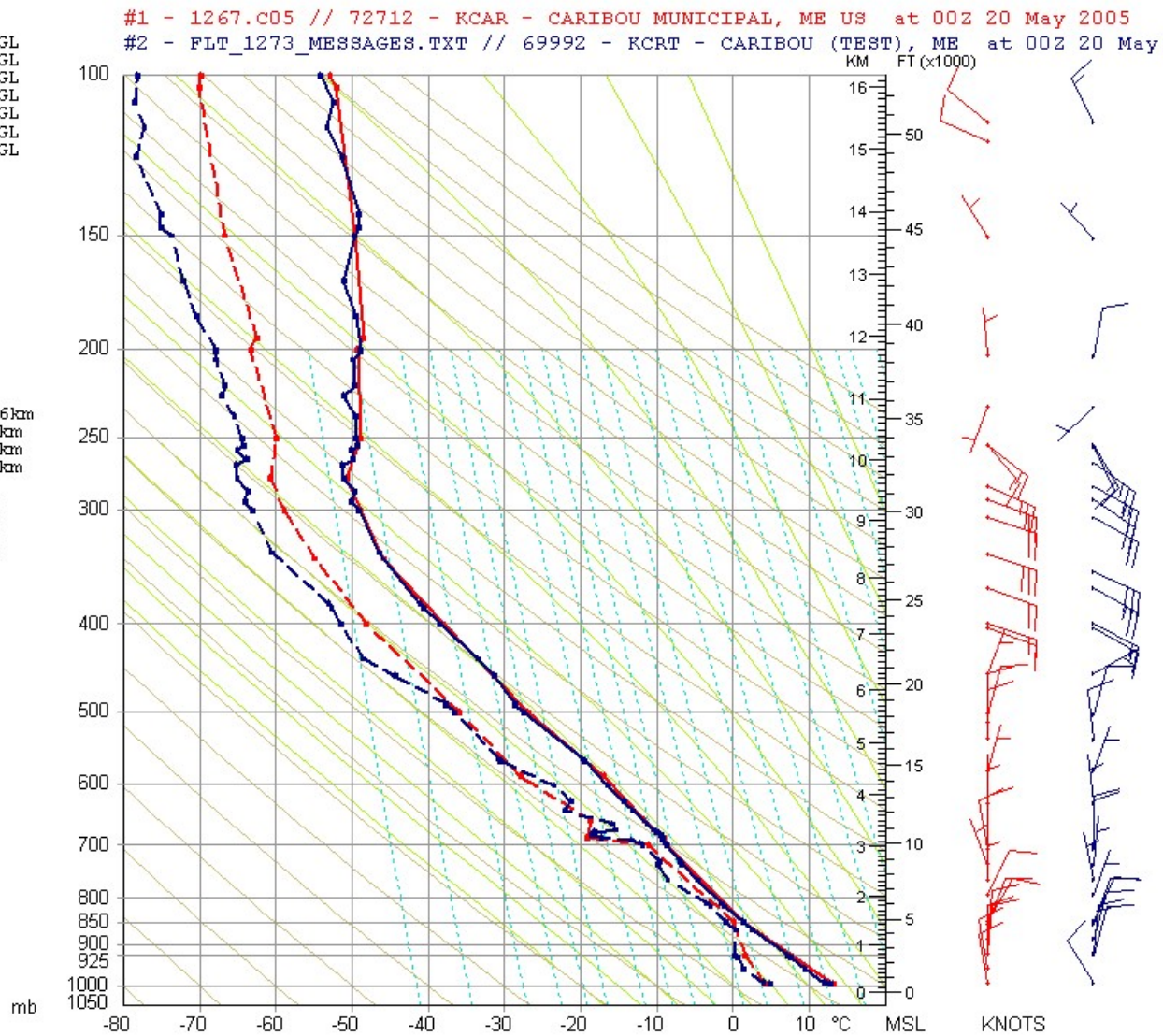
Test #14 - System Test II – 00UTC on 05/20/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9373	9361	m AGL
FRZG Lvl:	1501	1465	m AGL
cclEL Hgt:	2883	2689	m AGL
lfcEL Hgt:	2869	2950	m AGL
LFC Hgt:	1504	1291	m AGL
CCL Hgt:	1383	1512	m AGL
LCL Hgt:	1123	999	m AGL
Water:	1.45	1.35	cm
Hail:	--	--	cm
T2Gust:	25	25	kt
WindEx:	41	40	kt
SWEAT:	156.2	158.0	
CAP:	0.6	0.6	
Boyden:	96.3	95.8	
S{TT}:	52.9	52.3	
KO:	-.8	-1.1	
LI:	0.9	0.2	
TT:	55.3	55.5	
KI:	26.0	24.8	
Tc:	14.3	14.4	°C
Storm:	234/8	243/9	0-6km
s-rH:	16	13	0-3km
s-rH:	25	25	0-2km
s-rH:	7	19	0-1km
CAPE+ only:	8	34	J/kg
CAPE 0-3km:	8	34	J/kg
CIN total:	-13	-9	J/kg
DCAPE 6km:	139	-40	J/kg
VGP 0-4km:	0.01	0.029	
EHI 0-2km:	.0	.0	
MVV:	4	8	m/s
BRN:	--	--	
FOG FSI:	50.6	47.8	
Threat:	11.2	11.2	
Point:	2.6	2.2	°C
1000 - 500 mb:	5401	5392	m
1000 - 700 mb:	2876	2871	m
1000 - 850 mb:	1340	1337	m
850 - 500 mb:	4061	4055	m
850 - 700 mb:	1536	1533	m
700 - 500 mb:	2525	2521	m
600 - 400 mb:	2920	2916	m



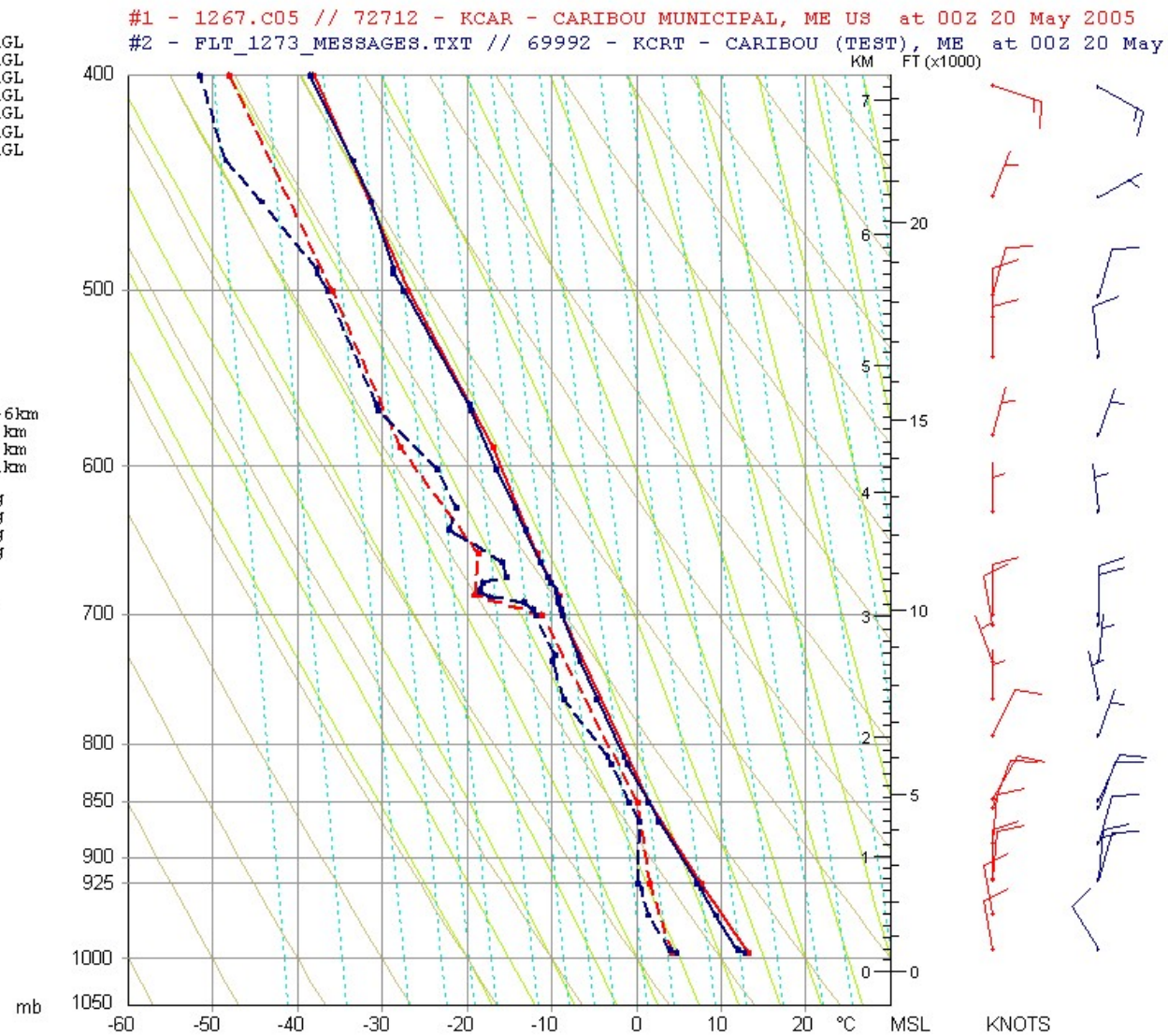
Test #14 - System Test II – 00UTC on 05/20/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9373	9361	m AGL
FRZG Lvl:	1501	1465	m AGL
cclEL Hgt:	2883	2689	m AGL
lfcEL Hgt:	2869	2950	m AGL
LFC Hgt:	1504	1291	m AGL
CCL Hgt:	1383	1512	m AGL
LCL Hgt:	1123	999	m AGL
Water:	1.45	1.35	cm
Hail:	--	--	cm
T2Gust:	25	25	kt
WindEx:	41	40	kt
SWEAT:	156.2	158.0	
CAP:	0.6	0.6	
Boyden:	96.3	95.8	
S{TT}:	52.9	52.3	
KO:	-.8	-1.1	
LI:	0.9	0.2	
TT:	55.3	55.5	
KI:	26.0	24.8	
Tc:	14.3	14.4	°C
Storm:	234/8	243/9	0-6km
s-rH:	16	13	0-3km
s-rH:	25	25	0-2km
s-rH:	7	19	0-1km
CAPE+ only:	8	34	J/kg
CAPE 0-3km:	8	34	J/kg
CIN total:	-13	-9	J/kg
DCAPE 6km:	139	-40	J/kg
VGP 0-4km:	0.01	0.029	
EHI 0-2km:	.0	.0	
MVV:	4	8	m/s
BRN:	--	--	
FOG FSI:	50.6	47.8	
Threat:	11.2	11.2	
Point:	2.6	2.2	°C
1000 - 500 mb:	5401	5392	m
1000 - 700 mb:	2876	2871	m
1000 - 850 mb:	1340	1337	m
850 - 500 mb:	4061	4055	m
850 - 700 mb:	1536	1533	m
700 - 500 mb:	2525	2521	m
600 - 400 mb:	2920	2916	m



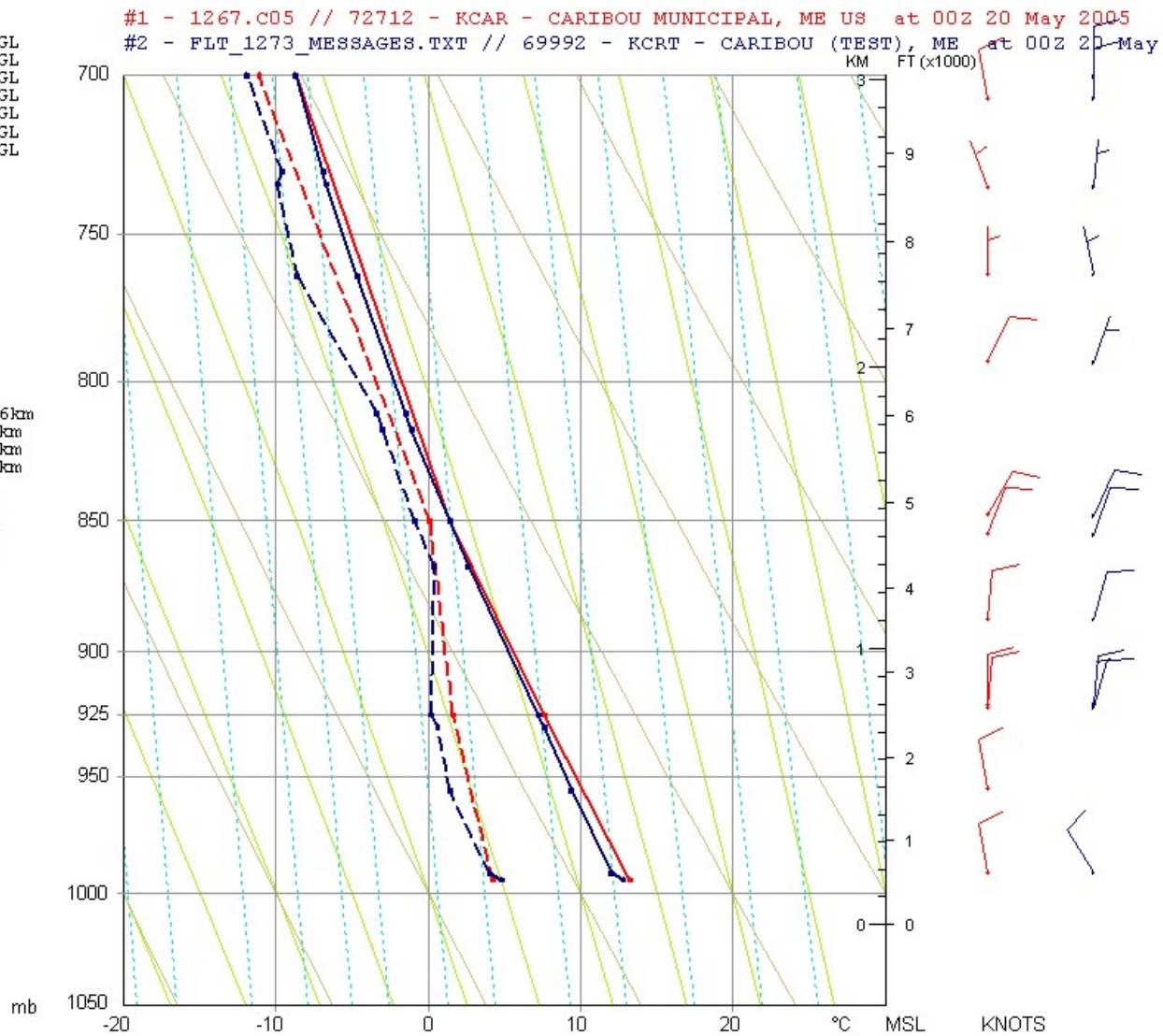
Test #14 - System Test II – 00UTC on 05/20/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9373	9361	m AGL
FRZG Lvl:	1501	1465	m AGL
cclEL Hgt:	2883	2689	m AGL
lfcEL Hgt:	2869	2950	m AGL
LFC Hgt:	1504	1291	m AGL
CCL Hgt:	1383	1512	m AGL
LCL Hgt:	1123	999	m AGL
Water:	1.45	1.35	cm
Hail:	--	--	cm
T2Gust:	25	25	kt
WindEx:	41	40	kt
SWEAT:	156.2	158.0	
CAP:	0.6	0.6	
Boyden:	96.3	95.8	
S{TT}:	52.9	52.3	
KO:	-.8	-1.1	
LI:	0.9	0.2	
TT:	55.3	55.5	
KI:	26.0	24.8	
Tc:	14.3	14.4	°C
Storm:	234/8	243/9	0-6km
s-rH:	16	13	0-3km
s-rH:	25	25	0-2km
s-rH:	7	19	0-1km
CAPE+ only:	8	34	J/kg
CAPE 0-3km:	8	34	J/kg
CIN total:	-13	-9	J/kg
DCAPE 6km:	139	-40	J/kg
VGP 0-4km:	0.01	0.029	
EHI 0-2km:	.0	.0	
MVV:	4	8	m/s
BRN:	--	--	
FOG FSI:	50.6	47.8	
Threat:	11.2	11.2	
Point:	2.6	2.2	°C
1000 - 500 mb:	5401	5392	m
1000 - 700 mb:	2876	2871	m
1000 - 850 mb:	1340	1337	m
850 - 500 mb:	4061	4055	m
850 - 700 mb:	1536	1533	m
700 - 500 mb:	2525	2521	m
600 - 400 mb:	2920	2916	m



Test #14 - System Test II – 00UTC on 05/20/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9373	9361	m AGL
FRZG Lvl:	1501	1465	m AGL
cclEL Hgt:	2883	2689	m AGL
lfcEL Hgt:	2869	2950	m AGL
LFC Hgt:	1504	1291	m AGL
CCL Hgt:	1383	1512	m AGL
LCL Hgt:	1123	999	m AGL
Water:	1.45	1.35	cm
Hail:	--	--	cm
T2Gust:	25	25	kt
WindEx:	41	40	kt
SWEAT:	156.2	158.0	
CAP:	0.6	0.6	
Boyden:	96.3	95.8	
S{TT}:	52.9	52.3	
KO:	-.8	-1.1	
LI:	0.9	0.2	
TT:	55.3	55.5	
KI:	26.0	24.8	
Tc:	14.3	14.4	°C
Storm:	234/8	243/9	0-6km
s-rH:	16	13	0-3km
s-rH:	25	25	0-2km
s-rH:	7	19	0-1km
CAPE+ only:	8	34	J/kg
CAPE 0-3km:	8	34	J/kg
CIN total:	-13	-9	J/kg
DCAPE 6km:	139	-40	J/kg
VGP 0-4km:	0.01	0.029	
EHI 0-2km:	.0	.0	
MVV:	4	8	m/s
BRN:	--	--	
FOG FSI:	50.6	47.8	
Threat:	11.2	11.2	
Point:	2.6	2.2	°C
1000 - 500 mb:	5401	5392	m
1000 - 700 mb:	2876	2871	m
1000 - 850 mb:	1340	1337	m
850 - 500 mb:	4061	4055	m
850 - 700 mb:	1536	1533	m
700 - 500 mb:	2525	2521	m
600 - 400 mb:	2920	2916	m



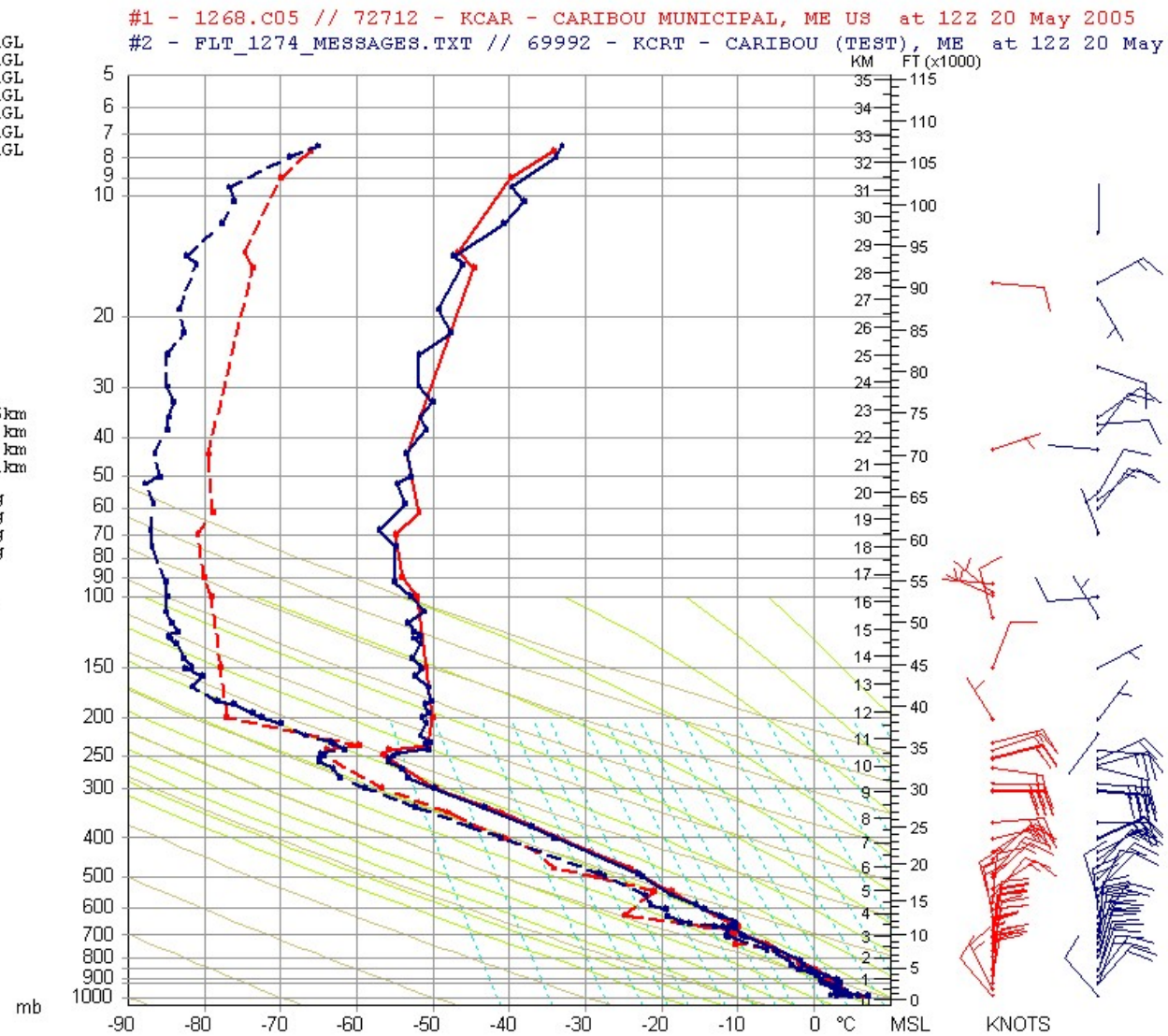
Test #15 - System Test II – 12UTC on 05/20/2005
RWS Version 1.0.4.0

TEST # 15			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10129	9858	271
Freezing Level (m AGL)	1269	1185	84
LFC Height (m AGL)	225	288	-63
CCL Height (m AGL)	807	1052	-245
LCL Height (m AGL)	188	288	-100
Precipitable Water (cm)	1.56	1.52	0.04
Thickness 1000 - 500 mb (m)	5393	5393	0
Thickness 1000 - 700 mb (m)	2861	2860	1
Thickness 1000 - 850 mb (m)	1319	1319	0
Thickness 850 - 500 mb (m)	4074	4074	0
Thickness 850 - 700 mb (m)	1532	1531	1
Thickness 700 - 500 mb (m)	2543	2543	0
Thickness 600 - 400 mb (m)	2968	2961	7
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (No Max Winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/ Agree)	Agree	Agree	

NC= Not Calculated

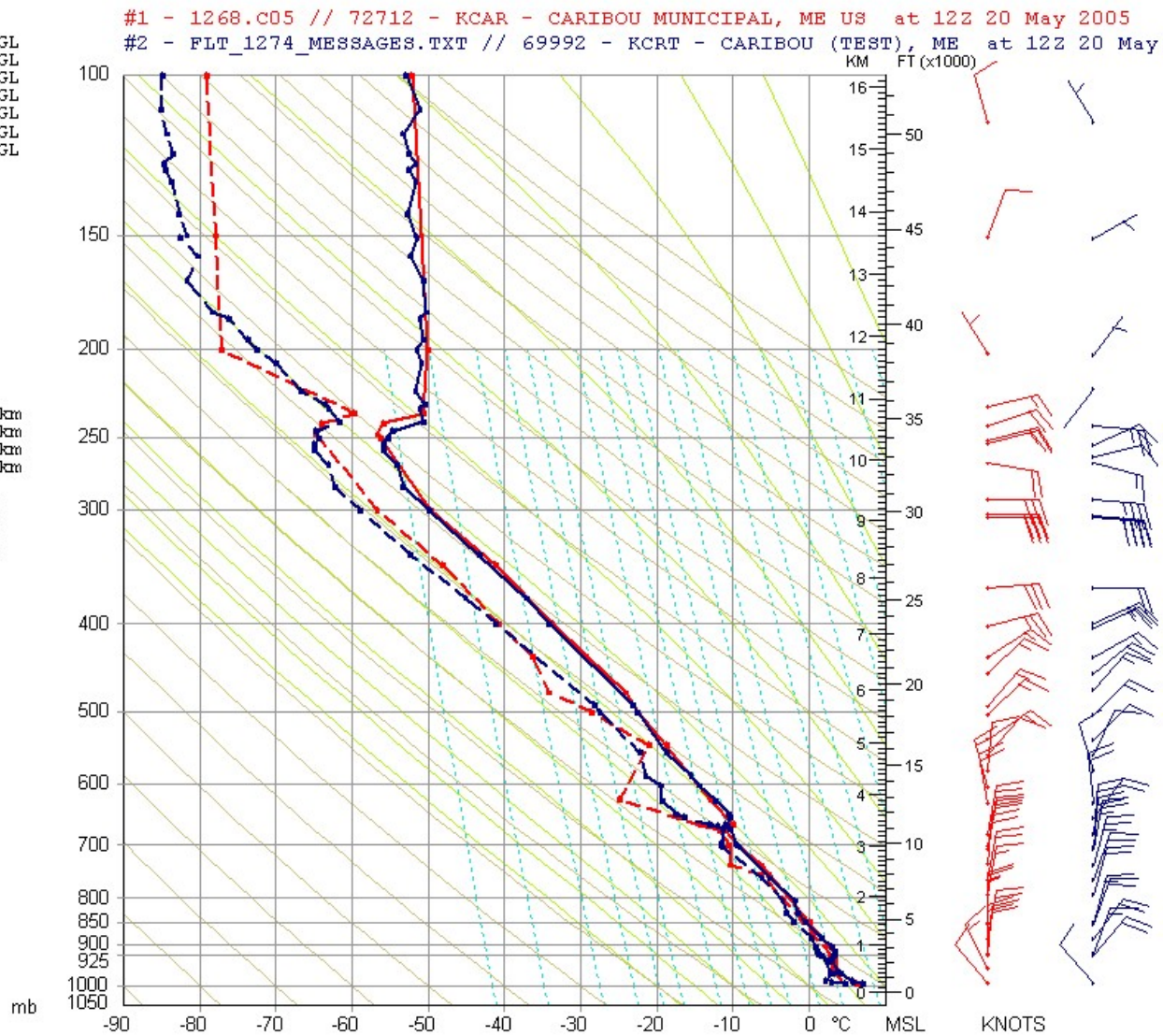
Test #15 - System Test II – 12UTC on 05/20/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10129	9858	m AGL
FRZG Lvl:	1269	1185	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	225	288	m AGL
CCL Hgt:	807	1052	m AGL
LCL Hgt:	188	288	m AGL
Water:	1.56	1.52	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	48.0	51.0	
CAP:	0.1	-0.6	
Boyden:	94.6	94.5	
S{TT}:	41.3	34.5	
KO:	6.6	6.8	
LI:	10.3	9.6	
TT:	44.3	42.5	
KI:	20.8	18.0	
Tc:	10.2	11.2	°C
Storm:	80/2	86/8	0-6km
s-rH:	58	15	0-3km
s-rH:	53	39	0-2km
s-rH:	55	58	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	31.4	36.6	
Threat:	7.3	8.5	
Point:	5.2	3.3°C	
1000 - 500 mb:	5393	5393	m
1000 - 700 mb:	2851	2850	m
1000 - 850 mb:	1319	1319	m
850 - 500 mb:	4074	4074	m
850 - 700 mb:	1532	1531	m
700 - 500 mb:	2543	2543	m
600 - 400 mb:	2968	2961	m



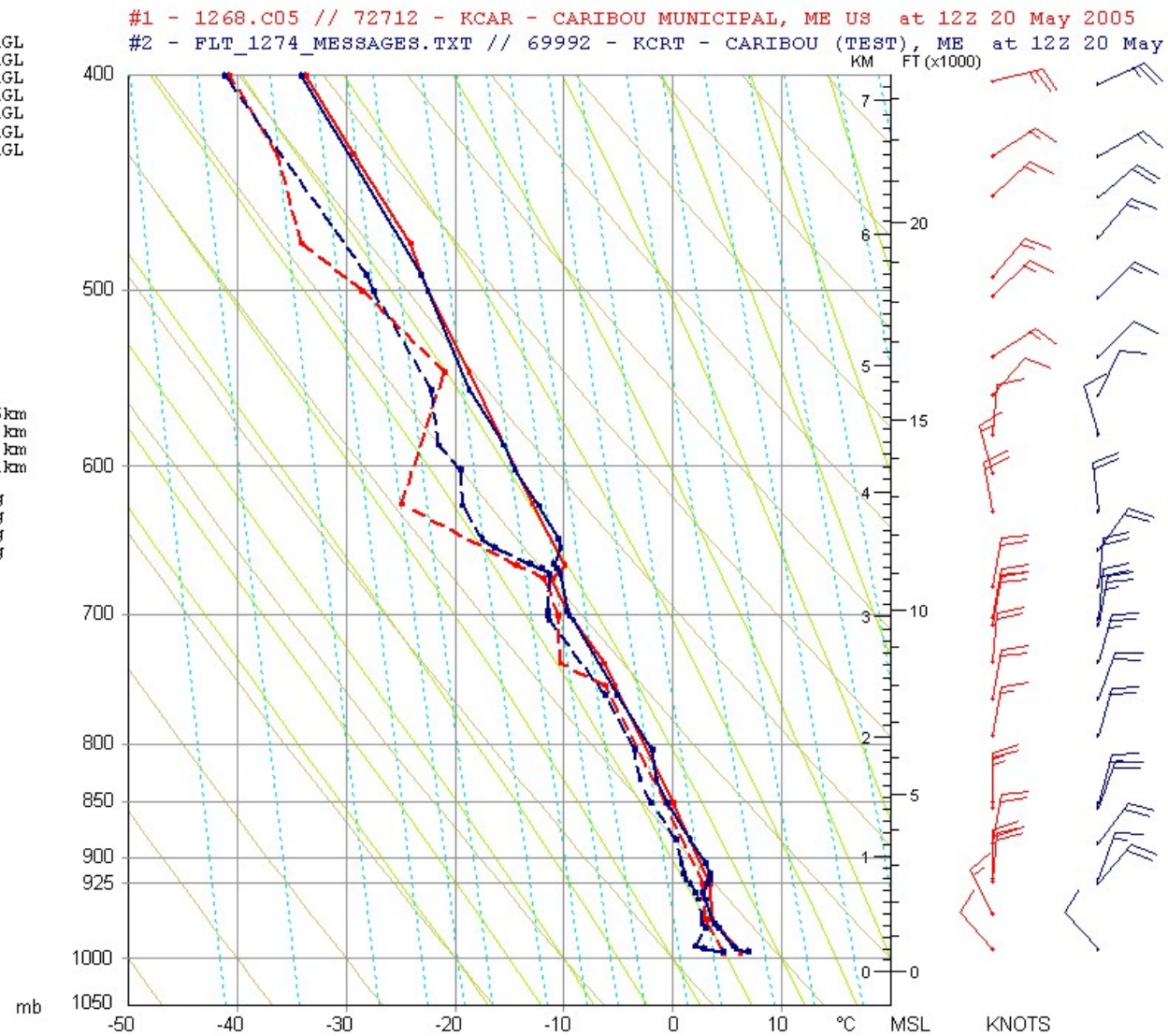
Test #15 - System Test II – 12UTC on 05/20/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10129	9858	m AGL
FRZG Lvl:	1269	1185	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	225	288	m AGL
CCL Hgt:	807	1052	m AGL
LCL Hgt:	188	288	m AGL
Water:	1.56	1.52	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	48.0	51.0	
CAP:	0.1	-0.6	
Boyden:	94.6	94.5	
S{TT}:	41.3	34.5	
KO:	6.6	6.8	
LI:	10.3	9.6	
TT:	44.3	42.5	
KI:	20.8	18.0	
Tc:	10.2	11.2	°C
Storm:	80/2	86/8	0-6km
s-rH:	58	15	0-3km
s-rH:	53	39	0-2km
s-rH:	55	58	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	31.4	36.6	
Threat:	7.3	8.5	
Point:	5.2	3.3°C	
1000 - 500 mb:	5393	5393	m
1000 - 700 mb:	2851	2850	m
1000 - 850 mb:	1319	1319	m
850 - 500 mb:	4074	4074	m
850 - 700 mb:	1532	1531	m
700 - 500 mb:	2543	2543	m
600 - 400 mb:	2968	2961	m



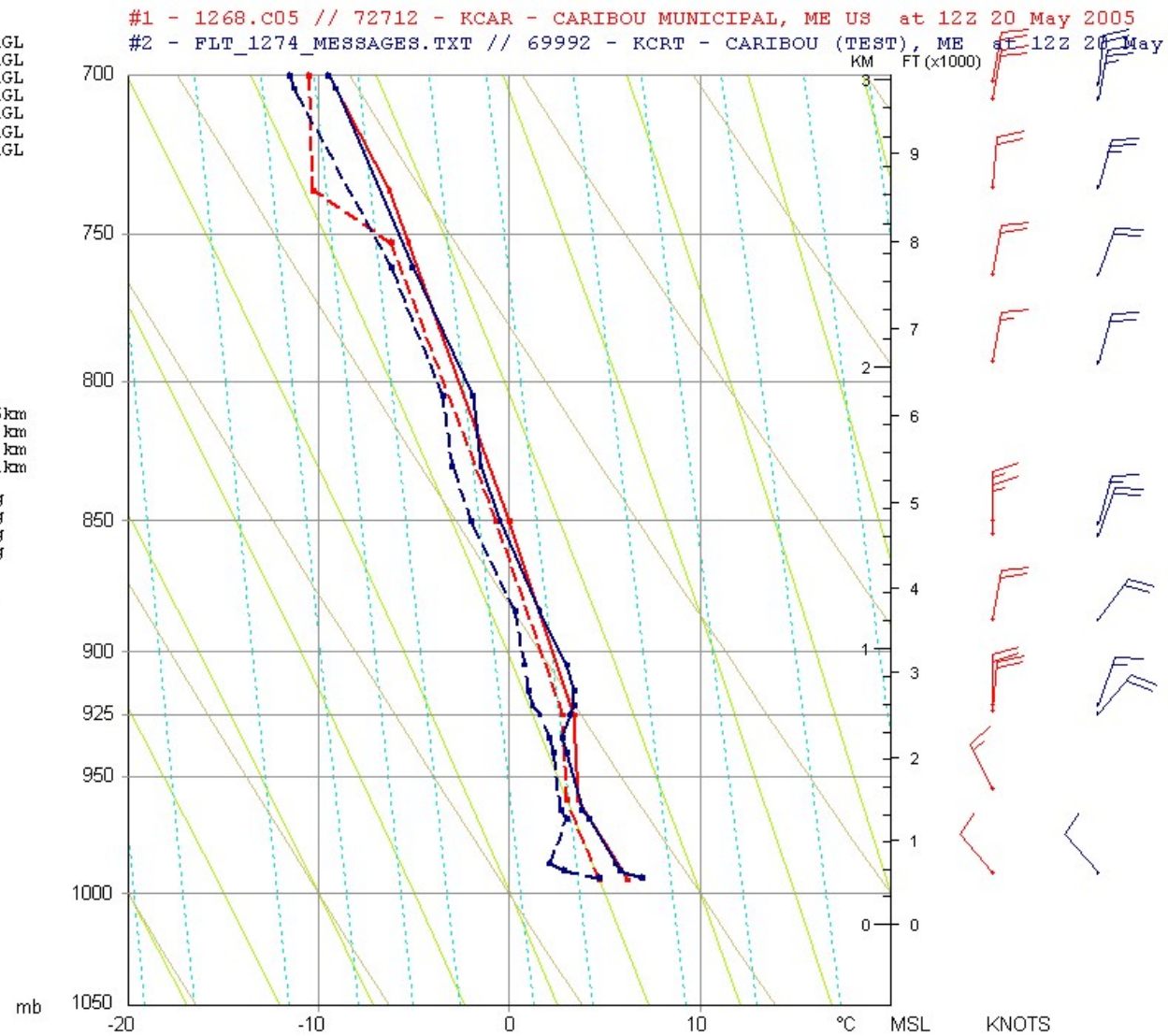
Test #15 - System Test II – 12UTC on 05/20/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10129	9858	m AGL
FRZG Lvl:	1269	1185	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	225	288	m AGL
CCL Hgt:	807	1052	m AGL
LCL Hgt:	188	288	m AGL
Water:	1.56	1.52	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	48.0	51.0	
CAP:	0.1	-0.6	
Boyden:	94.6	94.5	
S{TT}:	41.3	34.5	
KO:	6.6	6.8	
LI:	10.3	9.6	
TT:	44.3	42.5	
KI:	20.8	18.0	
Tc:	10.2	11.2	°C
Storm:	80/2	86/8	0-6km
s-rH:	58	15	0-3km
s-rH:	53	39	0-2km
s-rH:	55	58	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	31.4	36.6	
Threat:	7.3	8.5	
Point:	5.2	3.3°C	
1000 - 500 mb:	5393	5393	m
1000 - 700 mb:	2851	2850	m
1000 - 850 mb:	1319	1319	m
850 - 500 mb:	4074	4074	m
850 - 700 mb:	1532	1531	m
700 - 500 mb:	2543	2543	m
600 - 400 mb:	2968	2961	m

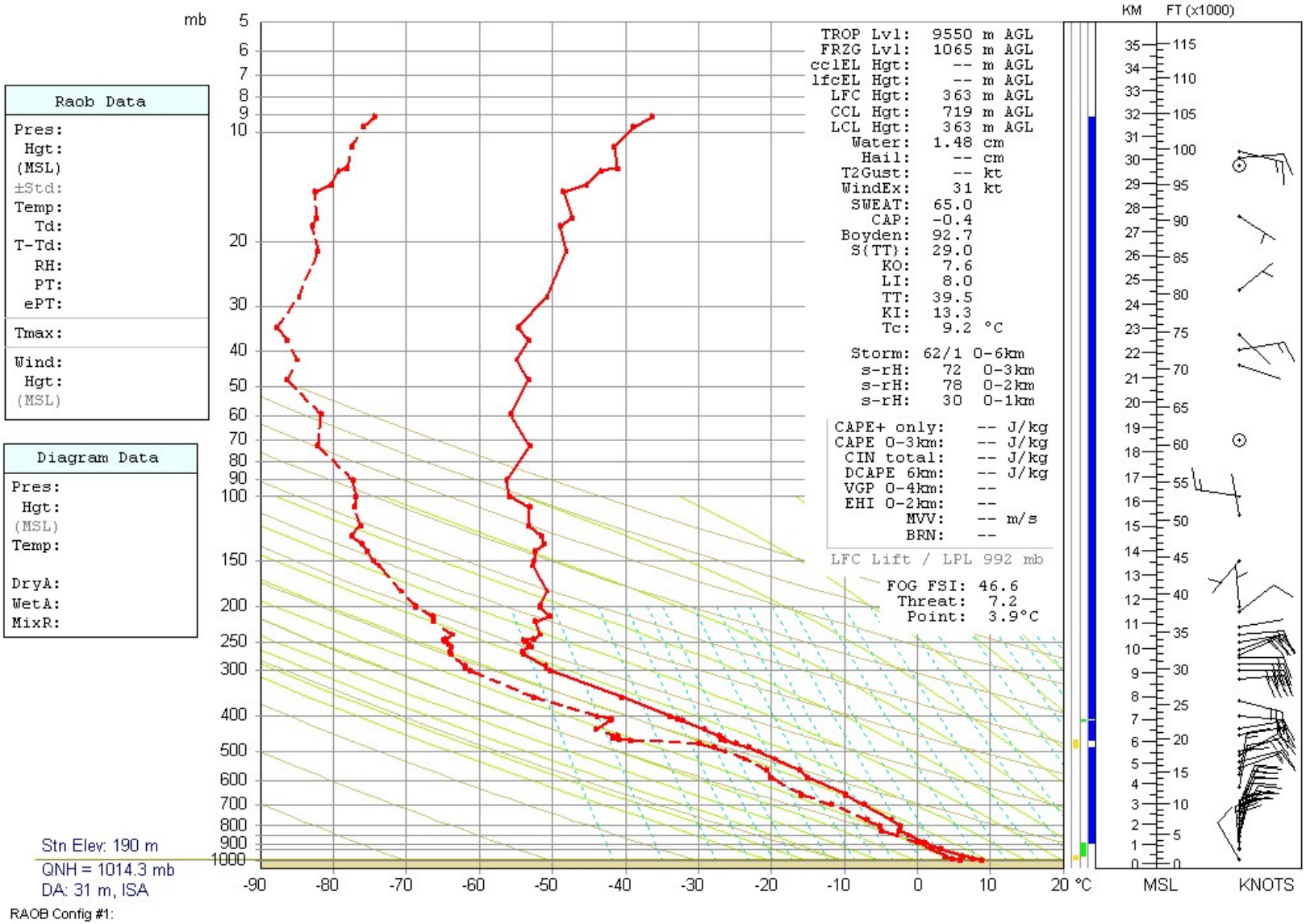


Test #15 - System Test II – 12UTC on 05/20/2005
RWS Version 1.0.4.0

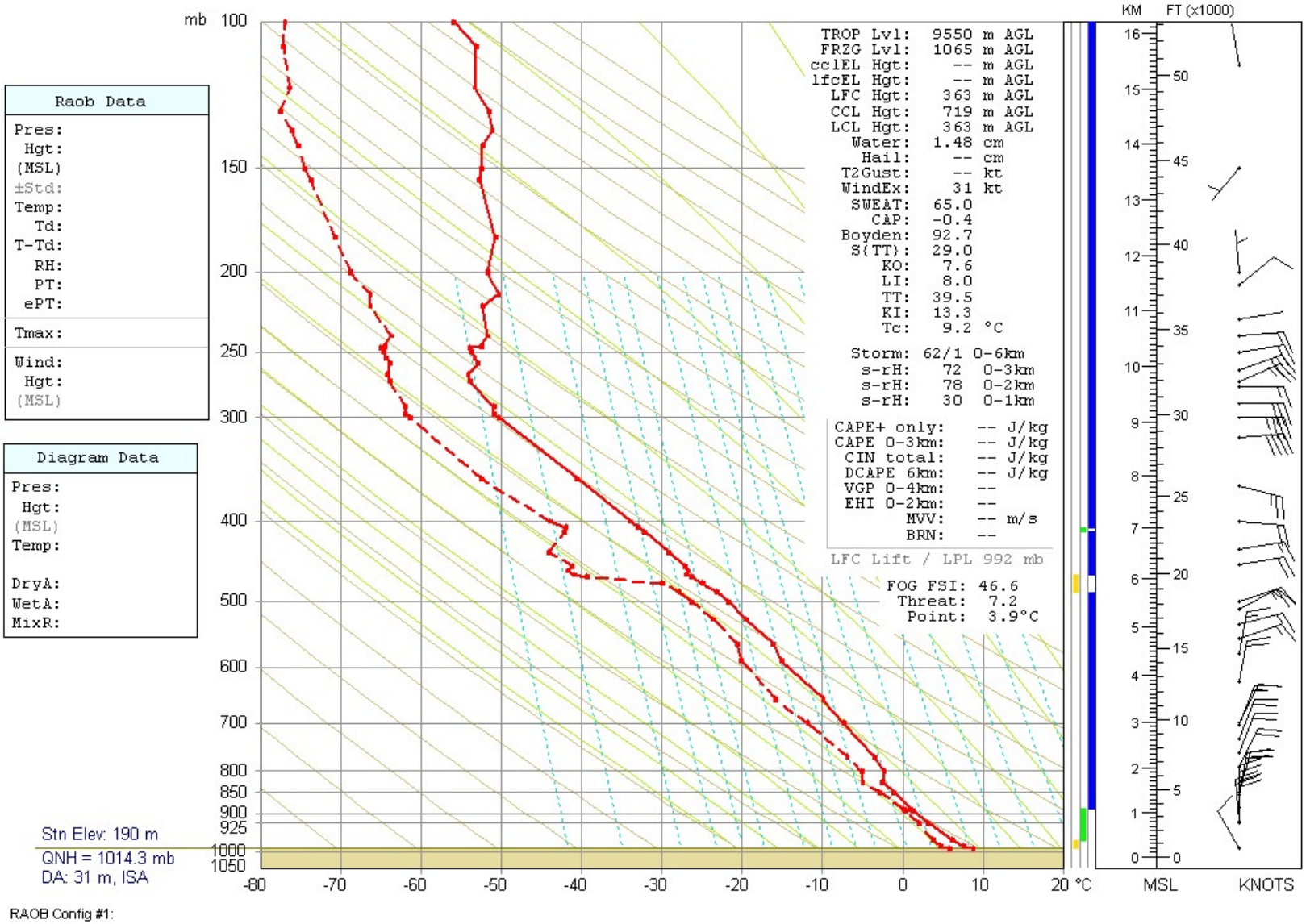
	#1	#2	
TROP Lvl:	10129	9858	m AGL
FRZG Lvl:	1269	1185	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	225	288	m AGL
CCL Hgt:	807	1052	m AGL
LCL Hgt:	188	288	m AGL
Water:	1.56	1.52	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	7	kt
SWEAT:	48.0	51.0	
CAP:	0.1	-0.6	
Boyden:	94.6	94.5	
S{TT}:	41.3	34.5	
KO:	6.6	6.8	
LI:	10.3	9.6	
TT:	44.3	42.5	
KI:	20.8	18.0	
Tc:	10.2	11.2	°C
Storm:	80/2	86/8	0-6km
s-rH:	58	15	0-3km
s-rH:	53	39	0-2km
s-rH:	55	58	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	31.4	36.6	
Threat:	7.3	8.5	
Point:	5.2	3.3°C	
1000 - 500 mb:	5393	5393	m
1000 - 700 mb:	2851	2850	m
1000 - 850 mb:	1319	1319	m
850 - 500 mb:	4074	4074	m
850 - 700 mb:	1532	1531	m
700 - 500 mb:	2543	2543	m
600 - 400 mb:	2968	2961	m



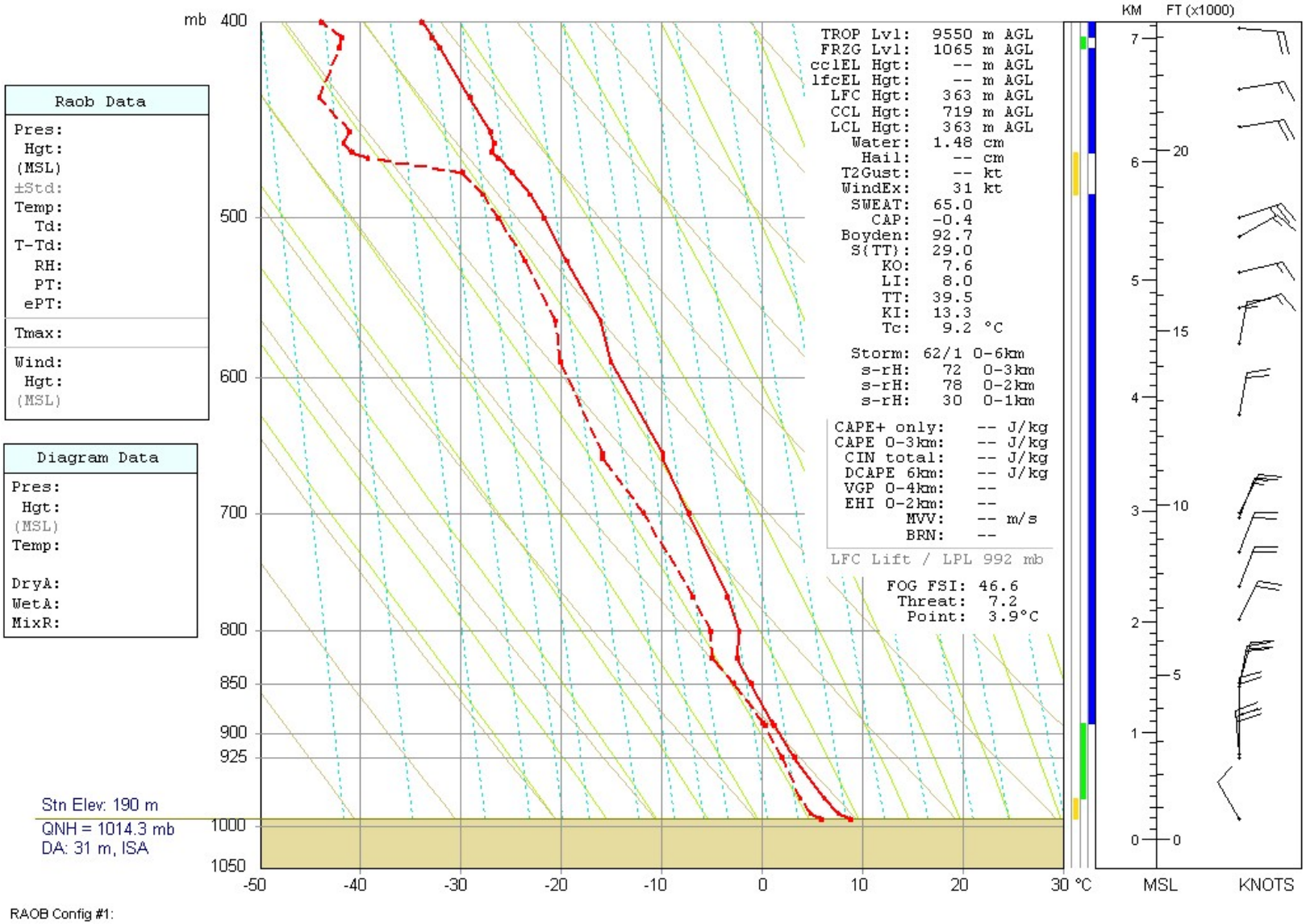
Test #16 System Test II – 15 UTC on 05/20/2005
RWS Version 1.0.4.0



Test #16 System Test II – 15 UTC on 05/20/2005
RWS Version 1.0.4.0

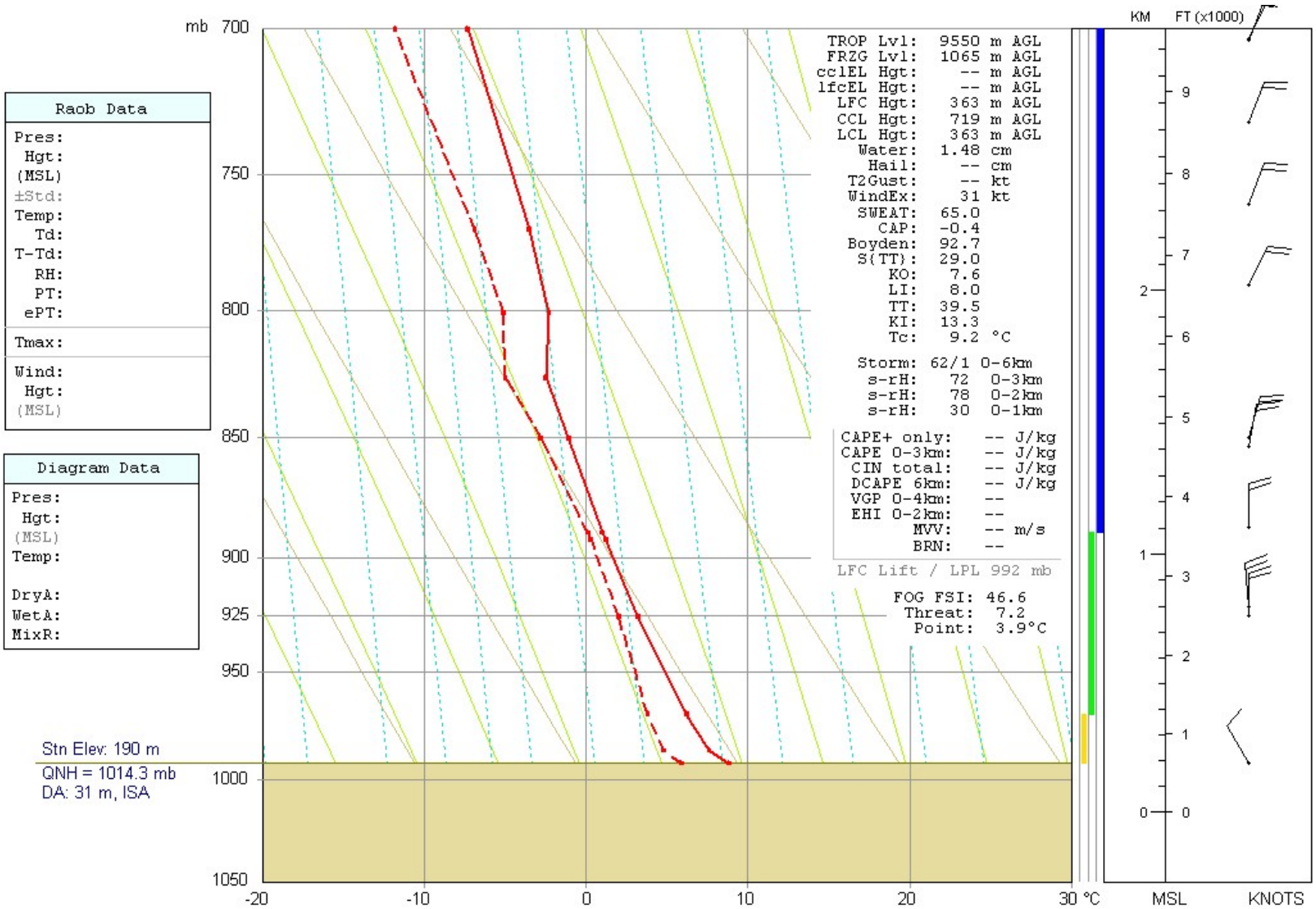


Test #16 System Test II – 15 UTC on 05/20/2005
RWS Version 1.0.4.0



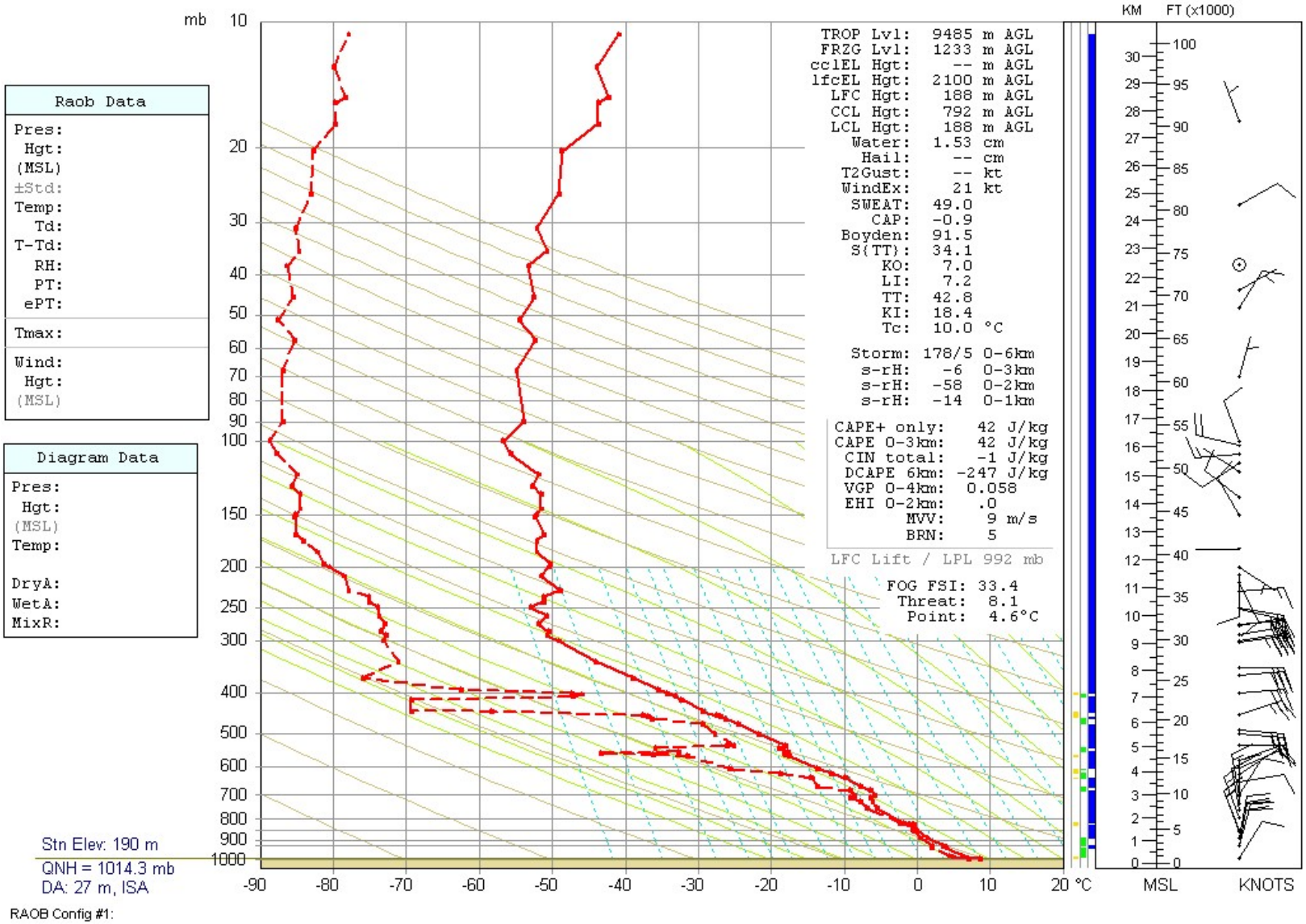
RAOB Config #1:

Test #16 System Test II – 15 UTC on 05/20/2005
RWS Version 1.0.4.0

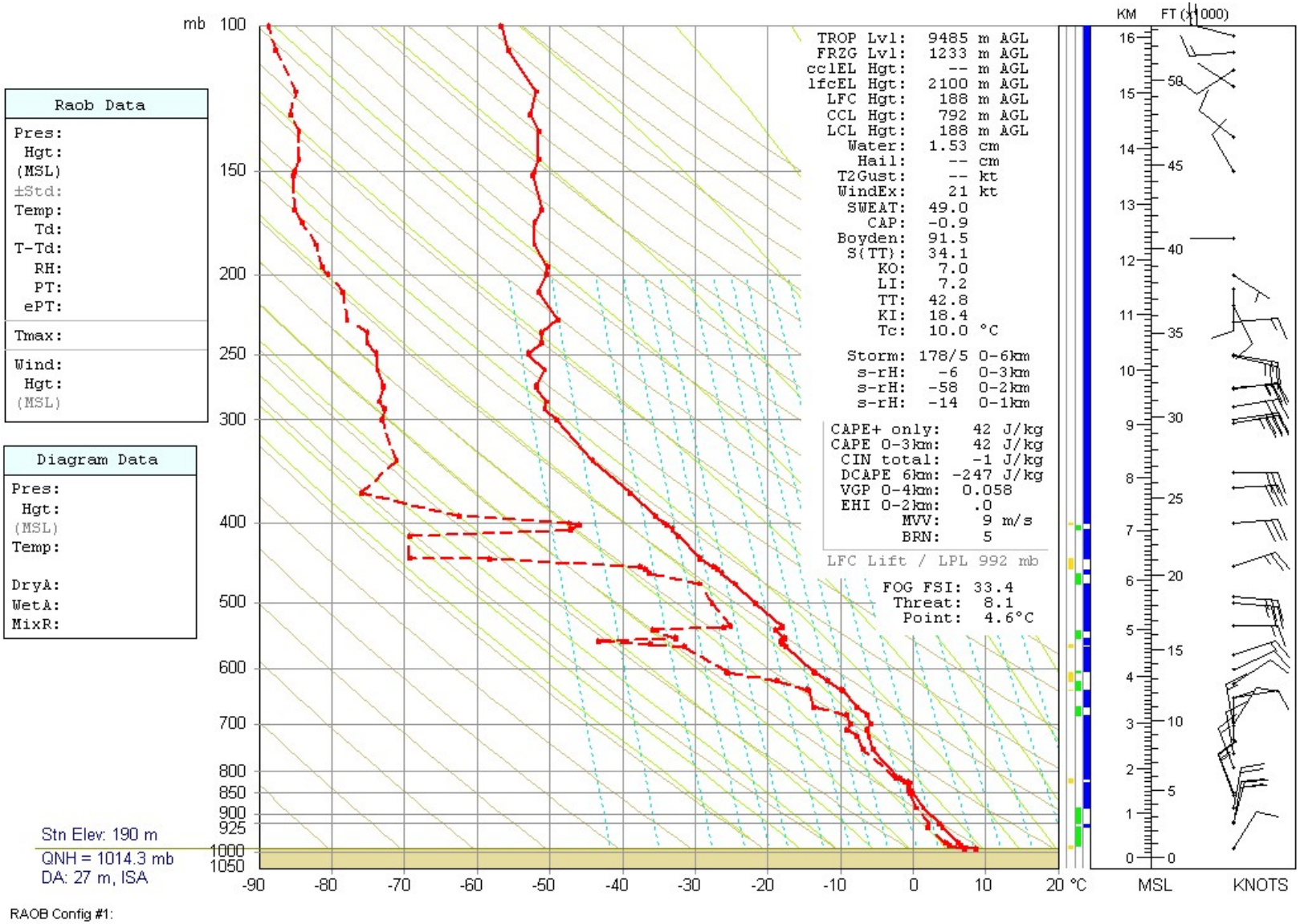


RAOB Config #1:

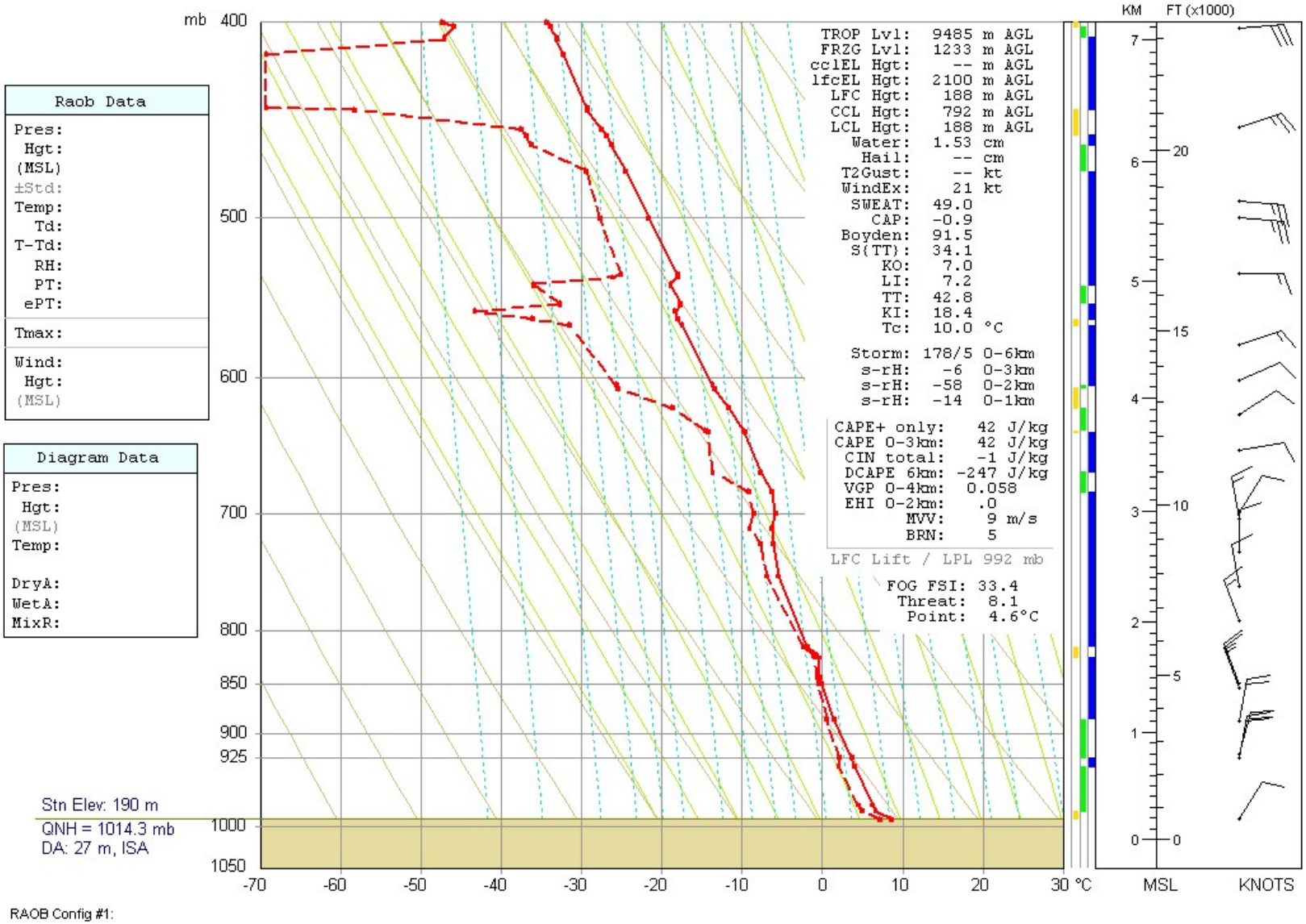
Test #17 System Test II – 20 UTC on 05/20/2005
RWS Version 1.0.4.0



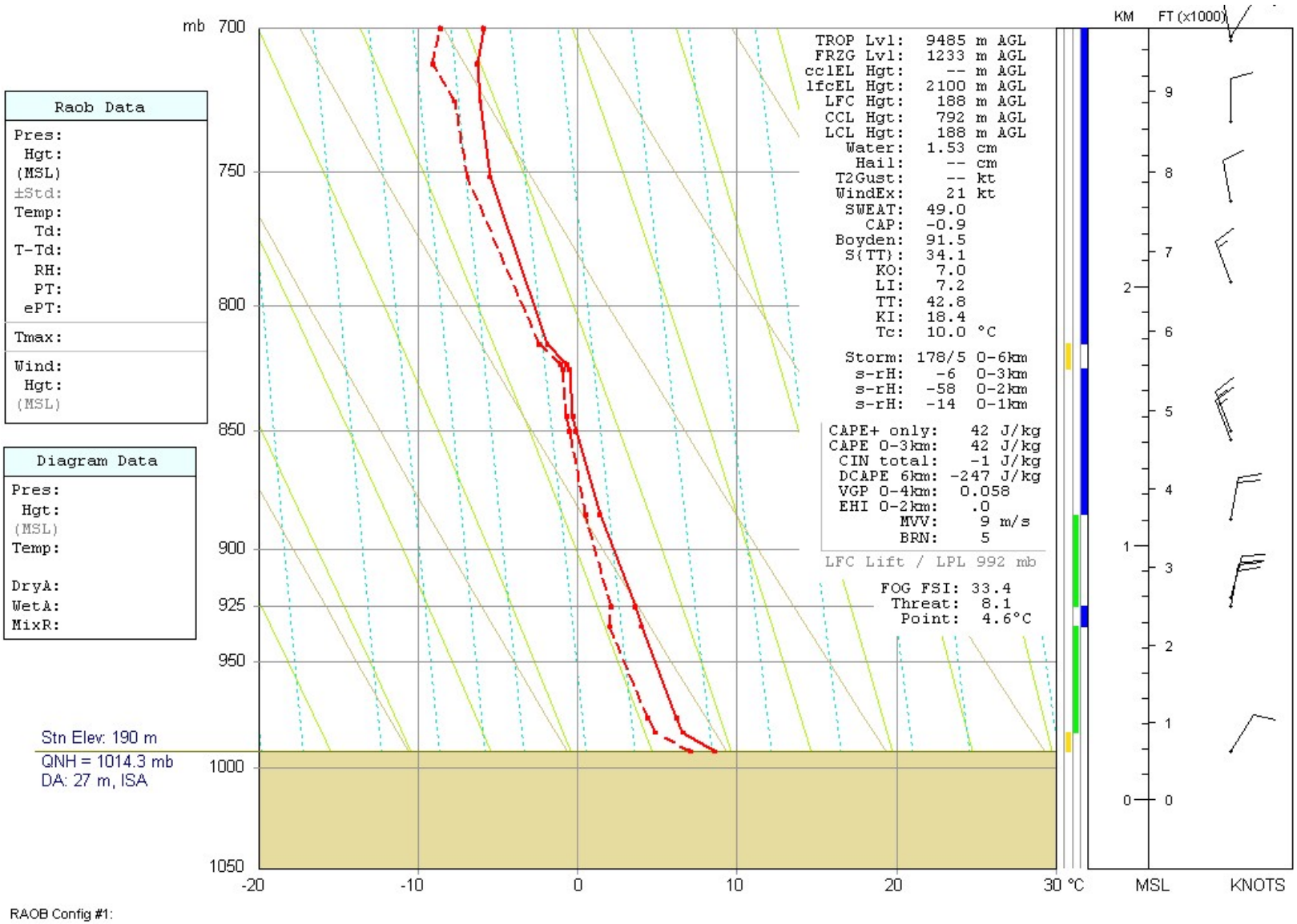
Test #17 System Test II – 20 UTC on 05/20/2005
RWS Version 1.0.4.0



Test #17 System Test II – 20 UTC on 05/20/2005
RWS Version 1.0.4.0



Test #17 System Test II – 20 UTC on 05/20/2005
RWS Version 1.0.4.0



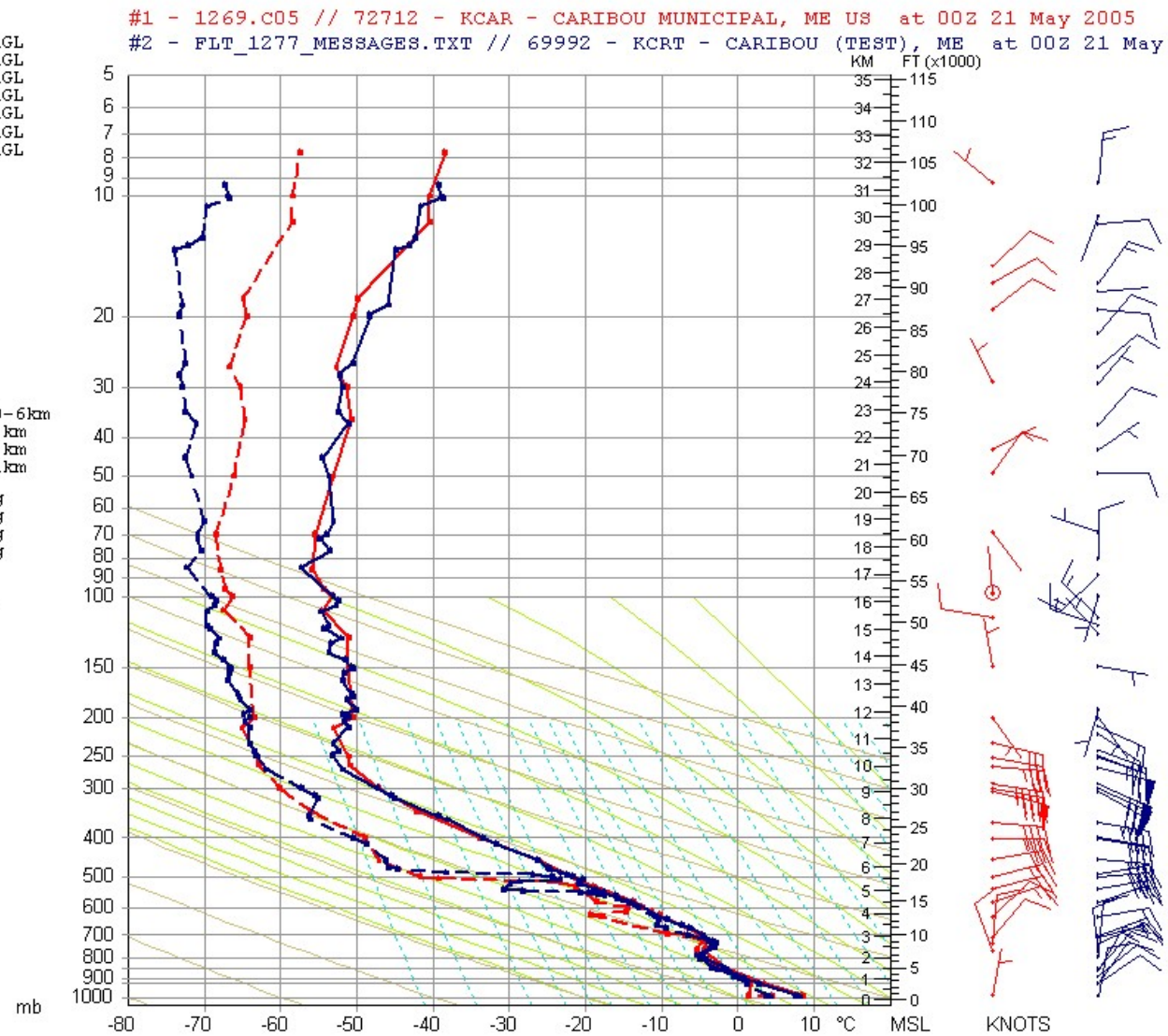
Test #18 - System Test II – 00UTC on 05/21/2005
RWS Version 1.0.4.0

TEST # 18			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	9791	10149	-358
Freezing Level (m AGL)	1054	945	109
LFC Height (m AGL)	737	585	152
CCL Height (m AGL)	1008	769	239
LCL Height (m AGL)	513	500	13
Precipitable Water (cm)	1.57	1.67	-0.1
Thickness 1000 - 500 mb (m)	5424	5419	5
Thickness 1000 - 700 mb (m)	2857	2854	3
Thickness 1000 - 850 mb (m)	1320	1318	2
Thickness 850 - 500 mb (m)	4103	4101	2
Thickness 850 - 700 mb (m)	1536	1536	0
Thickness 700 - 500 mb (m)	2567	2565	2
Thickness 600 - 400 mb (m)	2976	2974	2
Wind Shear Below	NC	18	NC
Wind Shear Above	NC	27	NC
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/ Agree)	Agree	Agree	

NC= Not Calculated

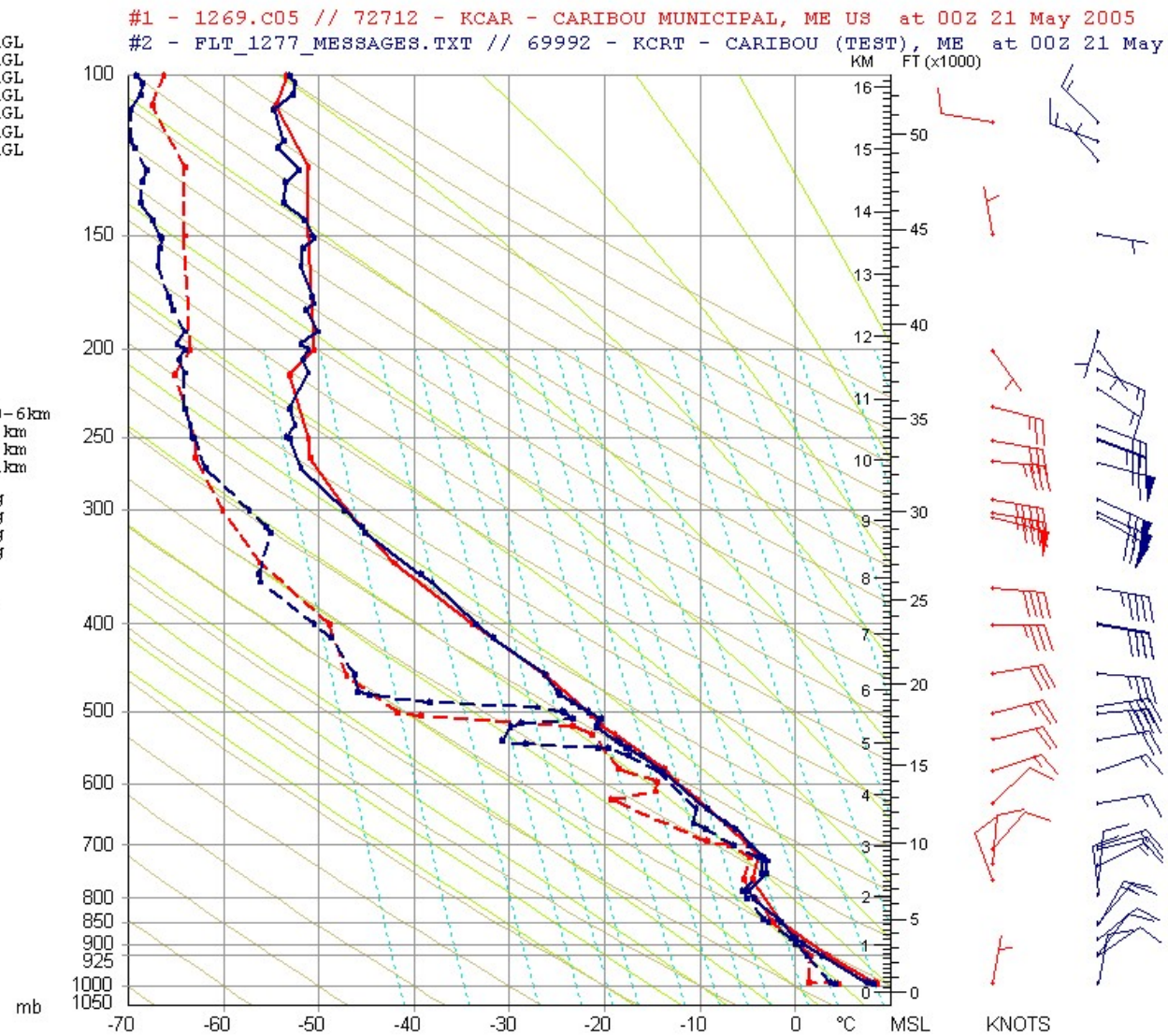
Test #18 - System Test II – 00UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9791	10149	m AGL
FRZG Lvl:	1054	945	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	737	585	m AGL
CCL Hgt:	1008	769	m AGL
LCL Hgt:	513	500	m AGL
Water:	1.57	1.67	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	29	31	kt
SWEAT:	42.6	66.0	
CAP:	0.4	0.2	
Boyden:	90.6	90.1	
S{TT}:	31.5	31.3	
KO:	10.4	12.8	
LI:	9.3	9.9	
TT:	39.6	39.1	
KI:	15.8	15.6	
Tc:	10.2	8.8	°C
Storm:	132/11	126/16	0-6km
s-rH:	29	47	0-3km
s-rH:	0	-17	0-2km
s-rH:	0	29	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	37.2	41.4	
Threat:	8.4	8.1	
Point:	2.7	2.8°C	
1000 - 500 mb:	5424	5419	m
1000 - 700 mb:	2857	2854	m
1000 - 850 mb:	1320	1318	m
850 - 500 mb:	4103	4101	m
850 - 700 mb:	1536	1536	m
700 - 500 mb:	2567	2565	m
600 - 400 mb:	2976	2974	m



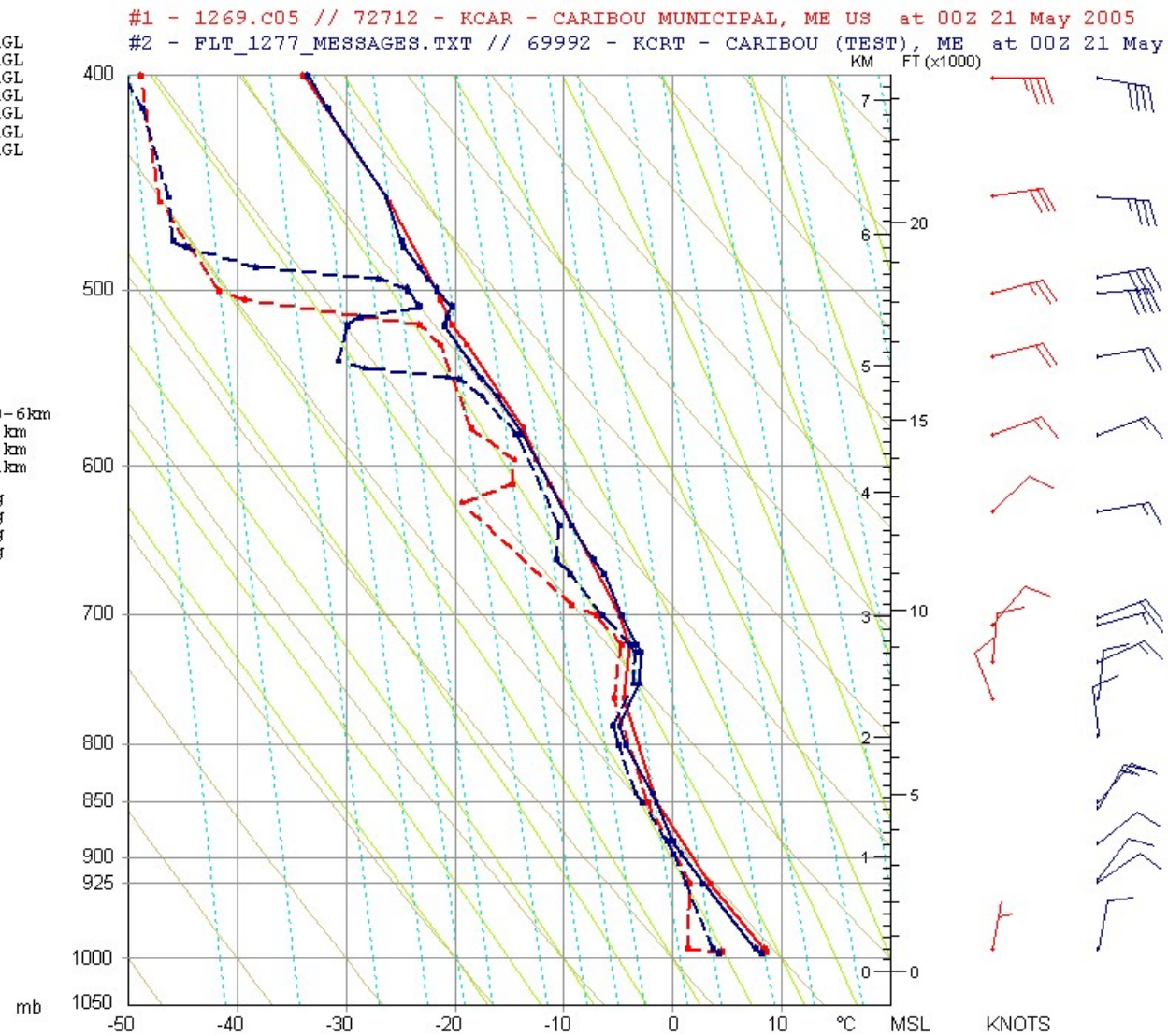
Test #18 - System Test II – 00UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9791	10149	m AGL
FRZG Lvl:	1054	945	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	737	585	m AGL
CCL Hgt:	1008	769	m AGL
LCL Hgt:	513	500	m AGL
Water:	1.57	1.67	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	29	31	kt
SWEAT:	42.6	66.0	
CAP:	0.4	0.2	
Boyden:	90.6	90.1	
S{TT}:	31.5	31.3	
KO:	10.4	12.8	
LI:	9.3	9.9	
TT:	39.6	39.1	
KI:	15.8	15.6	
Tc:	10.2	8.8	°C
Storm:	132/11	126/16	0-6km
s-rH:	29	47	0-3km
s-rH:	0	-17	0-2km
s-rH:	0	29	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	37.2	41.4	
Threat:	8.4	8.1	
Point:	2.7	2.8°C	
1000 - 500 mb:	5424	5419	m
1000 - 700 mb:	2857	2854	m
1000 - 850 mb:	1320	1318	m
850 - 500 mb:	4103	4101	m
850 - 700 mb:	1536	1536	m
700 - 500 mb:	2567	2565	m
600 - 400 mb:	2976	2974	m



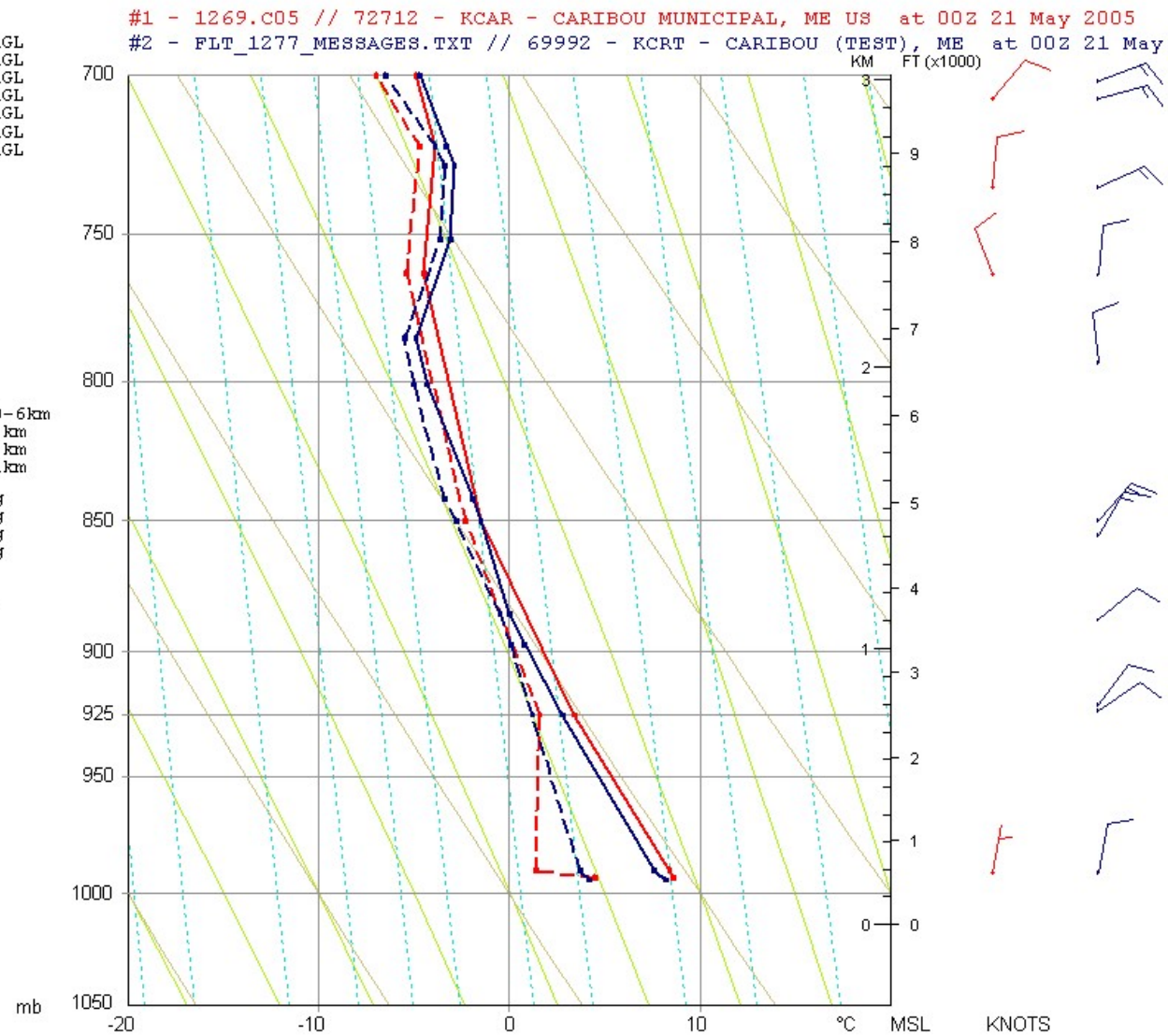
Test #18 - System Test II – 00UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9791	10149	m AGL
FRZG Lvl:	1054	945	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	737	585	m AGL
CCL Hgt:	1008	769	m AGL
LCL Hgt:	513	500	m AGL
Water:	1.57	1.67	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	29	31	kt
SWEAT:	42.6	66.0	
CAP:	0.4	0.2	
Boyden:	90.6	90.1	
S{TT}:	31.5	31.3	
KO:	10.4	12.8	
LI:	9.3	9.9	
TT:	39.6	39.1	
KI:	15.8	15.6	
Tc:	10.2	8.8	°C
Storm:	132/11	126/16	0-6km
s-rH:	29	47	0-3km
s-rH:	0	-17	0-2km
s-rH:	0	29	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	37.2	41.4	
Threat:	8.4	8.1	
Point:	2.7	2.8°C	
1000 - 500 mb:	5424	5419	m
1000 - 700 mb:	2857	2854	m
1000 - 850 mb:	1320	1318	m
850 - 500 mb:	4103	4101	m
850 - 700 mb:	1536	1536	m
700 - 500 mb:	2567	2565	m
600 - 400 mb:	2976	2974	m



Test #18 - System Test II – 00UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	9791	10149	m AGL
FRZG Lvl:	1054	945	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	737	585	m AGL
CCL Hgt:	1008	769	m AGL
LCL Hgt:	513	500	m AGL
Water:	1.57	1.67	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	29	31	kt
SWEAT:	42.6	66.0	
CAP:	0.4	0.2	
Boyden:	90.6	90.1	
S{TT}:	31.5	31.3	
KO:	10.4	12.8	
LI:	9.3	9.9	
TT:	39.6	39.1	
KI:	15.8	15.6	
Tc:	10.2	8.8	°C
Storm:	132/11	126/16	0-6km
s-rH:	29	47	0-3km
s-rH:	0	-17	0-2km
s-rH:	0	29	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	37.2	41.4	
Threat:	8.4	8.1	
Point:	2.7	2.8°C	
1000 - 500 mb:	5424	5419	m
1000 - 700 mb:	2857	2854	m
1000 - 850 mb:	1320	1318	m
850 - 500 mb:	4103	4101	m
850 - 700 mb:	1536	1536	m
700 - 500 mb:	2567	2565	m
600 - 400 mb:	2976	2974	m



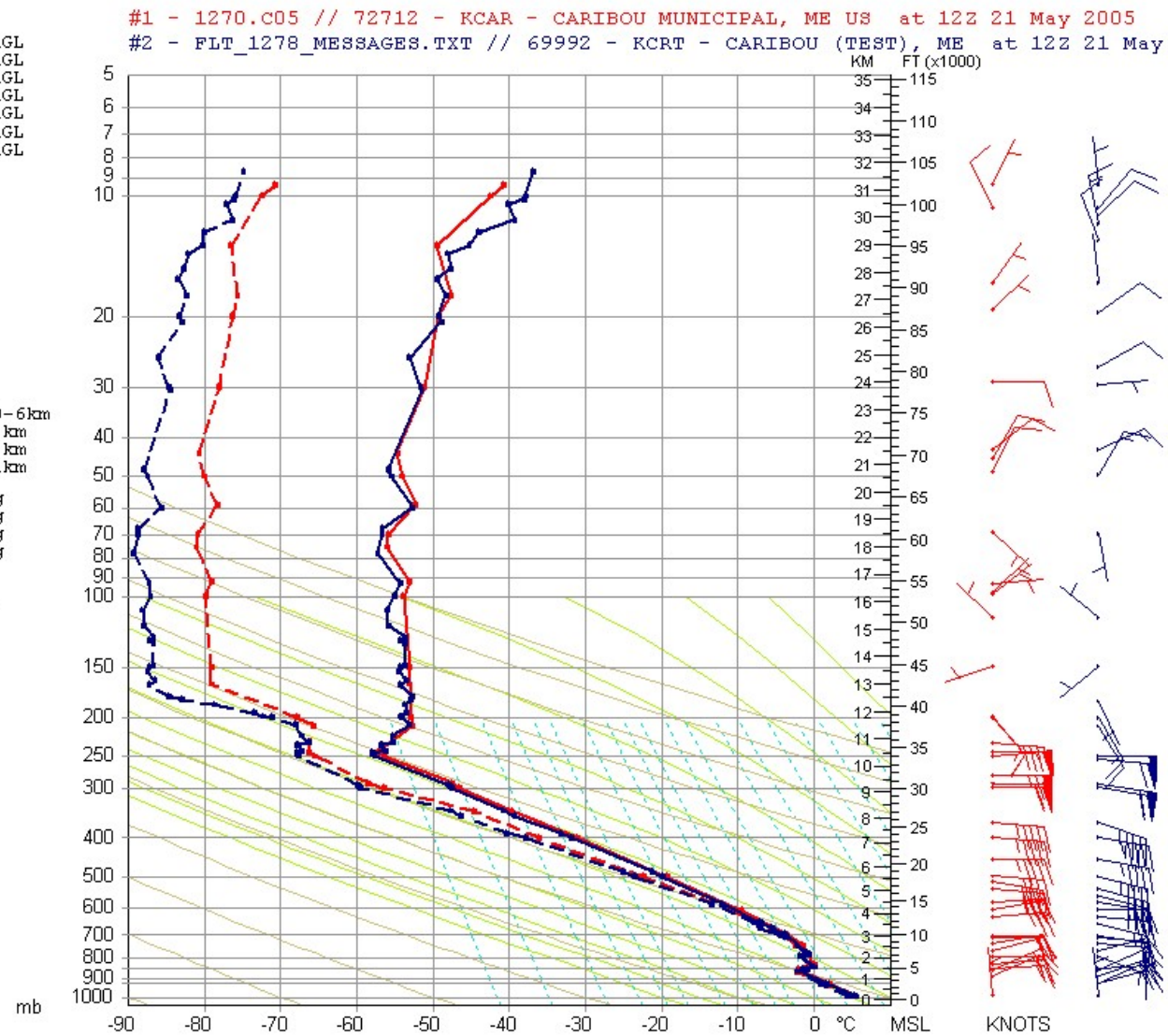
Test #19 - System Test II – 12UTC on 05/21/2005
RWS Version 1.0.4.0

TEST # 19			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10335	10214	121
Freezing Level (m AGL)	899	867	32
LFC Height (m AGL)	587	582	5
CCL Height (m AGL)	100	113	-13
LCL Height (m AGL)	100	113	-13
Precipitable Water (cm)	1.98	1.93	0.05
Thickness 1000 - 500 mb (m)	5450	5442	8
Thickness 1000 - 700 mb (m)	2863	2861	2
Thickness 1000 - 850 mb (m)	1313	1312	1
Thickness 850 - 500 mb (m)	4138	4130	8
Thickness 850 - 700 mb (m)	1550	1548	2
Thickness 700 - 500 mb (m)	2587	2582	5
Thickness 600 - 400 mb (m)	3005	2998	7
Wind Shear Below	12	7	5
Wind Shear Above	7	37	-30
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Direction and Speed Agree but Heights Disagree.		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

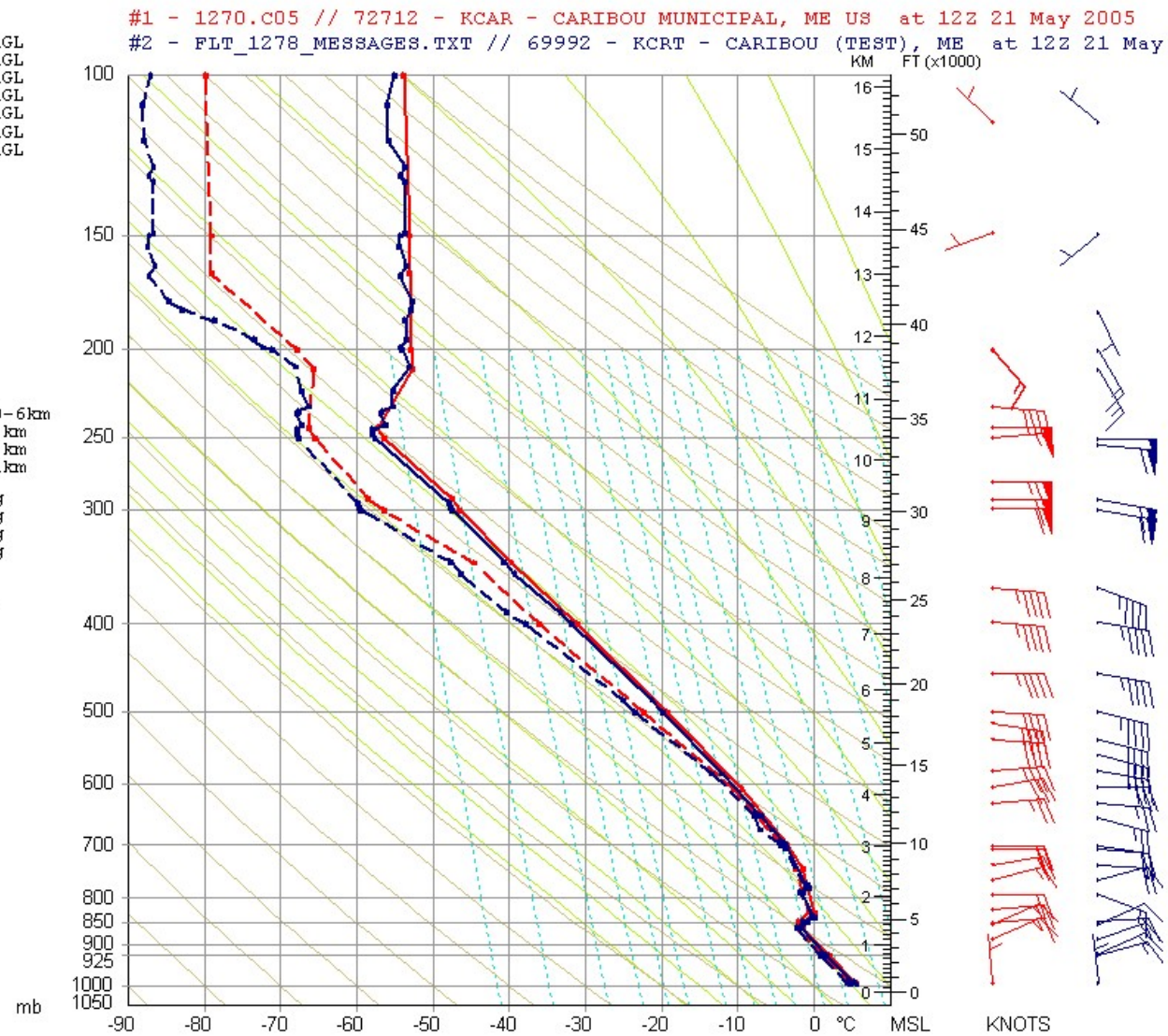
Test #19 - System Test II – 12UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10335	10214	m AGL
FRZG Lvl:	899	867	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	534	m AGL
CCL Hgt:	587	582	m AGL
LCL Hgt:	100	113	m AGL
Water:	1.98	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	11	13	kt
SWEAT:	76.0	83.0	
CAP:	--	0.2	
Boyden:	89.8	89.8	
S{TT}:	28.4	30.9	
KO:	16.8	15.7	
LI:	13.9	13.4	
TT:	35.2	37.5	
KI:	15.1	17.0	
Tc:	7.7	7.3	°C
Storm:	120/26	130/26	0-6km
s-rH:	100	120	0-3km
s-rH:	79	84	0-2km
s-rH:	79	65	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	32.4	34.8	
Threat:	6.3	6.6	
Point:	5.0	5.1°C	
1000 - 500 mb:	5450	5442	m
1000 - 700 mb:	2863	2861	m
1000 - 850 mb:	1313	1312	m
850 - 500 mb:	4138	4130	m
850 - 700 mb:	1550	1548	m
700 - 500 mb:	2587	2582	m
600 - 400 mb:	3005	2998	m



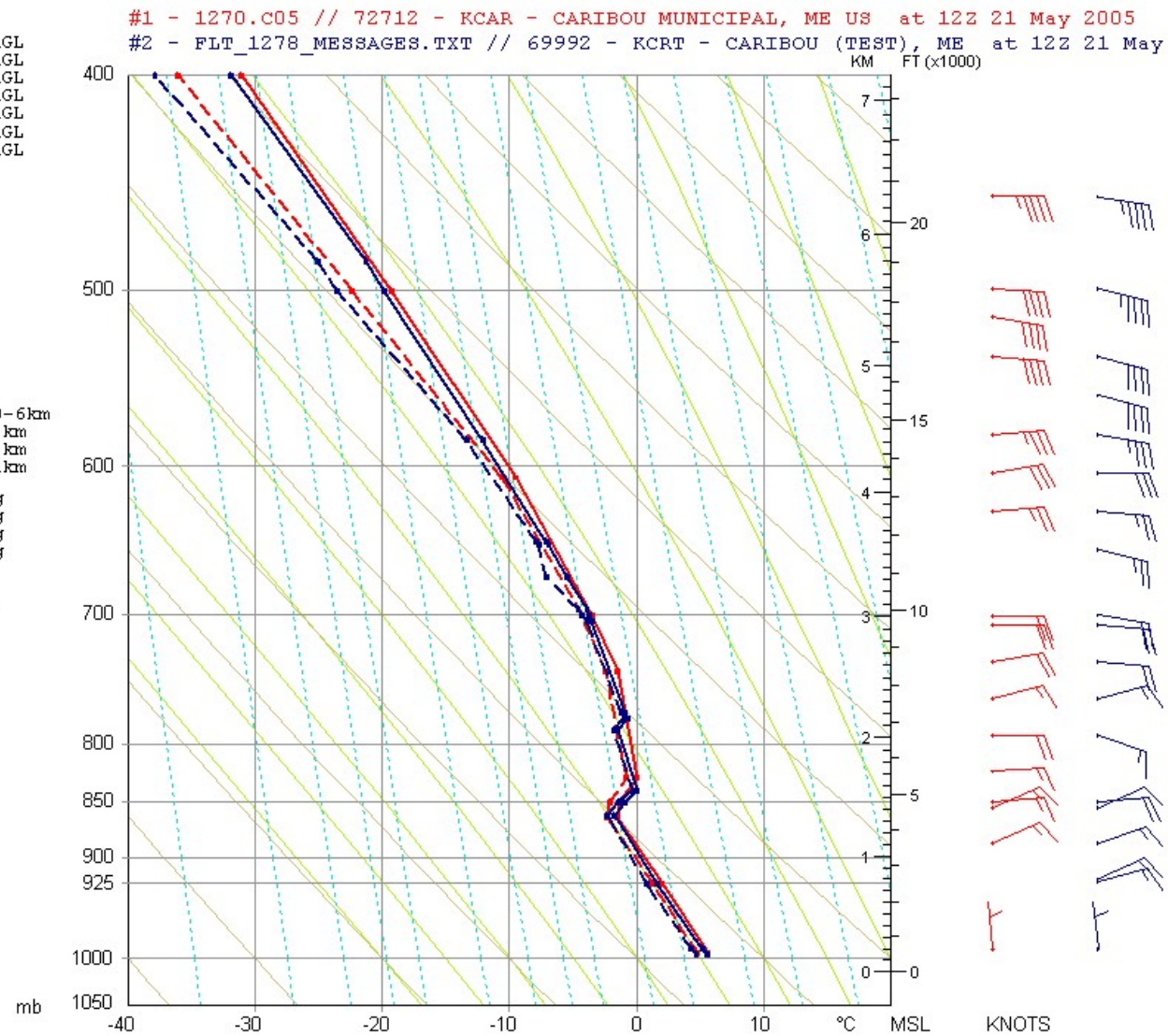
Test #19 - System Test II – 12UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10335	10214	m AGL
FRZG Lvl:	899	867	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	534	m AGL
CCL Hgt:	587	582	m AGL
LCL Hgt:	100	113	m AGL
Water:	1.98	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	11	13	kt
SWEAT:	76.0	83.0	
CAP:	--	0.2	
Boyden:	89.8	89.8	
S{TT}:	28.4	30.9	
KO:	16.8	15.7	
LI:	13.9	13.4	
TT:	35.2	37.5	
KI:	15.1	17.0	
Tc:	7.7	7.3	°C
Storm:	120/26	130/26	0-6km
s-rH:	100	120	0-3km
s-rH:	79	84	0-2km
s-rH:	79	65	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	32.4	34.8	
Threat:	6.3	6.6	
Point:	5.0	5.1	°C
1000 - 500 mb:	5450	5442	m
1000 - 700 mb:	2863	2861	m
1000 - 850 mb:	1313	1312	m
850 - 500 mb:	4138	4130	m
850 - 700 mb:	1550	1548	m
700 - 500 mb:	2587	2582	m
600 - 400 mb:	3005	2998	m



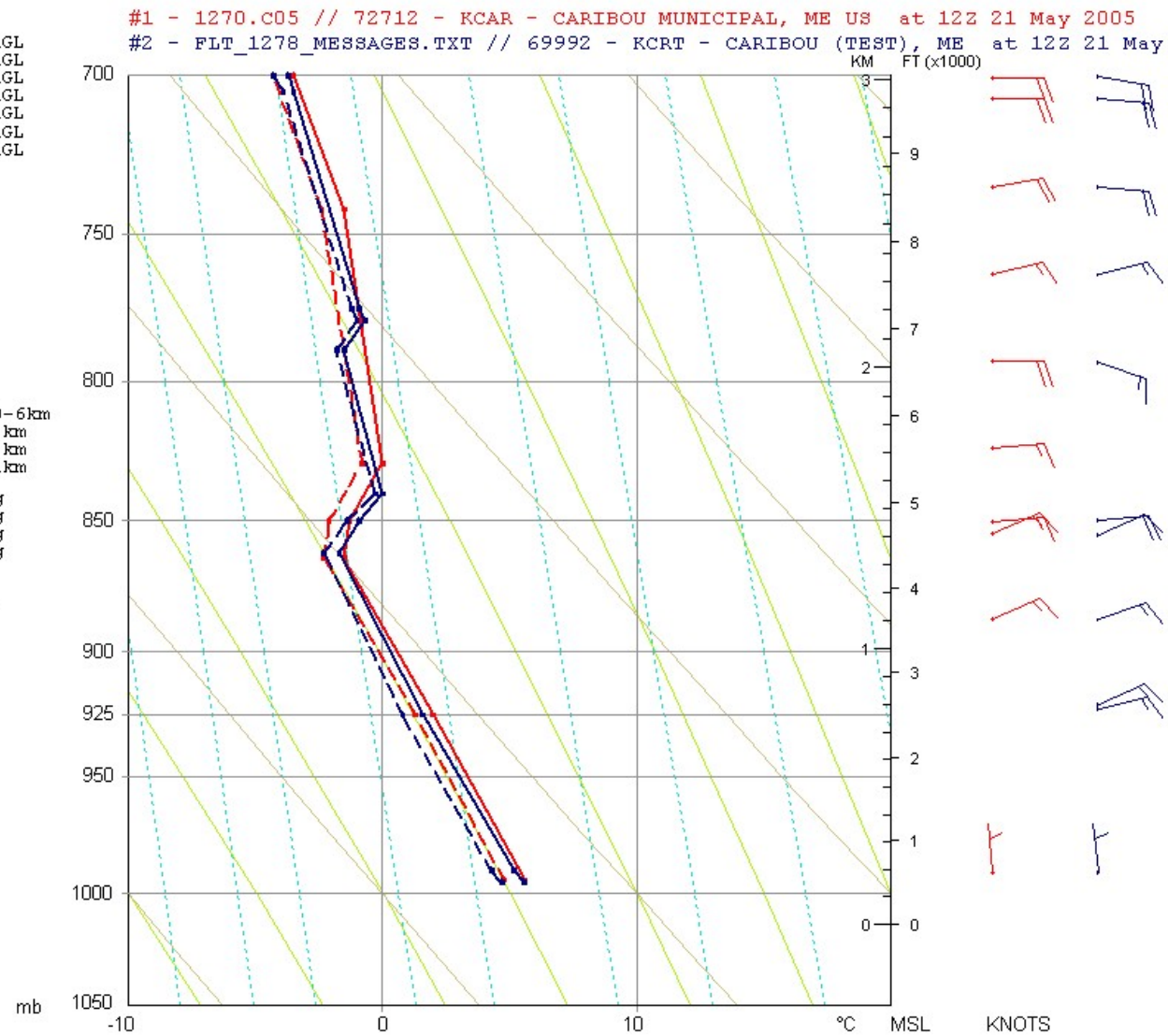
Test #19 - System Test II – 12UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10335	10214	m AGL
FRZG Lvl:	899	867	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	534	m AGL
CCL Hgt:	587	582	m AGL
LCL Hgt:	100	113	m AGL
Water:	1.98	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	11	13	kt
SWEAT:	76.0	83.0	
CAP:	--	0.2	
Boyden:	89.8	89.8	
S{TT}:	28.4	30.9	
KO:	16.8	15.7	
LI:	13.9	13.4	
TT:	35.2	37.5	
KI:	15.1	17.0	
Tc:	7.7	7.3	°C
Storm:	120/26	130/26	0-6km
s-rH:	100	120	0-3km
s-rH:	79	84	0-2km
s-rH:	79	65	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	32.4	34.8	
Threat:	6.3	6.6	
Point:	5.0	5.1°C	
1000 - 500 mb:	5450	5442	m
1000 - 700 mb:	2863	2861	m
1000 - 850 mb:	1313	1312	m
850 - 500 mb:	4138	4130	m
850 - 700 mb:	1550	1548	m
700 - 500 mb:	2587	2582	m
600 - 400 mb:	3005	2998	m



Test #19 - System Test II – 12UTC on 05/21/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10335	10214	m AGL
FRZG Lvl:	899	867	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	534	m AGL
CCL Hgt:	587	582	m AGL
LCL Hgt:	100	113	m AGL
Water:	1.98	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	11	13	kt
SWEAT:	76.0	83.0	
CAP:	--	0.2	
Boyden:	89.8	89.8	
S{TT}:	28.4	30.9	
KO:	16.8	15.7	
LI:	13.9	13.4	
TT:	35.2	37.5	
KI:	15.1	17.0	
Tc:	7.7	7.3	°C
Storm:	120/26	130/26	0-6km
s-rH:	100	120	0-3km
s-rH:	79	84	0-2km
s-rH:	79	65	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	32.4	34.8	
Threat:	6.3	6.6	
Point:	5.0	5.1°C	
1000 - 500 mb:	5450	5442	m
1000 - 700 mb:	2863	2861	m
1000 - 850 mb:	1313	1312	m
850 - 500 mb:	4138	4130	m
850 - 700 mb:	1550	1548	m
700 - 500 mb:	2587	2582	m
600 - 400 mb:	3005	2998	m



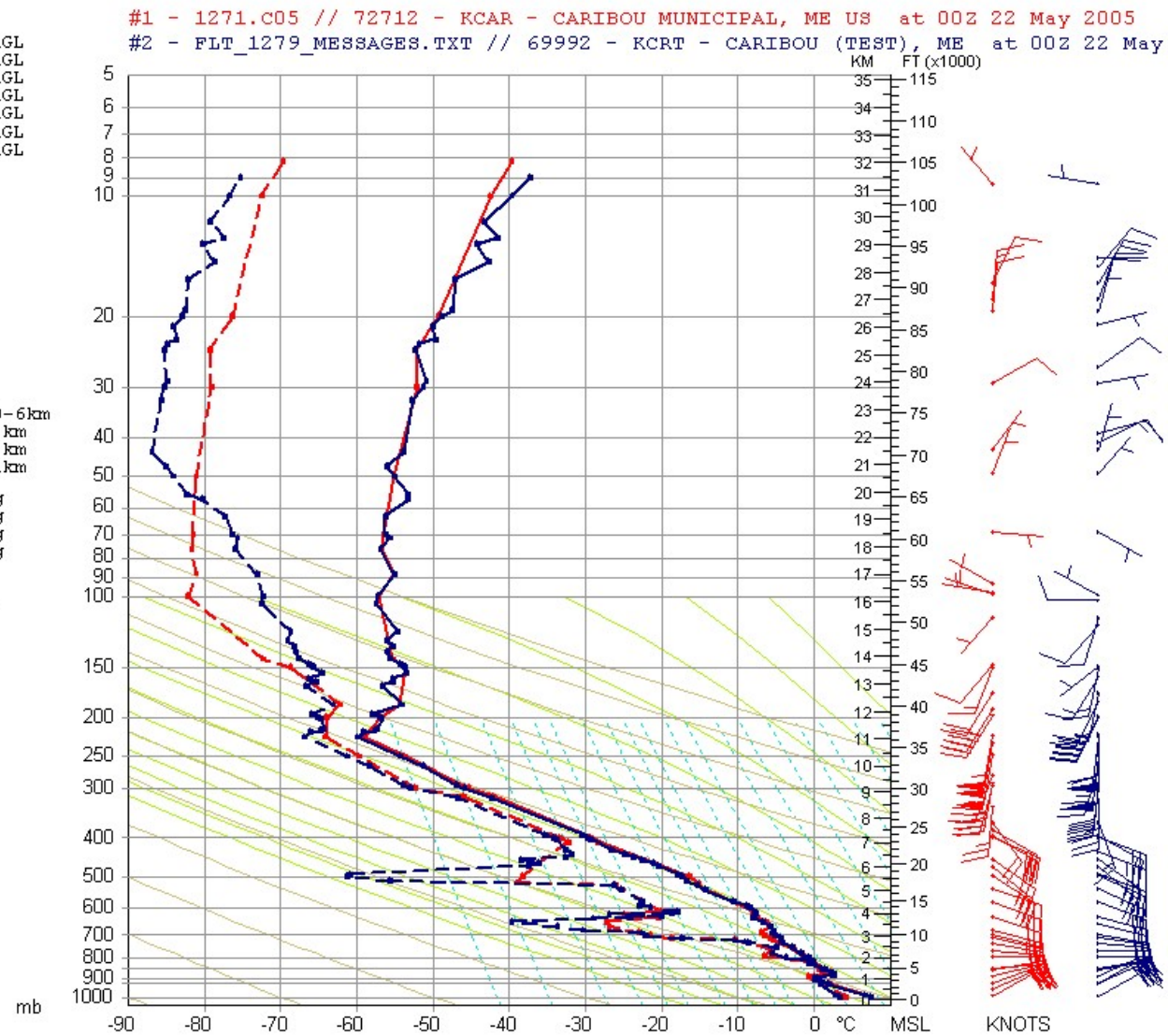
Test #20 - System Test II – 00UTC on 05/22/2005
RWS Version 1.0.4.0

TEST # 20			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10939	10928	11
Freezing Level (m AGL)	932	1491	-559
LFC Height (m AGL)	507	536	-29
CCL Height (m AGL)	658	753	-95
LCL Height (m AGL)	399	500	-101
Precipitable Water (cm)	1.46	1.45	0.01
Thickness 1000 - 500 mb (m)	5454	5457	-3
Thickness 1000 - 700 mb (m)	2862	2864	-2
Thickness 1000 - 850 mb (m)	1318	1319	-1
Thickness 850 - 500 mb (m)	4136	4138	-2
Thickness 850 - 700 mb (m)	1544	1545	-1
Thickness 700 - 500 mb (m)	2592	2593	-1
Thickness 600 - 400 mb (m)	3027	3021	6
Wind Shear Below	NC	17	NC
Wind Shear Above	NC	27	NC
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

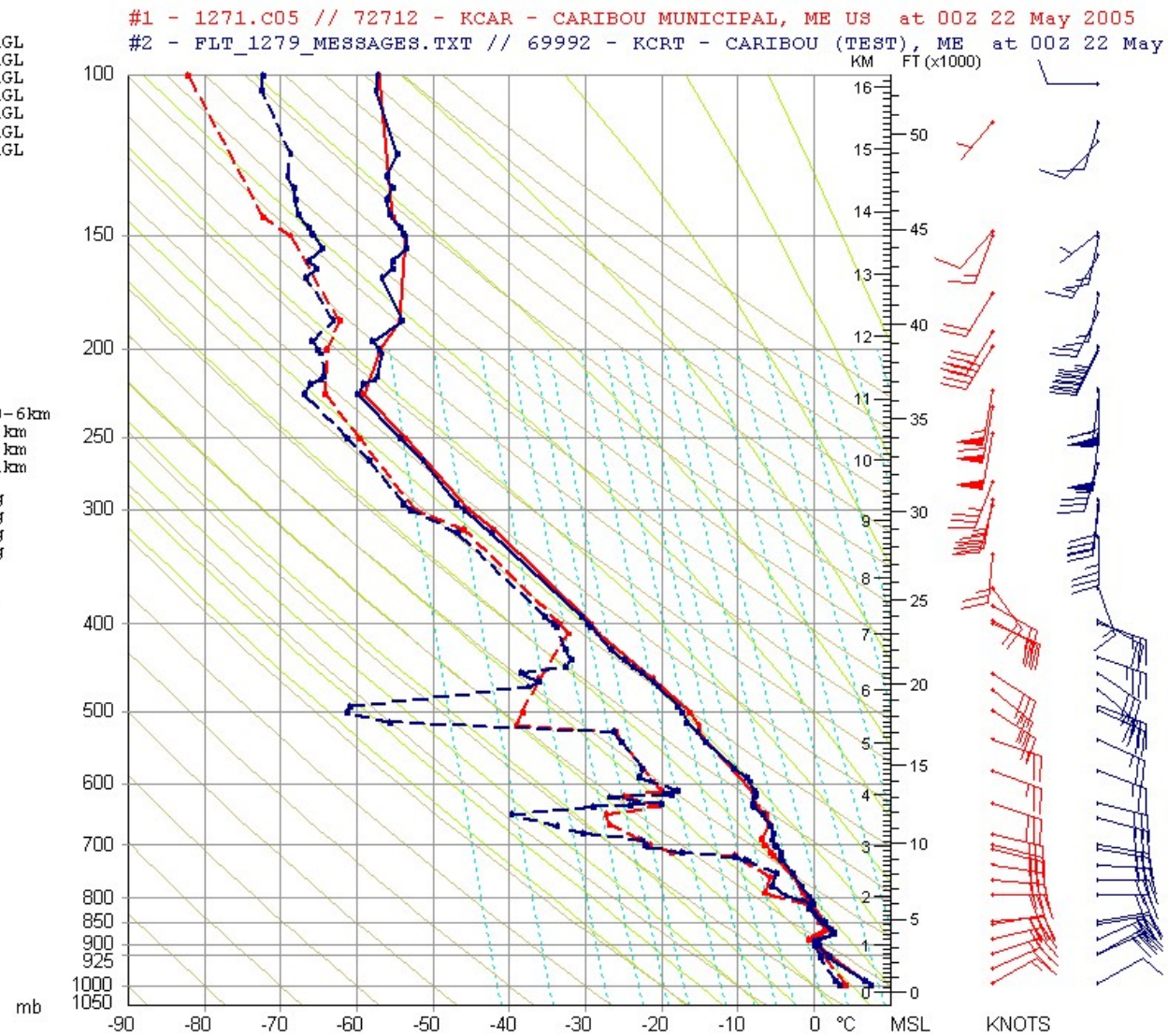
Test #20 - System Test II – 00UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10939	10928	m AGL
FRZG Lvl:	932	1491	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	507	536	m AGL
CCL Hgt:	658	753	m AGL
LCL Hgt:	399	500	m AGL
Water:	1.46	1.45	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	26	--	kt
SWEAT:	97.4	93.0	
CAP:	0.3	0.1	
Boyden:	92.7	91.5	
S{TT}:	13.7	14.0	
KO:	7.2	7.1	
LI:	16.0	15.6	
TT:	34.7	37.0	
KI:	3.4	2.7	
Tc:	8.1	8.3	°C
Storm:	122/13	106/11	0-6km
s-rH:	140	129	0-3km
s-rH:	107	109	0-2km
s-rH:	62	43	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	49.4	49.0	
Threat:	11.0	12.1	
Point:	3.1	2.1°C	
1000 - 500 mb:	5454	5457	m
1000 - 700 mb:	2862	2864	m
1000 - 850 mb:	1318	1319	m
850 - 500 mb:	4136	4138	m
850 - 700 mb:	1544	1545	m
700 - 500 mb:	2592	2593	m
600 - 400 mb:	3027	3021	m



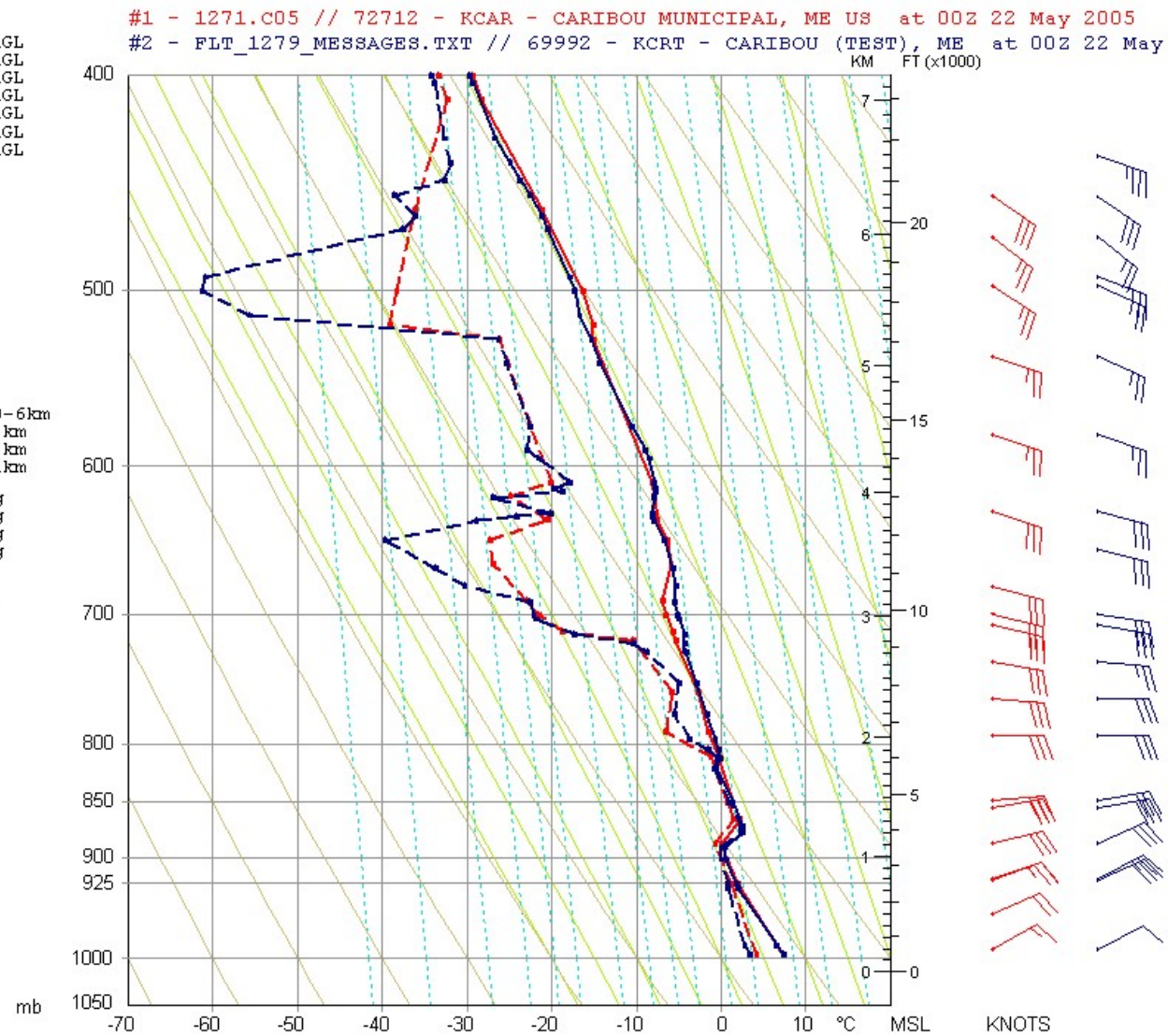
Test #20 - System Test II – 00UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10939	10928	m AGL
FRZG Lvl:	932	1491	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	507	536	m AGL
CCL Hgt:	658	753	m AGL
LCL Hgt:	399	500	m AGL
Water:	1.46	1.45	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	26	--	kt
SWEAT:	97.4	93.0	
CAP:	0.3	0.1	
Boyden:	92.7	91.5	
S{TT}:	13.7	14.0	
KO:	7.2	7.1	
LI:	16.0	15.6	
TT:	34.7	37.0	
KI:	3.4	2.7	
Tc:	8.1	8.3	°C
Storm:	122/13	106/11	0-6km
s-rH:	140	129	0-3km
s-rH:	107	109	0-2km
s-rH:	62	43	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	49.4	49.0	
Threat:	11.0	12.1	
Point:	3.1	2.1	°C
1000 - 500 mb:	5454	5457	m
1000 - 700 mb:	2862	2864	m
1000 - 850 mb:	1318	1319	m
850 - 500 mb:	4136	4138	m
850 - 700 mb:	1544	1545	m
700 - 500 mb:	2592	2593	m
600 - 400 mb:	3027	3021	m



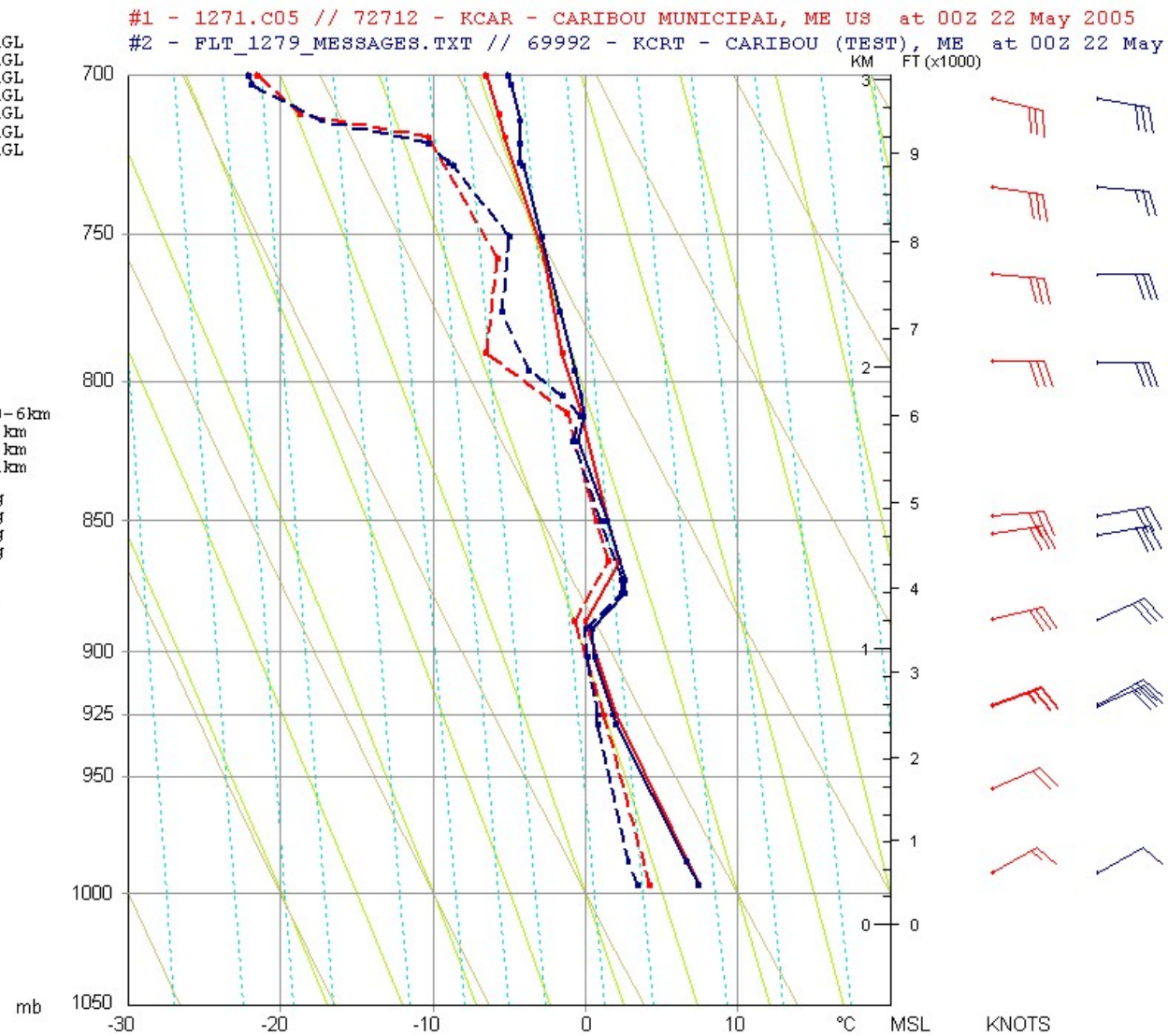
Test #20 - System Test II – 00UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10939	10928	m AGL
FRZG Lvl:	932	1491	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	507	536	m AGL
CCL Hgt:	658	753	m AGL
LCL Hgt:	399	500	m AGL
Water:	1.46	1.45	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	26	--	kt
SWEAT:	97.4	93.0	
CAP:	0.3	0.1	
Boyden:	92.7	91.5	
S{TT}:	13.7	14.0	
KO:	7.2	7.1	
LI:	16.0	15.6	
TT:	34.7	37.0	
KI:	3.4	2.7	
Tc:	8.1	8.3	°C
Storm:	122/13	106/11	0-6km
s-rH:	140	129	0-3km
s-rH:	107	109	0-2km
s-rH:	62	43	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	49.4	49.0	
Threat:	11.0	12.1	
Point:	3.1	2.1	°C
1000 - 500 mb:	5454	5457	m
1000 - 700 mb:	2862	2864	m
1000 - 850 mb:	1318	1319	m
850 - 500 mb:	4136	4138	m
850 - 700 mb:	1544	1545	m
700 - 500 mb:	2592	2593	m
600 - 400 mb:	3027	3021	m



Test #20 - System Test II – 00UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10939	10928	m AGL
FRZG Lvl:	932	1491	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	507	536	m AGL
CCL Hgt:	658	753	m AGL
LCL Hgt:	399	500	m AGL
Water:	1.46	1.45	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	26	--	kt
SWEAT:	97.4	93.0	
CAP:	0.3	0.1	
Boyden:	92.7	91.5	
S{TT}:	13.7	14.0	
KO:	7.2	7.1	
LI:	16.0	15.6	
TT:	34.7	37.0	
KI:	3.4	2.7	
Tc:	8.1	8.3	°C
Storm:	122/13	106/11	0-6km
s-rH:	140	129	0-3km
s-rH:	107	109	0-2km
s-rH:	62	43	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	49.4	49.0	
Threat:	11.0	12.1	
Point:	3.1	2.1°C	
1000 - 500 mb:	5454	5457	m
1000 - 700 mb:	2862	2864	m
1000 - 850 mb:	1318	1319	m
850 - 500 mb:	4136	4138	m
850 - 700 mb:	1544	1545	m
700 - 500 mb:	2592	2593	m
600 - 400 mb:	3027	3021	m



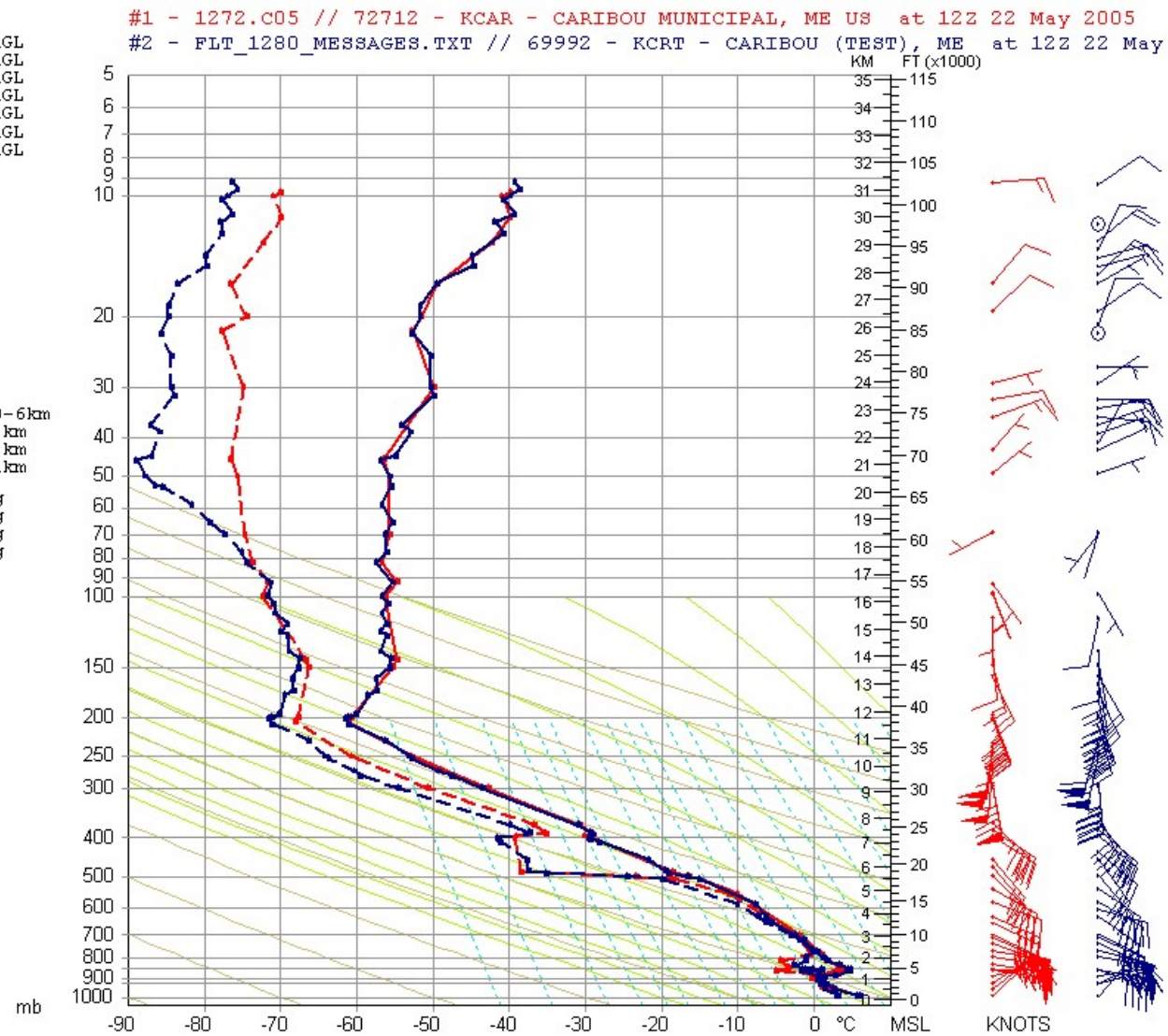
Test #21 - System Test II – 12UTC on 05/22/2005
RWS Version 1.0.4.0

TEST # 21			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11542	11621	-79
Freezing Level (m AGL)	2259	2199	60
LFC Height (m AGL)	443	NC	NC
CCL Height (m AGL)	772	2865	-2093
LCL Height (m AGL)	350	350	0
Precipitable Water (cm)	2.04	2.03	0.01
Thickness 1000 - 500 mb (m)	5496	5493	3
Thickness 1000 - 700 mb (m)	2878	2880	-2
Thickness 1000 - 850 mb (m)	1316	1318	-2
Thickness 850 - 500 mb (m)	4180	4175	5
Thickness 850 - 700 mb (m)	1562	1562	0
Thickness 700 - 500 mb (m)	2618	2613	5
Thickness 600 - 400 mb (m)	3044	3036	8
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (No Max Winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

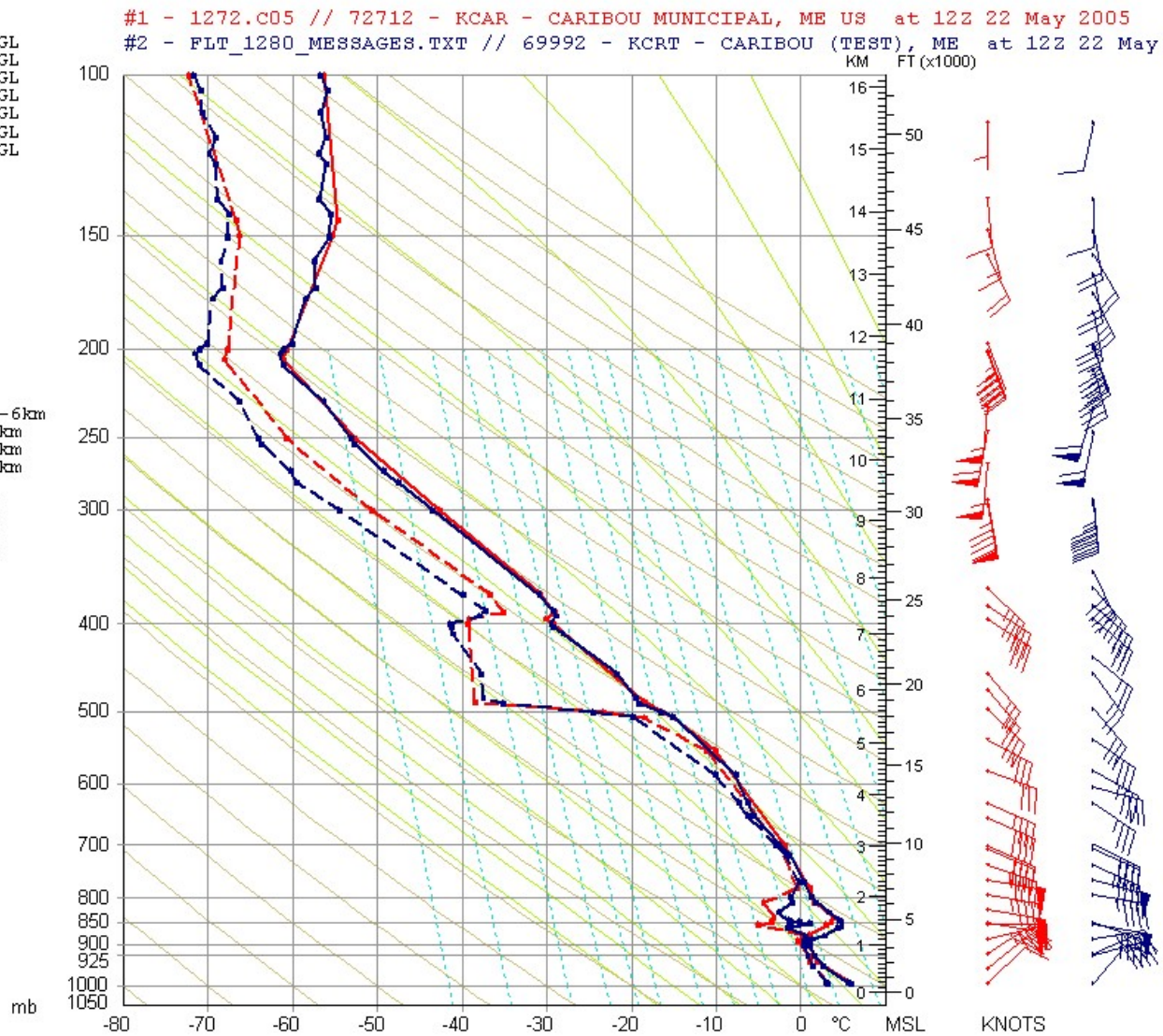
Test #21 - System Test II – 12UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11542	11621	m AGL
FRZG Lvl:	2259	2199	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	443	--	m AGL
CCL Hgt:	772	2865	m AGL
LCL Hgt:	350	350	m AGL
Water:	2.04	2.03	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	125.0	113.0	
CAP:	0.3	--	
Boyden:	89.7	90.5	
S{TT}:	26.1	31.1	
KO:	18.9	15.9	
LI:	17.6	17.4	
TT:	32.8	37.6	
KI:	15.8	20.6	
Tc:	8.4	26.1	°C
Storm:	119/20	116/18	0-6km
s-rH:	515	426	0-3km
s-rH:	427	330	0-2km
s-rH:	255	176	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	58.4	49.0	
Threat:	9.7	11.6	
Point:	3.9	4.0	°C
1000 - 500 mb:	5496	5493	m
1000 - 700 mb:	2878	2880	m
1000 - 850 mb:	1316	1318	m
850 - 500 mb:	4180	4175	m
850 - 700 mb:	1562	1562	m
700 - 500 mb:	2618	2613	m
600 - 400 mb:	3044	3036	m



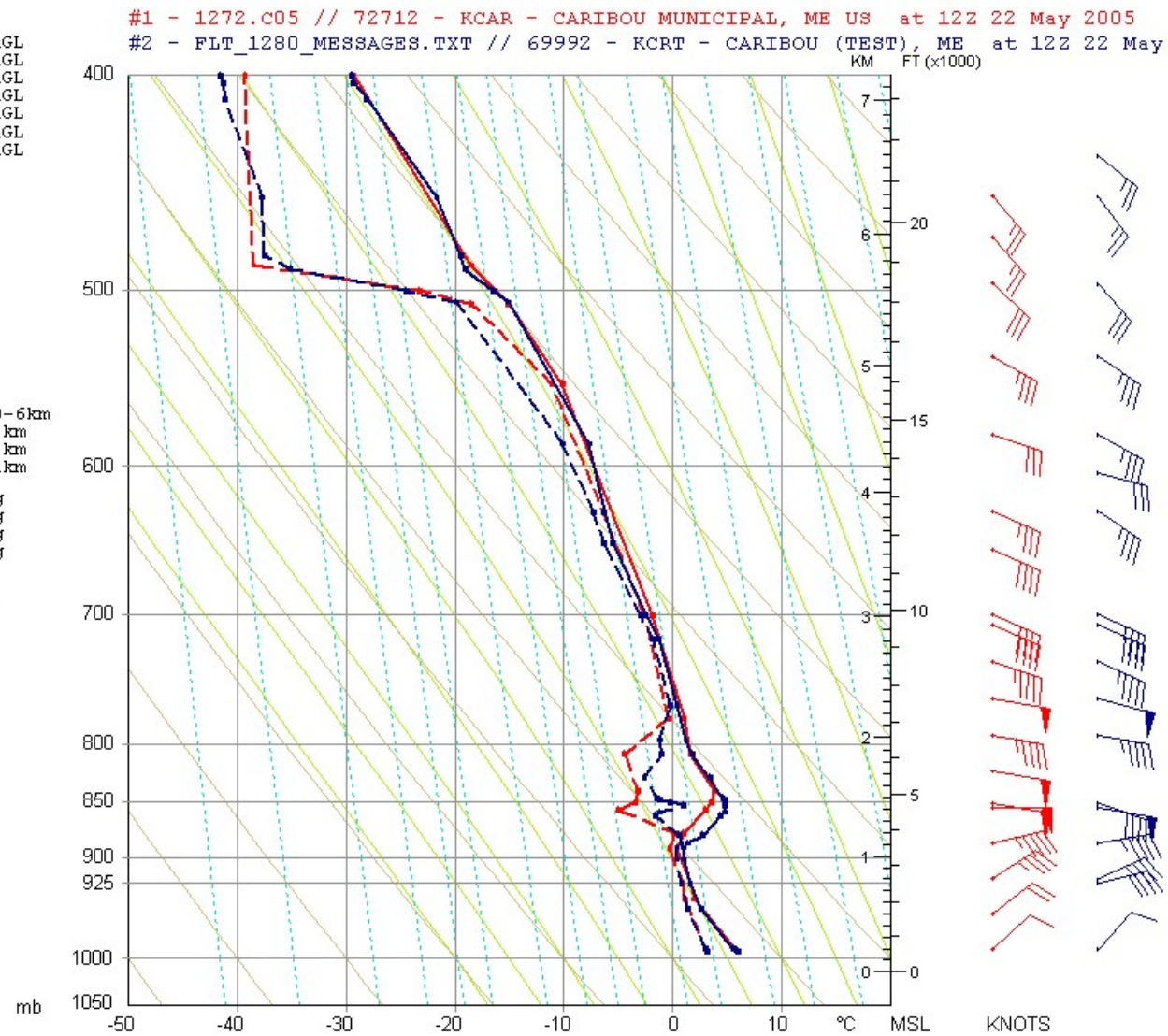
Test #21 - System Test II – 12UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11542	11621	m AGL
FRZG Lvl:	2259	2199	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	443	--	m AGL
CCL Hgt:	772	2865	m AGL
LCL Hgt:	350	350	m AGL
Water:	2.04	2.03	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	125.0	113.0	
CAP:	0.3	--	
Boyden:	89.7	90.5	
S{TT}:	26.1	31.1	
KO:	18.9	15.9	
LI:	17.6	17.4	
TT:	32.8	37.6	
KI:	15.8	20.6	
Tc:	8.4	26.1	°C
Storm:	119/20	116/18	0-6km
s-rH:	515	426	0-3km
s-rH:	427	330	0-2km
s-rH:	255	176	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	58.4	49.0	
Threat:	9.7	11.6	
Point:	3.9	4.0	°C
1000 - 500 mb:	5496	5493	m
1000 - 700 mb:	2878	2880	m
1000 - 850 mb:	1316	1318	m
850 - 500 mb:	4180	4175	m
850 - 700 mb:	1562	1562	m
700 - 500 mb:	2618	2613	m
600 - 400 mb:	3044	3036	m



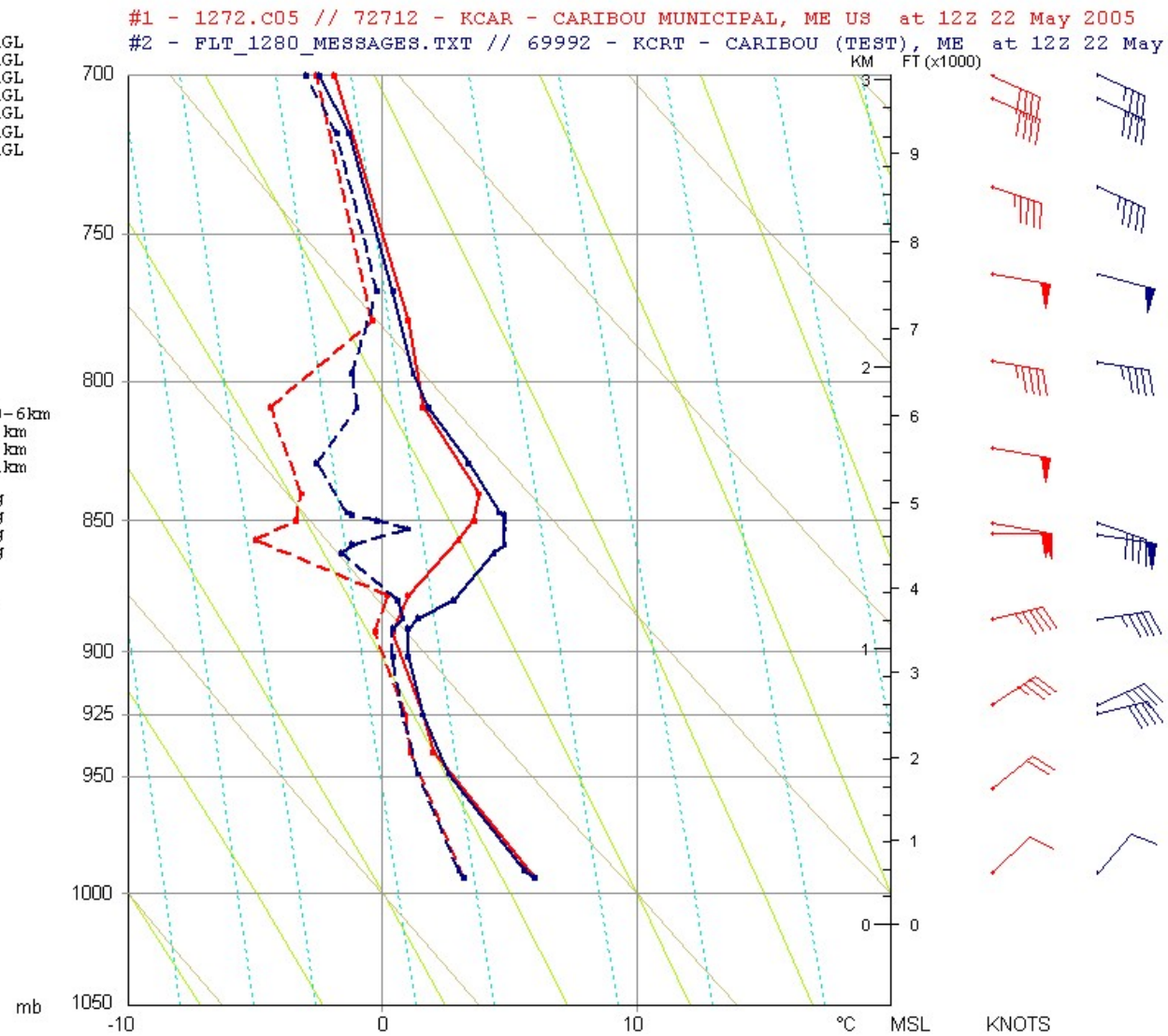
Test #21 - System Test II – 12UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11542	11621	m AGL
FRZG Lvl:	2259	2199	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	443	--	m AGL
CCL Hgt:	772	2865	m AGL
LCL Hgt:	350	350	m AGL
Water:	2.04	2.03	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	125.0	113.0	
CAP:	0.3	--	
Boyden:	89.7	90.5	
S{TT}:	26.1	31.1	
KO:	18.9	15.9	
LI:	17.6	17.4	
TT:	32.8	37.6	
KI:	15.8	20.6	
Tc:	8.4	26.1	°C
Storm:	119/20	116/18	0-6km
s-rH:	515	426	0-3km
s-rH:	427	330	0-2km
s-rH:	255	176	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	58.4	49.0	
Threat:	9.7	11.6	
Point:	3.9	4.0°C	
1000 - 500 mb:	5496	5493	m
1000 - 700 mb:	2878	2880	m
1000 - 850 mb:	1316	1318	m
850 - 500 mb:	4180	4175	m
850 - 700 mb:	1562	1562	m
700 - 500 mb:	2618	2613	m
600 - 400 mb:	3044	3036	m



Test #21 - System Test II – 12UTC on 05/22/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11542	11621	m AGL
FRZG Lvl:	2259	2199	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	443	--	m AGL
CCL Hgt:	772	2865	m AGL
LCL Hgt:	350	350	m AGL
Water:	2.04	2.03	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	125.0	113.0	
CAP:	0.3	--	
Boyden:	89.7	90.5	
S{TT}:	26.1	31.1	
KO:	18.9	15.9	
LI:	17.6	17.4	
TT:	32.8	37.6	
KI:	15.8	20.6	
Tc:	8.4	26.1	°C
Storm:	119/20	116/18	0-6km
s-rH:	515	426	0-3km
s-rH:	427	330	0-2km
s-rH:	255	176	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	58.4	49.0	
Threat:	9.7	11.6	
Point:	3.9	4.0	°C
1000 - 500 mb:	5496	5493	m
1000 - 700 mb:	2878	2880	m
1000 - 850 mb:	1316	1318	m
850 - 500 mb:	4180	4175	m
850 - 700 mb:	1562	1562	m
700 - 500 mb:	2618	2613	m
600 - 400 mb:	3044	3036	m



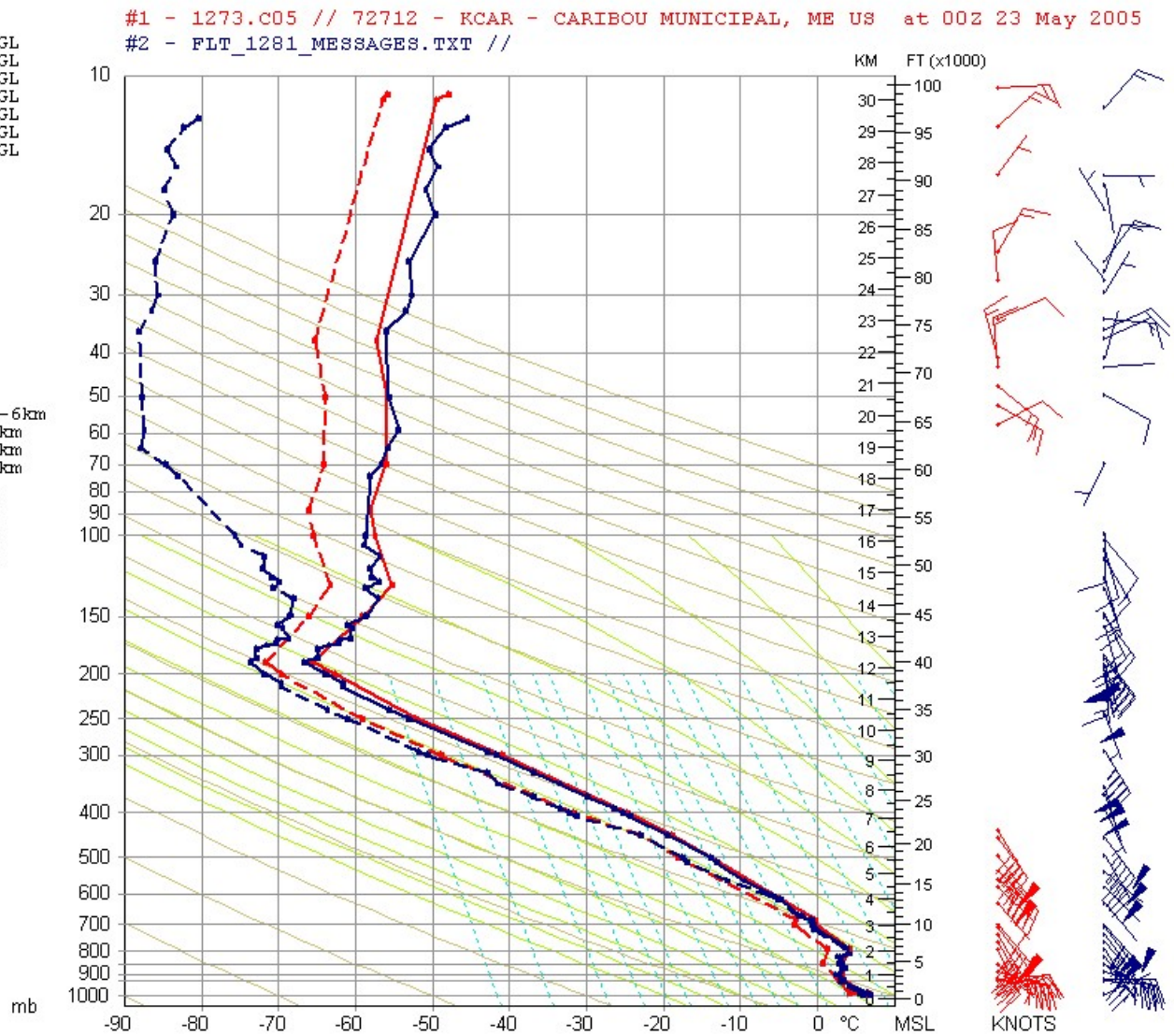
Test #22 - System Test II – 00UTC on 05/23/2005
RWS Version 1.0.4.0

TEST # 22			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12144	12112	32
Freezing Level (m AGL)	2758	2595	163
LFC Height (m AGL)	NC	444	NC
CCL Height (m AGL)	3317	471	2846
LCL Height (m AGL)	101	113	-12
Precipitable Water (cm)	2.37	2.57	-0.2
Thickness 1000 - 500 mb (m)	5531	5525	6
Thickness 1000 - 700 mb (m)	2898	2896	2
Thickness 1000 - 850 mb (m)	1325	1325	0
Thickness 850 - 500 mb (m)	4206	4200	6
Thickness 850 - 700 mb (m)	1573	1572	1
Thickness 700 - 500 mb (m)	2633	2629	4
Thickness 600 - 400 mb (m)	3086	3065	21
Wind Shear Below	NC	16	NC
Wind Shear Above	NC	30	NC
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

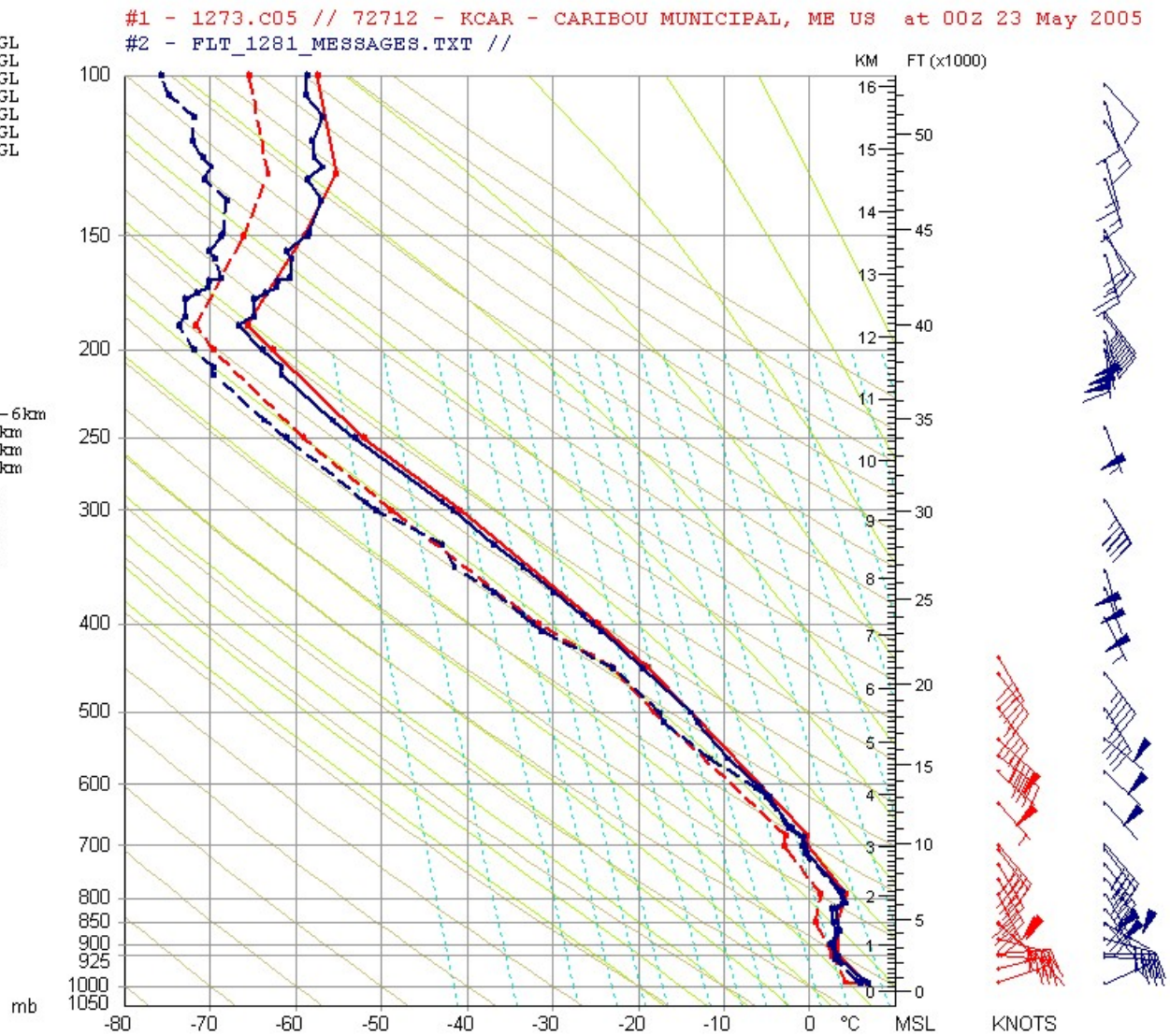
Test #22 - System Test II – 00UTC on 05/23/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12144	12112	m AGL
FRZG Lvl:	2758	2595	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	444	m AGL
CCL Hgt:	3317	471	m AGL
LCL Hgt:	101	113	m AGL
Water:	2.37	2.57	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	157.4	179.6	
CAP:	--	0.3	
Boyden:	90.2	90.1	
S{TT}:	23.0	27.5	
KO:	18.4	18.5	
LI:	17.2	17.3	
TT:	31.7	33.8	
KI:	15.1	19.6	
Tc:	31.8	8.2	°C
Storm:	157/34	156/32	0-6km
s-rH:	543	528	0-3km
s-rH:	548	507	0-2km
s-rH:	332	287	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	60.8	59.0	
Threat:	10.7	9.9	
Point:	4.4	6.2	°C
1000 - 500 mb:	5532	5525	m
1000 - 700 mb:	2899	2896	m
1000 - 850 mb:	1326	1325	m
850 - 500 mb:	4206	4200	m
850 - 700 mb:	1573	1572	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3086	3065	m



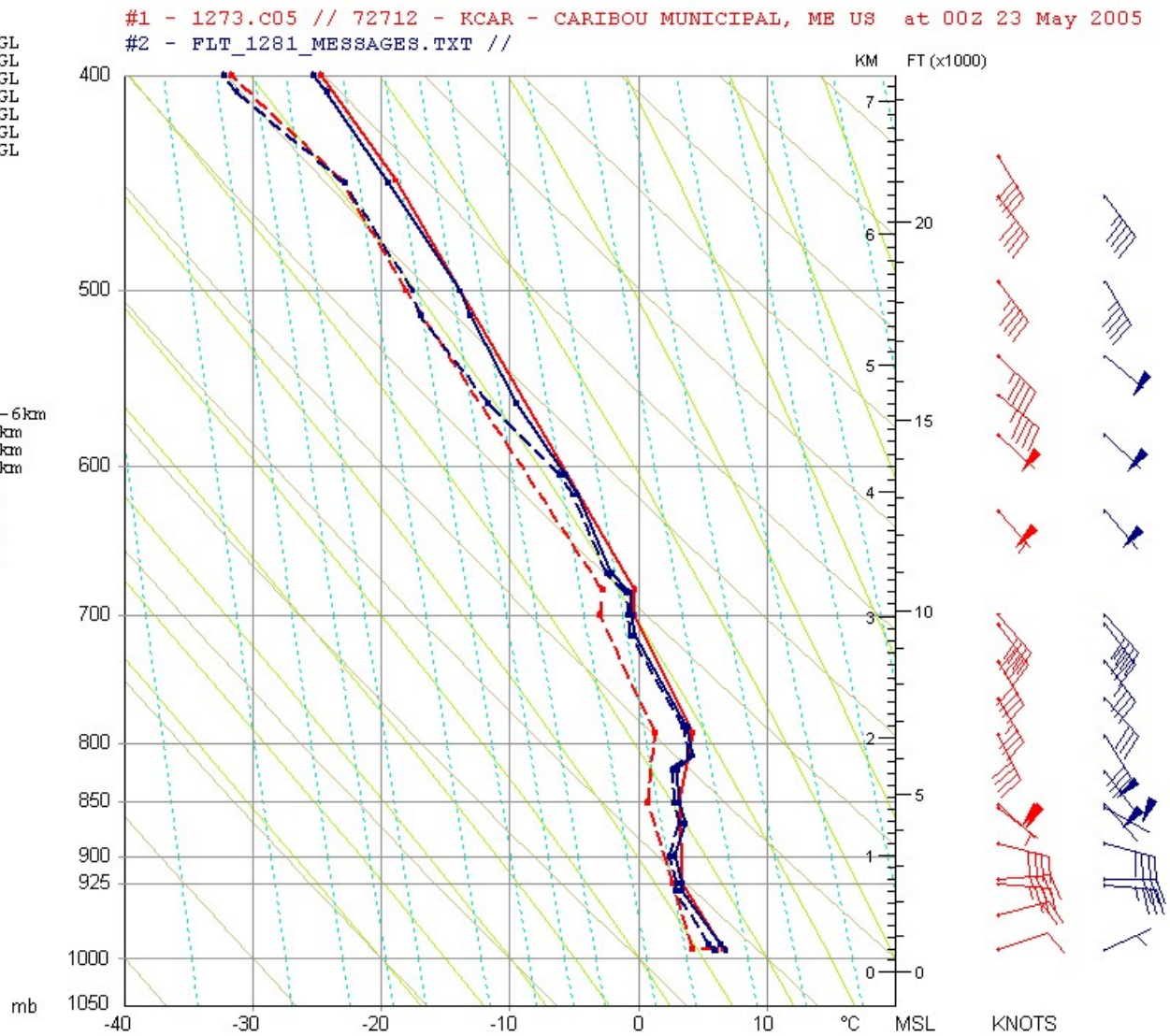
Test #22 - System Test II – 00UTC on 05/23/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12144	12112	m AGL
FRZG Lvl:	2758	2595	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	444	m AGL
CCL Hgt:	3317	471	m AGL
LCL Hgt:	101	113	m AGL
Water:	2.37	2.57	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	157.4	179.6	
CAP:	--	0.3	
Boyden:	90.2	90.1	
S{TT}:	23.0	27.5	
KO:	18.4	18.5	
LI:	17.2	17.3	
TT:	31.7	33.8	
KI:	15.1	19.6	
Tc:	31.8	8.2	°C
Storm:	157/34	156/32	0-6km
s-rH:	543	528	0-3km
s-rH:	548	507	0-2km
s-rH:	332	287	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	60.8	59.0	
Threat:	10.7	9.9	
Point:	4.4	6.2	°C
1000 - 500 mb:	5532	5525	m
1000 - 700 mb:	2899	2896	m
1000 - 850 mb:	1326	1325	m
850 - 500 mb:	4206	4200	m
850 - 700 mb:	1573	1572	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3086	3065	m



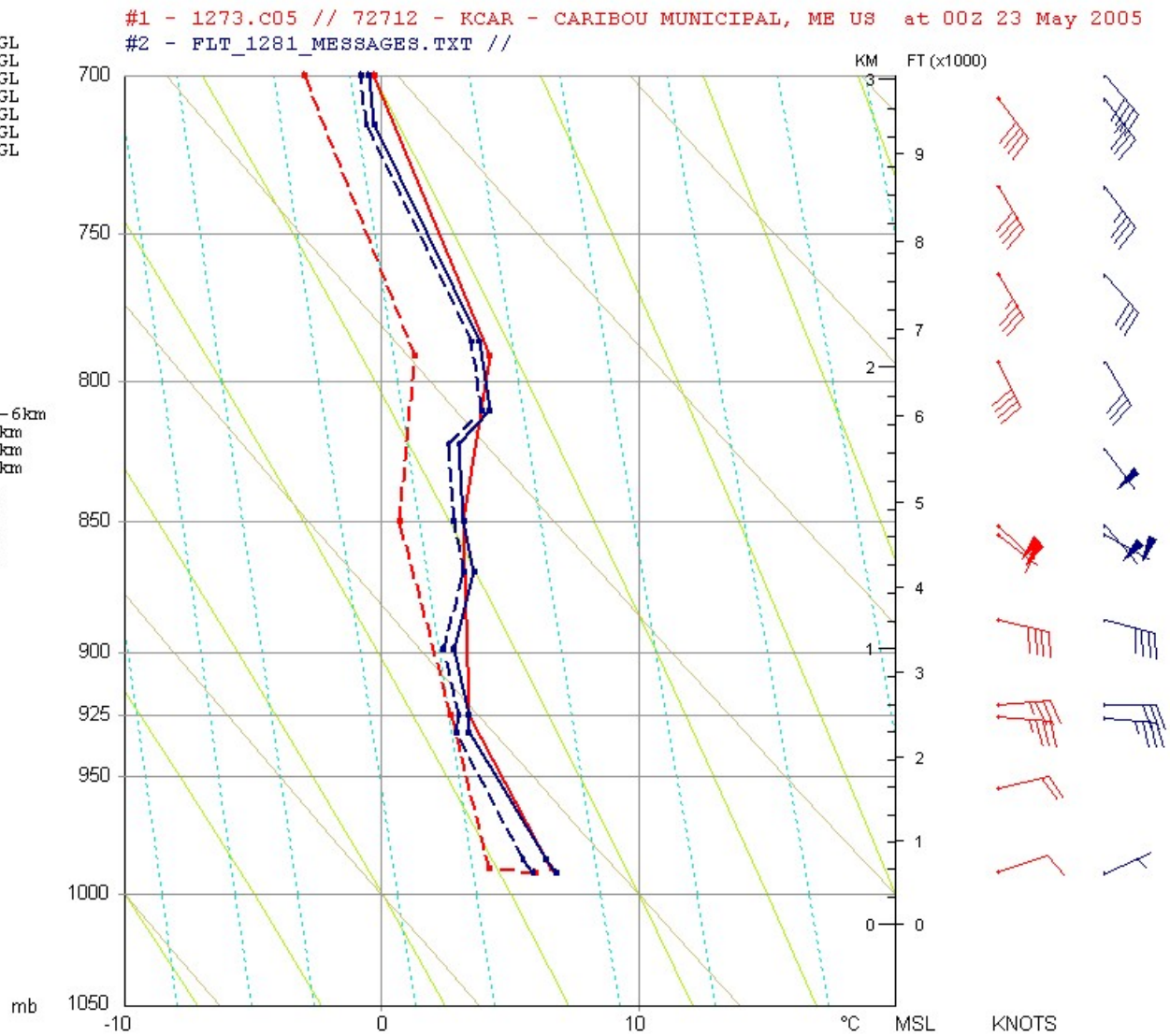
Test #22 - System Test II – 00UTC on 05/23/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12144	12112	m AGL
FRZG Lvl:	2758	2595	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	444	m AGL
CCL Hgt:	3317	471	m AGL
LCL Hgt:	101	113	m AGL
Water:	2.37	2.57	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	157.4	179.6	
CAP:	--	0.3	
Boyden:	90.2	90.1	
S{TT}:	23.0	27.5	
KO:	18.4	18.5	
LI:	17.2	17.3	
TT:	31.7	33.8	
KI:	15.1	19.6	
Tc:	31.8	8.2	°C
Storm:	157/34	156/32	0-6km
s-rH:	543	528	0-3km
s-rH:	548	507	0-2km
s-rH:	332	287	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	60.8	59.0	
Threat:	10.7	9.9	
Point:	4.4	6.2°C	
1000 - 500 mb:	5532	5525	m
1000 - 700 mb:	2899	2896	m
1000 - 850 mb:	1326	1325	m
850 - 500 mb:	4206	4200	m
850 - 700 mb:	1573	1572	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3086	3065	m



Test #22 - System Test II – 00UTC on 05/23/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12144	12112	m AGL
FRZG Lvl:	2758	2595	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	444	m AGL
CCL Hgt:	3317	471	m AGL
LCL Hgt:	101	113	m AGL
Water:	2.37	2.57	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	157.4	179.6	
CAP:	--	0.3	
Boyden:	90.2	90.1	
S{TT}:	23.0	27.5	
KO:	18.4	18.5	
LI:	17.2	17.3	
TT:	31.7	33.8	
KI:	15.1	19.6	
Tc:	31.8	8.2	°C
Storm:	157/34	156/32	0-6km
s-rH:	543	528	0-3km
s-rH:	548	507	0-2km
s-rH:	332	287	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	60.8	59.0	
Threat:	10.7	9.9	
Point:	4.4	6.2°C	
1000 - 500 mb:	5532	5525	m
1000 - 700 mb:	2899	2896	m
1000 - 850 mb:	1326	1325	m
850 - 500 mb:	4206	4200	m
850 - 700 mb:	1573	1572	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3086	3065	m



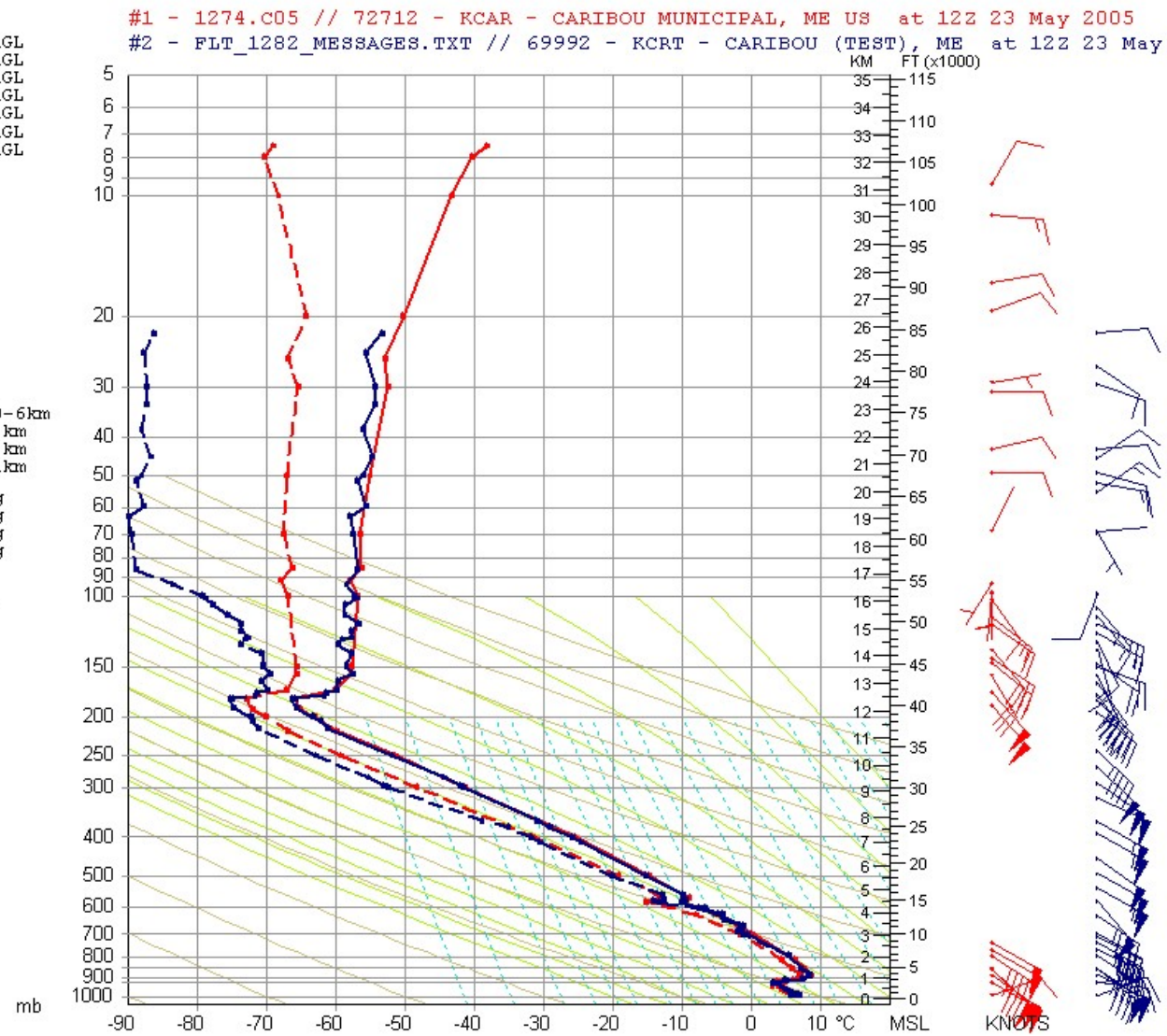
Test #23 - System Test II – 12UTC on 05/23/2005
RWS Version 1.0.4.0

TEST # 23			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12405	12362	43
Freezing Level (m AGL)	2879	2761	118
LFC Height (m AGL)	418	NC	NC
CCL Height (m AGL)	302	245	57
LCL Height (m AGL)	137	137	0
Precipitable Water (cm)	2.59	2.78	-0.19
Thickness 1000 - 500 mb (m)	5541	5541	0
Thickness 1000 - 700 mb (m)	2919	2917	2
Thickness 1000 - 850 mb (m)	1335	1335	0
Thickness 850 - 500 mb (m)	4206	4207	-1
Thickness 850 - 700 mb (m)	1583	1582	1
Thickness 700 - 500 mb (m)	2622	2625	-3
Thickness 600 - 400 mb (m)	3059	3054	5
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (No Max Winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Warmer	Colder	

NC= Not Calculated

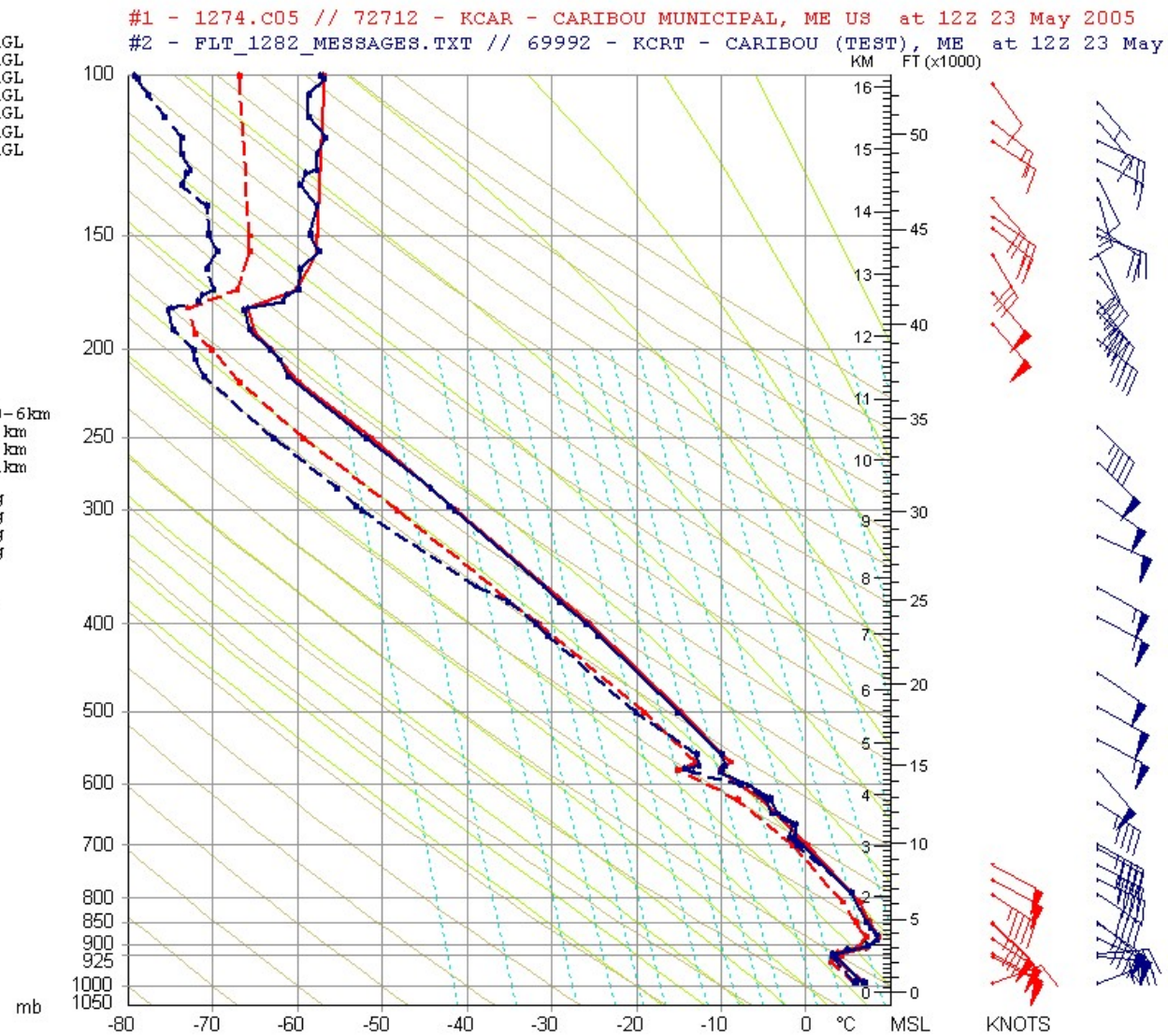
Test #23 - System Test II – 12UTC on 05/23/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12405	12362	m AGL
FRZG Lvl:	2879	2761	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	418	--	m AGL
CCL Hgt:	302	245	m AGL
LCL Hgt:	137	137	m AGL
Water:	2.59	2.78	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	212.9	229.4	
CAP:	0.4	--	
Boyden:	91.7	92.2	
S{TT}:	39.2	42.0	
KO:	13.1	11.6	
LI:	16.3	15.9	
TT:	42.9	44.6	
KI:	26.5	28.9	
Tc:	7.8	7.7	°C
Storm:	146/44	142/39	0-6km
s-rH:	285	364	0-3km
s-rH:	271	354	0-2km
s-rH:	273	333	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	47.0	48.8	
Threat:	13.6	14.3	
Point:	6.4	6.2	°C
1000 - 500 mb:	5541	5541	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1335	1335	m
850 - 500 mb:	4206	4207	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2622	2625	m
600 - 400 mb:	3059	3054	m



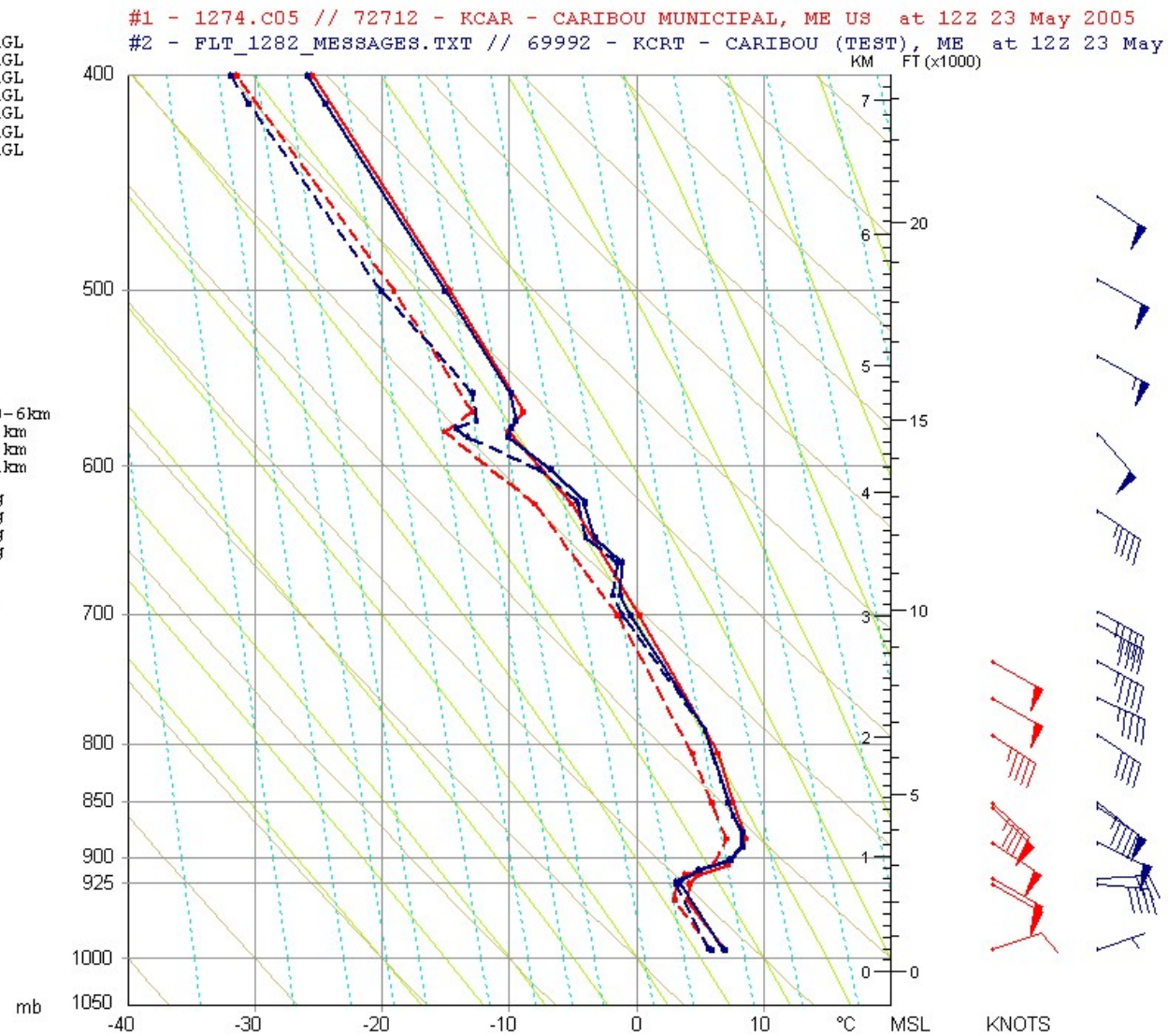
Test #23 - System Test II – 12UTC on 05/23/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12405	12362	m AGL
FRZG Lvl:	2879	2761	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	418	--	m AGL
CCL Hgt:	302	245	m AGL
LCL Hgt:	137	137	m AGL
Water:	2.59	2.78	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	212.9	229.4	
CAP:	0.4	--	
Boyden:	91.7	92.2	
S{TT}:	39.2	42.0	
KO:	13.1	11.6	
LI:	16.3	15.9	
TT:	42.9	44.6	
KI:	26.5	28.9	
Tc:	7.8	7.7	°C
Storm:	146/44	142/39	0-6km
s-rH:	285	364	0-3km
s-rH:	271	354	0-2km
s-rH:	273	333	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	47.0	48.8	
Threat:	13.6	14.3	
Point:	6.4	6.2	°C
1000 - 500 mb:	5541	5541	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1335	1335	m
850 - 500 mb:	4206	4207	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2622	2625	m
600 - 400 mb:	3059	3054	m



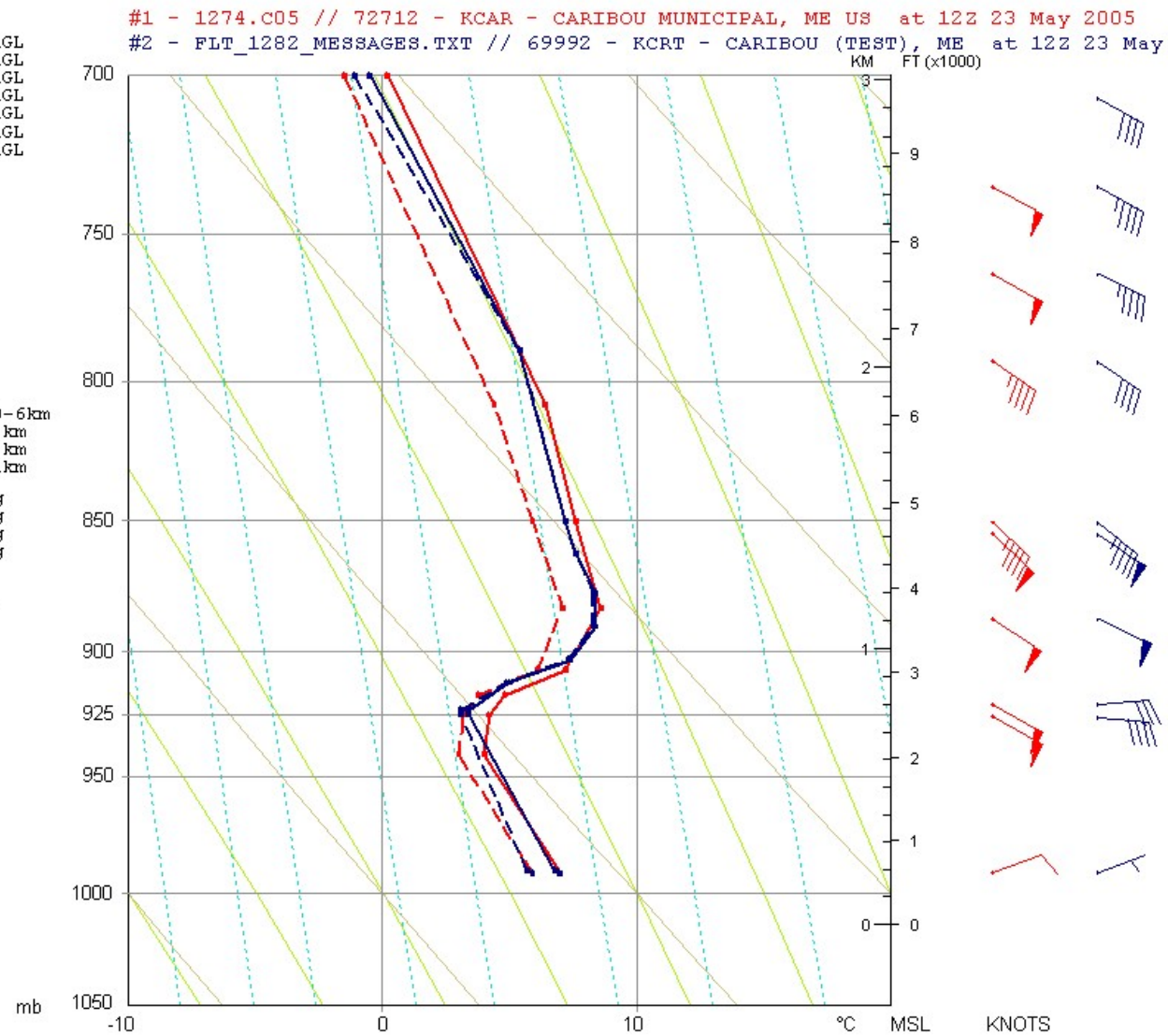
Test #23 - System Test II – 12UTC on 05/23/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12405	12362	m AGL
FRZG Lvl:	2879	2761	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	418	--	m AGL
CCL Hgt:	302	245	m AGL
LCL Hgt:	137	137	m AGL
Water:	2.59	2.78	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	212.9	229.4	
CAP:	0.4	--	
Boyden:	91.7	92.2	
S{TT}:	39.2	42.0	
KO:	13.1	11.6	
LI:	16.3	15.9	
TT:	42.9	44.6	
KI:	26.5	28.9	
Tc:	7.8	7.7	°C
Storm:	146/44	142/39	0-6km
s-rH:	285	364	0-3km
s-rH:	271	354	0-2km
s-rH:	273	333	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	47.0	48.8	
Threat:	13.6	14.3	
Point:	6.4	6.2	°C
1000 - 500 mb:	5541	5541	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1335	1335	m
850 - 500 mb:	4206	4207	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2622	2625	m
600 - 400 mb:	3059	3054	m

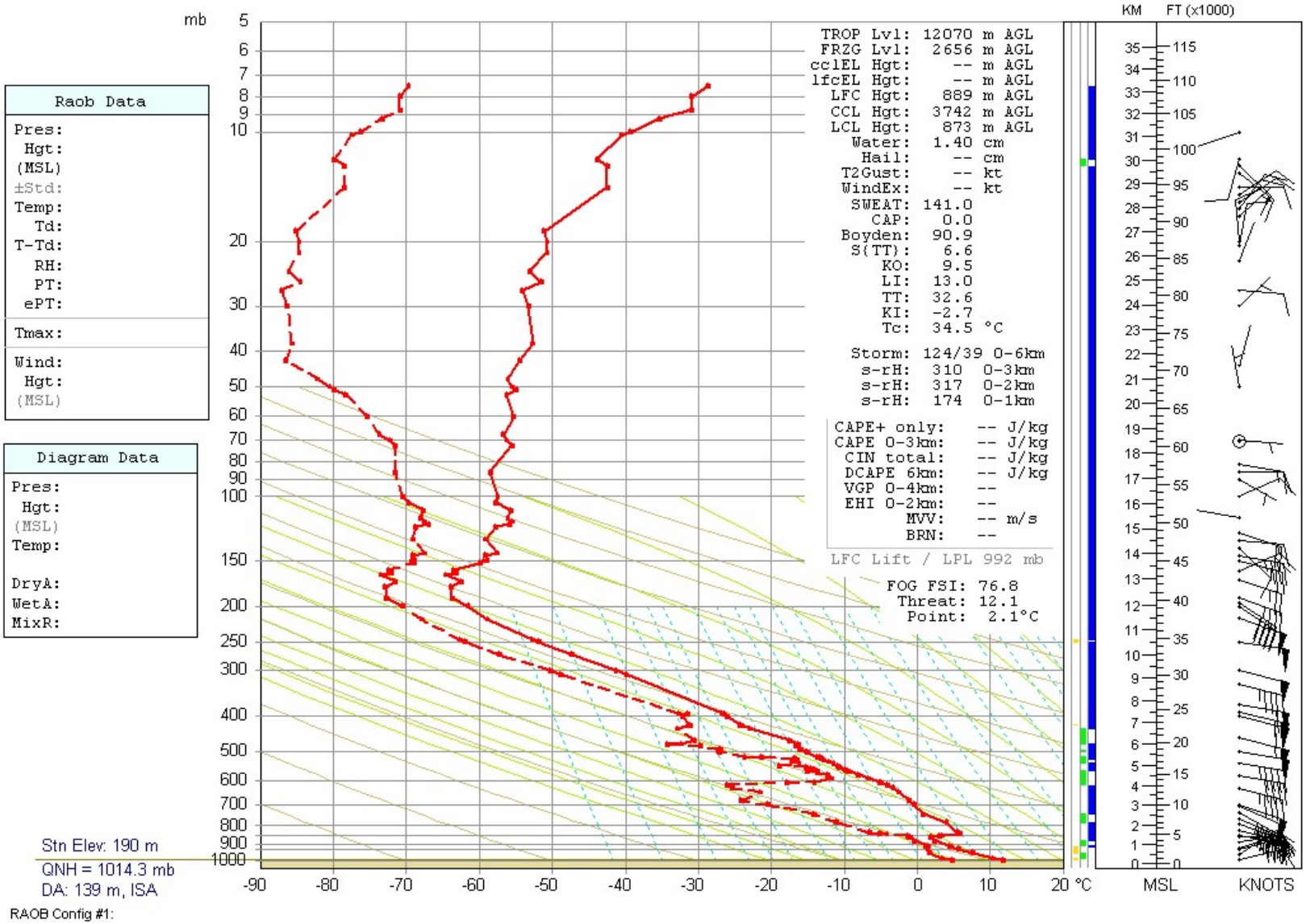


Test #23 - System Test II – 12UTC on 05/23/2005
RWS Version 1.0.4.0

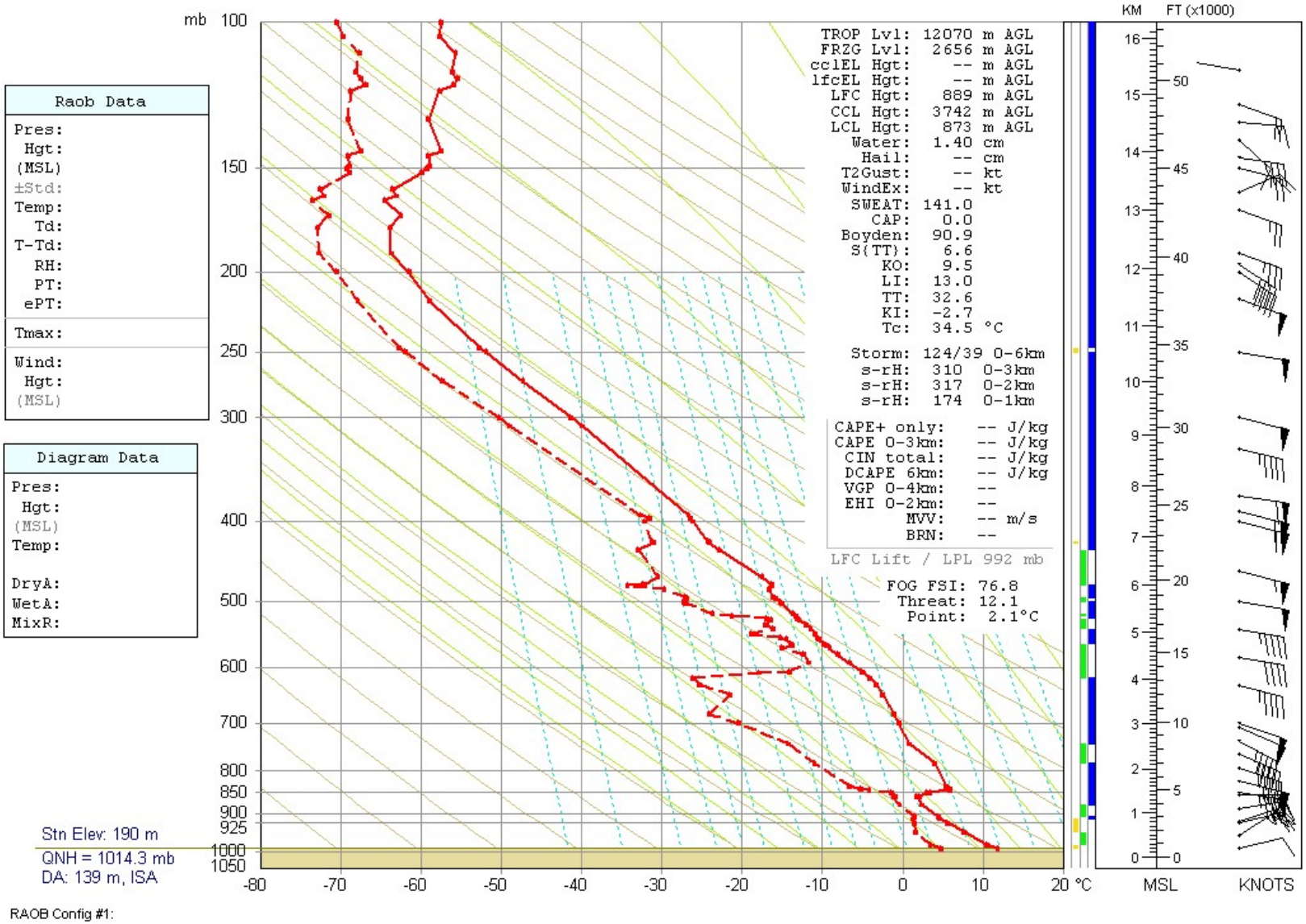
	#1	#2	
TROP Lvl:	12405	12362	m AGL
FRZG Lvl:	2879	2761	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	418	--	m AGL
CCL Hgt:	302	245	m AGL
LCL Hgt:	137	137	m AGL
Water:	2.59	2.78	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	212.9	229.4	
CAP:	0.4	--	
Boyden:	91.7	92.2	
S{TT}:	39.2	42.0	
KO:	13.1	11.6	
LI:	16.3	15.9	
TT:	42.9	44.6	
KI:	26.5	28.9	
Tc:	7.8	7.7	°C
Storm:	146/44	142/39	0-6km
s-rH:	285	364	0-3km
s-rH:	271	354	0-2km
s-rH:	273	333	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	47.0	48.8	
Threat:	13.6	14.3	
Point:	6.4	6.2	°C
1000 - 500 mb:	5541	5541	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1335	1335	m
850 - 500 mb:	4206	4207	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2622	2625	m
600 - 400 mb:	3059	3054	m



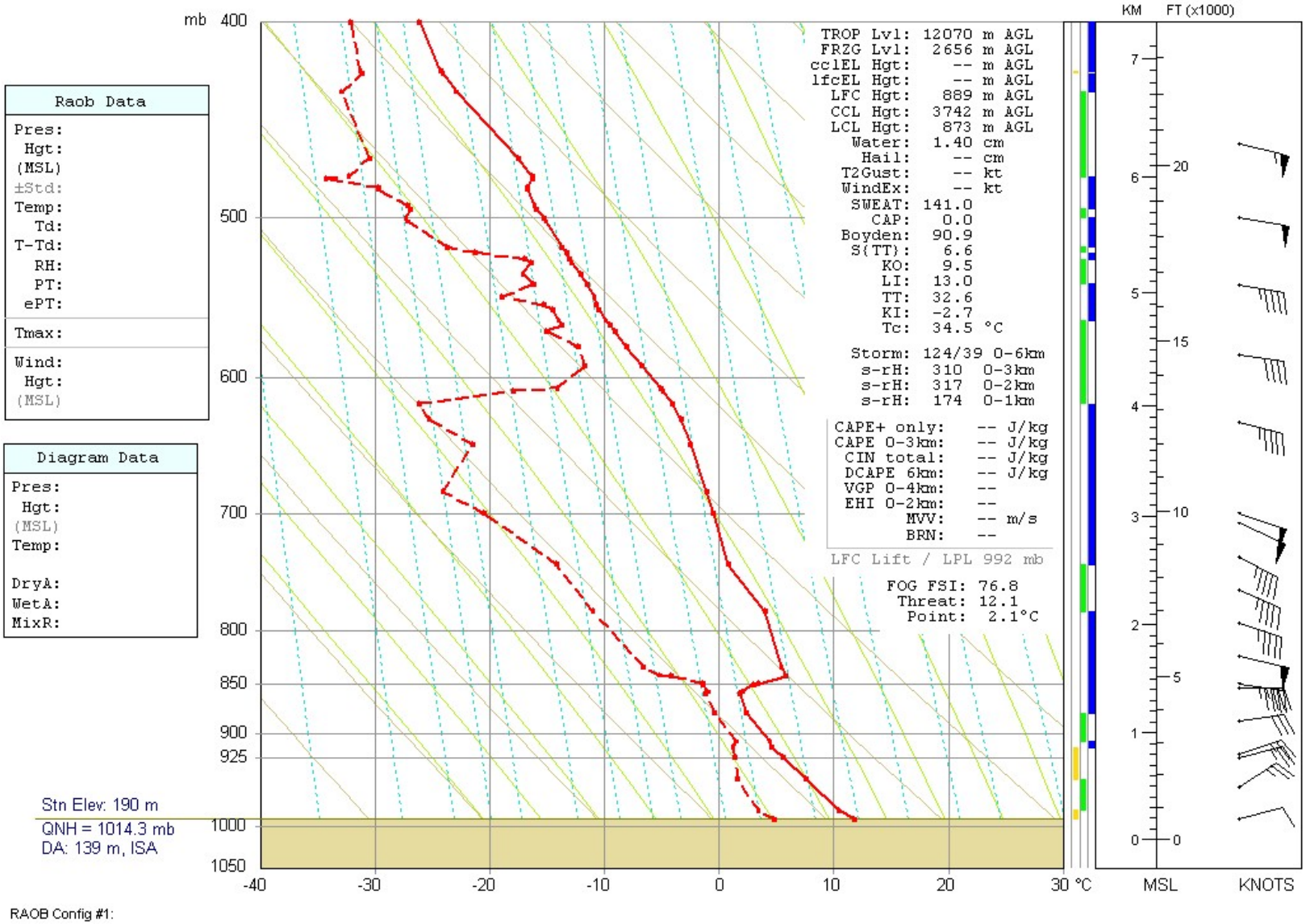
Test #25 System Test II – 20 UTC on 05/23/2005
RWS Version 1.0.4.0



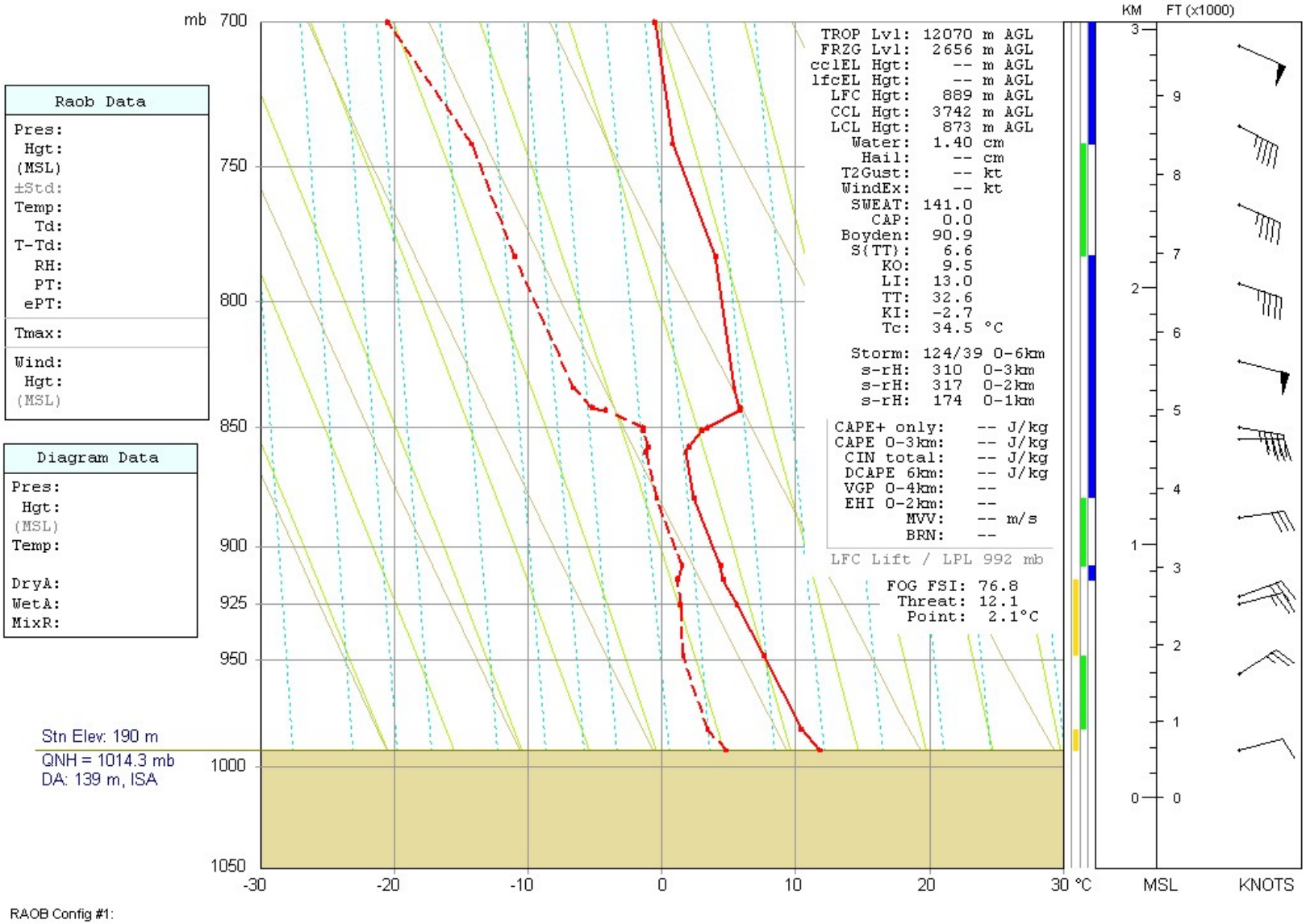
Test #25 System Test II – 20 UTC on 05/23/2005
RWS Version 1.0.4.0



Test #25 System Test II – 20 UTC on 05/23/2005
RWS Version 1.0.4.0



Test #25 System Test II – 20 UTC on 05/23/2005
RWS Version 1.0.4.0



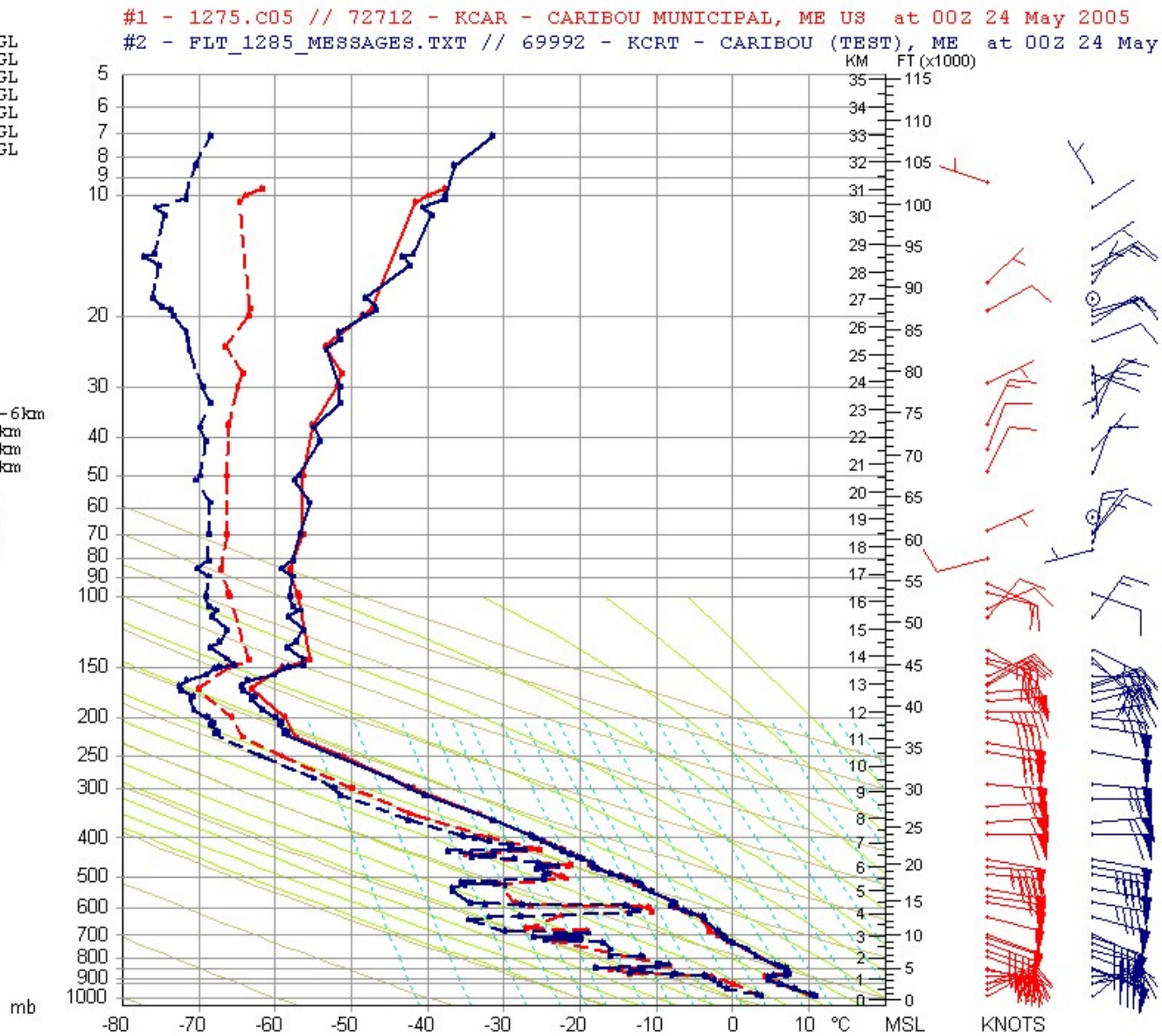
Test #26 - System Test II – 00UTC on 05/24/2005
RWS Version 1.0.4.0

TEST # 26			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12779	12692	87
Freezing Level (m AGL)	2489	2513	-24
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	3770	3946	-176
LCL Height (m AGL)	876	876	0
Precipitable Water (cm)	1.15	1.04	0.11
Thickness 1000 - 500 mb (m)	5526	5530	-4
Thickness 1000 - 700 mb (m)	2906	2908	-2
Thickness 1000 - 850 mb (m)	1337	1338	-1
Thickness 850 - 500 mb (m)	4189	4192	-3
Thickness 850 - 700 mb (m)	1569	1569	0
Thickness 700 - 500 mb (m)	2620	2622	-2
Thickness 600 - 400 mb (m)	3058	3058	0
Wind Shear Below	08	06	2
Wind Shear Above	26	13	13
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

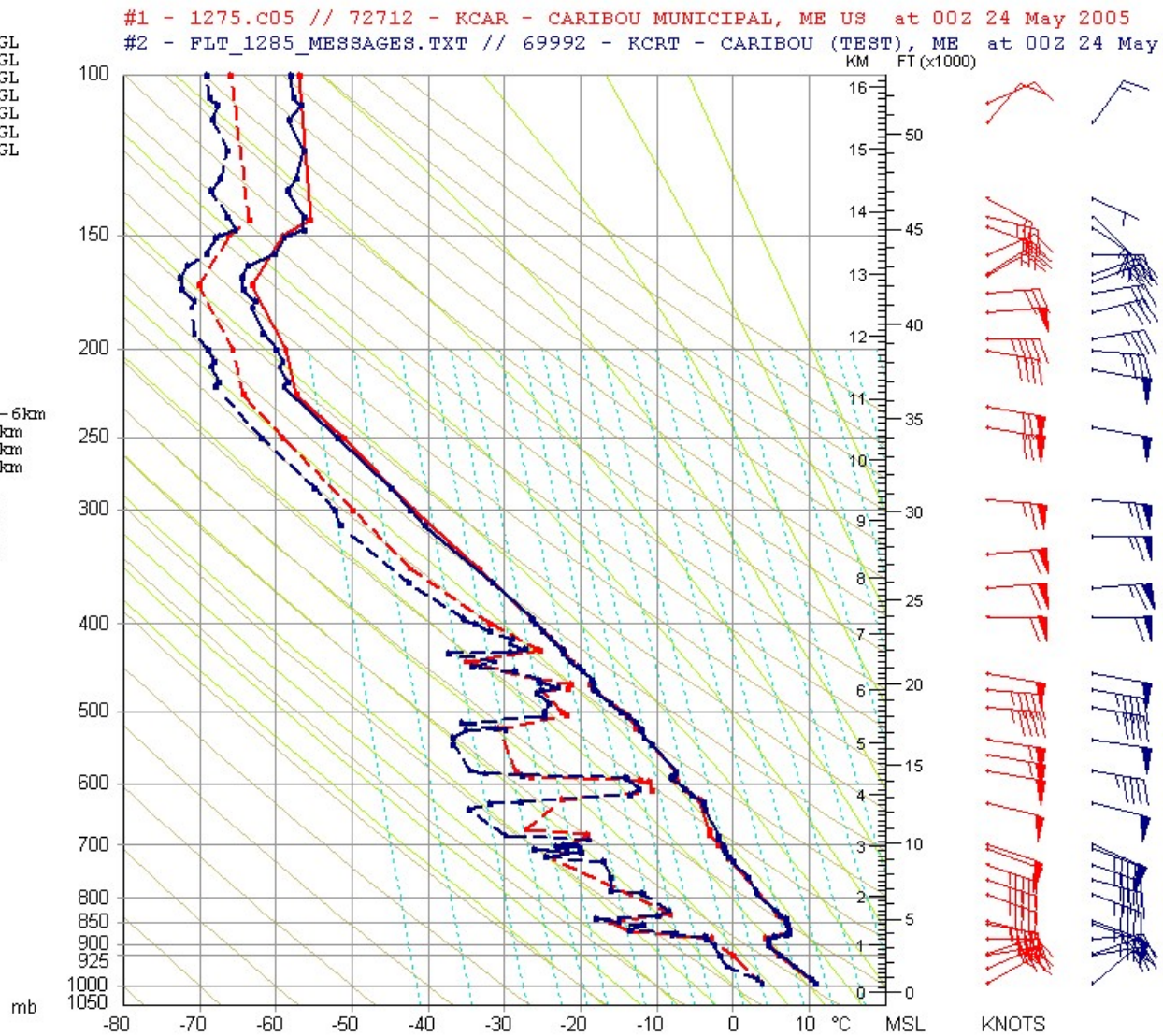
Test #26 - System Test II – 00UTC on 05/24/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12779	12692	m AGL
FRZG Lvl:	2489	2513	m AGL
cclEL Hgt:	4230	4223	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3770	3946	m AGL
LCL Hgt:	876	876	m AGL
Water:	1.15	1.04	cm
Hail:	--	--	cm
T2Gust:	23	23	kt
WindEx:	--	--	kt
SWEAT:	136.0	139.0	
CAP:	--	--	
Boyden:	92.5	92.1	
S(TT):	-5.0	-5.6	
KO:	13.3	12.8	
LI:	15.3	15.1	
TT:	20.0	21.4	
KI:	-13.5	-14.3	
Tc:	33.6	33.9	°C
Storm:	121/43	122/41	0-6km
s-rH:	255	276	0-3km
s-rH:	244	259	0-2km
s-rH:	198	198	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	67.6	67.6	
Threat:	12.8	13.6	
Point:	-.6	-1.3°C	
1000 - 500 mb:	5526	5530	m
1000 - 700 mb:	2906	2908	m
1000 - 850 mb:	1337	1338	m
850 - 500 mb:	4189	4192	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2620	2622	m
600 - 400 mb:	3058	3058	m



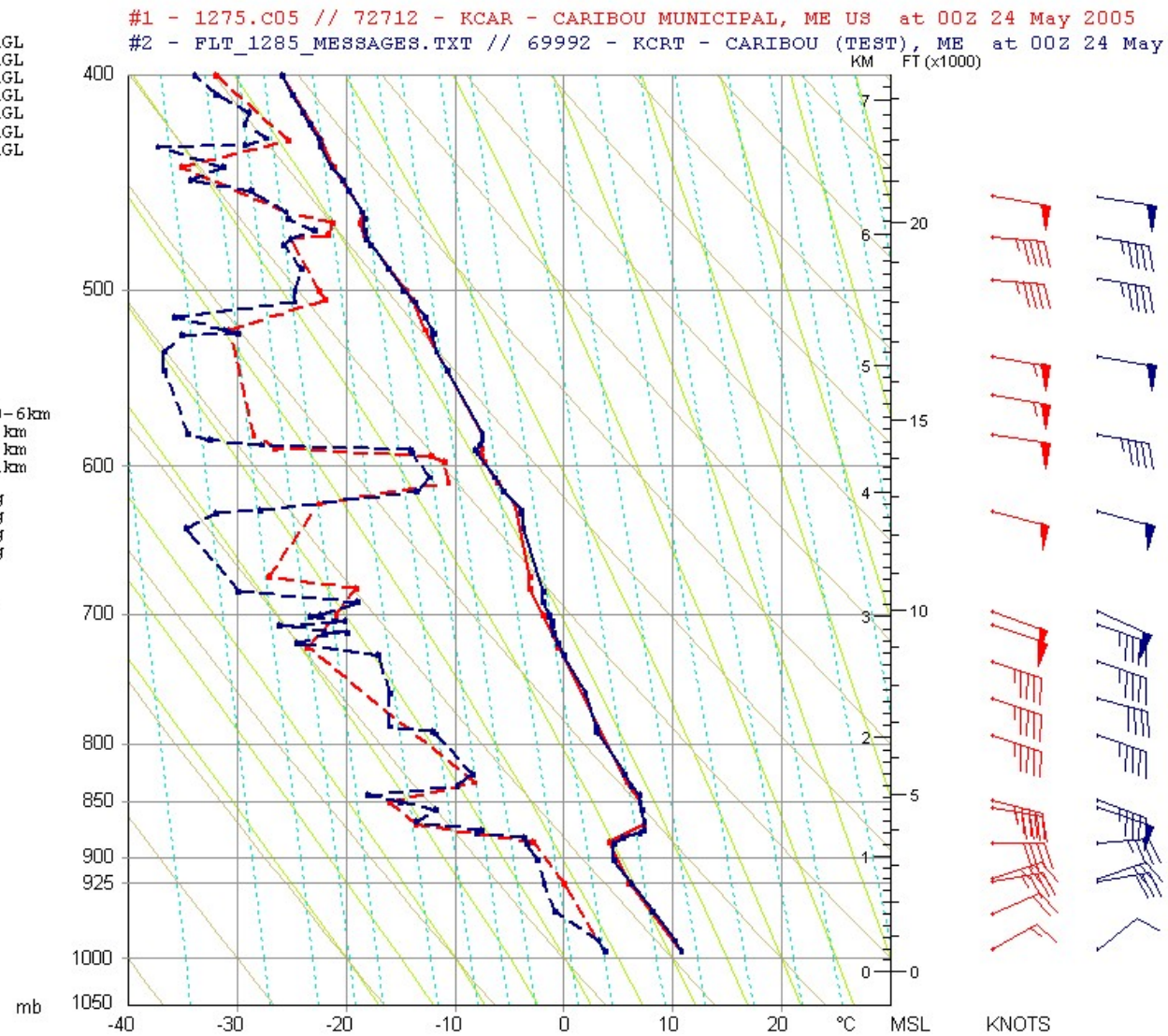
Test #26 - System Test II – 00UTC on 05/24/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12779	12692	m AGL
FRZG Lvl:	2489	2513	m AGL
cclEL Hgt:	4230	4223	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3770	3946	m AGL
LCL Hgt:	876	876	m AGL
Water:	1.15	1.04	cm
Hail:	--	--	cm
T2Gust:	23	23	kt
WindEx:	--	--	kt
SWEAT:	136.0	139.0	
CAP:	--	--	
Boyden:	92.5	92.1	
S{TT}:	-5.0	-5.6	
KO:	13.3	12.8	
LI:	15.3	15.1	
TT:	20.0	21.4	
KI:	-13.5	-14.3	
Tc:	33.6	33.9	°C
Storm:	121/43	122/41	0-6km
s-rH:	255	276	0-3km
s-rH:	244	259	0-2km
s-rH:	198	198	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	67.6	67.6	
Threat:	12.8	13.6	
Point:	-.6	-1.3	°C
1000 - 500 mb:	5526	5530	m
1000 - 700 mb:	2906	2908	m
1000 - 850 mb:	1337	1338	m
850 - 500 mb:	4189	4192	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2620	2622	m
600 - 400 mb:	3058	3058	m



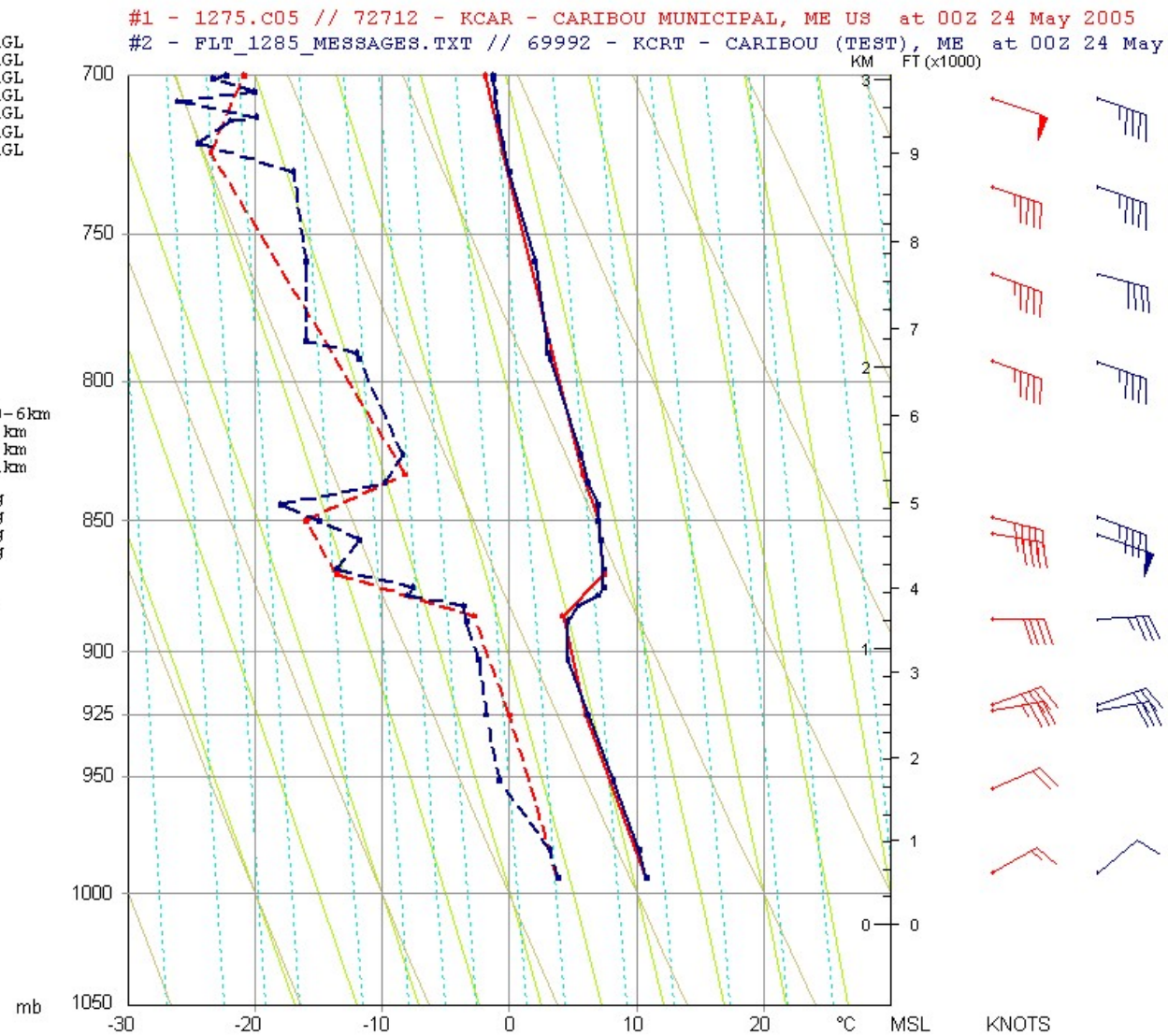
Test #26 - System Test II – 00UTC on 05/24/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12779	12692	m AGL
FRZG Lvl:	2489	2513	m AGL
cclEL Hgt:	4230	4223	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3770	3946	m AGL
LCL Hgt:	876	876	m AGL
Water:	1.15	1.04	cm
Hail:	--	--	cm
T2Gust:	23	23	kt
WindEx:	--	--	kt
SWEAT:	136.0	139.0	
CAP:	--	--	
Boyden:	92.5	92.1	
S{TT}:	-5.0	-5.6	
KO:	13.3	12.8	
LI:	15.3	15.1	
TT:	20.0	21.4	
KI:	-13.5	-14.3	
Tc:	33.6	33.9	°C
Storm:	121/43	122/41	0-6km
s-rH:	255	276	0-3km
s-rH:	244	259	0-2km
s-rH:	198	198	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	67.6	67.6	
Threat:	12.8	13.6	
Point:	-.6	-1.3	°C
1000 - 500 mb:	5526	5530	m
1000 - 700 mb:	2906	2908	m
1000 - 850 mb:	1337	1338	m
850 - 500 mb:	4189	4192	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2620	2622	m
600 - 400 mb:	3058	3058	m



Test #26 - System Test II – 00UTC on 05/24/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12779	12692	m AGL
FRZG Lvl:	2489	2513	m AGL
cclEL Hgt:	4230	4223	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3770	3946	m AGL
LCL Hgt:	876	876	m AGL
Water:	1.15	1.04	cm
Hail:	--	--	cm
T2Gust:	23	23	kt
WindEx:	--	--	kt
SWEAT:	136.0	139.0	
CAP:	--	--	
Boyden:	92.5	92.1	
S{TT}:	-5.0	-5.6	
KO:	13.3	12.8	
LI:	15.3	15.1	
TT:	20.0	21.4	
KI:	-13.5	-14.3	
Tc:	33.6	33.9	°C
Storm:	121/43	122/41	0-6km
s-rH:	255	276	0-3km
s-rH:	244	259	0-2km
s-rH:	198	198	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	67.6	67.6	
Threat:	12.8	13.6	
Point:	-.6	-1.3	°C
1000 - 500 mb:	5526	5530	m
1000 - 700 mb:	2906	2908	m
1000 - 850 mb:	1337	1338	m
850 - 500 mb:	4189	4192	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2620	2622	m
600 - 400 mb:	3058	3058	m



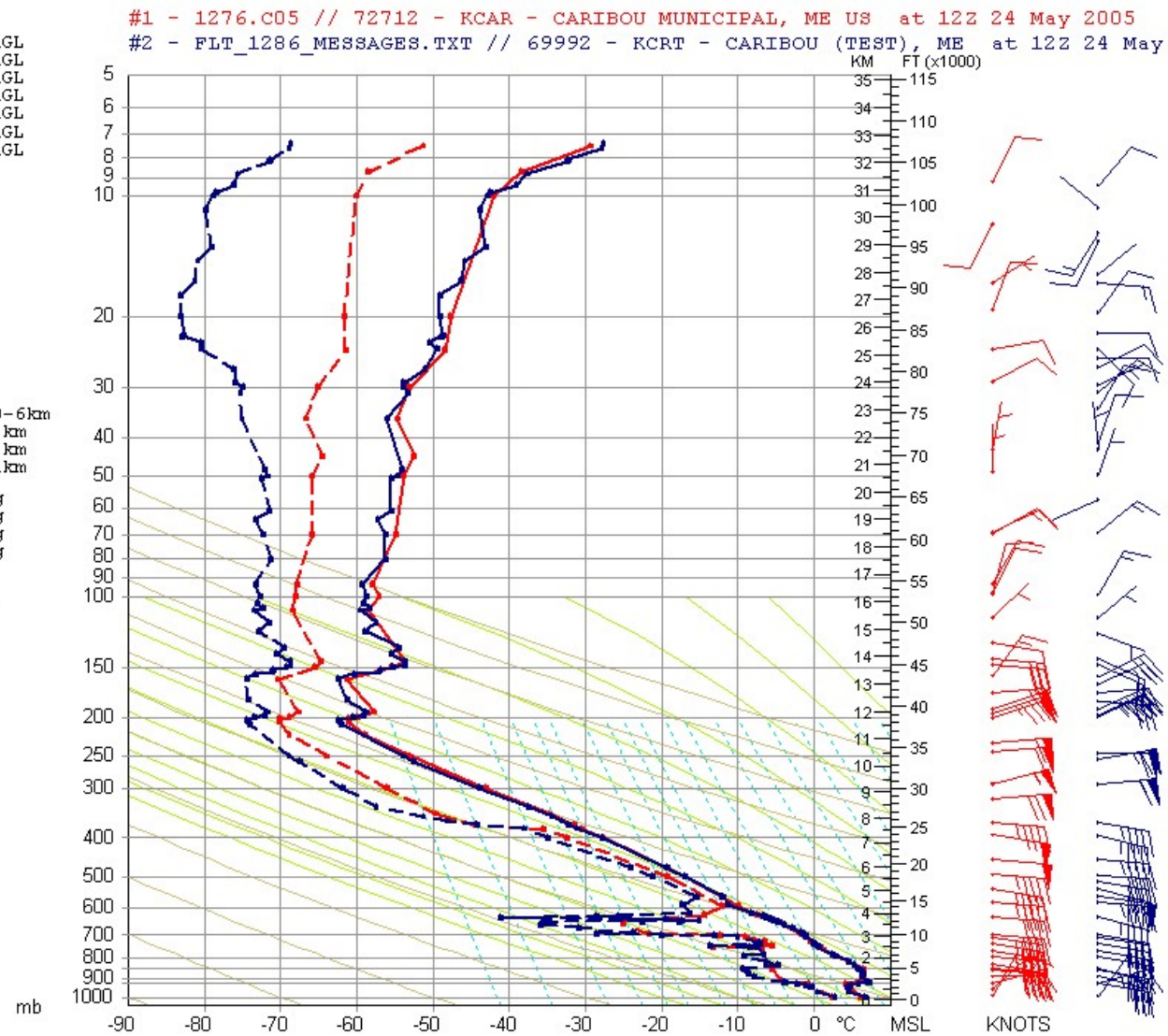
Test #27 - System Test II – 12UTC on 05/24/2005
RWS Version 1.0.4.0

TEST # 27			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11570	11612	-42
Freezing Level (m AGL)	2472	2442	30
LFC Height (m AGL)			0
CCL Height (m AGL)	3557	3708	-151
LCL Height (m AGL)	464	488	-24
Precipitable Water (cm)	1.52	1.31	0.21
Thickness 1000 - 500 mb (m)	5502	5498	4
Thickness 1000 - 700 mb (m)	2899	2898	1
Thickness 1000 - 850 mb (m)	1331	1330	1
Thickness 850 - 500 mb (m)	4171	4168	3
Thickness 850 - 700 mb (m)	1569	1568	1
Thickness 700 - 500 mb (m)	2602	2600	2
Thickness 600 - 400 mb (m)	3032	3029	3
Wind Shear Below	27	08	19
Wind Shear Above	19	14	5
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Warmer	Colder	

NC= Not Calculated

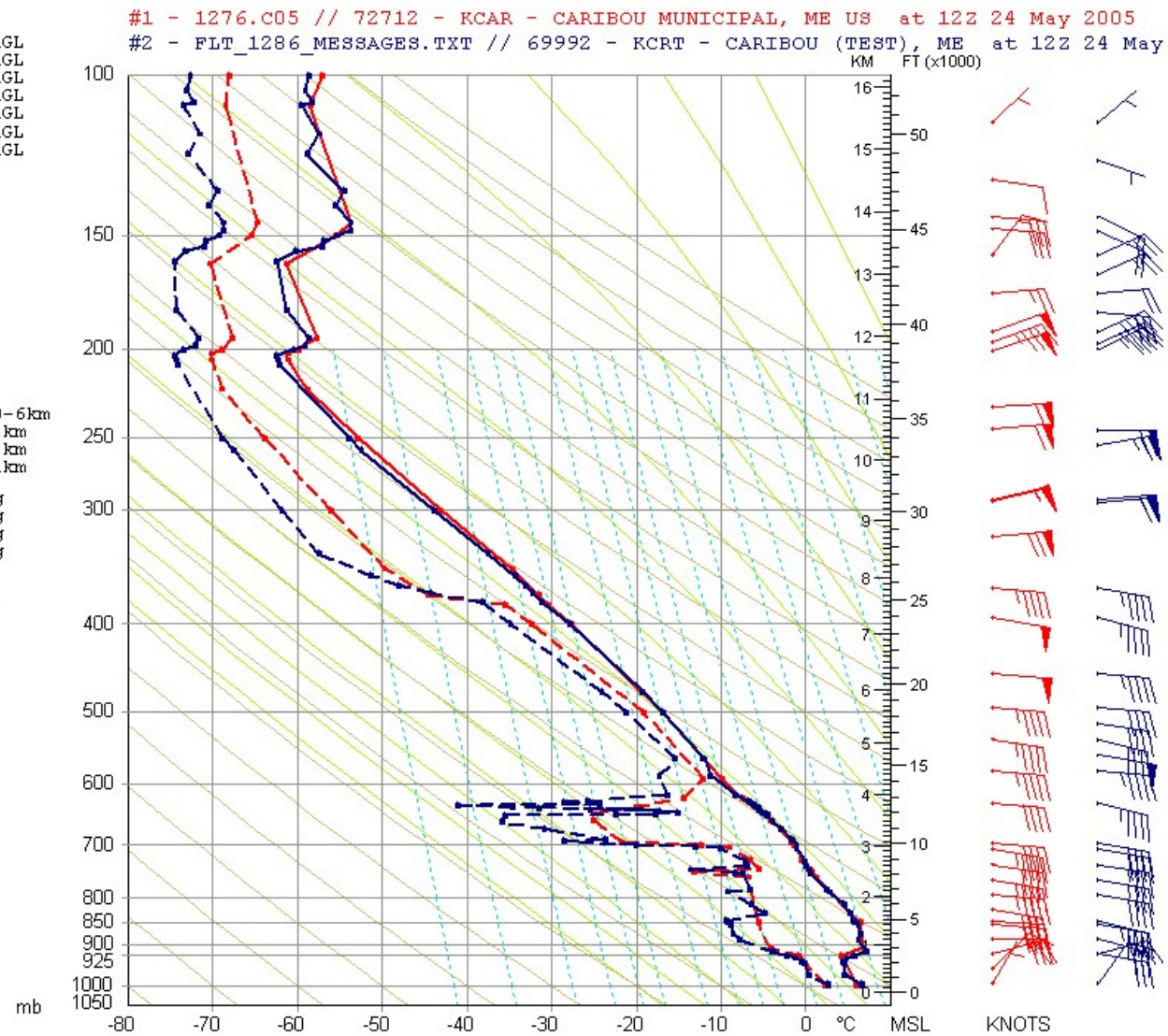
Test #27 - System Test II – 12UTC on 05/24/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11570	11612	m AGL
FRZG Lvl:	2472	2442	m AGL
cclEL Hgt:	4365	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3557	3708	m AGL
LCL Hgt:	464	488	m AGL
Water:	1.52	1.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	129.0	121.0	
CAP:	--	--	
Boyden:	91.2	90.9	
S{TT}:	21.6	9.4	
KO:	15.8	14.7	
LI:	17.8	17.1	
TT:	34.6	30.4	
KI:	6.7	-5.5	
Tc:	30.3	31.0	°C
Storm:	117/38	120/42	0-6km
s-rH:	228	119	0-3km
s-rH:	231	127	0-2km
s-rH:	179	106	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	48.6	49.4	
Threat:	13.5	12.4	
Point:	.9	.5	°C
1000 - 500 mb:	5502	5498	m
1000 - 700 mb:	2899	2898	m
1000 - 850 mb:	1331	1330	m
850 - 500 mb:	4171	4168	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2602	2600	m
600 - 400 mb:	3032	3029	m



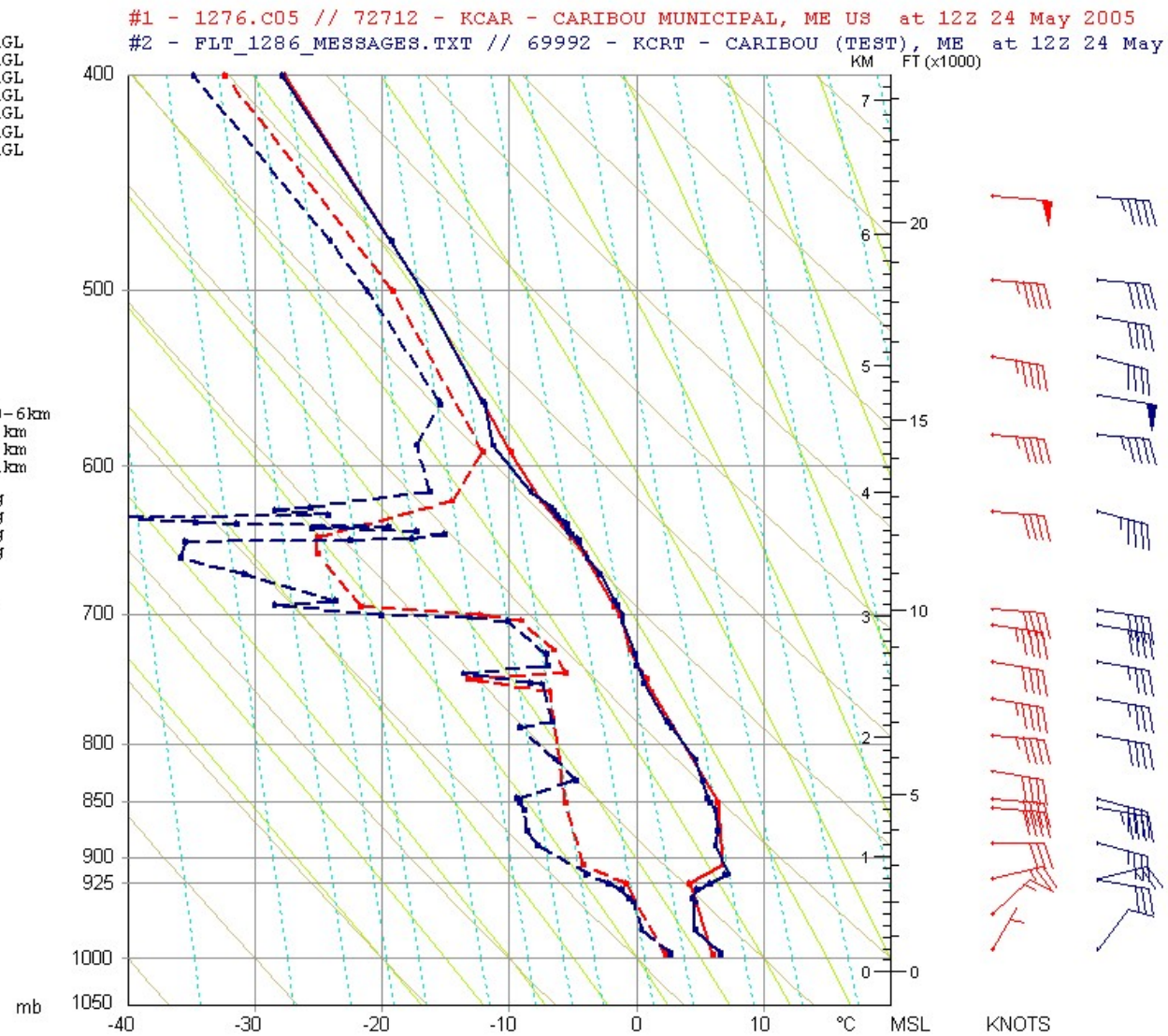
Test #27 - System Test II – 12UTC on 05/24/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11570	11612	m AGL
FRZG Lvl:	2472	2442	m AGL
cclEL Hgt:	4365	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3557	3708	m AGL
LCL Hgt:	464	488	m AGL
Water:	1.52	1.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	129.0	121.0	
CAP:	--	--	
Boyden:	91.2	90.9	
S{TT}:	21.6	9.4	
KO:	15.8	14.7	
LI:	17.8	17.1	
TT:	34.6	30.4	
KI:	6.7	-5.5	
Tc:	30.3	31.0	°C
Storm:	117/38	120/42	0-6km
s-rH:	228	119	0-3km
s-rH:	231	127	0-2km
s-rH:	179	106	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	48.6	49.4	
Threat:	13.5	12.4	
Point:	.9	.5°C	
1000 - 500 mb:	5502	5498	m
1000 - 700 mb:	2899	2898	m
1000 - 850 mb:	1331	1330	m
850 - 500 mb:	4171	4168	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2602	2600	m
600 - 400 mb:	3032	3029	m



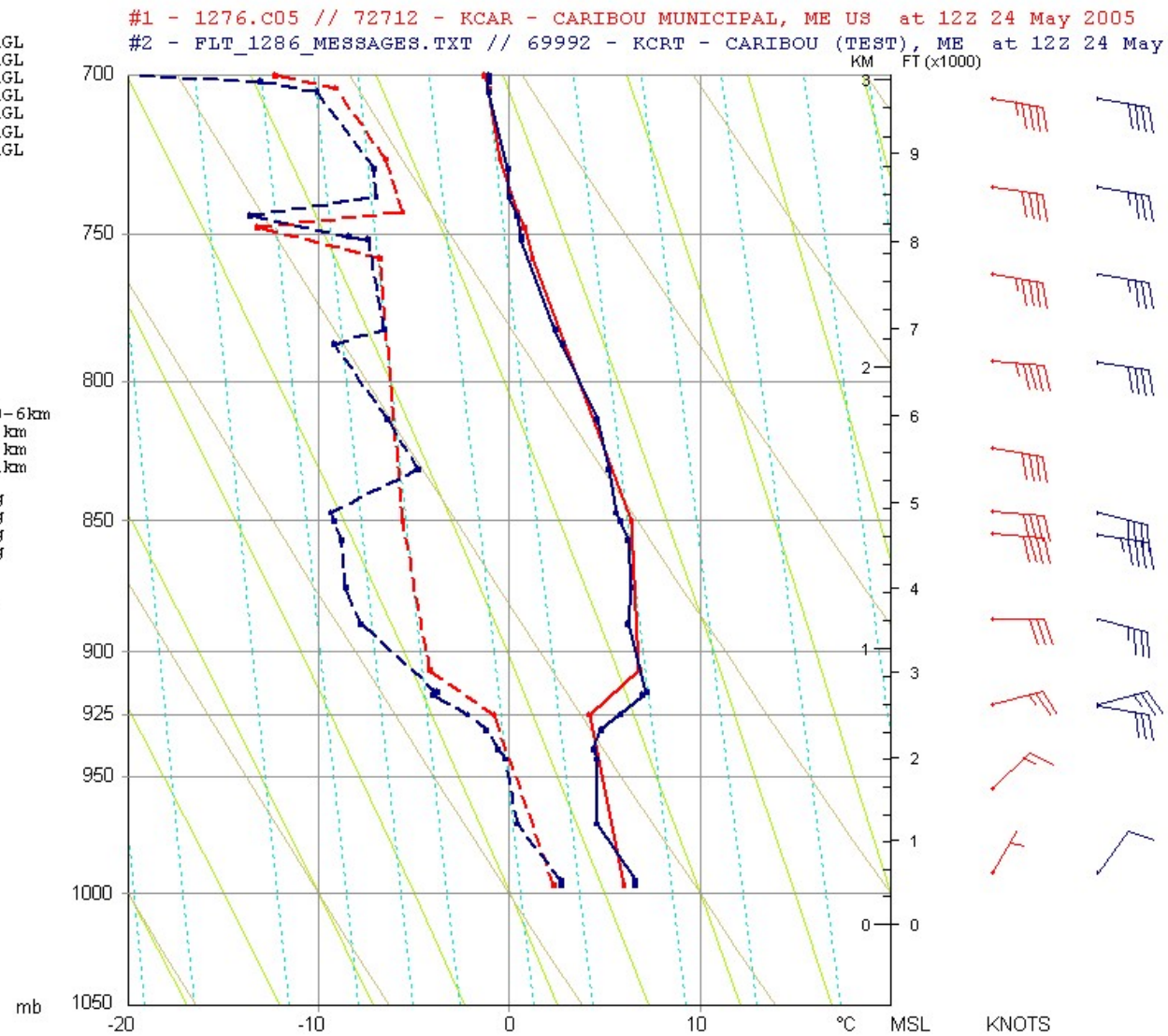
Test #27 - System Test II – 12UTC on 05/24/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11570	11612	m AGL
FRZG Lvl:	2472	2442	m AGL
cclEL Hgt:	4365	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3557	3708	m AGL
LCL Hgt:	464	488	m AGL
Water:	1.52	1.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	129.0	121.0	
CAP:	--	--	
Boyden:	91.2	90.9	
S{TT}:	21.6	9.4	
KO:	15.8	14.7	
LI:	17.8	17.1	
TT:	34.6	30.4	
KI:	6.7	-5.5	
Tc:	30.3	31.0	°C
Storm:	117/38	120/42	0-6km
s-rH:	228	119	0-3km
s-rH:	231	127	0-2km
s-rH:	179	106	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	48.6	49.4	
Threat:	13.5	12.4	
Point:	.9	.5	°C
1000 - 500 mb:	5502	5498	m
1000 - 700 mb:	2899	2898	m
1000 - 850 mb:	1331	1330	m
850 - 500 mb:	4171	4168	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2602	2600	m
600 - 400 mb:	3032	3029	m

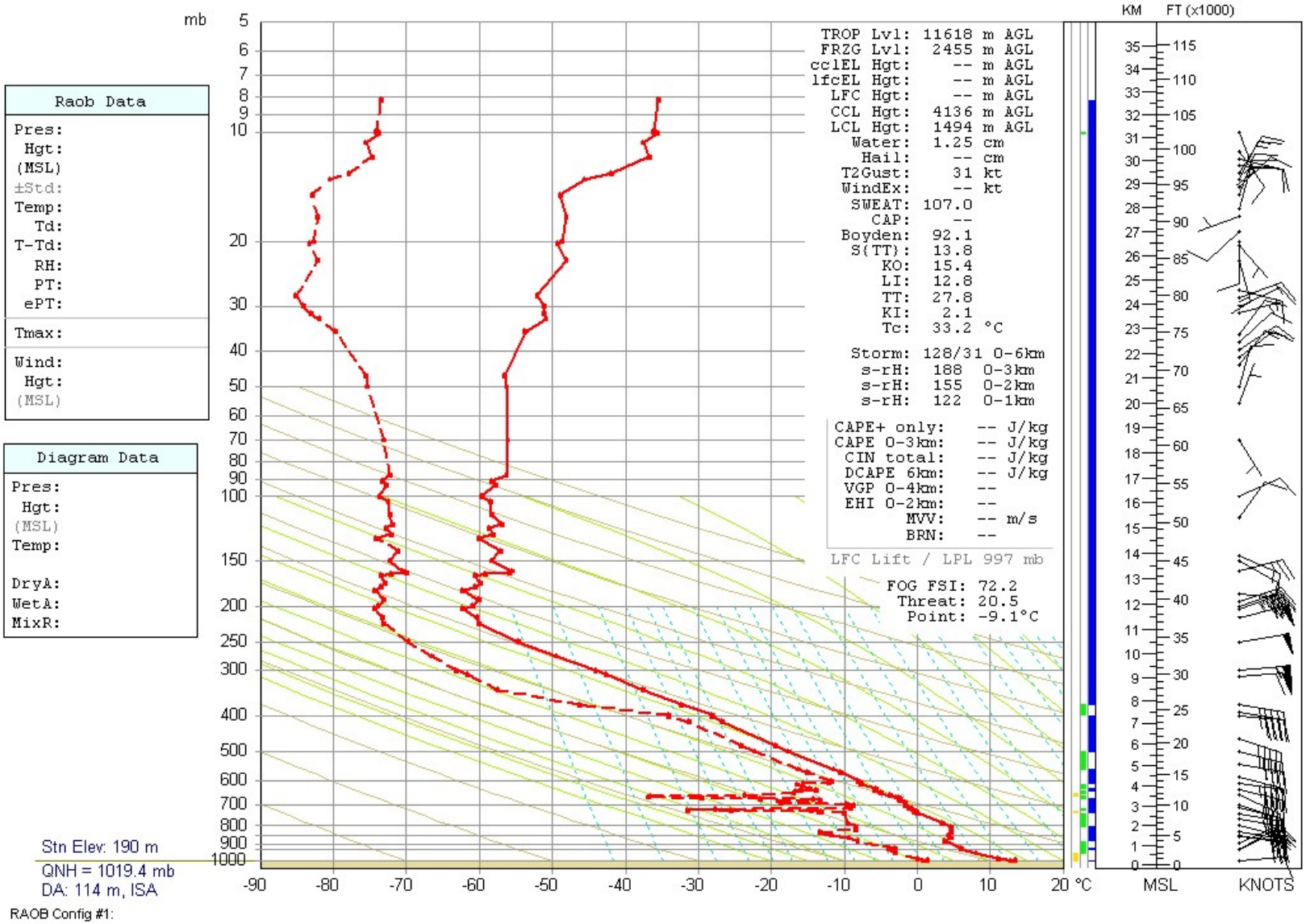


Test #27 - System Test II – 12UTC on 05/24/2005
RWS Version 1.0.4.0

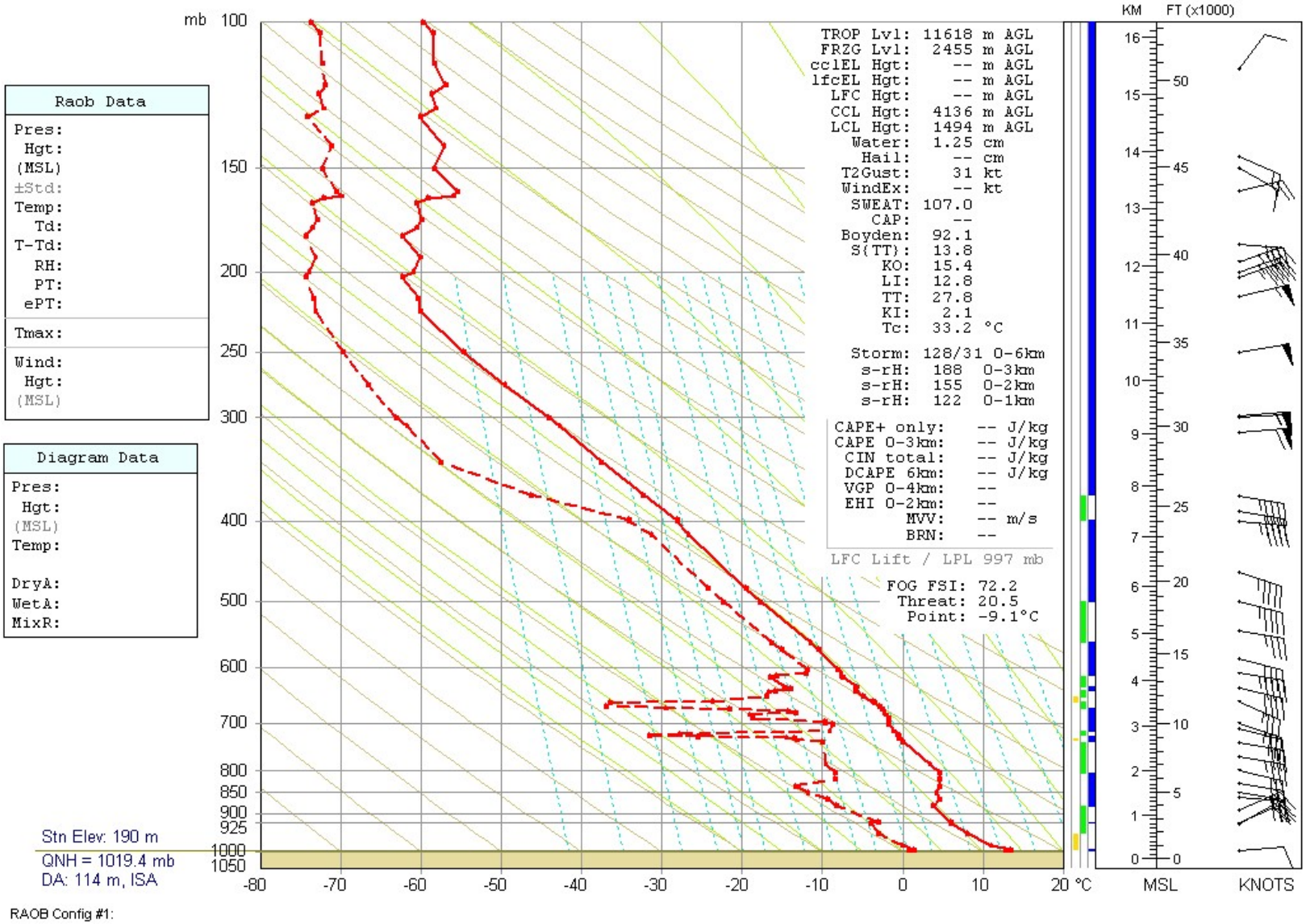
	#1	#2	
TROP Lvl:	11570	11612	m AGL
FRZG Lvl:	2472	2442	m AGL
cclEL Hgt:	4365	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3557	3708	m AGL
LCL Hgt:	464	488	m AGL
Water:	1.52	1.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	129.0	121.0	
CAP:	--	--	
Boyden:	91.2	90.9	
S{TT}:	21.6	9.4	
KO:	15.8	14.7	
LI:	17.8	17.1	
TT:	34.6	30.4	
KI:	6.7	-5.5	
Tc:	30.3	31.0	°C
Storm:	117/38	120/42	0-6km
s-rH:	228	119	0-3km
s-rH:	231	127	0-2km
s-rH:	179	106	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	48.6	49.4	
Threat:	13.5	12.4	
Point:	.9	.5°C	
1000 - 500 mb:	5502	5498	m
1000 - 700 mb:	2899	2898	m
1000 - 850 mb:	1331	1330	m
850 - 500 mb:	4171	4168	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2602	2600	m
600 - 400 mb:	3032	3029	m



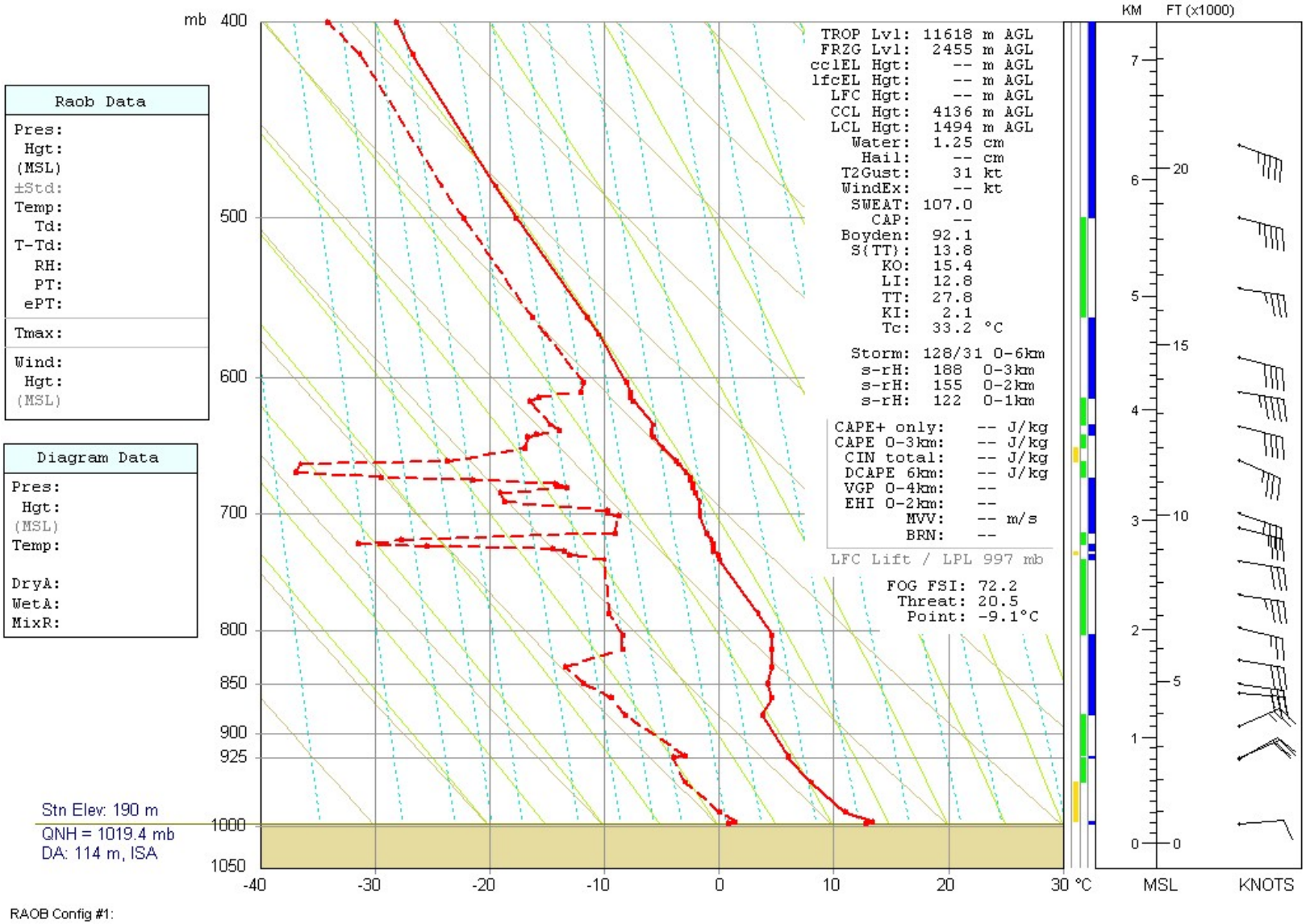
Test #28 System Test II – 15 UTC on 05/24/2005
RWS Version 1.0.4.0



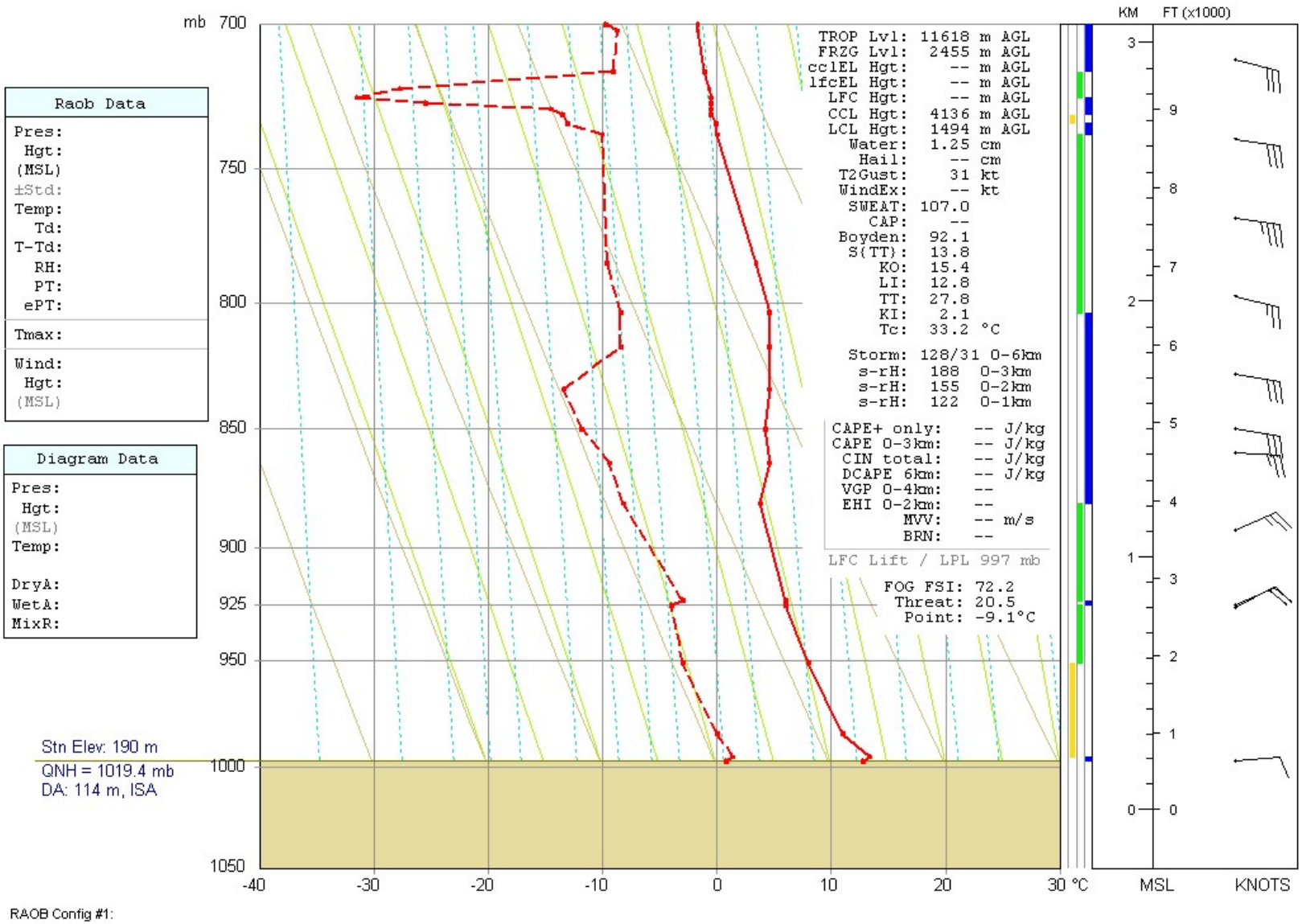
Test #28 System Test II – 15 UTC on 05/24/2005
RWS Version 1.0.4.0



Test #28 System Test II – 15 UTC on 05/24/2005
RWS Version 1.0.4.0



Test #28 System Test II – 15 UTC on 05/24/2005
RWS Version 1.0.4.0



RAOB Config #1:

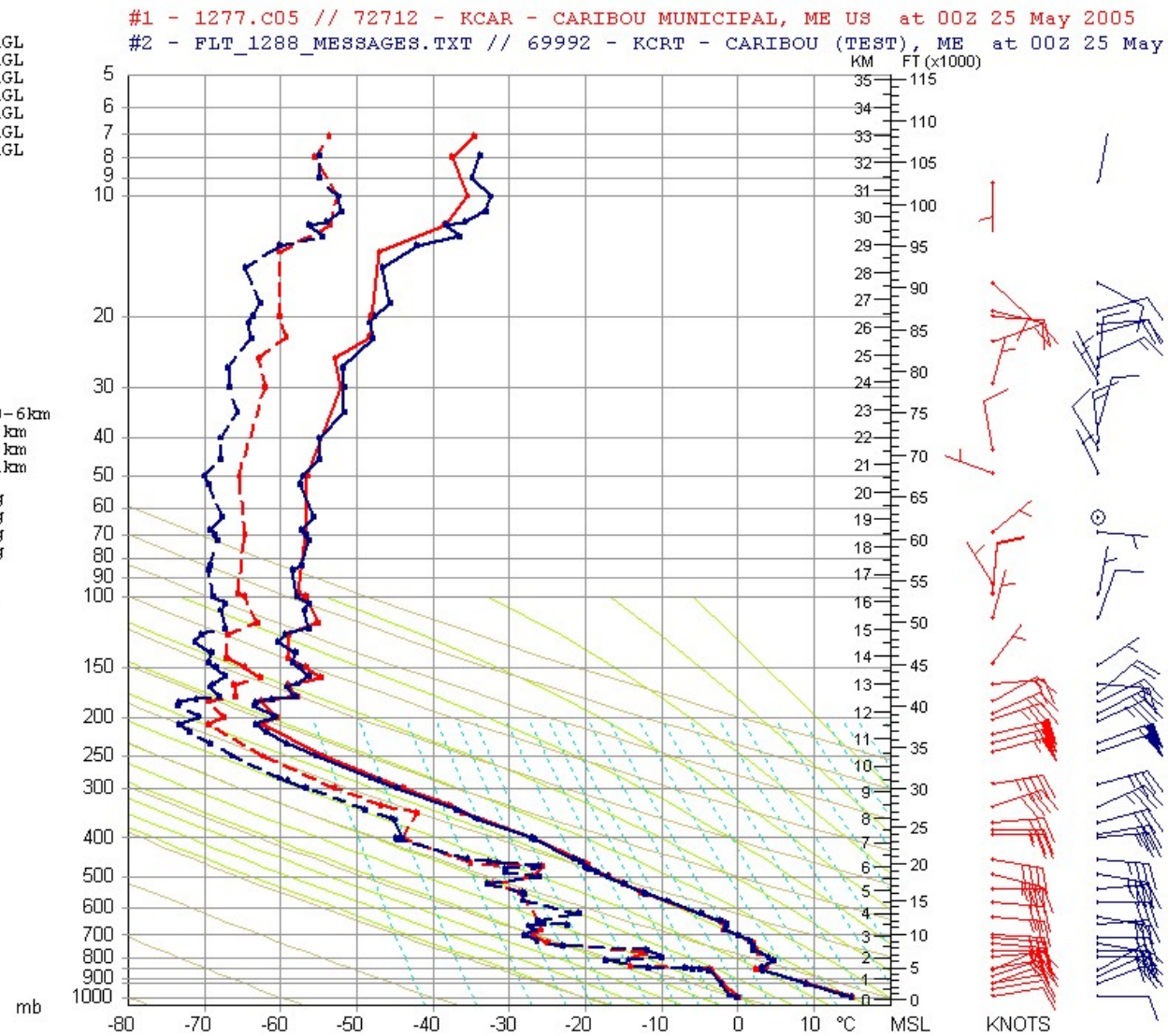
Test #29 - System Test II – 00UTC on 05/25/2005
RWS Version 1.0.4.0

TEST # 29			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11494	11477	17
Freezing Level (m AGL)	2882	2880	2
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	4170	4307	-137
LCL Height (m AGL)	1867	1867	0
Precipitable Water (cm)	1.01	0.99	0.02
Thickness 1000 - 500 mb (m)	5530	5529	1
Thickness 1000 - 700 mb (m)	2916	2914	2
Thickness 1000 - 850 mb (m)	1345	1344	1
Thickness 850 - 500 mb (m)	4184	4186	-2
Thickness 850 - 700 mb (m)	1570	1570	0
Thickness 700 - 500 mb (m)	2614	2615	-1
Thickness 600 - 400 mb (m)	3044	3038	6
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

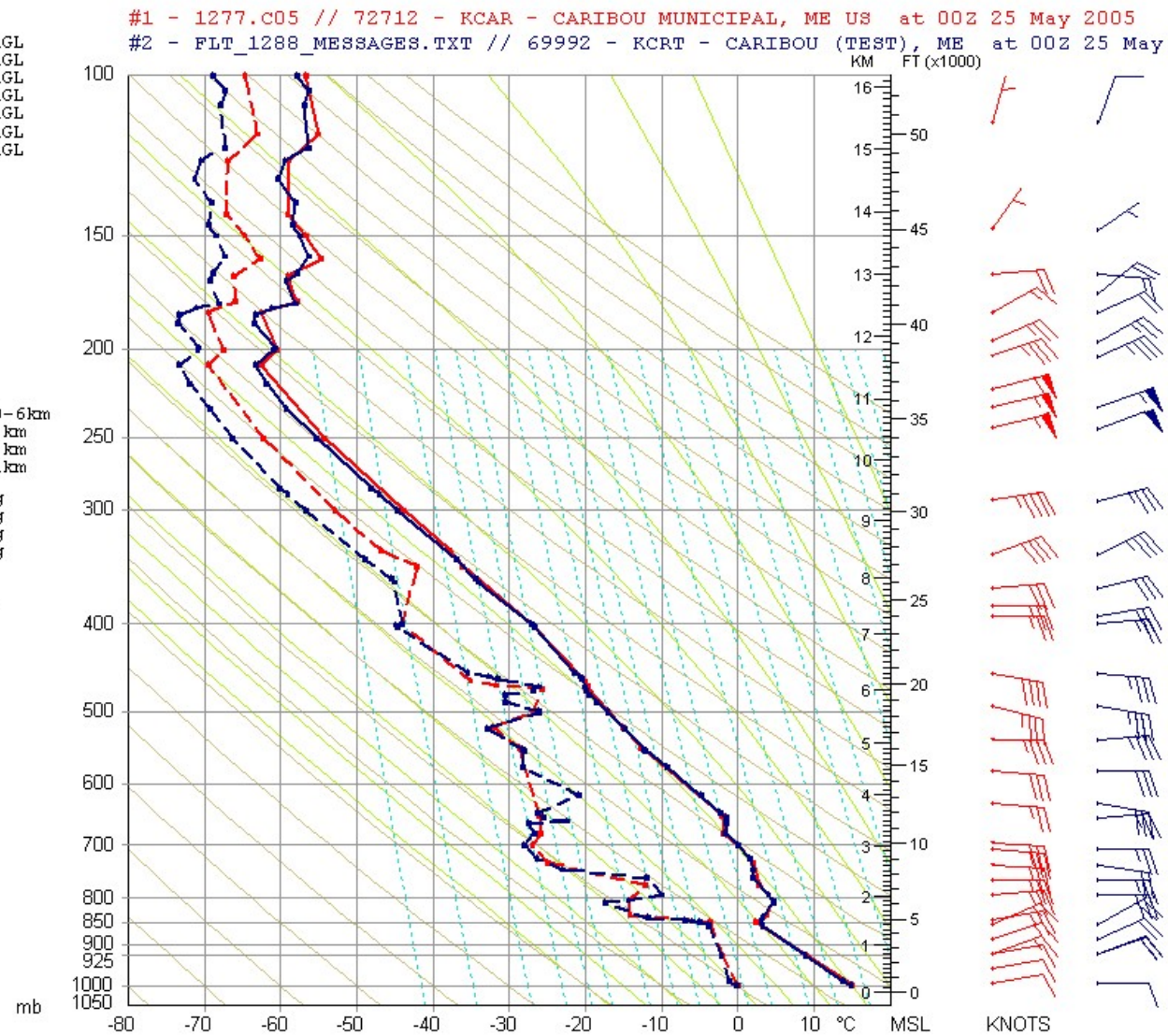
Test #29 - System Test II – 00UTC on 05/25/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11494	11477	m AGL
FRZG Lvl:	2882	2880	m AGL
cclEL Hgt:	5792	6015	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4170	4307	m AGL
LCL Hgt:	1867	1867	m AGL
Water:	1.01	0.99	cm
Hail:	--	--	cm
T2Gust:	32	32	kt
WindEx:	--	--	kt
SWEAT:	82.0	75.2	
CAP:	--	--	
Boyden:	91.6	91.4	
S{TT}:	-.4	-1.8	
KO:	10.5	10.9	
LI:	12.2	12.3	
TT:	32.6	32.2	
KI:	-11.3	-12.9	
Tc:	34.6	35.4	°C
Storm:	126/26	123/24	0-6km
s-rH:	111	99	0-3km
s-rH:	106	111	0-2km
s-rH:	22	52	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	78.2	73.2	
Threat:	22.5	19.4	
Point:	-9.6	-6.7°C	
1000 - 500 mb:	5530	5529	m
1000 - 700 mb:	2916	2914	m
1000 - 850 mb:	1345	1344	m
850 - 500 mb:	4184	4186	m
850 - 700 mb:	1570	1570	m
700 - 500 mb:	2614	2615	m
600 - 400 mb:	3044	3038	m



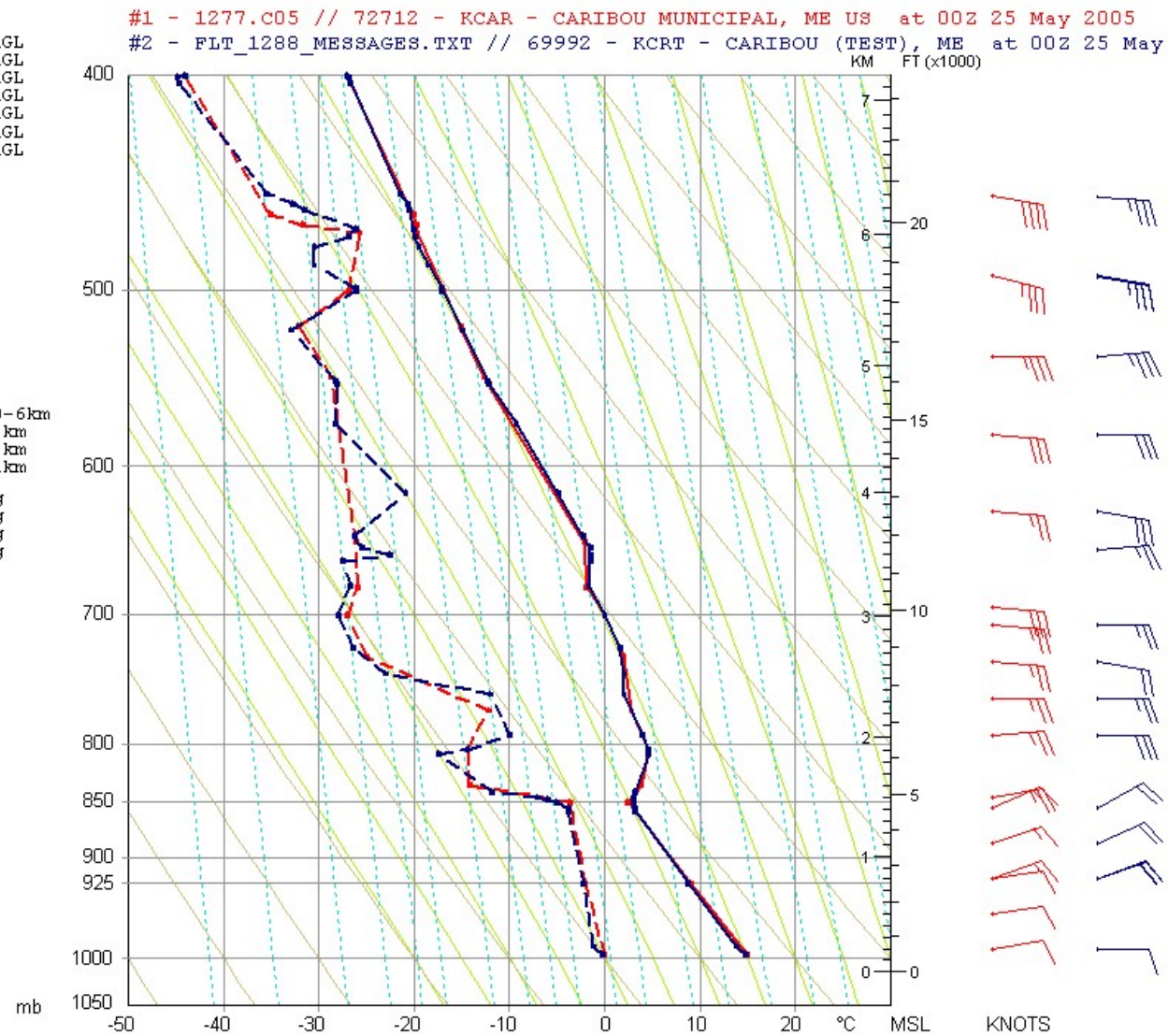
Test #29 - System Test II – 00UTC on 05/25/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11494	11477	m AGL
FRZG Lvl:	2882	2880	m AGL
cclEL Hgt:	5792	6015	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4170	4307	m AGL
LCL Hgt:	1867	1867	m AGL
Water:	1.01	0.99	cm
Hail:	--	--	cm
T2Gust:	32	32	kt
WindEx:	--	--	kt
SWEAT:	82.0	75.2	
CAP:	--	--	
Boyden:	91.6	91.4	
S{TT}:	-.4	-1.8	
KO:	10.5	10.9	
LI:	12.2	12.3	
TT:	32.6	32.2	
KI:	-11.3	-12.9	
Tc:	34.6	35.4	°C
Storm:	126/26	123/24	0-6km
s-rH:	111	99	0-3km
s-rH:	106	111	0-2km
s-rH:	22	52	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	78.2	73.2	
Threat:	22.5	19.4	
Point:	-9.6	-6.7°C	
1000 - 500 mb:	5530	5529	m
1000 - 700 mb:	2916	2914	m
1000 - 850 mb:	1345	1344	m
850 - 500 mb:	4184	4186	m
850 - 700 mb:	1570	1570	m
700 - 500 mb:	2614	2615	m
600 - 400 mb:	3044	3038	m



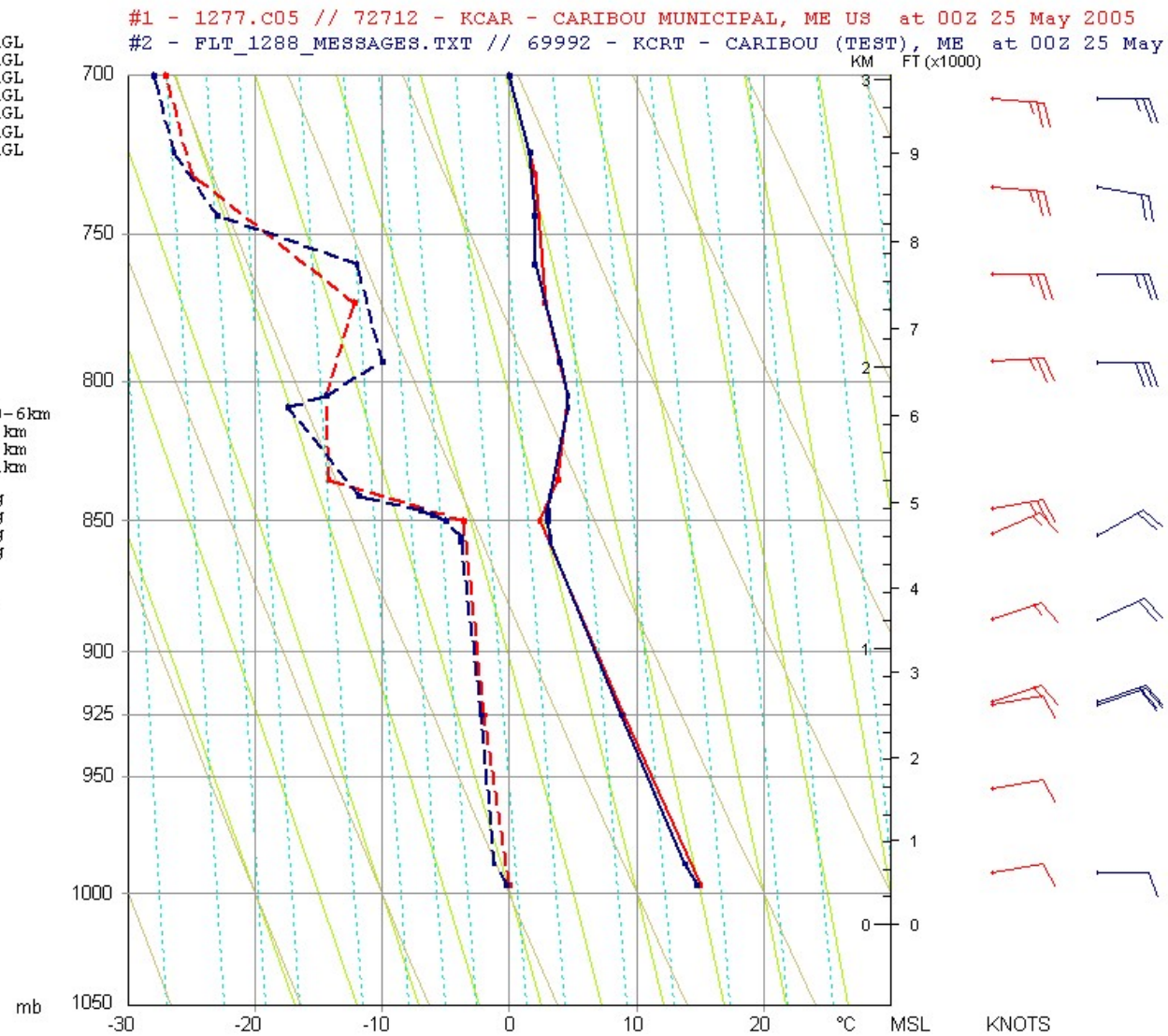
Test #29 - System Test II – 00UTC on 05/25/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11494	11477	m AGL
FRZG Lvl:	2882	2880	m AGL
cclEL Hgt:	5792	6015	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4170	4307	m AGL
LCL Hgt:	1867	1867	m AGL
Water:	1.01	0.99	cm
Hail:	--	--	cm
T2Gust:	32	32	kt
WindEx:	--	--	kt
SWEAT:	82.0	75.2	
CAP:	--	--	
Boyden:	91.6	91.4	
S{TT}:	-.4	-1.8	
KO:	10.5	10.9	
LI:	12.2	12.3	
TT:	32.6	32.2	
KI:	-11.3	-12.9	
Tc:	34.6	35.4	°C
Storm:	126/26	123/24	0-6km
s-rH:	111	99	0-3km
s-rH:	106	111	0-2km
s-rH:	22	52	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	78.2	73.2	
Threat:	22.5	19.4	
Point:	-9.6	-6.7°C	
1000 - 500 mb:	5530	5529	m
1000 - 700 mb:	2916	2914	m
1000 - 850 mb:	1345	1344	m
850 - 500 mb:	4184	4186	m
850 - 700 mb:	1570	1570	m
700 - 500 mb:	2614	2615	m
600 - 400 mb:	3044	3038	m

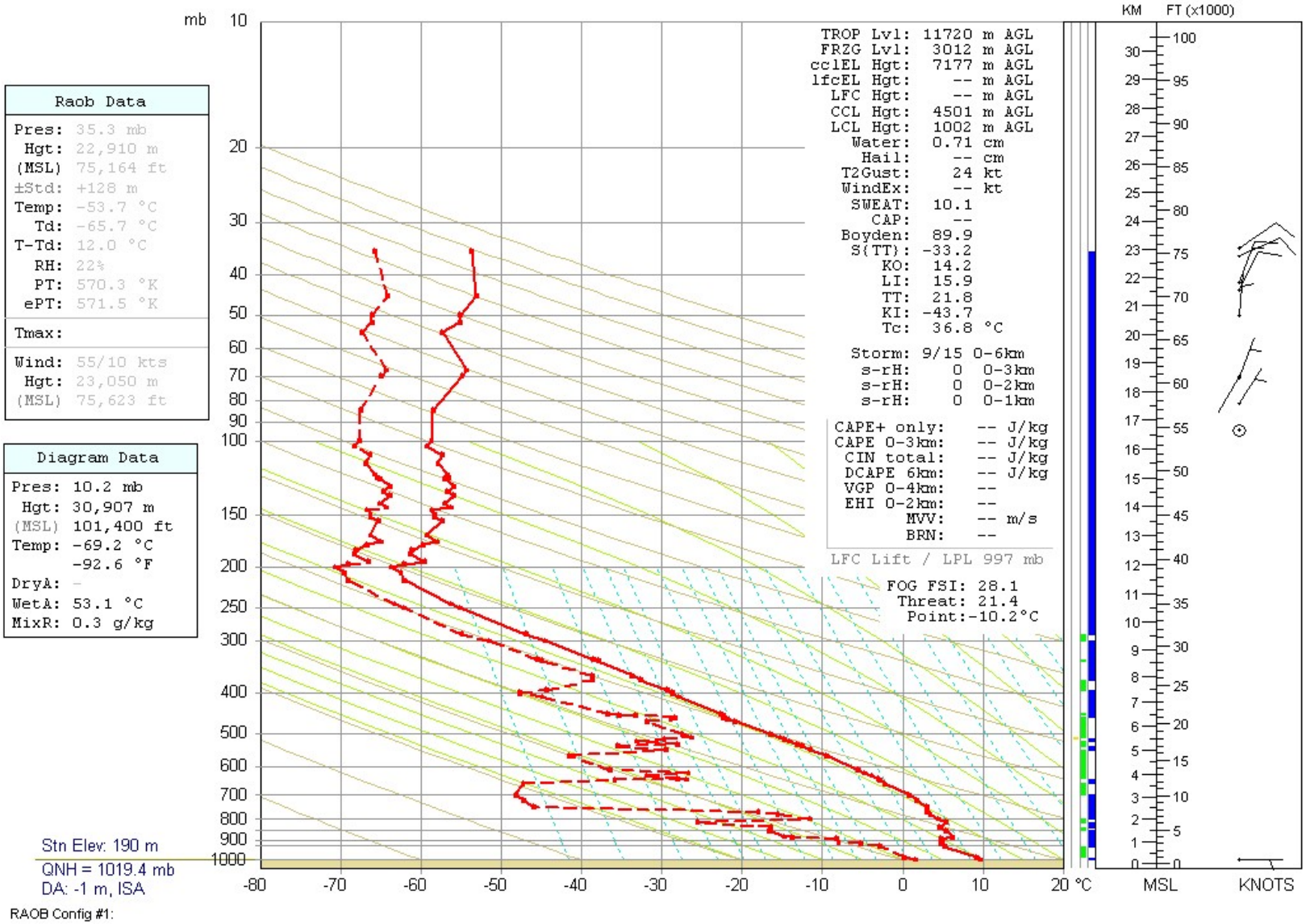


Test #29 - System Test II – 00UTC on 05/25/2005
RWS Version 1.0.4.0

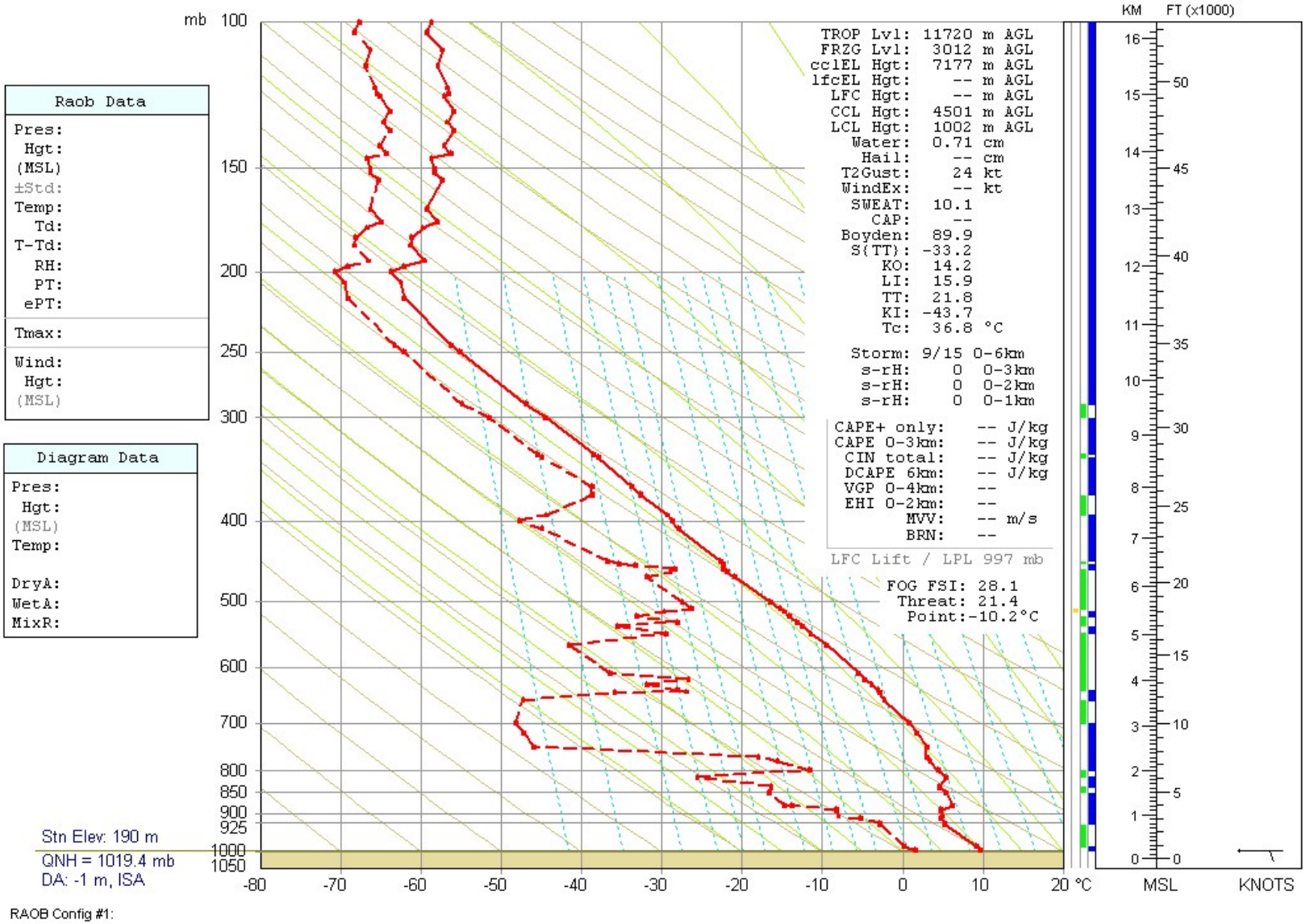
	#1	#2	
TROP Lvl:	11494	11477	m AGL
FRZG Lvl:	2882	2880	m AGL
cclEL Hgt:	5792	6015	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4170	4307	m AGL
LCL Hgt:	1867	1867	m AGL
Water:	1.01	0.99	cm
Hail:	--	--	cm
T2Gust:	32	32	kt
WindEx:	--	--	kt
SWEAT:	82.0	75.2	
CAP:	--	--	
Boyden:	91.6	91.4	
S{TT}:	-.4	-1.8	
KO:	10.5	10.9	
LI:	12.2	12.3	
TT:	32.6	32.2	
KI:	-11.3	-12.9	
Tc:	34.6	35.4	°C
Storm:	126/26	123/24	0-6km
s-rH:	111	99	0-3km
s-rH:	106	111	0-2km
s-rH:	22	52	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	78.2	73.2	
Threat:	22.5	19.4	
Point:	-9.6	-6.7°C	
1000 - 500 mb:	5530	5529	m
1000 - 700 mb:	2916	2914	m
1000 - 850 mb:	1345	1344	m
850 - 500 mb:	4184	4186	m
850 - 700 mb:	1570	1570	m
700 - 500 mb:	2614	2615	m
600 - 400 mb:	3044	3038	m



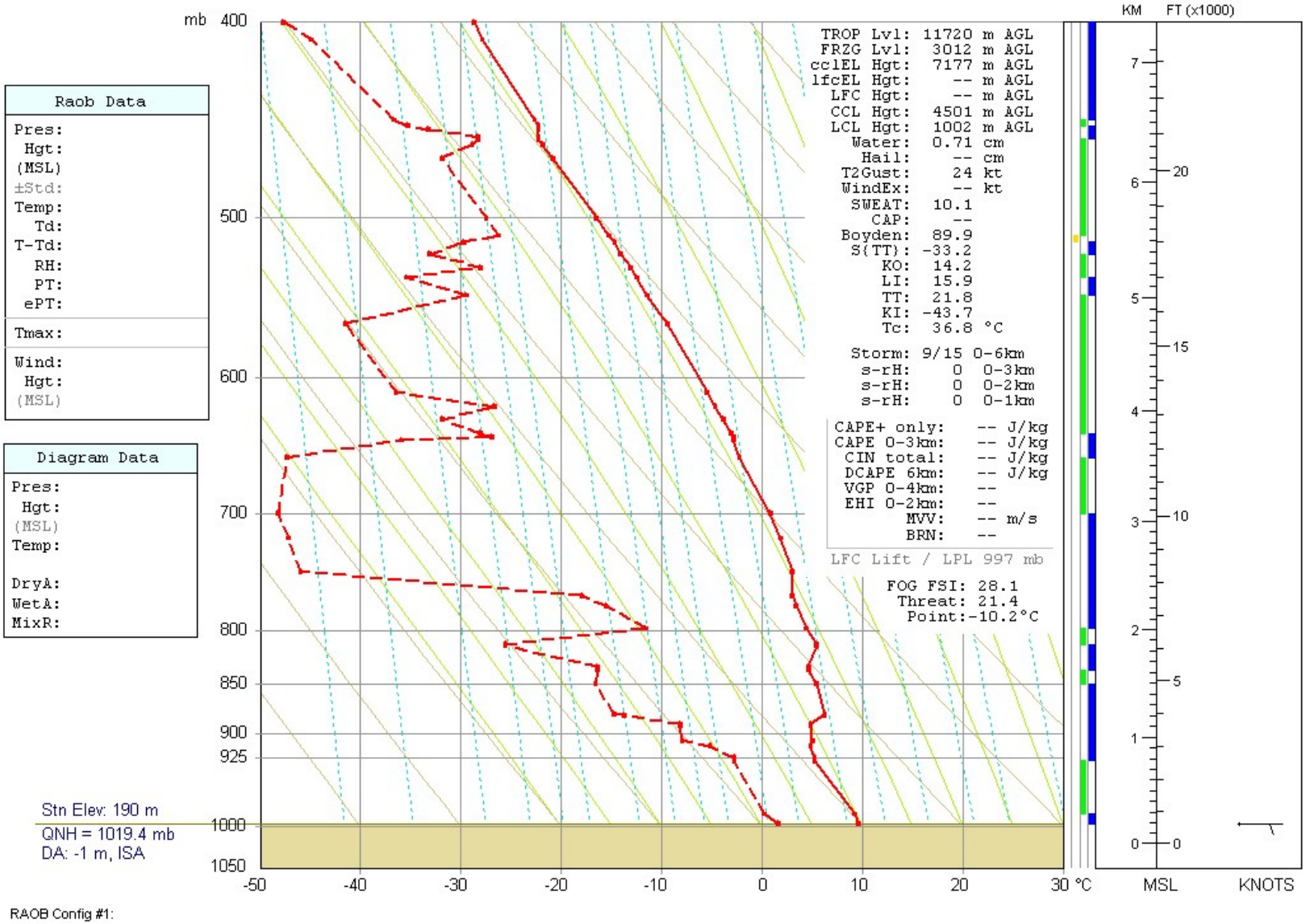
Test #30 System Test II – 01 UTC on 05/25/2005
RWS Version 1.0.4.0



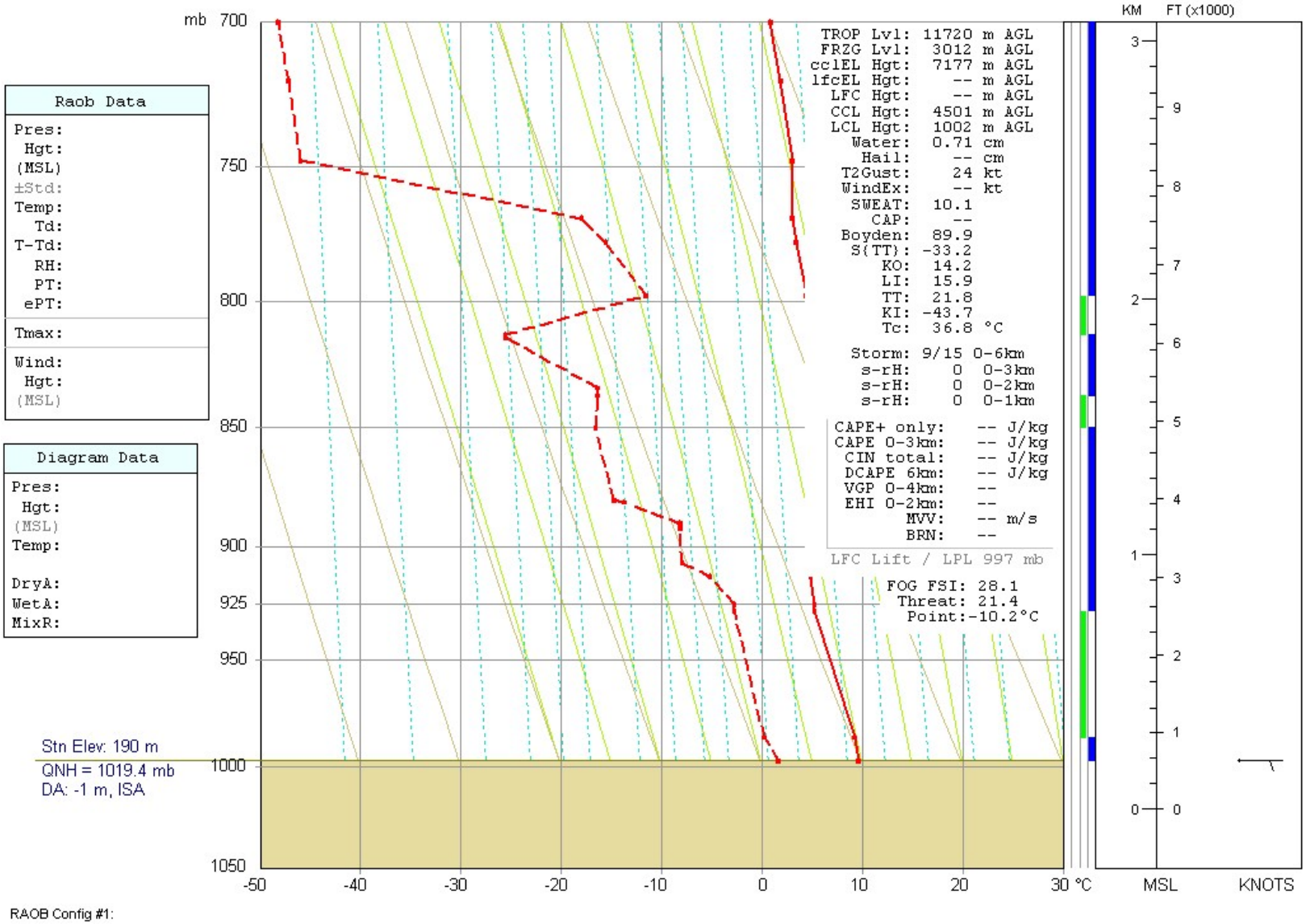
Test #30 System Test II – 01 UTC on 05/25/2005
RWS Version 1.0.4.0



Test #30 System Test II – 01 UTC on 05/25/2005
RWS Version 1.0.4.0



Test #30 System Test II – 01 UTC on 05/25/2005
RWS Version 1.0.4.0



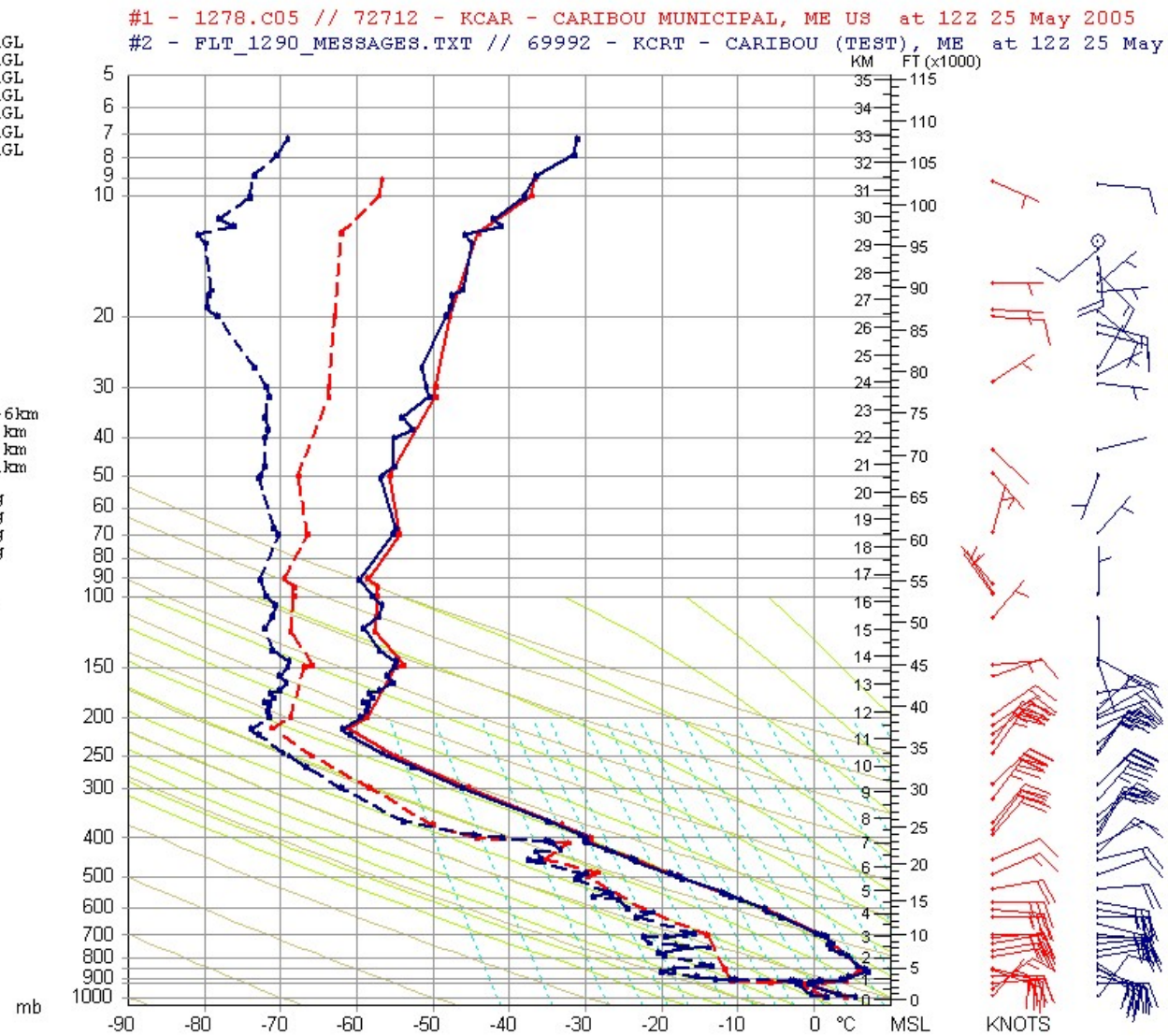
Test #31 - System Test II – 12UTC on 05/25/2005
RWS Version 1.0.4.0

TEST # 31			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11310	11261	49
Freezing Level (m AGL)	493	504	-11
LFC Height (m AGL)	NC	460	NC
CCL Height (m AGL)	4290	4324	-34
LCL Height (m AGL)	349	460	-111
Precipitable Water (cm)	1.05	0.86	0.19
Thickness 1000 - 500 mb (m)	5510	5508	2
Thickness 1000 - 700 mb (m)	2894	2893	1
Thickness 1000 - 850 mb (m)	1319	1318	1
Thickness 850 - 500 mb (m)	4192	4189	3
Thickness 850 - 700 mb (m)	1576	1575	1
Thickness 700 - 500 mb (m)	2616	2615	1
Thickness 600 - 400 mb (m)	3023	3019	4
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

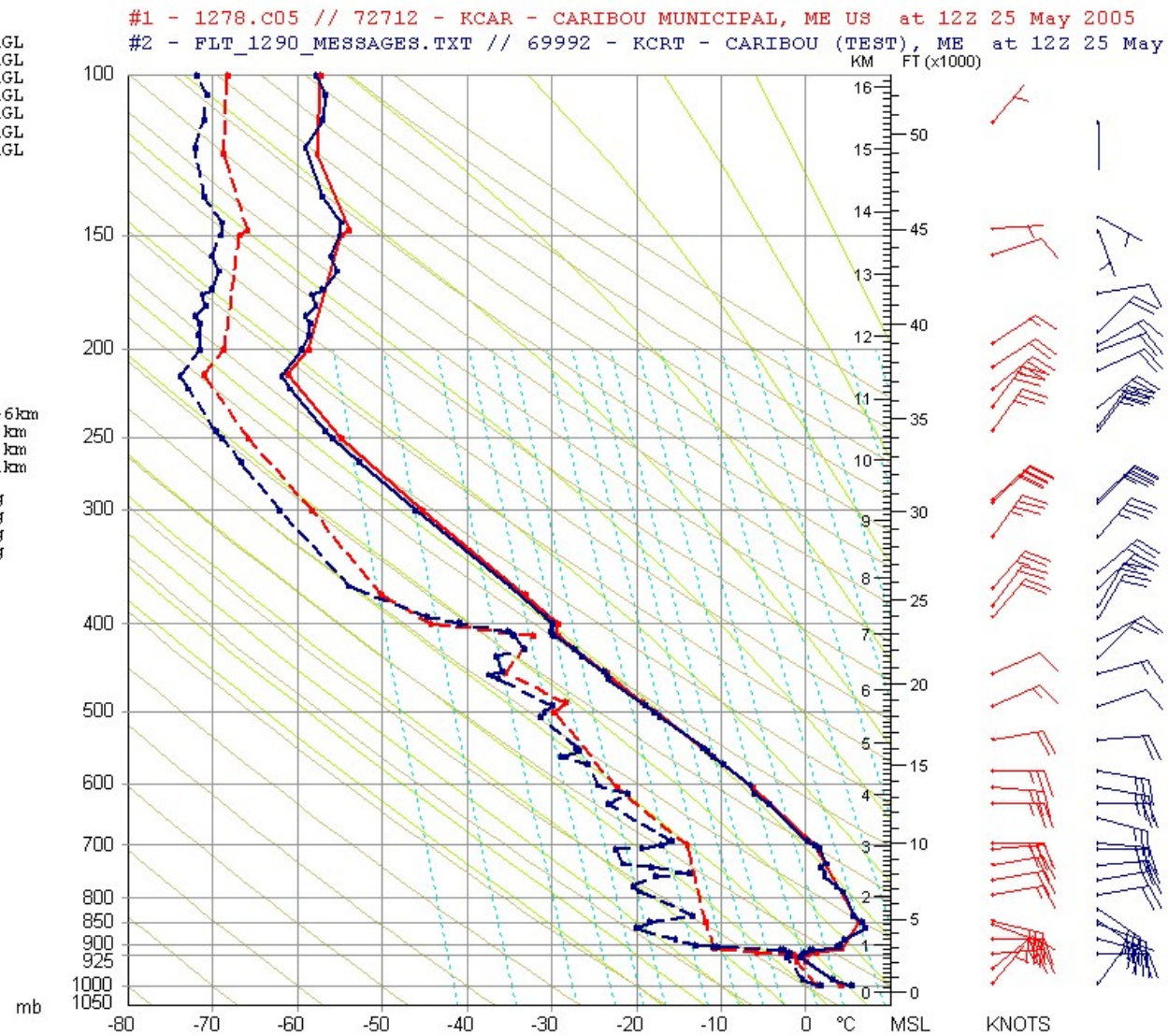
Test #31 - System Test II – 12UTC on 05/25/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11310	11261	m AGL
FRZG Lvl:	493	504	m AGL
cclEL Hgt:	7117	7660	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	460	m AGL
CCL Hgt:	4290	4324	m AGL
LCL Hgt:	349	460	m AGL
Water:	1.05	0.86	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	22	32	kt
SWEAT:	61.0	64.0	
CAP:	--	-0.5	
Boyden:	88.4	88.3	
S{TT}:	12.8	4.0	
KO:	17.6	16.9	
LI:	19.1	17.8	
TT:	29.8	24.0	
KI:	-2.9	-11.9	
Tc:	35.3	35.5	°C
Storm:	45/23	63/29	0-6km
s-rH:	-5	-11	0-3km
s-rH:	25	22	0-2km
s-rH:	-53	-116	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.6	31.0	
Threat:	10.5	12.2	
Point:	2.1	-.6	°C
1000 - 500 mb:	5510	5508	m
1000 - 700 mb:	2894	2893	m
1000 - 850 mb:	1319	1318	m
850 - 500 mb:	4192	4189	m
850 - 700 mb:	1576	1575	m
700 - 500 mb:	2616	2615	m
600 - 400 mb:	3023	3019	m



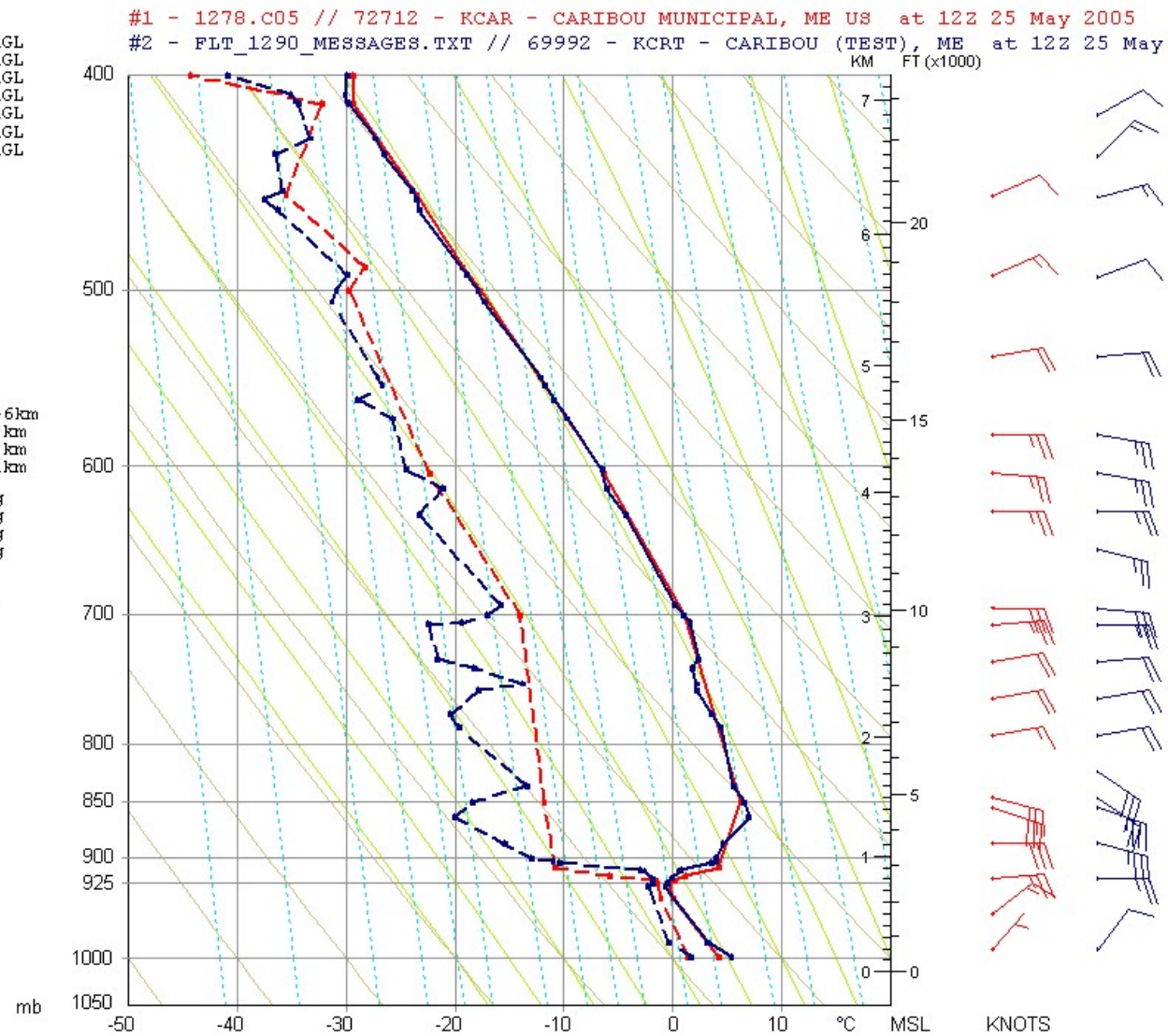
Test #31 - System Test II – 12UTC on 05/25/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11310	11261	m AGL
FRZG Lvl:	493	504	m AGL
cclEL Hgt:	7117	7660	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	460	m AGL
CCL Hgt:	4290	4324	m AGL
LCL Hgt:	349	460	m AGL
Water:	1.05	0.86	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	22	32	kt
SWEAT:	61.0	64.0	
CAP:	--	-0.5	
Boyden:	88.4	88.3	
S{TT}:	12.8	4.0	
KO:	17.6	16.9	
LI:	19.1	17.8	
TT:	29.8	24.0	
KI:	-2.9	-11.9	
Tc:	35.3	35.5	°C
Storm:	45/23	63/29	0-6km
s-rH:	-5	-11	0-3km
s-rH:	25	22	0-2km
s-rH:	-53	-116	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.6	31.0	
Threat:	10.5	12.2	
Point:	2.1	-.6°C	
1000 - 500 mb:	5510	5508	m
1000 - 700 mb:	2894	2893	m
1000 - 850 mb:	1319	1318	m
850 - 500 mb:	4192	4189	m
850 - 700 mb:	1576	1575	m
700 - 500 mb:	2616	2615	m
600 - 400 mb:	3023	3019	m



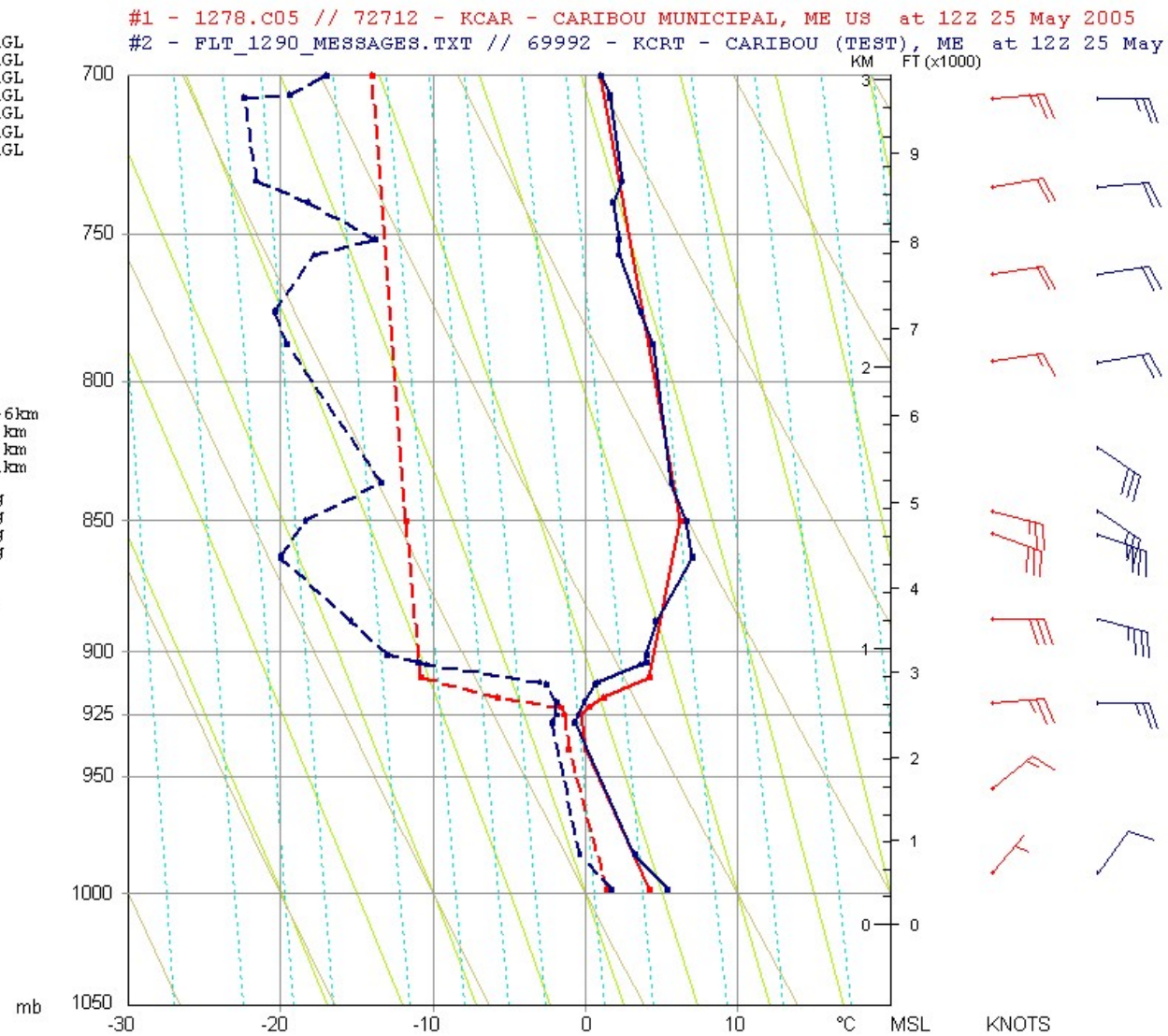
Test #31 - System Test II – 12UTC on 05/25/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11310	11261	m AGL
FRZG Lvl:	493	504	m AGL
cclEL Hgt:	7117	7660	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	460	m AGL
CCL Hgt:	4290	4324	m AGL
LCL Hgt:	349	460	m AGL
Water:	1.05	0.86	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	22	32	kt
SWEAT:	61.0	64.0	
CAP:	--	-0.5	
Boyden:	88.4	88.3	
S{TT}:	12.8	4.0	
KO:	17.6	16.9	
LI:	19.1	17.8	
TT:	29.8	24.0	
KI:	-2.9	-11.9	
Tc:	35.3	35.5	°C
Storm:	45/23	63/29	0-6km
s-rH:	-5	-11	0-3km
s-rH:	25	22	0-2km
s-rH:	-53	-116	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.6	31.0	
Threat:	10.5	12.2	
Point:	2.1	-.6	°C
1000 - 500 mb:	5510	5508	m
1000 - 700 mb:	2894	2893	m
1000 - 850 mb:	1319	1318	m
850 - 500 mb:	4192	4189	m
850 - 700 mb:	1576	1575	m
700 - 500 mb:	2616	2615	m
600 - 400 mb:	3023	3019	m

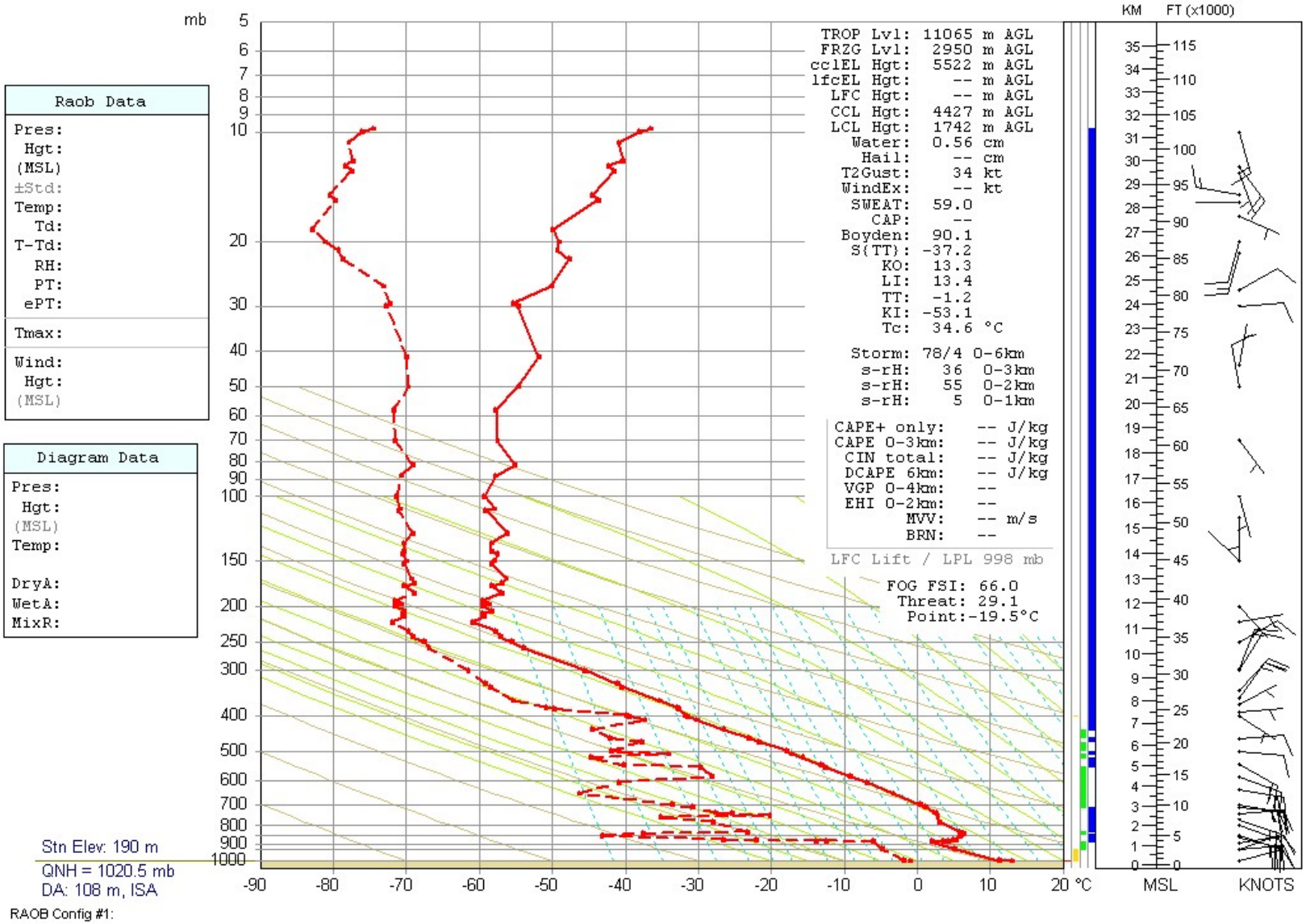


Test #31 - System Test II – 12UTC on 05/25/2005
RWS Version 1.0.4.0

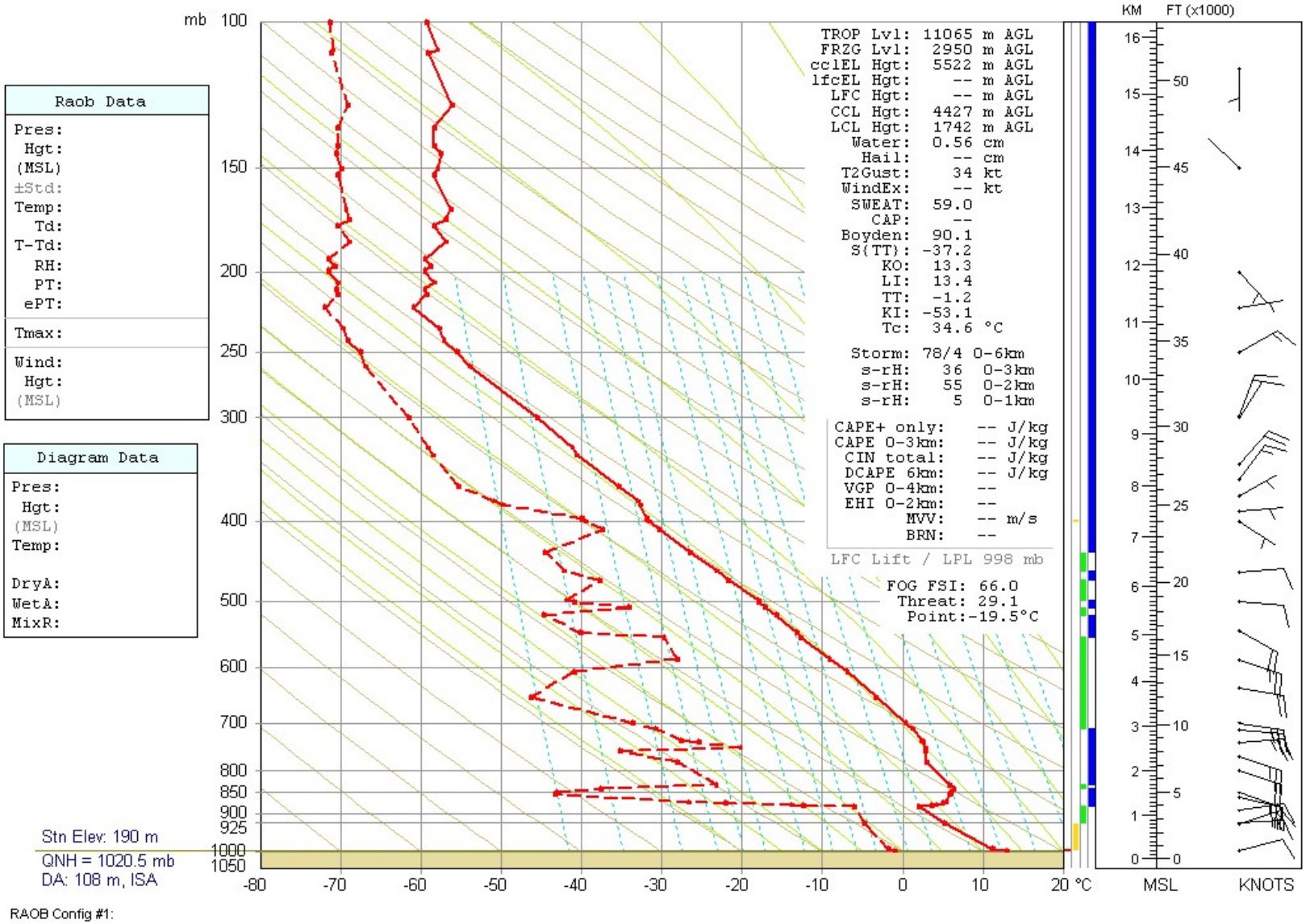
	#1	#2	
TROP Lvl:	11310	11261	m AGL
FRZG Lvl:	493	504	m AGL
cclEL Hgt:	7117	7660	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	460	m AGL
CCL Hgt:	4290	4324	m AGL
LCL Hgt:	349	460	m AGL
Water:	1.05	0.86	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	22	32	kt
SWEAT:	61.0	64.0	
CAP:	--	-0.5	
Boyden:	88.4	88.3	
S{TT}:	12.8	4.0	
KO:	17.6	16.9	
LI:	19.1	17.8	
TT:	29.8	24.0	
KI:	-2.9	-11.9	
Tc:	35.3	35.5	°C
Storm:	45/23	63/29	0-6km
s-rH:	-5	-11	0-3km
s-rH:	25	22	0-2km
s-rH:	-53	-116	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.6	31.0	
Threat:	10.5	12.2	
Point:	2.1	-.6°C	
1000 - 500 mb:	5510	5508	m
1000 - 700 mb:	2894	2893	m
1000 - 850 mb:	1319	1318	m
850 - 500 mb:	4192	4189	m
850 - 700 mb:	1576	1575	m
700 - 500 mb:	2616	2615	m
600 - 400 mb:	3023	3019	m



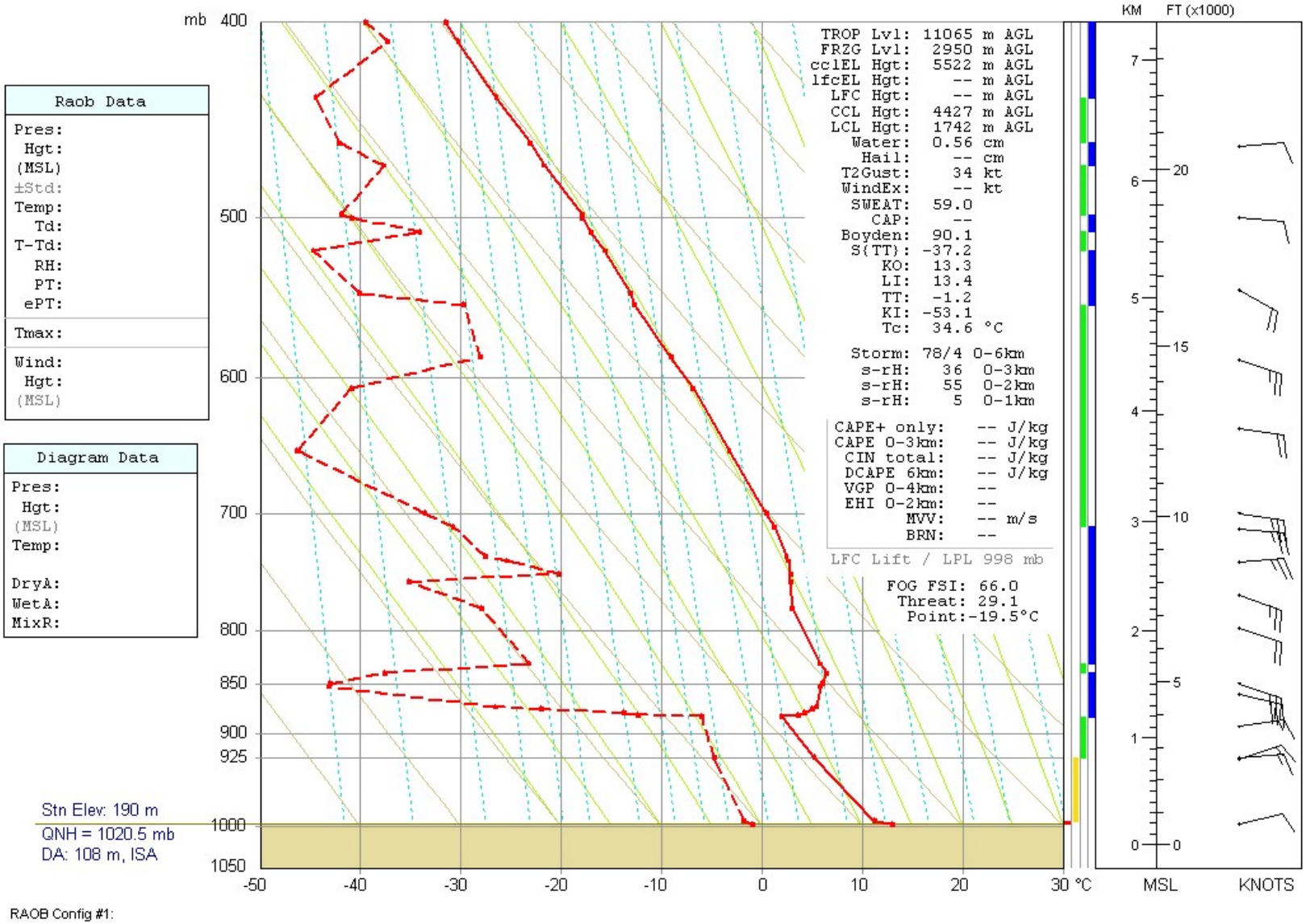
Test #32 System Test II – 15 UTC on 05/25/2005
RWS Version 1.0.4.0



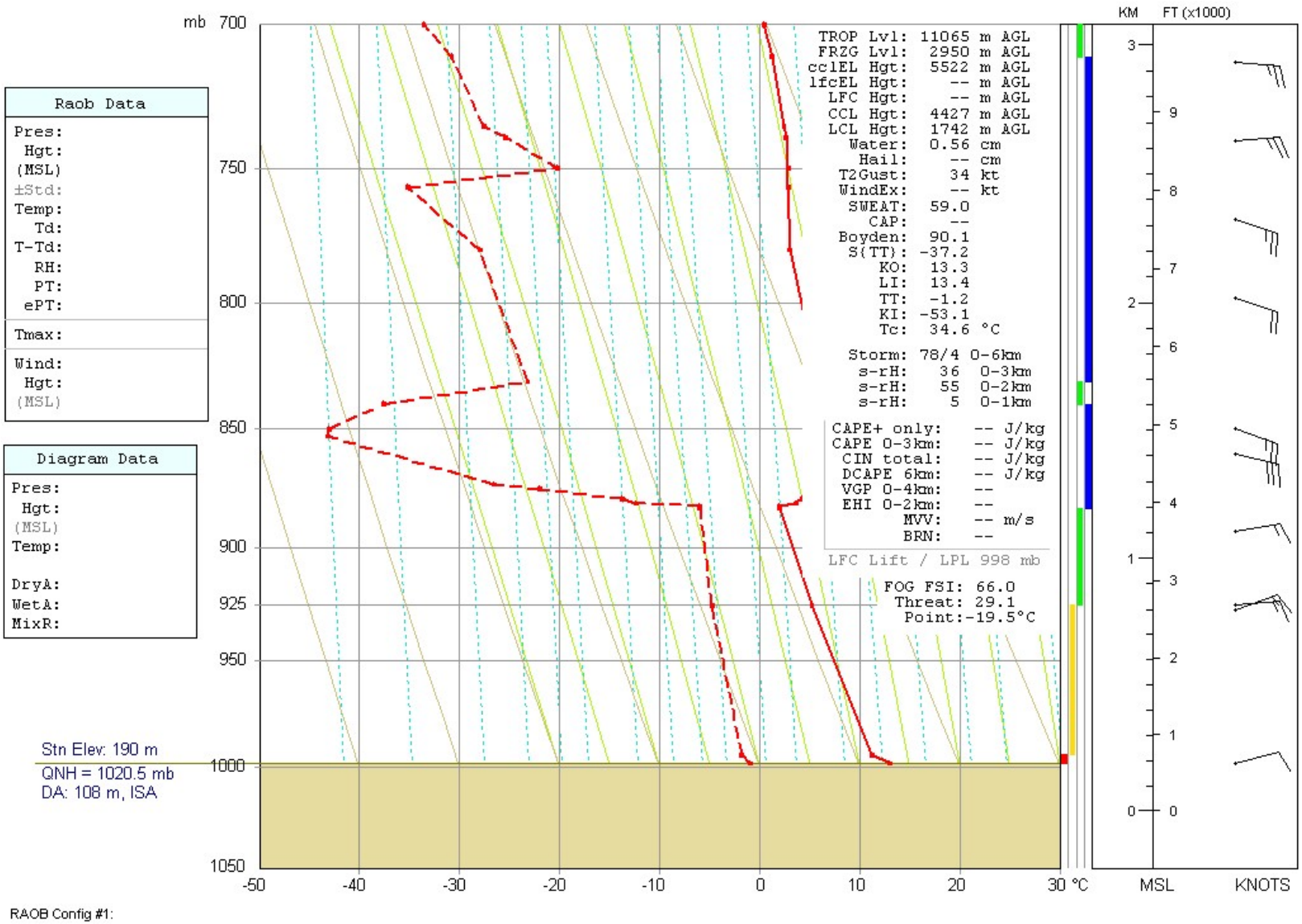
Test #32 System Test II – 15 UTC on 05/25/2005
RWS Version 1.0.4.0



Test #32 System Test II – 15 UTC on 05/25/2005
RWS Version 1.0.4.0

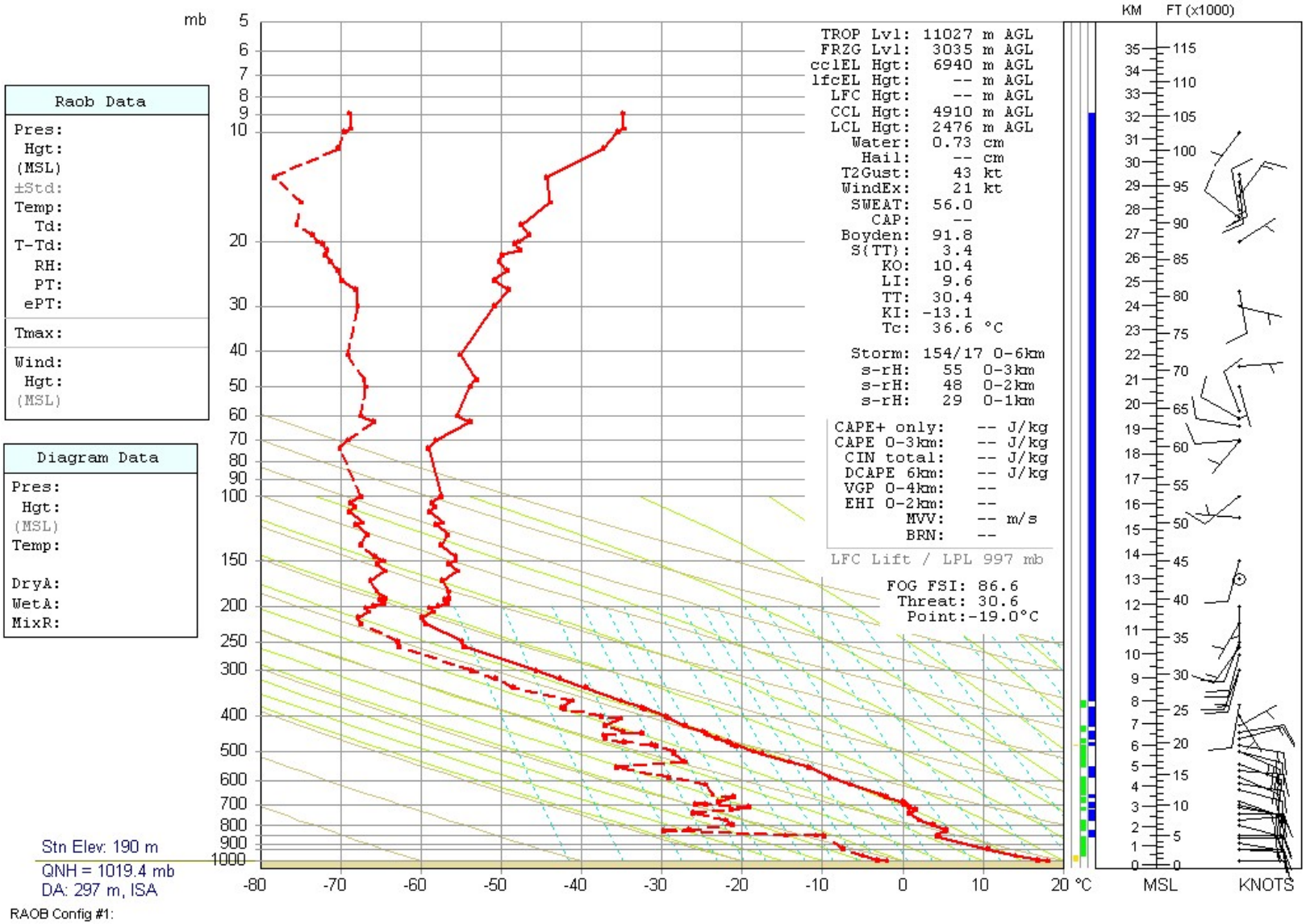


Test #32 System Test II – 15 UTC on 05/25/2005
RWS Version 1.0.4.0

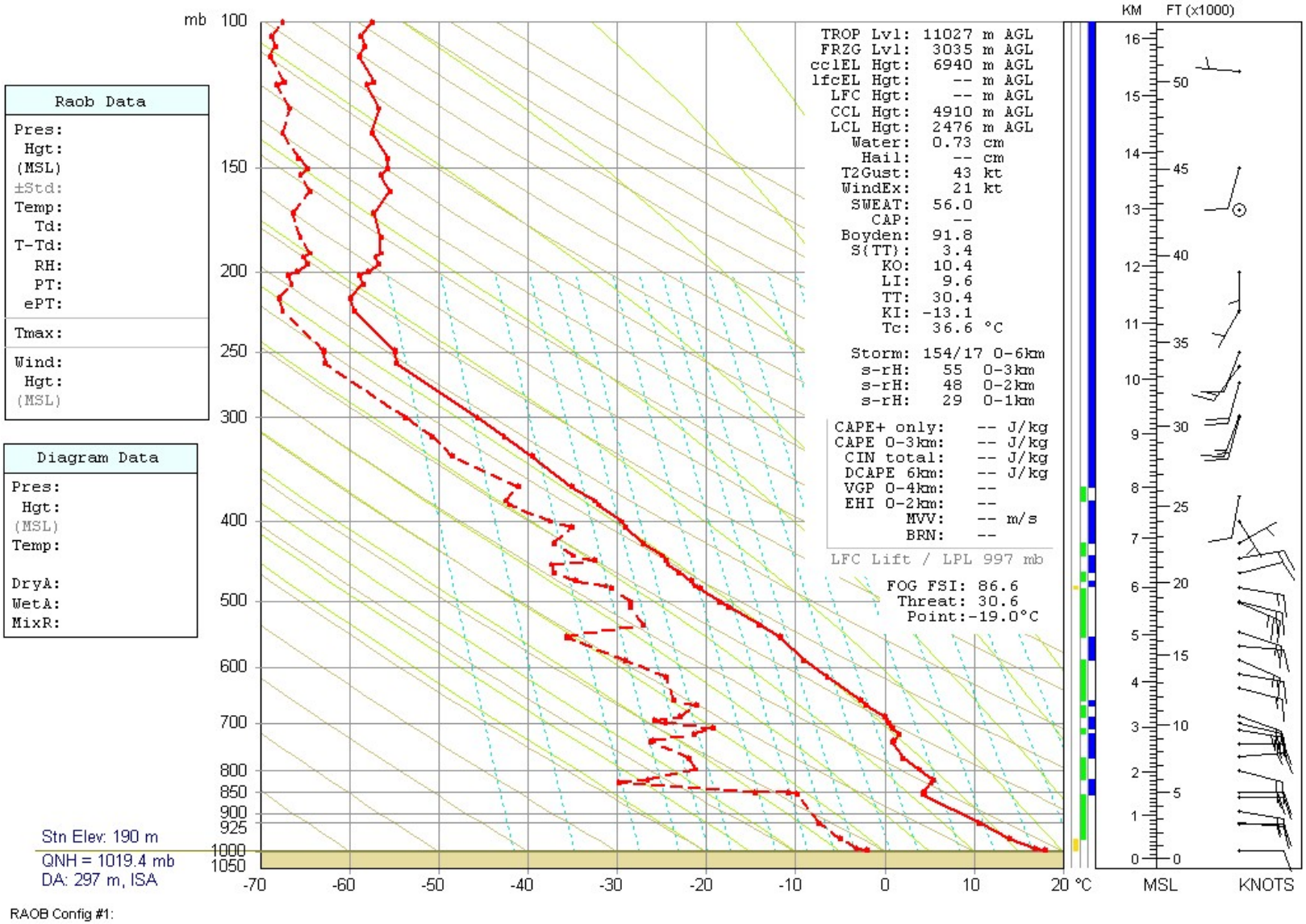


RAOB Config #1:

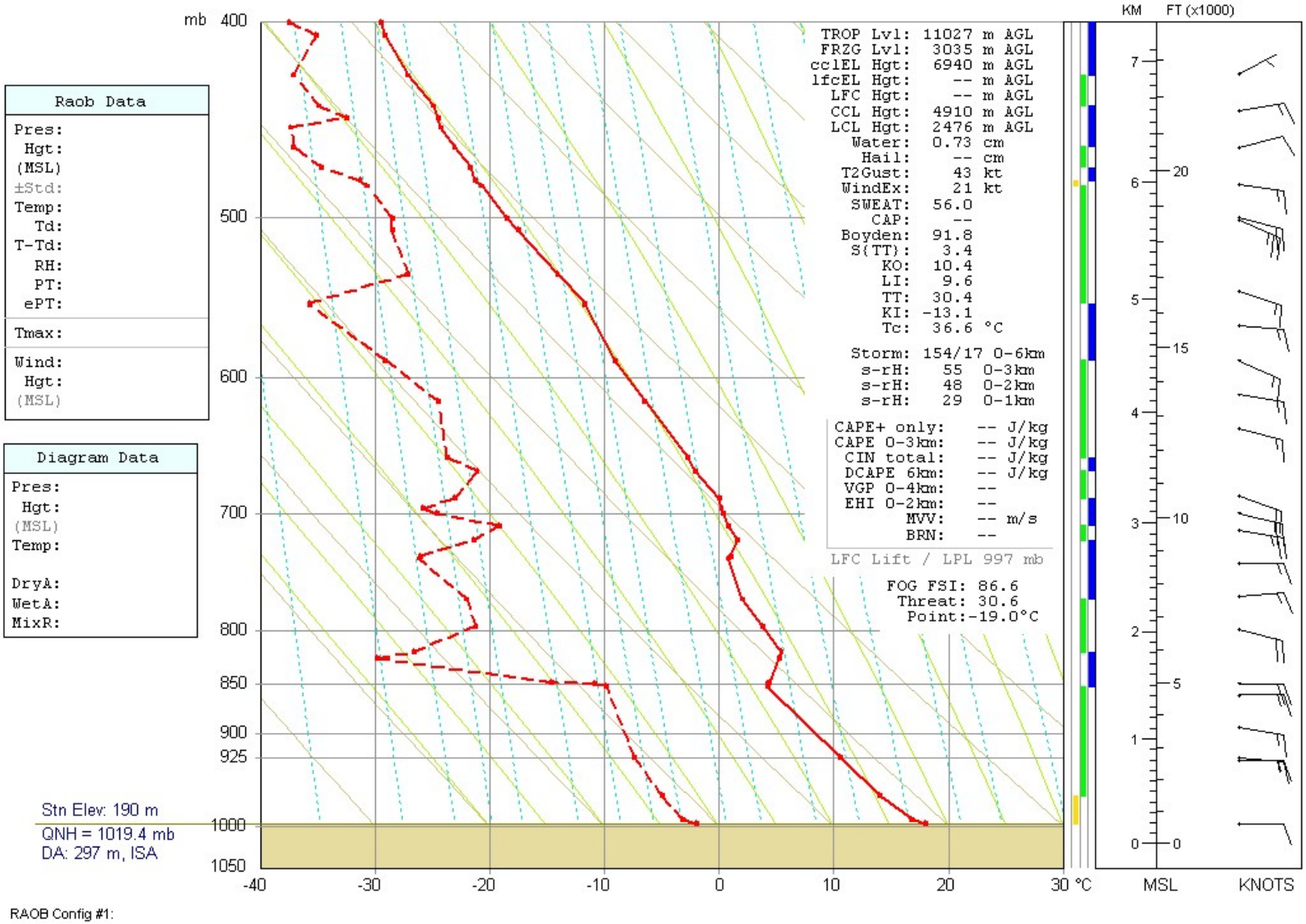
Test #33 System Test II – 20 UTC on 05/25/2005
RWS Version 1.0.4.0



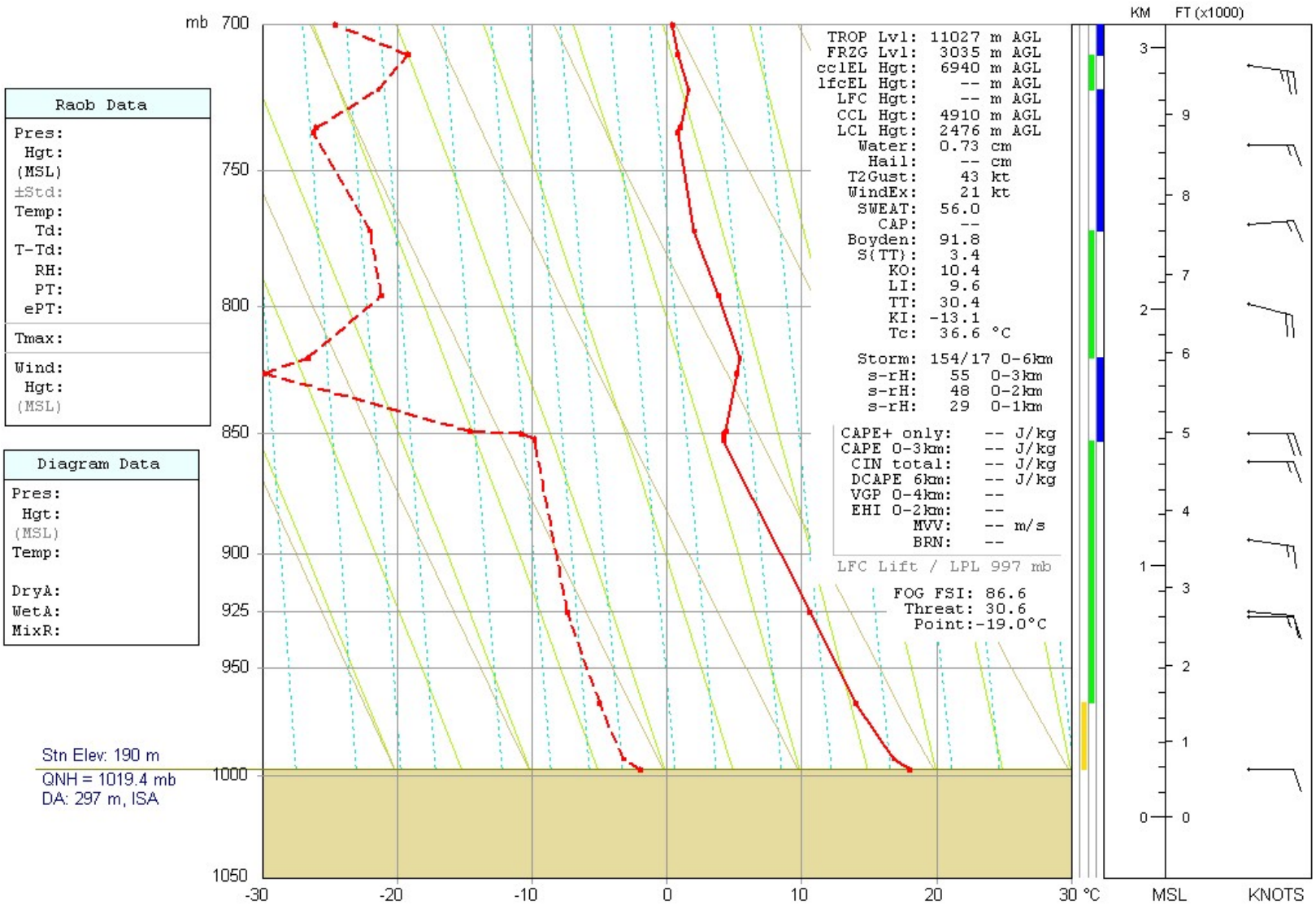
Test #33 System Test II – 20 UTC on 05/25/2005
RWS Version 1.0.4.0



Test #33 System Test II – 20 UTC on 05/25/2005
RWS Version 1.0.4.0



Test #33 System Test II – 20 UTC on 05/25/2005
RWS Version 1.0.4.0



RAOB Config #1:

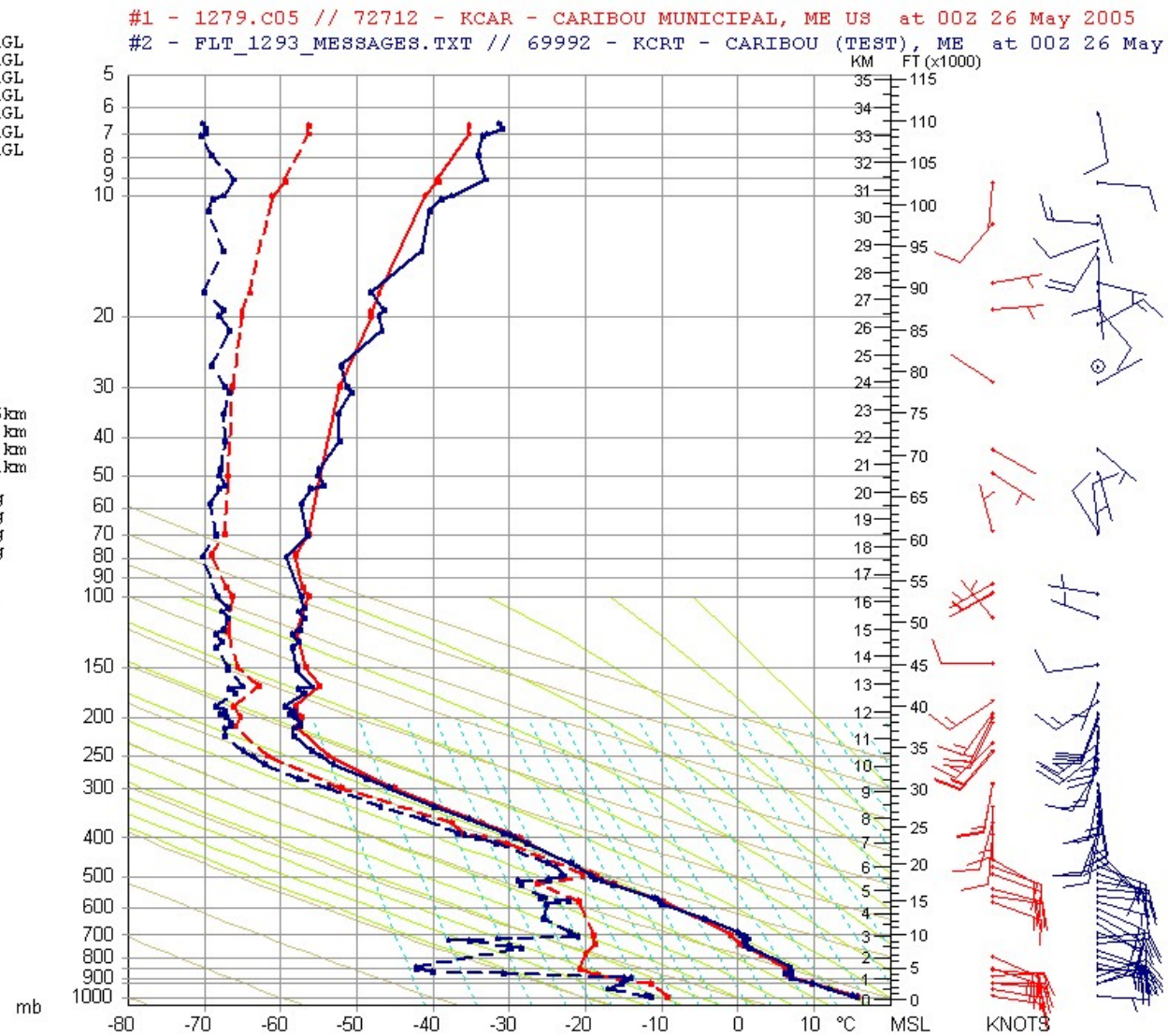
Test #34 - System Test II – 00UTC on 05/26/2005
RWS Version 1.0.4.0

TEST # 34			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11385	11030	355
Freezing Level (m AGL)	2537	3024	-487
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	5567	6294	-727
LCL Height (m AGL)	3101	3357	-256
Precipitable Water (cm)	0.8	0.53	0.27
Thickness 1000 - 500 mb (m)	5521	5526	-5
Thickness 1000 - 700 mb (m)	2917	2921	-4
Thickness 1000 - 850 mb (m)	1349	1349	0
Thickness 850 - 500 mb (m)	4171	4177	-6
Thickness 850 - 700 mb (m)	1568	1572	-4
Thickness 700 - 500 mb (m)	2604	2605	-1
Thickness 600 - 400 mb (m)	3025	3020	5
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

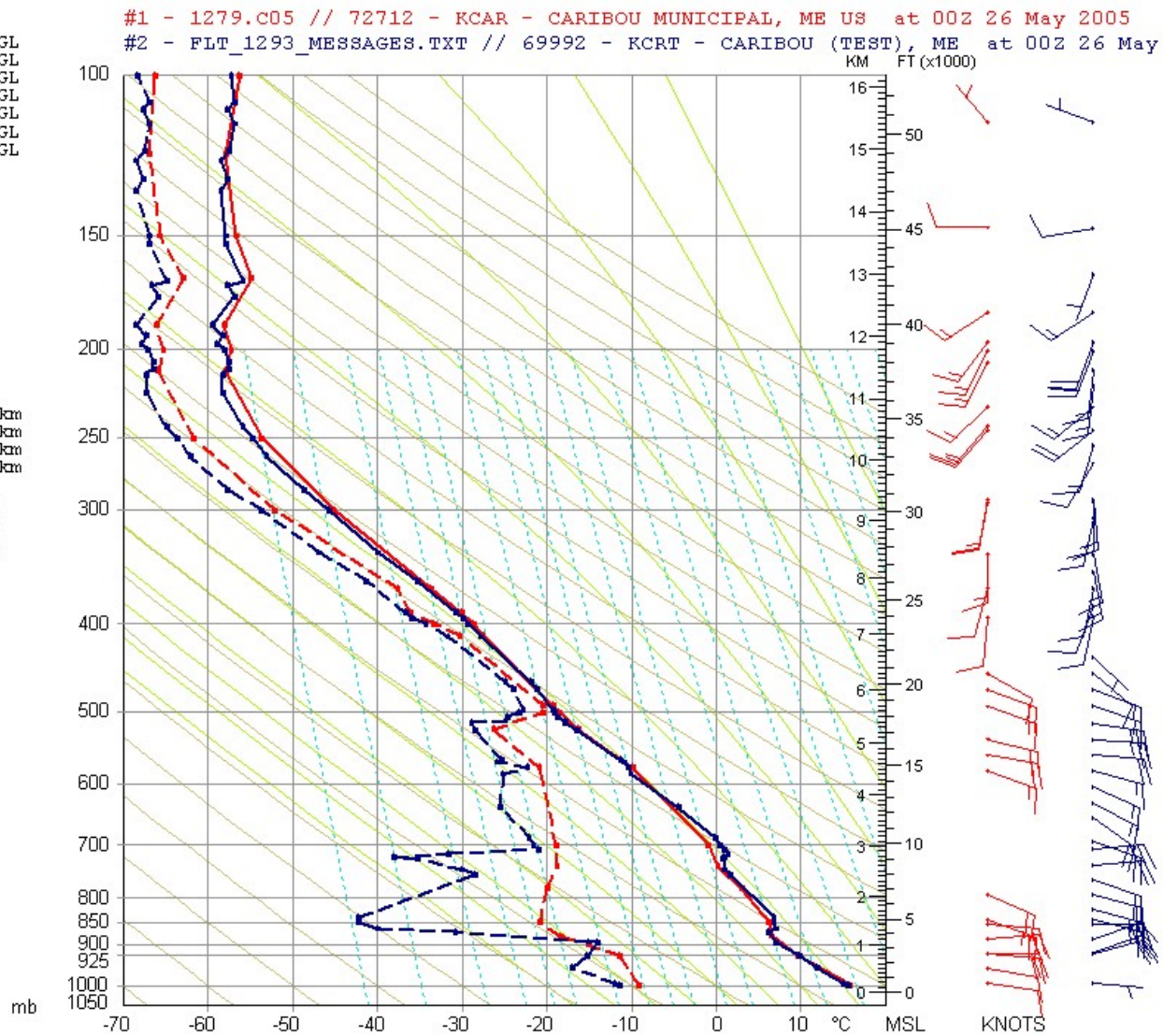
Test #34 - System Test II – 00UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11385	11030	m AGL
FRZG Lvl:	2537	3024	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5567	6294	m AGL
LCL Hgt:	3101	3357	m AGL
Water:	0.80	0.53	cm
Hail:	--	--	cm
T2Gust:	41	40	kt
WindEx:	23	--	kt
SWEAT:	60.0	67.0	
CAP:	--	--	
Boyden:	92.6	91.7	
S{TT}:	2.4	-19.2	
KO:	15.5	16.3	
LI:	14.0	14.2	
TT:	22.4	2.8	
KI:	-14.1	-38.3	
Tc:	37.2	40.4	°C
Storm:	106/3	77/3	0-6km
s-rH:	41	90	0-3km
s-rH:	41	63	0-2km
s-rH:	-17	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	92.2	98.6	
Threat:	24.3	26.3	
Point:	-13.2	-16.1°C	
1000 - 500 mb:	5521	5526	m
1000 - 700 mb:	2917	2921	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4171	4177	m
850 - 700 mb:	1568	1572	m
700 - 500 mb:	2604	2605	m
600 - 400 mb:	3025	3020	m



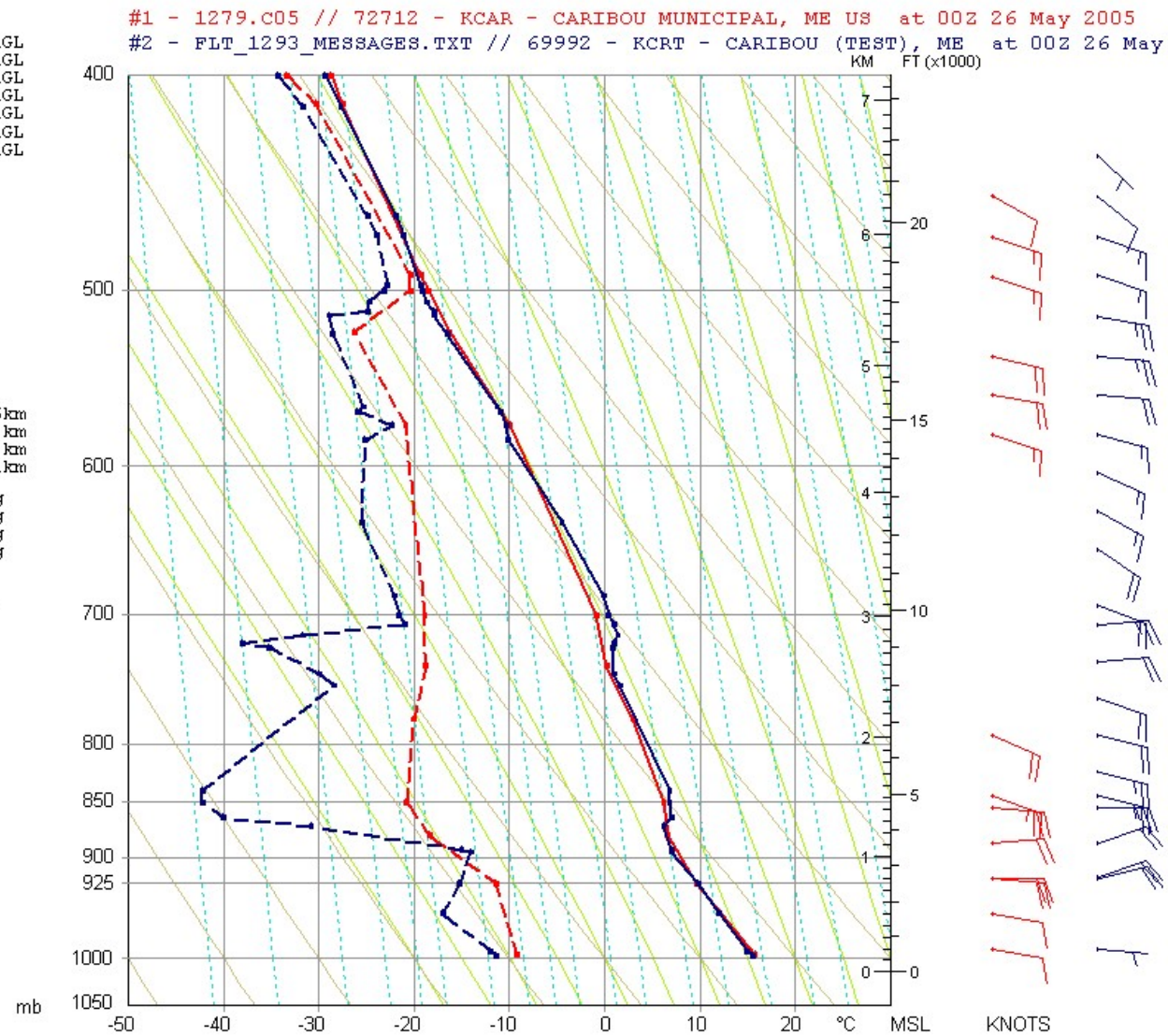
Test #34 - System Test II – 00UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11385	11030	m AGL
FRZG Lvl:	2537	3024	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5567	6294	m AGL
LCL Hgt:	3101	3357	m AGL
Water:	0.80	0.53	cm
Hail:	--	--	cm
T2Gust:	41	40	kt
WindEx:	23	--	kt
SWEAT:	60.0	67.0	
CAP:	--	--	
Boyden:	92.6	91.7	
S{TT}:	2.4	-19.2	
KO:	15.5	16.3	
LI:	14.0	14.2	
TT:	22.4	2.8	
KI:	-14.1	-38.3	
Tc:	37.2	40.4	°C
Storm:	106/3	77/3	0-6km
s-rH:	41	90	0-3km
s-rH:	41	63	0-2km
s-rH:	-17	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	92.2	98.6	
Threat:	24.3	26.3	
Point:	-13.2	-16.1°C	
1000 - 500 mb:	5521	5526	m
1000 - 700 mb:	2917	2921	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4171	4177	m
850 - 700 mb:	1568	1572	m
700 - 500 mb:	2604	2605	m
600 - 400 mb:	3025	3020	m



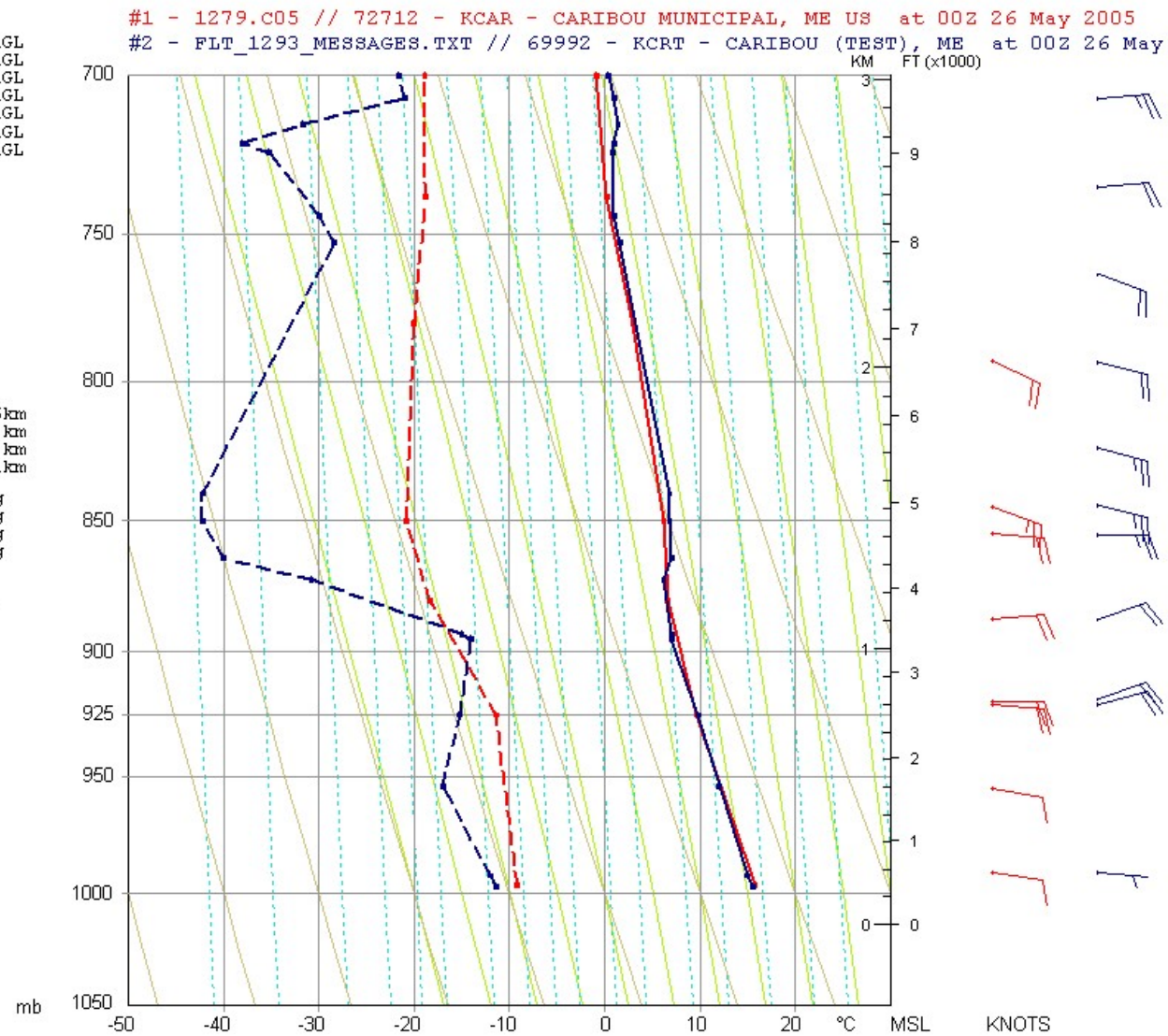
Test #34 - System Test II – 00UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11385	11030	m AGL
FRZG Lvl:	2537	3024	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5567	6294	m AGL
LCL Hgt:	3101	3357	m AGL
Water:	0.80	0.53	cm
Hail:	--	--	cm
T2Gust:	41	40	kt
WindEx:	23	--	kt
SWEAT:	60.0	67.0	
CAP:	--	--	
Boyden:	92.6	91.7	
S{TT}:	2.4	-19.2	
KO:	15.5	16.3	
LI:	14.0	14.2	
TT:	22.4	2.8	
KI:	-14.1	-38.3	
Tc:	37.2	40.4	°C
Storm:	106/3	77/3	0-6km
s-rH:	41	90	0-3km
s-rH:	41	63	0-2km
s-rH:	-17	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	92.2	98.6	
Threat:	24.3	26.3	
Point:	-13.2	-16.1°C	
1000 - 500 mb:	5521	5526	m
1000 - 700 mb:	2917	2921	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4171	4177	m
850 - 700 mb:	1568	1572	m
700 - 500 mb:	2604	2605	m
600 - 400 mb:	3025	3020	m



Test #34 - System Test II – 00UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11385	11030	m AGL
FRZG Lvl:	2537	3024	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5567	6294	m AGL
LCL Hgt:	3101	3357	m AGL
Water:	0.80	0.53	cm
Hail:	--	--	cm
T2Gust:	41	40	kt
WindEx:	23	--	kt
SWEAT:	60.0	67.0	
CAP:	--	--	
Boyden:	92.6	91.7	
S{TT}:	2.4	-19.2	
KO:	15.5	16.3	
LI:	14.0	14.2	
TT:	22.4	2.8	
KI:	-14.1	-38.3	
Tc:	37.2	40.4	°C
Storm:	106/3	77/3	0-6km
s-rH:	41	90	0-3km
s-rH:	41	63	0-2km
s-rH:	-17	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	92.2	98.6	
Threat:	24.3	26.3	
Point:	-13.2	-16.1°C	
1000 - 500 mb:	5521	5526	m
1000 - 700 mb:	2917	2921	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4171	4177	m
850 - 700 mb:	1568	1572	m
700 - 500 mb:	2604	2605	m
600 - 400 mb:	3025	3020	m



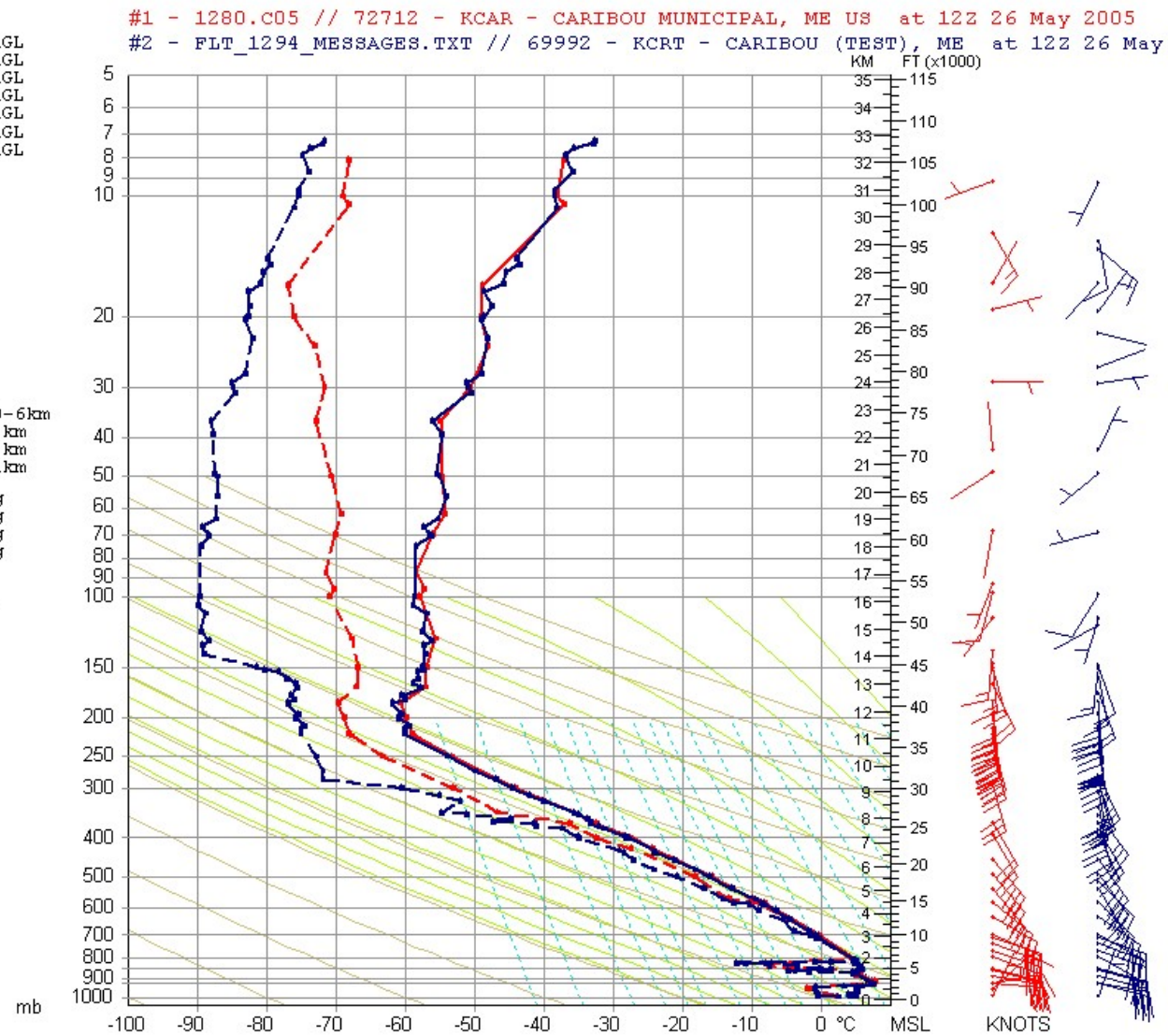
Test #35 - System Test II – 12UTC on 05/26/2005
RWS Version 1.0.4.0

TEST # 35			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11176	11126	50
Freezing Level (m AGL)	2805	2690	115
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	2993	2918	75
LCL Height (m AGL)	340	314	26
Precipitable Water (cm)	2.47	2.31	0.16
Thickness 1000 - 500 mb (m)	5531	5524	7
Thickness 1000 - 700 mb (m)	2910	2906	4
Thickness 1000 - 850 mb (m)	1333	1332	1
Thickness 850 - 500 mb (m)	4197	4192	5
Thickness 850 - 700 mb (m)	1577	1574	3
Thickness 700 - 500 mb (m)	2621	2618	3
Thickness 600 - 400 mb (m)	3048	3041	7
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

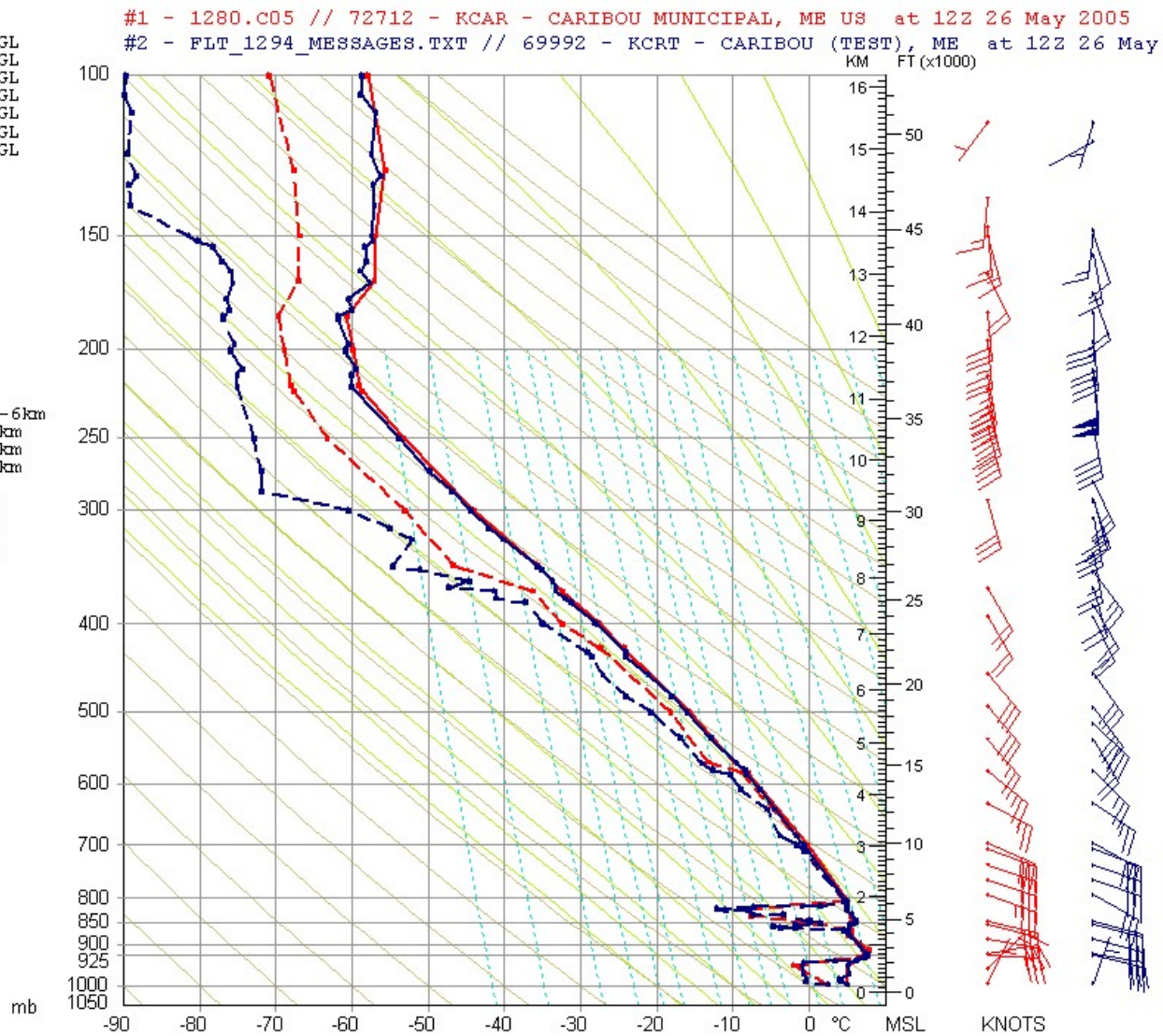
Test #35 - System Test II – 12UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11176	11126	m AGL
FRZG Lvl:	2805	2690	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2993	2918	m AGL
LCL Hgt:	340	314	m AGL
Water:	2.47	2.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	92.0	94.0	
CAP:	--	--	
Boyden:	91.3	91.3	
S{TT}:	30.1	35.3	
KO:	21.0	18.9	
LI:	19.7	19.2	
TT:	36.6	38.2	
KI:	20.4	21.2	
Tc:	29.1	28.4	°C
Storm:	150/15	151/14	0-6km
s-rH:	239	153	0-3km
s-rH:	240	164	0-2km
s-rH:	204	117	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	36.2	35.0	
Threat:	16.4	16.3	
Point:	-.5	-.1	°C
1000 - 500 mb:	5531	5524	m
1000 - 700 mb:	2910	2906	m
1000 - 850 mb:	1333	1332	m
850 - 500 mb:	4197	4192	m
850 - 700 mb:	1577	1574	m
700 - 500 mb:	2621	2618	m
600 - 400 mb:	3048	3041	m



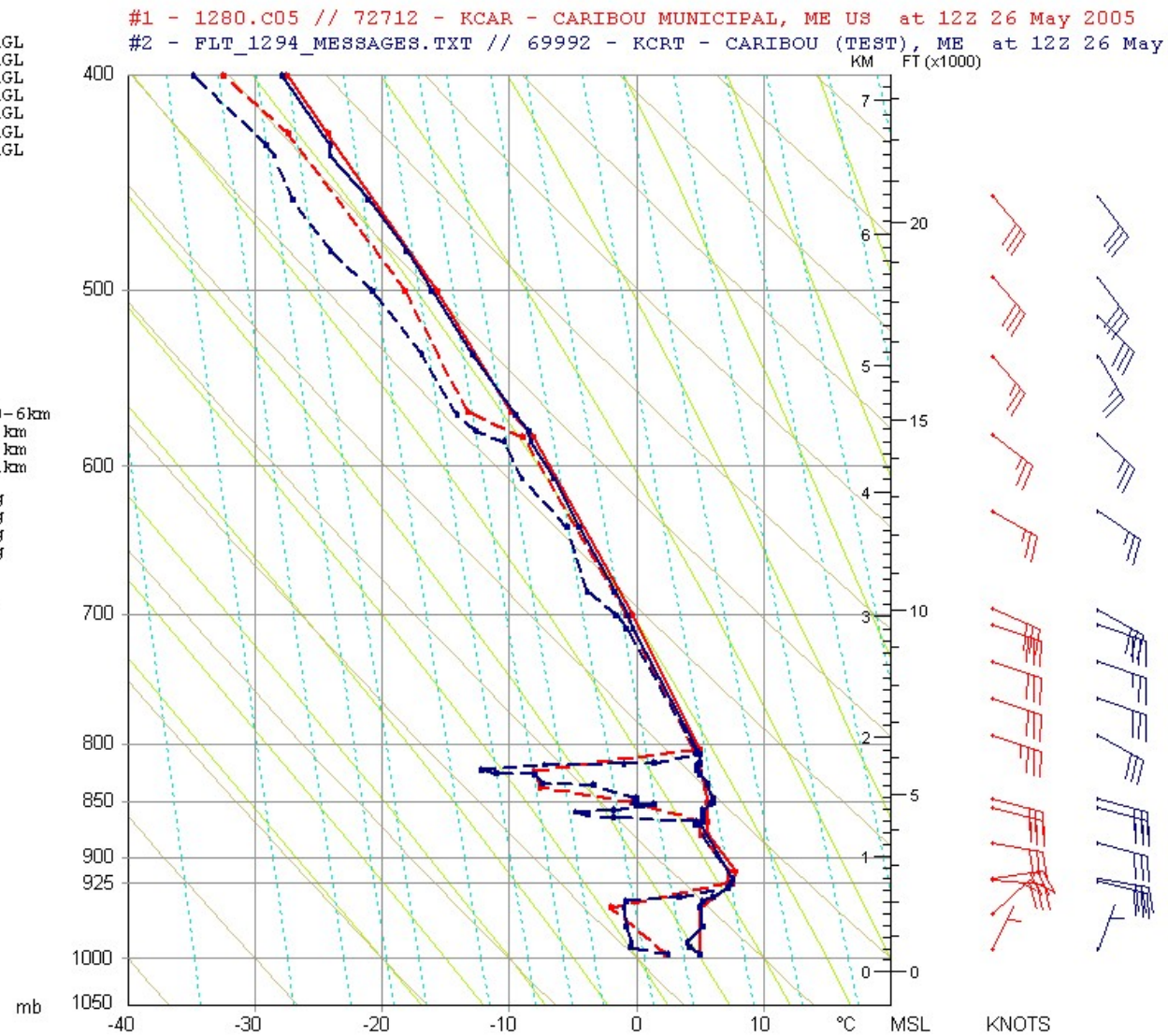
Test #35 - System Test II – 12UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11176	11126	m AGL
FRZG Lvl:	2805	2690	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2993	2918	m AGL
LCL Hgt:	340	314	m AGL
Water:	2.47	2.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	92.0	94.0	
CAP:	--	--	
Boyden:	91.3	91.3	
S{TT}:	30.1	35.3	
KO:	21.0	18.9	
LI:	19.7	19.2	
TT:	36.6	38.2	
KI:	20.4	21.2	
Tc:	29.1	28.4	°C
Storm:	150/15	151/14	0-6km
s-rH:	239	153	0-3km
s-rH:	240	164	0-2km
s-rH:	204	117	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	36.2	35.0	
Threat:	16.4	16.3	
Point:	-.5	-.1	°C
1000 - 500 mb:	5531	5524	m
1000 - 700 mb:	2910	2906	m
1000 - 850 mb:	1333	1332	m
850 - 500 mb:	4197	4192	m
850 - 700 mb:	1577	1574	m
700 - 500 mb:	2621	2618	m
600 - 400 mb:	3048	3041	m



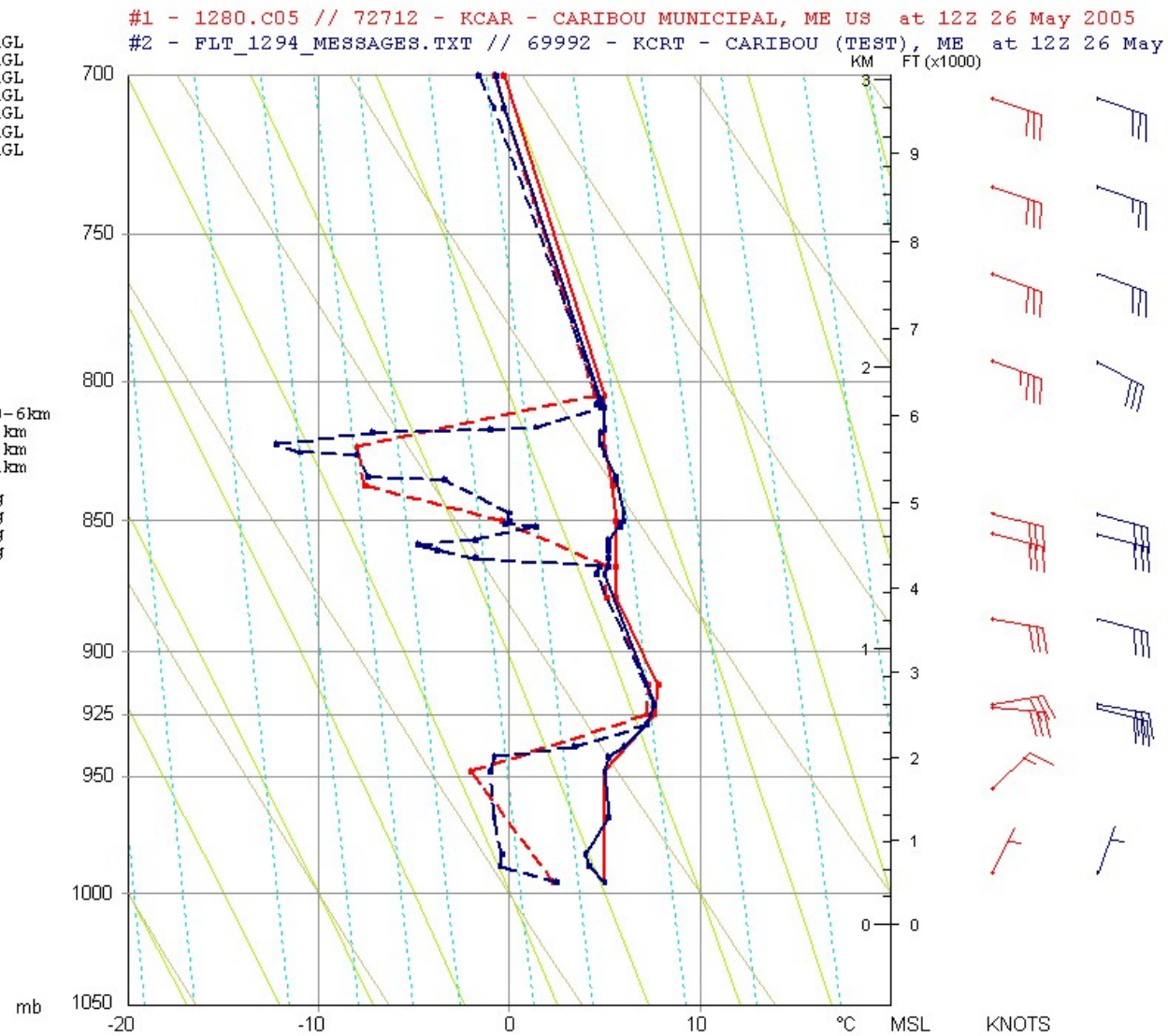
Test #35 - System Test II – 12UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11176	11126	m AGL
FRZG Lvl:	2805	2690	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2993	2918	m AGL
LCL Hgt:	340	314	m AGL
Water:	2.47	2.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	92.0	94.0	
CAP:	--	--	
Boyden:	91.3	91.3	
S{TT}:	30.1	35.3	
KO:	21.0	18.9	
LI:	19.7	19.2	
TT:	36.6	38.2	
KI:	20.4	21.2	
Tc:	29.1	28.4	°C
Storm:	150/15	151/14	0-6km
s-rH:	239	153	0-3km
s-rH:	240	164	0-2km
s-rH:	204	117	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	36.2	35.0	
Threat:	16.4	16.3	
Point:	-.5	-.1	°C
1000 - 500 mb:	5531	5524	m
1000 - 700 mb:	2910	2906	m
1000 - 850 mb:	1333	1332	m
850 - 500 mb:	4197	4192	m
850 - 700 mb:	1577	1574	m
700 - 500 mb:	2621	2618	m
600 - 400 mb:	3048	3041	m



Test #35 - System Test II – 12UTC on 05/26/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11176	11126	m AGL
FRZG Lvl:	2805	2690	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2993	2918	m AGL
LCL Hgt:	340	314	m AGL
Water:	2.47	2.31	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	92.0	94.0	
CAP:	--	--	
Boyden:	91.3	91.3	
S{TT}:	30.1	35.3	
KO:	21.0	18.9	
LI:	19.7	19.2	
TT:	36.6	38.2	
KI:	20.4	21.2	
Tc:	29.1	28.4	°C
Storm:	150/15	151/14	0-6km
s-rH:	239	153	0-3km
s-rH:	240	164	0-2km
s-rH:	204	117	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	36.2	35.0	
Threat:	16.4	16.3	
Point:	-.5	-.1°C	
1000 - 500 mb:	5531	5524	m
1000 - 700 mb:	2910	2906	m
1000 - 850 mb:	1333	1332	m
850 - 500 mb:	4197	4192	m
850 - 700 mb:	1577	1574	m
700 - 500 mb:	2621	2618	m
600 - 400 mb:	3048	3041	m



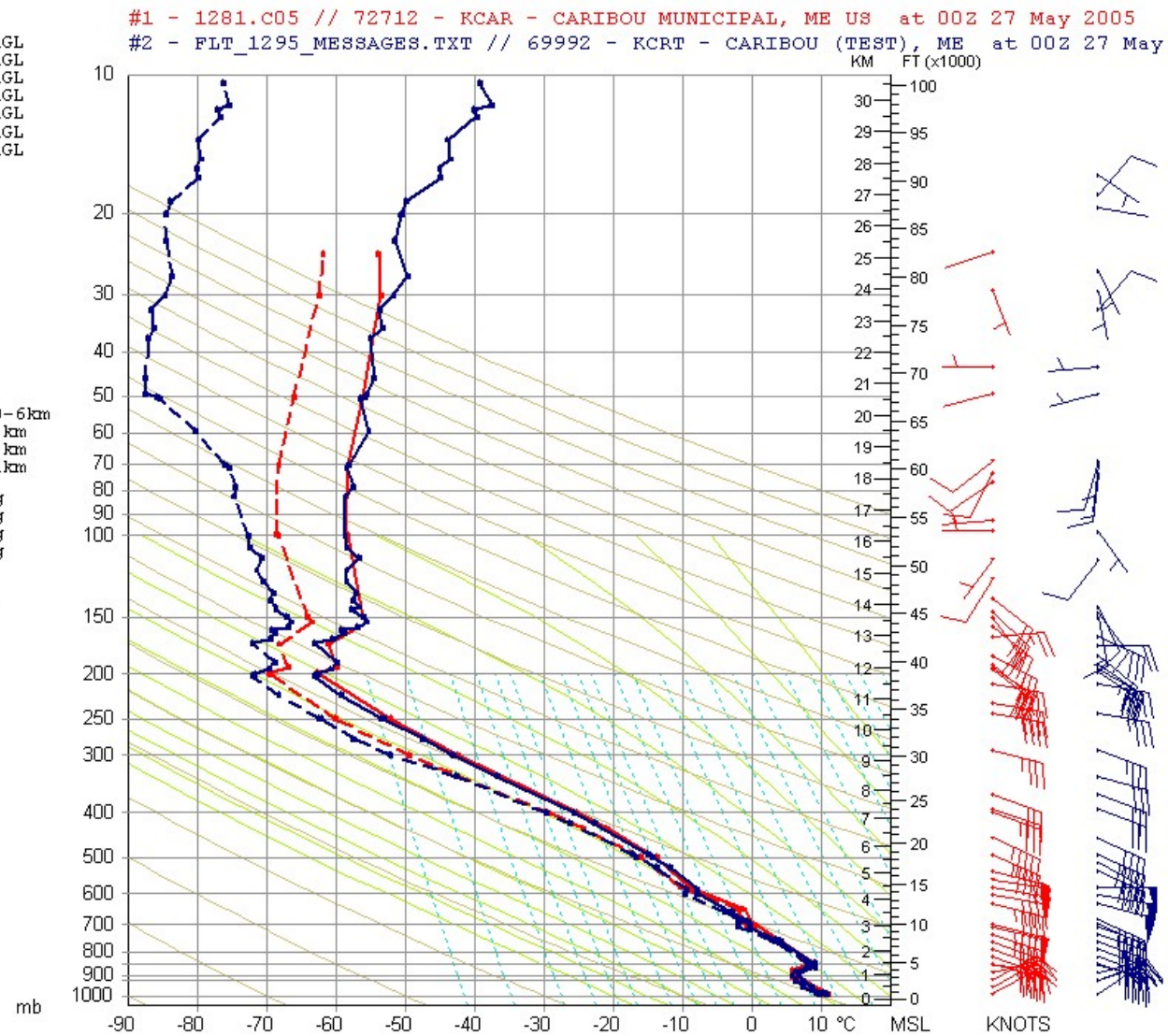
Test #36 - System Test II – 00UTC on 05/27/2005
RWS Version 1.0.4.0

TEST # 36			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11797	11677	120
Freezing Level (m AGL)	2921	2717	204
LFC Height (m AGL)	527	230	297
CCL Height (m AGL)	597	2166	-1569
LCL Height (m AGL)	138	138	0
Precipitable Water (cm)	3	2.88	0.12
Thickness 1000 - 500 mb (m)	5564	5556	8
Thickness 1000 - 700 mb (m)	2932	2931	1
Thickness 1000 - 850 mb (m)	1345	1347	-2
Thickness 850 - 500 mb (m)	4219	4209	10
Thickness 850 - 700 mb (m)	1587	1585	2
Thickness 700 - 500 mb (m)	2632	2624	8
Thickness 600 - 400 mb (m)	3068	3063	5
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

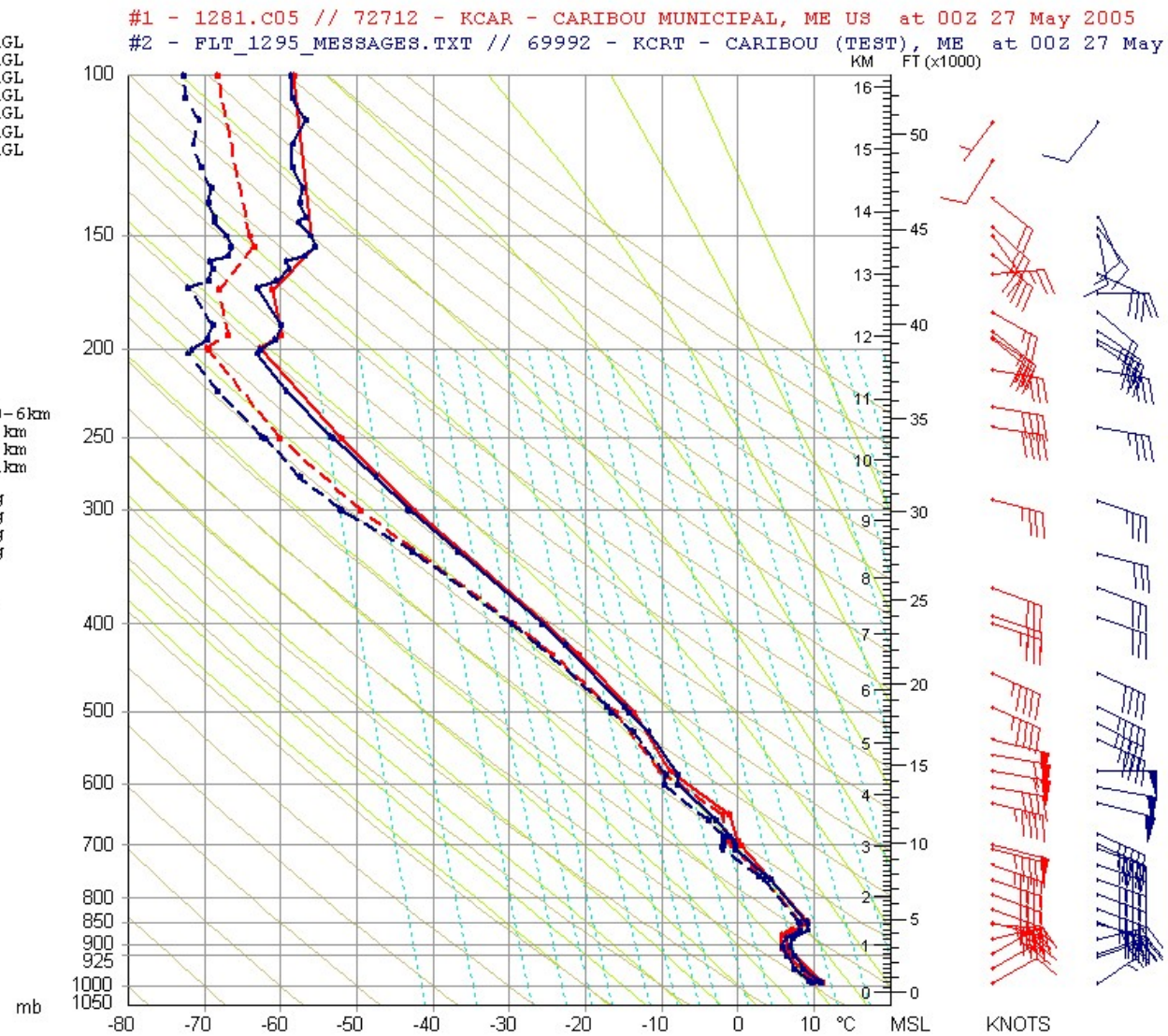
Test #36 - System Test II – 00UTC on 05/27/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11797	11677	m AGL
FRZG Lvl:	2921	2717	m AGL
cclEL Hgt:	--	4199	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	527	230	m AGL
CCL Hgt:	597	2166	m AGL
LCL Hgt:	138	138	m AGL
Water:	3.00	2.88	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	228.6	227.0	
CAP:	0.5	0.2	
Boyden:	92.8	93.4	
S{TT}:	41.8	42.0	
KO:	7.3	6.4	
LI:	10.7	10.5	
TT:	44.9	45.6	
KI:	30.1	29.7	
Tc:	13.0	25.6	°C
Storm:	122/33	122/30	0-6km
s-rH:	372	370	0-3km
s-rH:	370	352	0-2km
s-rH:	281	254	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	46.8	49.8	
Threat:	11.6	13.0	
Point:	10.5	8.8	°C
1000 - 500 mb:	5564	5556	m
1000 - 700 mb:	2932	2931	m
1000 - 850 mb:	1345	1347	m
850 - 500 mb:	4219	4209	m
850 - 700 mb:	1587	1585	m
700 - 500 mb:	2632	2624	m
600 - 400 mb:	3068	3063	m



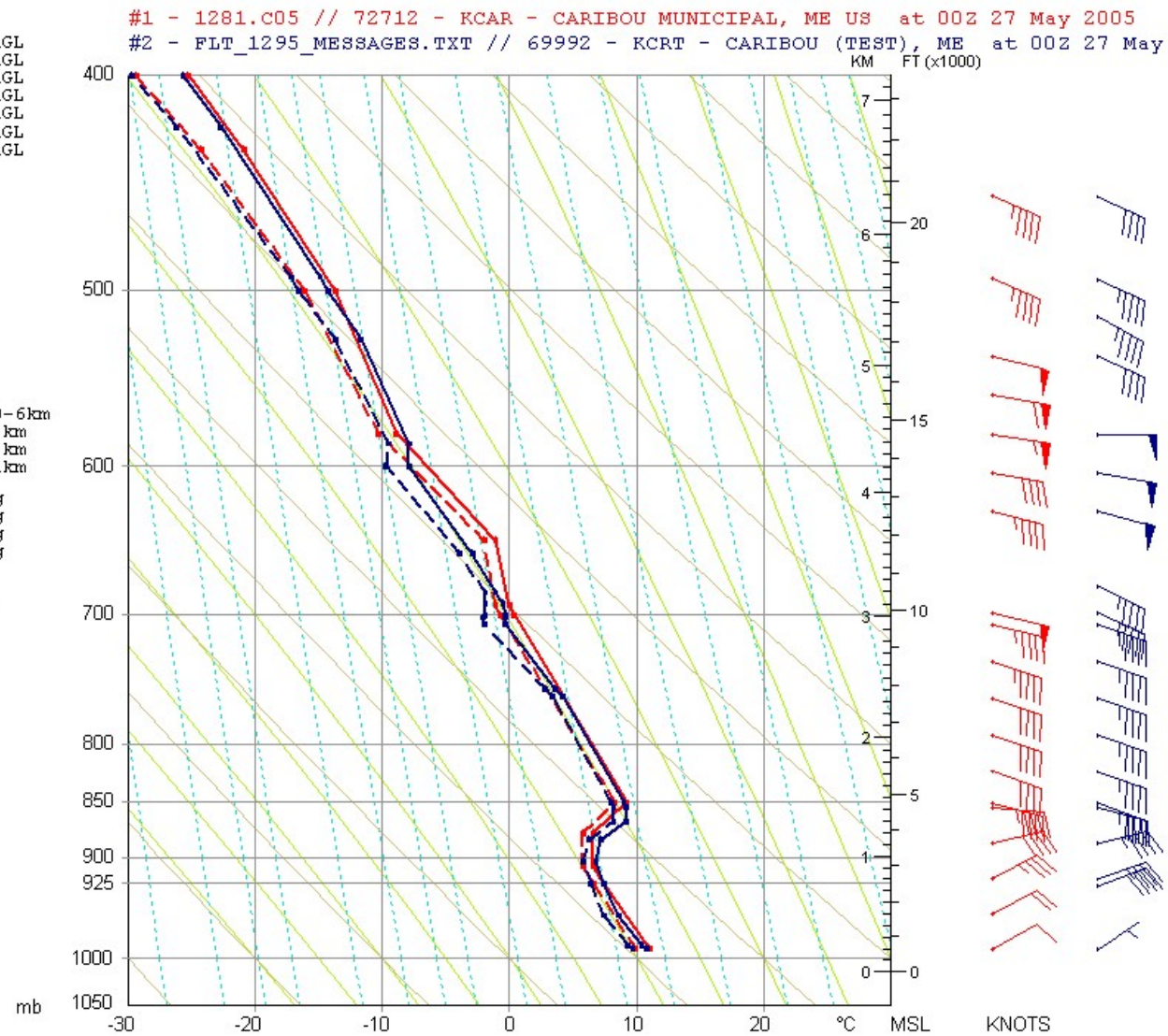
Test #36 - System Test II – 00UTC on 05/27/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11797	11677	m AGL
FRZG Lvl:	2921	2717	m AGL
cclEL Hgt:	--	4199	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	527	230	m AGL
CCL Hgt:	597	2166	m AGL
LCL Hgt:	138	138	m AGL
Water:	3.00	2.88	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	228.6	227.0	
CAP:	0.5	0.2	
Boyden:	92.8	93.4	
S{TT}:	41.8	42.0	
KO:	7.3	6.4	
LI:	10.7	10.5	
TT:	44.9	45.6	
KI:	30.1	29.7	
Tc:	13.0	25.6	°C
Storm:	122/33	122/30	0-6km
s-rH:	372	370	0-3km
s-rH:	370	352	0-2km
s-rH:	281	254	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	46.8	49.8	
Threat:	11.6	13.0	
Point:	10.5	8.8	°C
1000 - 500 mb:	5564	5556	m
1000 - 700 mb:	2932	2931	m
1000 - 850 mb:	1345	1347	m
850 - 500 mb:	4219	4209	m
850 - 700 mb:	1587	1585	m
700 - 500 mb:	2632	2624	m
600 - 400 mb:	3068	3063	m



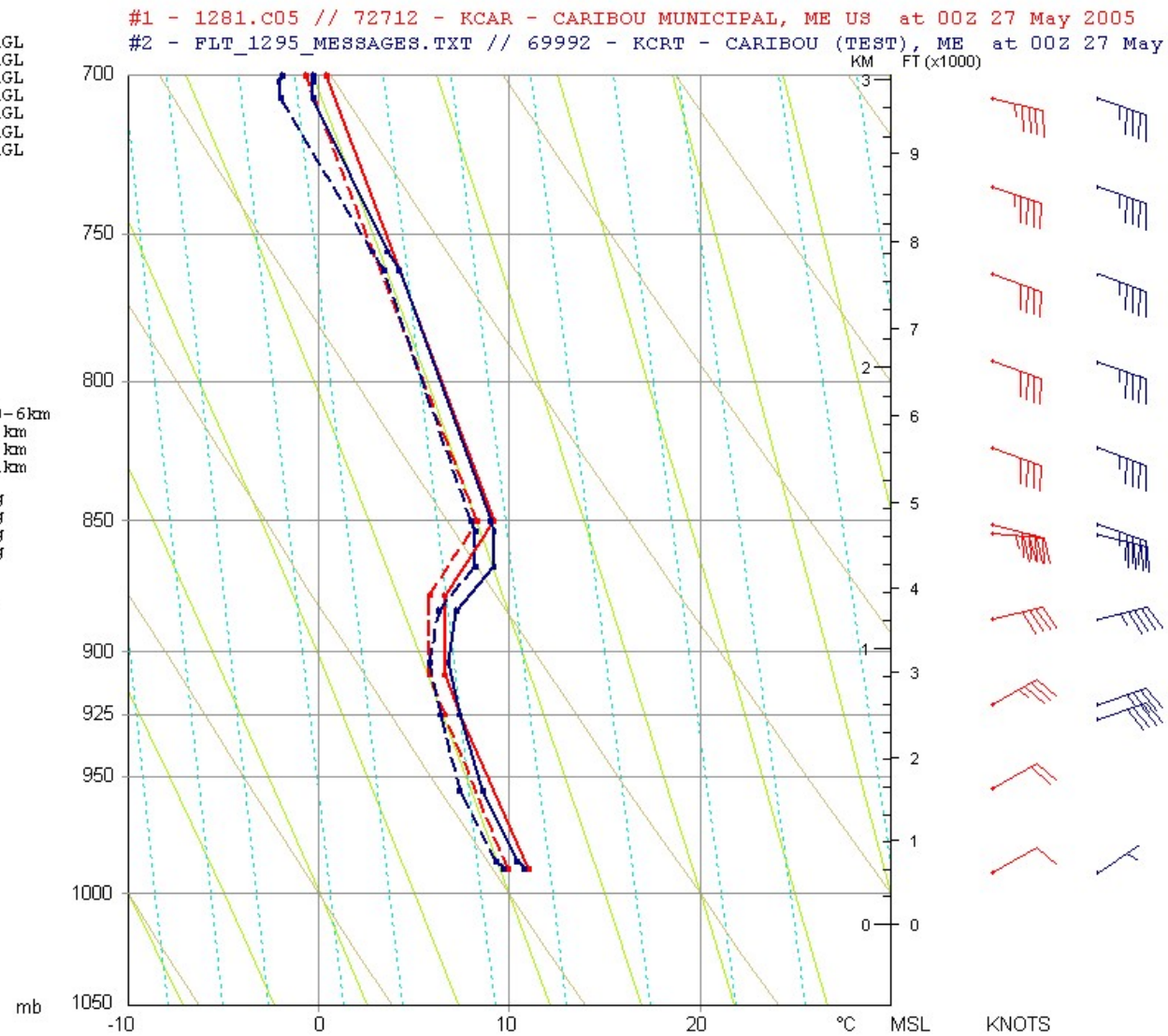
Test #36 - System Test II – 00UTC on 05/27/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11797	11677	m AGL
FRZG Lvl:	2921	2717	m AGL
cclEL Hgt:	--	4199	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	527	230	m AGL
CCL Hgt:	597	2166	m AGL
LCL Hgt:	138	138	m AGL
Water:	3.00	2.88	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	228.6	227.0	
CAP:	0.5	0.2	
Boyden:	92.8	93.4	
S{TT}:	41.8	42.0	
KO:	7.3	6.4	
LI:	10.7	10.5	
TT:	44.9	45.6	
KI:	30.1	29.7	
Tc:	13.0	25.6	°C
Storm:	122/33	122/30	0-6km
s-rH:	372	370	0-3km
s-rH:	370	352	0-2km
s-rH:	281	254	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	46.8	49.8	
Threat:	11.6	13.0	
Point:	10.5	8.8	°C
1000 - 500 mb:	5564	5556	m
1000 - 700 mb:	2932	2931	m
1000 - 850 mb:	1345	1347	m
850 - 500 mb:	4219	4209	m
850 - 700 mb:	1587	1585	m
700 - 500 mb:	2632	2624	m
600 - 400 mb:	3068	3063	m



Test #36 - System Test II – 00UTC on 05/27/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11797	11677	m AGL
FRZG Lvl:	2921	2717	m AGL
cclEL Hgt:	--	4199	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	527	230	m AGL
CCL Hgt:	597	2166	m AGL
LCL Hgt:	138	138	m AGL
Water:	3.00	2.88	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	228.6	227.0	
CAP:	0.5	0.2	
Boyden:	92.8	93.4	
S{TT}:	41.8	42.0	
KO:	7.3	6.4	
LI:	10.7	10.5	
TT:	44.9	45.6	
KI:	30.1	29.7	
Tc:	13.0	25.6	°C
Storm:	122/33	122/30	0-6km
s-rH:	372	370	0-3km
s-rH:	370	352	0-2km
s-rH:	281	254	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	46.8	49.8	
Threat:	11.6	13.0	
Point:	10.5	8.8	°C
1000 - 500 mb:	5564	5556	m
1000 - 700 mb:	2932	2931	m
1000 - 850 mb:	1345	1347	m
850 - 500 mb:	4219	4209	m
850 - 700 mb:	1587	1585	m
700 - 500 mb:	2632	2624	m
600 - 400 mb:	3068	3063	m



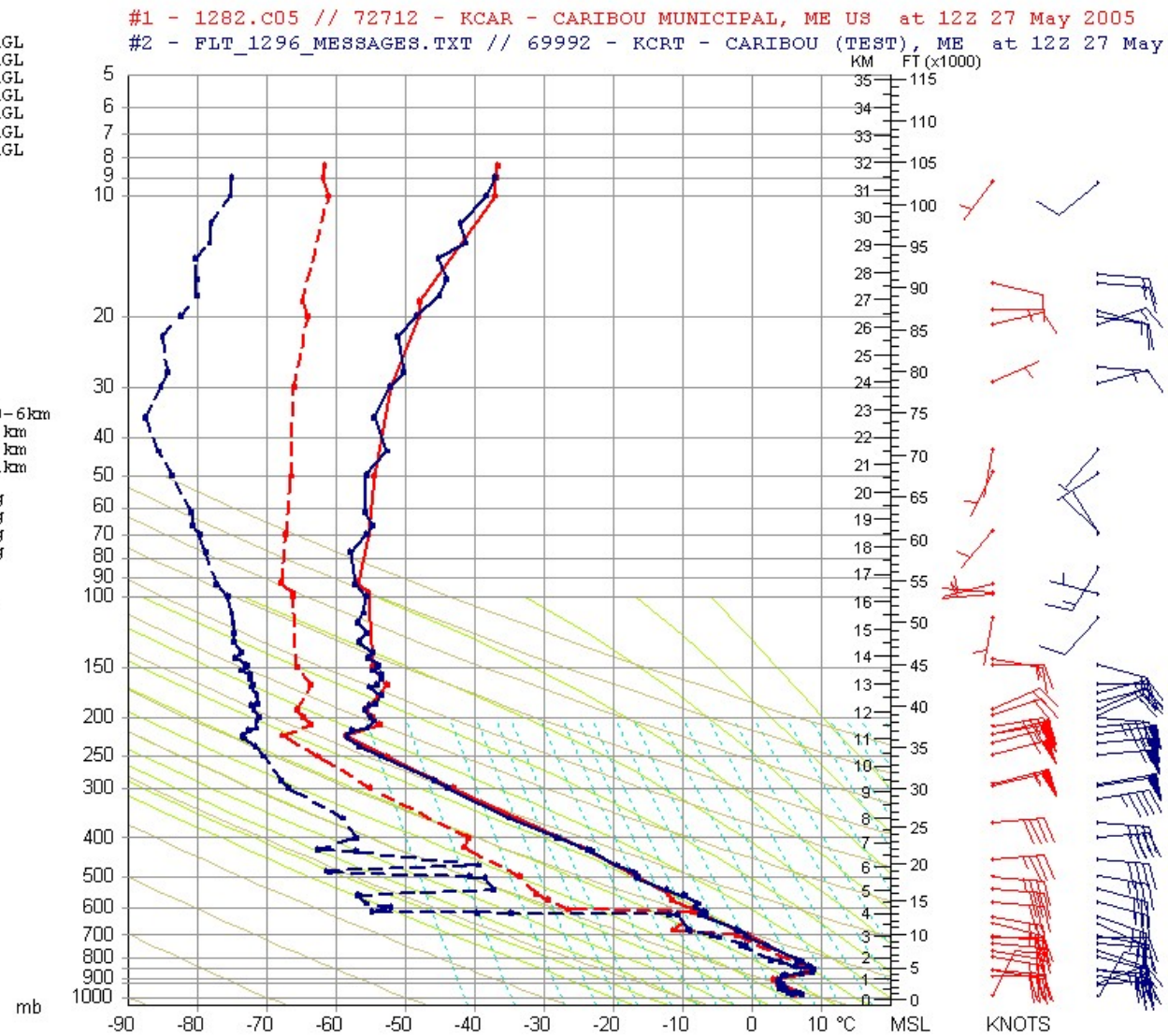
Test #37 - System Test II – 12UTC on 05/27/2005
RWS Version 1.0.4.0

TEST # 37			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11004	10965	39
Freezing Level (m AGL)	2708	2621	87
LFC Height (m AGL)	NC	245	NC
CCL Height (m AGL)	575	2536	-1961
LCL Height (m AGL)	137	175	-38
Precipitable Water (cm)	2.23	1.93	0.3
Thickness 1000 - 500 mb (m)	5523	5526	-3
Thickness 1000 - 700 mb (m)	2917	2914	3
Thickness 1000 - 850 mb (m)	1334	1332	2
Thickness 850 - 500 mb (m)	4189	4193	-4
Thickness 850 - 700 mb (m)	1583	1582	1
Thickness 700 - 500 mb (m)	2606	2611	-5
Thickness 600 - 400 mb (m)	3034	3041	-7
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

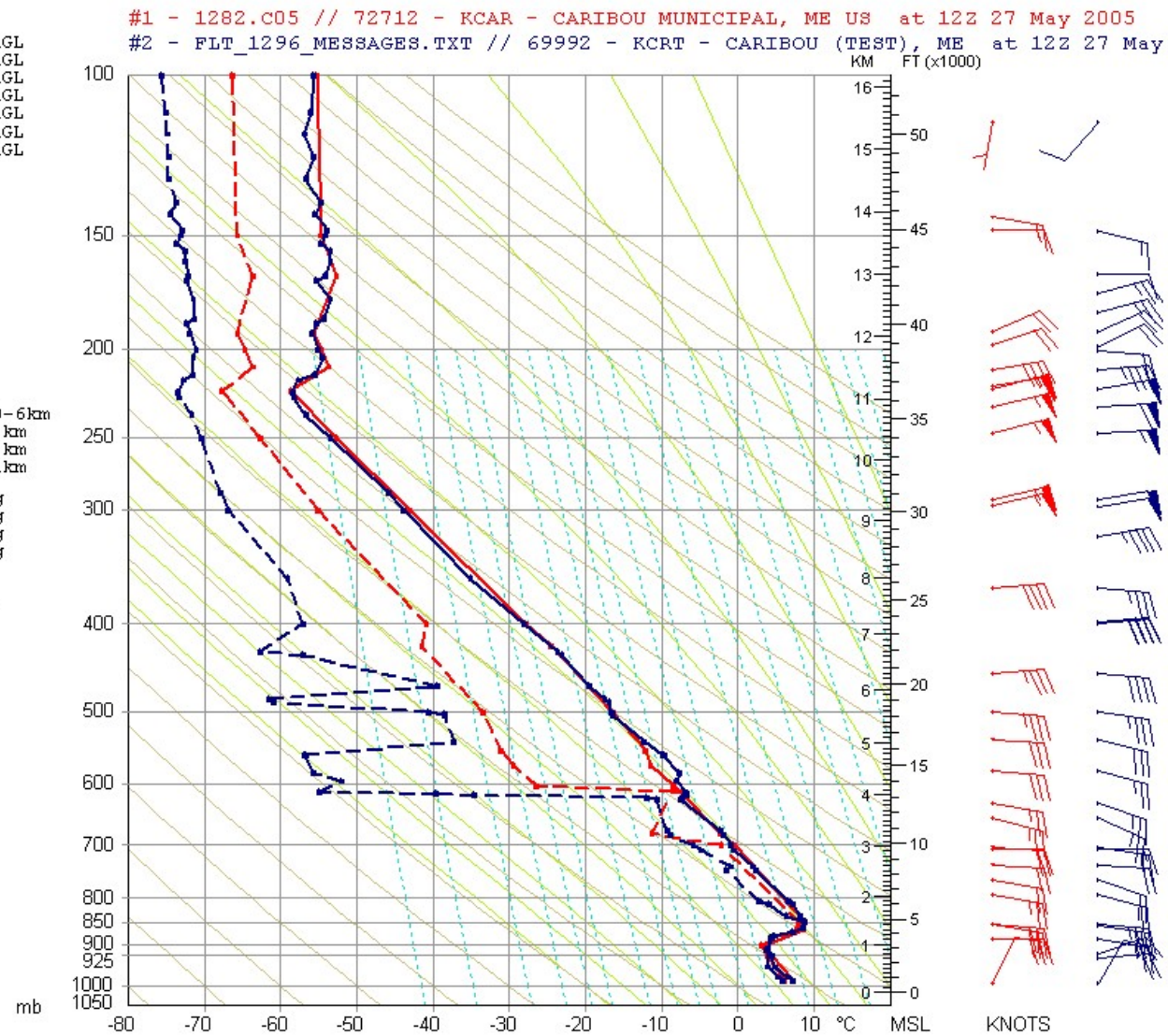
Test #37 - System Test II – 12UTC on 05/27/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11004	10965	m AGL
FRZG Lvl:	2708	2621	m AGL
cclEL Hgt:	--	2854	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	245	m AGL
CCL Hgt:	575	2536	m AGL
LCL Hgt:	137	175	m AGL
Water:	2.23	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	202.0	239.6	
CAP:	--	0.2	
Boyden:	92.2	92.3	
S{TT}:	48.1	46.0	
KO:	6.1	3.1	
LI:	13.8	13.8	
TT:	49.8	51.0	
KI:	31.6	29.3	
Tc:	9.8	26.0	°C
Storm:	126/28	133/28	0-6km
s-rH:	101	86	0-3km
s-rH:	109	101	0-2km
s-rH:	123	118	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	27.0	28.6	
Threat:	15.4	15.5	
Point:	6.3	6.7°C	
1000 - 500 mb:	5523	5526	m
1000 - 700 mb:	2917	2914	m
1000 - 850 mb:	1334	1332	m
850 - 500 mb:	4189	4193	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2606	2611	m
600 - 400 mb:	3034	3041	m



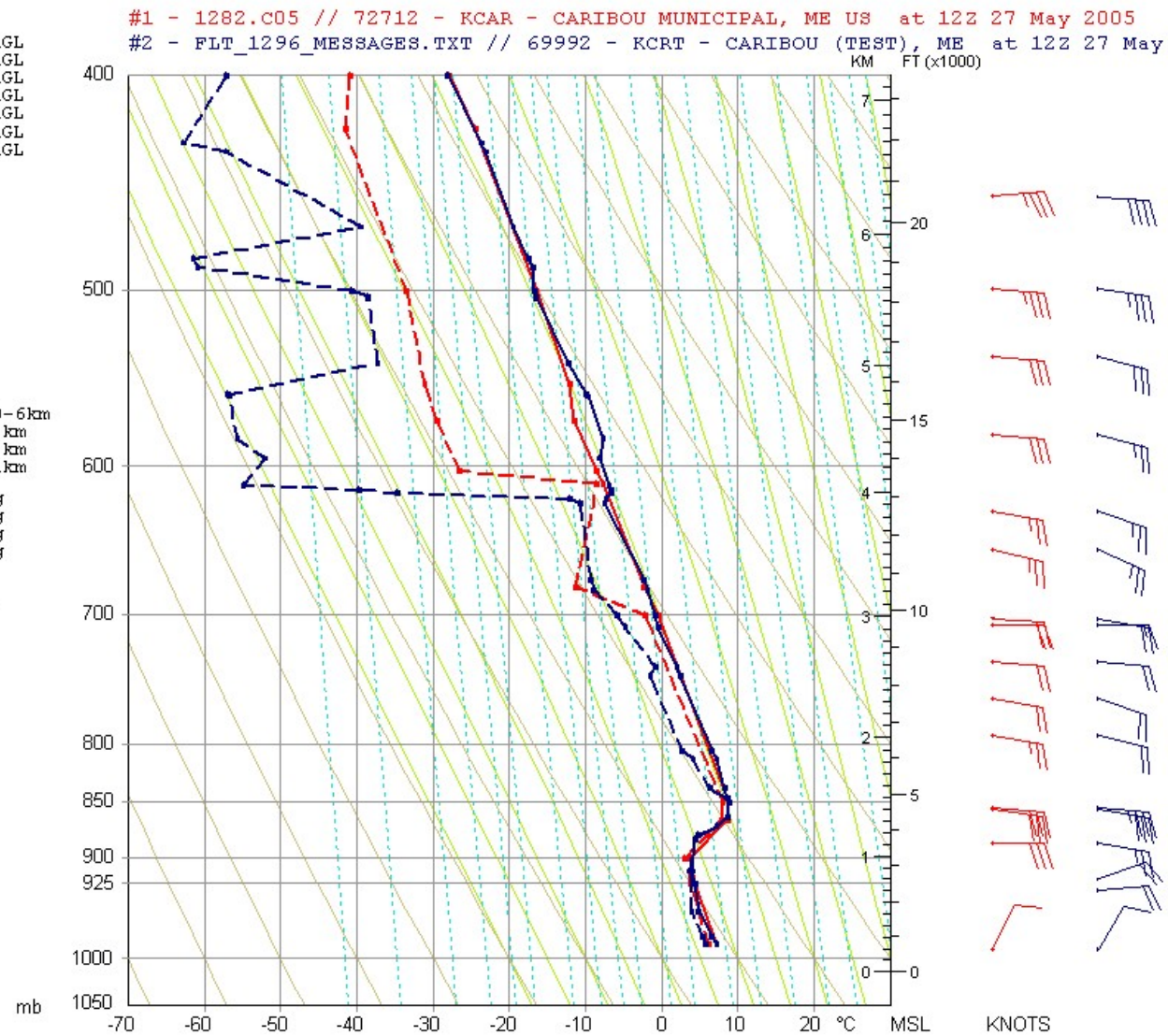
Test #37 - System Test II – 12UTC on 05/27/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11004	10965	m AGL
FRZG Lvl:	2708	2621	m AGL
cclEL Hgt:	--	2854	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	245	m AGL
CCL Hgt:	575	2536	m AGL
LCL Hgt:	137	175	m AGL
Water:	2.23	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	202.0	239.6	
CAP:	--	0.2	
Boyden:	92.2	92.3	
S{TT}:	48.1	46.0	
KO:	6.1	3.1	
LI:	13.8	13.8	
TT:	49.8	51.0	
KI:	31.6	29.3	
Tc:	9.8	26.0	°C
Storm:	126/28	133/28	0-6km
s-rH:	101	86	0-3km
s-rH:	109	101	0-2km
s-rH:	123	118	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	27.0	28.6	
Threat:	15.4	15.5	
Point:	6.3	6.7	°C
1000 - 500 mb:	5523	5526	m
1000 - 700 mb:	2917	2914	m
1000 - 850 mb:	1334	1332	m
850 - 500 mb:	4189	4193	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2606	2611	m
600 - 400 mb:	3034	3041	m



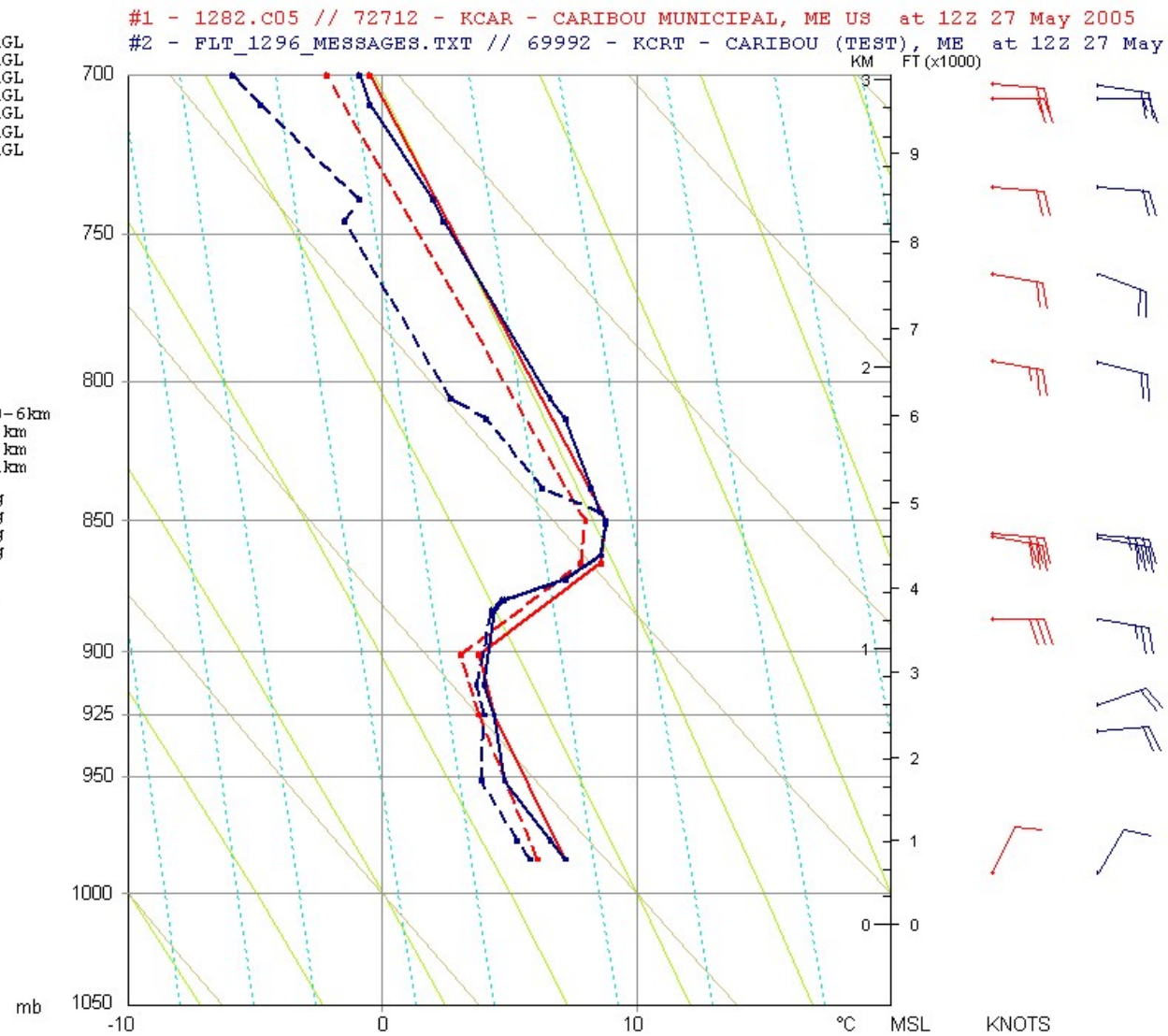
Test #37 - System Test II – 12UTC on 05/27/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11004	10965	m AGL
FRZG Lvl:	2708	2621	m AGL
cclEL Hgt:	--	2854	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	245	m AGL
CCL Hgt:	575	2536	m AGL
LCL Hgt:	137	175	m AGL
Water:	2.23	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	202.0	239.6	
CAP:	--	0.2	
Boyden:	92.2	92.3	
S{TT}:	48.1	46.0	
KO:	6.1	3.1	
LI:	13.8	13.8	
TT:	49.8	51.0	
KI:	31.6	29.3	
Tc:	9.8	26.0	°C
Storm:	126/28	133/28	0-6km
s-rH:	101	86	0-3km
s-rH:	109	101	0-2km
s-rH:	123	118	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	27.0	28.6	
Threat:	15.4	15.5	
Point:	6.3	6.7°C	
1000 - 500 mb:	5523	5526	m
1000 - 700 mb:	2917	2914	m
1000 - 850 mb:	1334	1332	m
850 - 500 mb:	4189	4193	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2606	2611	m
600 - 400 mb:	3034	3041	m

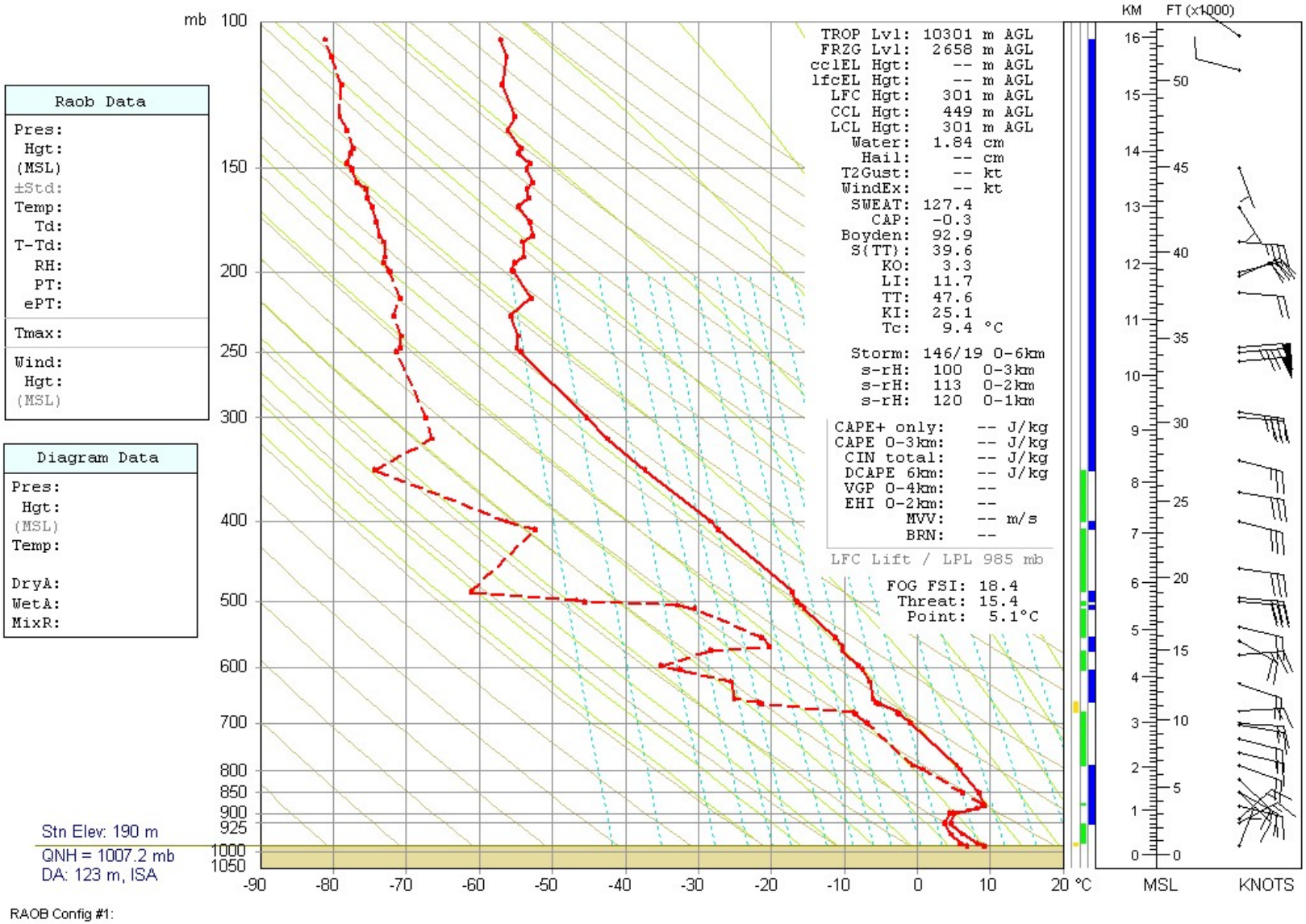


Test #37 - System Test II – 12UTC on 05/27/2005
RWS Version 1.0.4.0

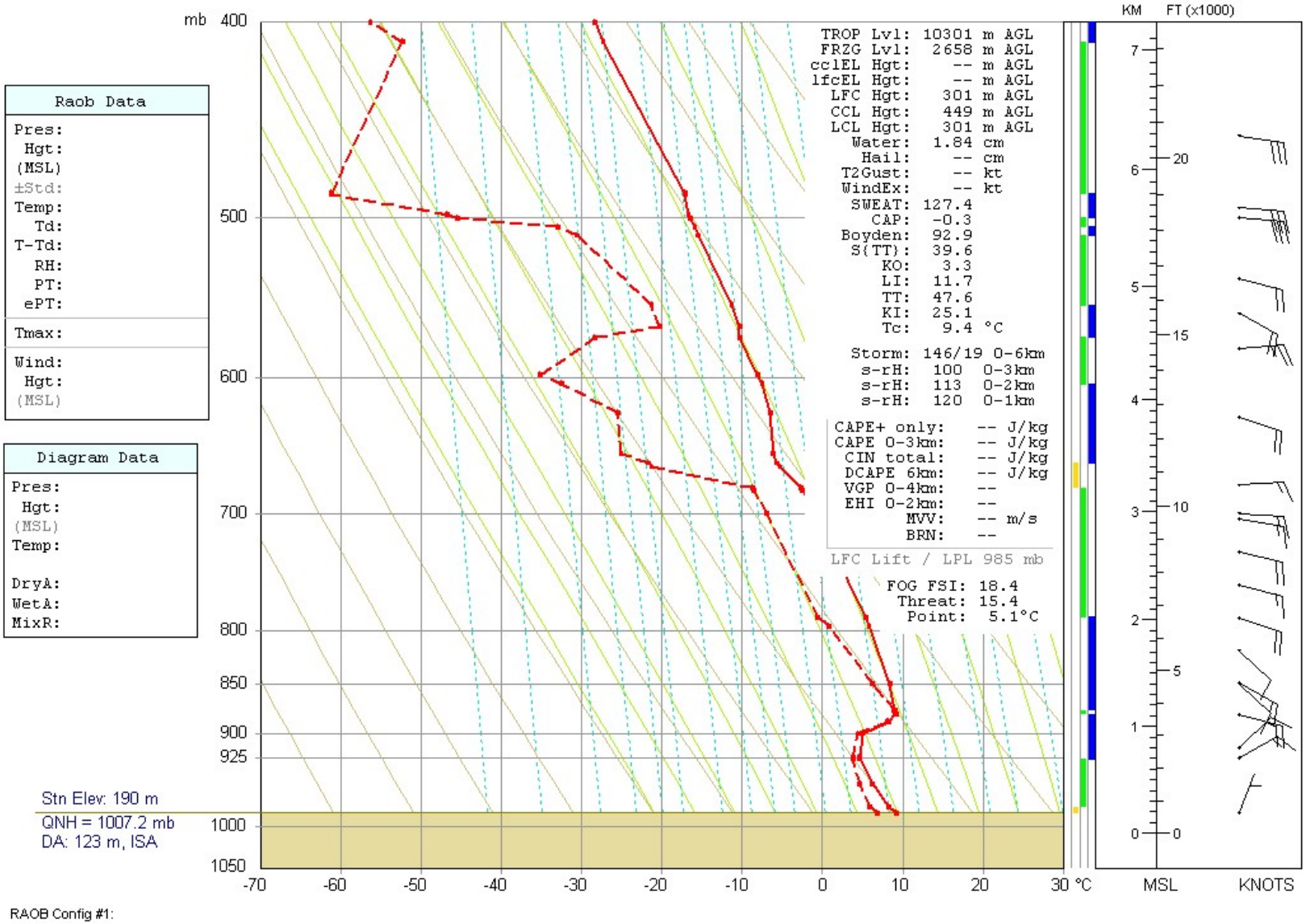
	#1	#2	
TROP Lvl:	11004	10965	m AGL
FRZG Lvl:	2708	2621	m AGL
cclEL Hgt:	--	2854	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	245	m AGL
CCL Hgt:	575	2536	m AGL
LCL Hgt:	137	175	m AGL
Water:	2.23	1.93	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	202.0	239.6	
CAP:	--	0.2	
Boyden:	92.2	92.3	
S{TT}:	48.1	46.0	
KO:	6.1	3.1	
LI:	13.8	13.8	
TT:	49.8	51.0	
KI:	31.6	29.3	
Tc:	9.8	26.0	°C
Storm:	126/28	133/28	0-6km
s-rH:	101	86	0-3km
s-rH:	109	101	0-2km
s-rH:	123	118	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	27.0	28.6	
Threat:	15.4	15.5	
Point:	6.3	6.7°C	
1000 - 500 mb:	5523	5526	m
1000 - 700 mb:	2917	2914	m
1000 - 850 mb:	1334	1332	m
850 - 500 mb:	4189	4193	m
850 - 700 mb:	1583	1582	m
700 - 500 mb:	2606	2611	m
600 - 400 mb:	3034	3041	m



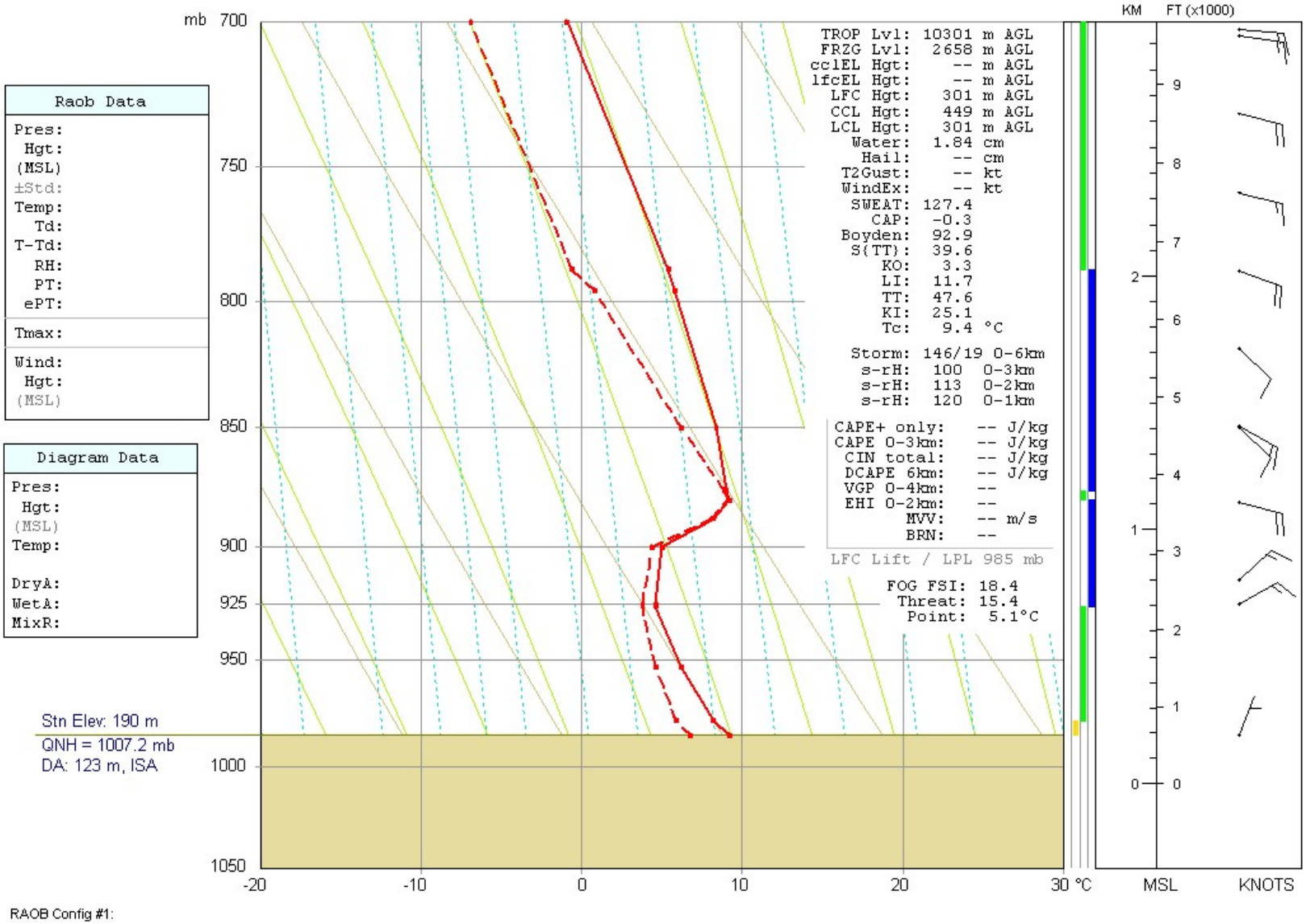
Test #38 System Test II – 15 UTC on 05/27/2005
RWS Version 1.0.4.0



Test #38 System Test II – 15 UTC on 05/27/2005
RWS Version 1.0.4.0

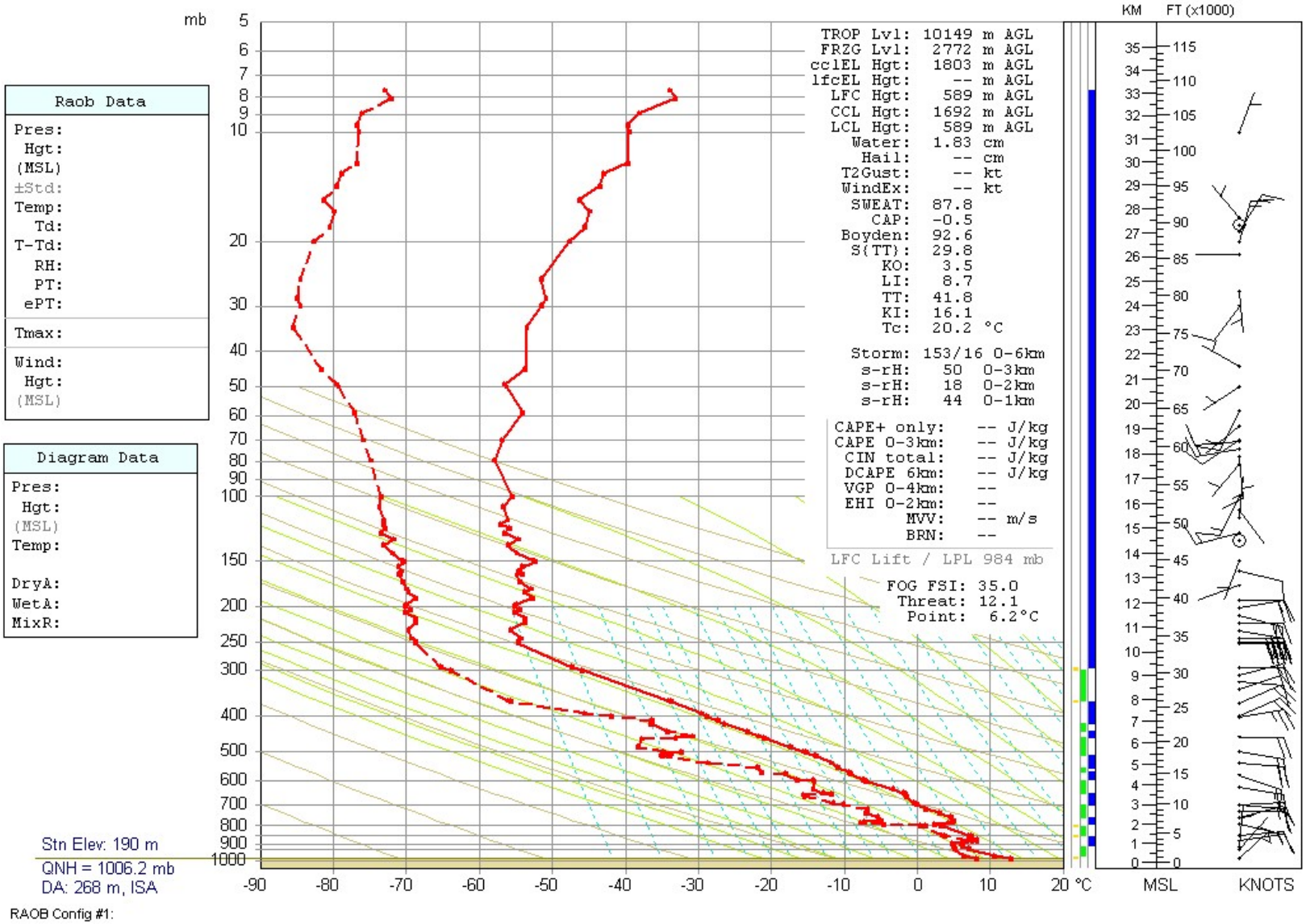


Test #38 System Test II – 15 UTC on 05/27/2005
RWS Version 1.0.4.0

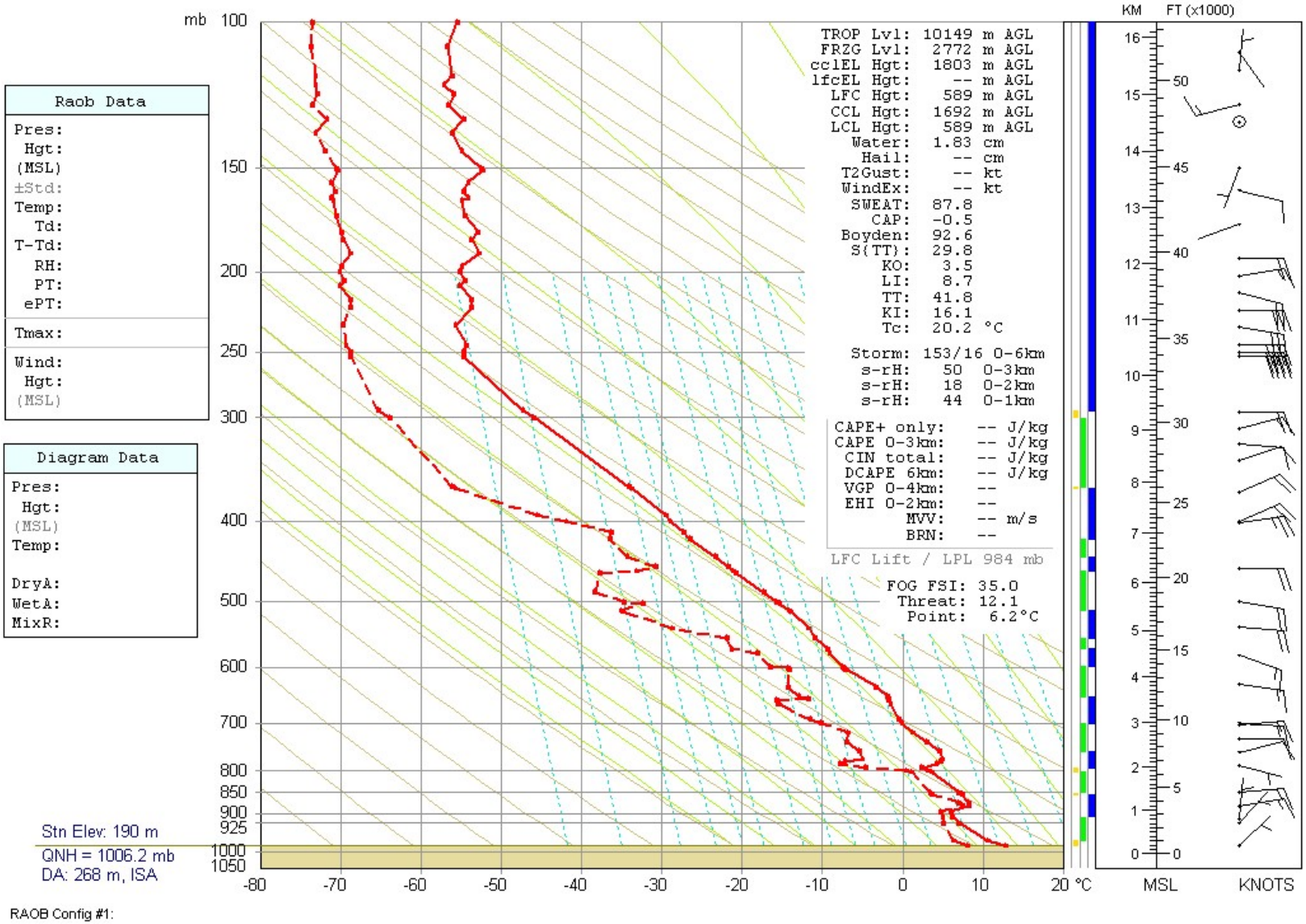


RAOB Config #1:

Test #39 System Test II – 18 UTC on 05/27/2005
RWS Version 1.0.4.0

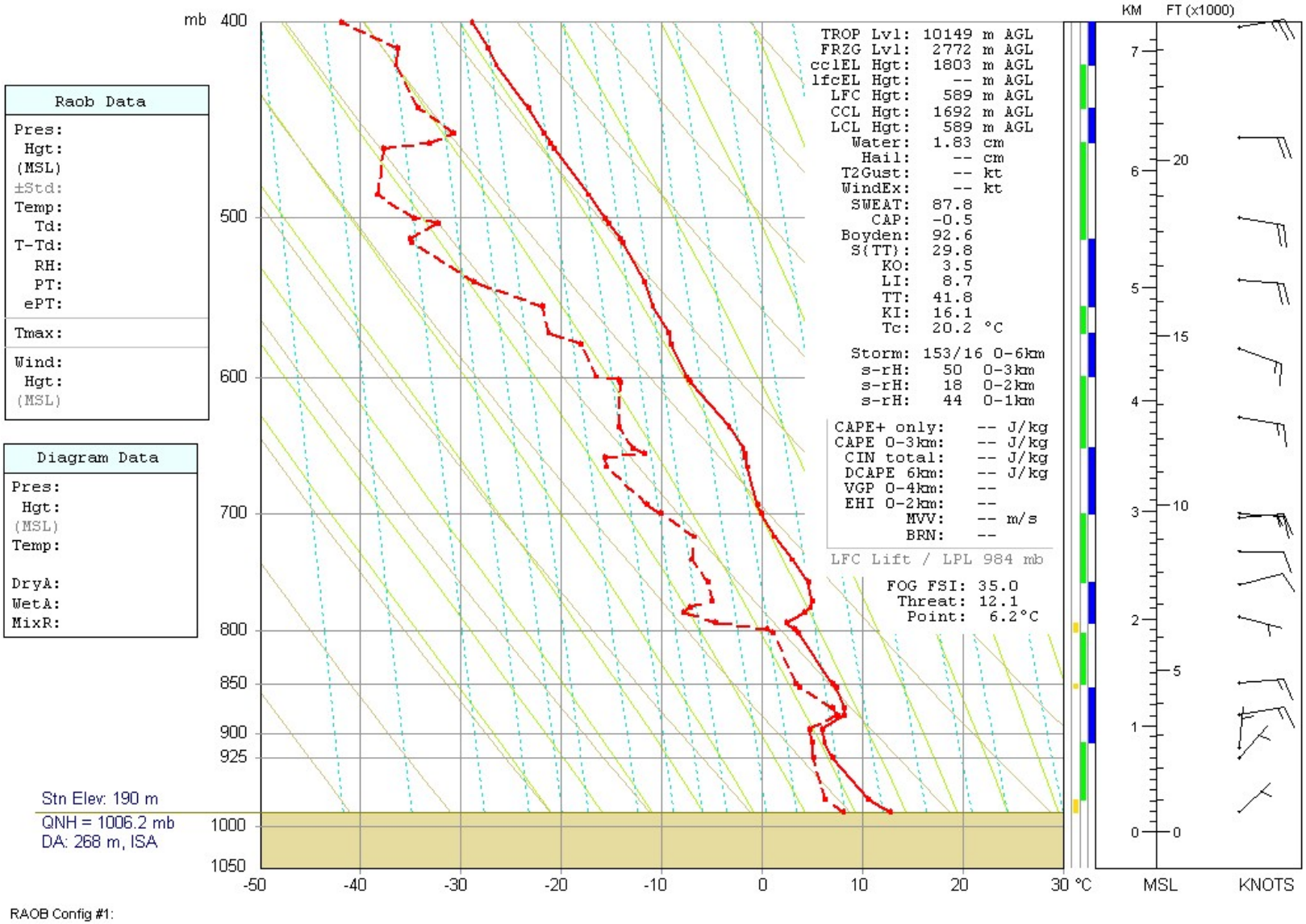


Test #39 System Test II – 18 UTC on 05/27/2005
RWS Version 1.0.4.0



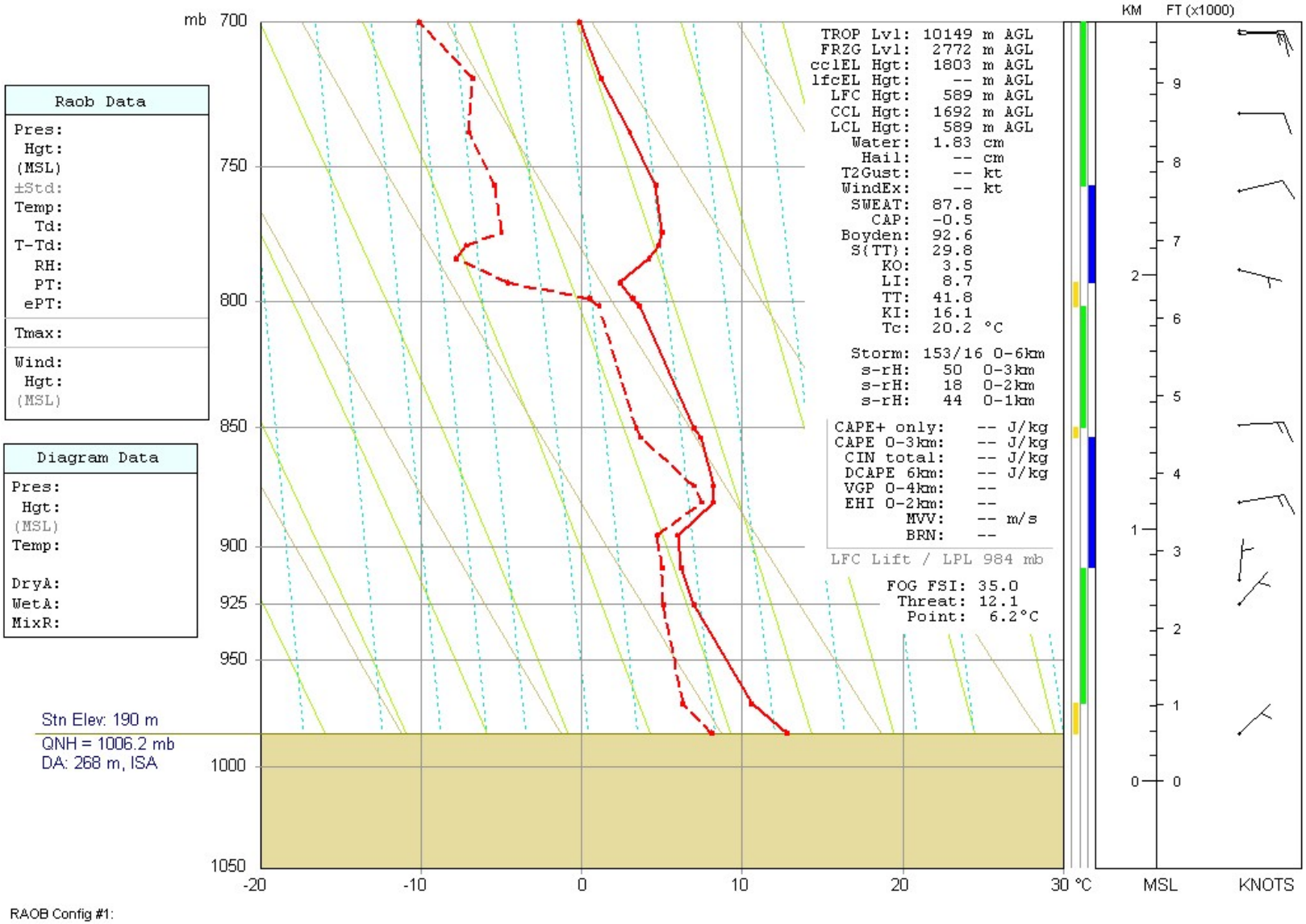
RAOB Config #1:

Test #39 System Test II – 18 UTC on 05/27/2005
RWS Version 1.0.4.0



RAOB Config #1:

Test #39 System Test II – 18 UTC on 05/27/2005
RWS Version 1.0.4.0



RAOB Config #1:

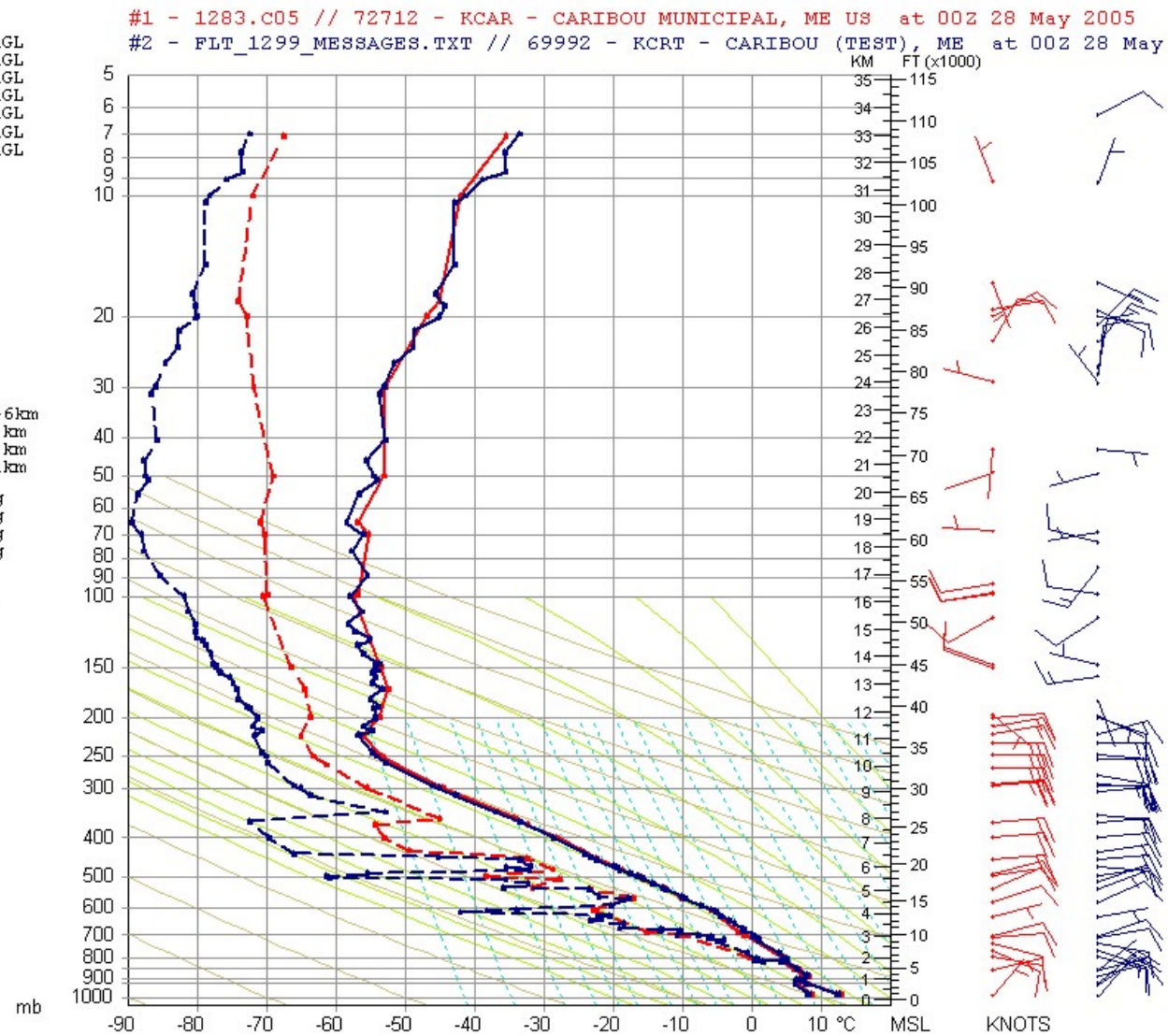
Test #40 - System Test II – 00UTC on 05/28/2005
RWS Version 1.0.4.0

TEST # 40			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10968	10987	-19
Freezing Level (m AGL)	2591	2837	-246
LFC Height (m AGL)	560	NC	NC
CCL Height (m AGL)	1445	1493	-48
LCL Height (m AGL)	541	541	0
Precipitable Water (cm)	1.98	1.95	0.03
Thickness 1000 - 500 mb (m)	5540	5545	-5
Thickness 1000 - 700 mb (m)	2925	2925	0
Thickness 1000 - 850 mb (m)	1349	1349	0
Thickness 850 - 500 mb (m)	4190	4196	-6
Thickness 850 - 700 mb (m)	1575	1577	-2
Thickness 700 - 500 mb (m)	2615	2620	-5
Thickness 600 - 400 mb (m)	3037	3034	3
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

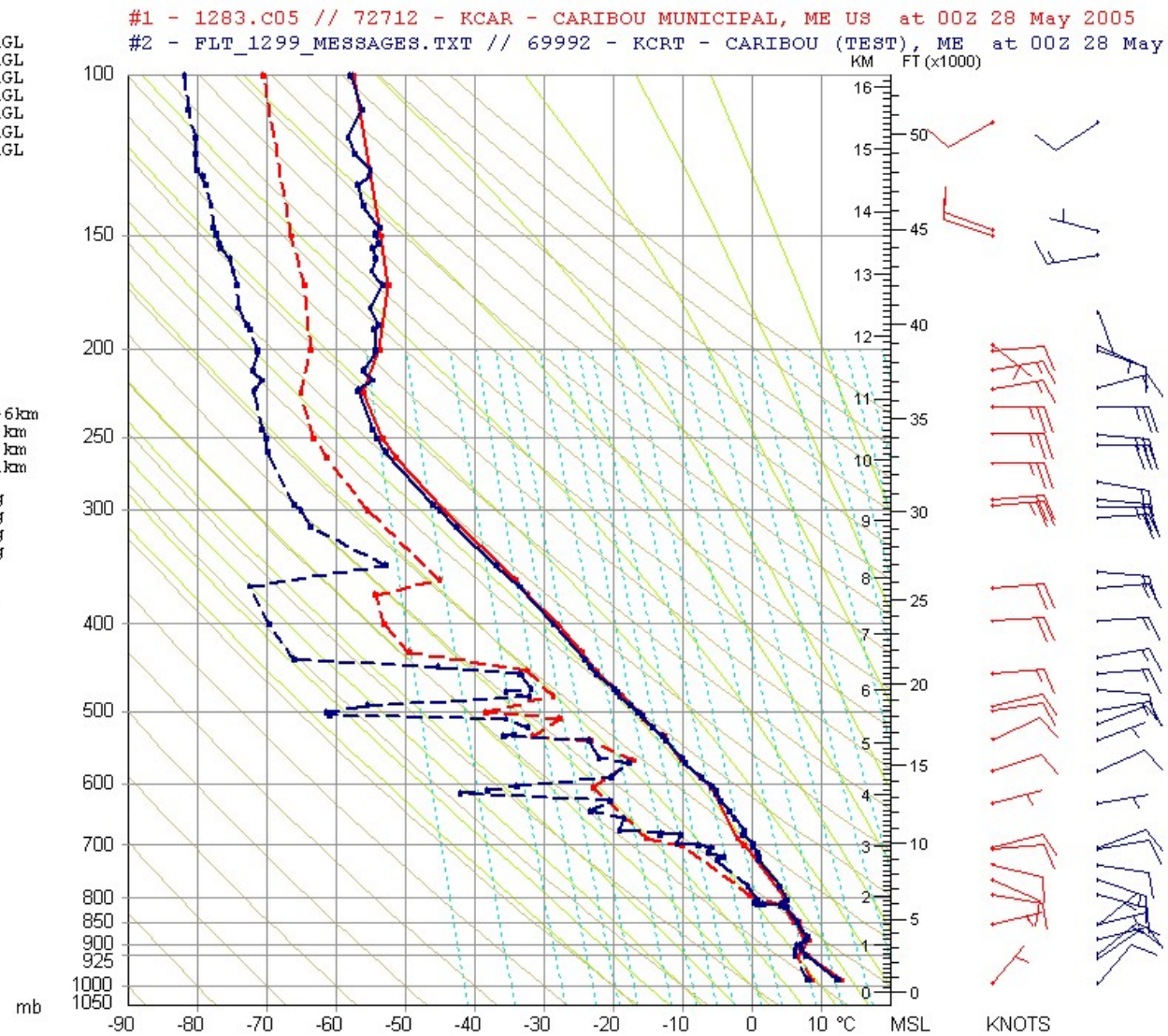
Test #40 - System Test II – 00UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10968	10987	m AGL
FRZG Lvl:	2591	2837	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	560	--	m AGL
CCL Hgt:	1445	1493	m AGL
LCL Hgt:	541	541	m AGL
Water:	1.98	1.95	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	95.2	103.0	
CAP:	0.1	--	
Boyden:	93.6	92.3	
S{TT}:	34.5	36.1	
KO:	.1	1.3	
LI:	7.4	7.9	
TT:	45.5	46.1	
KI:	20.2	21.6	
Tc:	19.8	19.9	°C
Storm:	149/16	221/7	0-6km
s-rH:	15	15	0-3km
s-rH:	18	42	0-2km
s-rH:	0	26	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.0	26.6	
Threat:	12.3	12.6	
Point:	7.5	7.3	°C
1000 - 500 mb:	5540	5545	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4190	4196	m
850 - 700 mb:	1575	1577	m
700 - 500 mb:	2615	2620	m
600 - 400 mb:	3037	3034	m



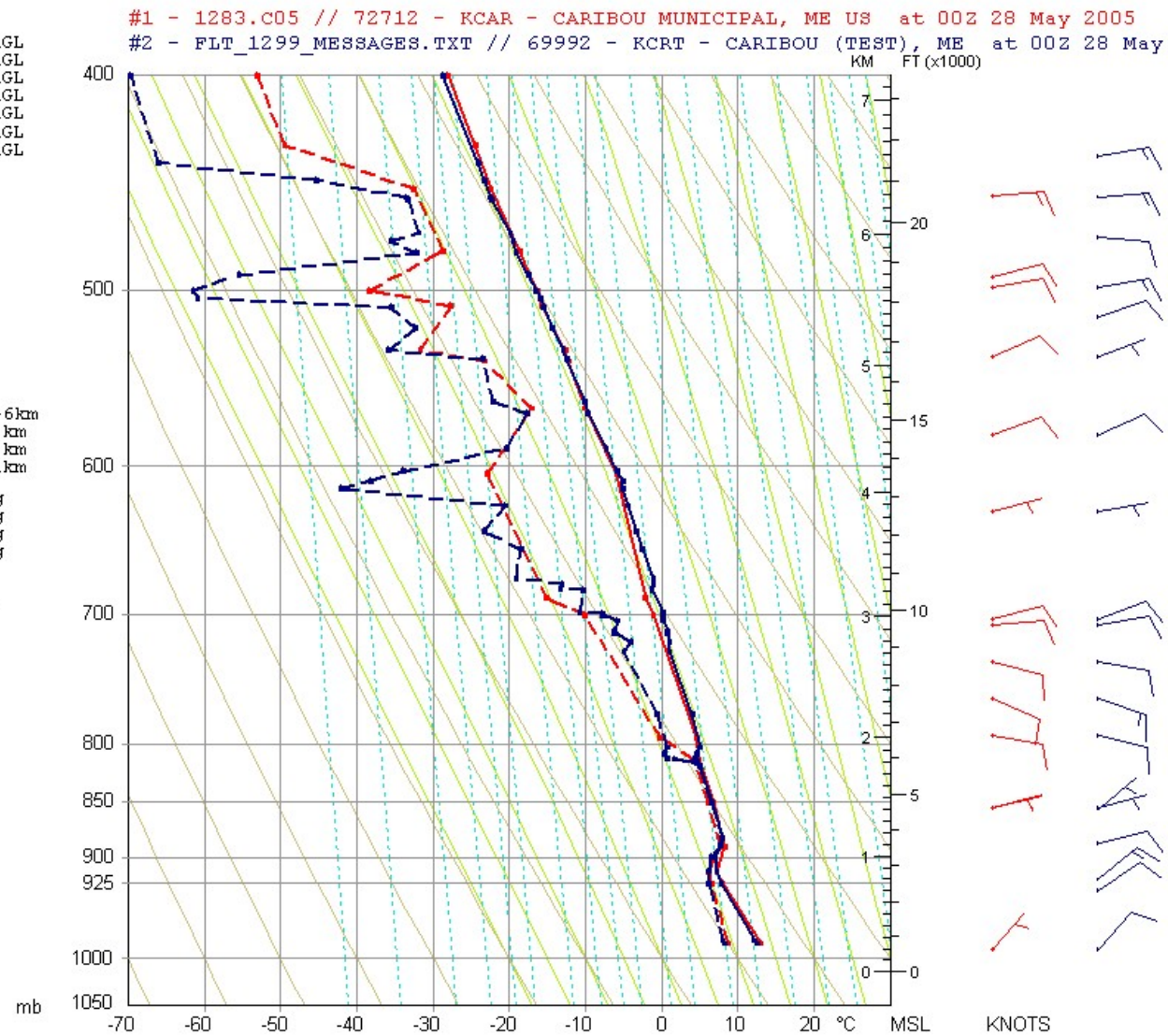
Test #40 - System Test II – 00UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10968	10987	m AGL
FRZG Lvl:	2591	2837	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	560	--	m AGL
CCL Hgt:	1445	1493	m AGL
LCL Hgt:	541	541	m AGL
Water:	1.98	1.95	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	95.2	103.0	
CAP:	0.1	--	
Boyden:	93.6	92.3	
S{TT}:	34.5	36.1	
KO:	.1	1.3	
LI:	7.4	7.9	
TT:	45.5	46.1	
KI:	20.2	21.6	
Tc:	19.8	19.9	°C
Storm:	149/16	221/7	0-6km
s-rH:	15	15	0-3km
s-rH:	18	42	0-2km
s-rH:	0	26	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.0	26.6	
Threat:	12.3	12.6	
Point:	7.5	7.3	°C
1000 - 500 mb:	5540	5545	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4190	4196	m
850 - 700 mb:	1575	1577	m
700 - 500 mb:	2615	2620	m
600 - 400 mb:	3037	3034	m



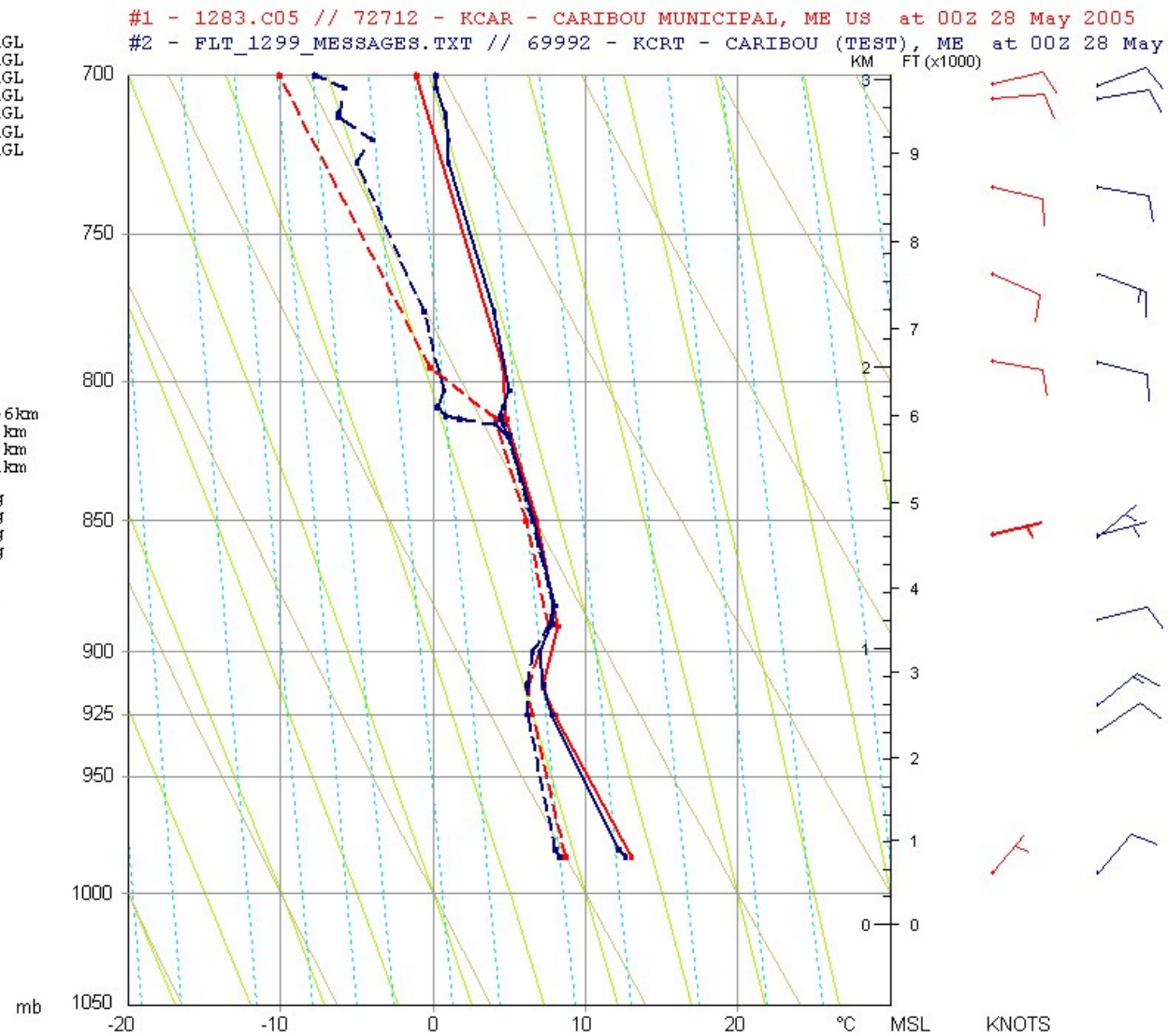
Test #40 - System Test II – 00UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10968	10987	m AGL
FRZG Lvl:	2591	2837	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	560	--	m AGL
CCL Hgt:	1445	1493	m AGL
LCL Hgt:	541	541	m AGL
Water:	1.98	1.95	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	95.2	103.0	
CAP:	0.1	--	
Boyden:	93.6	92.3	
S{TT}:	34.5	36.1	
KO:	.1	1.3	
LI:	7.4	7.9	
TT:	45.5	46.1	
KI:	20.2	21.6	
Tc:	19.8	19.9	°C
Storm:	149/16	221/7	0-6km
s-rH:	15	15	0-3km
s-rH:	18	42	0-2km
s-rH:	0	26	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.0	26.6	
Threat:	12.3	12.6	
Point:	7.5	7.3	°C
1000 - 500 mb:	5540	5545	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4190	4196	m
850 - 700 mb:	1575	1577	m
700 - 500 mb:	2615	2620	m
600 - 400 mb:	3037	3034	m



Test #40 - System Test II – 00UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10968	10987	m AGL
FRZG Lvl:	2591	2837	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	560	--	m AGL
CCL Hgt:	1445	1493	m AGL
LCL Hgt:	541	541	m AGL
Water:	1.98	1.95	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	95.2	103.0	
CAP:	0.1	--	
Boyden:	93.6	92.3	
S{TT}:	34.5	36.1	
KO:	.1	1.3	
LI:	7.4	7.9	
TT:	45.5	46.1	
KI:	20.2	21.6	
Tc:	19.8	19.9	°C
Storm:	149/16	221/7	0-6km
s-rH:	15	15	0-3km
s-rH:	18	42	0-2km
s-rH:	0	26	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	26.0	26.6	
Threat:	12.3	12.6	
Point:	7.5	7.3	°C
1000 - 500 mb:	5540	5545	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1349	1349	m
850 - 500 mb:	4190	4196	m
850 - 700 mb:	1575	1577	m
700 - 500 mb:	2615	2620	m
600 - 400 mb:	3037	3034	m



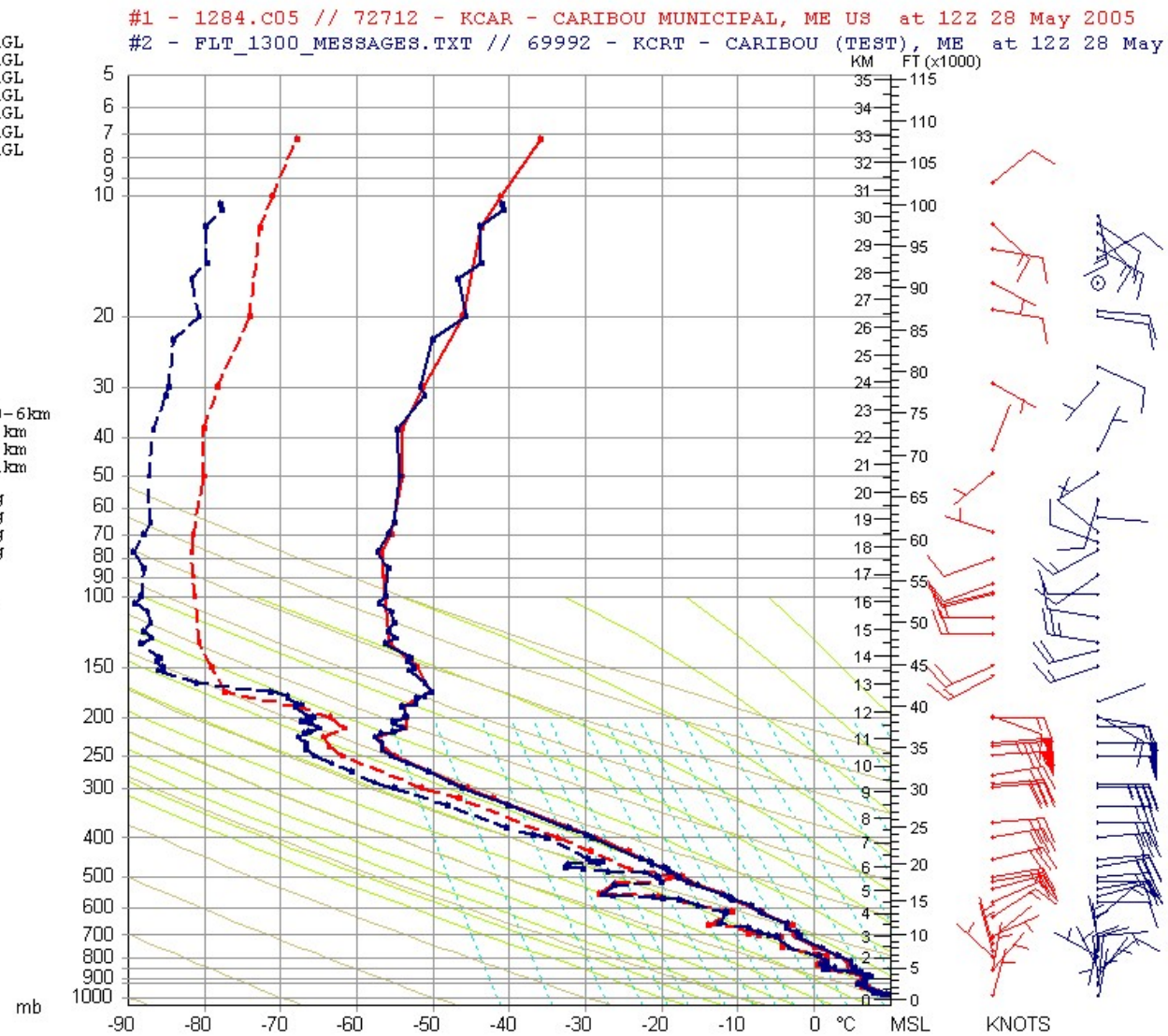
Test #41 - System Test II – 12UTC on 05/28/2005
RWS Version 1.0.4.0

TEST # 41			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10564	10885	-321
Freezing Level (m AGL)	2244	2362	-118
LFC Height (m AGL)	198	76	122
CCL Height (m AGL)	445	405	40
LCL Height (m AGL)	76	76	0
Precipitable Water (cm)	2.12	2.1	0.02
Thickness 1000 - 500 mb (m)	5514	5515	-1
Thickness 1000 - 700 mb (m)	2908	2909	-1
Thickness 1000 - 850 mb (m)	1341	1340	1
Thickness 850 - 500 mb (m)	4173	4175	-2
Thickness 850 - 700 mb (m)	1567	1569	-2
Thickness 700 - 500 mb (m)	2606	2606	0
Thickness 600 - 400 mb (m)	3031	3026	5
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

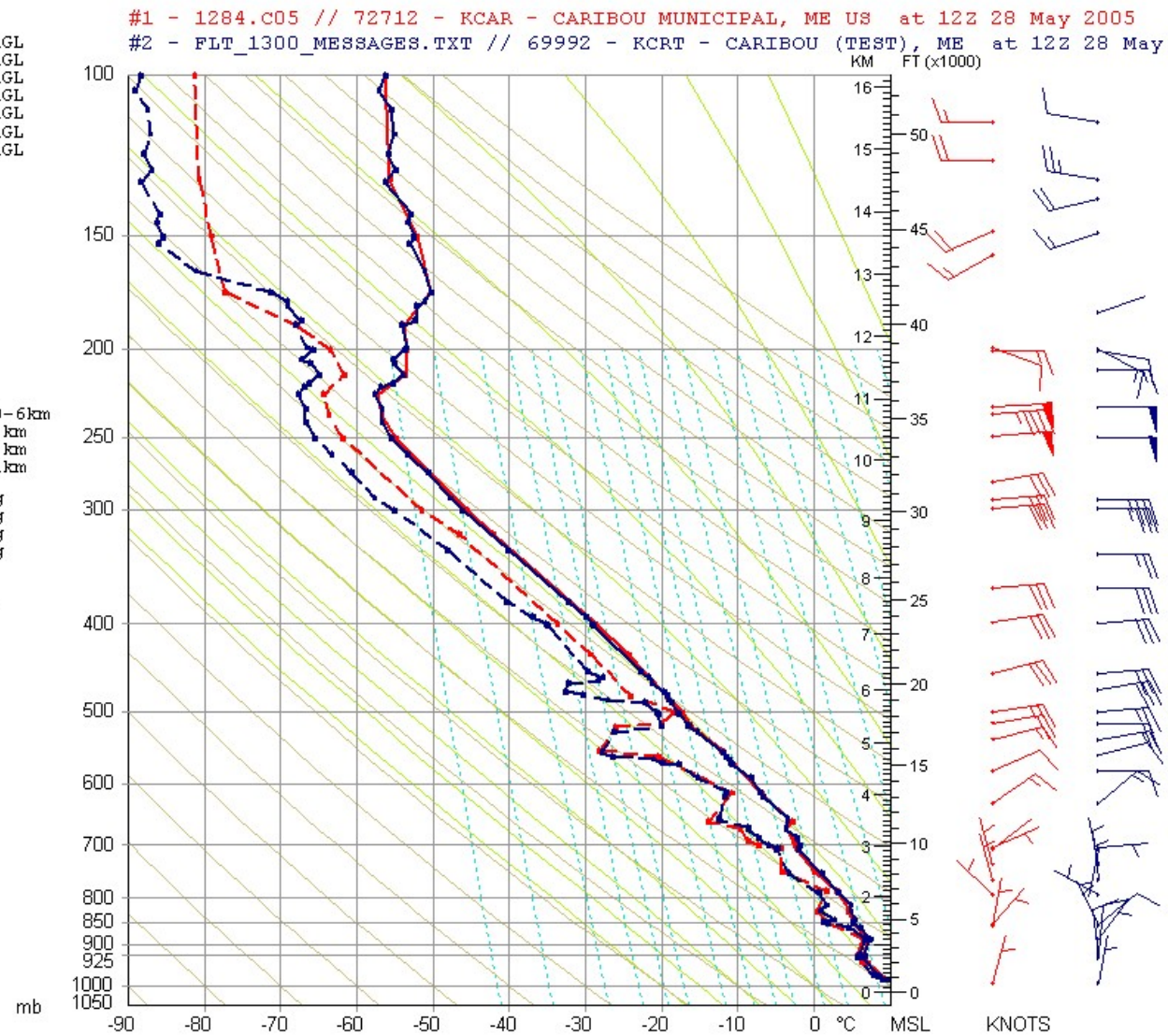
Test #41 - System Test II – 12UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10564	10885	m AGL
FRZG Lvl:	2244	2362	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	198	76	m AGL
CCL Hgt:	445	405	m AGL
LCL Hgt:	76	76	m AGL
Water:	2.12	2.10	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	53.4	50.6	
CAP:	0.2	-0.1	
Boyden:	93.3	92.8	
S{TT}:	34.6	36.0	
KO:	7.8	7.8	
LI:	8.6	8.0	
TT:	41.3	42.1	
KI:	19.3	20.1	
Tc:	11.0	10.7	°C
Storm:	136/15	147/13	0-6km
s-rH:	2	4	0-3km
s-rH:	-17	-12	0-2km
s-rH:	0	11	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.4	14.4	
Threat:	7.2	8.1	
Point:	9.3	8.2	°C
1000 - 500 mb:	5514	5515	m
1000 - 700 mb:	2908	2909	m
1000 - 850 mb:	1341	1340	m
850 - 500 mb:	4173	4175	m
850 - 700 mb:	1567	1569	m
700 - 500 mb:	2606	2606	m
600 - 400 mb:	3031	3026	m



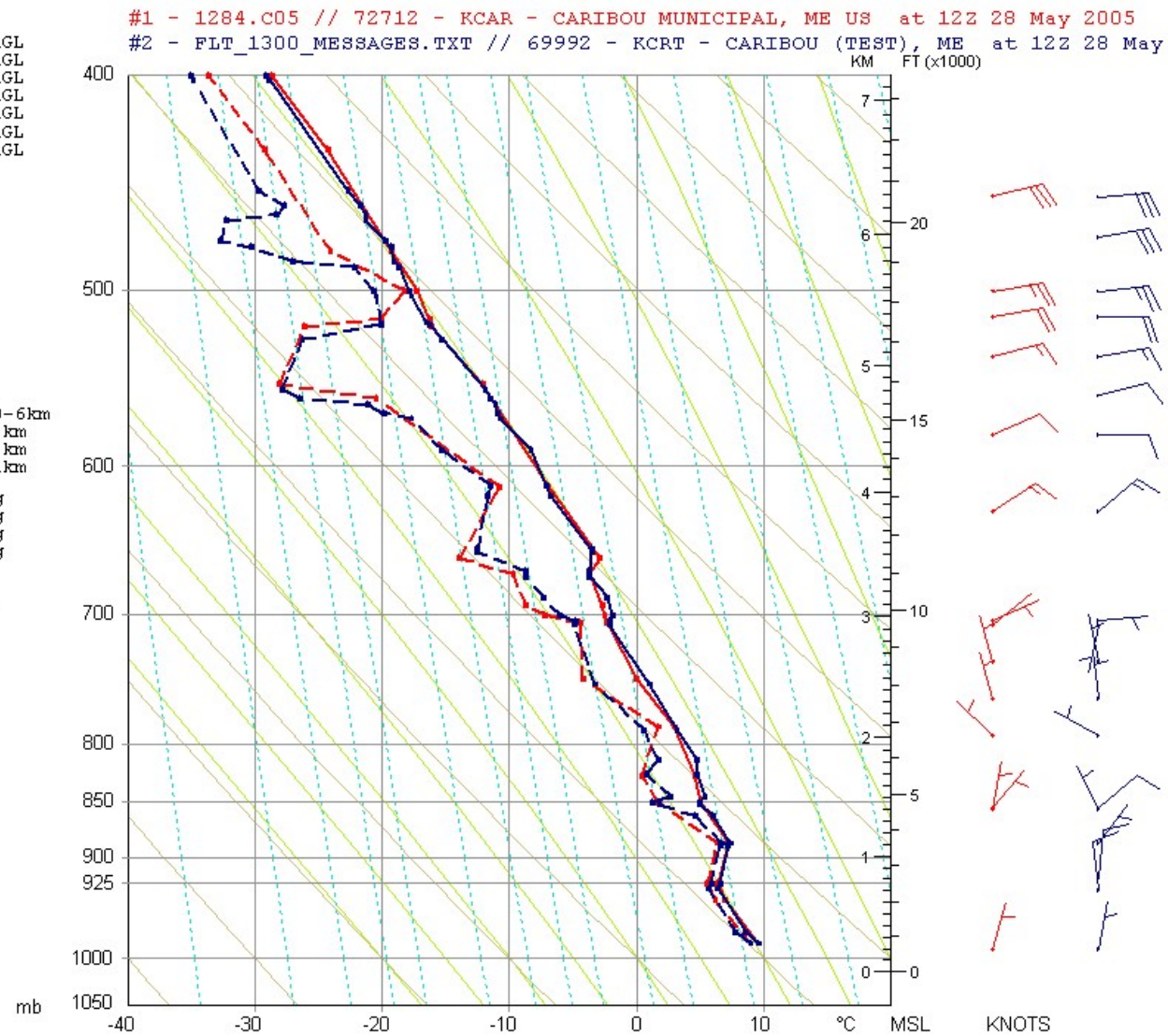
Test #41 - System Test II – 12UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10564	10885	m AGL
FRZG Lvl:	2244	2362	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	198	76	m AGL
CCL Hgt:	445	405	m AGL
LCL Hgt:	76	76	m AGL
Water:	2.12	2.10	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	53.4	50.6	
CAP:	0.2	-0.1	
Boyden:	93.3	92.8	
S{TT}:	34.6	36.0	
KO:	7.8	7.8	
LI:	8.6	8.0	
TT:	41.3	42.1	
KI:	19.3	20.1	
Tc:	11.0	10.7	°C
Storm:	136/15	147/13	0-6km
s-rH:	2	4	0-3km
s-rH:	-17	-12	0-2km
s-rH:	0	11	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.4	14.4	
Threat:	7.2	8.1	
Point:	9.3	8.2	°C
1000 - 500 mb:	5514	5515	m
1000 - 700 mb:	2908	2909	m
1000 - 850 mb:	1341	1340	m
850 - 500 mb:	4173	4175	m
850 - 700 mb:	1567	1569	m
700 - 500 mb:	2606	2606	m
600 - 400 mb:	3031	3026	m



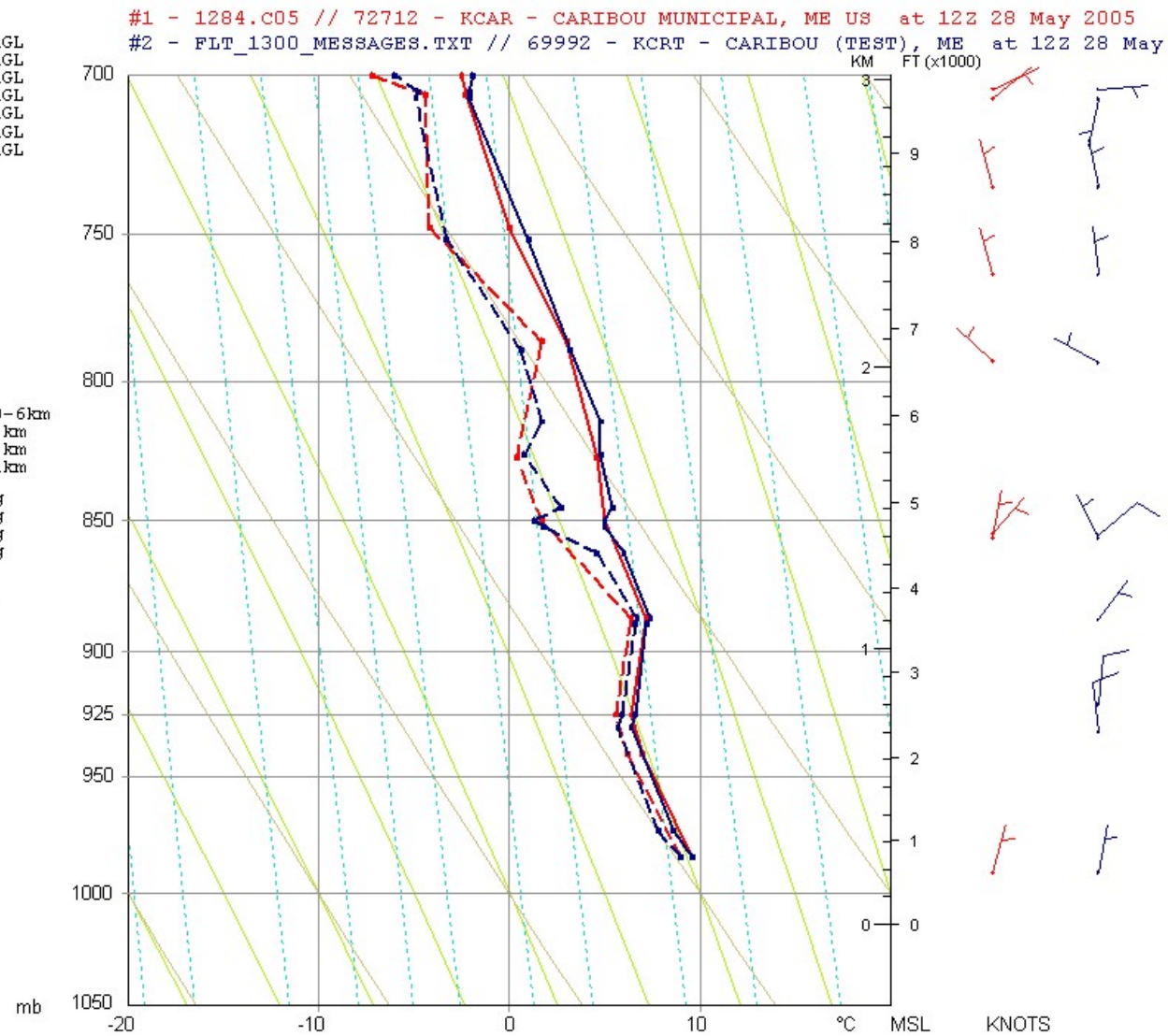
Test #41 - System Test II – 12UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10564	10885	m AGL
FRZG Lvl:	2244	2362	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	198	76	m AGL
CCL Hgt:	445	405	m AGL
LCL Hgt:	76	76	m AGL
Water:	2.12	2.10	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	53.4	50.6	
CAP:	0.2	-0.1	
Boyden:	93.3	92.8	
S{TT}:	34.6	36.0	
KO:	7.8	7.8	
LI:	8.6	8.0	
TT:	41.3	42.1	
KI:	19.3	20.1	
Tc:	11.0	10.7	°C
Storm:	136/15	147/13	0-6km
s-rH:	2	4	0-3km
s-rH:	-17	-12	0-2km
s-rH:	0	11	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.4	14.4	
Threat:	7.2	8.1	
Point:	9.3	8.2	°C
1000 - 500 mb:	5514	5515	m
1000 - 700 mb:	2908	2909	m
1000 - 850 mb:	1341	1340	m
850 - 500 mb:	4173	4175	m
850 - 700 mb:	1567	1569	m
700 - 500 mb:	2606	2606	m
600 - 400 mb:	3031	3026	m



Test #41 - System Test II – 12UTC on 05/28/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10564	10885	m AGL
FRZG Lvl:	2244	2362	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	198	76	m AGL
CCL Hgt:	445	405	m AGL
LCL Hgt:	76	76	m AGL
Water:	2.12	2.10	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	53.4	50.6	
CAP:	0.2	-0.1	
Boyden:	93.3	92.8	
S{TT}:	34.6	36.0	
KO:	7.8	7.8	
LI:	8.6	8.0	
TT:	41.3	42.1	
KI:	19.3	20.1	
Tc:	11.0	10.7	°C
Storm:	136/15	147/13	0-6km
s-rH:	2	4	0-3km
s-rH:	-17	-12	0-2km
s-rH:	0	11	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.4	14.4	
Threat:	7.2	8.1	
Point:	9.3	8.2	°C
1000 - 500 mb:	5514	5515	m
1000 - 700 mb:	2908	2909	m
1000 - 850 mb:	1341	1340	m
850 - 500 mb:	4173	4175	m
850 - 700 mb:	1567	1569	m
700 - 500 mb:	2606	2606	m
600 - 400 mb:	3031	3026	m



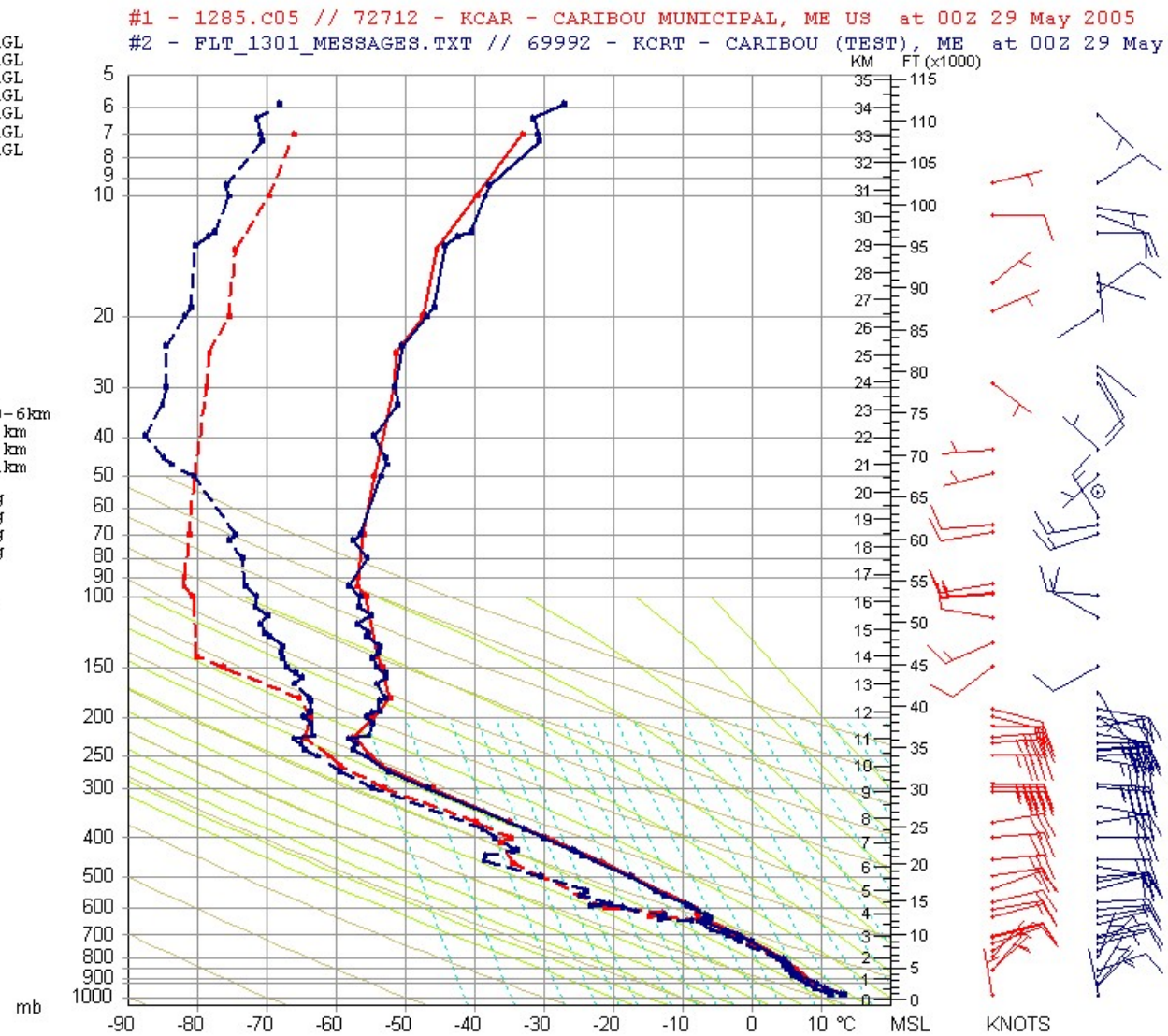
Test #42 - System Test II – 00UTC on 05/29/2005
RWS Version 1.0.4.0

TEST # 42			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10871	10420	451
Freezing Level (m AGL)	2480	2487	-7
LFC Height (m AGL)	361	268	93
CCL Height (m AGL)	654	738	-84
LCL Height (m AGL)	252	240	12
Precipitable Water (cm)	2.4	2.34	0.06
Thickness 1000 - 500 mb (m)	5527	5524	3
Thickness 1000 - 700 mb (m)	2925	2925	0
Thickness 1000 - 850 mb (m)	1352	1352	0
Thickness 850 - 500 mb (m)	4175	4172	3
Thickness 850 - 700 mb (m)	1574	1573	1
Thickness 700 - 500 mb (m)	2601	2599	2
Thickness 600 - 400 mb (m)	3025	3020	5
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

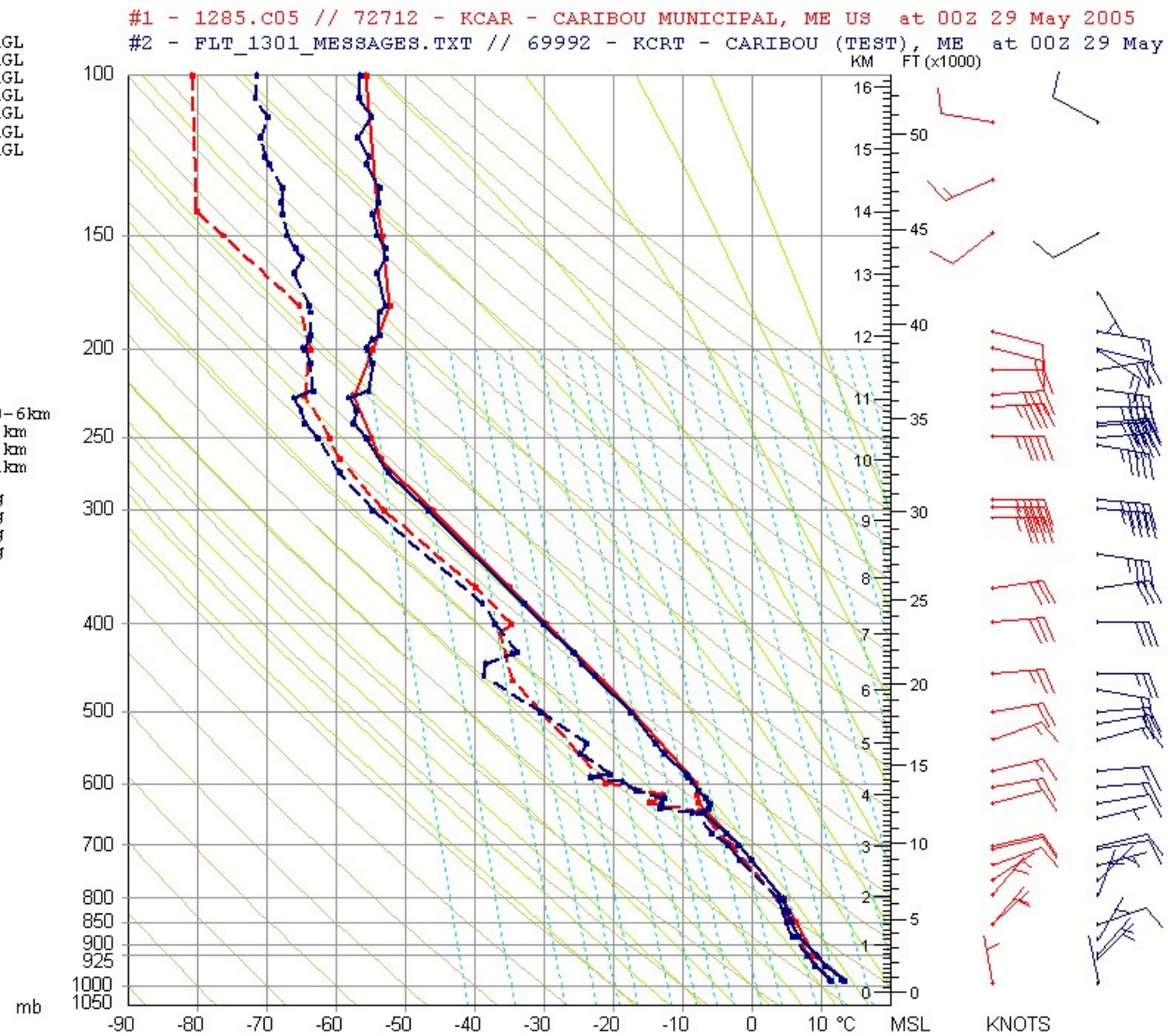
Test #42 - System Test II – 00UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10871	10420	m AGL
FRZG Lvl:	2480	2487	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	361	268	m AGL
CCL Hgt:	654	738	m AGL
LCL Hgt:	252	240	m AGL
Water:	2.40	2.34	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	99.0	96.0	
CAP:	0.3	0.1	
Boyden:	94.4	94.4	
S{TT}:	43.4	42.3	
KO:	.9	1.1	
LI:	3.8	3.5	
TT:	46.5	45.8	
KI:	28.1	26.8	
Tc:	14.9	15.2	°C
Storm:	139/15	158/12	0-6km
s-rH:	42	37	0-3km
s-rH:	21	9	0-2km
s-rH:	0	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.0	28.0	
Threat:	8.8	8.6	
Point:	10.4	10.1	°C
1000 - 500 mb:	5527	5524	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1352	1352	m
850 - 500 mb:	4175	4172	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2601	2599	m
600 - 400 mb:	3025	3020	m



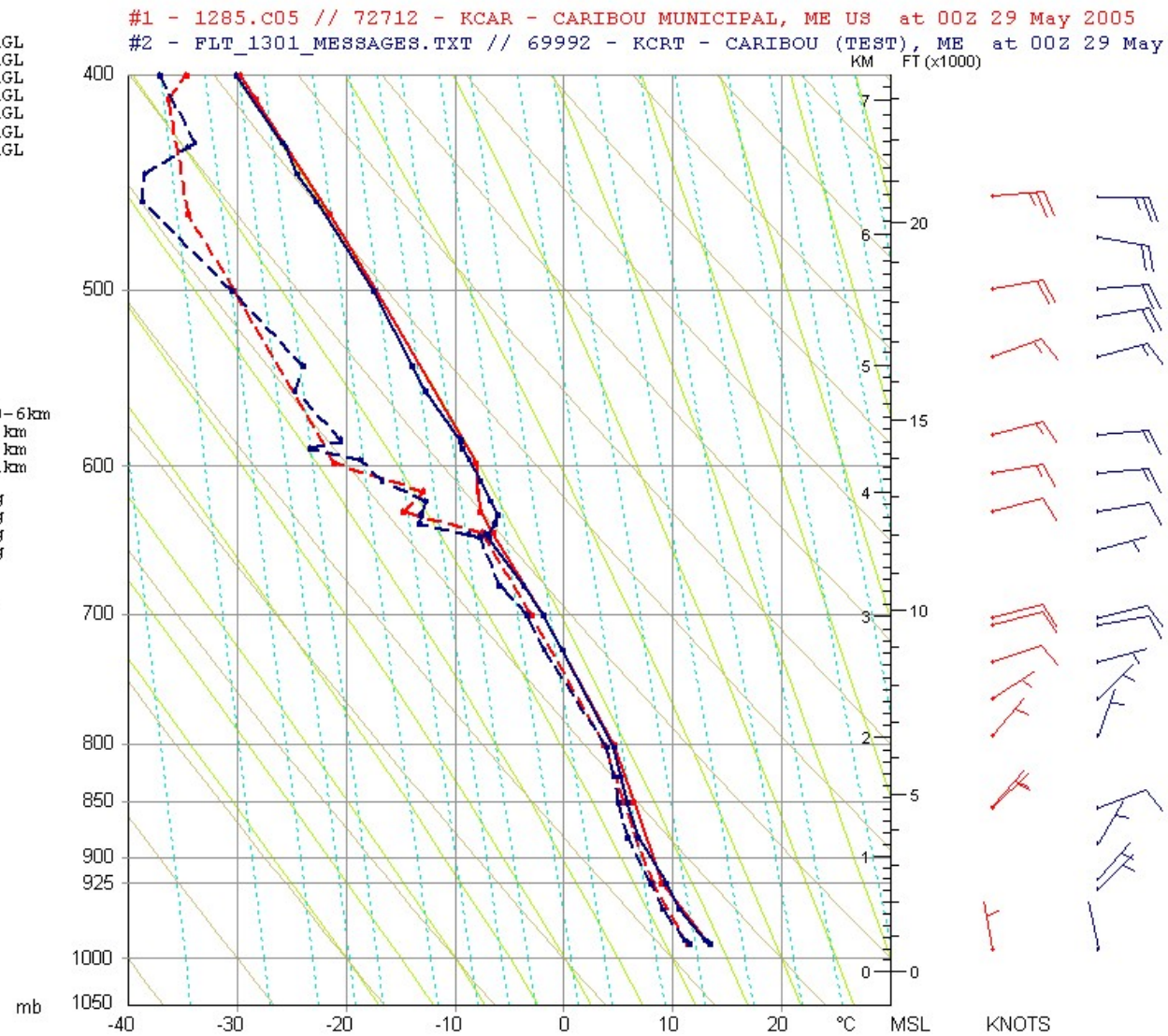
Test #42 - System Test II – 00UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10871	10420	m AGL
FRZG Lvl:	2480	2487	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	361	268	m AGL
CCL Hgt:	654	738	m AGL
LCL Hgt:	252	240	m AGL
Water:	2.40	2.34	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	99.0	96.0	
CAP:	0.3	0.1	
Boyden:	94.4	94.4	
S{TT}:	43.4	42.3	
KO:	.9	1.1	
LI:	3.8	3.5	
TT:	46.5	45.8	
KI:	28.1	26.8	
Tc:	14.9	15.2	°C
Storm:	139/15	158/12	0-6km
s-rH:	42	37	0-3km
s-rH:	21	9	0-2km
s-rH:	0	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.0	28.0	
Threat:	8.8	8.6	
Point:	10.4	10.1	°C
1000 - 500 mb:	5527	5524	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1352	1352	m
850 - 500 mb:	4175	4172	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2601	2599	m
600 - 400 mb:	3025	3020	m



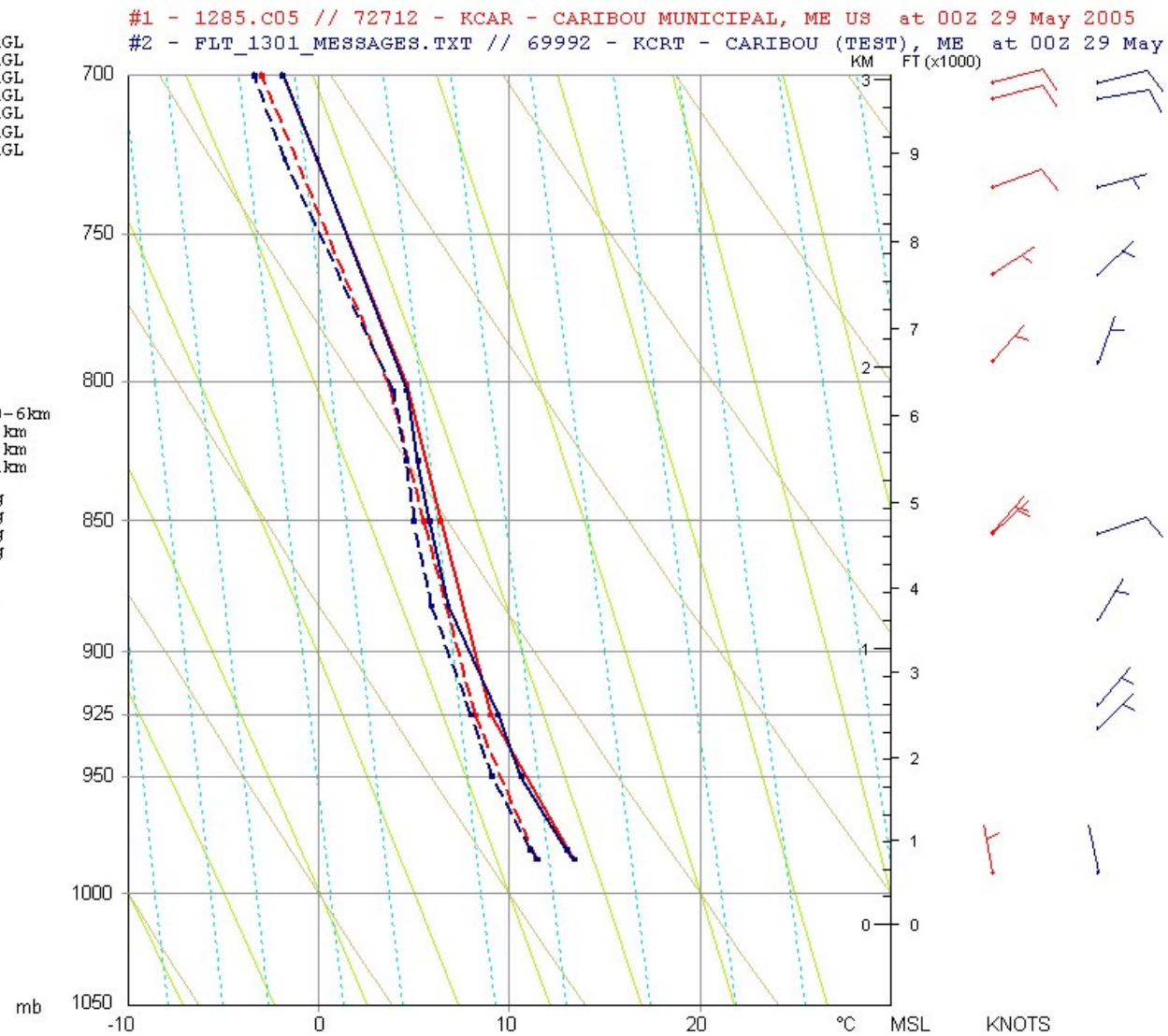
Test #42 - System Test II – 00UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10871	10420	m AGL
FRZG Lvl:	2480	2487	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	361	268	m AGL
CCL Hgt:	654	738	m AGL
LCL Hgt:	252	240	m AGL
Water:	2.40	2.34	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	99.0	96.0	
CAP:	0.3	0.1	
Boyden:	94.4	94.4	
S{TT}:	43.4	42.3	
KO:	.9	1.1	
LI:	3.8	3.5	
TT:	46.5	45.8	
KI:	28.1	26.8	
Tc:	14.9	15.2	°C
Storm:	139/15	158/12	0-6km
s-rH:	42	37	0-3km
s-rH:	21	9	0-2km
s-rH:	0	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.0	28.0	
Threat:	8.8	8.6	
Point:	10.4	10.1°C	
1000 - 500 mb:	5527	5524	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1352	1352	m
850 - 500 mb:	4175	4172	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2601	2599	m
600 - 400 mb:	3025	3020	m



Test #42 - System Test II – 00UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10871	10420	m AGL
FRZG Lvl:	2480	2487	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	361	268	m AGL
CCL Hgt:	654	738	m AGL
LCL Hgt:	252	240	m AGL
Water:	2.40	2.34	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	99.0	96.0	
CAP:	0.3	0.1	
Boyden:	94.4	94.4	
S{TT}:	43.4	42.3	
KO:	.9	1.1	
LI:	3.8	3.5	
TT:	46.5	45.8	
KI:	28.1	26.8	
Tc:	14.9	15.2	°C
Storm:	139/15	158/12	0-6km
s-rH:	42	37	0-3km
s-rH:	21	9	0-2km
s-rH:	0	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	25.0	28.0	
Threat:	8.8	8.6	
Point:	10.4	10.1°C	
1000 - 500 mb:	5527	5524	m
1000 - 700 mb:	2925	2925	m
1000 - 850 mb:	1352	1352	m
850 - 500 mb:	4175	4172	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2601	2599	m
600 - 400 mb:	3025	3020	m



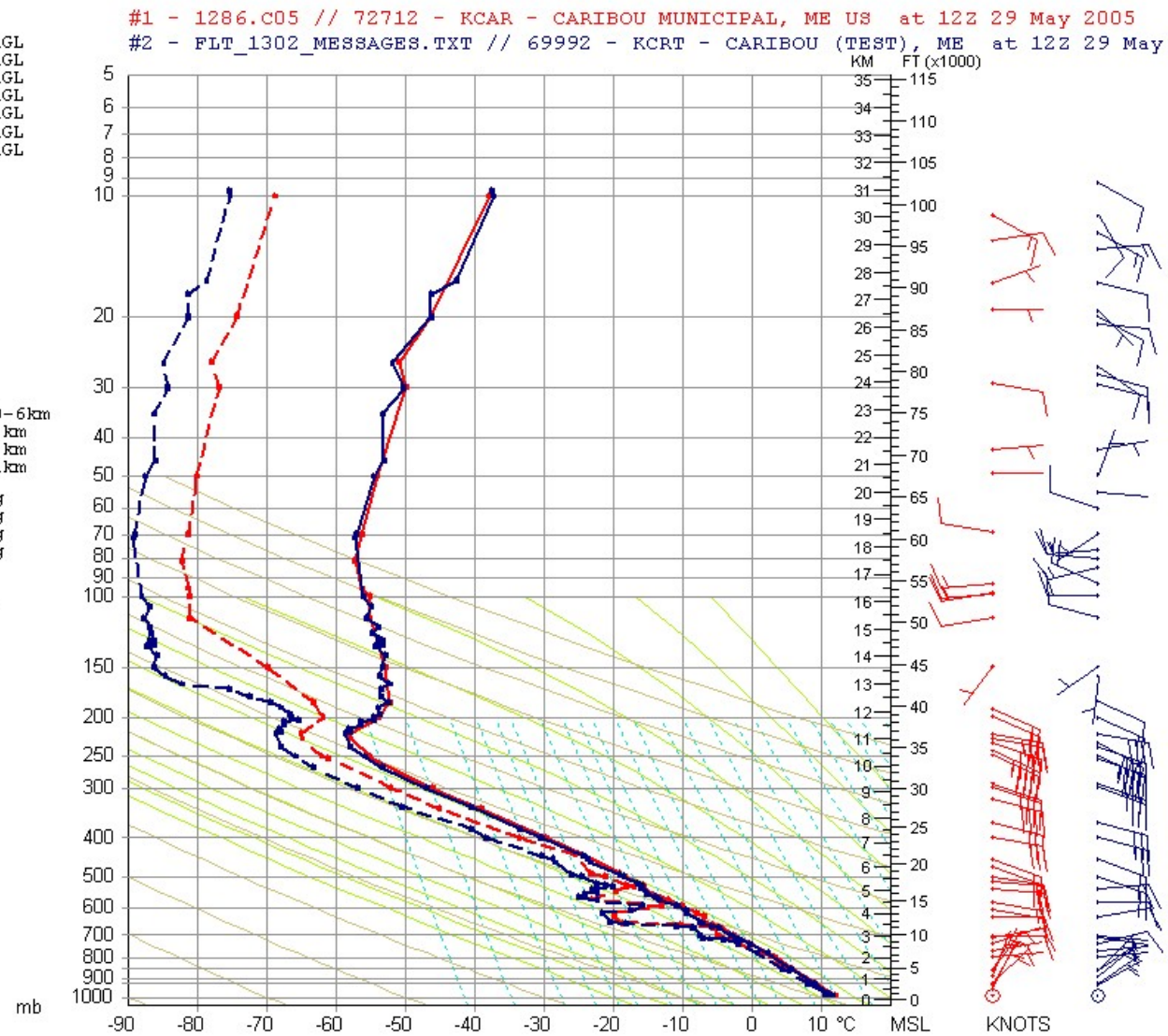
Test #43 - System Test II – 12UTC on 05/29/2005
RWS Version 1.0.4.0

TEST # 43			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10836	10507	329
Freezing Level (m AGL)	2366	2351	15
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	675	718	-43
LCL Height (m AGL)	126	76	50
Precipitable Water (cm)	2.4	2.2	0.2
Thickness 1000 - 500 mb (m)	5512	5501	11
Thickness 1000 - 700 mb (m)	2919	2917	2
Thickness 1000 - 850 mb (m)	1350	1349	1
Thickness 850 - 500 mb (m)	4163	4152	11
Thickness 850 - 700 mb (m)	1569	1568	1
Thickness 700 - 500 mb (m)	2594	2584	10
Thickness 600 - 400 mb (m)	3017	3008	9
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

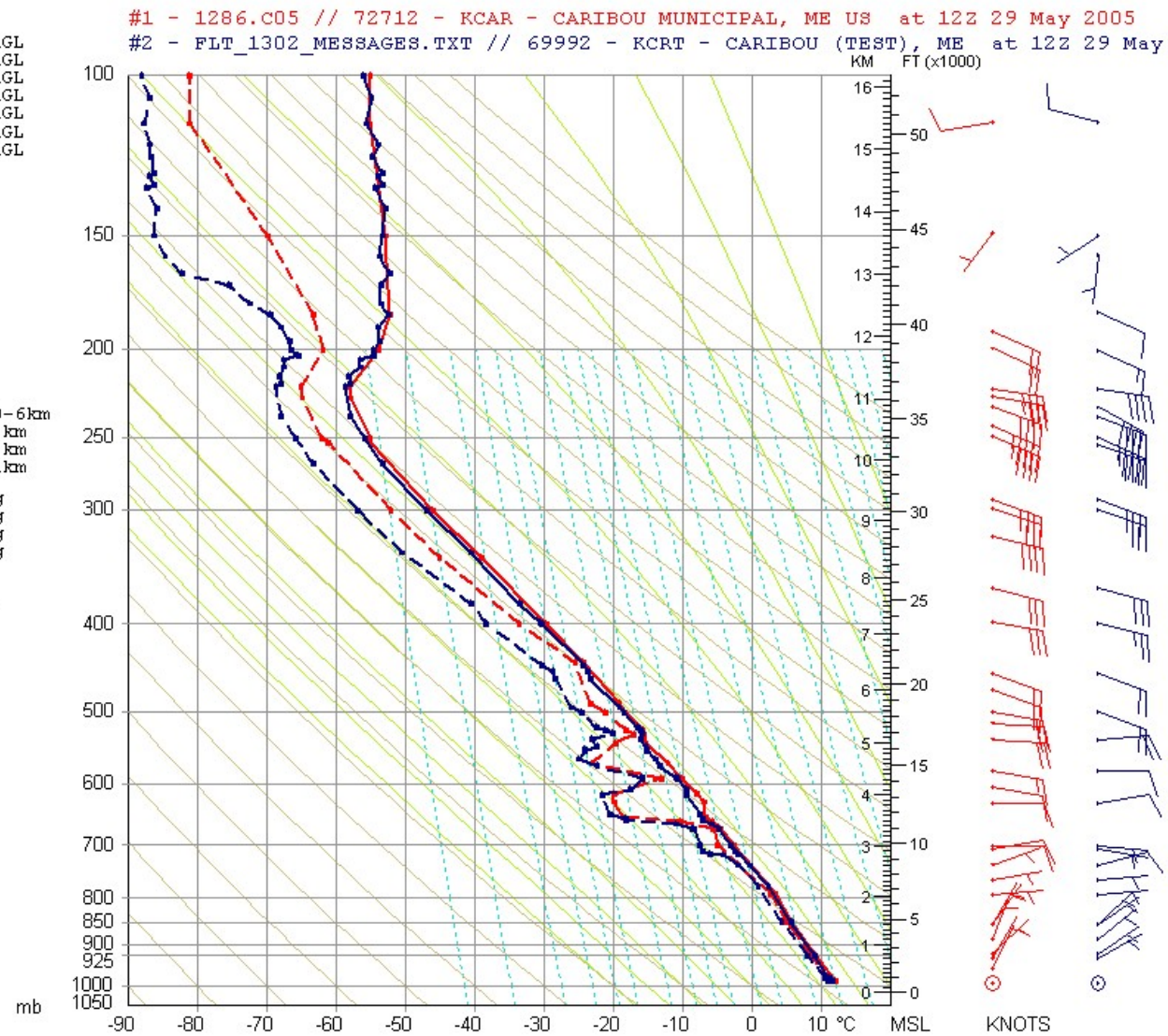
Test #43 - System Test II – 12UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10836	10507	m AGL
FRZG Lvl:	2366	2351	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	675	718	m AGL
LCL Hgt:	126	76	m AGL
Water:	2.40	2.20	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	91.2	83.6	
CAP:	--	--	
Boyden:	94.6	94.8	
S{TT}:	43.3	40.5	
KO:	2.0	.8	
LI:	4.2	4.3	
TT:	47.5	46.9	
KI:	27.0	24.0	
Tc:	15.1	15.1	°C
Storm:	166/15	165/15	0-6km
s-rH:	39	35	0-3km
s-rH:	16	29	0-2km
s-rH:	8	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	19.4	19.2	
Threat:	7.4	6.9	
Point:	11.3	11.3	°C
1000 - 500 mb:	5512	5501	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4163	4152	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2594	2584	m
600 - 400 mb:	3017	3008	m



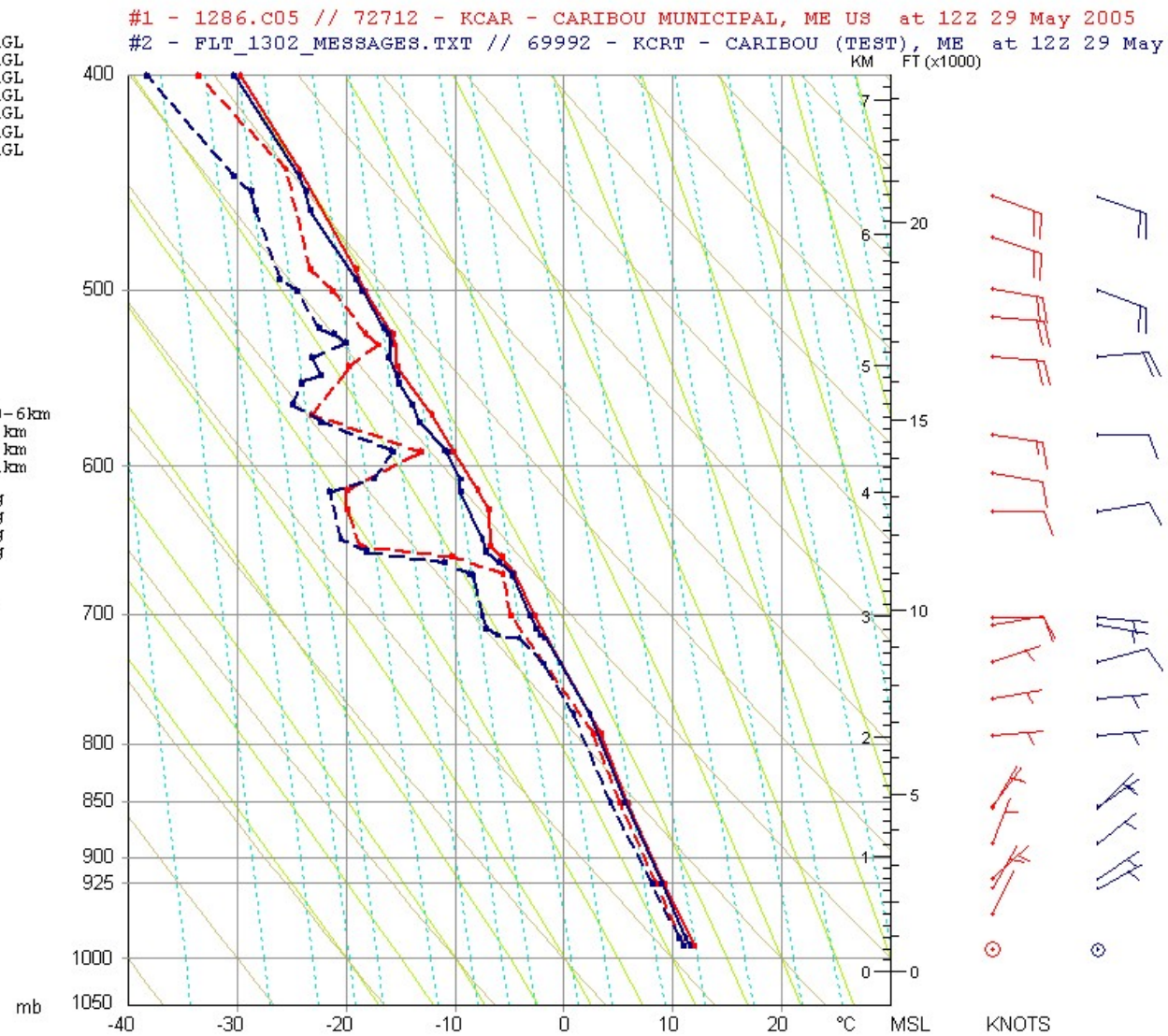
Test #43 - System Test II – 12UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10836	10507	m AGL
FRZG Lvl:	2366	2351	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	675	718	m AGL
LCL Hgt:	126	76	m AGL
Water:	2.40	2.20	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	91.2	83.6	
CAP:	--	--	
Boyden:	94.6	94.8	
S{TT}:	43.3	40.5	
KO:	2.0	.8	
LI:	4.2	4.3	
TT:	47.5	46.9	
KI:	27.0	24.0	
Tc:	15.1	15.1	°C
Storm:	166/15	165/15	0-6km
s-rH:	39	35	0-3km
s-rH:	16	29	0-2km
s-rH:	8	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	19.4	19.2	
Threat:	7.4	6.9	
Point:	11.3	11.3	°C
1000 - 500 mb:	5512	5501	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4163	4152	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2594	2584	m
600 - 400 mb:	3017	3008	m



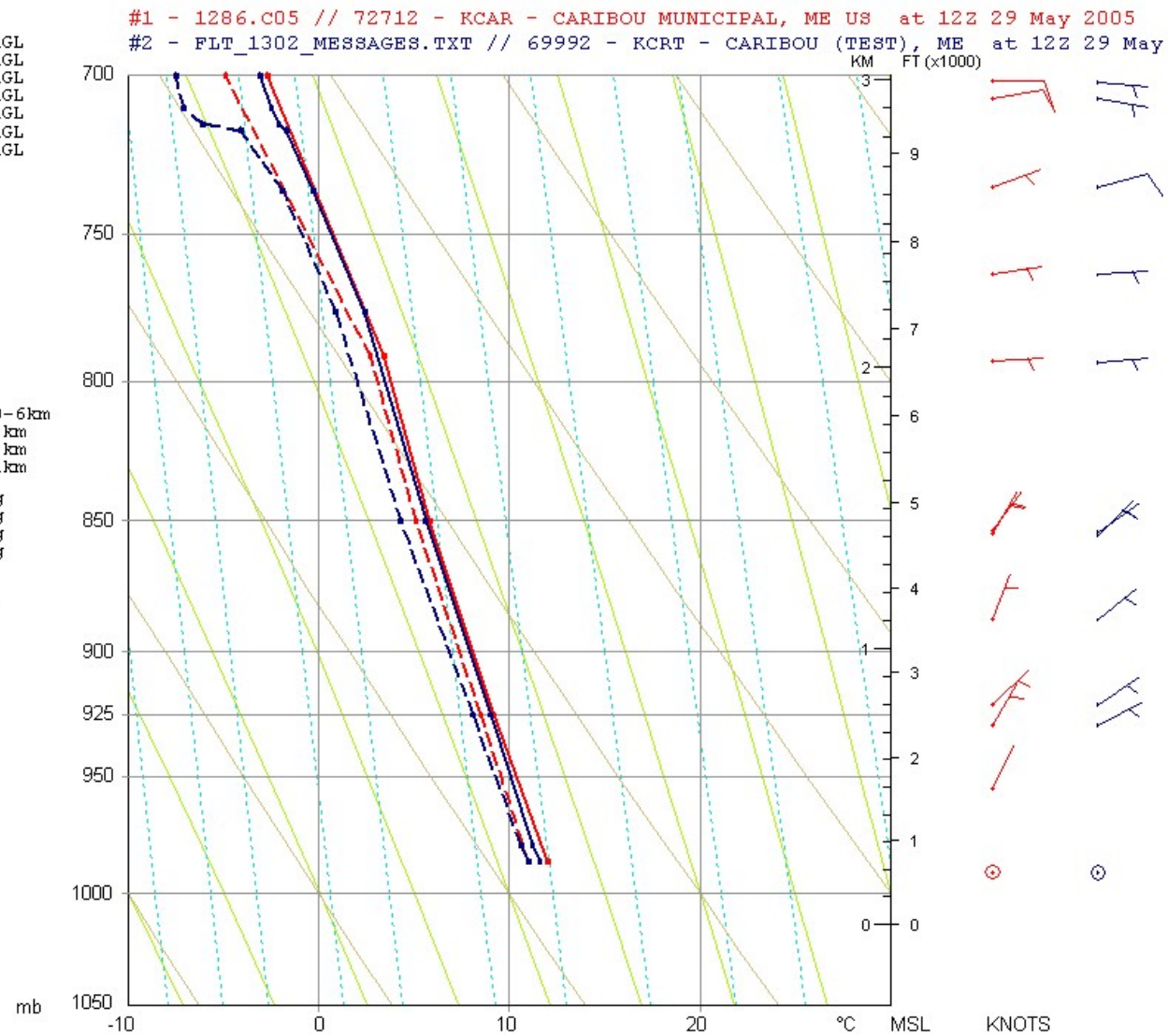
Test #43 - System Test II – 12UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10836	10507	m AGL
FRZG Lvl:	2366	2351	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	675	718	m AGL
LCL Hgt:	126	76	m AGL
Water:	2.40	2.20	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	91.2	83.6	
CAP:	--	--	
Boyden:	94.6	94.8	
S{TT}:	43.3	40.5	
KO:	2.0	.8	
LI:	4.2	4.3	
TT:	47.5	46.9	
KI:	27.0	24.0	
Tc:	15.1	15.1	°C
Storm:	166/15	165/15	0-6km
s-rH:	39	35	0-3km
s-rH:	16	29	0-2km
s-rH:	8	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	19.4	19.2	
Threat:	7.4	6.9	
Point:	11.3	11.3	°C
1000 - 500 mb:	5512	5501	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4163	4152	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2594	2584	m
600 - 400 mb:	3017	3008	m



Test #43 - System Test II – 12UTC on 05/29/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10836	10507	m AGL
FRZG Lvl:	2366	2351	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	675	718	m AGL
LCL Hgt:	126	76	m AGL
Water:	2.40	2.20	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	91.2	83.6	
CAP:	--	--	
Boyden:	94.6	94.8	
S{TT}:	43.3	40.5	
KO:	2.0	.8	
LI:	4.2	4.3	
TT:	47.5	46.9	
KI:	27.0	24.0	
Tc:	15.1	15.1	°C
Storm:	166/15	165/15	0-6km
s-rH:	39	35	0-3km
s-rH:	16	29	0-2km
s-rH:	8	14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	19.4	19.2	
Threat:	7.4	6.9	
Point:	11.3	11.3	°C
1000 - 500 mb:	5512	5501	m
1000 - 700 mb:	2919	2917	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4163	4152	m
850 - 700 mb:	1569	1568	m
700 - 500 mb:	2594	2584	m
600 - 400 mb:	3017	3008	m



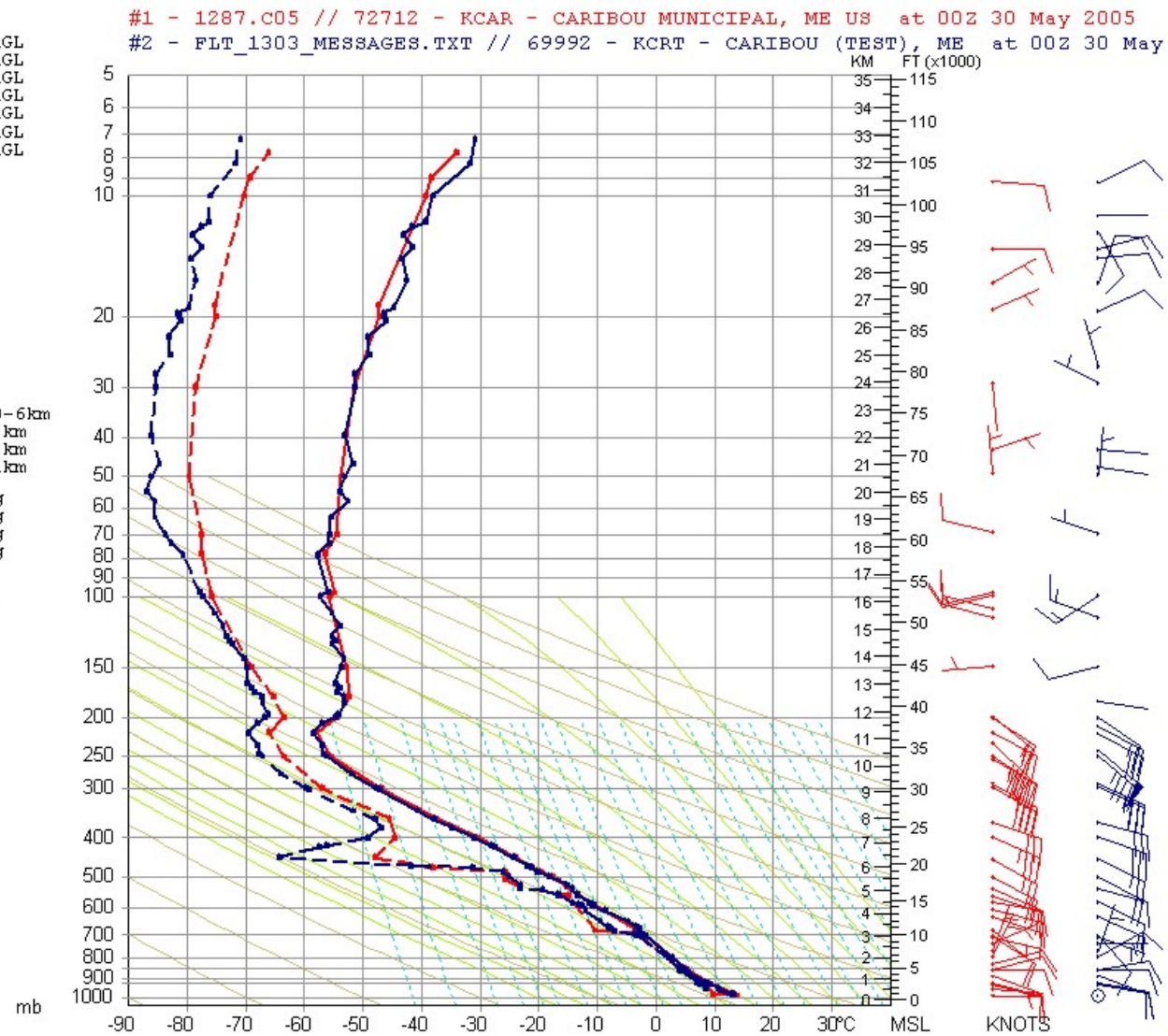
Test #44 - System Test II – 00UTC on 05/30/2005
RWS Version 1.0.4.0

TEST # 44			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11051	11009	42
Freezing Level (m AGL)	2380	2380	0
LFC Height (m AGL)	63	127	-64
CCL Height (m AGL)	778	637	141
LCL Height (m AGL)	63	0	63
Precipitable Water (cm)	2.31	2.33	-0.02
Thickness 1000 - 500 mb (m)	5517	5517	0
Thickness 1000 - 700 mb (m)	2920	2917	3
Thickness 1000 - 850 mb (m)	1352	1349	3
Thickness 850 - 500 mb (m)	4165	4168	-3
Thickness 850 - 700 mb (m)	1568	1568	0
Thickness 700 - 500 mb (m)	2597	2600	-3
Thickness 600 - 400 mb (m)	3022	3014	8
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

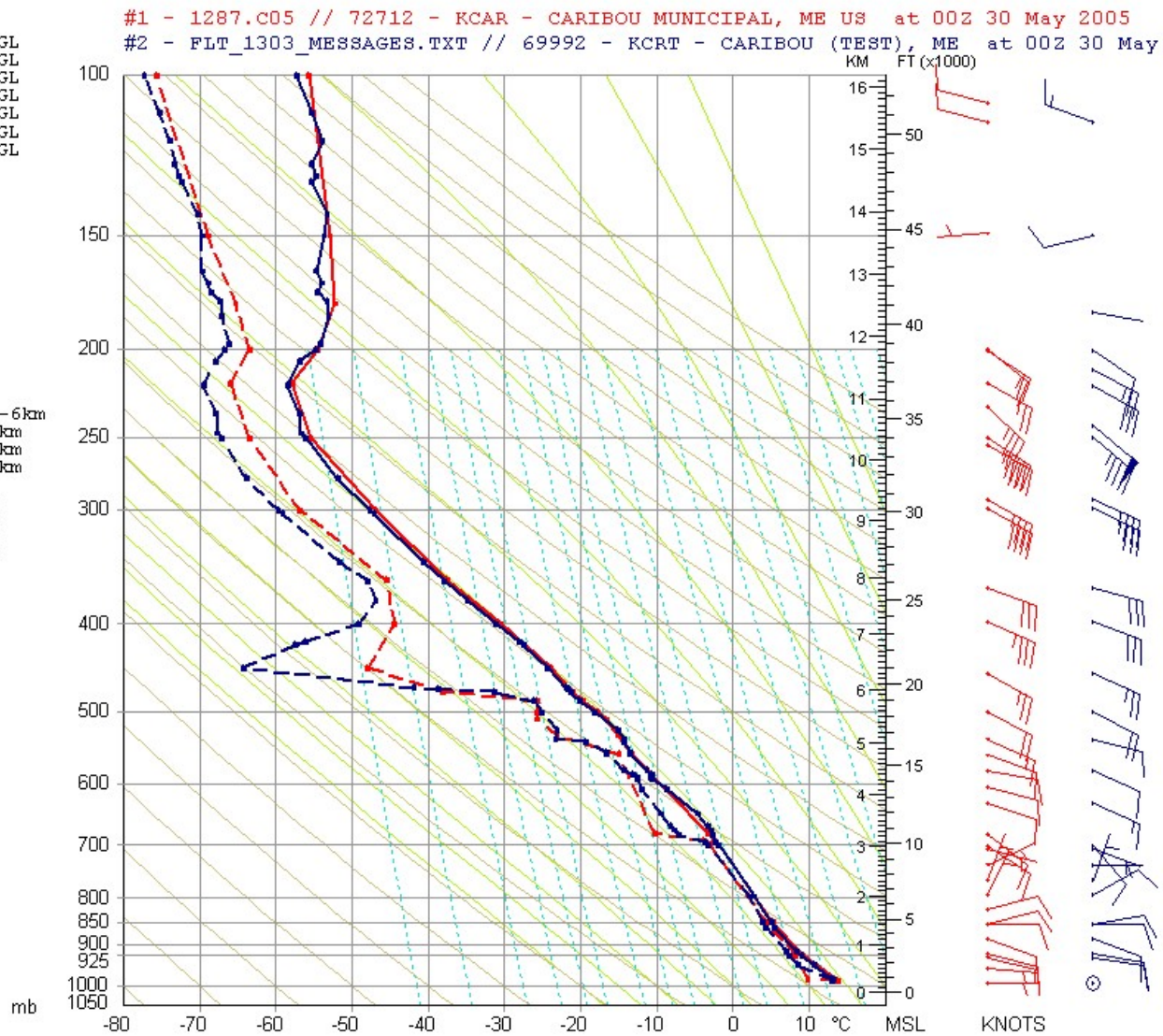
Test #44 - System Test II – 00UTC on 05/30/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11051	11009	m AGL
FRZG Lvl:	2380	2380	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	4676	2577	m AGL
LFC Hgt:	63	127	m AGL
CCL Hgt:	778	637	m AGL
LCL Hgt:	63	0	m AGL
Water:	2.31	2.33	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	9	--	kt
SWEAT:	92.6	88.8	
CAP:	0.0	0.3	
Boyden:	93.9	93.6	
S{TT}:	41.8	41.7	
KO:	.7	1.4	
LI:	1.3	1.7	
TT:	44.9	45.1	
KI:	26.1	25.6	
Tc:	15.4	14.5	°C
Storm:	176/15	172/16	0-6km
s-rH:	0	5	0-3km
s-rH:	-27	15	0-2km
s-rH:	34	45	0-1km
CAPE+ only:	149	88	J/kg
CAPE 0-3km:	130	88	J/kg
CIN total:	0	-1	J/kg
DCAPE 6km:	127	174	J/kg
VGP 0-4km:	0.077	0.065	
EHI 0-2km:	.0	.0	
MVV:	17	13	m/s
BRN:	57	31	
FOG FSI:	29.2	27.0	
Threat:	8.1	4.7	
Point:	9.9	13.0°C	
1000 - 500 mb:	5517	5517	m
1000 - 700 mb:	2920	2917	m
1000 - 850 mb:	1352	1349	m
850 - 500 mb:	4165	4168	m
850 - 700 mb:	1568	1568	m
700 - 500 mb:	2597	2600	m
600 - 400 mb:	3022	3014	m



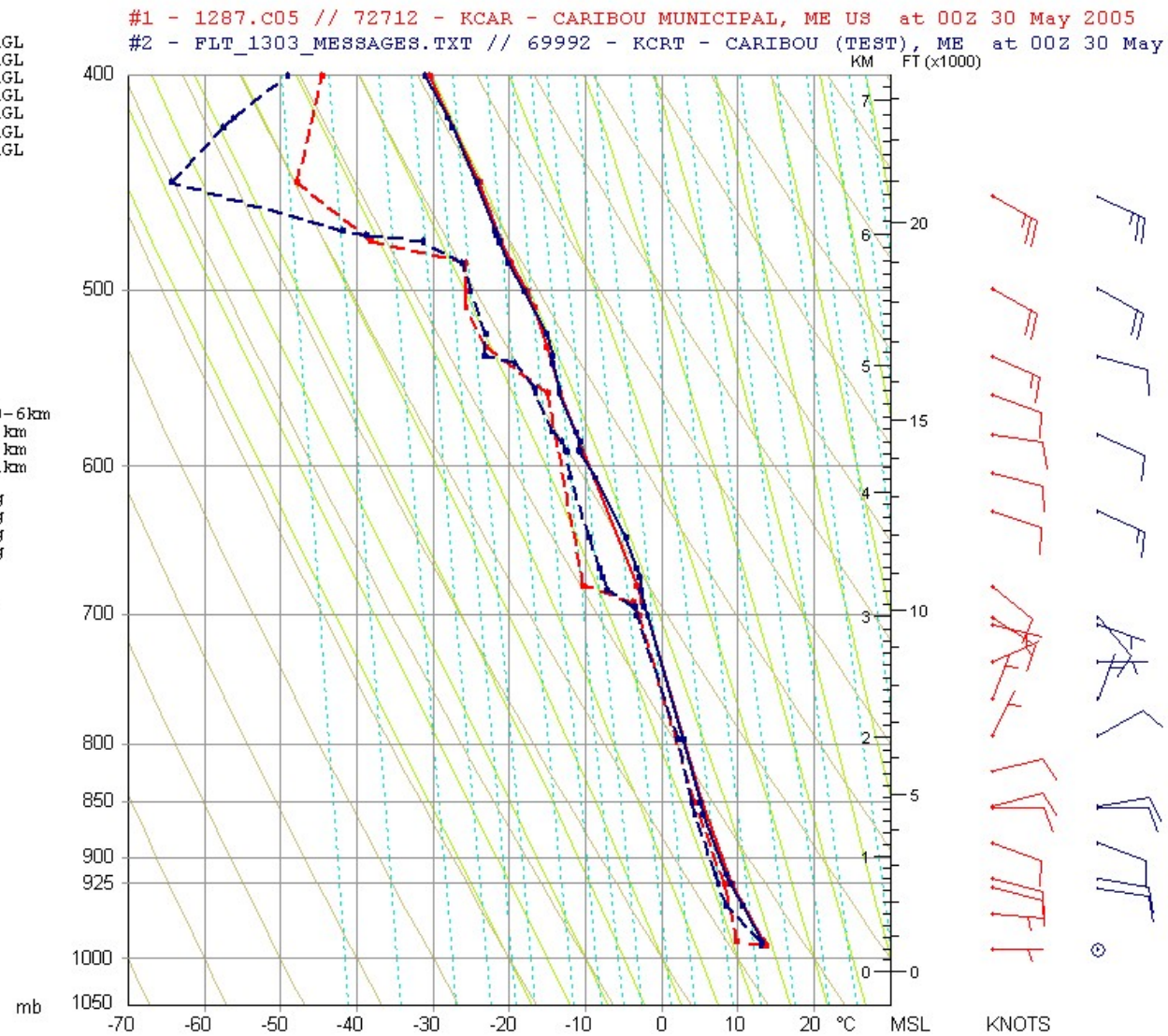
Test #44 - System Test II – 00UTC on 05/30/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11051	11009	m AGL
FRZG Lvl:	2380	2380	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	4676	2577	m AGL
LFC Hgt:	63	127	m AGL
CCL Hgt:	778	637	m AGL
LCL Hgt:	63	0	m AGL
Water:	2.31	2.33	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	9	--	kt
SWEAT:	92.6	88.8	
CAP:	0.0	0.3	
Boyden:	93.9	93.6	
S{TT}:	41.8	41.7	
KO:	.7	1.4	
LI:	1.3	1.7	
TT:	44.9	45.1	
KI:	26.1	25.6	
Tc:	15.4	14.5	°C
Storm:	176/15	172/16	0-6km
s-rH:	0	5	0-3km
s-rH:	-27	15	0-2km
s-rH:	34	45	0-1km
CAPE+ only:	149	88	J/kg
CAPE 0-3km:	130	88	J/kg
CIN total:	0	-1	J/kg
DCAPE 6km:	127	174	J/kg
VGP 0-4km:	0.077	0.065	
EHI 0-2km:	.0	.0	
MVV:	17	13	m/s
BRN:	57	31	
FOG FSI:	29.2	27.0	
Threat:	8.1	4.7	
Point:	9.9	13.0°C	
1000 - 500 mb:	5517	5517	m
1000 - 700 mb:	2920	2917	m
1000 - 850 mb:	1352	1349	m
850 - 500 mb:	4165	4168	m
850 - 700 mb:	1568	1568	m
700 - 500 mb:	2597	2600	m
600 - 400 mb:	3022	3014	m



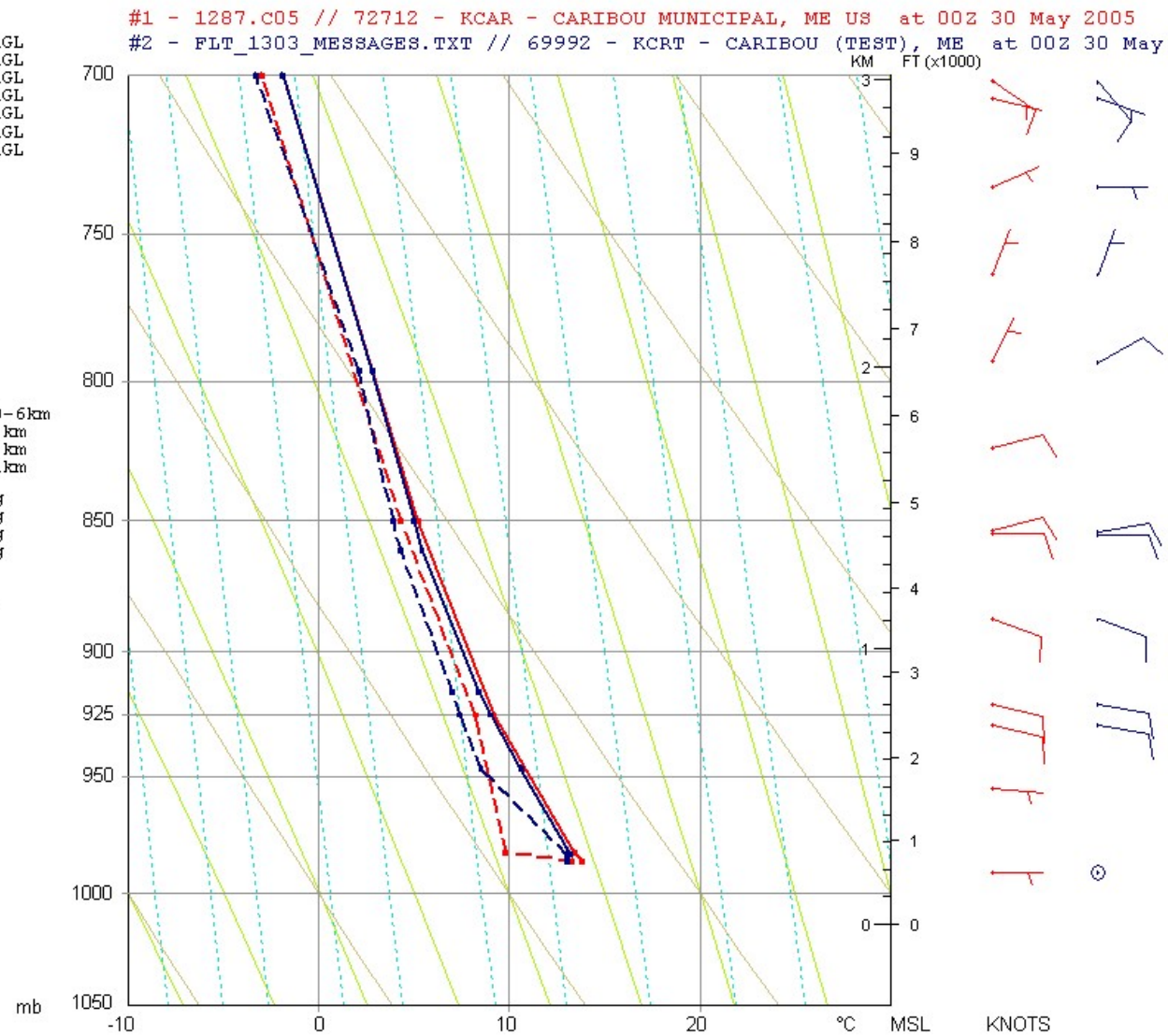
Test #44 - System Test II – 00UTC on 05/30/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11051	11009	m AGL
FRZG Lvl:	2380	2380	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	4676	2577	m AGL
LFC Hgt:	63	127	m AGL
CCL Hgt:	778	637	m AGL
LCL Hgt:	63	0	m AGL
Water:	2.31	2.33	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	9	--	kt
SWEAT:	92.6	88.8	
CAP:	0.0	0.3	
Boyden:	93.9	93.6	
S{TT}:	41.8	41.7	
KO:	.7	1.4	
LI:	1.3	1.7	
TT:	44.9	45.1	
KI:	26.1	25.6	
Tc:	15.4	14.5	°C
Storm:	176/15	172/16	0-6km
s-rH:	0	5	0-3km
s-rH:	-27	15	0-2km
s-rH:	34	45	0-1km
CAPE+ only:	149	88	J/kg
CAPE 0-3km:	130	88	J/kg
CIN total:	0	-1	J/kg
DCAPE 6km:	127	174	J/kg
VGP 0-4km:	0.077	0.065	
EHI 0-2km:	.0	.0	
MVV:	17	13	m/s
BRN:	57	31	
FOG FSI:	29.2	27.0	
Threat:	8.1	4.7	
Point:	9.9	13.0°C	
1000 - 500 mb:	5517	5517	m
1000 - 700 mb:	2920	2917	m
1000 - 850 mb:	1352	1349	m
850 - 500 mb:	4165	4168	m
850 - 700 mb:	1568	1568	m
700 - 500 mb:	2597	2600	m
600 - 400 mb:	3022	3014	m



Test #44 - System Test II – 00UTC on 05/30/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11051	11009	m AGL
FRZG Lvl:	2380	2380	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	4676	2577	m AGL
LFC Hgt:	63	127	m AGL
CCL Hgt:	778	637	m AGL
LCL Hgt:	63	0	m AGL
Water:	2.31	2.33	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	9	--	kt
SWEAT:	92.6	88.8	
CAP:	0.0	0.3	
Boyden:	93.9	93.6	
S{TT}:	41.8	41.7	
KO:	.7	1.4	
LI:	1.3	1.7	
TT:	44.9	45.1	
KI:	26.1	25.6	
Tc:	15.4	14.5	°C
Storm:	176/15	172/16	0-6km
s-rH:	0	5	0-3km
s-rH:	-27	15	0-2km
s-rH:	34	45	0-1km
CAPE+ only:	149	88	J/kg
CAPE 0-3km:	130	88	J/kg
CIN total:	0	-1	J/kg
DCAPE 6km:	127	174	J/kg
VGP 0-4km:	0.077	0.065	
EHI 0-2km:	.0	.0	
MVV:	17	13	m/s
BRN:	57	31	
FOG FSI:	29.2	27.0	
Threat:	8.1	4.7	
Point:	9.9	13.0°C	
1000 - 500 mb:	5517	5517	m
1000 - 700 mb:	2920	2917	m
1000 - 850 mb:	1352	1349	m
850 - 500 mb:	4165	4168	m
850 - 700 mb:	1568	1568	m
700 - 500 mb:	2597	2600	m
600 - 400 mb:	3022	3014	m



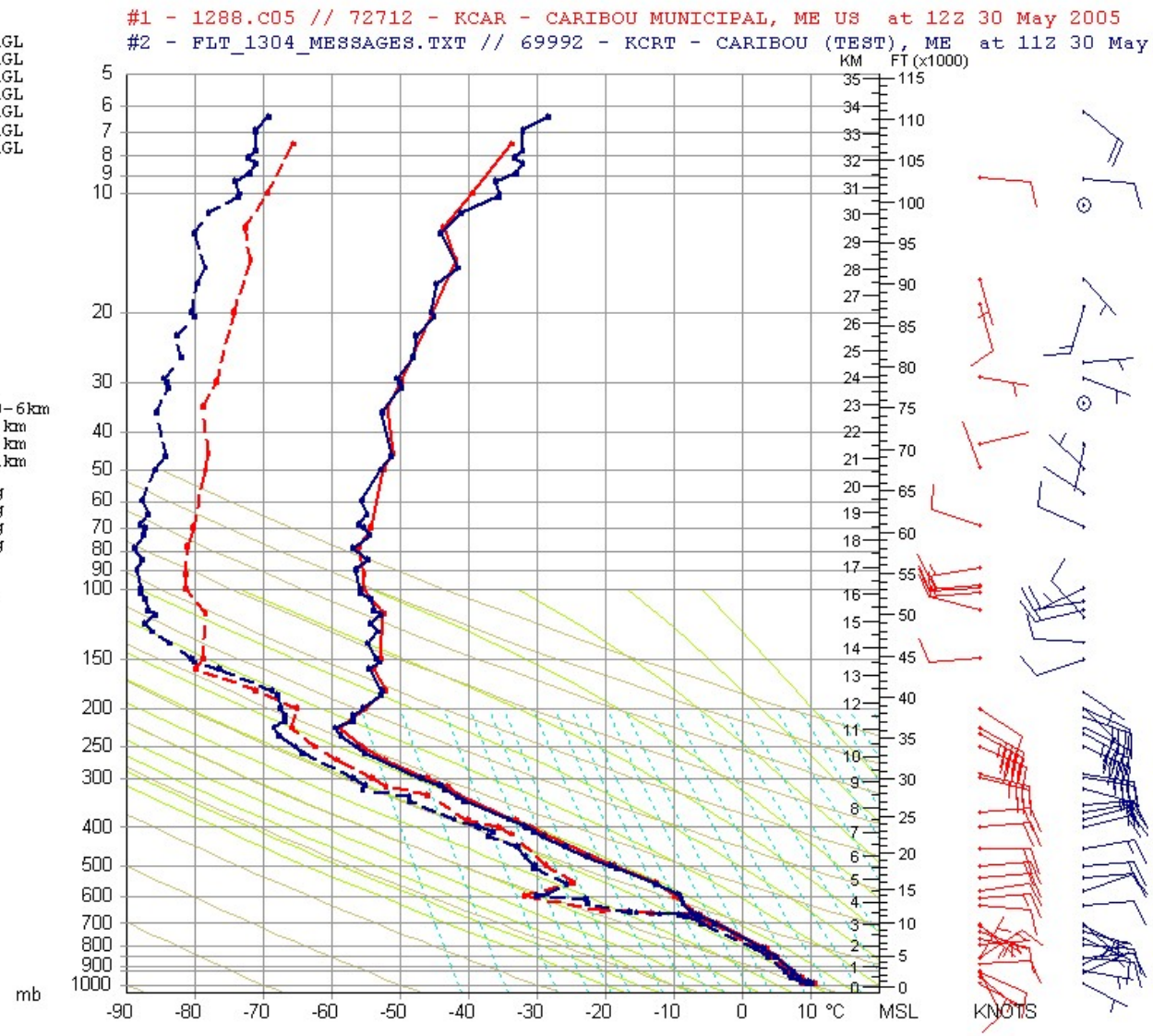
Test #45 - System Test II – 12UTC on 05/30/2005
RWS Version 1.0.4.0

TEST # 45			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10875	10848	27
Freezing Level (m AGL)	2212	2151	61
LFC Height (m AGL)	NC	167	NC
CCL Height (m AGL)	811	956	-145
LCL Height (m AGL)	227	101	126
Precipitable Water (cm)	2.09	2	0.09
Thickness 1000 - 500 mb (m)	5496	5491	5
Thickness 1000 - 700 mb (m)	2906	2903	3
Thickness 1000 - 850 mb (m)	1342	1341	1
Thickness 850 - 500 mb (m)	5154	5150	4
Thickness 850 - 700 mb (m)	1564	1562	2
Thickness 700 - 500 mb (m)	2589	2588	1
Thickness 600 - 400 mb (m)	3010	3003	7
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

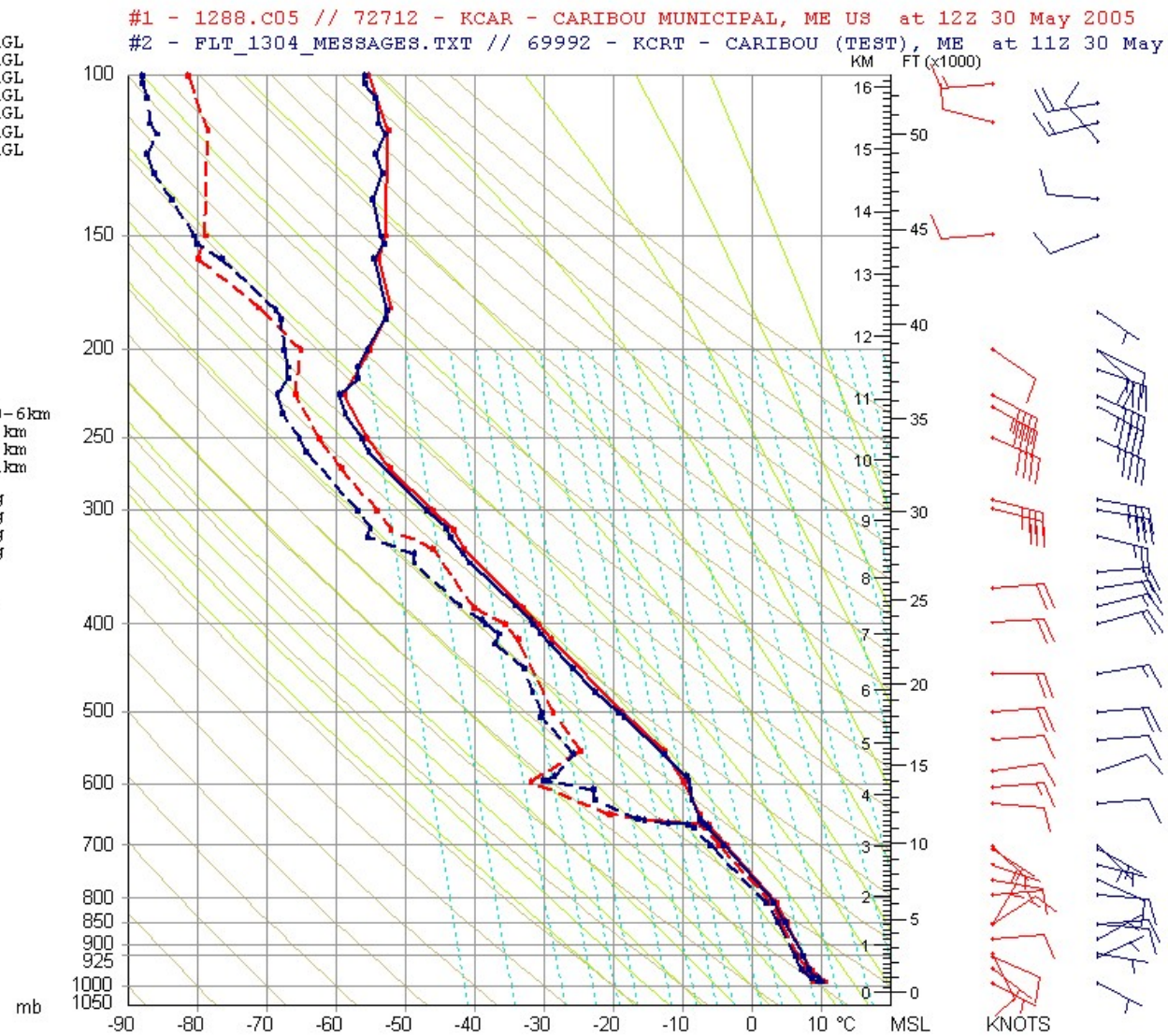
Test #45 - System Test II – 12UTC on 05/30/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10875	10848	m AGL
FRZG Lvl:	2212	2151	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	167	m AGL
CCL Hgt:	811	956	m AGL
LCL Hgt:	227	101	m AGL
Water:	2.09	2.00	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	76.4	79.6	
CAP:	--	0.1	
Boyden:	94.3	94.4	
S{TT}:	43.6	43.3	
KO:	3.6	2.5	
LI:	7.0	6.1	
TT:	46.6	47.2	
KI:	26.9	26.0	
Tc:	14.4	15.2	°C
Storm:	135/20	142/18	0-6km
s-rH:	-29	6	0-3km
s-rH:	-12	32	0-2km
s-rH:	22	16	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.8	20.4	
Threat:	8.7	8.8	
Point:	9.1	8.7	°C
1000 - 500 mb:	5496	5491	m
1000 - 700 mb:	2906	2903	m
1000 - 850 mb:	1342	1341	m
850 - 500 mb:	4154	4150	m
850 - 700 mb:	1564	1562	m
700 - 500 mb:	2589	2588	m
600 - 400 mb:	3010	3003	m



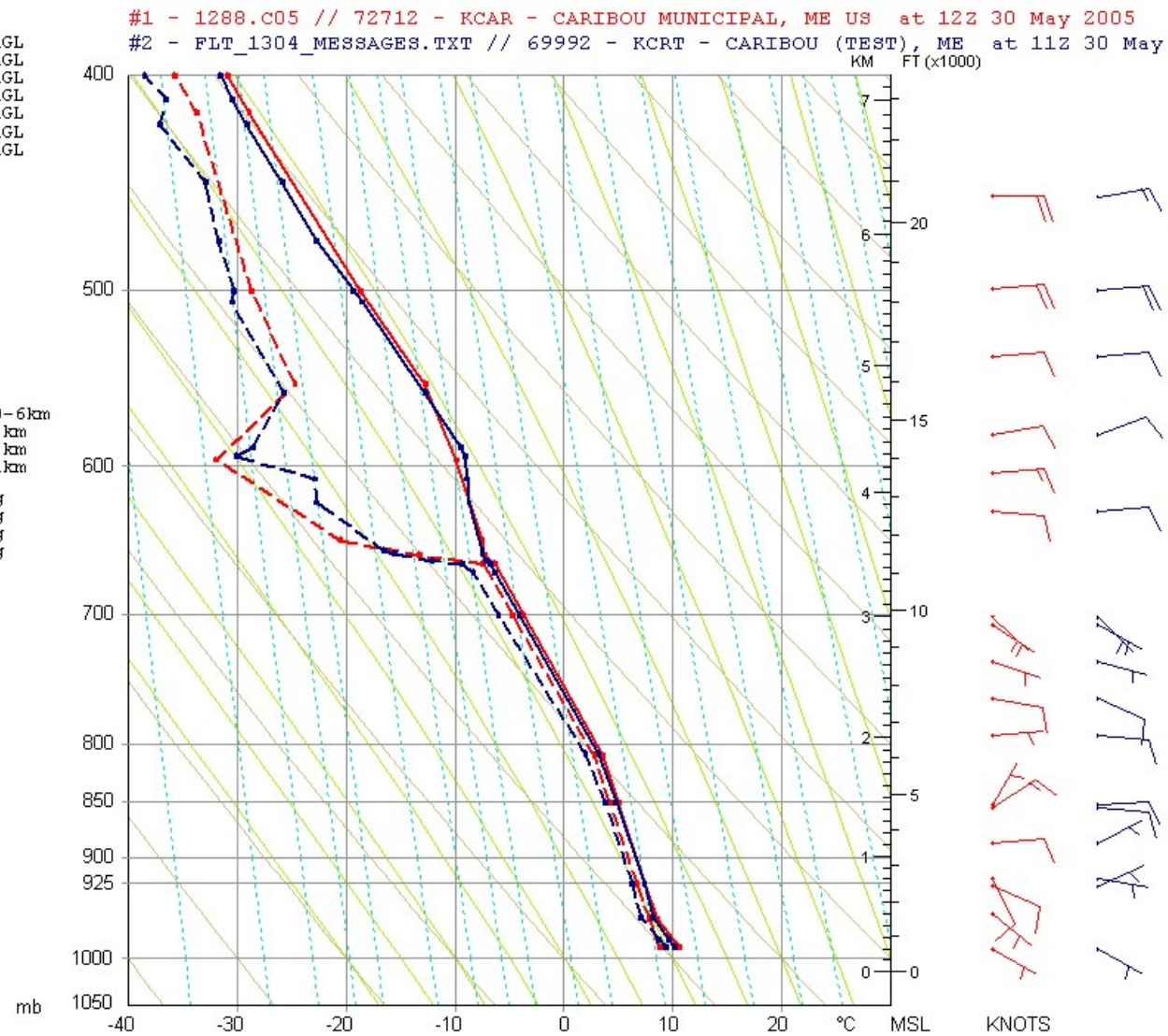
Test #45 - System Test II – 12UTC on 05/30/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10875	10848	m AGL
FRZG Lvl:	2212	2151	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	167	m AGL
CCL Hgt:	811	956	m AGL
LCL Hgt:	227	101	m AGL
Water:	2.09	2.00	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	76.4	79.6	
CAP:	--	0.1	
Boyden:	94.3	94.4	
S{TT}:	43.6	43.3	
KO:	3.6	2.5	
LI:	7.0	6.1	
TT:	46.6	47.2	
KI:	26.9	26.0	
Tc:	14.4	15.2	°C
Storm:	135/20	142/18	0-6km
s-rH:	-29	6	0-3km
s-rH:	-12	32	0-2km
s-rH:	22	16	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.8	20.4	
Threat:	8.7	8.8	
Point:	9.1	8.7°C	
1000 - 500 mb:	5496	5491	m
1000 - 700 mb:	2906	2903	m
1000 - 850 mb:	1342	1341	m
850 - 500 mb:	4154	4150	m
850 - 700 mb:	1564	1562	m
700 - 500 mb:	2589	2588	m
600 - 400 mb:	3010	3003	m



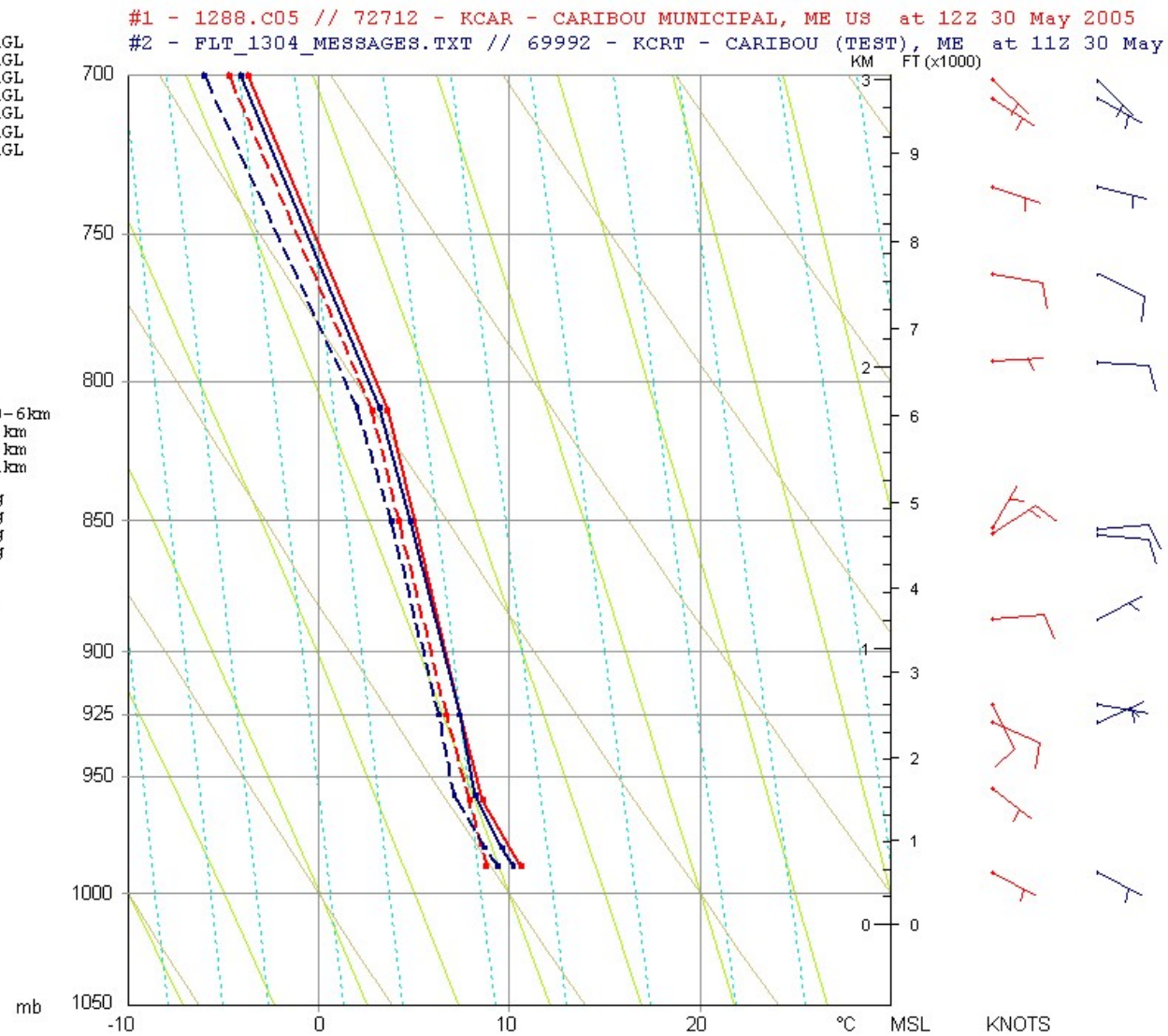
Test #45 - System Test II – 12UTC on 05/30/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10875	10848	m AGL
FRZG Lvl:	2212	2151	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	167	m AGL
CCL Hgt:	811	956	m AGL
LCL Hgt:	227	101	m AGL
Water:	2.09	2.00	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	76.4	79.6	
CAP:	--	0.1	
Boyden:	94.3	94.4	
S{TT}:	43.6	43.3	
KO:	3.6	2.5	
LI:	7.0	6.1	
TT:	46.6	47.2	
KI:	26.9	26.0	
Tc:	14.4	15.2	°C
Storm:	135/20	142/18	0-6km
s-rH:	-29	6	0-3km
s-rH:	-12	32	0-2km
s-rH:	22	16	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.8	20.4	
Threat:	8.7	8.8	
Point:	9.1	8.7°C	
1000 - 500 mb:	5496	5491	m
1000 - 700 mb:	2906	2903	m
1000 - 850 mb:	1342	1341	m
850 - 500 mb:	4154	4150	m
850 - 700 mb:	1564	1562	m
700 - 500 mb:	2589	2588	m
600 - 400 mb:	3010	3003	m

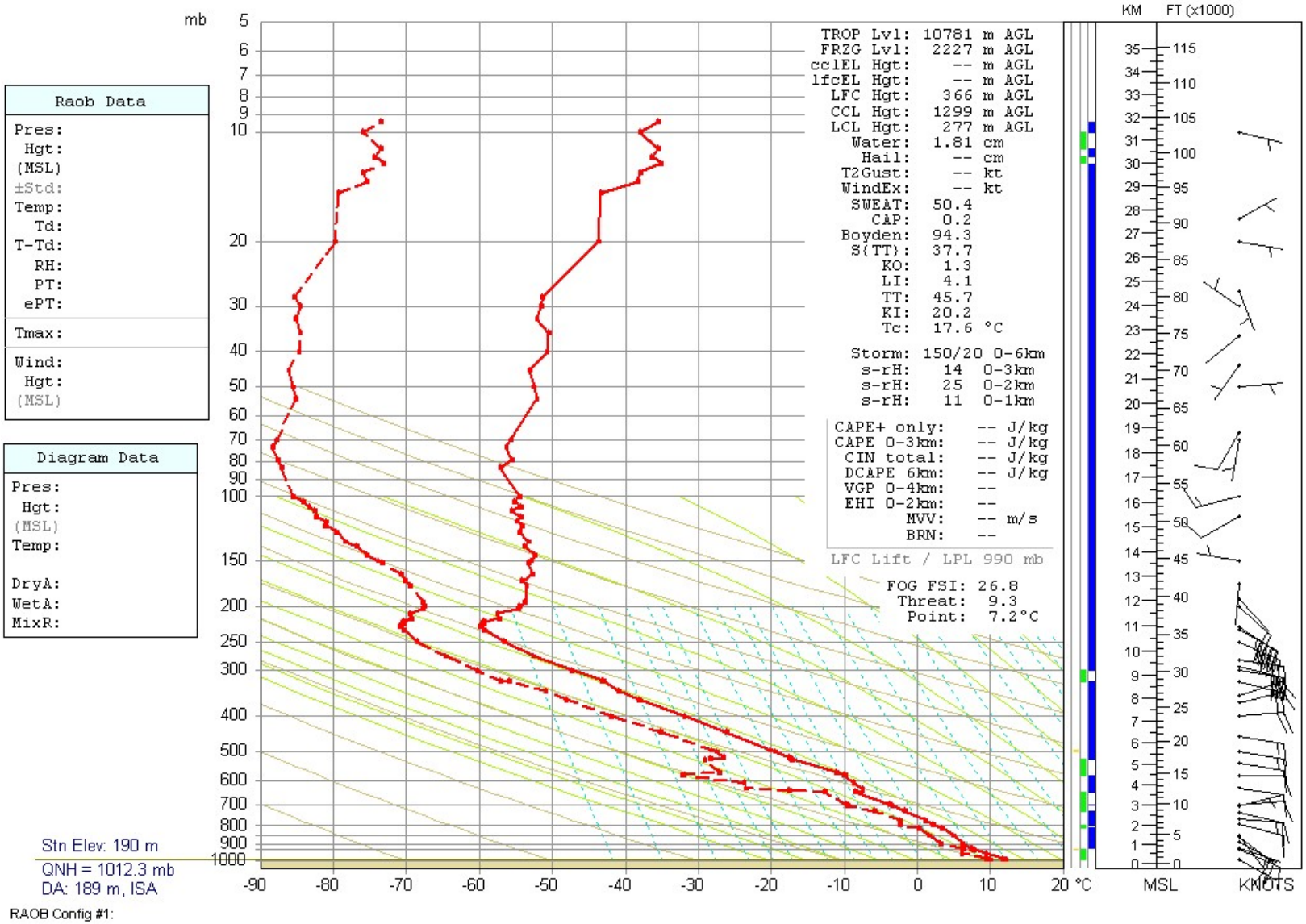


Test #45 - System Test II – 12UTC on 05/30/2005
RWS Version 1.0.4.0

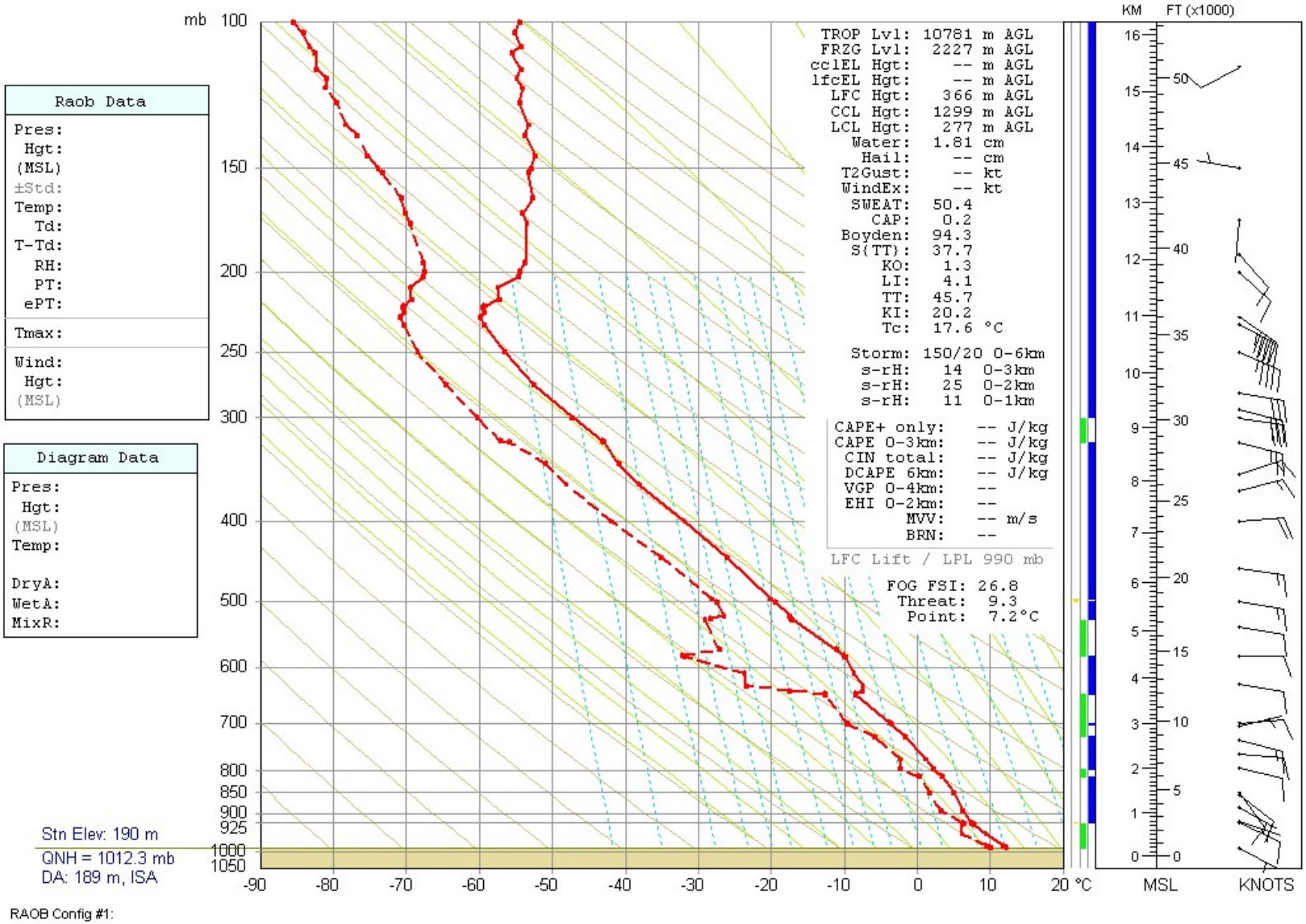
	#1	#2	
TROP Lvl:	10875	10848	m AGL
FRZG Lvl:	2212	2151	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	167	m AGL
CCL Hgt:	811	956	m AGL
LCL Hgt:	227	101	m AGL
Water:	2.09	2.00	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	76.4	79.6	
CAP:	--	0.1	
Boyden:	94.3	94.4	
S{TT}:	43.6	43.3	
KO:	3.6	2.5	
LI:	7.0	6.1	
TT:	46.6	47.2	
KI:	26.9	26.0	
Tc:	14.4	15.2	°C
Storm:	135/20	142/18	0-6km
s-rH:	-29	6	0-3km
s-rH:	-12	32	0-2km
s-rH:	22	16	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	18.8	20.4	
Threat:	8.7	8.8	
Point:	9.1	8.7°C	
1000 - 500 mb:	5496	5491	m
1000 - 700 mb:	2906	2903	m
1000 - 850 mb:	1342	1341	m
850 - 500 mb:	4154	4150	m
850 - 700 mb:	1564	1562	m
700 - 500 mb:	2589	2588	m
600 - 400 mb:	3010	3003	m



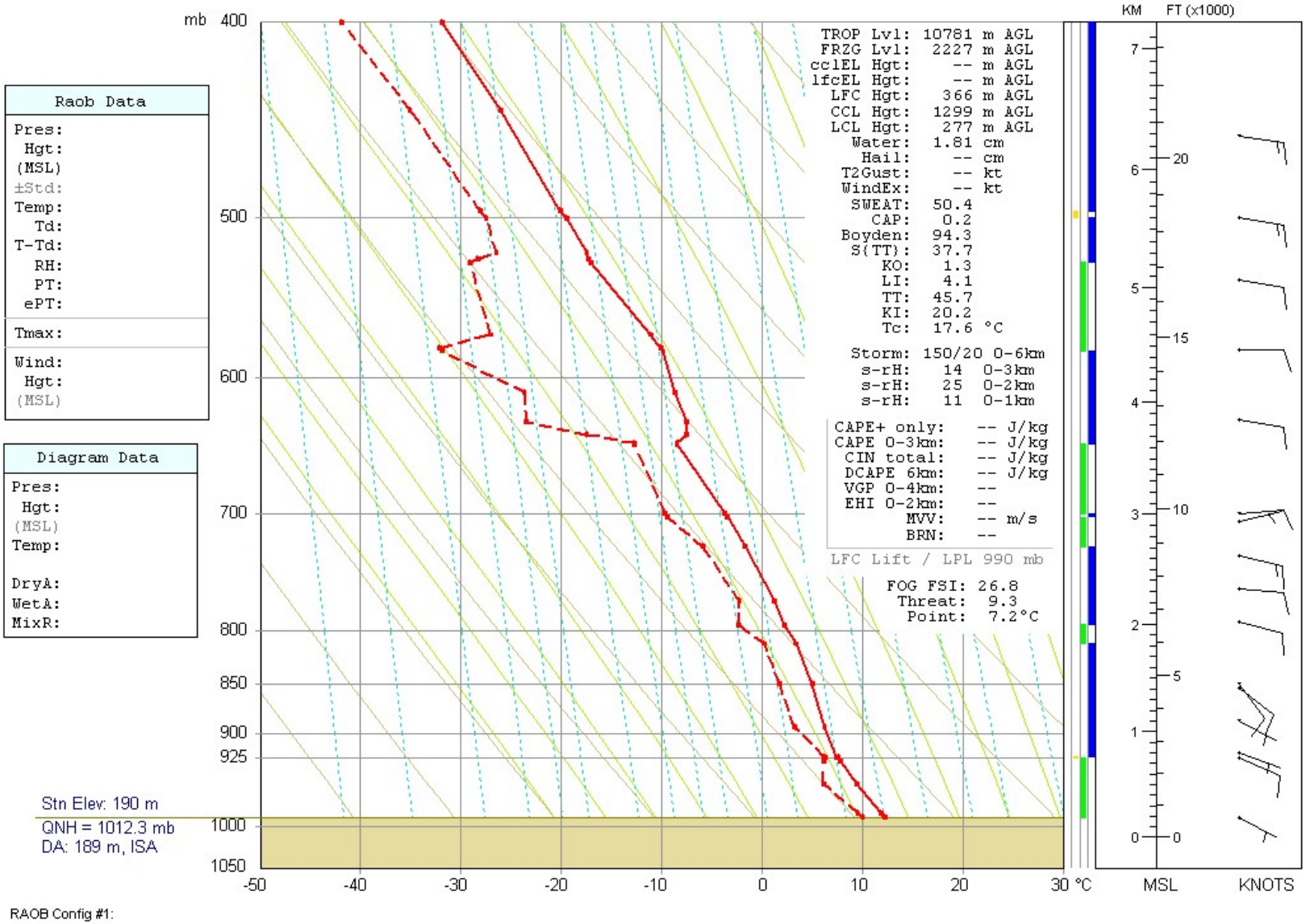
Test #46 System Test II – 15 UTC on 05/30/2005
RWS Version 1.0.4.0



Test #46 System Test II – 15 UTC on 05/30/2005
RWS Version 1.0.4.0

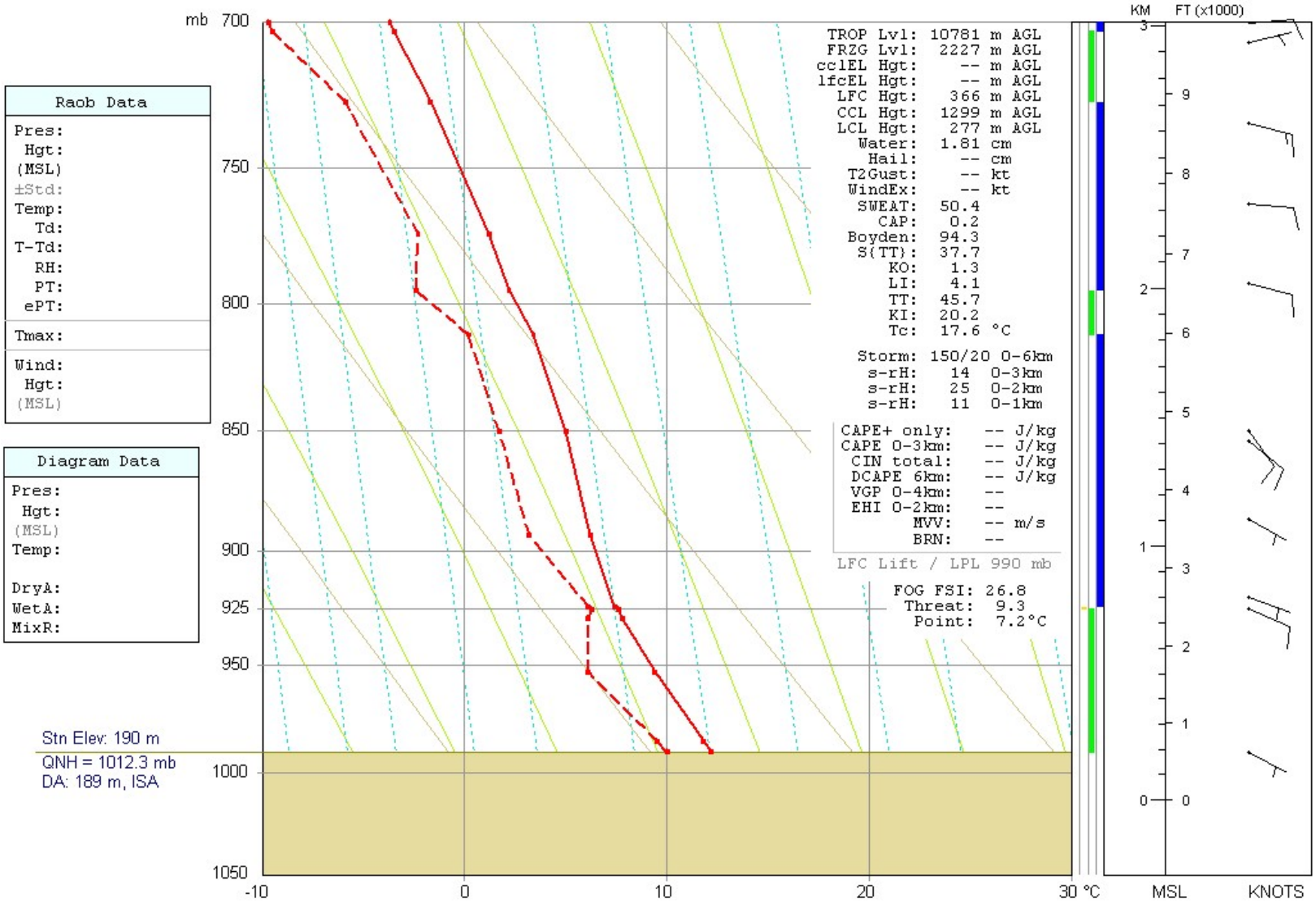


Test #46 System Test II – 15 UTC on 05/30/2005
RWS Version 1.0.4.0



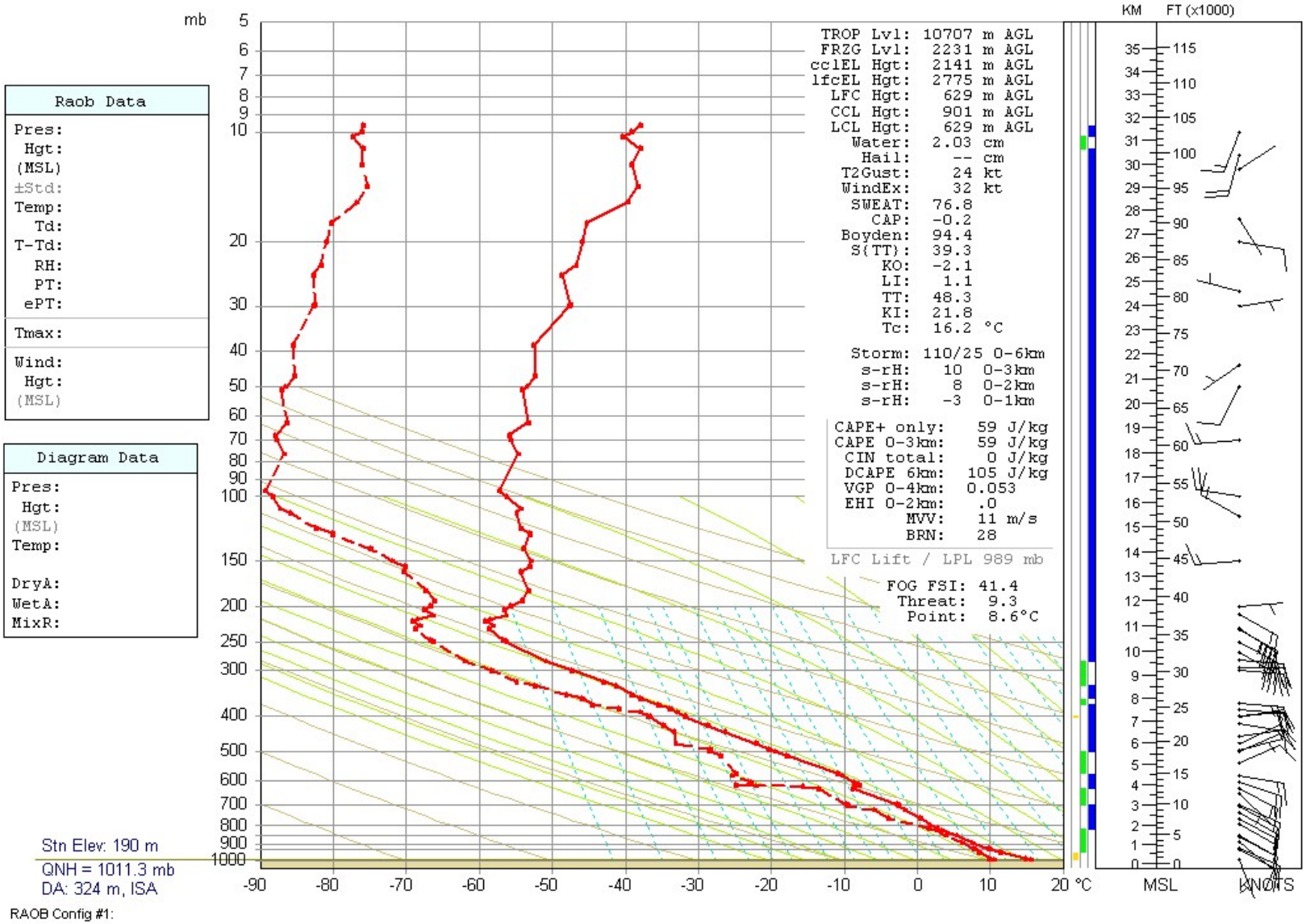
RAOB Config #1:

Test #46 System Test II – 15 UTC on 05/30/2005
RWS Version 1.0.4.0

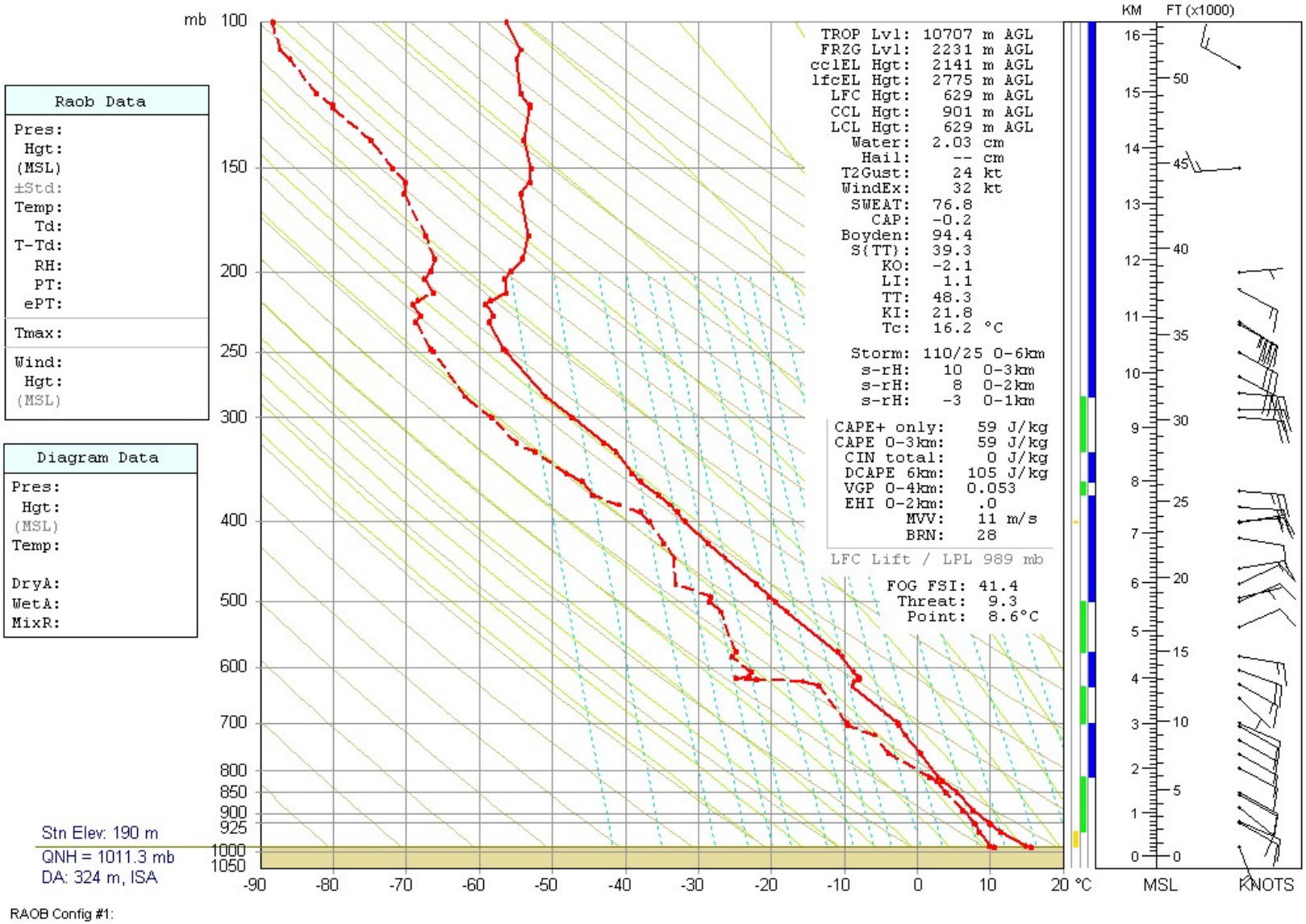


RAOB Config #1:

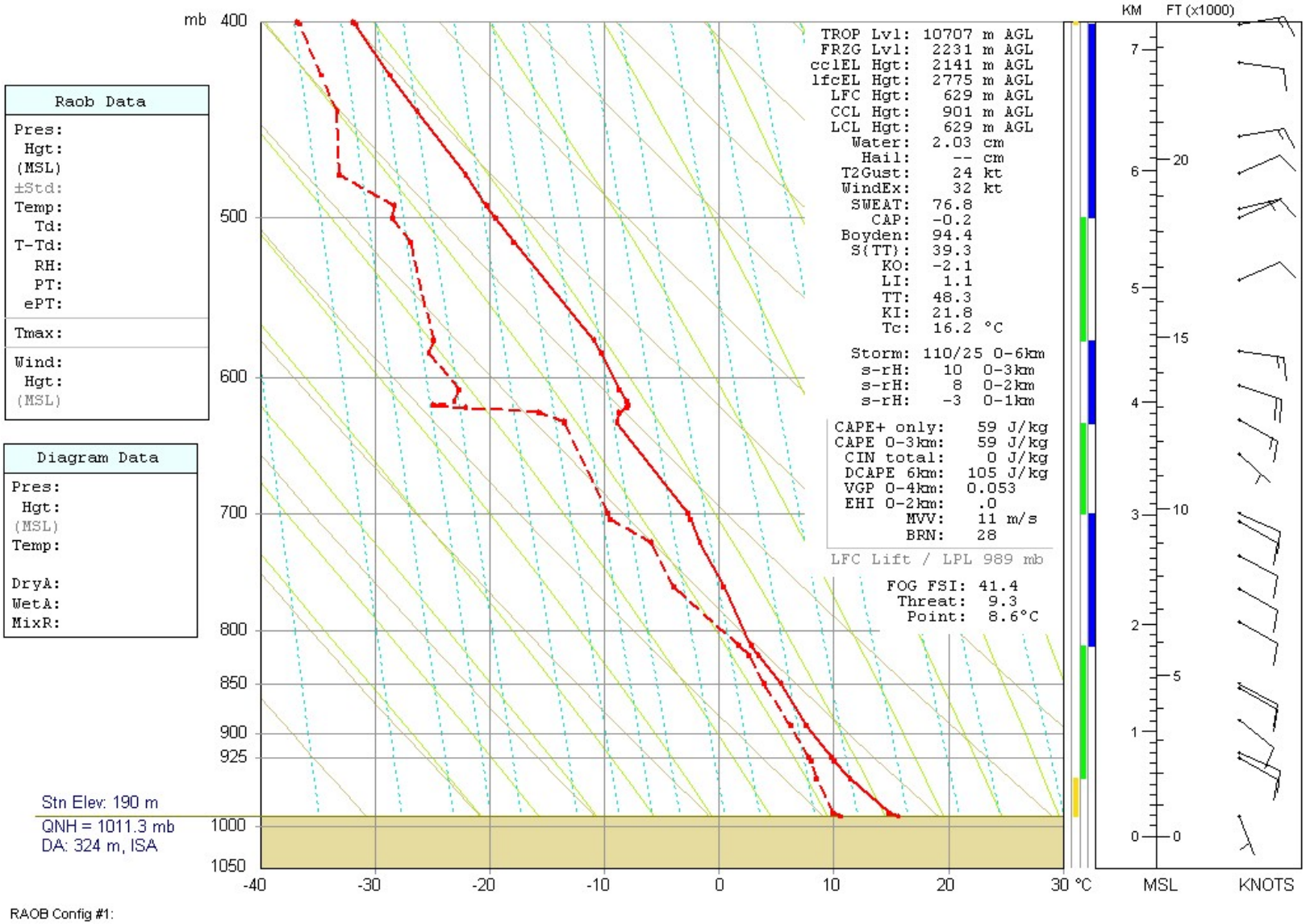
Test #47 System Test II – 20 UTC on 05/30/2005
RWS Version 1.0.4.0



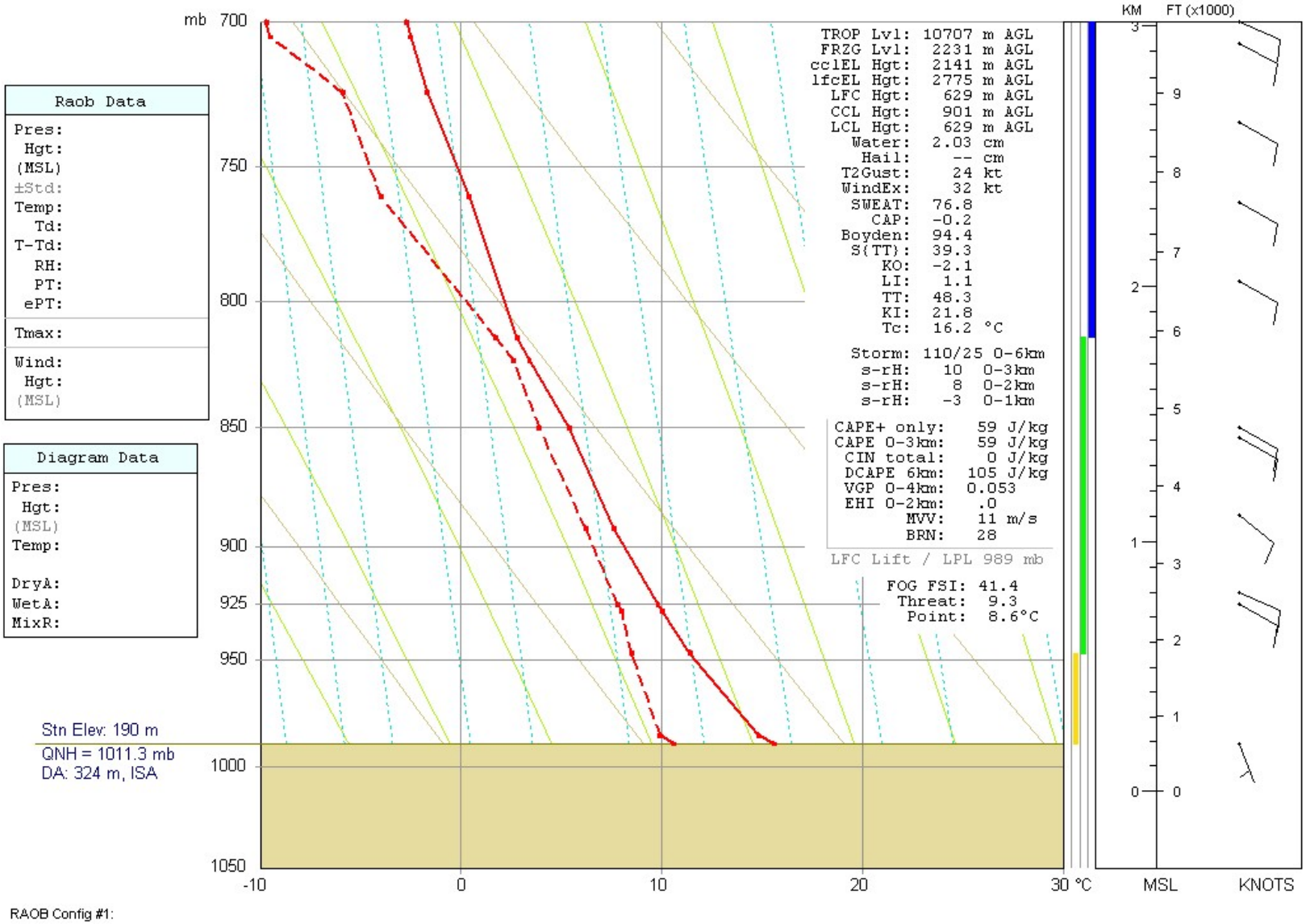
Test #47 System Test II – 20 UTC on 05/30/2005
RWS Version 1.0.4.0



Test #47 System Test II – 20 UTC on 05/30/2005
RWS Version 1.0.4.0



Test #47 System Test II – 20 UTC on 05/30/2005
RWS Version 1.0.4.0



RAOB Config #1:

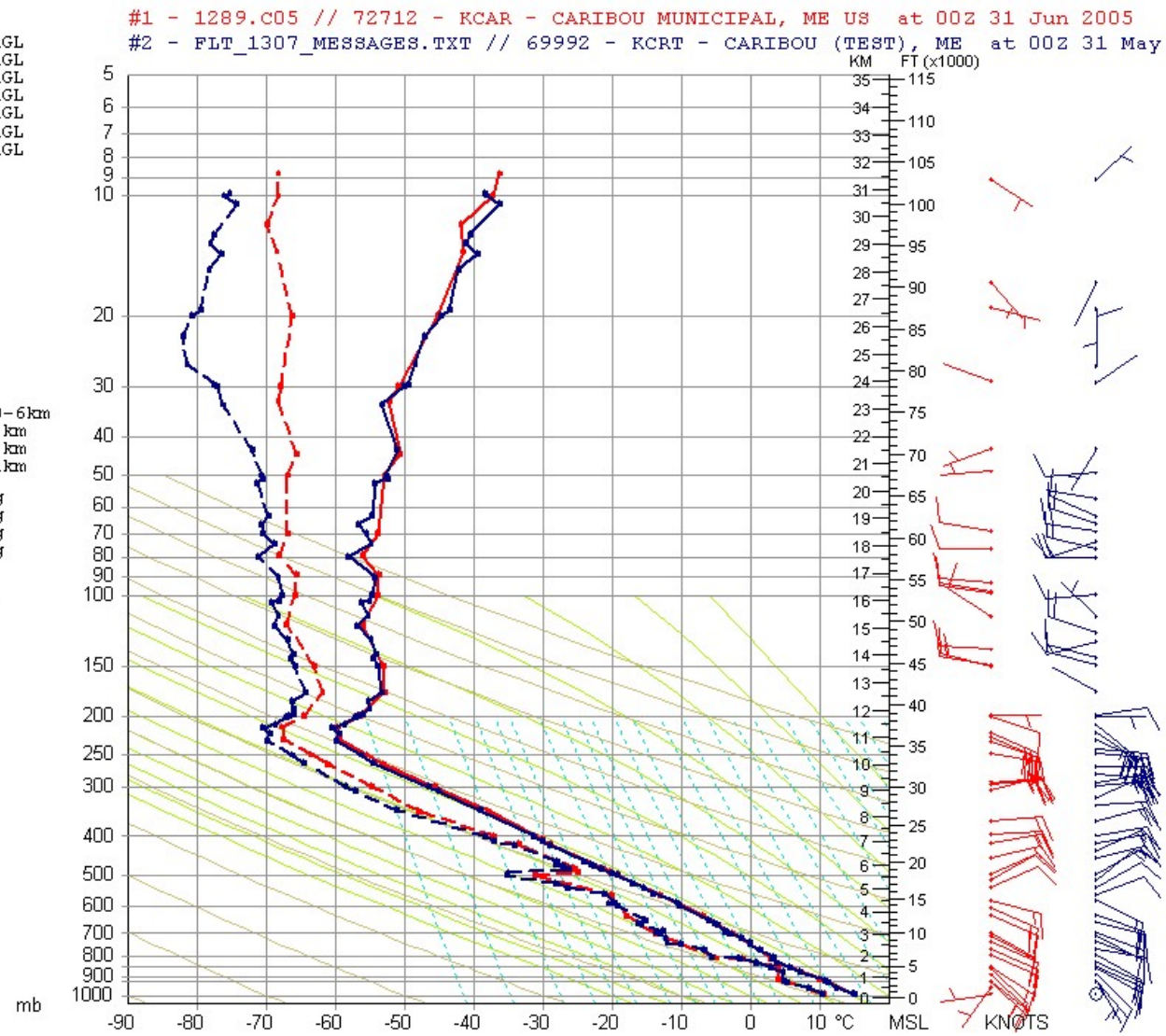
Test #48 - System Test II – 00UTC on 05/31/2005
RWS Version 1.0.4.0

TEST # 48			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10806	10734	72
Freezing Level (m AGL)	2313	2359	-46
LFC Height (m AGL)	1180	1235	-55
CCL Height (m AGL)	1327	1263	64
LCL Height (m AGL)	544	582	-38
Precipitable Water (cm)	1.83	1.82	0.01
Thickness 1000 - 500 mb (m)	5512	5511	1
Thickness 1000 - 700 mb (m)	2921	2923	-2
Thickness 1000 - 850 mb (m)	1357	1358	-1
Thickness 850 - 500 mb (m)	4155	4153	2
Thickness 850 - 700 mb (m)	1564	1565	-1
Thickness 700 - 500 mb (m)	2591	2588	3
Thickness 600 - 400 mb (m)	3007	3001	6
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

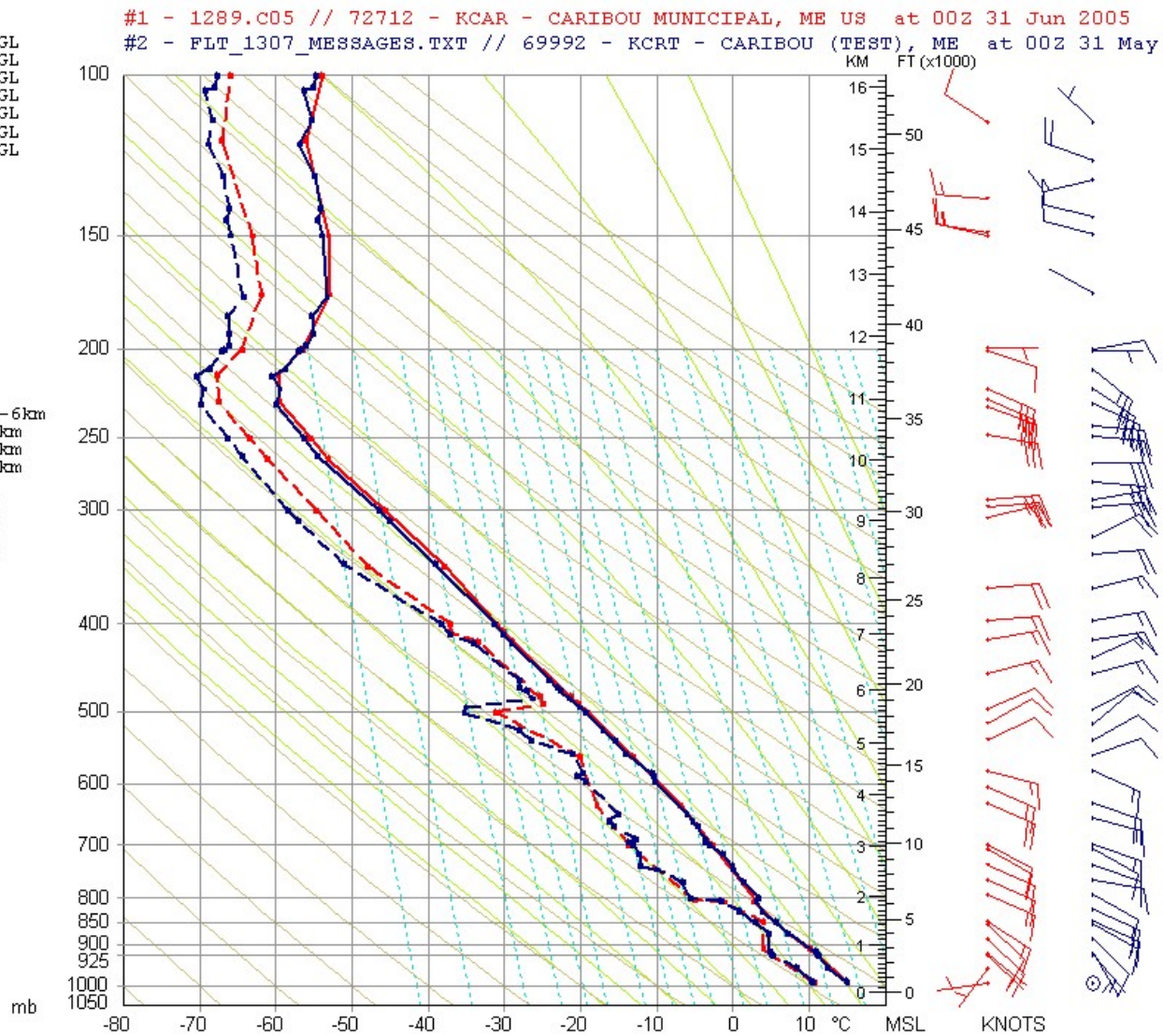
Test #48 - System Test II – 00UTC on 05/31/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10806	10734	m AGL
FRZG Lvl:	2313	2359	m AGL
cclEL Hgt:	1851	--	m AGL
lfcEL Hgt:	2324	--	m AGL
LFC Hgt:	1180	1235	m AGL
CCL Hgt:	1327	1263	m AGL
LCL Hgt:	544	582	m AGL
Water:	1.83	1.82	cm
Hail:	--	--	cm
T2Gust:	26	26	kt
WindEx:	28	27	kt
SWEAT:	88.0	79.8	
CAP:	1.7	1.8	
Boyden:	94.8	95.4	
S{TT}:	34.8	35.1	
KO:	-3.1	-2.7	
LI:	2.0	2.0	
TT:	47.8	47.1	
KI:	17.7	17.8	
Tc:	18.2	18.0	°C
Storm:	131/24	123/25	0-6km
s-rH:	12	2	0-3km
s-rH:	17	-7	0-2km
s-rH:	7	-14	0-1km
CAPE+ only:	13	--	J/kg
CAPE 0-3km:	13	--	J/kg
CIN total:	-34	--	J/kg
DCAPE 6km:	43	--	J/kg
VGP 0-4km:	0.017	--	
EHI 0-2km:	.0	--	
MVV:	5	--	m/s
BRN:	1	--	
FOG FSI:	41.4	44.0	
Threat:	11.4	11.2	
Point:	6.6	6.3	°C
1000 - 500 mb:	5512	5511	m
1000 - 700 mb:	2921	2923	m
1000 - 850 mb:	1357	1358	m
850 - 500 mb:	4155	4153	m
850 - 700 mb:	1564	1565	m
700 - 500 mb:	2591	2588	m
600 - 400 mb:	3007	3001	m



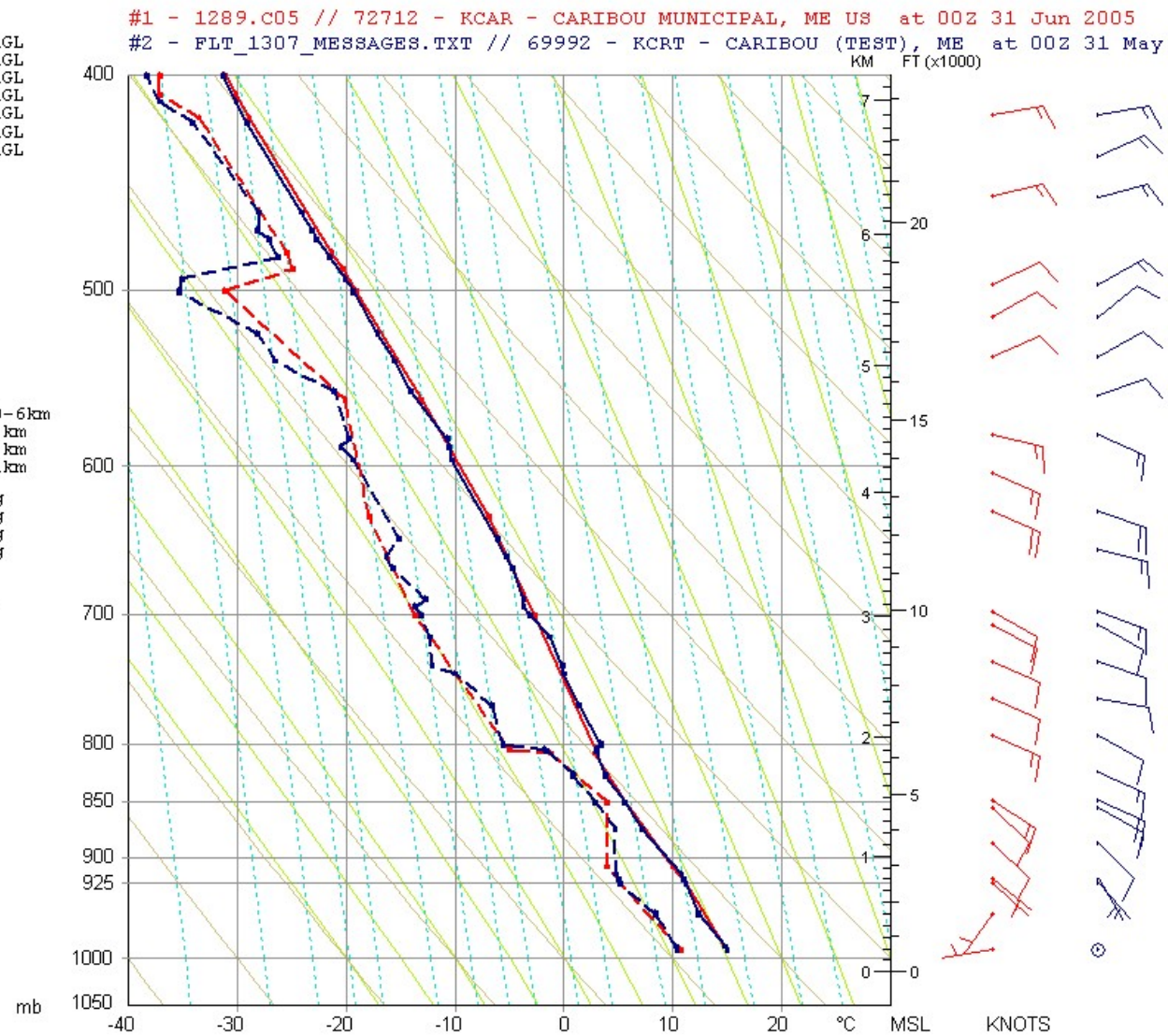
Test #48 - System Test II – 00UTC on 05/31/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10806	10734	m AGL
FRZG Lvl:	2313	2359	m AGL
cclEL Hgt:	1851	--	m AGL
lfcEL Hgt:	2324	--	m AGL
LFC Hgt:	1180	1235	m AGL
CCL Hgt:	1327	1263	m AGL
LCL Hgt:	544	582	m AGL
Water:	1.83	1.82	cm
Hail:	--	--	cm
T2Gust:	26	26	kt
WindEx:	28	27	kt
SWEAT:	88.0	79.8	
CAP:	1.7	1.8	
Boyden:	94.8	95.4	
S{TT}:	34.8	35.1	
KO:	-3.1	-2.7	
LI:	2.0	2.0	
TT:	47.8	47.1	
KI:	17.7	17.8	
Tc:	18.2	18.0	°C
Storm:	131/24	123/25	0-6km
s-rH:	12	2	0-3km
s-rH:	17	-7	0-2km
s-rH:	7	-14	0-1km
CAPE+ only:	13	--	J/kg
CAPE 0-3km:	13	--	J/kg
CIN total:	-34	--	J/kg
DCAPE 6km:	43	--	J/kg
VGP 0-4km:	0.017	--	
EHI 0-2km:	.0	--	
MVV:	5	--	m/s
BRN:	1	--	
FOG FSI:	41.4	44.0	
Threat:	11.4	11.2	
Point:	6.6	6.3°C	
1000 - 500 mb:	5512	5511	m
1000 - 700 mb:	2921	2923	m
1000 - 850 mb:	1357	1358	m
850 - 500 mb:	4155	4153	m
850 - 700 mb:	1564	1565	m
700 - 500 mb:	2591	2588	m
600 - 400 mb:	3007	3001	m



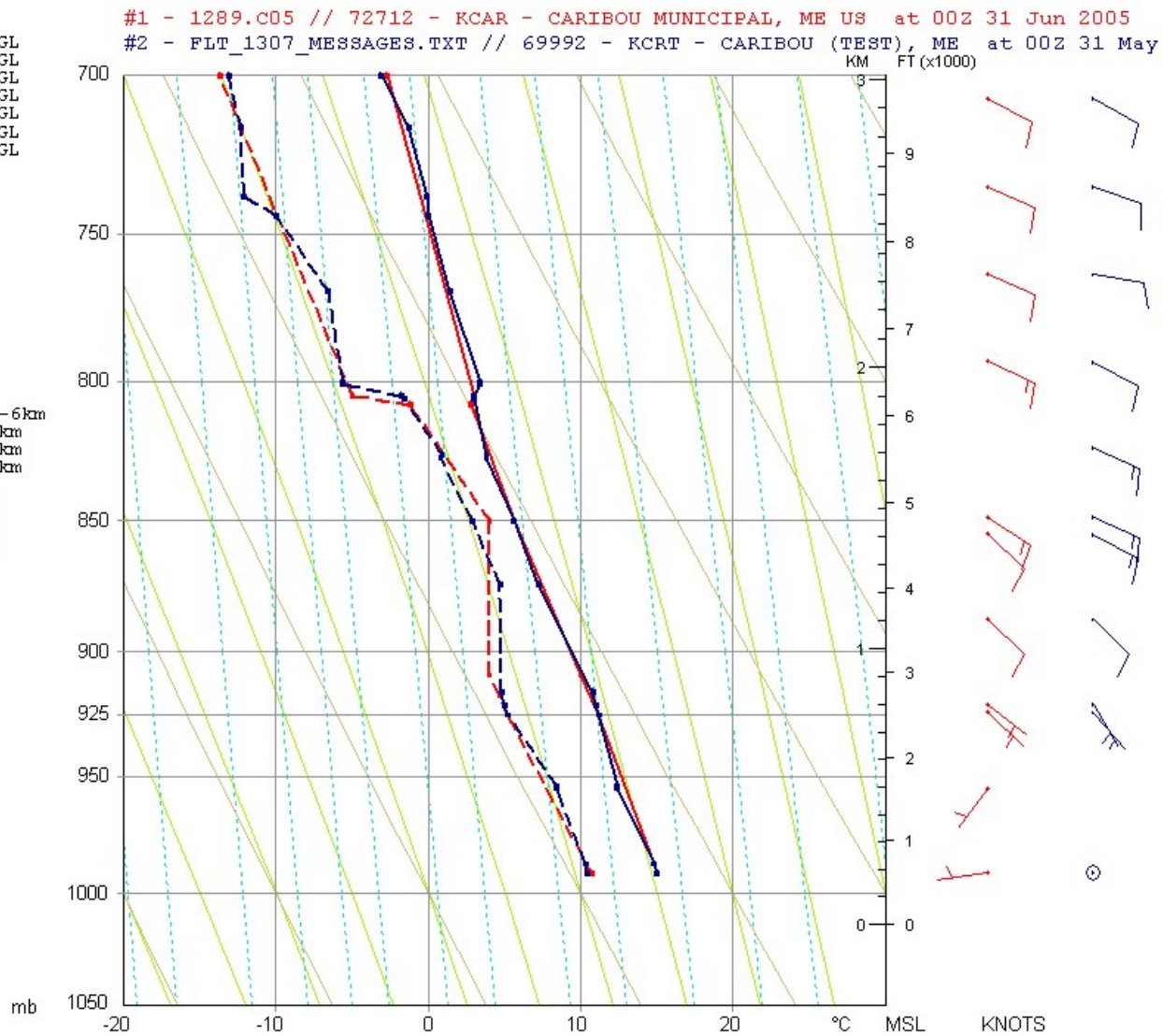
Test #48 - System Test II – 00UTC on 05/31/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10806	10734	m AGL
FRZG Lvl:	2313	2359	m AGL
cclEL Hgt:	1851	--	m AGL
lfcEL Hgt:	2324	--	m AGL
LFC Hgt:	1180	1235	m AGL
CCL Hgt:	1327	1263	m AGL
LCL Hgt:	544	582	m AGL
Water:	1.83	1.82	cm
Hail:	--	--	cm
T2Gust:	26	26	kt
WindEx:	28	27	kt
SWEAT:	88.0	79.8	
CAP:	1.7	1.8	
Boyden:	94.8	95.4	
S{TT}:	34.8	35.1	
KO:	-3.1	-2.7	
LI:	2.0	2.0	
TT:	47.8	47.1	
KI:	17.7	17.8	
Tc:	18.2	18.0	°C
Storm:	131/24	123/25	0-6km
s-rH:	12	2	0-3km
s-rH:	17	-7	0-2km
s-rH:	7	-14	0-1km
CAPE+ only:	13	--	J/kg
CAPE 0-3km:	13	--	J/kg
CIN total:	-34	--	J/kg
DCAPE 6km:	43	--	J/kg
VGP 0-4km:	0.017	--	
EHI 0-2km:	.0	--	
MVV:	5	--	m/s
BRN:	1	--	
FOG FSI:	41.4	44.0	
Threat:	11.4	11.2	
Point:	6.6	6.3°C	
1000 - 500 mb:	5512	5511	m
1000 - 700 mb:	2921	2923	m
1000 - 850 mb:	1357	1358	m
850 - 500 mb:	4155	4153	m
850 - 700 mb:	1564	1565	m
700 - 500 mb:	2591	2588	m
600 - 400 mb:	3007	3001	m



Test #48 - System Test II – 00UTC on 05/31/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10806	10734	m AGL
FRZG Lvl:	2313	2359	m AGL
cclEL Hgt:	1851	--	m AGL
lfcEL Hgt:	2324	--	m AGL
LFC Hgt:	1180	1235	m AGL
CCL Hgt:	1327	1263	m AGL
LCL Hgt:	544	582	m AGL
Water:	1.83	1.82	cm
Hail:	--	--	cm
T2Gust:	26	26	kt
WindEx:	28	27	kt
SWEAT:	88.0	79.8	
CAP:	1.7	1.8	
Boyden:	94.8	95.4	
S{TT}:	34.8	35.1	
KO:	-3.1	-2.7	
LI:	2.0	2.0	
TT:	47.8	47.1	
KI:	17.7	17.8	
Tc:	18.2	18.0	°C
Storm:	131/24	123/25	0-6km
s-rH:	12	2	0-3km
s-rH:	17	-7	0-2km
s-rH:	7	-14	0-1km
CAPE+ only:	13	--	J/kg
CAPE 0-3km:	13	--	J/kg
CIN total:	-34	--	J/kg
DCAPE 6km:	43	--	J/kg
VGP 0-4km:	0.017	--	
EHI 0-2km:	.0	--	
MVV:	5	--	m/s
BRN:	1	--	
FOG FSI:	41.4	44.0	
Threat:	11.4	11.2	
Point:	6.6	6.3°C	
1000 - 500 mb:	5512	5511	m
1000 - 700 mb:	2921	2923	m
1000 - 850 mb:	1357	1358	m
850 - 500 mb:	4155	4153	m
850 - 700 mb:	1564	1565	m
700 - 500 mb:	2591	2588	m
600 - 400 mb:	3007	3001	m



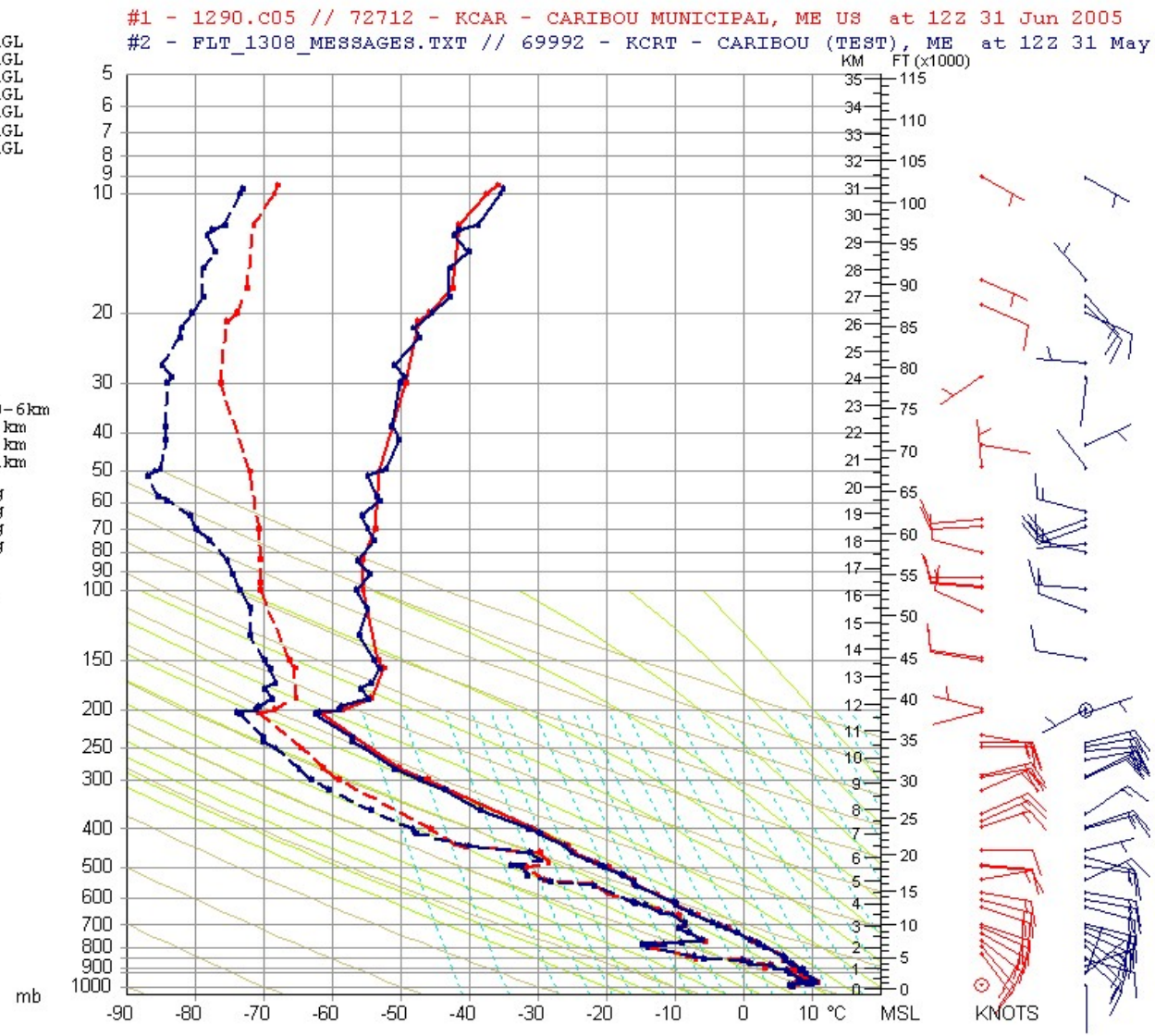
Test #49 - System Test II – 12UTC on 05/31/2005
RWS Version 1.0.4.0

TEST # 49			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11519	11466	53
Freezing Level (m AGL)	2390	2375	15
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	1099	1208	-109
LCL Height (m AGL)	0	0	0
Precipitable Water (cm)	1.77	1.71	0.06
Thickness 1000 - 500 mb (m)	5486	5485	1
Thickness 1000 - 700 mb (m)	2909	2911	-2
Thickness 1000 - 850 mb (m)	1343	1346	-3
Thickness 850 - 500 mb (m)	2909	2911	-2
Thickness 850 - 700 mb (m)	1343	1346	-3
Thickness 700 - 500 mb (m)	4143	4139	4
Thickness 600 - 400 mb (m)	1565	1565	0
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

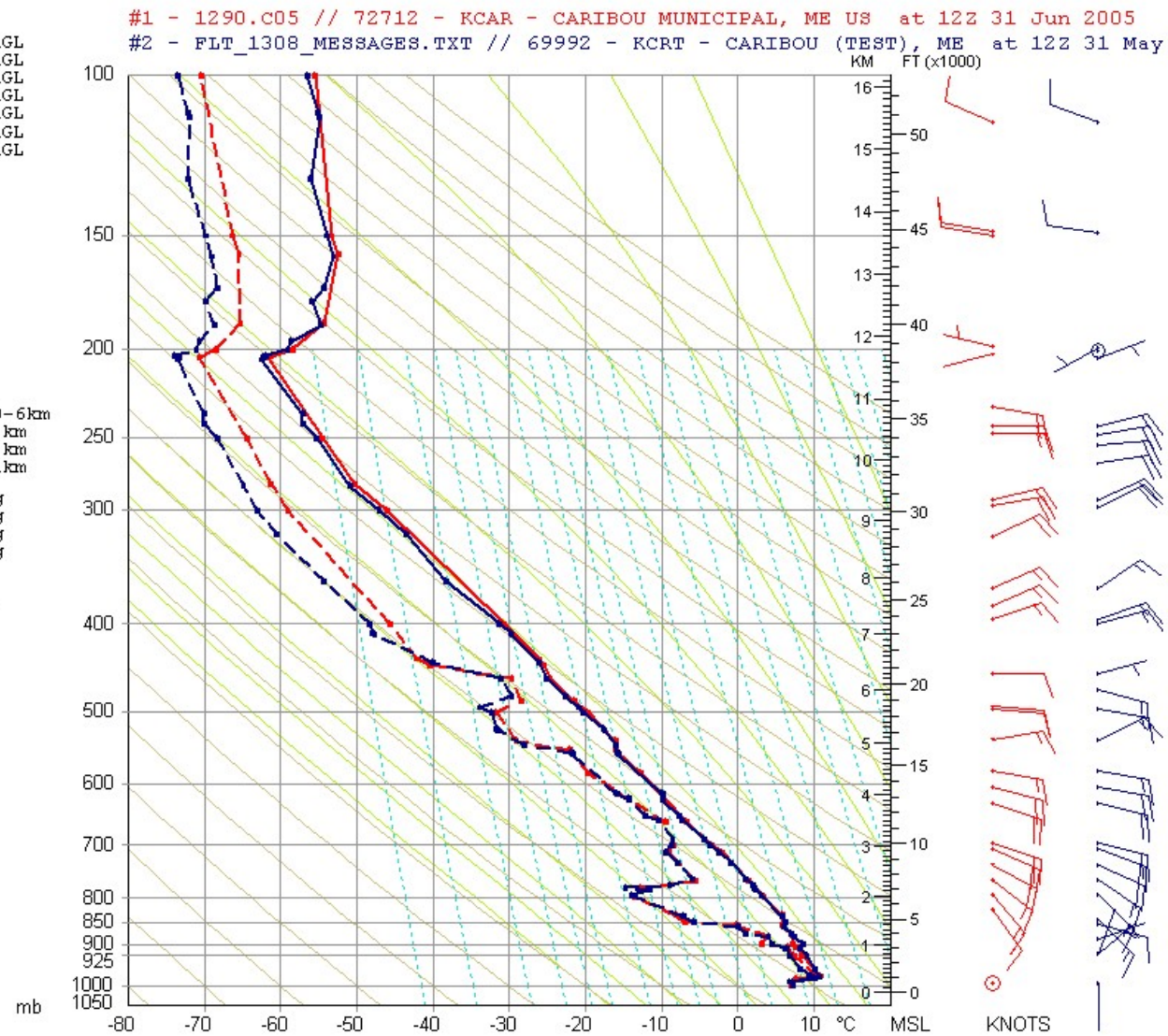
Test #49 - System Test II – 12UTC on 05/31/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11519	11466	m AGL
FRZG Lvl:	2390	2375	m AGL
cclEL Hgt:	4006	3848	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	1099	1208	m AGL
LCL Hgt:	0	0	m AGL
Water:	1.77	1.71	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	35.0	40.0	
CAP:	--	--	
Boyden:	94.4	94.8	
S{TT}:	33.4	36.0	
KO:	9.6	8.3	
LI:	10.8	9.9	
TT:	38.4	41.0	
KI:	13.7	15.7	
Tc:	17.5	17.9	°C
Storm:	133/26	155/19	0-6km
s-rH:	6	71	0-3km
s-rH:	-17	67	0-2km
s-rH:	0	42	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.0	15.0	
Threat:	6.7	7.0	
Point:	7.0	7.2	°C
1000 - 500 mb:	5486	5485	m
1000 - 700 mb:	2909	2911	m
1000 - 850 mb:	1343	1346	m
850 - 500 mb:	4143	4139	m
850 - 700 mb:	1565	1565	m
700 - 500 mb:	2577	2575	m
600 - 400 mb:	2998	2994	m



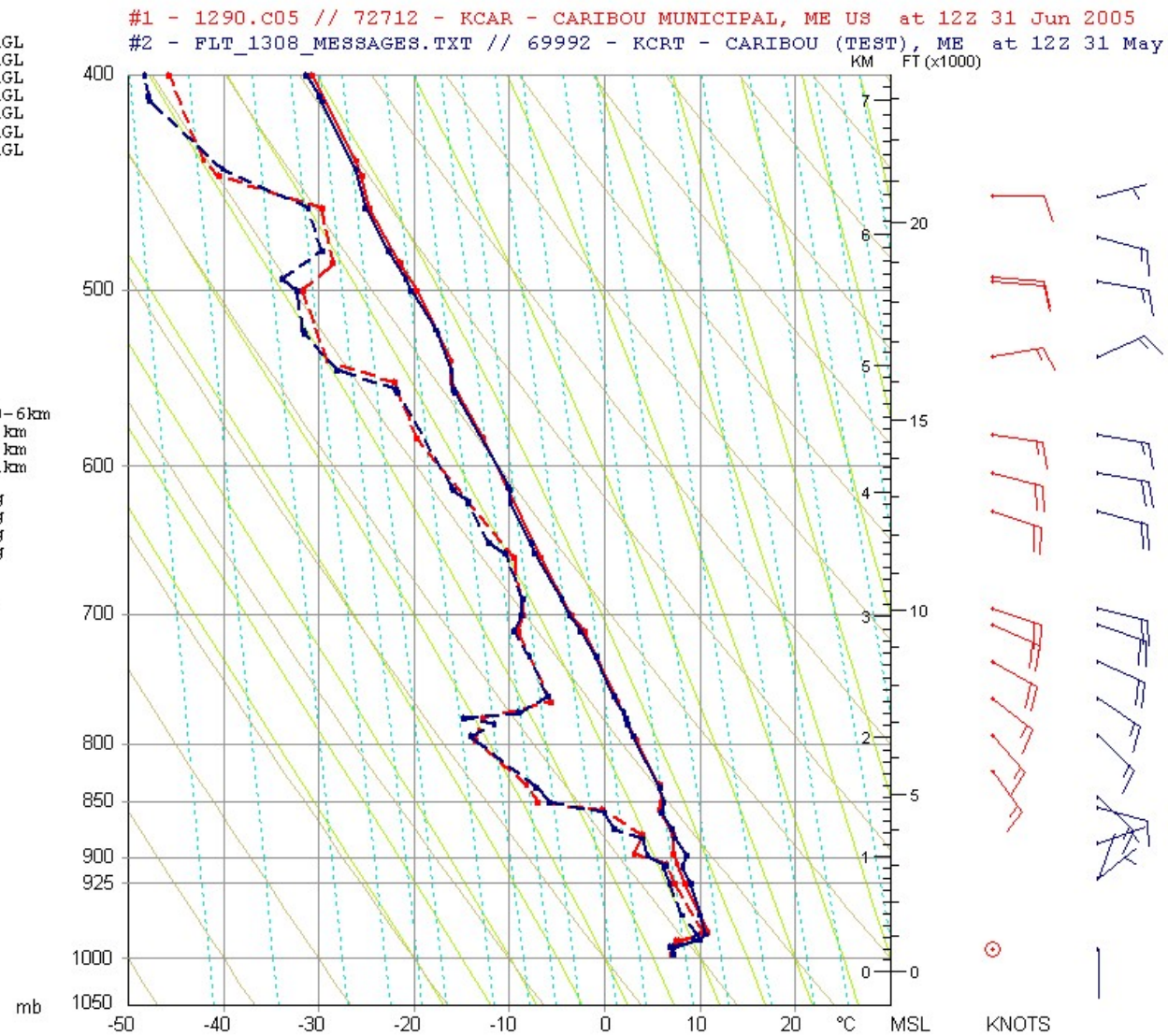
Test #49 - System Test II – 12UTC on 05/31/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11519	11466	m AGL
FRZG Lvl:	2390	2375	m AGL
cclEL Hgt:	4006	3848	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	1099	1208	m AGL
LCL Hgt:	0	0	m AGL
Water:	1.77	1.71	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	35.0	40.0	
CAP:	--	--	
Boyden:	94.4	94.8	
S{TT}:	33.4	36.0	
KO:	9.6	8.3	
LI:	10.8	9.9	
TT:	38.4	41.0	
KI:	13.7	15.7	
Tc:	17.5	17.9	°C
Storm:	133/26	155/19	0-6km
s-rH:	6	71	0-3km
s-rH:	-17	67	0-2km
s-rH:	0	42	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.0	15.0	
Threat:	6.7	7.0	
Point:	7.0	7.2	°C
1000 - 500 mb:	5486	5485	m
1000 - 700 mb:	2909	2911	m
1000 - 850 mb:	1343	1346	m
850 - 500 mb:	4143	4139	m
850 - 700 mb:	1565	1565	m
700 - 500 mb:	2577	2575	m
600 - 400 mb:	2998	2994	m



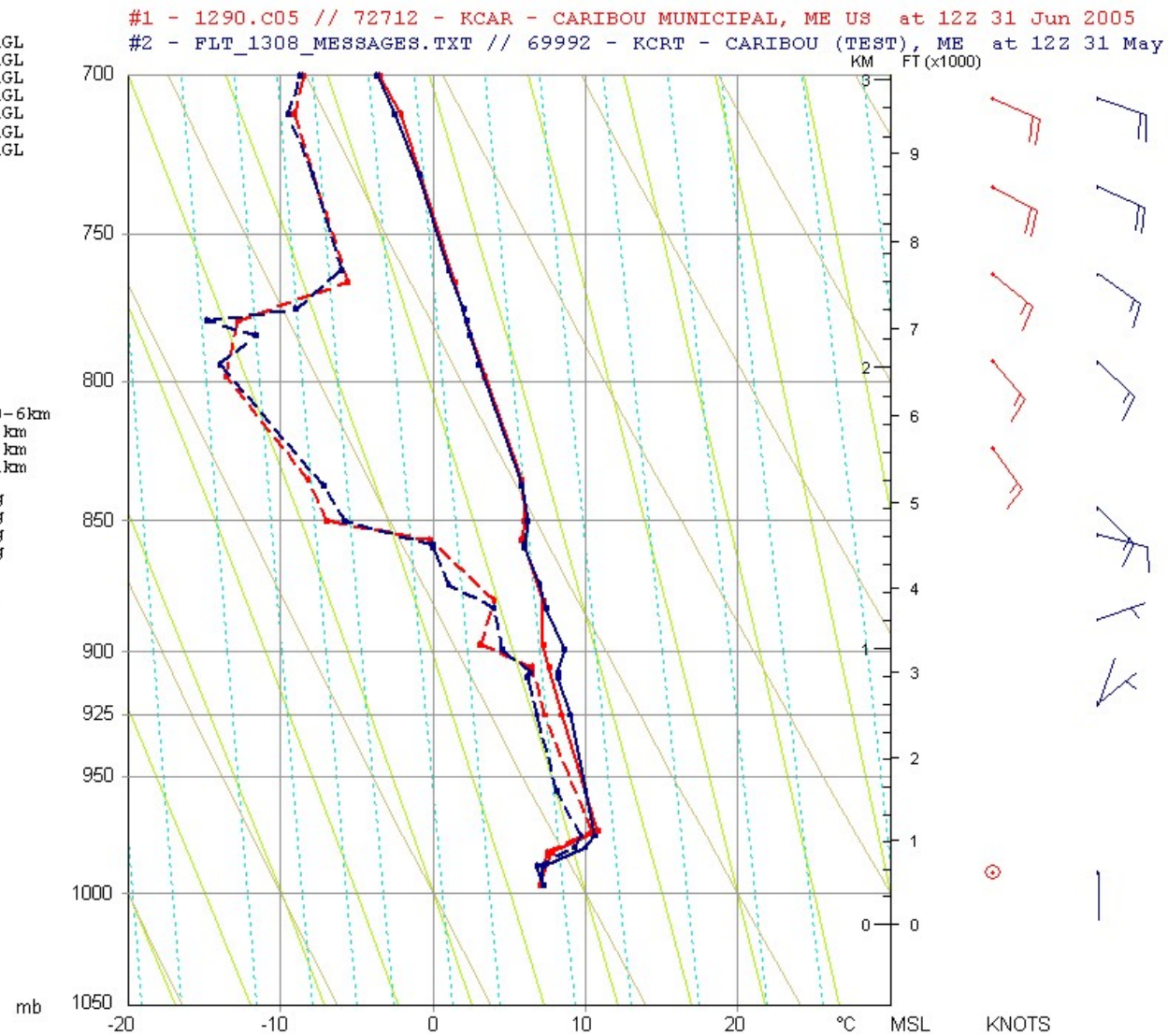
Test #49 - System Test II – 12UTC on 05/31/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11519	11466	m AGL
FRZG Lvl:	2390	2375	m AGL
cclEL Hgt:	4006	3848	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	1099	1208	m AGL
LCL Hgt:	0	0	m AGL
Water:	1.77	1.71	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	35.0	40.0	
CAP:	--	--	
Boyden:	94.4	94.8	
S{TT}:	33.4	36.0	
KO:	9.6	8.3	
LI:	10.8	9.9	
TT:	38.4	41.0	
KI:	13.7	15.7	
Tc:	17.5	17.9	°C
Storm:	133/26	155/19	0-6km
s-rH:	6	71	0-3km
s-rH:	-17	67	0-2km
s-rH:	0	42	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.0	15.0	
Threat:	6.7	7.0	
Point:	7.0	7.2	°C
1000 - 500 mb:	5486	5485	m
1000 - 700 mb:	2909	2911	m
1000 - 850 mb:	1343	1346	m
850 - 500 mb:	4143	4139	m
850 - 700 mb:	1565	1565	m
700 - 500 mb:	2577	2575	m
600 - 400 mb:	2998	2994	m

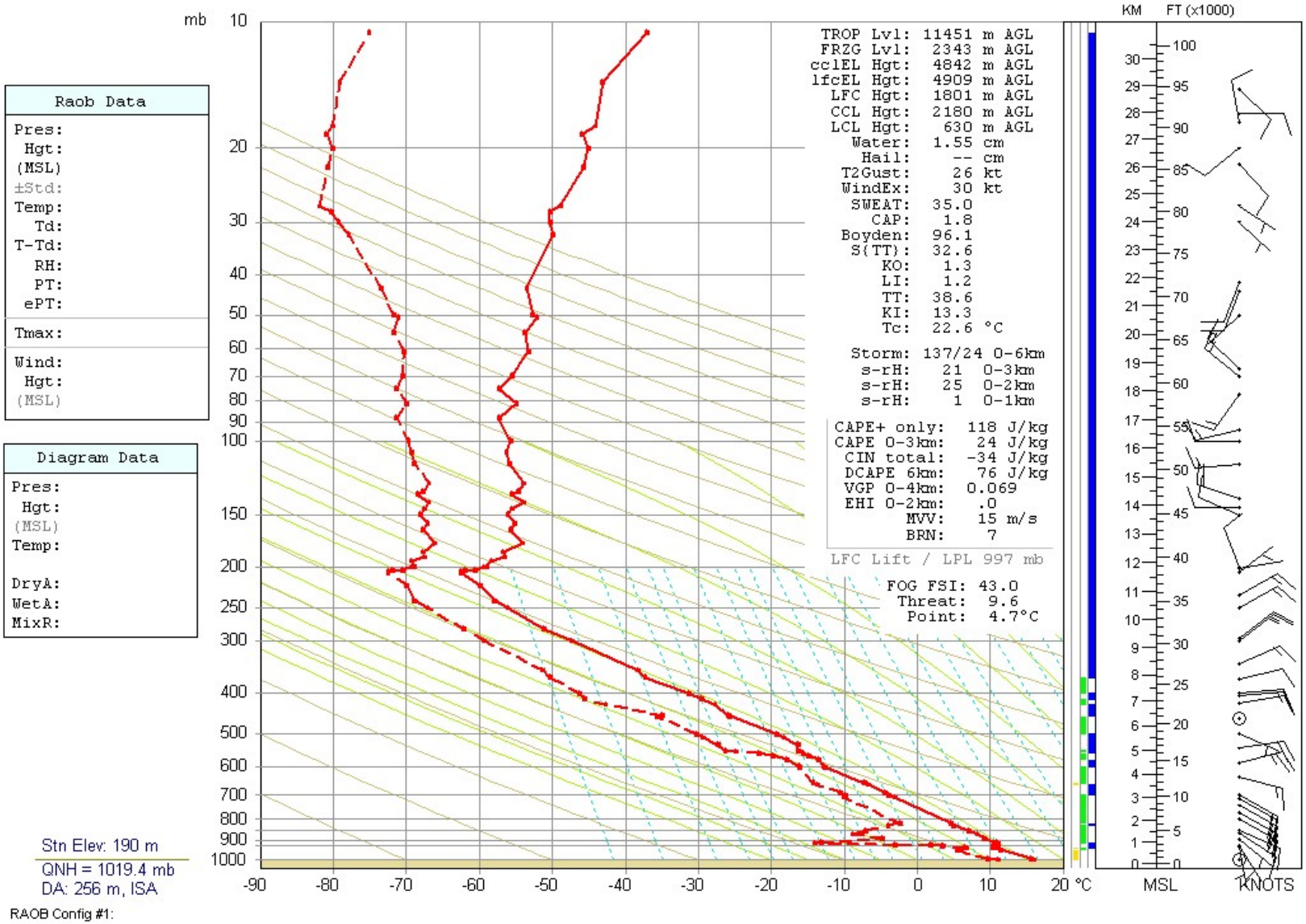


Test #49 - System Test II – 12UTC on 05/31/2005
RWS Version 1.0.4.0

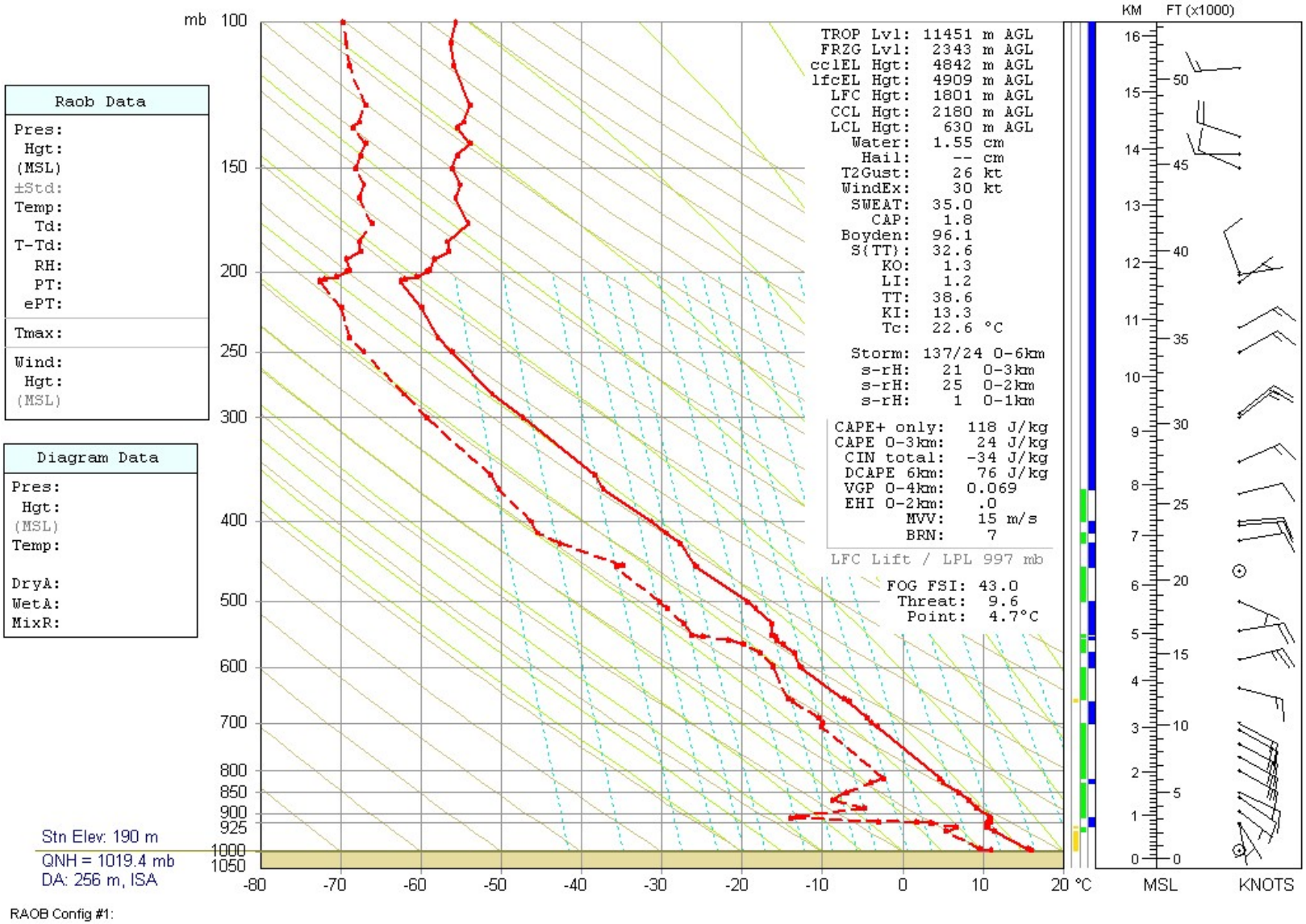
	#1	#2	
TROP Lvl:	11519	11466	m AGL
FRZG Lvl:	2390	2375	m AGL
cclEL Hgt:	4006	3848	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	1099	1208	m AGL
LCL Hgt:	0	0	m AGL
Water:	1.77	1.71	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	35.0	40.0	
CAP:	--	--	
Boyden:	94.4	94.8	
S{TT}:	33.4	36.0	
KO:	9.6	8.3	
LI:	10.8	9.9	
TT:	38.4	41.0	
KI:	13.7	15.7	
Tc:	17.5	17.9	°C
Storm:	133/26	155/19	0-6km
s-rH:	6	71	0-3km
s-rH:	-17	67	0-2km
s-rH:	0	42	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	14.0	15.0	
Threat:	6.7	7.0	
Point:	7.0	7.2	°C
1000 - 500 mb:	5486	5485	m
1000 - 700 mb:	2909	2911	m
1000 - 850 mb:	1343	1346	m
850 - 500 mb:	4143	4139	m
850 - 700 mb:	1565	1565	m
700 - 500 mb:	2577	2575	m
600 - 400 mb:	2998	2994	m



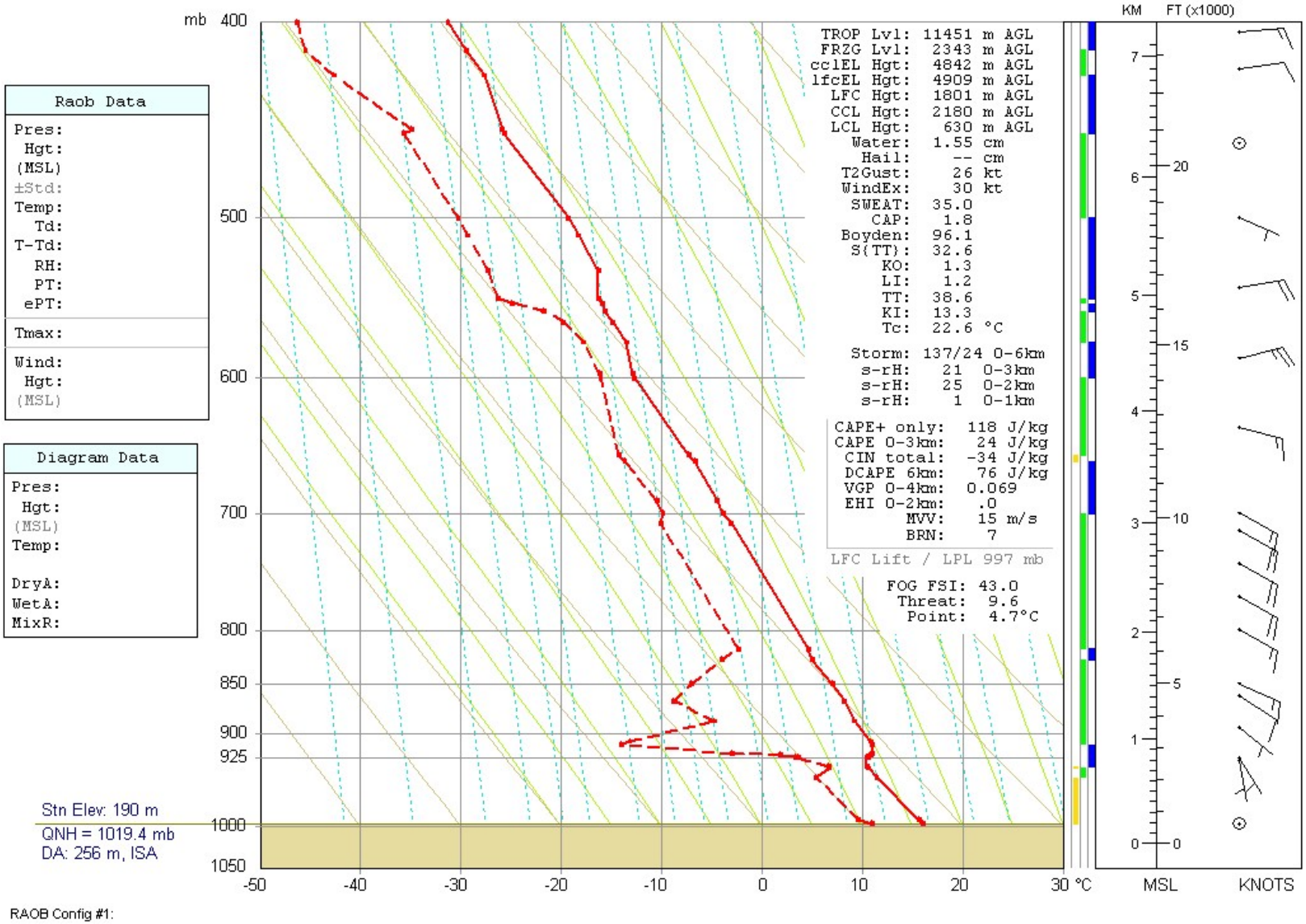
Test #50 System Test II – 15 UTC on 05/31/2005
RWS Version 1.0.4.0



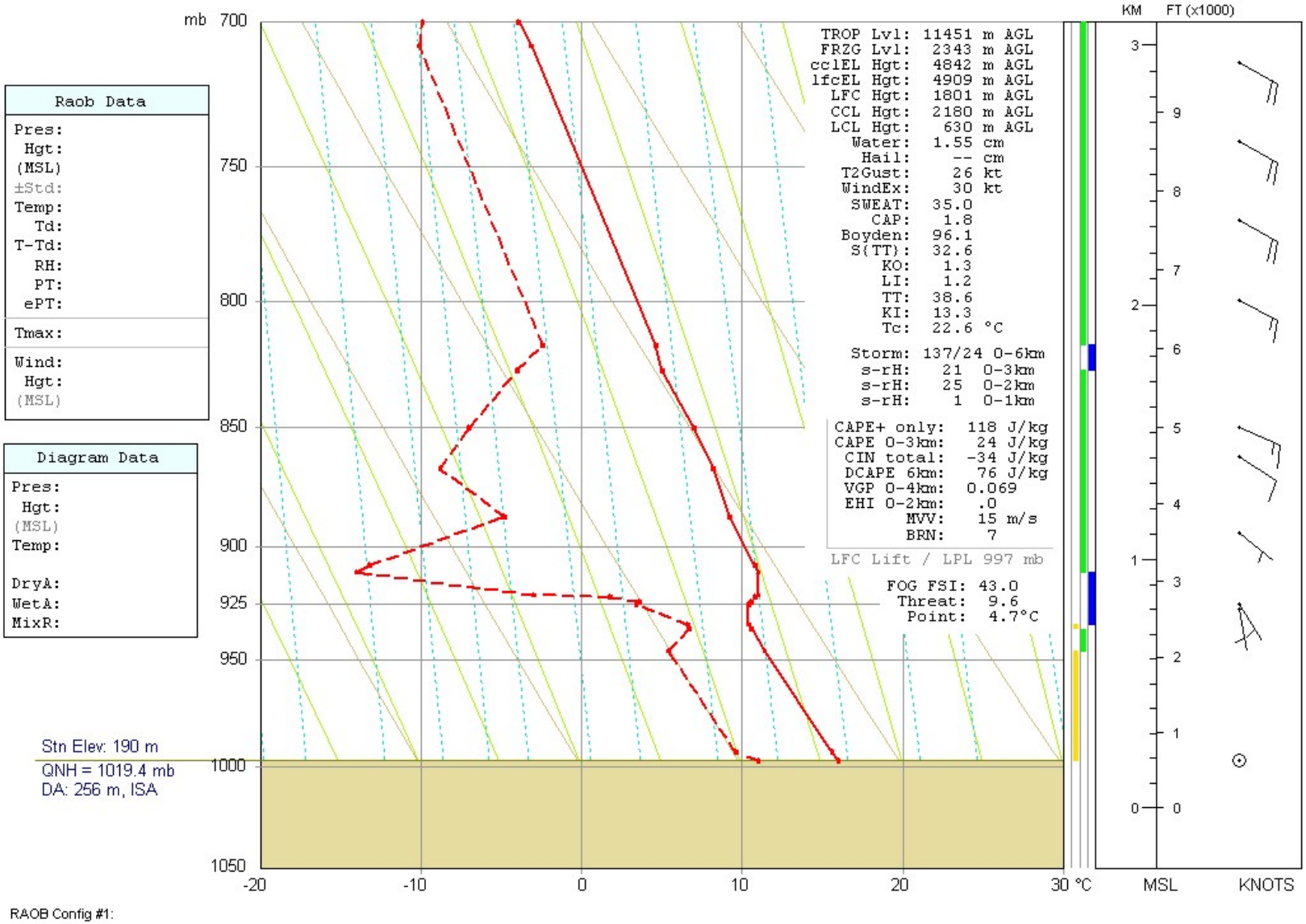
Test #50 System Test II – 15 UTC on 05/31/2005
RWS Version 1.0.4.0



Test #50 System Test II – 15 UTC on 05/31/2005
RWS Version 1.0.4.0

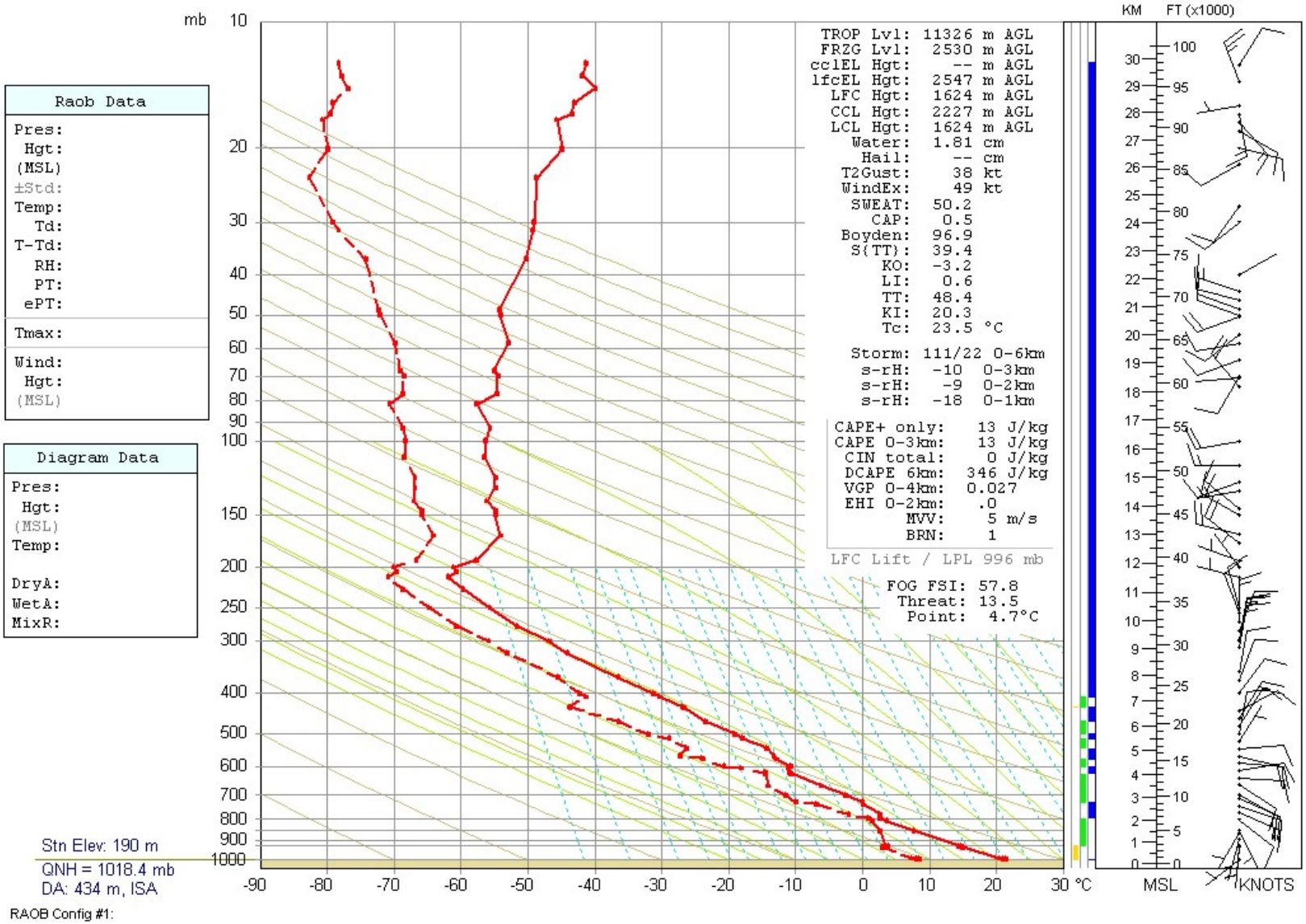


Test #50 System Test II – 15 UTC on 05/31/2005
RWS Version 1.0.4.0

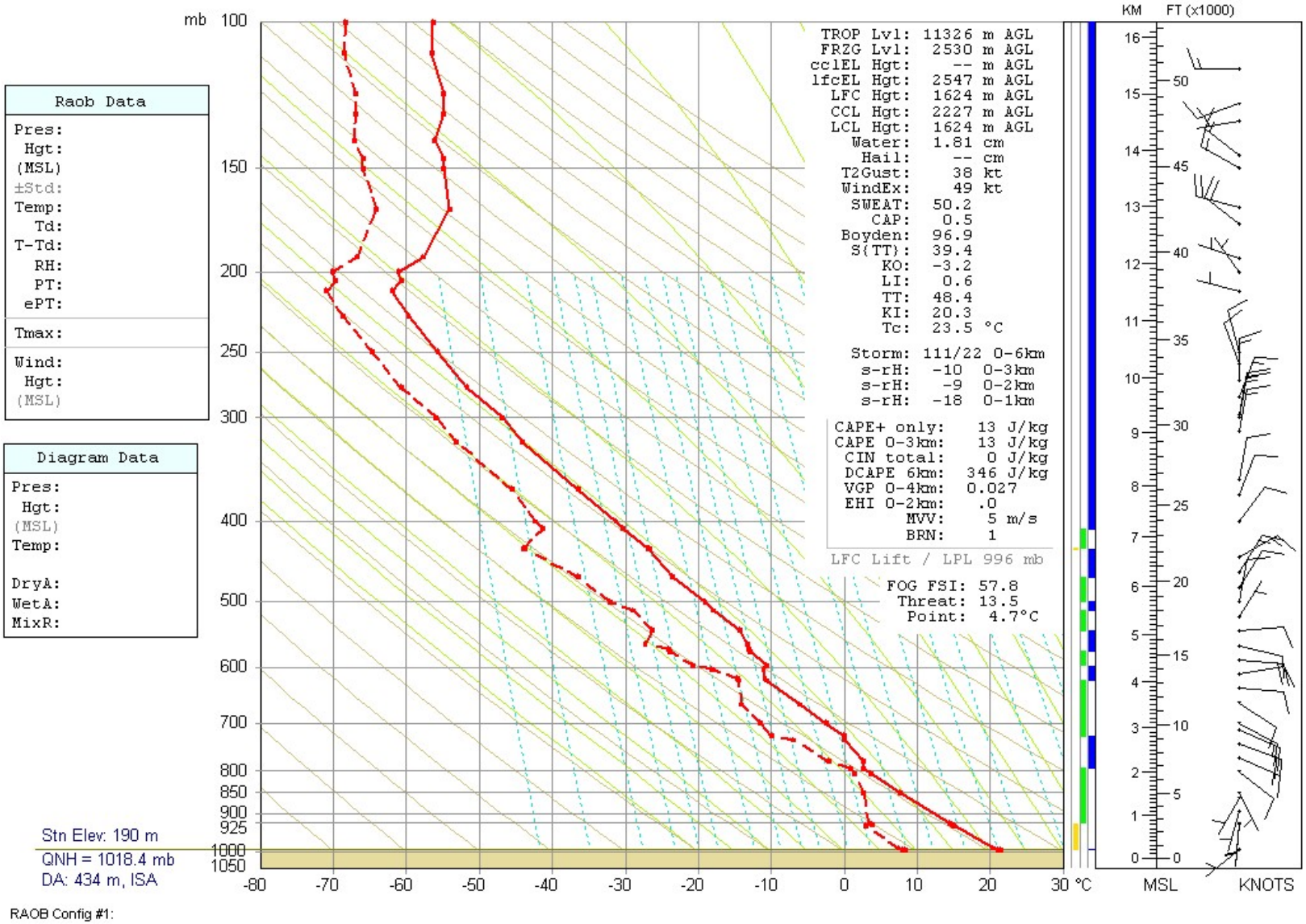


RAOB Config #1:

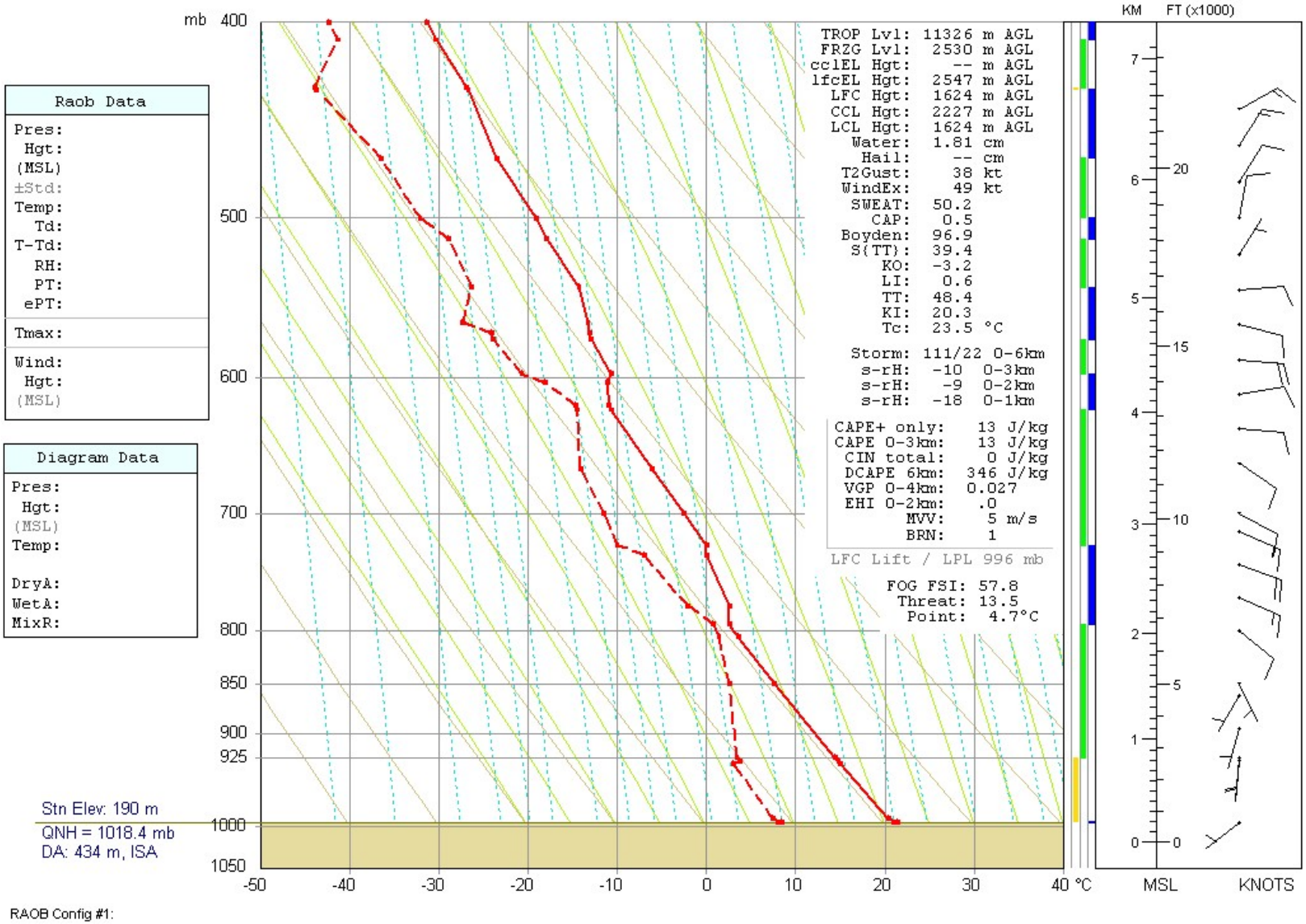
Test #51 System Test II – 20 UTC on 05/31/2005
RWS Version 1.0.4.0



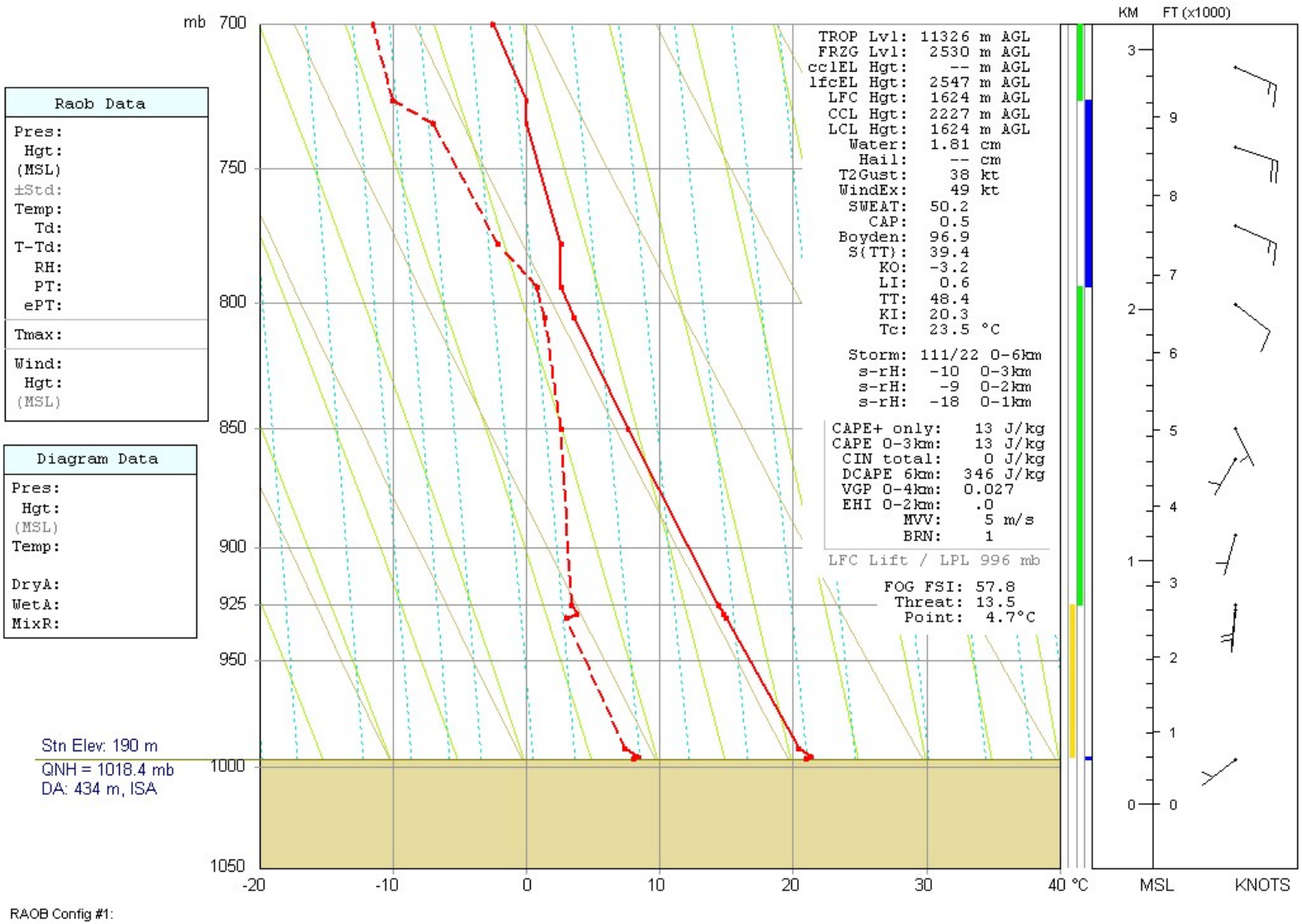
Test #51 System Test II – 20 UTC on 05/31/2005
RWS Version 1.0.4.0



Test #51 System Test II – 20 UTC on 05/31/2005
RWS Version 1.0.4.0



Test #51 System Test II – 20 UTC on 05/31/2005
RWS Version 1.0.4.0



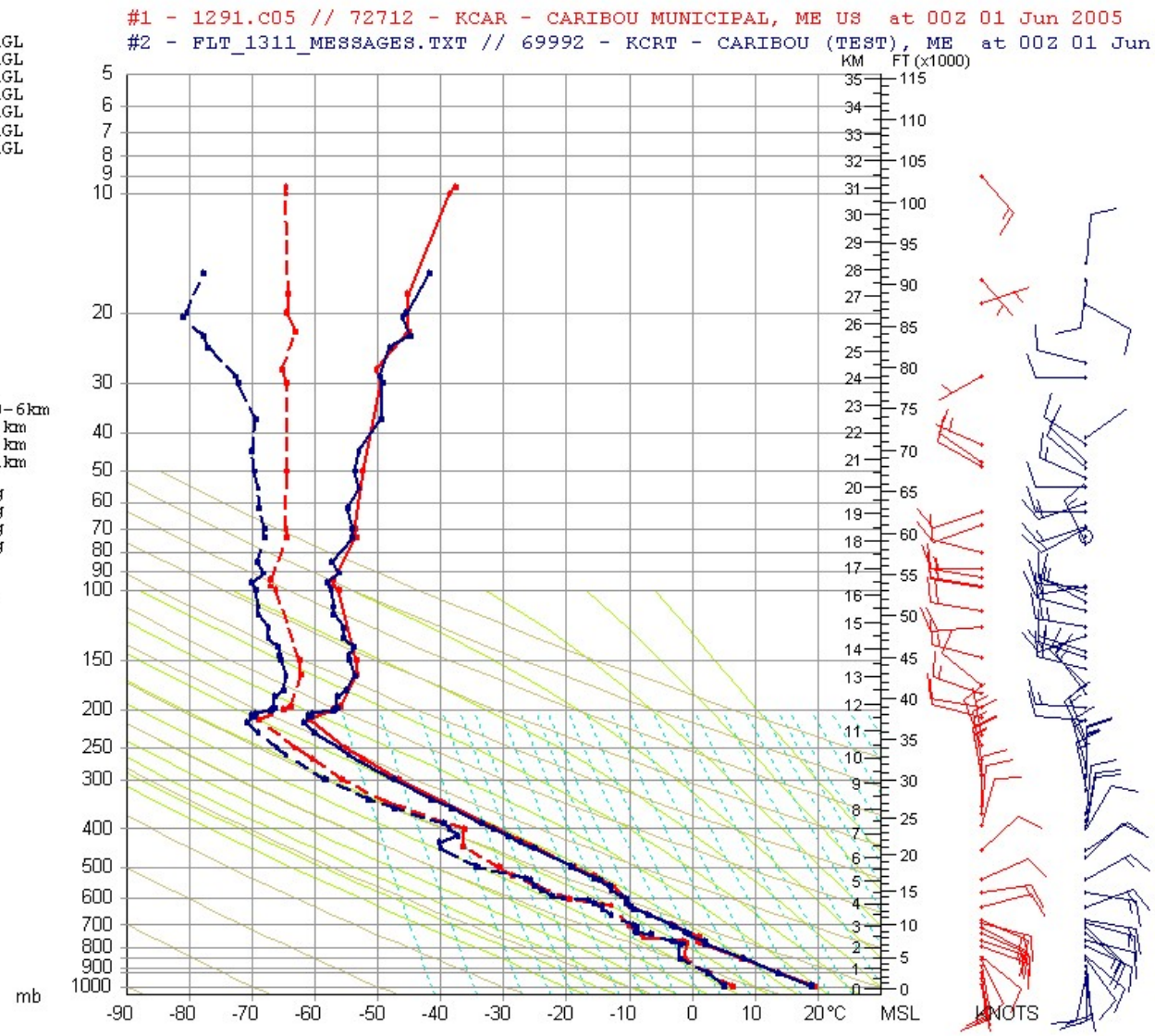
Test #52 - System Test II – 00UTC on 06/01/2005
RWS Version 1.0.4.0

TEST # 52			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11312	11207	105
Freezing Level (m AGL)	2507	2425	82
LFC Height (m AGL)	2501	NC	NC
CCL Height (m AGL)	2442	2432	10
LCL Height (m AGL)	1626	1751	-125
Precipitable Water (cm)	1.74	1.66	0.08
Thickness 1000 - 500 mb (m)	5525	5520	5
Thickness 1000 - 700 mb (m)	2939	2939	0
Thickness 1000 - 850 mb (m)	1370	1369	1
Thickness 850 - 500 mb (m)	4155	4151	4
Thickness 850 - 700 mb (m)	1569	1569	0
Thickness 700 - 500 mb (m)	2587	2583	4
Thickness 600 - 400 mb (m)	3009	3002	7
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

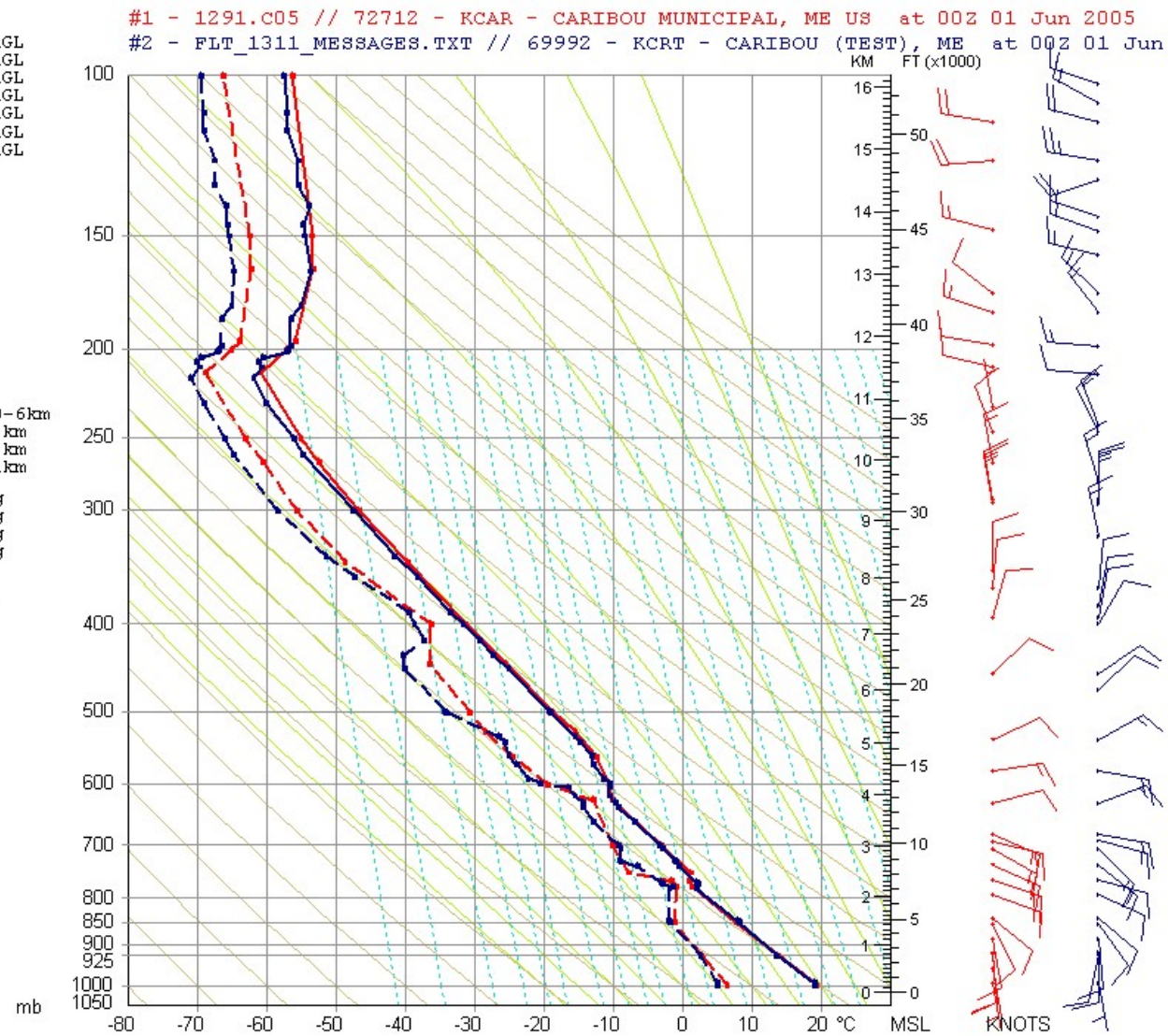
Test #52 - System Test II – 00UTC on 06/01/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11312	11207	m AGL
FRZG Lvl:	2507	2425	m AGL
cclEL Hgt:	4290	2545	m AGL
lfcEL Hgt:	3867	--	m AGL
LFC Hgt:	3501	--	m AGL
CCL Hgt:	2442	2432	m AGL
LCL Hgt:	1626	1751	m AGL
Water:	1.74	1.66	cm
Hail:	--	--	cm
T2Gust:	33	32	kt
WindEx:	43	43	kt
SWEAT:	35.0	31.0	
CAP:	1.8	--	
Boyden:	97.0	97.1	
S{TT}:	37.0	38.6	
KO:	1.0	1.8	
LI:	3.3	4.2	
TT:	44.0	44.6	
KI:	18.3	19.5	
Tc:	24.5	23.8	°C
Storm:	109/24	111/24	0-6km
s-rH:	-2	10	0-3km
s-rH:	-5	4	0-2km
s-rH:	-23	-20	0-1km
CAPE+ only:	3	--	J/kg
CAPE 0-3km:	0	--	J/kg
CIN total:	-102	--	J/kg
DCAPE 6km:	218	--	J/kg
VGP 0-4km:	0.008	--	
EHI 0-2km:	--	--	
MVV:	2	--	m/s
BRN:	0	--	
FOG FSI:	61.2	59.6	
Threat:	14.7	15.5	
Point:	1.9	1.1°C	
1000 - 500 mb:	5525	5520	m
1000 - 700 mb:	2939	2938	m
1000 - 850 mb:	1370	1369	m
850 - 500 mb:	4155	4151	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2587	2583	m
600 - 400 mb:	3009	3002	m



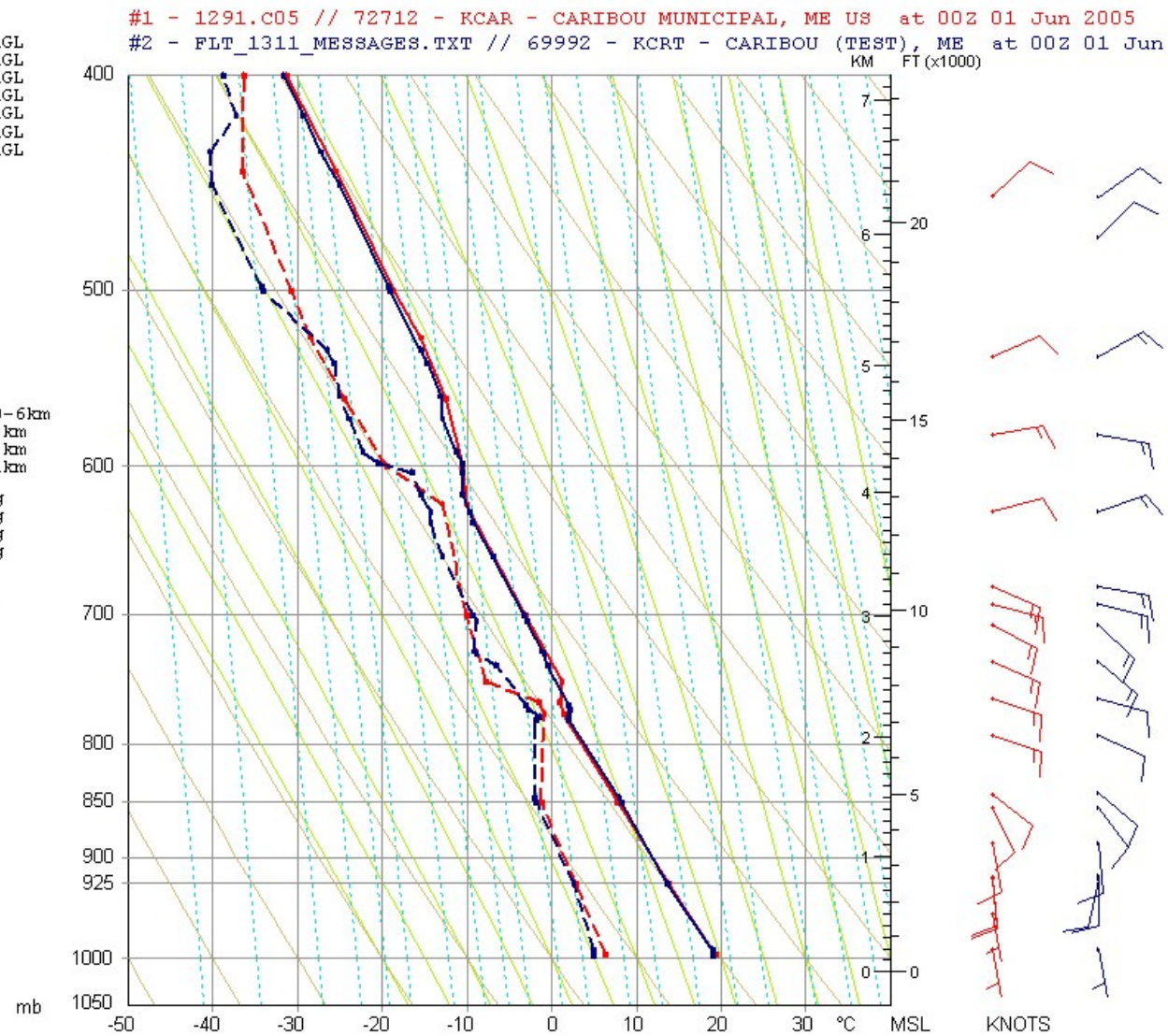
Test #52 - System Test II – 00UTC on 06/01/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11312	11207	m AGL
FRZG Lvl:	2507	2425	m AGL
cclEL Hgt:	4290	2545	m AGL
lfcEL Hgt:	3867	--	m AGL
LFC Hgt:	3501	--	m AGL
CCL Hgt:	2442	2432	m AGL
LCL Hgt:	1626	1751	m AGL
Water:	1.74	1.66	cm
Hail:	--	--	cm
T2Gust:	33	32	kt
WindEx:	43	43	kt
SWEAT:	35.0	31.0	
CAP:	1.8	--	
Boyden:	97.0	97.1	
S{TT}:	37.0	38.6	
KO:	1.0	1.8	
LI:	3.3	4.2	
TT:	44.0	44.6	
KI:	18.3	19.5	
Tc:	24.5	23.8	°C
Storm:	109/24	111/24	0-6km
s-rH:	-2	10	0-3km
s-rH:	-5	4	0-2km
s-rH:	-23	-20	0-1km
CAPE+ only:	3	--	J/kg
CAPE 0-3km:	0	--	J/kg
CIN total:	-102	--	J/kg
DCAPE 6km:	218	--	J/kg
VGP 0-4km:	0.008	--	
EHI 0-2km:	--	--	
MVV:	2	--	m/s
BRN:	0	--	
FOG FSI:	61.2	59.6	
Threat:	14.7	15.5	
Point:	1.9	1.1°C	
1000 - 500 mb:	5525	5520	m
1000 - 700 mb:	2939	2938	m
1000 - 850 mb:	1370	1369	m
850 - 500 mb:	4155	4151	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2587	2583	m
600 - 400 mb:	3009	3002	m



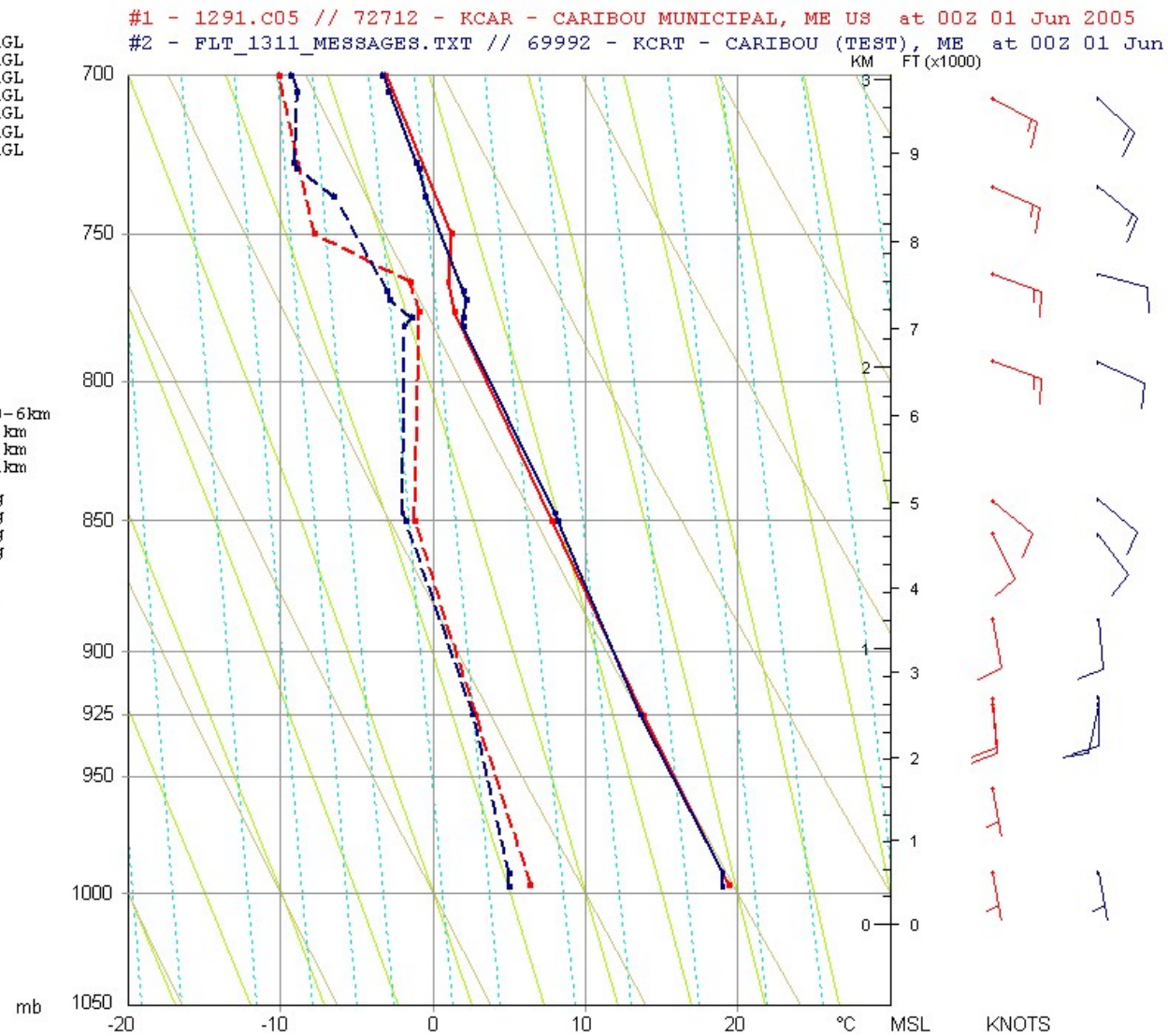
Test #52 - System Test II – 00UTC on 06/01/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11312	11207	m AGL
FRZG Lvl:	2507	2425	m AGL
cclEL Hgt:	4290	2545	m AGL
lfcEL Hgt:	3867	--	m AGL
LFC Hgt:	3501	--	m AGL
CCL Hgt:	2442	2432	m AGL
LCL Hgt:	1626	1751	m AGL
Water:	1.74	1.66	cm
Hail:	--	--	cm
T2Gust:	33	32	kt
WindEx:	43	43	kt
SWEAT:	35.0	31.0	
CAP:	1.8	--	
Boyden:	97.0	97.1	
S{TT}:	37.0	38.6	
KO:	1.0	1.8	
LI:	3.3	4.2	
TT:	44.0	44.6	
KI:	18.3	19.5	
Tc:	24.5	23.8	°C
Storm:	109/24	111/24	0-6km
s-rH:	-2	10	0-3km
s-rH:	-5	4	0-2km
s-rH:	-23	-20	0-1km
CAPE+ only:	3	--	J/kg
CAPE 0-3km:	0	--	J/kg
CIN total:	-102	--	J/kg
DCAPE 6km:	218	--	J/kg
VGP 0-4km:	0.008	--	
EHI 0-2km:	--	--	
MVV:	2	--	m/s
BRN:	0	--	
FOG FSI:	61.2	59.6	
Threat:	14.7	15.5	
Point:	1.9	1.1°C	
1000 - 500 mb:	5525	5520	m
1000 - 700 mb:	2939	2938	m
1000 - 850 mb:	1370	1369	m
850 - 500 mb:	4155	4151	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2587	2583	m
600 - 400 mb:	3009	3002	m



Test #52 - System Test II – 00UTC on 06/01/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11312	11207	m AGL
FRZG Lvl:	2507	2425	m AGL
cclEL Hgt:	4290	2545	m AGL
lfcEL Hgt:	3867	--	m AGL
LFC Hgt:	3501	--	m AGL
CCL Hgt:	2442	2432	m AGL
LCL Hgt:	1626	1751	m AGL
Water:	1.74	1.66	cm
Hail:	--	--	cm
T2Gust:	33	32	kt
WindEx:	43	43	kt
SWEAT:	35.0	31.0	
CAP:	1.8	--	
Boyden:	97.0	97.1	
S{TT}:	37.0	38.6	
KO:	1.0	1.8	
LI:	3.3	4.2	
TT:	44.0	44.6	
KI:	18.3	19.5	
Tc:	24.5	23.8	°C
Storm:	109/24	111/24	0-6km
s-rH:	-2	10	0-3km
s-rH:	-5	4	0-2km
s-rH:	-23	-20	0-1km
CAPE+ only:	3	--	J/kg
CAPE 0-3km:	0	--	J/kg
CIN total:	-102	--	J/kg
DCAPE 6km:	218	--	J/kg
VGP 0-4km:	0.008	--	
EHI 0-2km:	--	--	
MVV:	2	--	m/s
BRN:	0	--	
FOG FSI:	61.2	59.6	
Threat:	14.7	15.5	
Point:	1.9	1.1°C	
1000 - 500 mb:	5525	5520	m
1000 - 700 mb:	2939	2938	m
1000 - 850 mb:	1370	1369	m
850 - 500 mb:	4155	4151	m
850 - 700 mb:	1569	1569	m
700 - 500 mb:	2587	2583	m
600 - 400 mb:	3009	3002	m



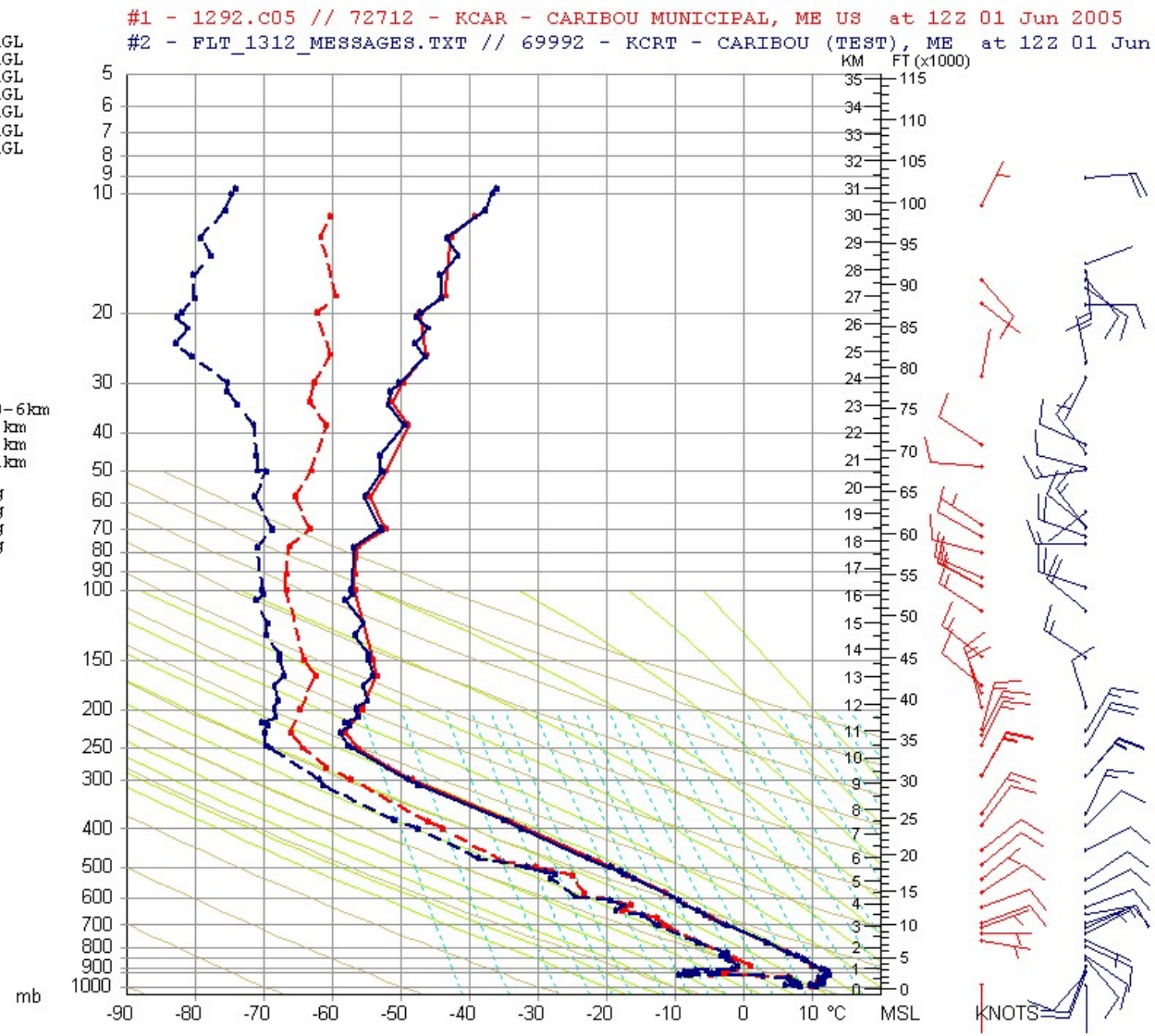
Test #53 - System Test II – 12UTC on 06/01/2005
RWS Version 1.0.4.0

TEST # 53			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	10862	10846	16
Freezing Level (m AGL)	2574	2583	-9
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	2522	2741	-219
LCL Height (m AGL)	215	291	-76
Precipitable Water (cm)	1.62	1.47	0.15
Thickness 1000 - 500 mb (m)	5517	5516	1
Thickness 1000 - 700 mb (m)	2929	2929	0
Thickness 1000 - 850 mb (m)	1355	1356	-1
Thickness 850 - 500 mb (m)	4162	4160	2
Thickness 850 - 700 mb (m)	1574	1573	1
Thickness 700 - 500 mb (m)	2588	2587	1
Thickness 600 - 400 mb (m)	3002	2997	5
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

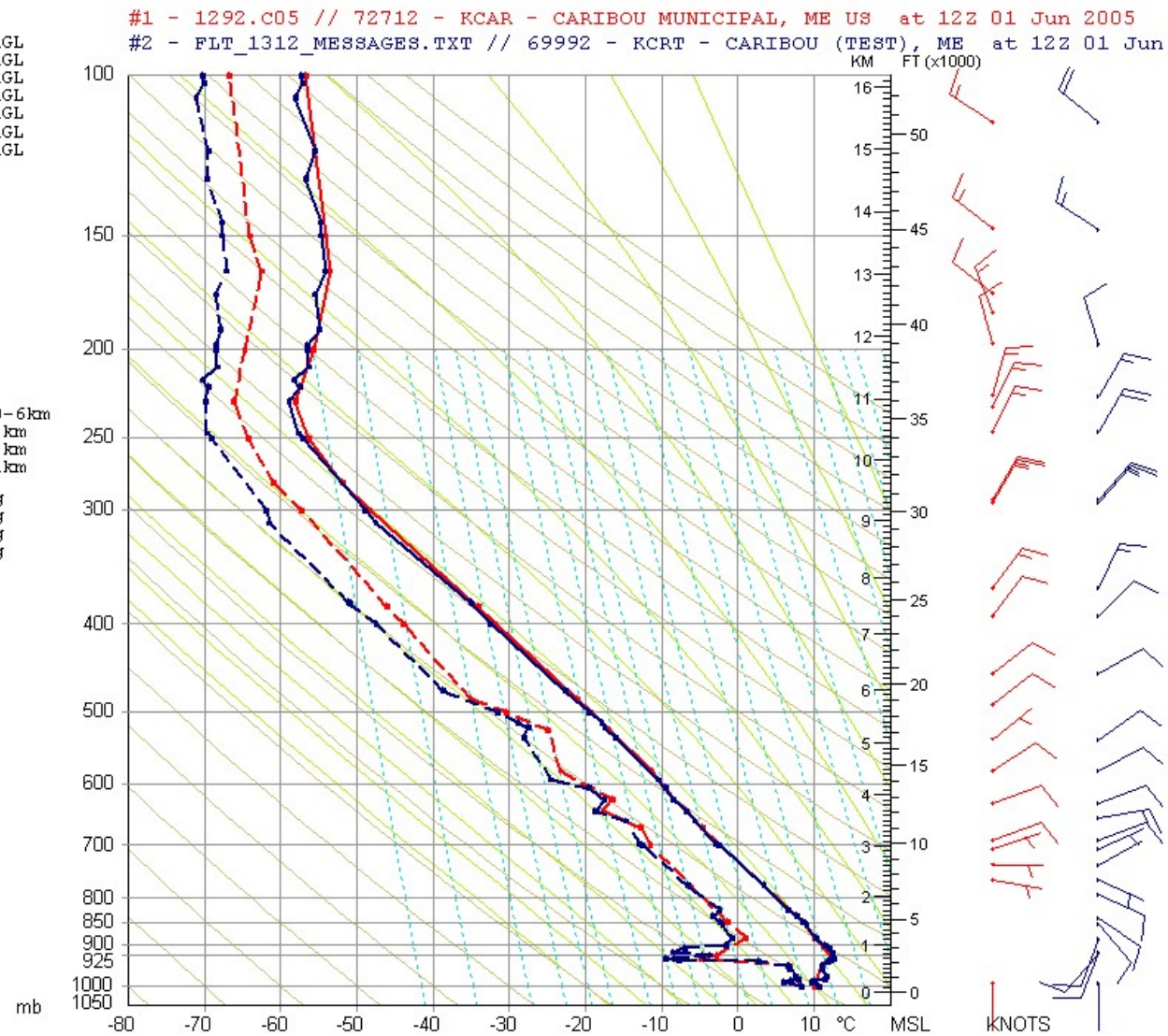
Test #53 - System Test II – 12UTC on 06/01/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10862	10846	m AGL
FRZG Lvl:	2574	2583	m AGL
cclEL Hgt:	4328	4143	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2522	2741	m AGL
LCL Hgt:	215	291	m AGL
Water:	1.62	1.47	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	13.8	27.0	
CAP:	--	--	
Boyden:	95.4	95.4	
S{TT}:	36.8	35.2	
KO:	3.9	3.5	
LI:	8.2	7.5	
TT:	45.8	45.2	
KI:	17.5	15.7	
Tc:	25.4	26.0	°C
Storm:	113/18	125/19	0-6km
s-rH:	27	-6	0-3km
s-rH:	0	-35	0-2km
s-rH:	0	-63	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	9.1	17.6	
Threat:	8.5	7.9	
Point:	8.5	8.7°C	
1000 - 500 mb:	5517	5516	m
1000 - 700 mb:	2929	2929	m
1000 - 850 mb:	1355	1356	m
850 - 500 mb:	4162	4160	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2588	2587	m
600 - 400 mb:	3002	2997	m



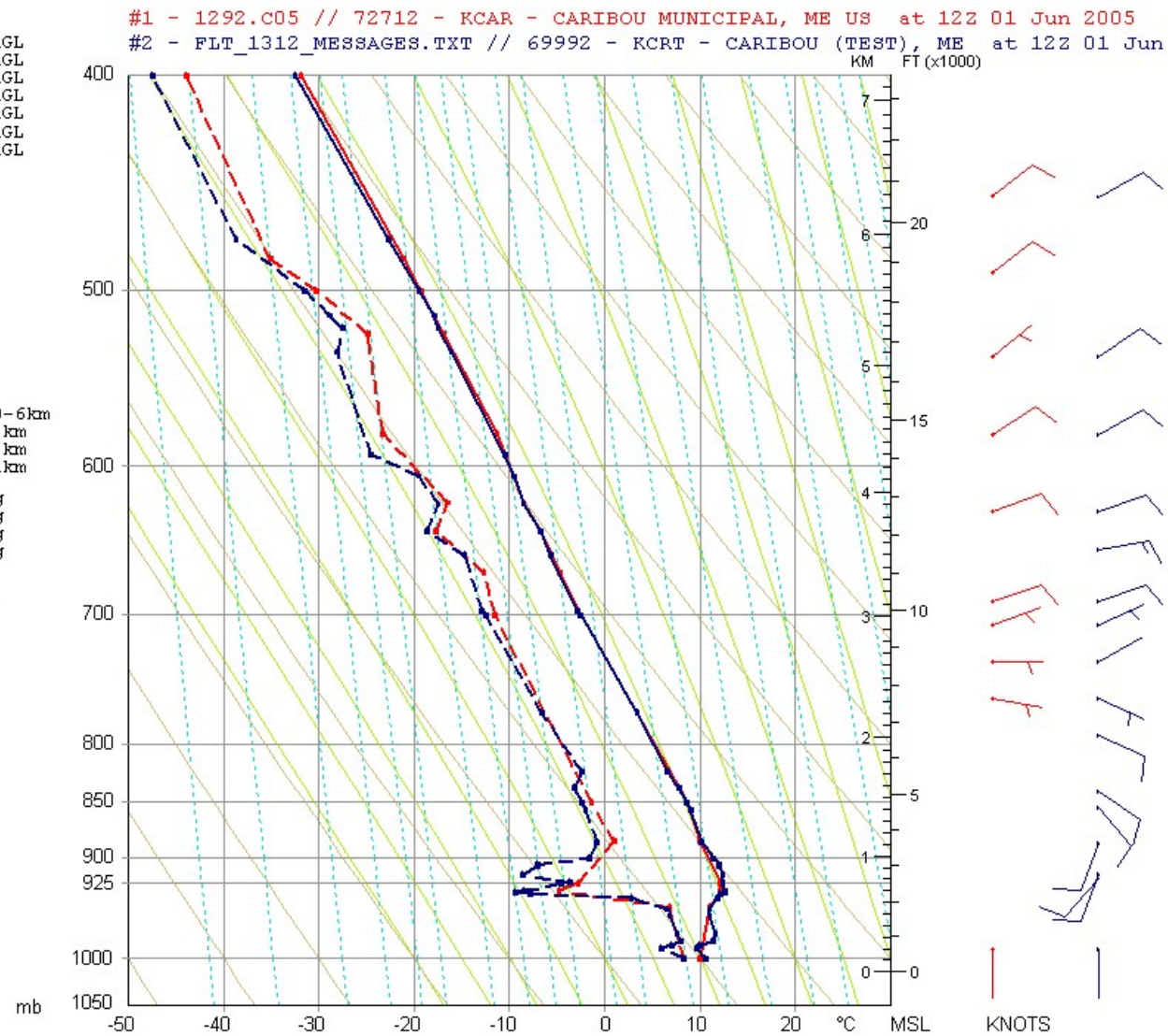
Test #53 - System Test II – 12UTC on 06/01/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10862	10846	m AGL
FRZG Lvl:	2574	2583	m AGL
cclEL Hgt:	4328	4143	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2522	2741	m AGL
LCL Hgt:	215	291	m AGL
Water:	1.62	1.47	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	13.8	27.0	
CAP:	--	--	
Boyden:	95.4	95.4	
S{TT}:	36.8	35.2	
KO:	3.9	3.5	
LI:	8.2	7.5	
TT:	45.8	45.2	
KI:	17.5	15.7	
Tc:	25.4	26.0	°C
Storm:	113/18	125/19	0-6km
s-rH:	27	-6	0-3km
s-rH:	0	-35	0-2km
s-rH:	0	-63	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	9.1	17.6	
Threat:	8.5	7.9	
Point:	8.5	8.7	°C
1000 - 500 mb:	5517	5516	m
1000 - 700 mb:	2929	2929	m
1000 - 850 mb:	1355	1356	m
850 - 500 mb:	4162	4160	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2588	2587	m
600 - 400 mb:	3002	2997	m



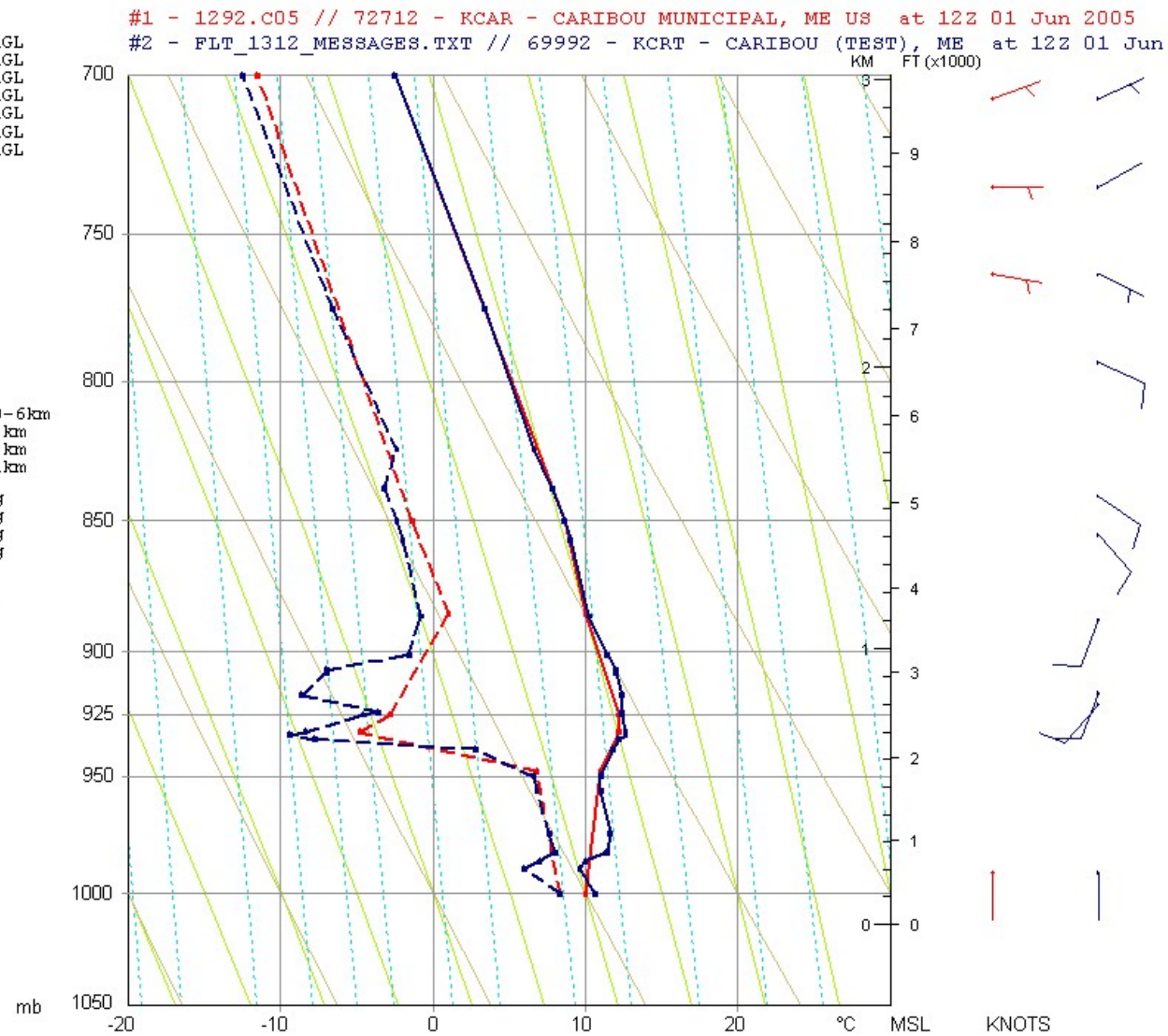
Test #53 - System Test II – 12UTC on 06/01/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	10862	10846	m AGL
FRZG Lvl:	2574	2583	m AGL
cclEL Hgt:	4328	4143	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2522	2741	m AGL
LCL Hgt:	215	291	m AGL
Water:	1.62	1.47	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	13.8	27.0	
CAP:	--	--	
Boyden:	95.4	95.4	
S{TT}:	36.8	35.2	
KO:	3.9	3.5	
LI:	8.2	7.5	
TT:	45.8	45.2	
KI:	17.5	15.7	
Tc:	25.4	26.0	°C
Storm:	113/18	125/19	0-6km
s-rH:	27	-6	0-3km
s-rH:	0	-35	0-2km
s-rH:	0	-63	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	9.1	17.6	
Threat:	8.5	7.9	
Point:	8.5	8.7°C	
1000 - 500 mb:	5517	5516	m
1000 - 700 mb:	2929	2929	m
1000 - 850 mb:	1355	1356	m
850 - 500 mb:	4162	4160	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2588	2587	m
600 - 400 mb:	3002	2997	m

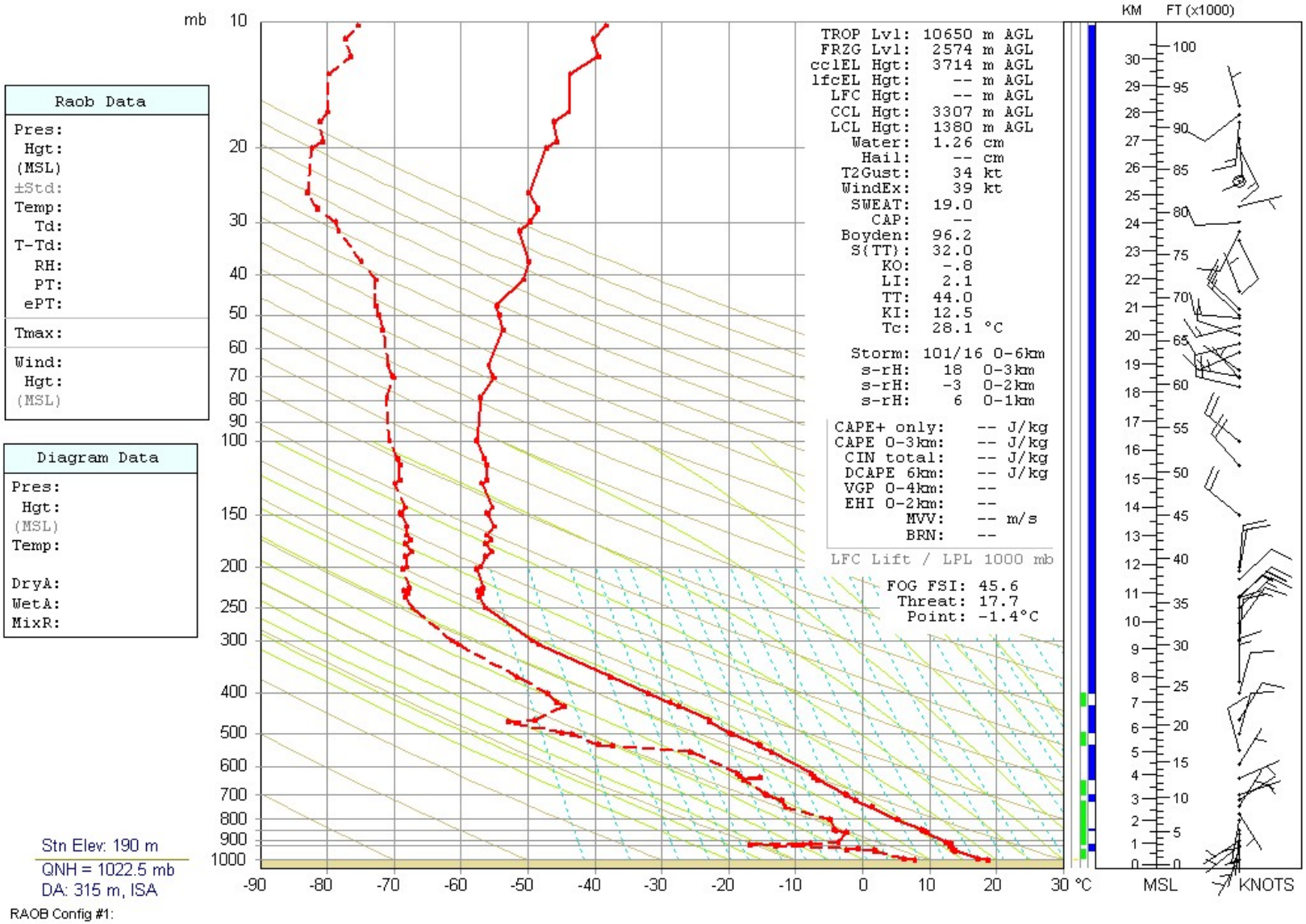


Test #53 - System Test II – 12UTC on 06/01/2005
RWS Version 1.0.4.0

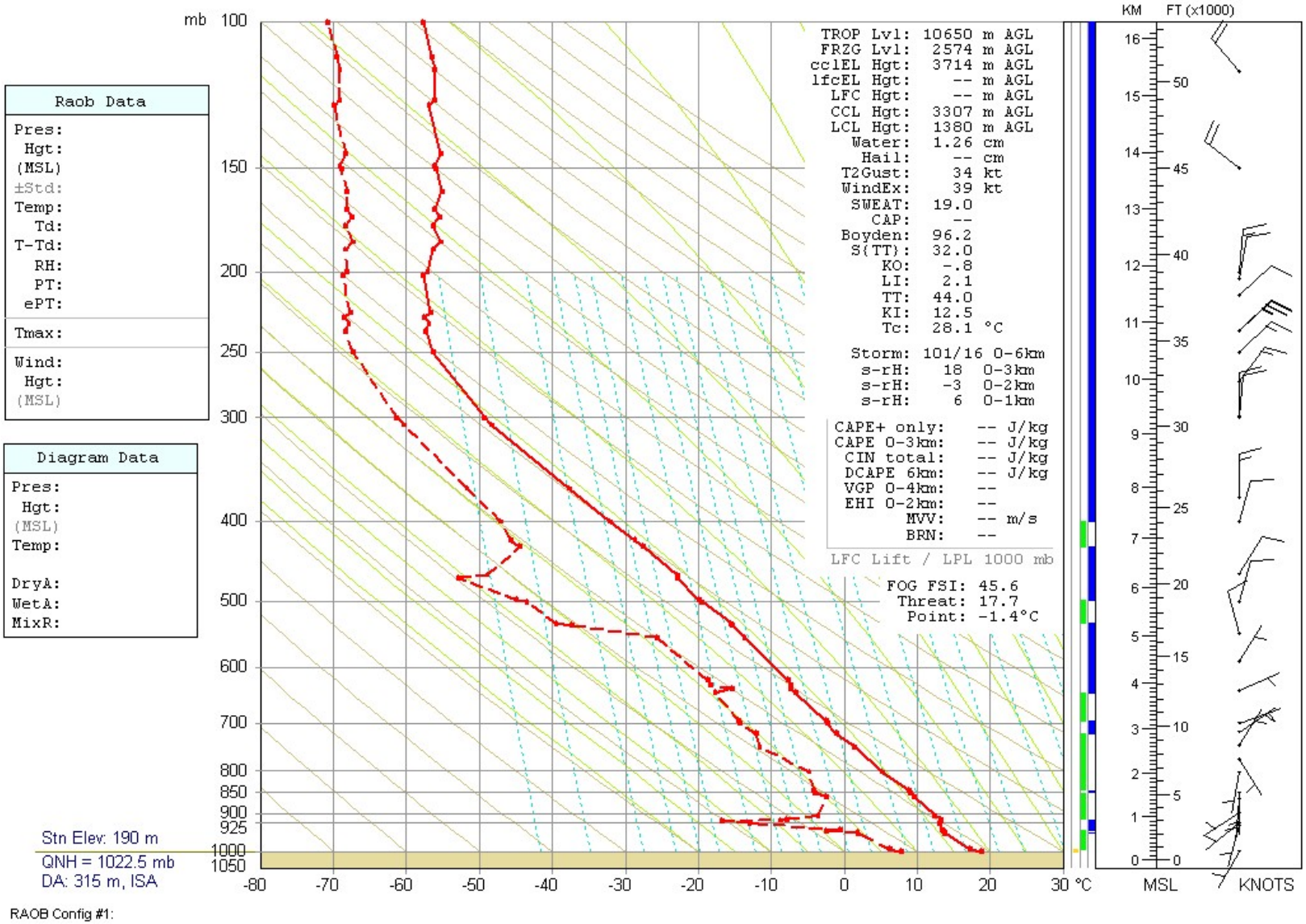
	#1	#2	
TROP Lvl:	10862	10846	m AGL
FRZG Lvl:	2574	2583	m AGL
cclEL Hgt:	4328	4143	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2522	2741	m AGL
LCL Hgt:	215	291	m AGL
Water:	1.62	1.47	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	13.8	27.0	
CAP:	--	--	
Boyden:	95.4	95.4	
S{TT}:	36.8	35.2	
KO:	3.9	3.5	
LI:	8.2	7.5	
TT:	45.8	45.2	
KI:	17.5	15.7	
Tc:	25.4	26.0	°C
Storm:	113/18	125/19	0-6km
s-rH:	27	-6	0-3km
s-rH:	0	-35	0-2km
s-rH:	0	-63	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	9.1	17.6	
Threat:	8.5	7.9	
Point:	8.5	8.7°C	
1000 - 500 mb:	5517	5516	m
1000 - 700 mb:	2929	2929	m
1000 - 850 mb:	1355	1356	m
850 - 500 mb:	4162	4160	m
850 - 700 mb:	1574	1573	m
700 - 500 mb:	2588	2587	m
600 - 400 mb:	3002	2997	m



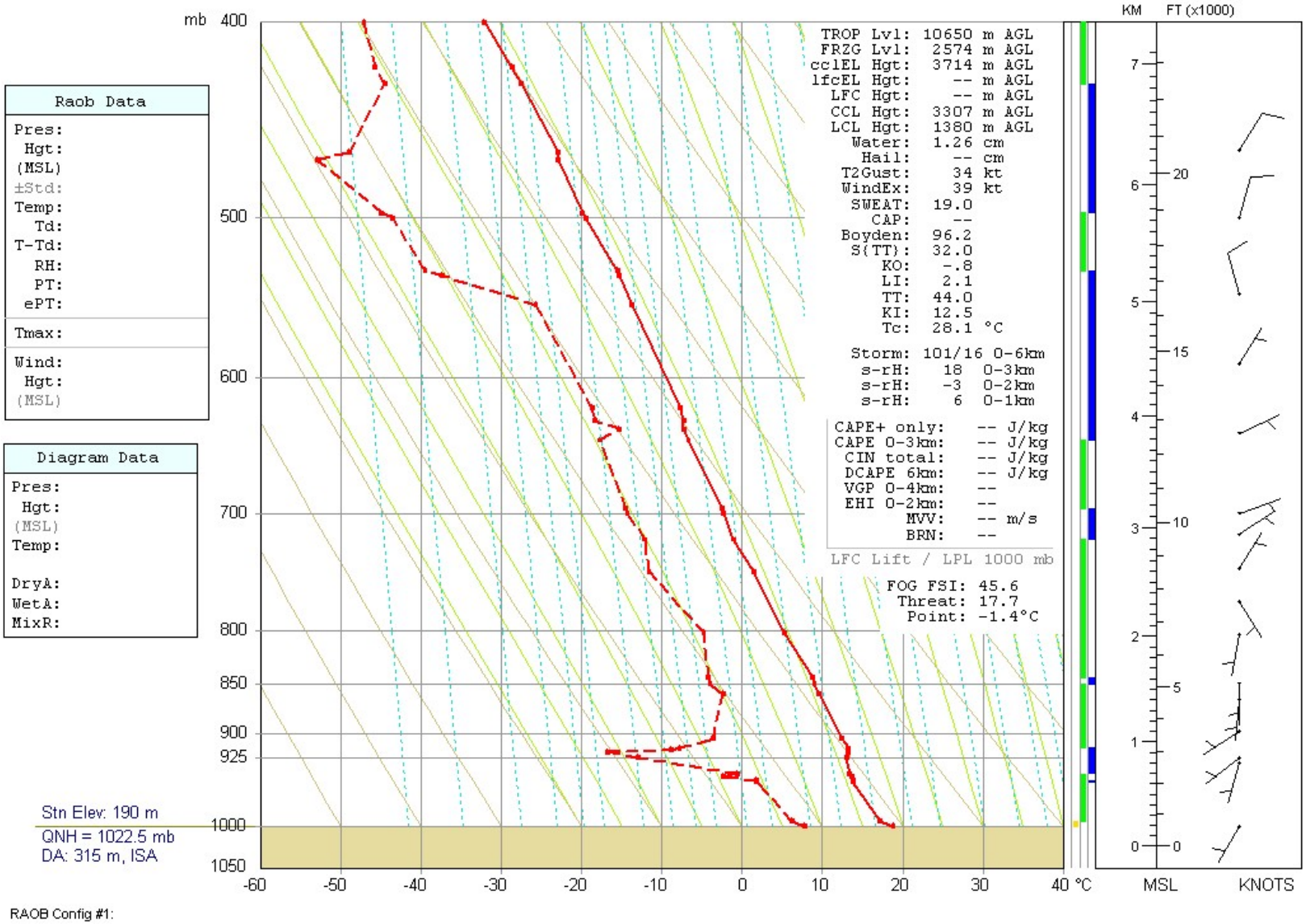
Test #54 System Test II – 15 UTC on 06/01/2005
RWS Version 1.0.4.0



Test #54 System Test II – 15 UTC on 06/01/2005
RWS Version 1.0.4.0

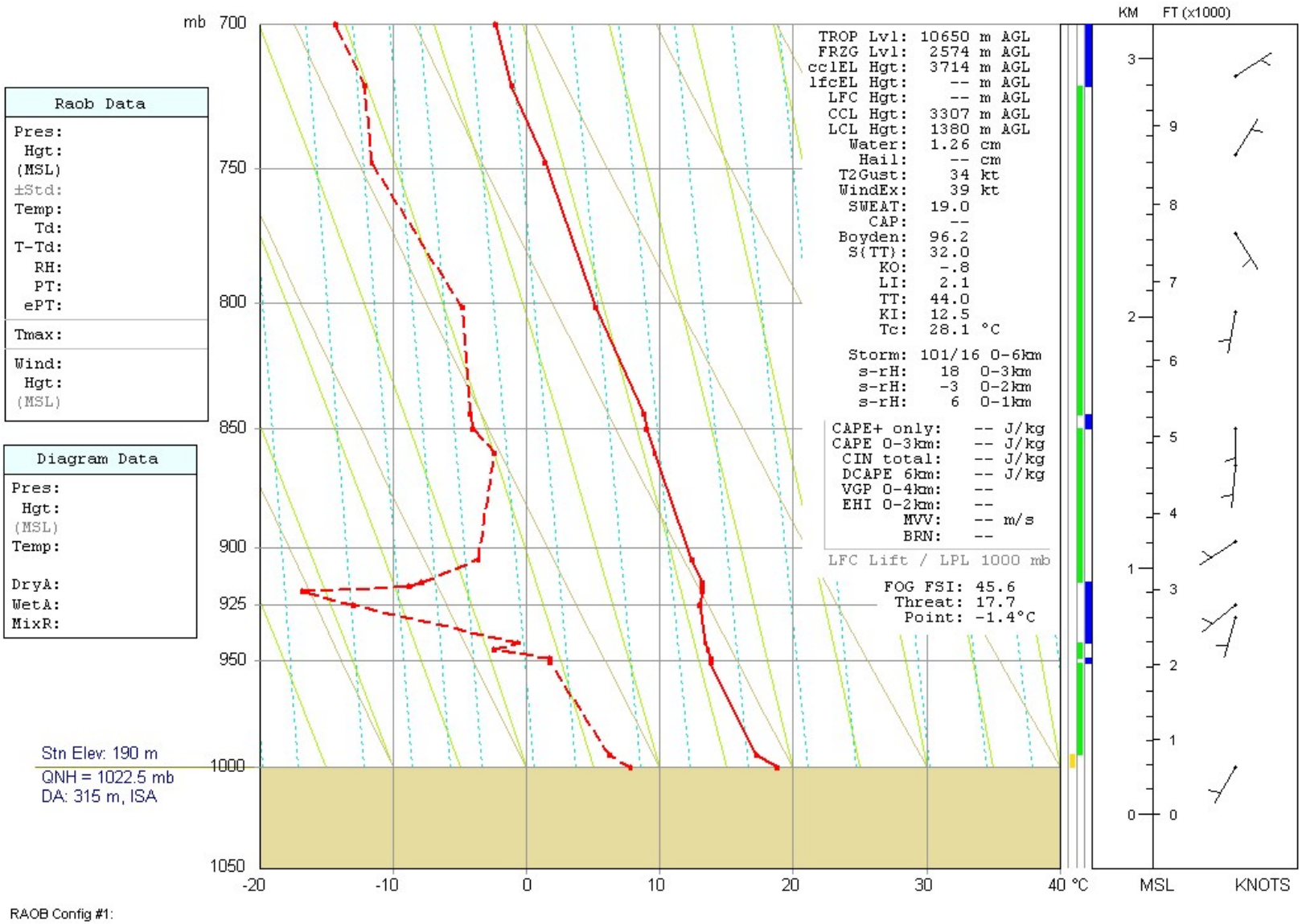


Test #54 System Test II – 15 UTC on 06/01/2005
RWS Version 1.0.4.0



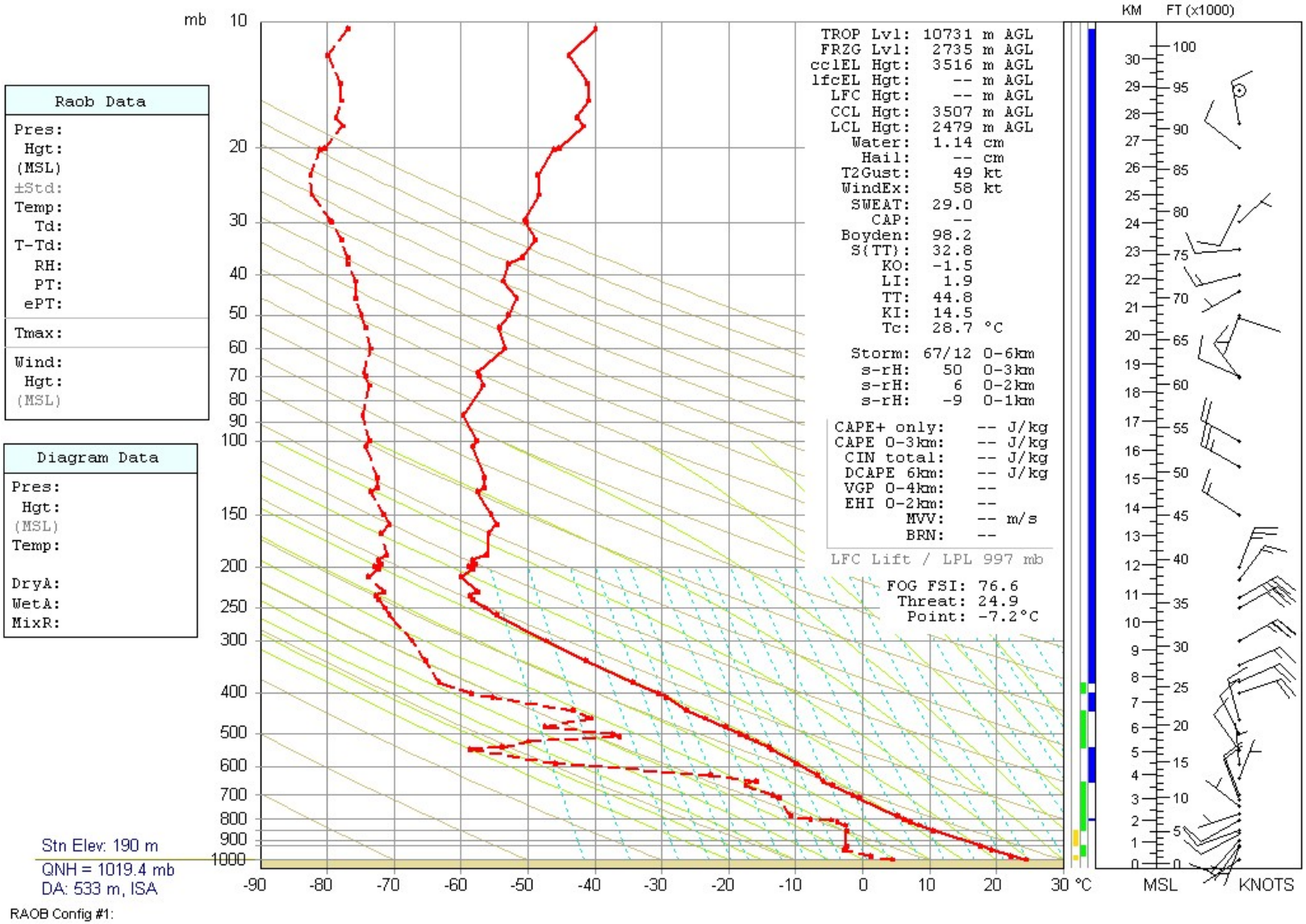
RAOB Config #1:

Test #54 System Test II – 15 UTC on 06/01/2005
RWS Version 1.0.4.0

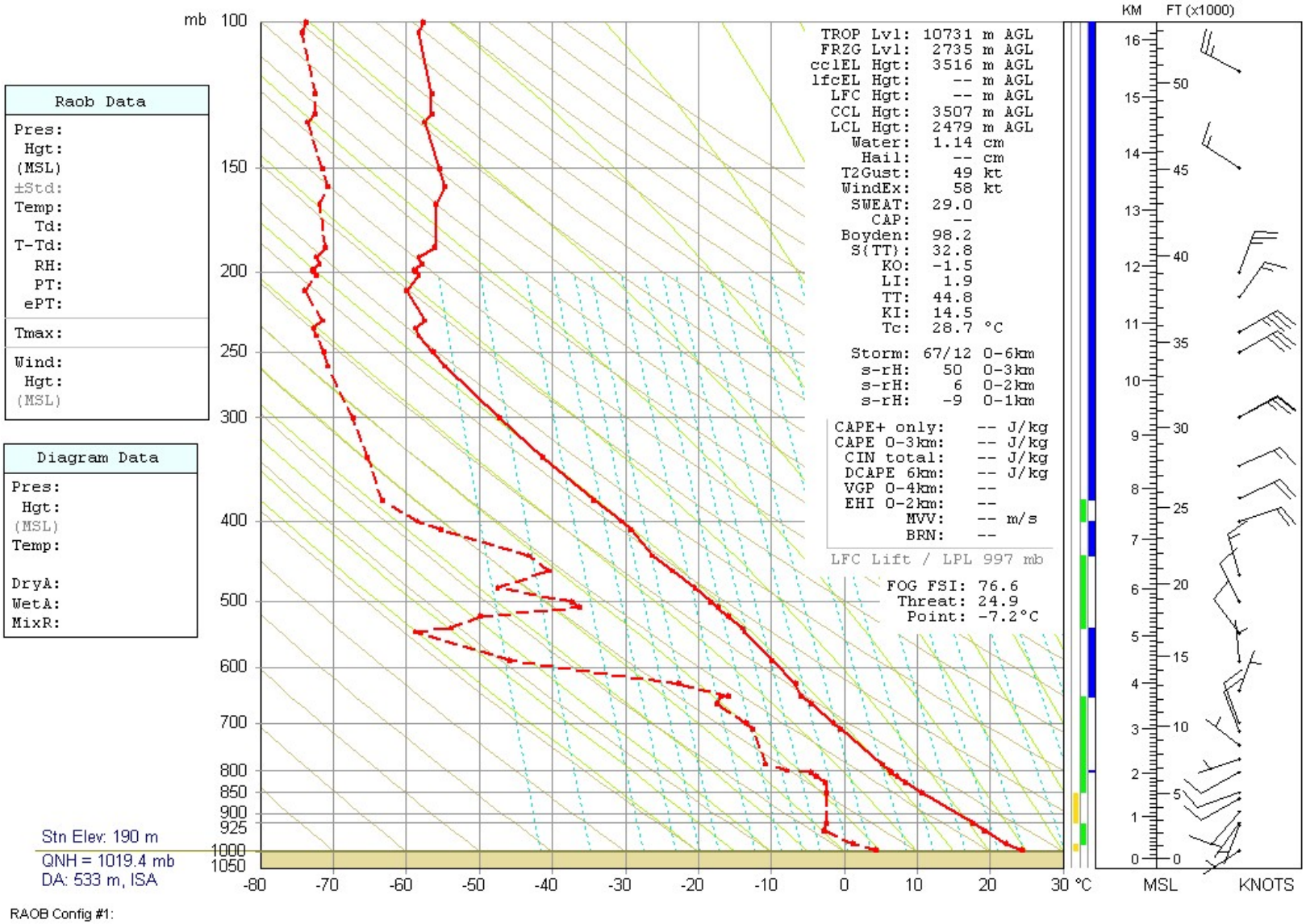


RAOB Config #1:

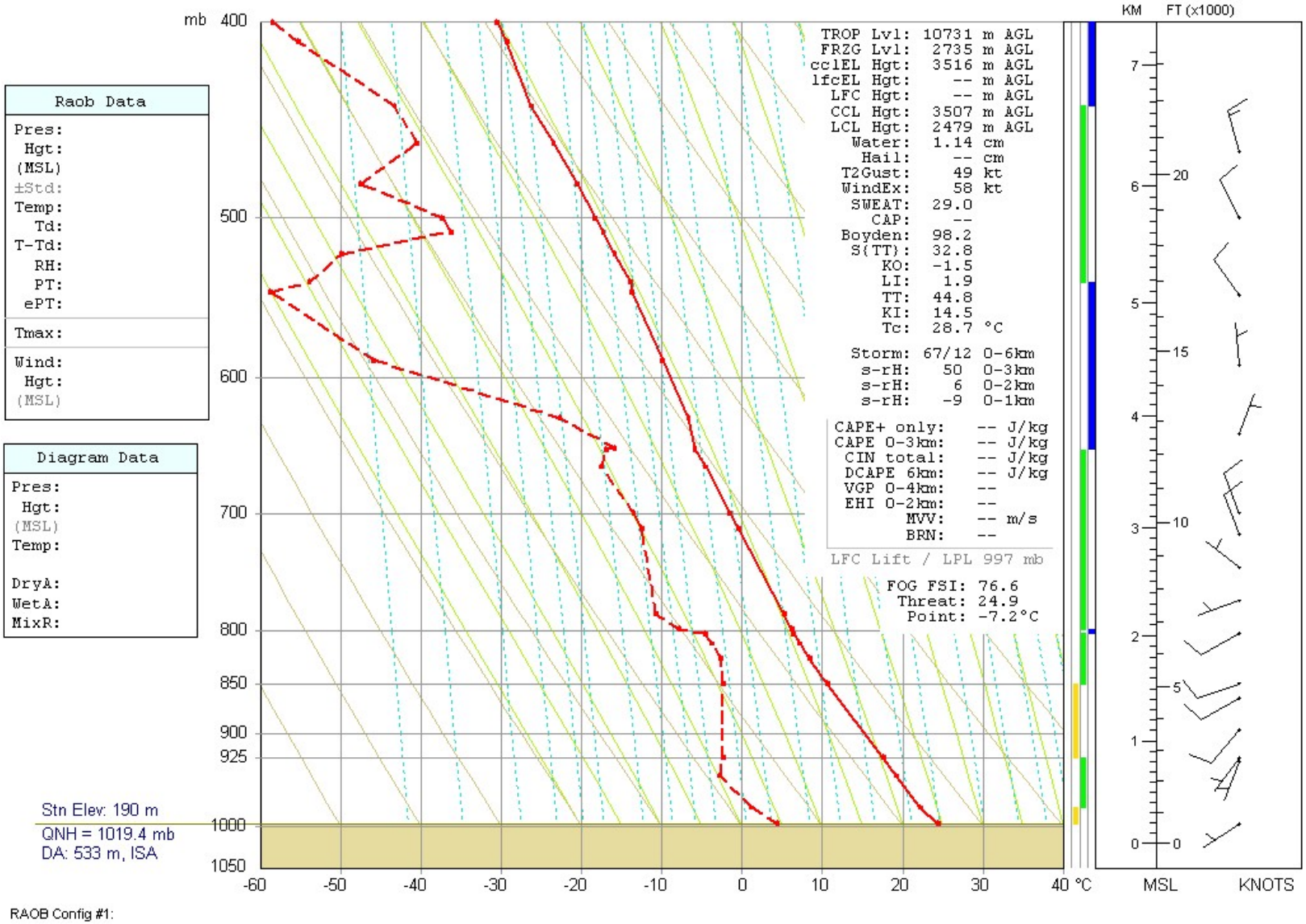
Test #55 System Test II – 20 UTC on 06/01/2005
RWS Version 1.0.4.0



Test #55 System Test II – 20 UTC on 06/01/2005
RWS Version 1.0.4.0

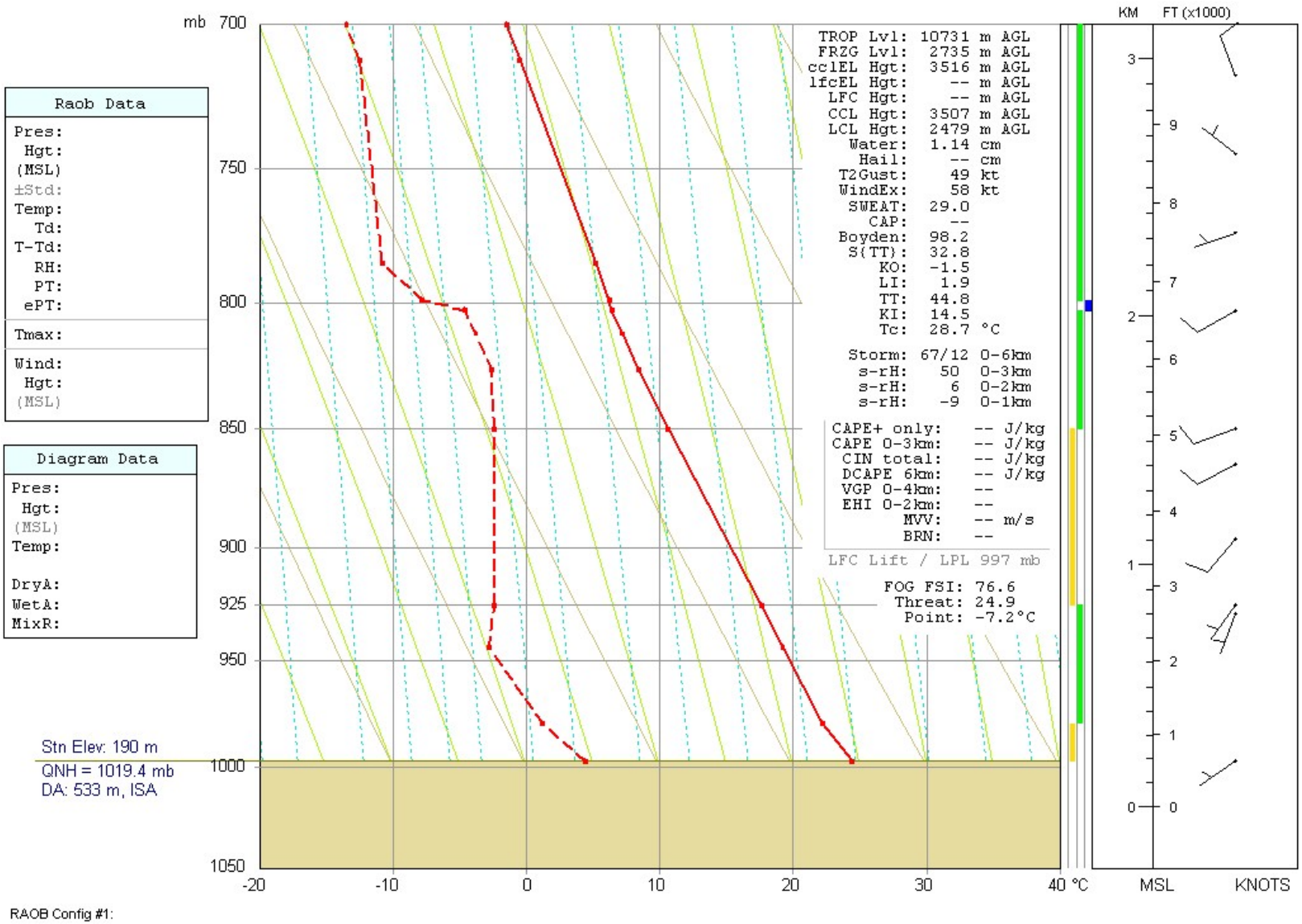


Test #55 System Test II – 20 UTC on 06/01/2005
RWS Version 1.0.4.0



RAOB Config #1:

Test #55 System Test II – 20 UTC on 06/01/2005
RWS Version 1.0.4.0



RAOB Config #1:

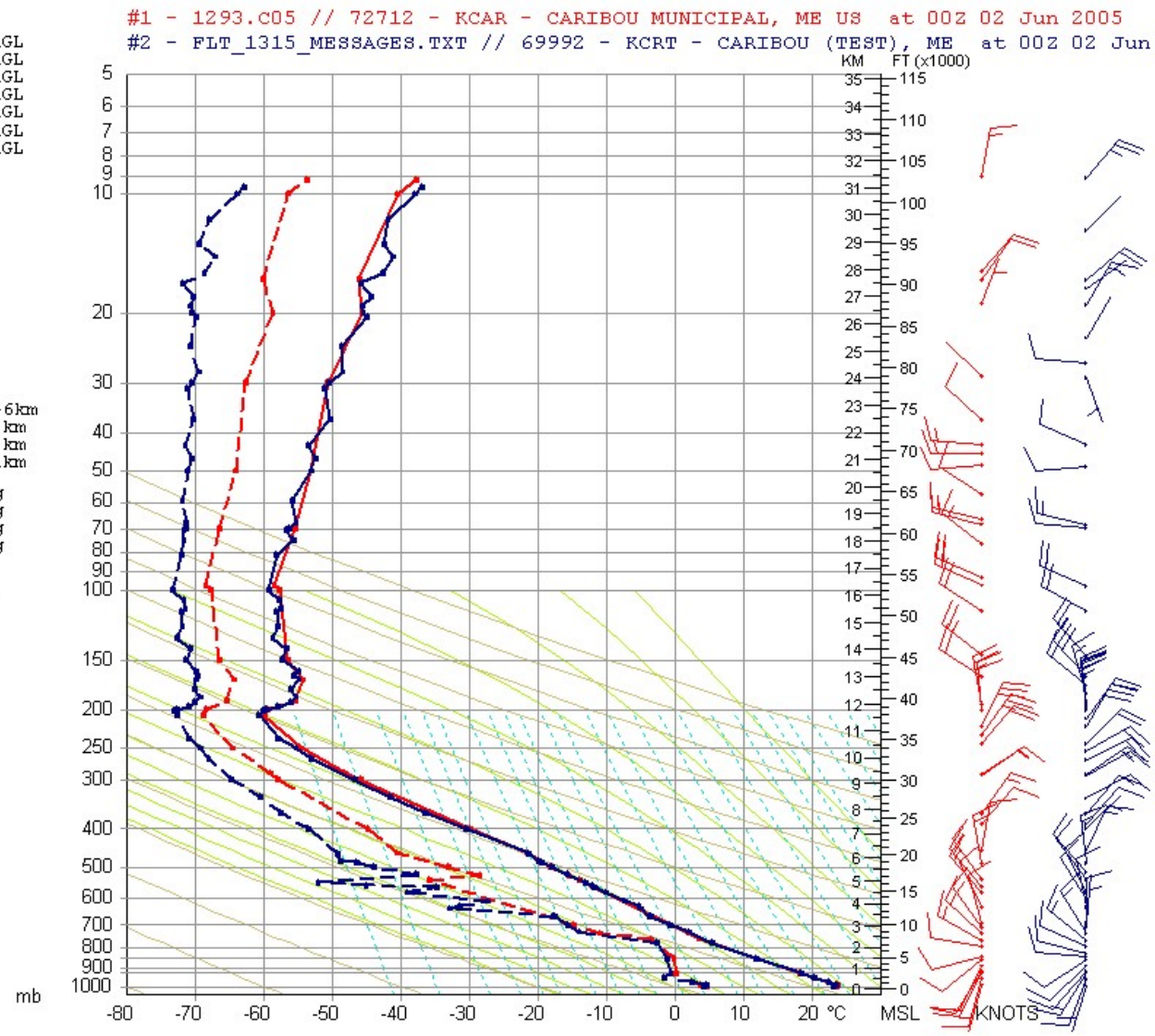
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

TEST # 56			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11550	11559	-9
Freezing Level (m AGL)	2854	2872	-18
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	3344	3682	-338
LCL Height (m AGL)	2373	2374	-1
Precipitable Water (cm)	1.47	1.28	0.19
Thickness 1000 - 500 mb (m)	5579	5582	-3
Thickness 1000 - 700 mb (m)	2977	2978	-1
Thickness 1000 - 850 mb (m)	1391	1391	0
Thickness 850 - 500 mb (m)	4189	4191	-2
Thickness 850 - 700 mb (m)	1586	1587	-1
Thickness 700 - 500 mb (m)	2602	2604	-2
Thickness 600 - 400 mb (m)	3033	3020	13
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

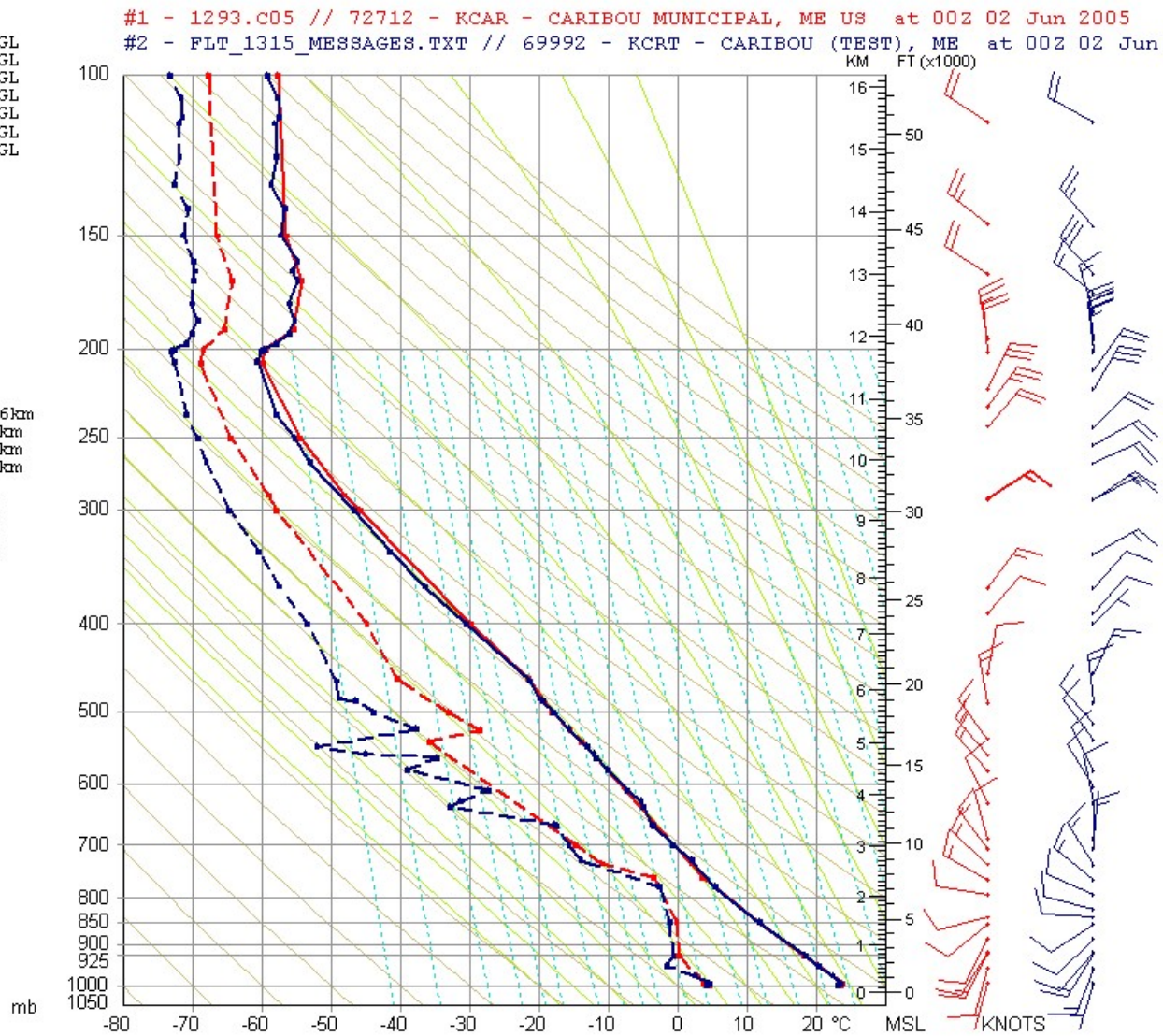
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



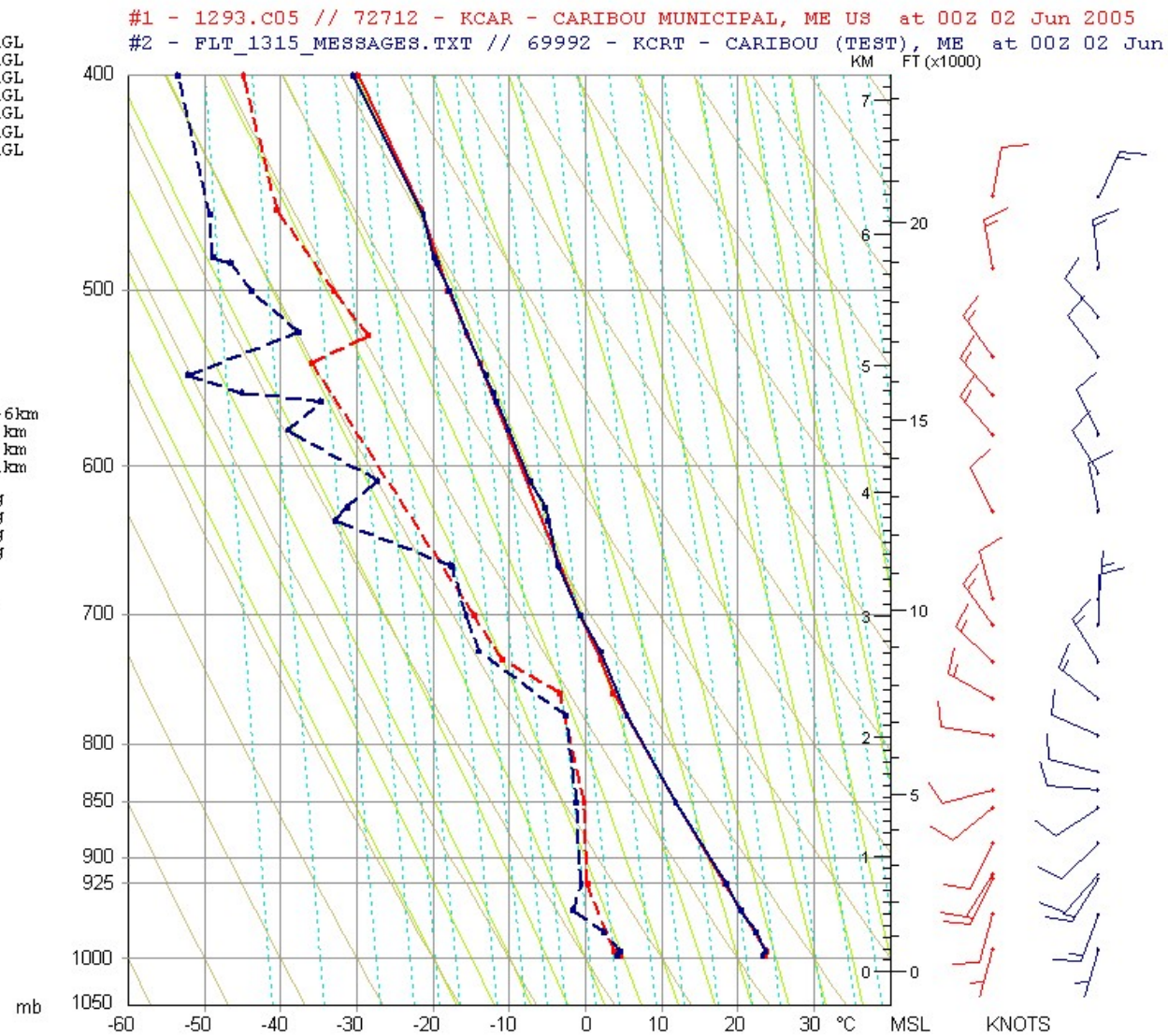
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



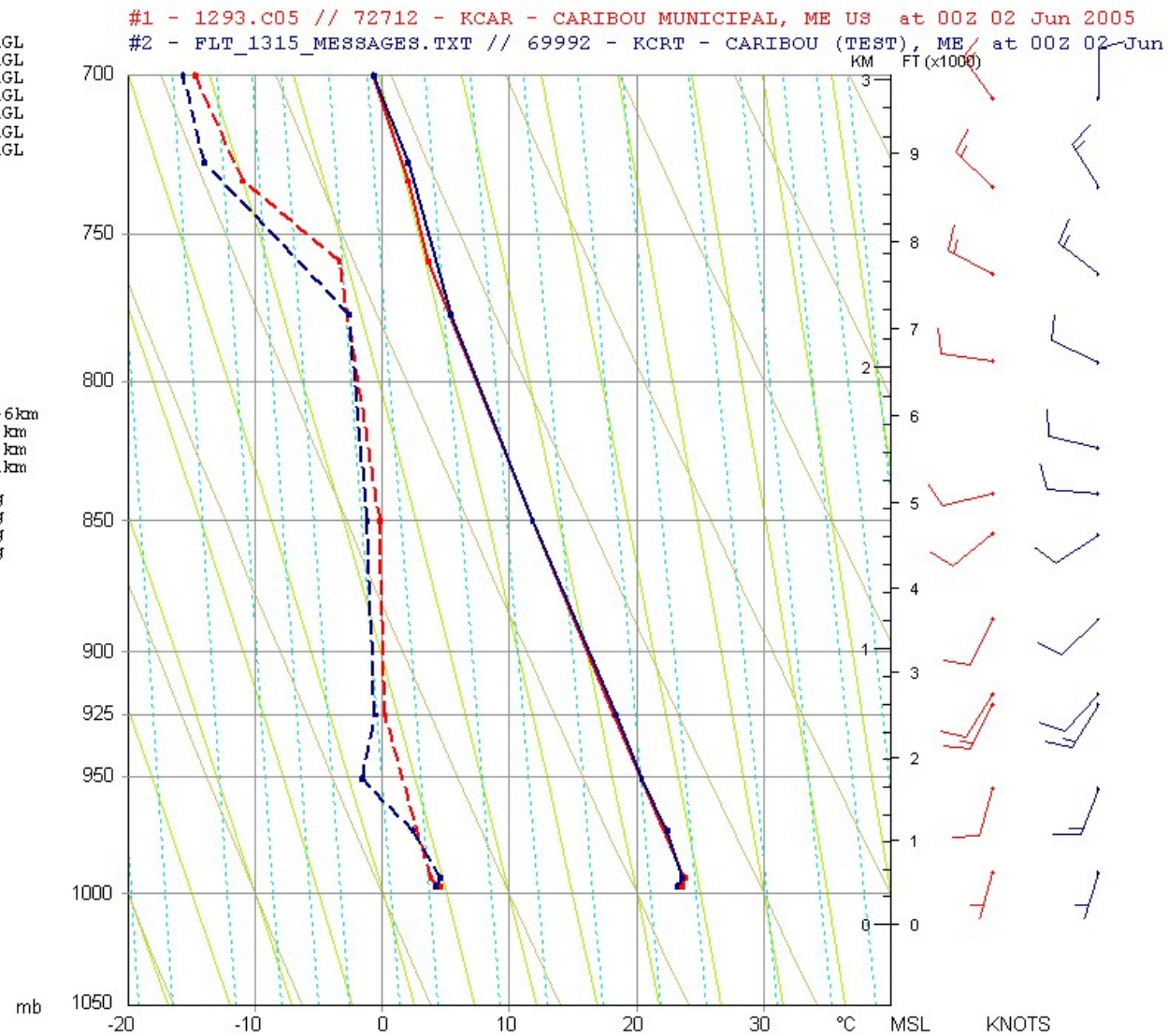
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



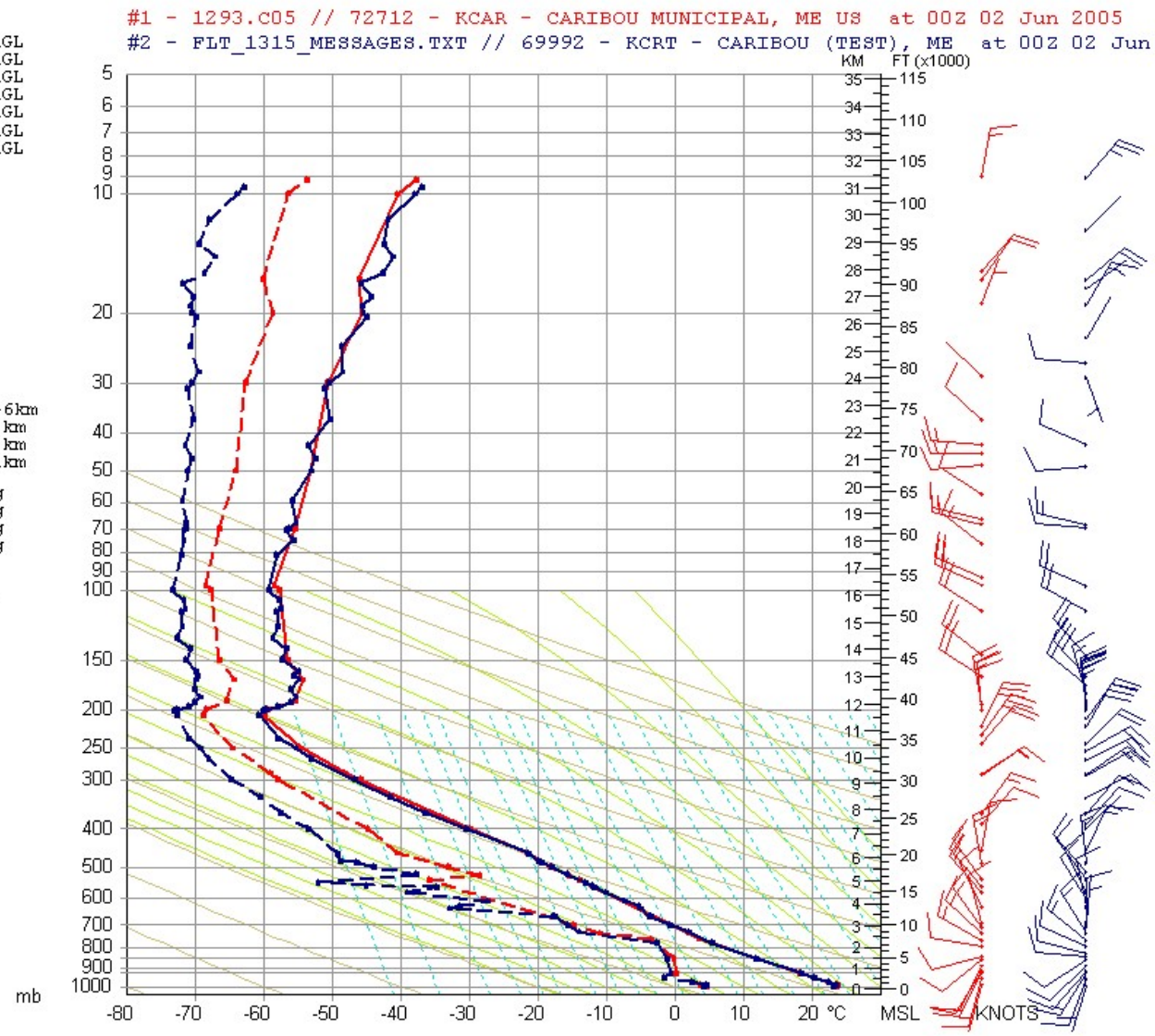
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

TEST # 56			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11550	11559	-9
Freezing Level (m AGL)	2854	2872	-18
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	3344	3682	-338
LCL Height (m AGL)	2373	2374	-1
Precipitable Water (cm)	1.47	1.28	0.19
Thickness 1000 - 500 mb (m)	5579	5582	-3
Thickness 1000 - 700 mb (m)	2977	2978	-1
Thickness 1000 - 850 mb (m)	1391	1391	0
Thickness 850 - 500 mb (m)	4189	4191	-2
Thickness 850 - 700 mb (m)	1586	1587	-1
Thickness 700 - 500 mb (m)	2602	2604	-2
Thickness 600 - 400 mb (m)	3033	3020	13
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

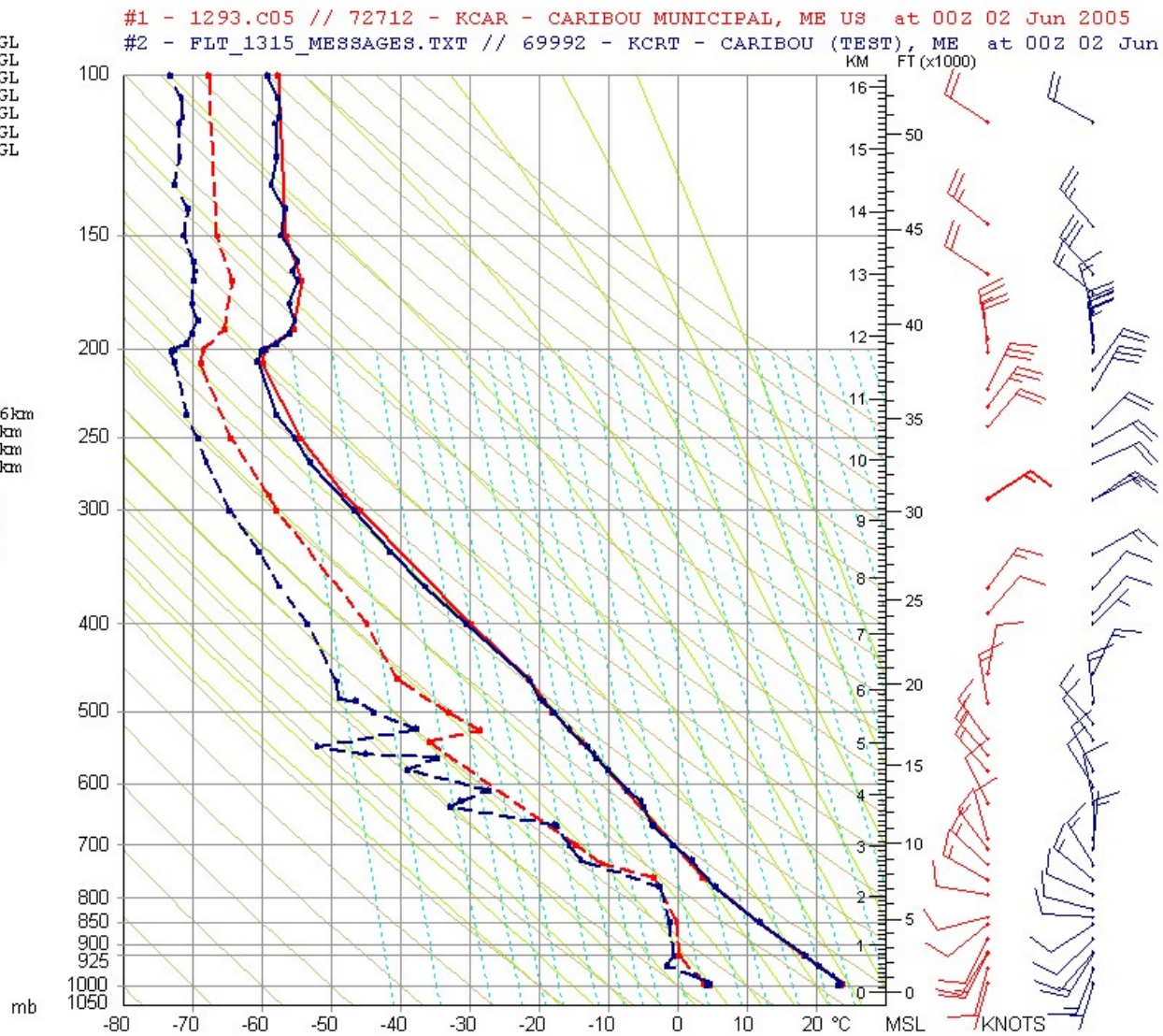
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



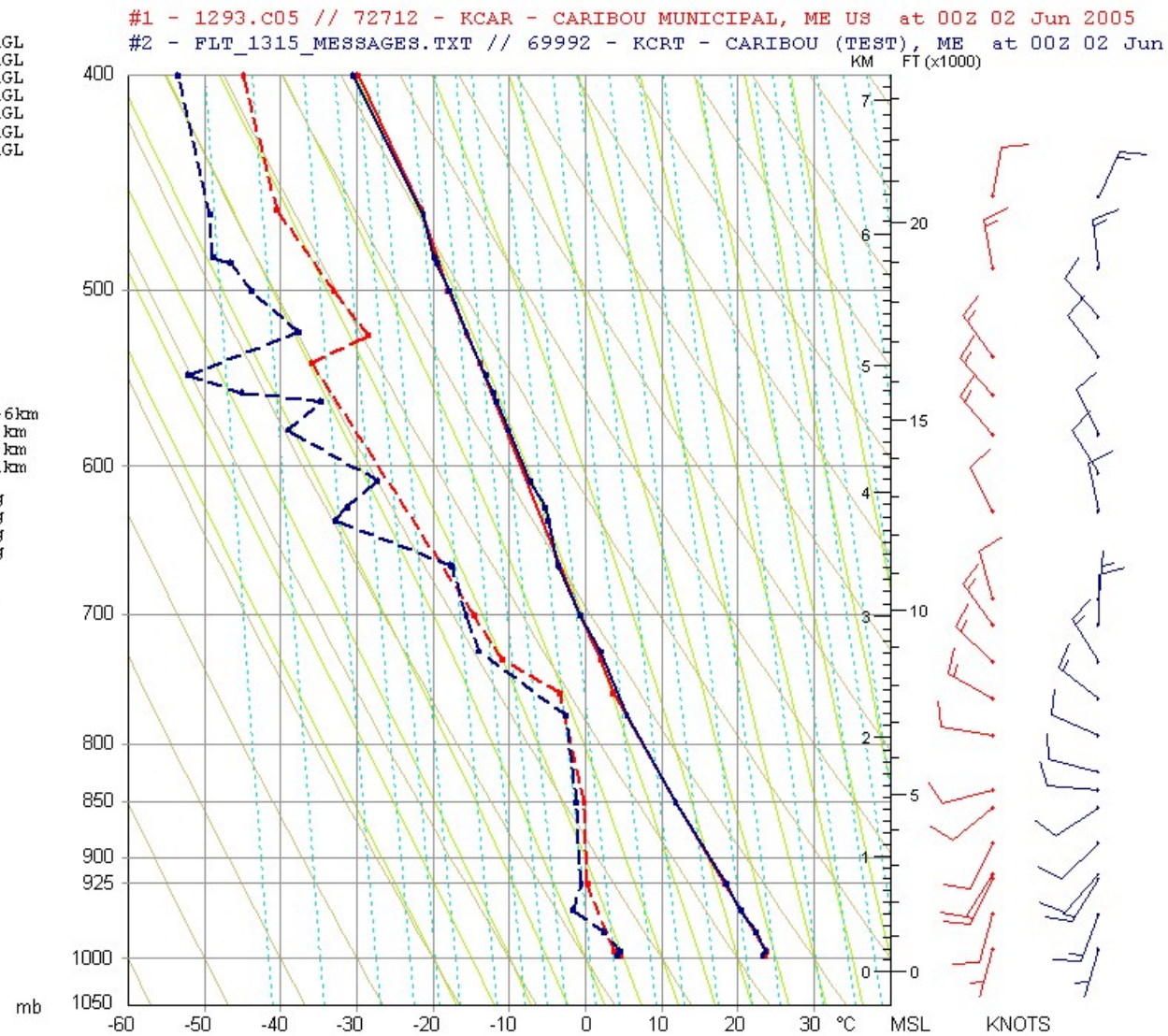
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



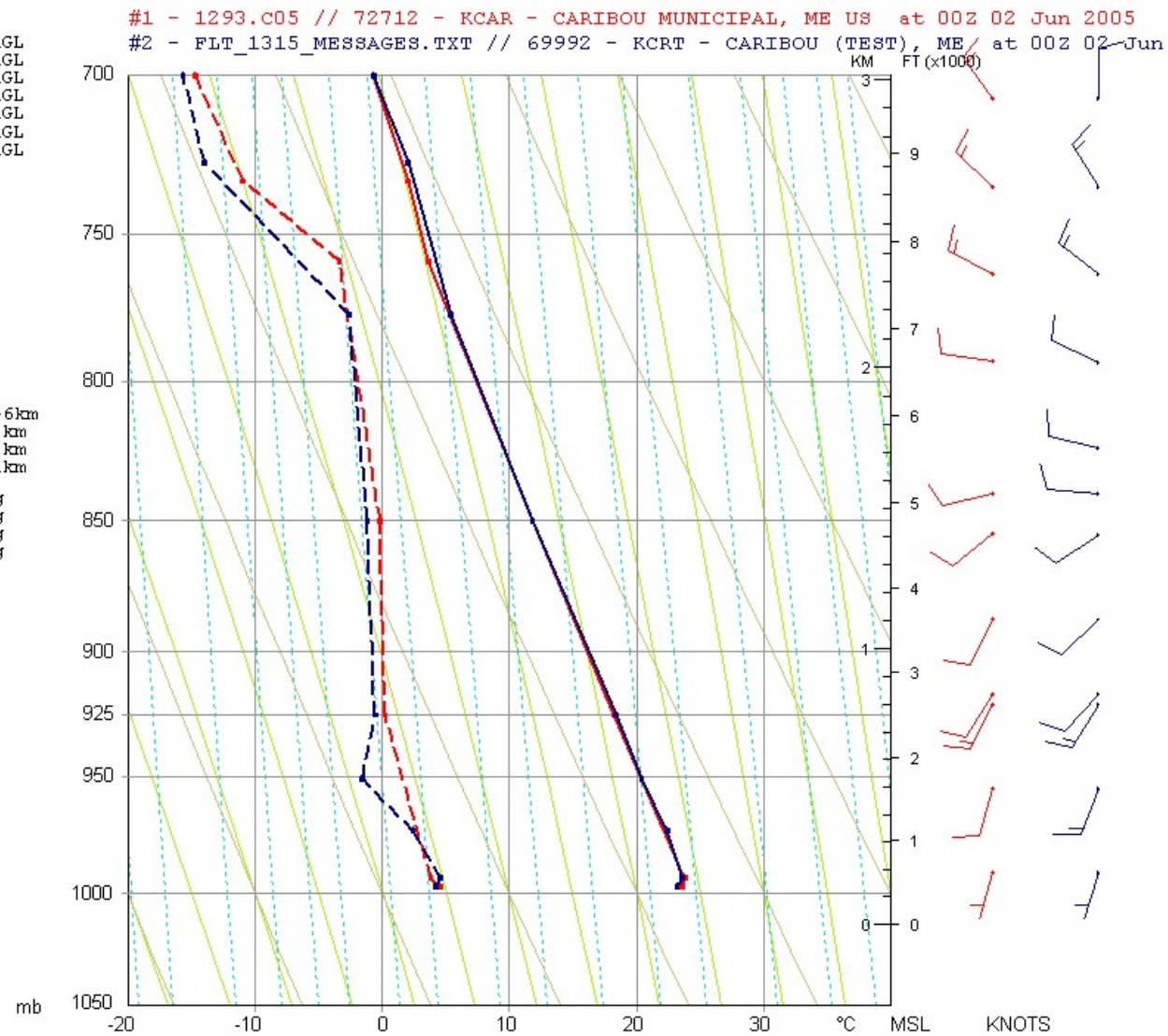
Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



Test #56 - System Test II – 00UTC on 06/02/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11550	11559	m AGL
FRZG Lvl:	2854	2872	m AGL
cclEL Hgt:	5577	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3344	3682	m AGL
LCL Hgt:	2373	2374	m AGL
Water:	1.47	1.28	cm
Hail:	--	--	cm
T2Gust:	42	42	kt
WindEx:	53	51	kt
SWEAT:	32.0	33.0	
CAP:	--	--	
Boyden:	98.4	98.5	
S{TT}:	33.8	31.4	
KO:	-2.3	-2.1	
LI:	2.4	3.2	
TT:	47.8	46.4	
KI:	15.7	13.5	
Tc:	29.7	31.7	°C
Storm:	69/10	80/10	0-6km
s-rH:	121	134	0-3km
s-rH:	68	78	0-2km
s-rH:	-1	12	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	70.6	70.8	
Threat:	20.2	22.6	
Point:	-1.2	-3.9	°C
1000 - 500 mb:	5579	5582	m
1000 - 700 mb:	2977	2978	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4189	4191	m
850 - 700 mb:	1586	1587	m
700 - 500 mb:	2602	2604	m
600 - 400 mb:	3033	3020	m



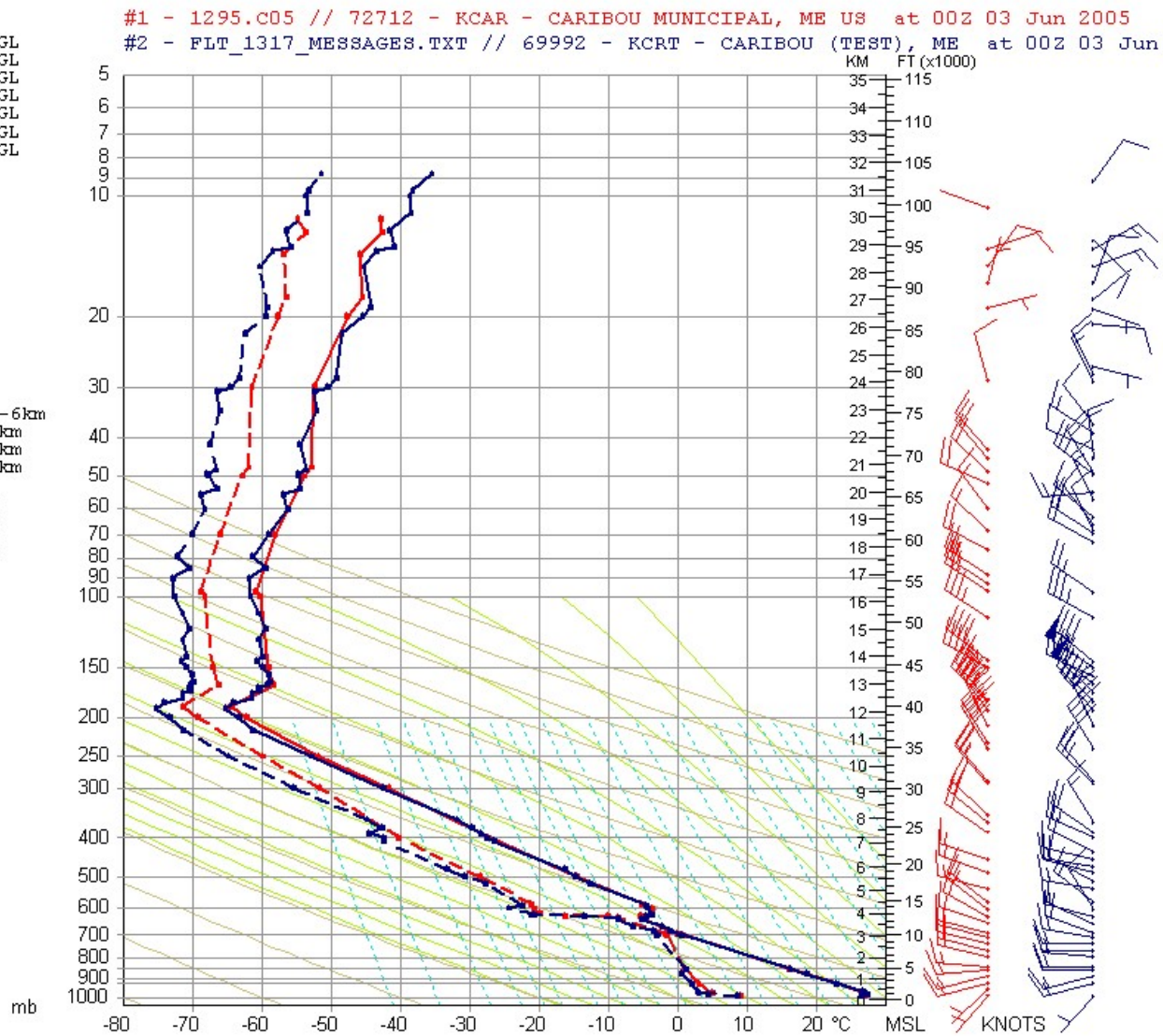
Test #58 - System Test II – 00UTC on 06/03/2005
RWS Version 1.0.4.0

TEST # 58			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12242	12160	82
Freezing Level (m AGL)	3028	3008	20
LFC Height (m AGL)	2790	2842	-52
CCL Height (m AGL)	3064	3298	-234
LCL Height (m AGL)	2253	2255	-2
Precipitable Water (cm)	2.06	1.89	0.17
Thickness 1000 - 500 mb (m)	5652	5651	1
Thickness 1000 - 700 mb (m)	3018	3019	-1
Thickness 1000 - 850 mb (m)	1412	1413	-1
Thickness 850 - 500 mb (m)	4240	4238	2
Thickness 850 - 700 mb (m)	1606	1606	0
Thickness 700 - 500 mb (m)	2634	2632	2
Thickness 600 - 400 mb (m)	3061	3060	1
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

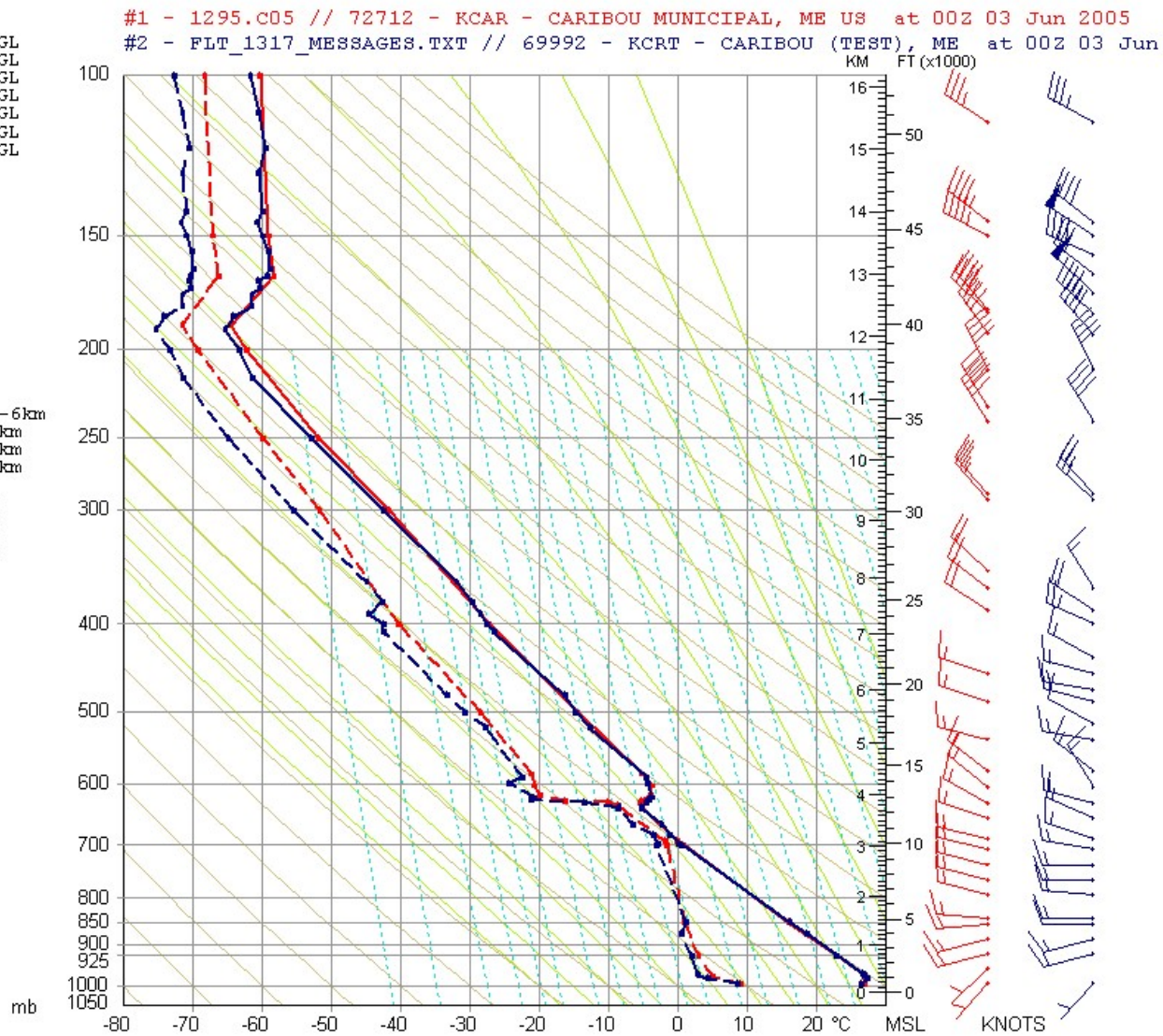
Test #58 - System Test II – 00UTC on 06/03/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12242	12160	m AGL
FRZG Lvl:	3028	3008	m AGL
cclEL Hgt:	3865	--	m AGL
lfcEL Hgt:	3923	3846	m AGL
LFC Hgt:	2790	2842	m AGL
CCL Hgt:	3064	3298	m AGL
LCL Hgt:	2253	2255	m AGL
Water:	2.06	1.89	cm
Hail:	--	--	cm
T2Gust:	45	45	kt
WindEx:	59	58	kt
SWEAT:	52.0	57.4	
CAP:	2.2	2.6	
Boyden:	101.0	101.3	
S{TT}:	43.7	43.1	
KO:	-1.4	-2.5	
LI:	0.5	0.8	
TT:	46.0	46.8	
KI:	29.2	28.4	
Tc:	29.6	30.3	°C
Storm:	356/13	350/14	0-6km
s-rH:	80	79	0-3km
s-rH:	76	68	0-2km
s-rH:	54	50	0-1km
CAPE+ only:	55	37	J/kg
CAPE 0-3km:	3	2	J/kg
CIN total:	-164	-208	J/kg
DCAPE 6km:	880	834	J/kg
VGP 0-4km:	0.027	0.04	
EHI 0-2km:	.0	.0	
MVV:	10	9	m/s
BRN:	5	5	
FOG FSI:	71.0	70.8	
Threat:	18.0	18.9	
Point:	3.4	2.6°C	
1000 - 500 mb:	5652	5651	m
1000 - 700 mb:	3018	3019	m
1000 - 850 mb:	1412	1413	m
850 - 500 mb:	4240	4238	m
850 - 700 mb:	1606	1606	m
700 - 500 mb:	2634	2632	m
600 - 400 mb:	3061	3060	m



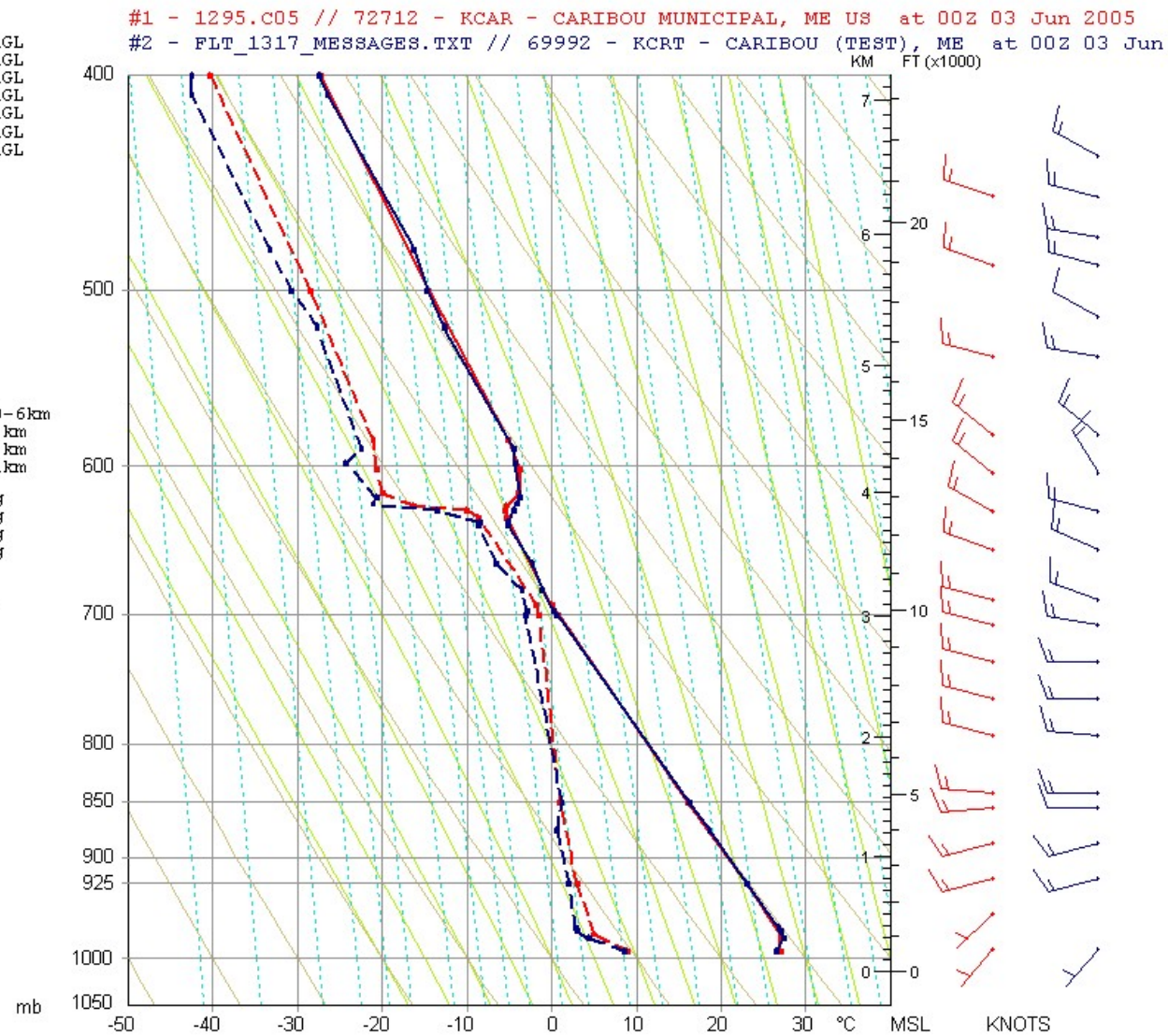
Test #58 - System Test II – 00UTC on 06/03/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12242	12160	m AGL
FRZG Lvl:	3028	3008	m AGL
cclEL Hgt:	3865	--	m AGL
lfcEL Hgt:	3923	3846	m AGL
LFC Hgt:	2790	2842	m AGL
CCL Hgt:	3064	3298	m AGL
LCL Hgt:	2253	2255	m AGL
Water:	2.06	1.89	cm
Hail:	--	--	cm
T2Gust:	45	45	kt
WindEx:	59	58	kt
SWEAT:	52.0	57.4	
CAP:	2.2	2.6	
Boyden:	101.0	101.3	
S{TT}:	43.7	43.1	
KO:	-1.4	-2.5	
LI:	0.5	0.8	
TT:	46.0	46.8	
KI:	29.2	28.4	
Tc:	29.6	30.3	°C
Storm:	356/13	350/14	0-6km
s-rH:	80	79	0-3km
s-rH:	76	68	0-2km
s-rH:	54	50	0-1km
CAPE+ only:	55	37	J/kg
CAPE 0-3km:	3	2	J/kg
CIN total:	-164	-208	J/kg
DCAPE 6km:	880	834	J/kg
VGP 0-4km:	0.027	0.04	
EHI 0-2km:	.0	.0	
MVV:	10	9	m/s
BRN:	5	5	
FOG FSI:	71.0	70.8	
Threat:	18.0	18.9	
Point:	3.4	2.6°C	
1000 - 500 mb:	5652	5651	m
1000 - 700 mb:	3018	3019	m
1000 - 850 mb:	1412	1413	m
850 - 500 mb:	4240	4238	m
850 - 700 mb:	1606	1606	m
700 - 500 mb:	2634	2632	m
600 - 400 mb:	3061	3060	m



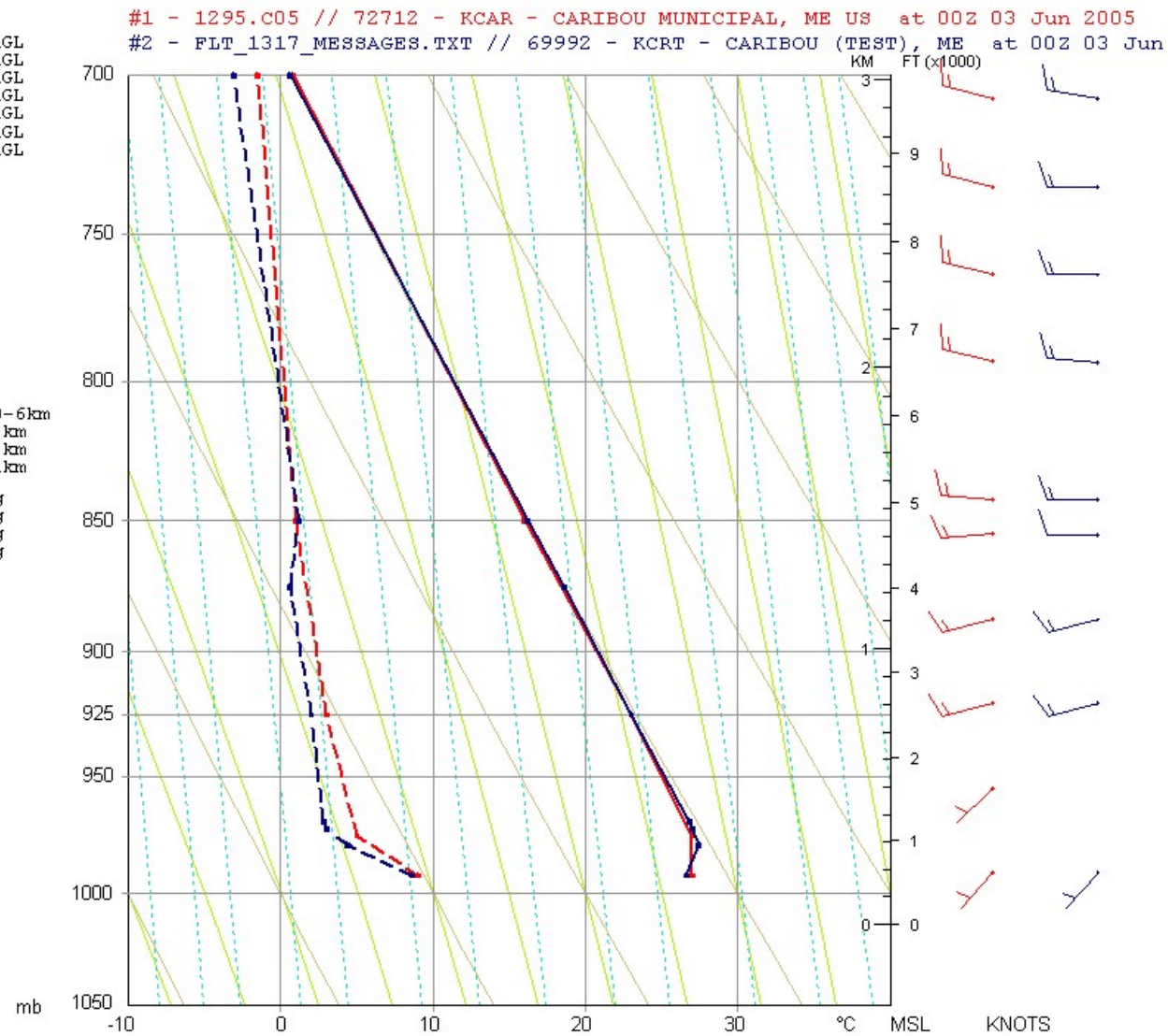
Test #58 - System Test II – 00UTC on 06/03/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12242	12160	m AGL
FRZG Lvl:	3028	3008	m AGL
cclEL Hgt:	3865	--	m AGL
lfcEL Hgt:	3923	3846	m AGL
LFC Hgt:	2790	2842	m AGL
CCL Hgt:	3064	3298	m AGL
LCL Hgt:	2253	2255	m AGL
Water:	2.06	1.89	cm
Hail:	--	--	cm
T2Gust:	45	45	kt
WindEx:	59	58	kt
SWEAT:	52.0	57.4	
CAP:	2.2	2.6	
Boyden:	101.0	101.3	
S{TT}:	43.7	43.1	
KO:	-1.4	-2.5	
LI:	0.5	0.8	
TT:	46.0	46.8	
KI:	29.2	28.4	
Tc:	29.6	30.3	°C
Storm:	356/13	350/14	0-6km
s-rH:	80	79	0-3km
s-rH:	76	68	0-2km
s-rH:	54	50	0-1km
CAPE+ only:	55	37	J/kg
CAPE 0-3km:	3	2	J/kg
CIN total:	-164	-208	J/kg
DCAPE 6km:	880	834	J/kg
VGP 0-4km:	0.027	0.04	
EHI 0-2km:	.0	.0	
MVV:	10	9	m/s
BRN:	5	5	
FOG FSI:	71.0	70.8	
Threat:	18.0	18.9	
Point:	3.4	2.6°C	
1000 - 500 mb:	5652	5651	m
1000 - 700 mb:	3018	3019	m
1000 - 850 mb:	1412	1413	m
850 - 500 mb:	4240	4238	m
850 - 700 mb:	1606	1606	m
700 - 500 mb:	2634	2632	m
600 - 400 mb:	3061	3060	m



Test #58 - System Test II – 00UTC on 06/03/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12242	12160	m AGL
FRZG Lvl:	3028	3008	m AGL
cclEL Hgt:	3865	--	m AGL
lfcEL Hgt:	3923	3846	m AGL
LFC Hgt:	2790	2842	m AGL
CCL Hgt:	3064	3298	m AGL
LCL Hgt:	2253	2255	m AGL
Water:	2.06	1.89	cm
Hail:	--	--	cm
T2Gust:	45	45	kt
WindEx:	59	58	kt
SWEAT:	52.0	57.4	
CAP:	2.2	2.6	
Boyden:	101.0	101.3	
S{TT}:	43.7	43.1	
KO:	-1.4	-2.5	
LI:	0.5	0.8	
TT:	46.0	46.8	
KI:	29.2	28.4	
Tc:	29.6	30.3	°C
Storm:	356/13	350/14	0-6km
s-rH:	80	79	0-3km
s-rH:	76	68	0-2km
s-rH:	54	50	0-1km
CAPE+ only:	55	37	J/kg
CAPE 0-3km:	3	2	J/kg
CIN total:	-164	-208	J/kg
DCAPE 6km:	880	834	J/kg
VGP 0-4km:	0.027	0.04	
EHI 0-2km:	.0	.0	
MVV:	10	9	m/s
BRN:	5	5	
FOG FSI:	71.0	70.8	
Threat:	18.0	18.9	
Point:	3.4	2.6°C	
1000 - 500 mb:	5652	5651	m
1000 - 700 mb:	3018	3019	m
1000 - 850 mb:	1412	1413	m
850 - 500 mb:	4240	4238	m
850 - 700 mb:	1606	1606	m
700 - 500 mb:	2634	2632	m
600 - 400 mb:	3061	3060	m



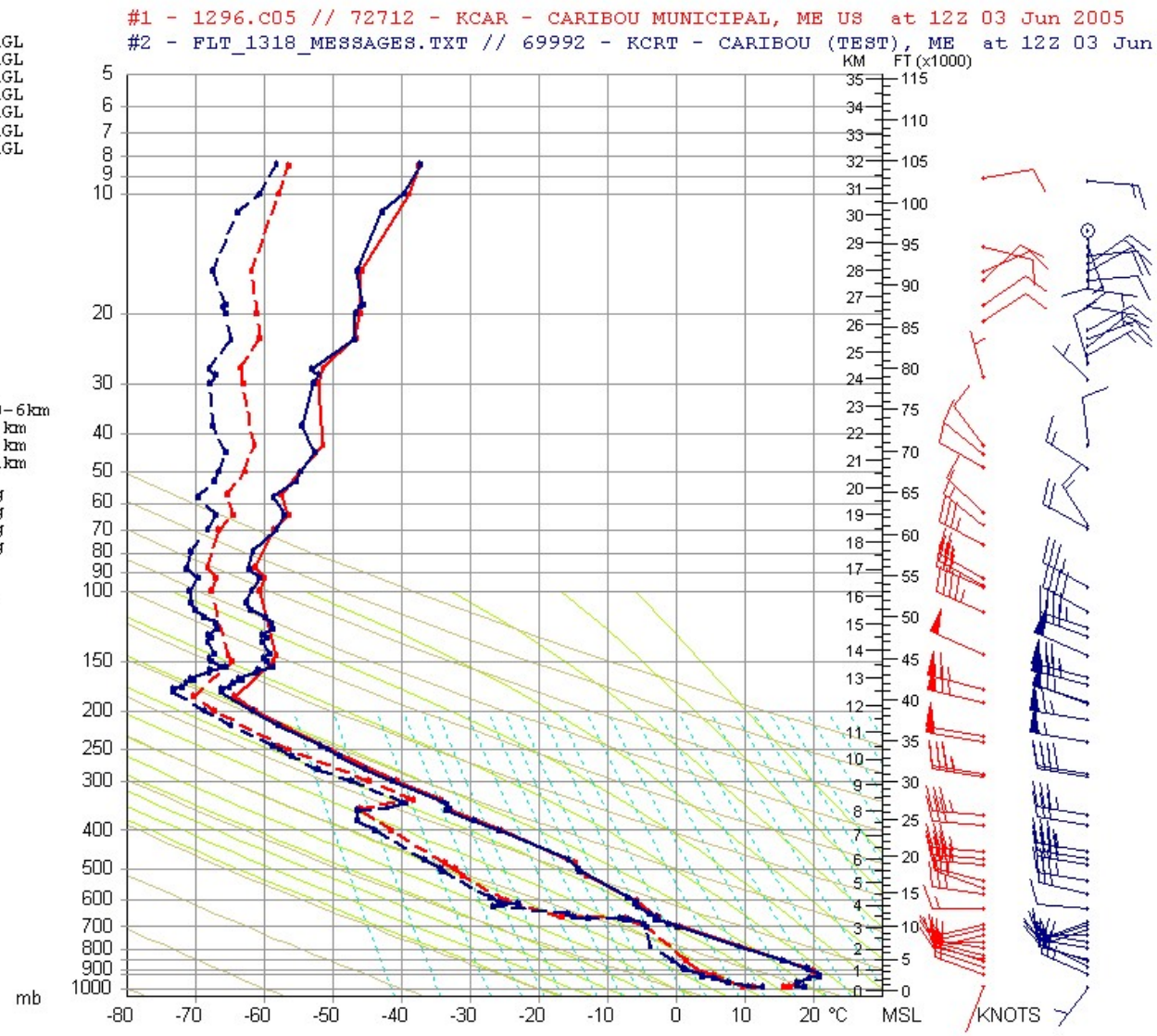
Test #59 - System Test II – 12UTC on 06/03/2005
RWS Version 1.0.4.0

TEST # 59			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12392	12542	-150
Freezing Level (m AGL)	3001	2957	44
LFC Height (m AGL)	NC	3019	NC
CCL Height (m AGL)	2721	2756	-35
LCL Height (m AGL)	566	769	-203
Precipitable Water (cm)	1.95	1.77	0.18
Thickness 1000 - 500 mb (m)	5622	5617	5
Thickness 1000 - 700 mb (m)	2998	2996	2
Thickness 1000 - 850 mb (m)	1394	1394	0
Thickness 850 - 500 mb (m)	4228	4223	5
Thickness 850 - 700 mb (m)	1602	1602	0
Thickness 700 - 500 mb (m)	2624	2621	3
Thickness 600 - 400 mb (m)	3064	3063	1
Wind Shear Below	03	15	-12
Wind Shear Above	19	28	-9
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Warmer	Colder	

NC= Not Calculated

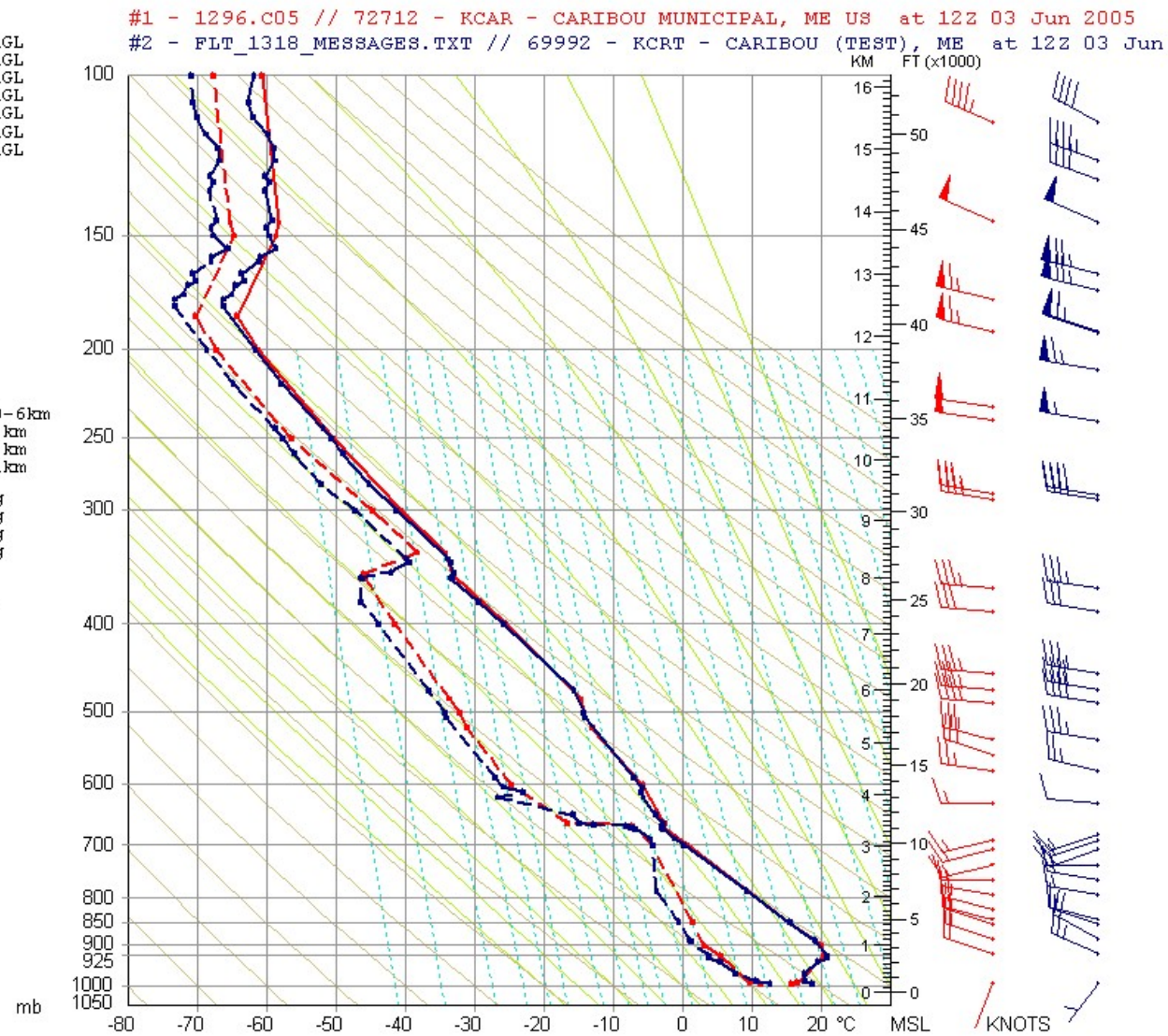
Test #59 - System Test II – 12UTC on 06/03/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12392	12542	m AGL
FRZG Lvl:	3001	2957	m AGL
cclEL Hgt:	5319	4091	m AGL
lfcEL Hgt:	--	3722	m AGL
LFC Hgt:	--	3019	m AGL
CCL Hgt:	2721	2756	m AGL
LCL Hgt:	566	769	m AGL
Water:	1.95	1.77	cm
Hail:	--	--	cm
T2Gust:	--	25	kt
WindEx:	--	24	kt
SWEAT:	87.8	71.0	
CAP:	--	8.7	
Boyden:	99.2	99.4	
S{TT}:	40.4	38.8	
KO:	.7	-1.4	
LI:	6.0	2.8	
TT:	45.4	43.4	
KI:	26.1	24.5	
Tc:	29.3	28.9	°C
Storm:	310/28	314/27	0-6km
s-rH:	35	31	0-3km
s-rH:	47	42	0-2km
s-rH:	49	35	0-1km
CAPE+ only:	--	8	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-458	J/kg
DCAPE 6km:	--	468	J/kg
VGP 0-4km:	--	0.023	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	1	
FOG FSI:	26.2	34.4	
Threat:	14.6	16.6	
Point:	6.8	4.0	°C
1000 - 500 mb:	5622	5617	m
1000 - 700 mb:	2998	2996	m
1000 - 850 mb:	1394	1394	m
850 - 500 mb:	4228	4223	m
850 - 700 mb:	1603	1602	m
700 - 500 mb:	2624	2621	m
600 - 400 mb:	3064	3063	m



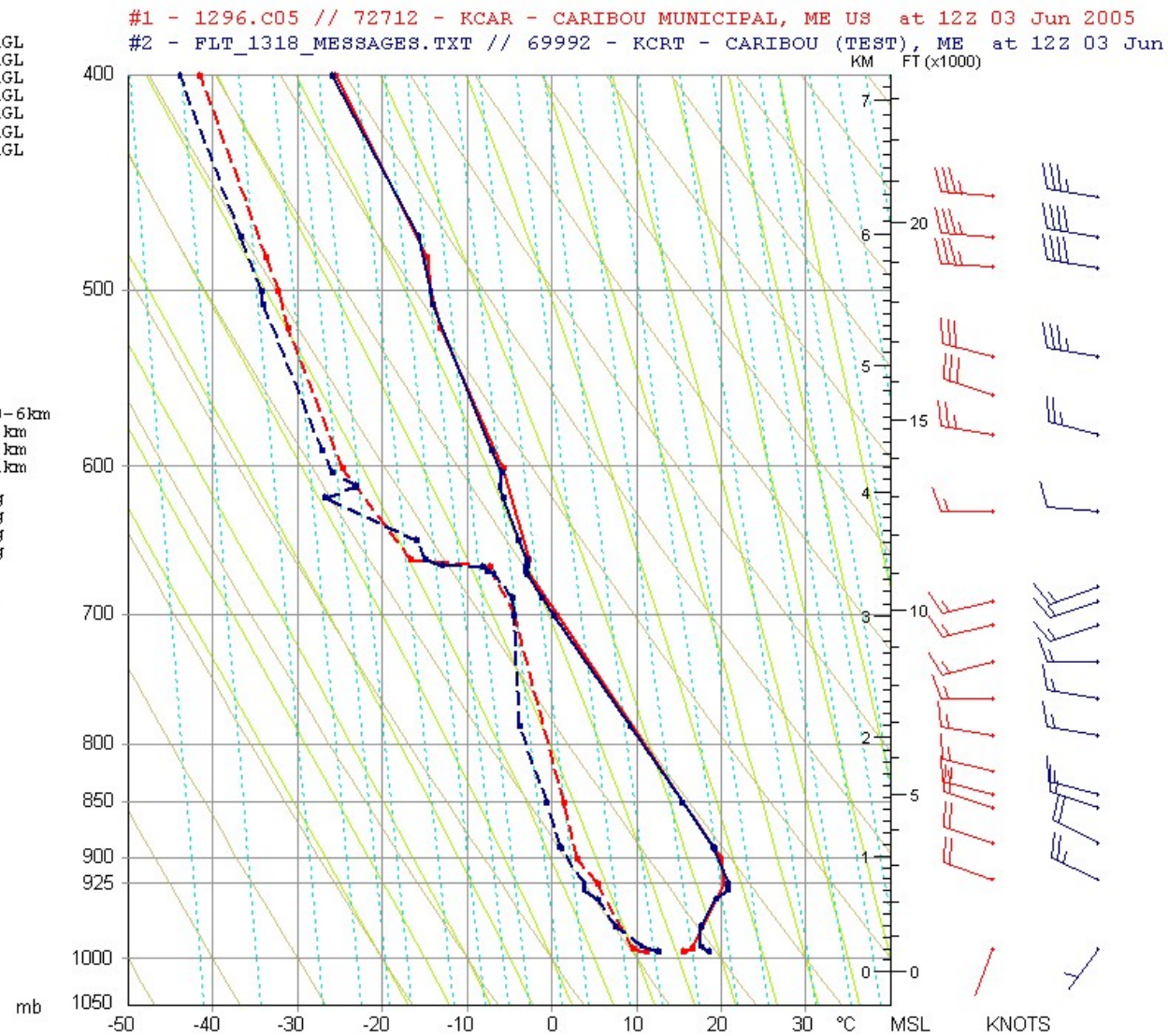
Test #59 - System Test II – 12UTC on 06/03/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12392	12542	m AGL
FRZG Lvl:	3001	2957	m AGL
cclEL Hgt:	5319	4091	m AGL
lfcEL Hgt:	--	3722	m AGL
LFC Hgt:	--	3019	m AGL
CCL Hgt:	2721	2756	m AGL
LCL Hgt:	566	769	m AGL
Water:	1.95	1.77	cm
Hail:	--	--	cm
T2Gust:	--	25	kt
WindEx:	--	24	kt
SWEAT:	87.8	71.0	
CAP:	--	8.7	
Boyden:	99.2	99.4	
S{TT}:	40.4	38.8	
KO:	.7	-1.4	
LI:	6.0	2.8	
TT:	45.4	43.4	
KI:	26.1	24.5	
Tc:	29.3	28.9	°C
Storm:	310/28	314/27	0-6km
s-rH:	35	31	0-3km
s-rH:	47	42	0-2km
s-rH:	49	35	0-1km
CAPE+ only:	--	8	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-458	J/kg
DCAPE 6km:	--	468	J/kg
VGP 0-4km:	--	0.023	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	1	
FOG FSI:	26.2	34.4	
Threat:	14.6	16.6	
Point:	6.8	4.0	°C
1000 - 500 mb:	5622	5617	m
1000 - 700 mb:	2998	2996	m
1000 - 850 mb:	1394	1394	m
850 - 500 mb:	4228	4223	m
850 - 700 mb:	1603	1602	m
700 - 500 mb:	2624	2621	m
600 - 400 mb:	3064	3063	m



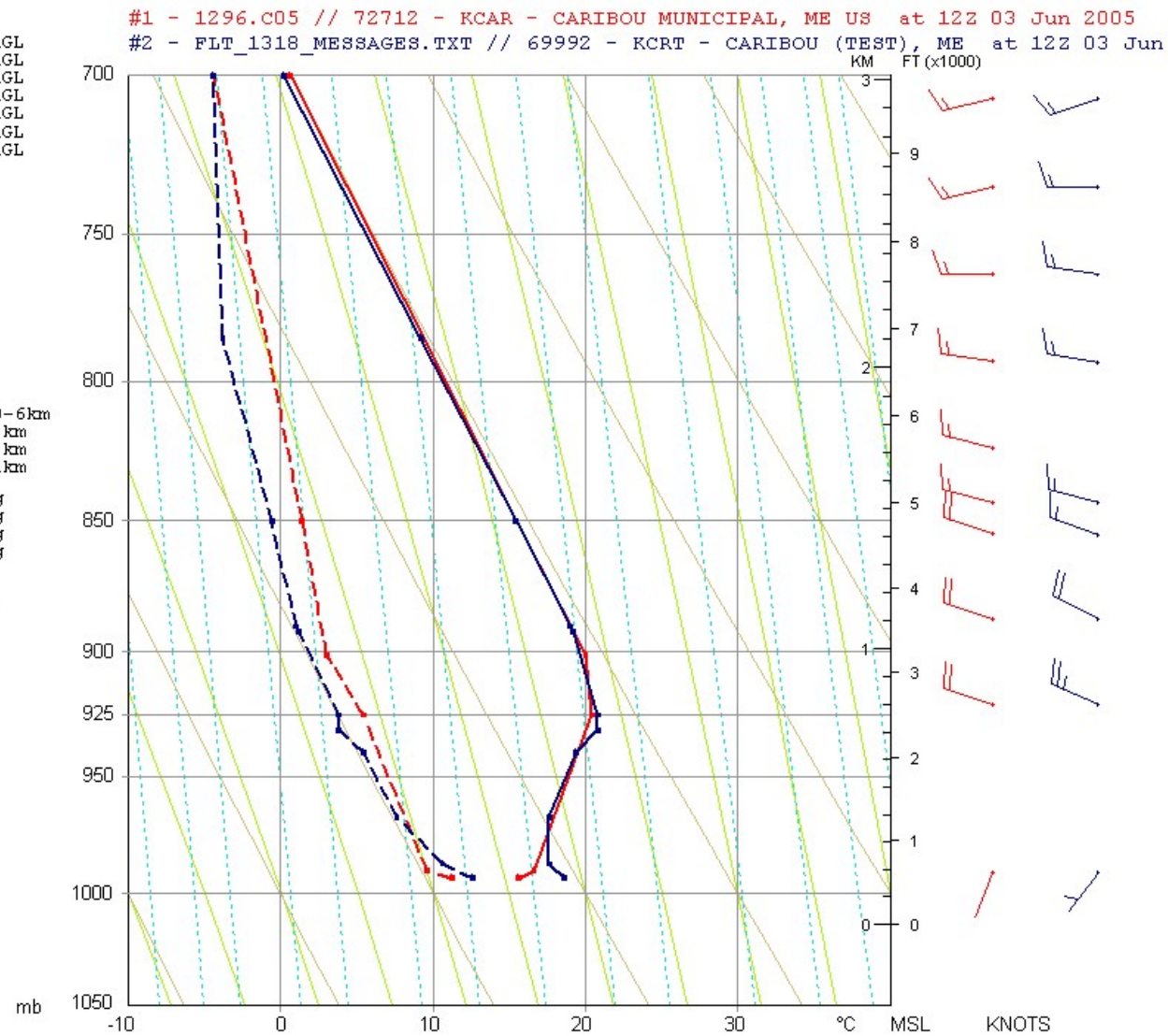
Test #59 - System Test II – 12UTC on 06/03/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12392	12542	m AGL
FRZG Lvl:	3001	2957	m AGL
cclEL Hgt:	5319	4091	m AGL
lfcEL Hgt:	--	3722	m AGL
LFC Hgt:	--	3019	m AGL
CCL Hgt:	2721	2756	m AGL
LCL Hgt:	566	769	m AGL
Water:	1.95	1.77	cm
Hail:	--	--	cm
T2Gust:	--	25	kt
WindEx:	--	24	kt
SWEAT:	87.8	71.0	
CAP:	--	8.7	
Boyden:	99.2	99.4	
S{TT}:	40.4	38.8	
KO:	.7	-1.4	
LI:	6.0	2.8	
TT:	45.4	43.4	
KI:	26.1	24.5	
Tc:	29.3	28.9	°C
Storm:	310/28	314/27	0-6km
s-rH:	35	31	0-3km
s-rH:	47	42	0-2km
s-rH:	49	35	0-1km
CAPE+ only:	--	8	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-458	J/kg
DCAPE 6km:	--	468	J/kg
VGP 0-4km:	--	0.023	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	1	
FOG FSI:	26.2	34.4	
Threat:	14.6	16.6	
Point:	6.8	4.0	°C
1000 - 500 mb:	5622	5617	m
1000 - 700 mb:	2998	2996	m
1000 - 850 mb:	1394	1394	m
850 - 500 mb:	4228	4223	m
850 - 700 mb:	1603	1602	m
700 - 500 mb:	2624	2621	m
600 - 400 mb:	3064	3063	m

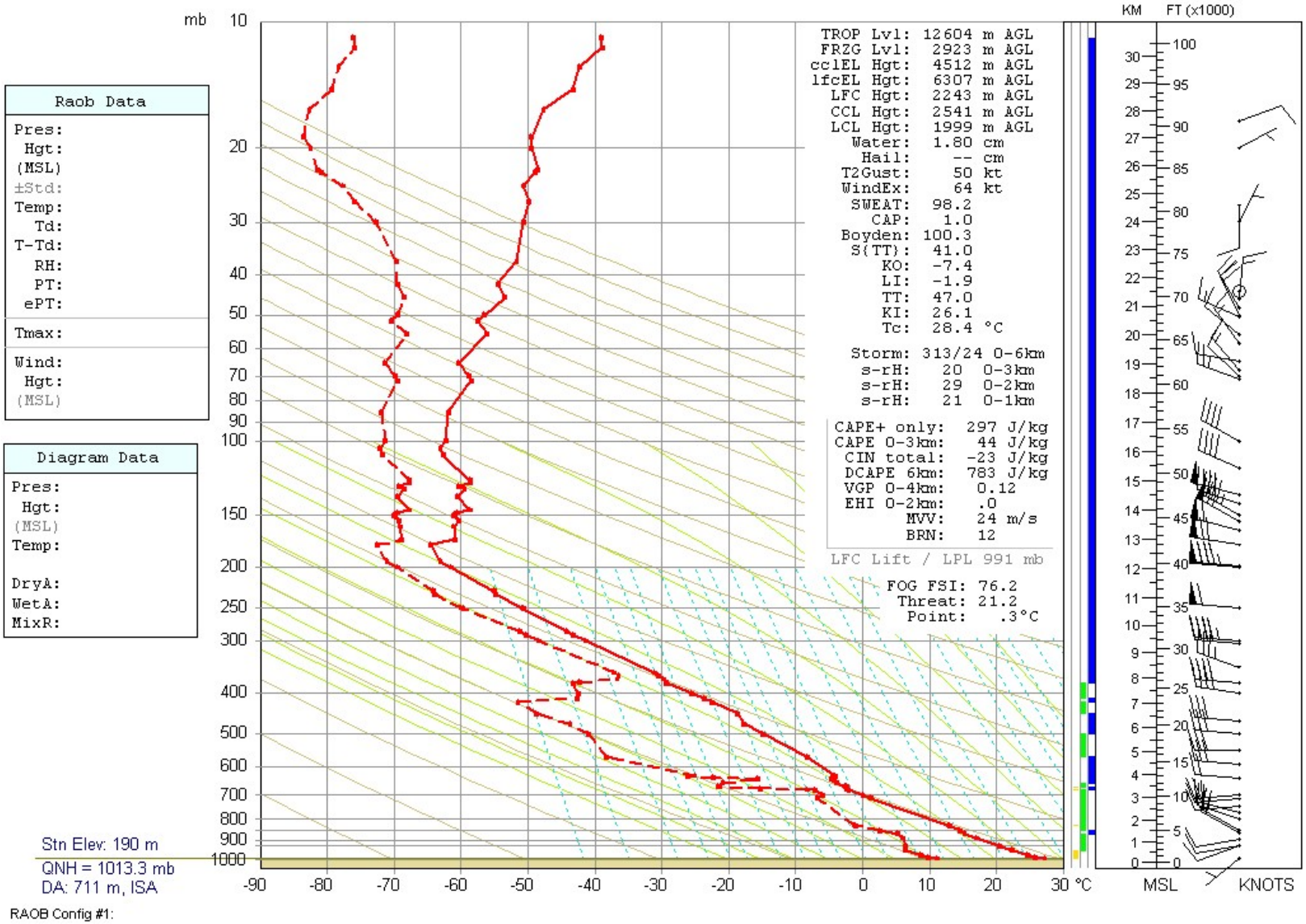


Test #59 - System Test II – 12UTC on 06/03/2005
RWS Version 1.0.4.0

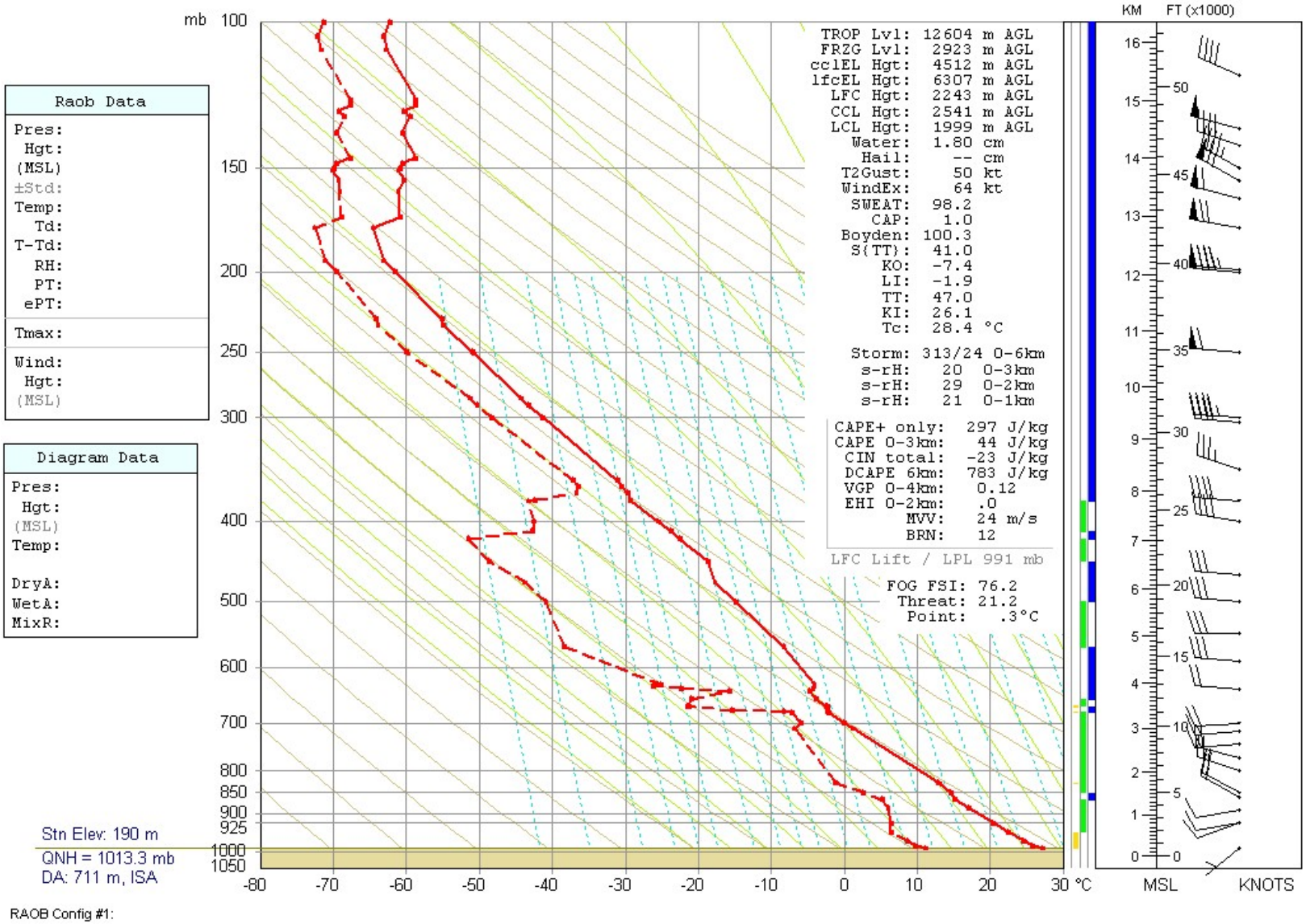
	#1	#2	
TROP Lvl:	12392	12542	m AGL
FRZG Lvl:	3001	2957	m AGL
cclEL Hgt:	5319	4091	m AGL
lfcEL Hgt:	--	3722	m AGL
LFC Hgt:	--	3019	m AGL
CCL Hgt:	2721	2756	m AGL
LCL Hgt:	566	769	m AGL
Water:	1.95	1.77	cm
Hail:	--	--	cm
T2Gust:	--	25	kt
WindEx:	--	24	kt
SWEAT:	87.8	71.0	
CAP:	--	8.7	
Boyden:	99.2	99.4	
S{TT}:	40.4	38.8	
KO:	.7	-1.4	
LI:	6.0	2.8	
TT:	45.4	43.4	
KI:	26.1	24.5	
Tc:	29.3	28.9	°C
Storm:	310/28	314/27	0-6km
s-rH:	35	31	0-3km
s-rH:	47	42	0-2km
s-rH:	49	35	0-1km
CAPE+ only:	--	8	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-458	J/kg
DCAPE 6km:	--	468	J/kg
VGP 0-4km:	--	0.023	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	1	
FOG FSI:	26.2	34.4	
Threat:	14.6	16.6	
Point:	6.8	4.0	°C
1000 - 500 mb:	5622	5617	m
1000 - 700 mb:	2998	2996	m
1000 - 850 mb:	1394	1394	m
850 - 500 mb:	4228	4223	m
850 - 700 mb:	1603	1602	m
700 - 500 mb:	2624	2621	m
600 - 400 mb:	3064	3063	m



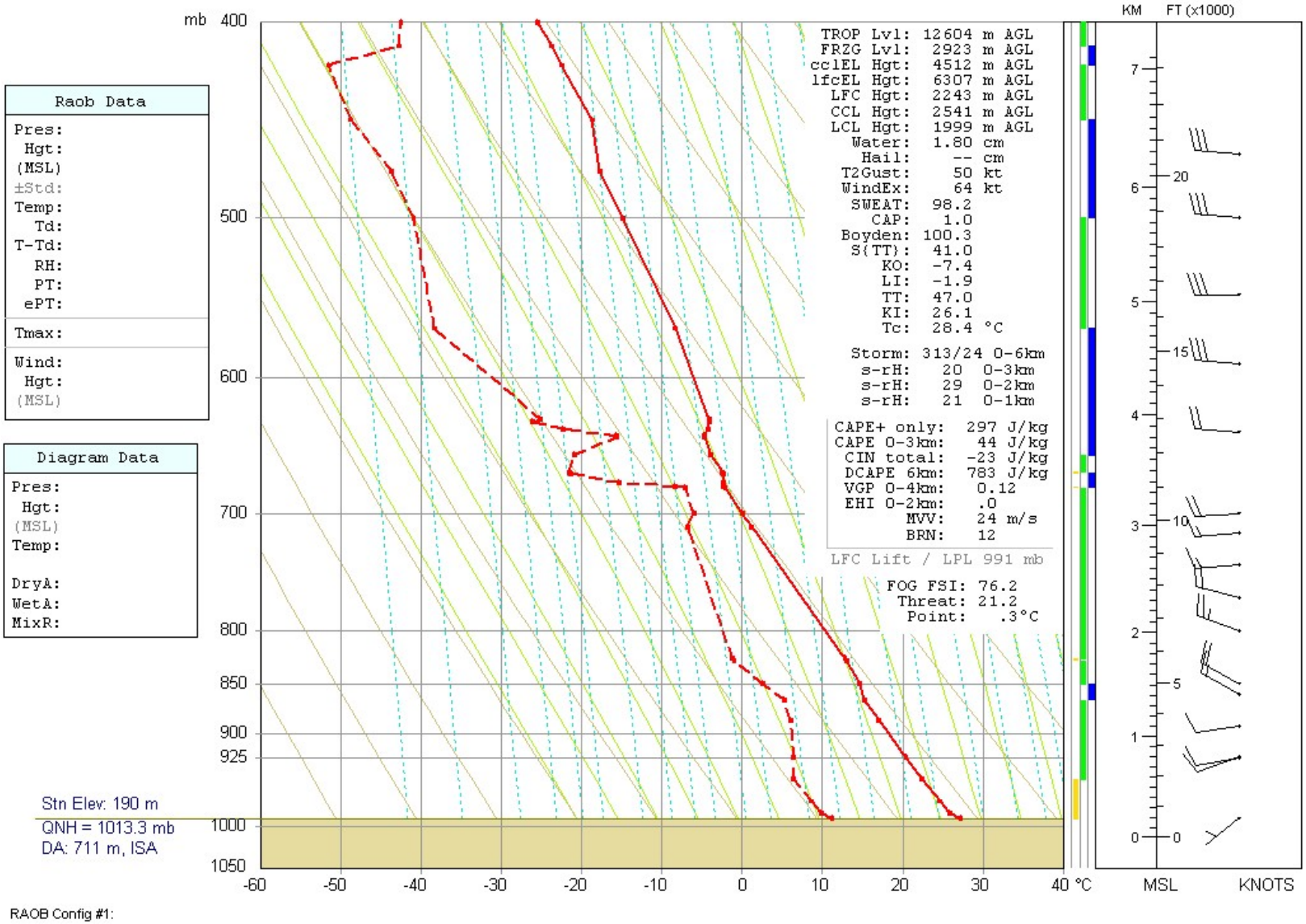
Test #60 System Test II – 15UTC on 06/03/2005
RWS Version 1.0.4.0



Test #60 System Test II – 15UTC on 06/03/2005
RWS Version 1.0.4.0

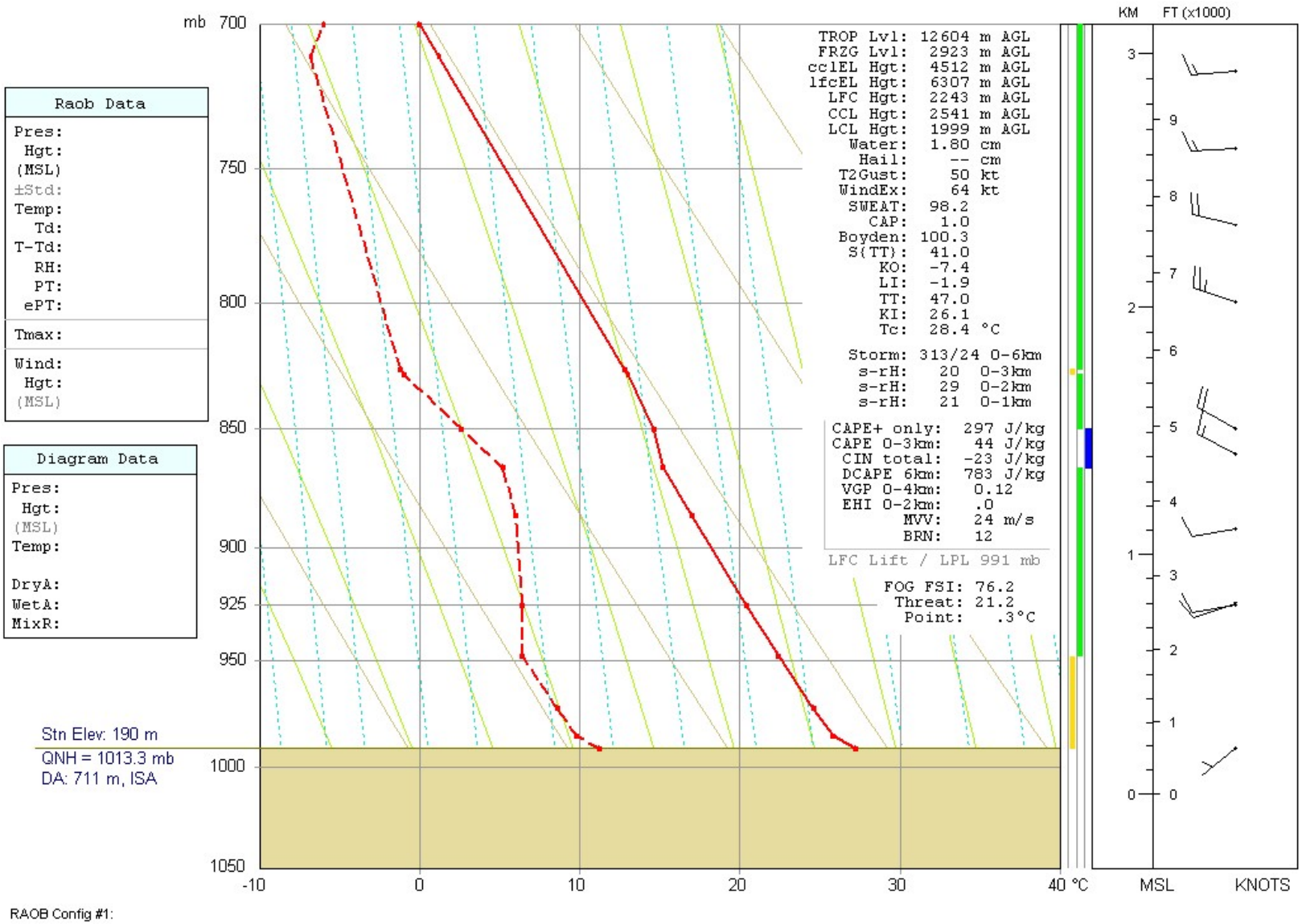


Test #60 System Test II – 15UTC on 06/03/2005
RWS Version 1.0.4.0



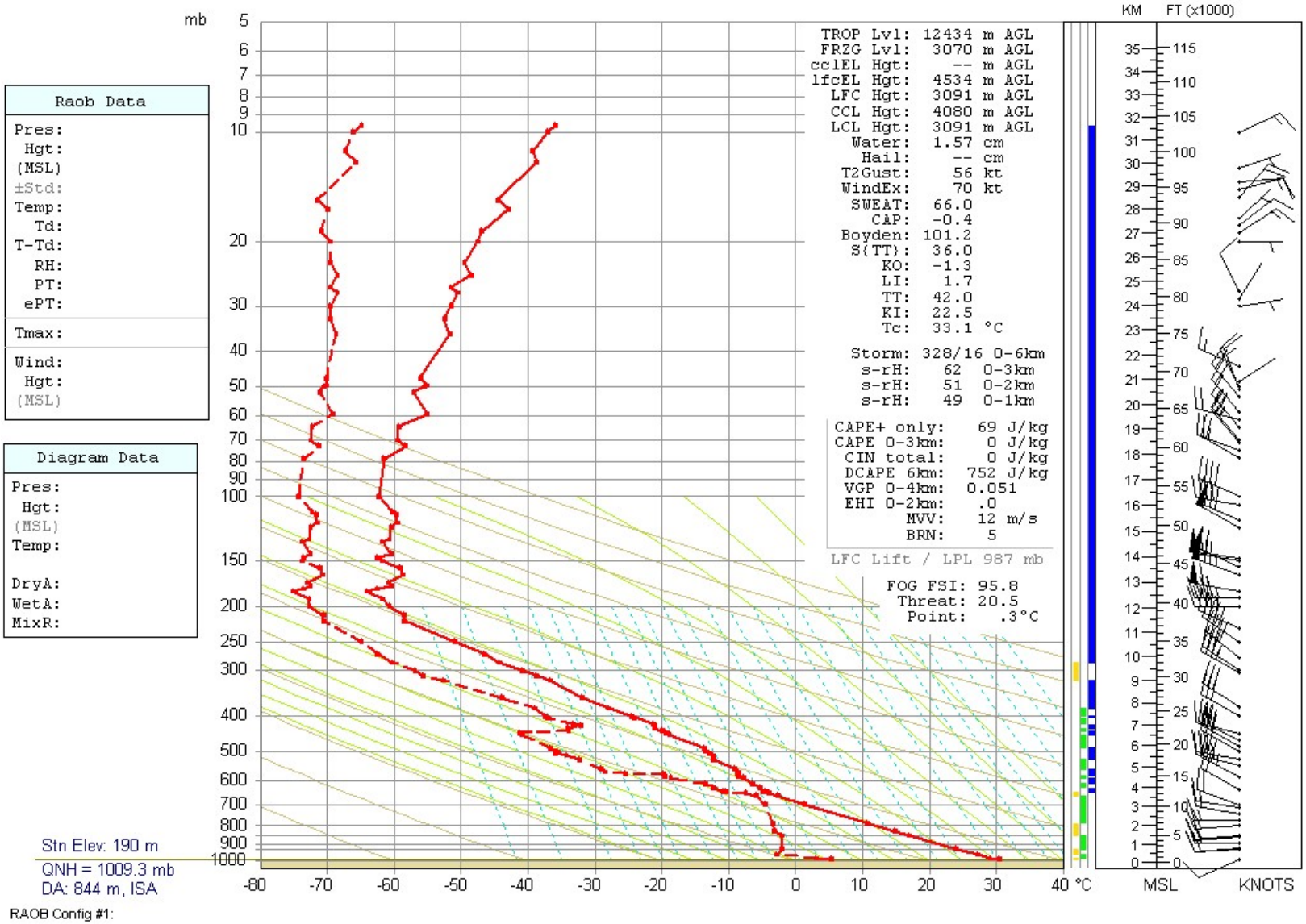
RAOB Config #1:

Test #60 System Test II – 15UTC on 06/03/2005
RWS Version 1.0.4.0

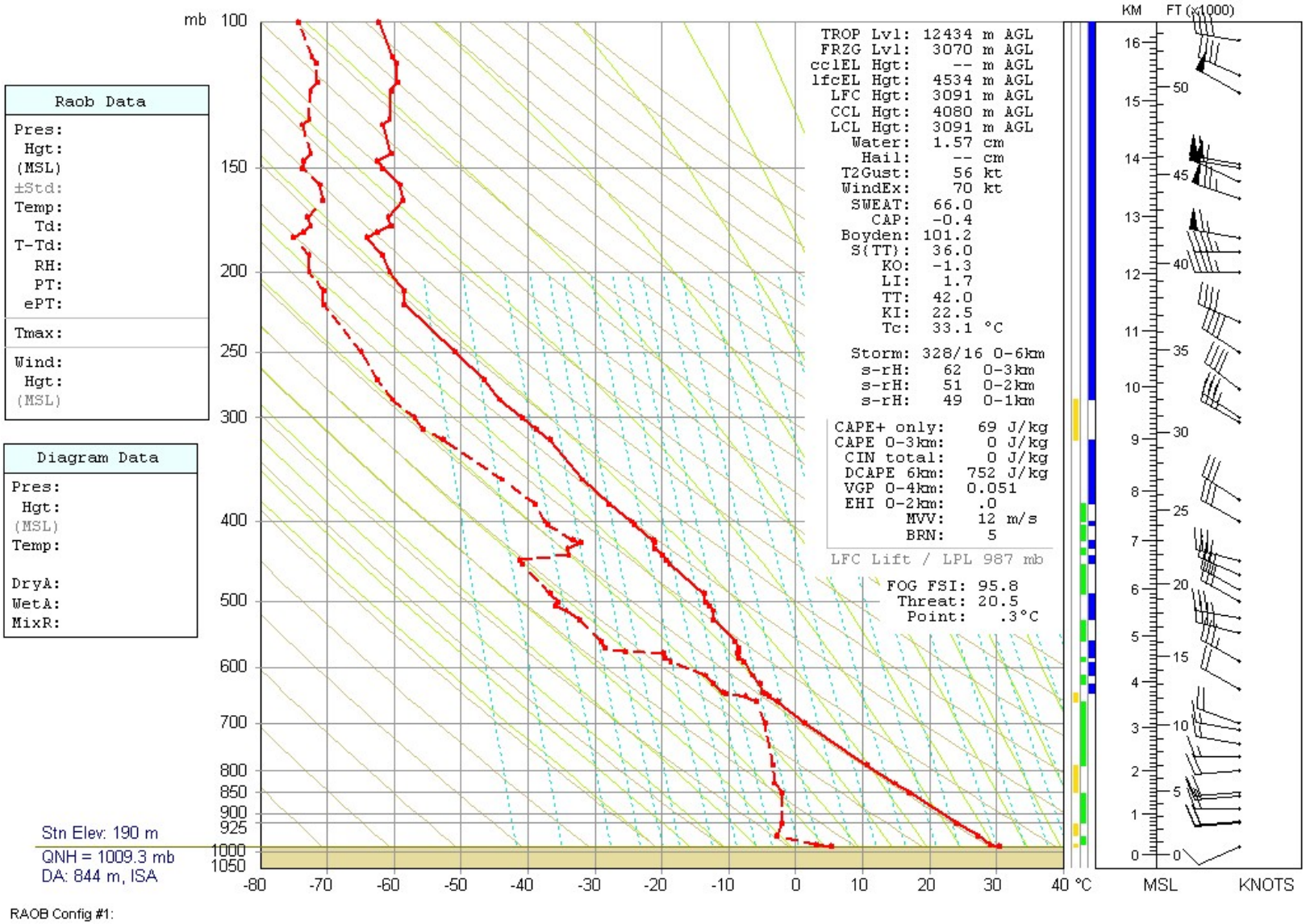


RAOB Config #1:

Test #61 System Test II – 20 UTC on 06/03/2005
RWS Version 1.0.4.0

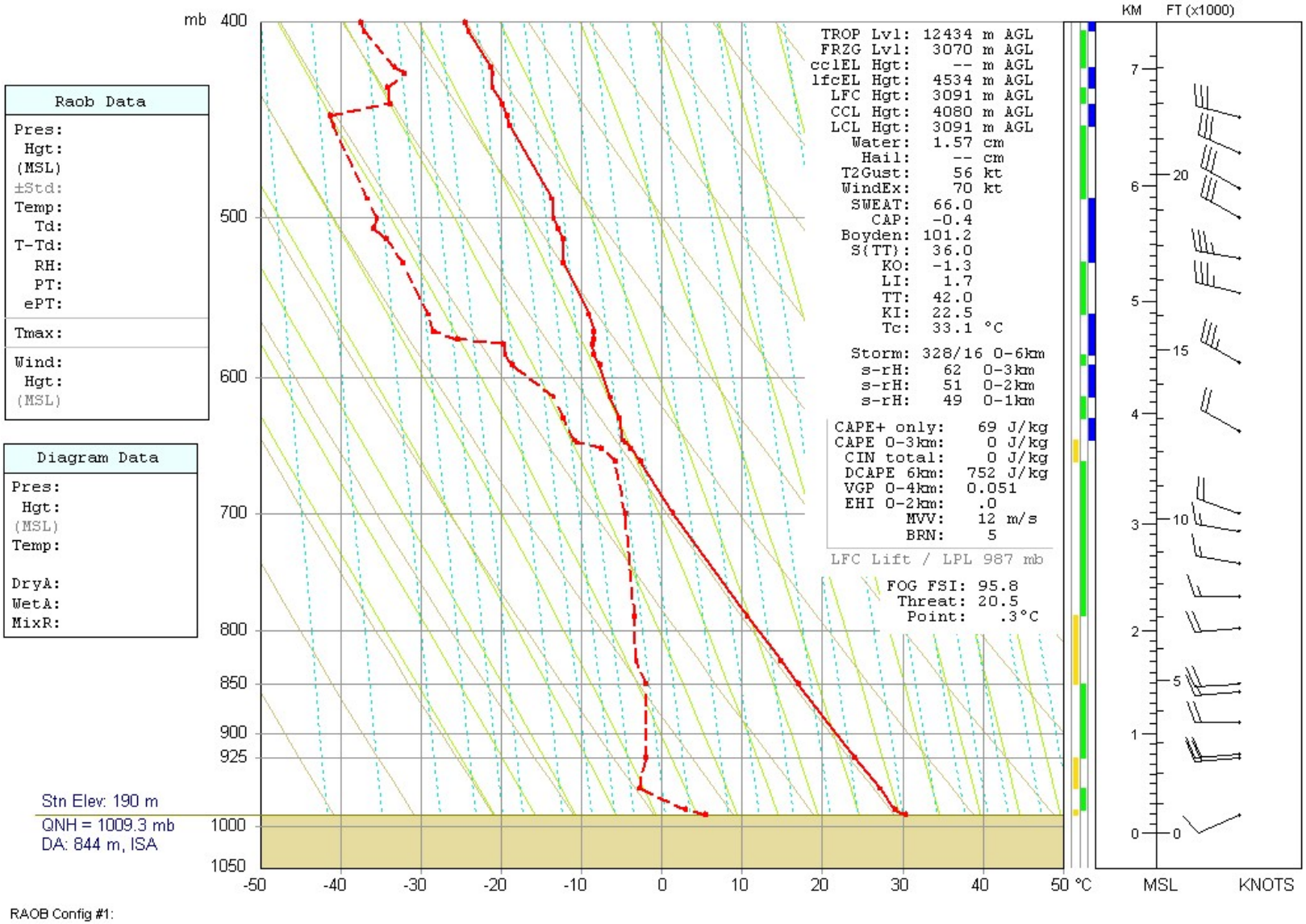


Test #61 System Test II – 20 UTC on 06/03/2005
RWS Version 1.0.4.0

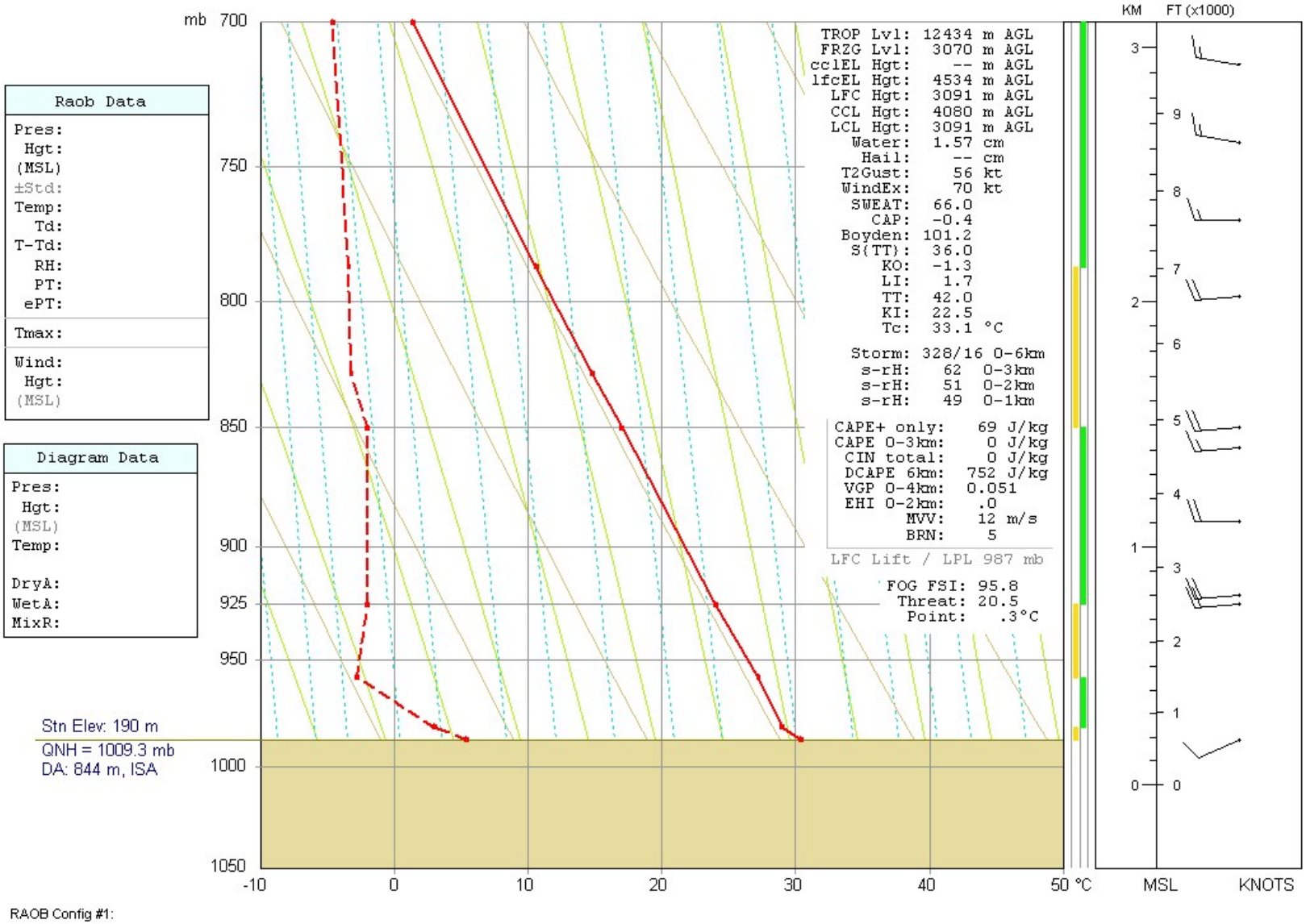


RAOB Config #1:

Test #61 System Test II – 20 UTC on 06/03/2005
RWS Version 1.0.4.0



Test #61 System Test II – 20 UTC on 06/03/2005
RWS Version 1.0.4.0



RAOB Config #1:

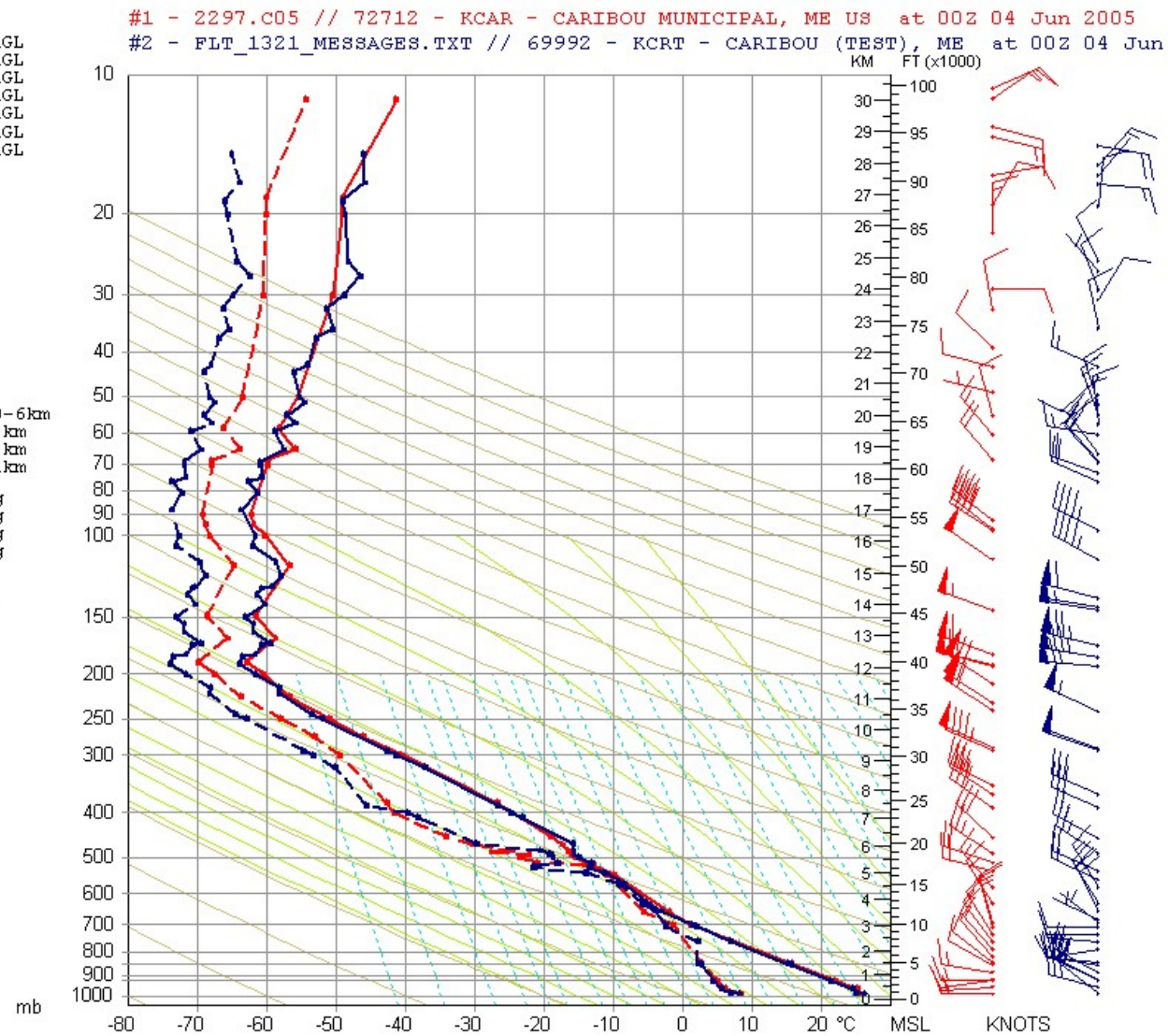
Test #62 - System Test II – 00UTC on 06/04/2005
RWS Version 1.0.4.0

TEST # 62			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12237	12152	85
Freezing Level (m AGL)	3097	3069	28
LFC Height (m AGL)	NC	3124	NC
CCL Height (m AGL)	2865	2985	-120
LCL Height (m AGL)	2133	2258	-125
Precipitable Water (cm)	2.44	2.43	0.01
Thickness 1000 - 500 mb (m)	5648	5638	10
Thickness 1000 - 700 mb (m)	3015	3011	4
Thickness 1000 - 850 mb (m)	1408	1405	3
Thickness 850 - 500 mb (m)	4239	4232	7
Thickness 850 - 700 mb (m)	1607	1606	1
Thickness 700 - 500 mb (m)	2633	2626	7
Thickness 600 - 400 mb (m)	3071	3069	2
Wind Shear Below	14	18	-4
Wind Shear Above	21	09	12
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

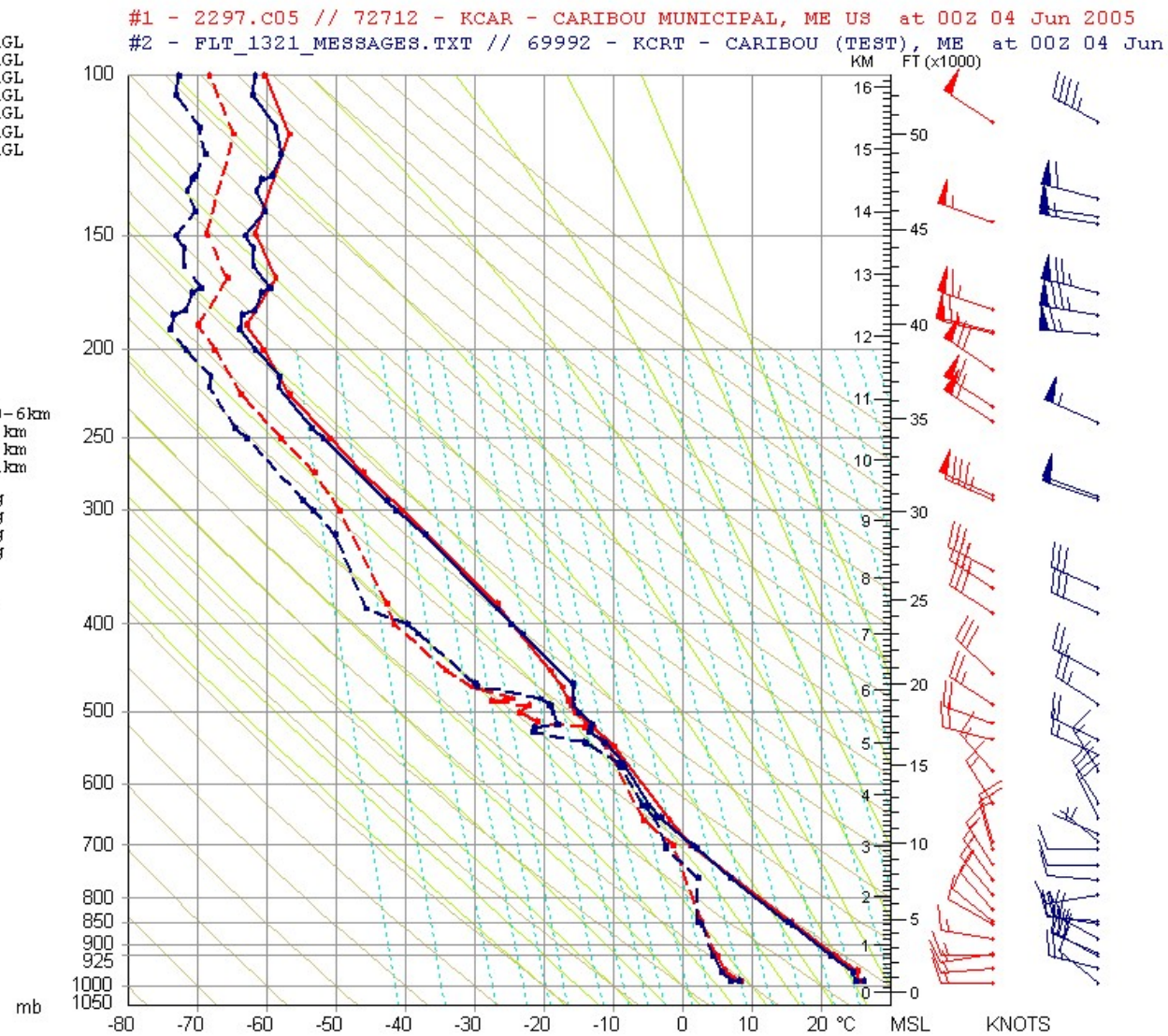
Test #62 - System Test II – 00UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12237	12152	m AGL
FRZG Lvl:	3097	3069	m AGL
cclEL Hgt:	4016	4493	m AGL
lfcEL Hgt:	--	4298	m AGL
LFC Hgt:	--	3124	m AGL
CCL Hgt:	2865	2985	m AGL
LCL Hgt:	2133	2258	m AGL
Water:	2.44	2.43	cm
Hail:	--	--	cm
T2Gust:	41	44	kt
WindEx:	52	55	kt
SWEAT:	92.6	99.4	
CAP:	--	2.4	
Boyden:	100.3	99.7	
S{TT}:	47.1	43.3	
KO:	-1.0	.3	
LI:	0.6	0.9	
TT:	49.6	47.2	
KI:	31.6	28.4	
Tc:	29.5	29.9	°C
Storm:	8/16	356/12	0-6km
s-rH:	37	-62	0-3km
s-rH:	22	-46	0-2km
s-rH:	9	55	0-1km
CAPE+ only:	--	25	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-135	J/kg
DCAPE 6km:	--	387	J/kg
VGP 0-4km:	--	0.056	
EHI 0-2km:	--	.0	
MVV:	--	7	m/s
BRN:	--	9	
FOG FSI:	65.2	81.0	
Threat:	17.7	15.6	
Point:	4.4	5.9	°C
1000 - 500 mb:	5648	5638	m
1000 - 700 mb:	3015	3011	m
1000 - 850 mb:	1408	1405	m
850 - 500 mb:	4239	4232	m
850 - 700 mb:	1607	1606	m
700 - 500 mb:	2633	2626	m
600 - 400 mb:	3071	3069	m



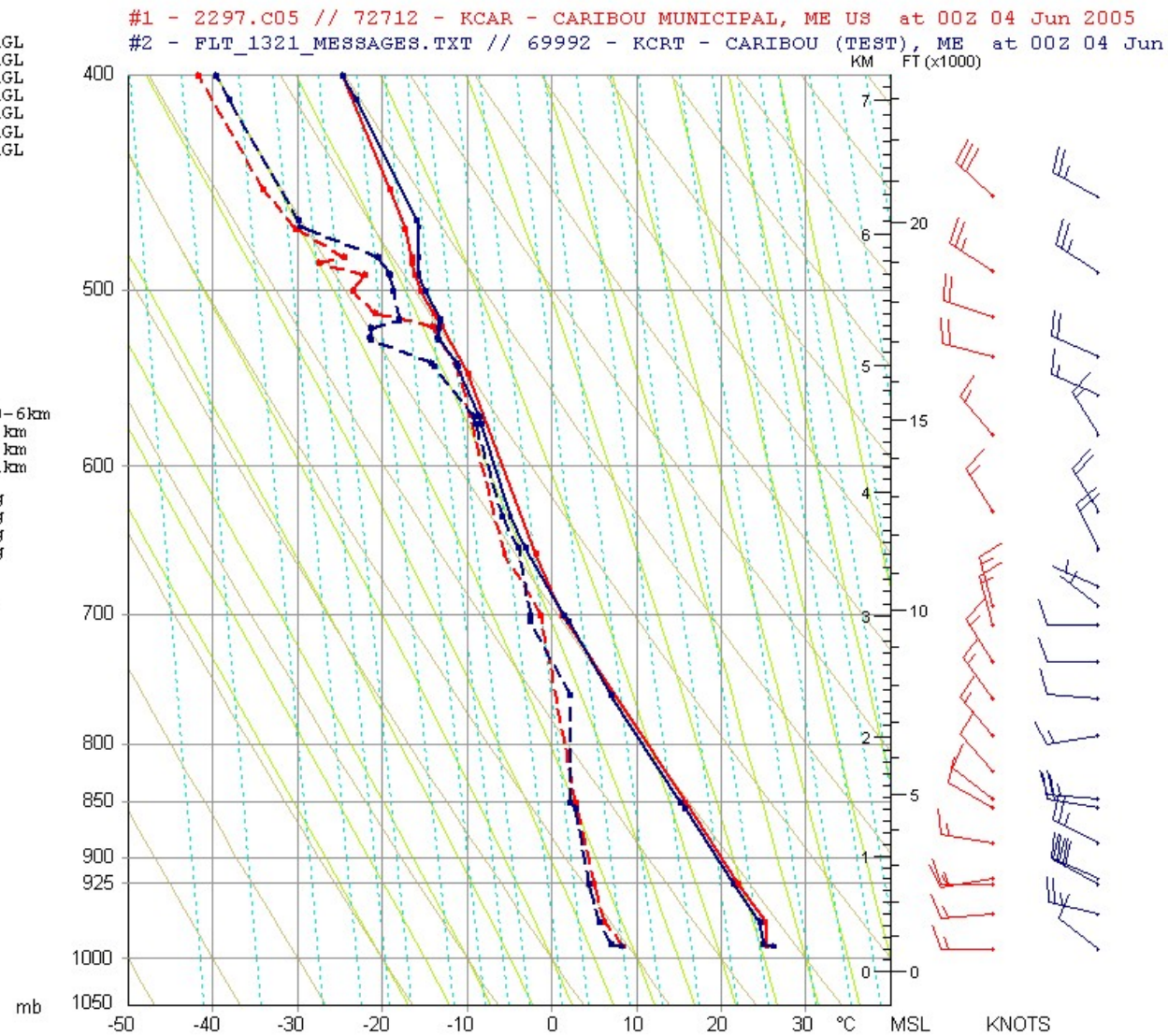
Test #62 - System Test II – 00UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12237	12152	m AGL
FRZG Lvl:	3097	3069	m AGL
cclEL Hgt:	4016	4493	m AGL
lfcEL Hgt:	--	4298	m AGL
LFC Hgt:	--	3124	m AGL
CCL Hgt:	2865	2985	m AGL
LCL Hgt:	2133	2258	m AGL
Water:	2.44	2.43	cm
Hail:	--	--	cm
T2Gust:	41	44	kt
WindEx:	52	55	kt
SWEAT:	92.6	99.4	
CAP:	--	2.4	
Boyden:	100.3	99.7	
S{TT}:	47.1	43.3	
KO:	-1.0	.3	
LI:	0.6	0.9	
TT:	49.6	47.2	
KI:	31.6	28.4	
Tc:	29.5	29.9	°C
Storm:	8/16	356/12	0-6km
s-rH:	37	-62	0-3km
s-rH:	22	-46	0-2km
s-rH:	9	55	0-1km
CAPE+ only:	--	25	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-135	J/kg
DCAPE 6km:	--	387	J/kg
VGP 0-4km:	--	0.056	
EHI 0-2km:	--	.0	
MVV:	--	7	m/s
BRN:	--	9	
FOG FSI:	65.2	81.0	
Threat:	17.7	15.6	
Point:	4.4	5.9	°C
1000 - 500 mb:	5648	5638	m
1000 - 700 mb:	3015	3011	m
1000 - 850 mb:	1408	1405	m
850 - 500 mb:	4239	4232	m
850 - 700 mb:	1607	1606	m
700 - 500 mb:	2633	2626	m
600 - 400 mb:	3071	3069	m



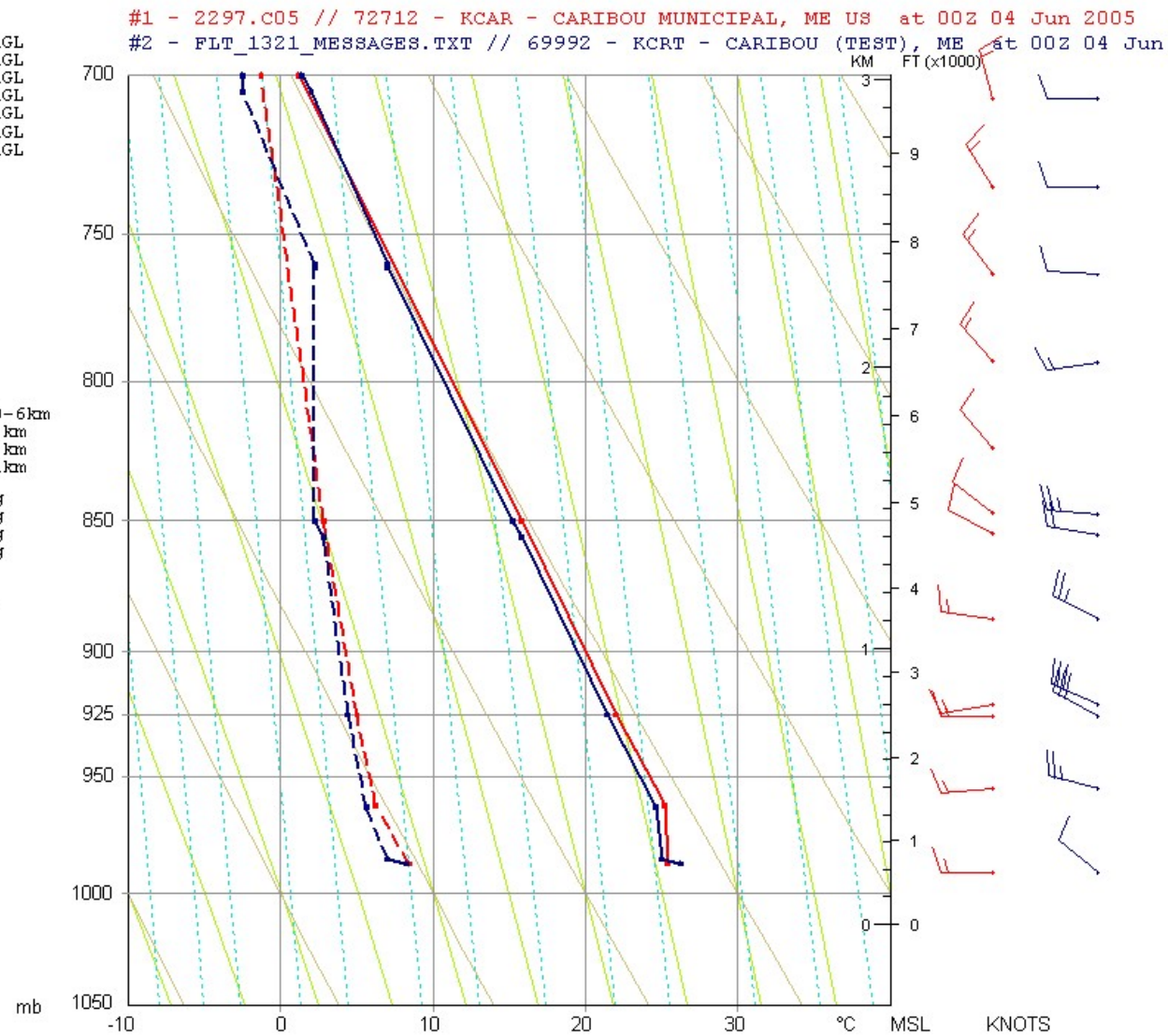
Test #62 - System Test II – 00UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12237	12152	m AGL
FRZG Lvl:	3097	3069	m AGL
cclEL Hgt:	4016	4493	m AGL
lfcEL Hgt:	--	4298	m AGL
LFC Hgt:	--	3124	m AGL
CCL Hgt:	2865	2985	m AGL
LCL Hgt:	2133	2258	m AGL
Water:	2.44	2.43	cm
Hail:	--	--	cm
T2Gust:	41	44	kt
WindEx:	52	55	kt
SWEAT:	92.6	99.4	
CAP:	--	2.4	
Boyden:	100.3	99.7	
S{TT}:	47.1	43.3	
KO:	-1.0	.3	
LI:	0.6	0.9	
TT:	49.6	47.2	
KI:	31.6	28.4	
Tc:	29.5	29.9	°C
Storm:	8/16	356/12	0-6km
s-rH:	37	-62	0-3km
s-rH:	22	-46	0-2km
s-rH:	9	55	0-1km
CAPE+ only:	--	25	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-135	J/kg
DCAPE 6km:	--	387	J/kg
VGP 0-4km:	--	0.056	
EHI 0-2km:	--	.0	
MVV:	--	7	m/s
BRN:	--	9	
FOG FSI:	65.2	81.0	
Threat:	17.7	15.6	
Point:	4.4	5.9	°C
1000 - 500 mb:	5648	5638	m
1000 - 700 mb:	3015	3011	m
1000 - 850 mb:	1408	1405	m
850 - 500 mb:	4239	4232	m
850 - 700 mb:	1607	1606	m
700 - 500 mb:	2633	2626	m
600 - 400 mb:	3071	3069	m



Test #62 - System Test II – 00UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12237	12152	m AGL
FRZG Lvl:	3097	3069	m AGL
cclEL Hgt:	4016	4493	m AGL
lfcEL Hgt:	--	4298	m AGL
LFC Hgt:	--	3124	m AGL
CCL Hgt:	2865	2985	m AGL
LCL Hgt:	2133	2258	m AGL
Water:	2.44	2.43	cm
Hail:	--	--	cm
T2Gust:	41	44	kt
WindEx:	52	55	kt
SWEAT:	92.6	99.4	
CAP:	--	2.4	
Boyden:	100.3	99.7	
S{TT}:	47.1	43.3	
KO:	-1.0	.3	
LI:	0.6	0.9	
TT:	49.6	47.2	
KI:	31.6	28.4	
Tc:	29.5	29.9	°C
Storm:	8/16	356/12	0-6km
s-rH:	37	-62	0-3km
s-rH:	22	-46	0-2km
s-rH:	9	55	0-1km
CAPE+ only:	--	25	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-135	J/kg
DCAPE 6km:	--	387	J/kg
VGP 0-4km:	--	0.056	
EHI 0-2km:	--	.0	
MVV:	--	7	m/s
BRN:	--	9	
FOG FSI:	65.2	81.0	
Threat:	17.7	15.6	
Point:	4.4	5.9	°C
1000 - 500 mb:	5648	5638	m
1000 - 700 mb:	3015	3011	m
1000 - 850 mb:	1408	1405	m
850 - 500 mb:	4239	4232	m
850 - 700 mb:	1607	1606	m
700 - 500 mb:	2633	2626	m
600 - 400 mb:	3071	3069	m



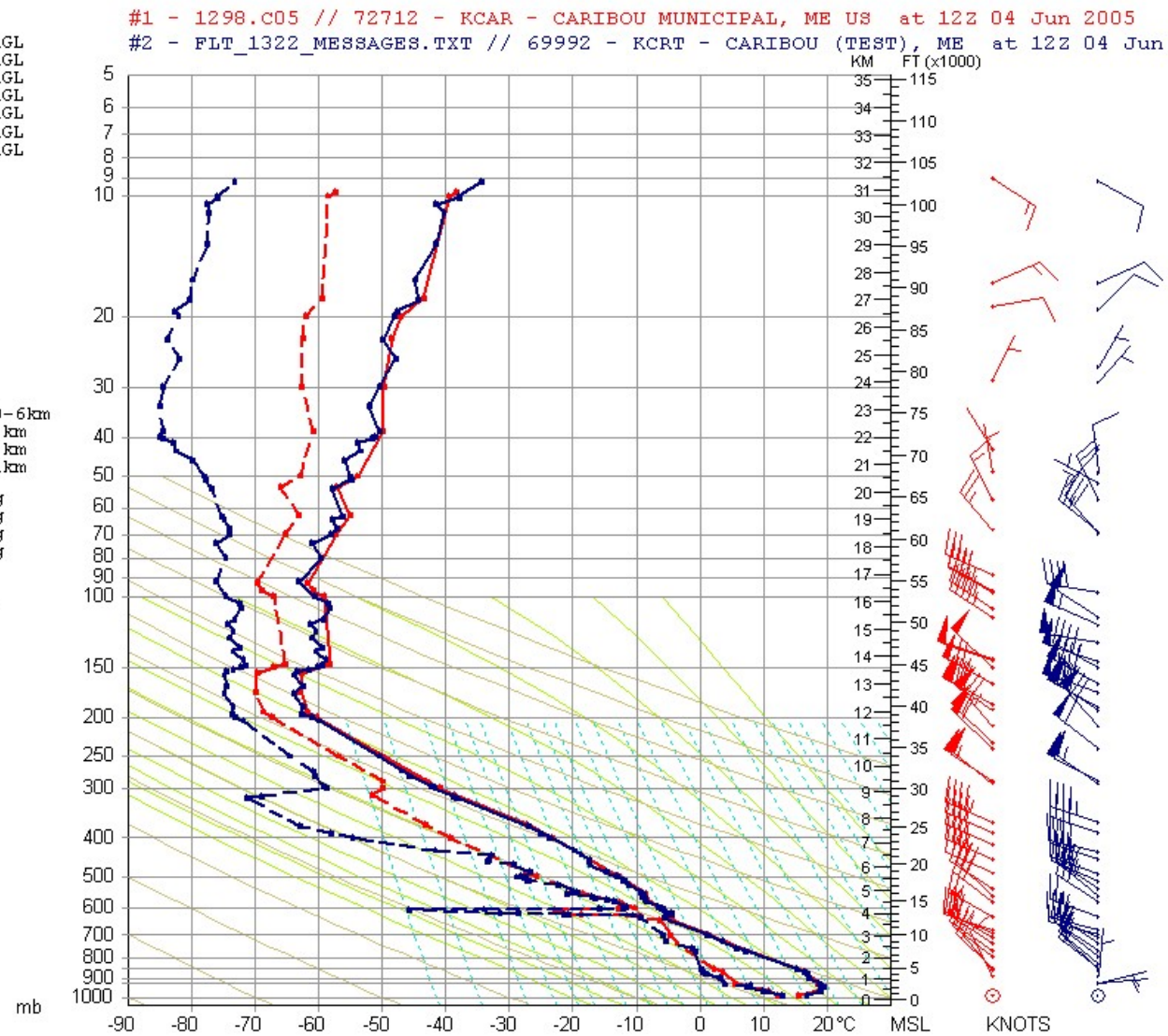
Test #63 - System Test II – 12UTC on 06/04/2005
RWS Version 1.0.4.0

TEST # 63			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12056	11971	85
Freezing Level (m AGL)	3052	3029	23
LFC Height (m AGL)	NC	3519	NC
CCL Height (m AGL)	2527	2633	-106
LCL Height (m AGL)	436	500	-64
Precipitable Water (cm)	2.26	2.04	0.22
Thickness 1000 - 500 mb (m)	5628	5623	5
Thickness 1000 - 700 mb (m)	2995	2994	1
Thickness 1000 - 850 mb (m)	1391	1391	0
Thickness 850 - 500 mb (m)	4237	4231	6
Thickness 850 - 700 mb (m)	1604	1602	2
Thickness 700 - 500 mb (m)	2633	2629	4
Thickness 600 - 400 mb (m)	3080	3075	5
Wind Shear Below	19	21	-2
Wind Shear Above	26	36	-10
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

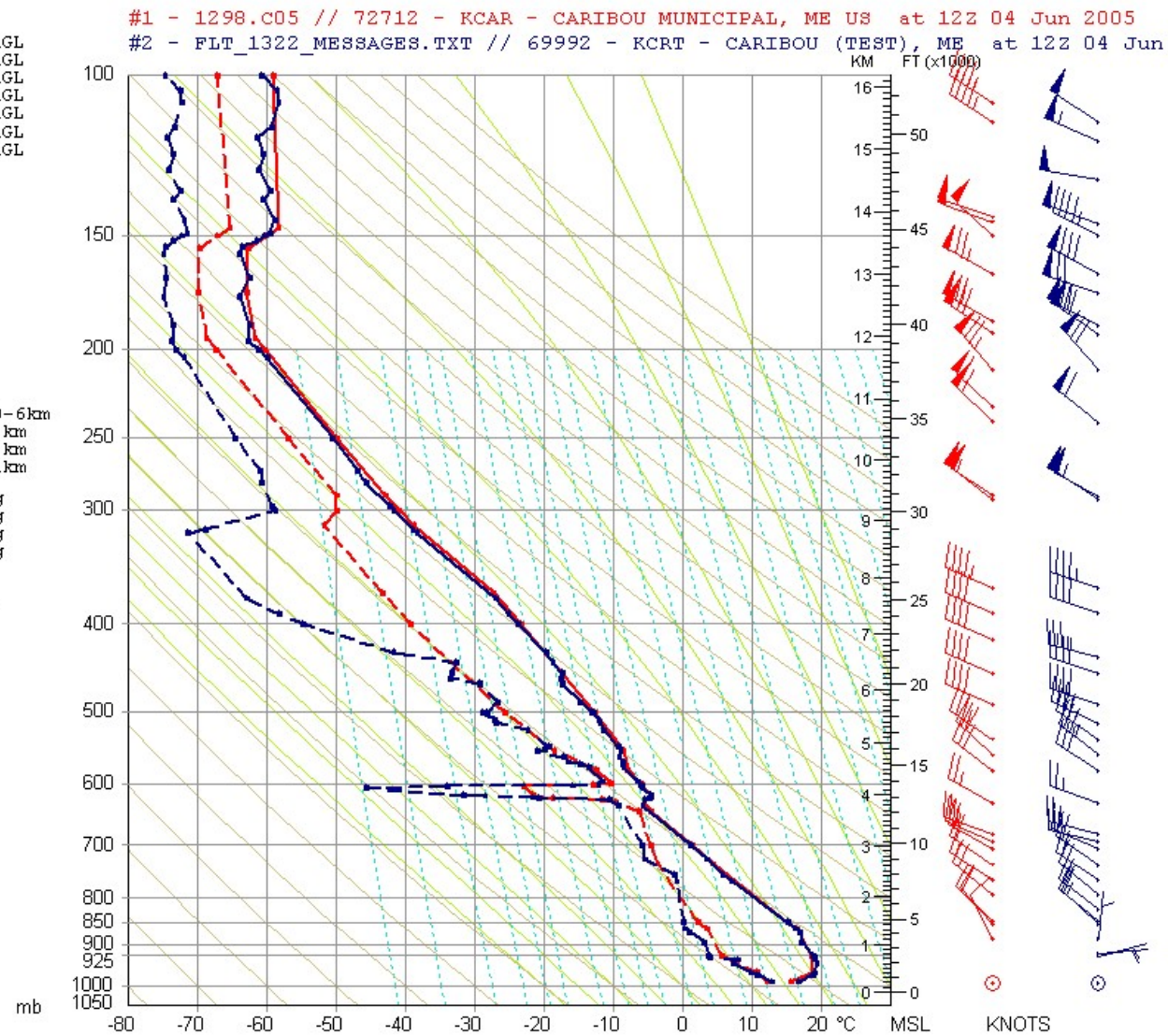
Test #63 - System Test II – 12UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12056	11971	m AGL
FRZG Lvl:	3052	3029	m AGL
cclEL Hgt:	4706	4719	m AGL
lfcEL Hgt:	--	3745	m AGL
LFC Hgt:	--	3519	m AGL
CCL Hgt:	2527	2633	m AGL
LCL Hgt:	436	500	m AGL
Water:	2.26	2.04	cm
Hail:	0.28	0.15	cm
T2Gust:	--	--	kt
WindEx:	--	6	kt
SWEAT:	102.4	81.4	
CAP:	--	7.8	
Boyden:	98.1	98.2	
S{TT}:	36.8	34.6	
KO:	1.2	-.2	
LI:	6.3	4.5	
TT:	42.8	41.6	
KI:	24.1	21.5	
Tc:	29.1	29.2	°C
Storm:	332/30	329/30	0-6km
s-rH:	64	66	0-3km
s-rH:	37	29	0-2km
s-rH:	-3	-23	0-1km
CAPE+ only:	--	2	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-505	J/kg
DCAPE 6km:	--	458	J/kg
VGP 0-4km:	--	0.01	
EHI 0-2km:	--	.0	
MVV:	--	2	m/s
BRN:	--	0	
FOG FSI:	25.6	30.0	
Threat:	13.3	13.3	
Point:	8.3	7.4	°C
1000 - 500 mb:	5628	5623	m
1000 - 700 mb:	2995	2994	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4237	4231	m
850 - 700 mb:	1604	1602	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3080	3075	m



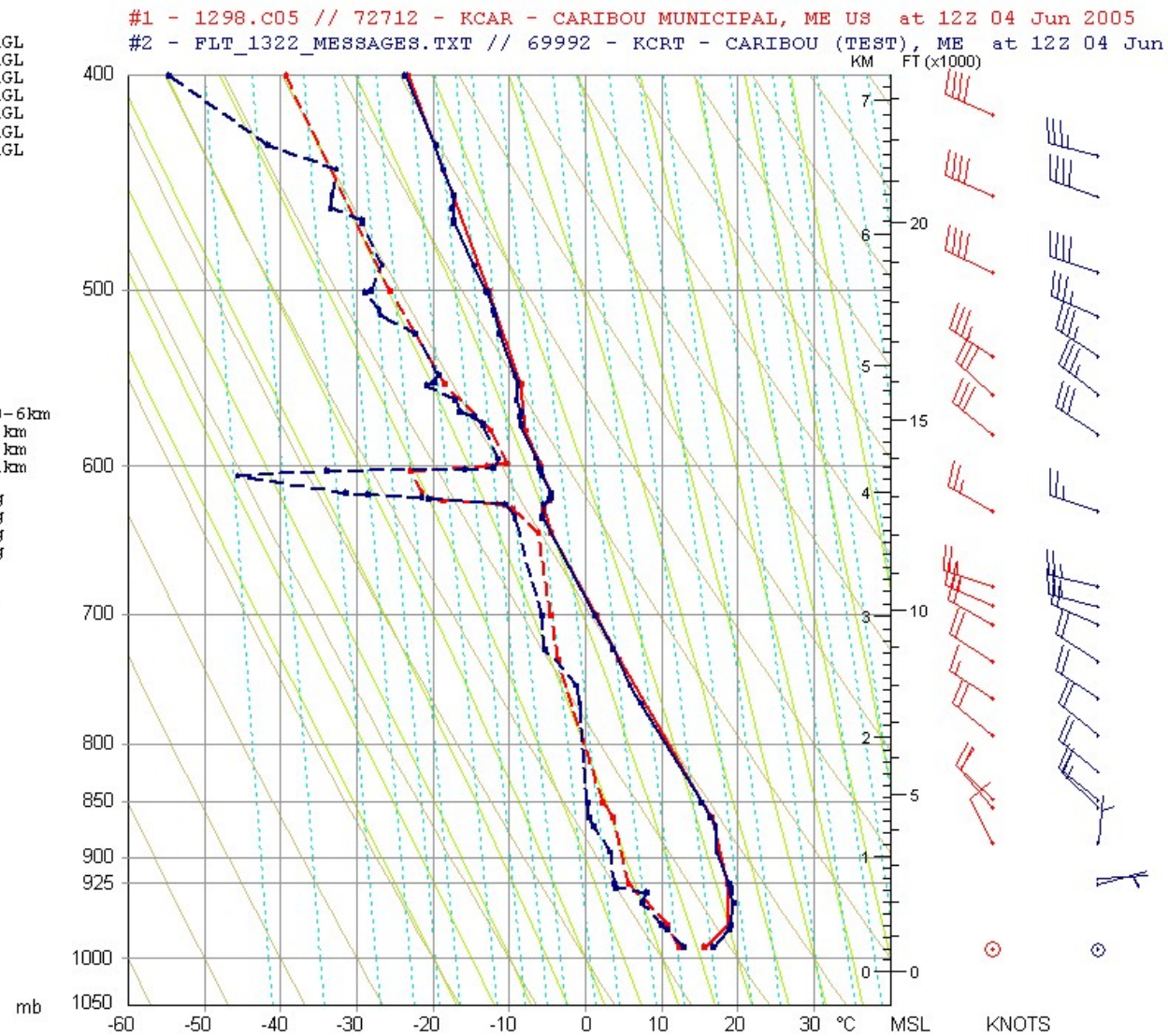
Test #63 - System Test II – 12UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12056	11971	m AGL
FRZG Lvl:	3052	3029	m AGL
cclEL Hgt:	4706	4719	m AGL
lfcEL Hgt:	--	3745	m AGL
LFC Hgt:	--	3519	m AGL
CCL Hgt:	2527	2633	m AGL
LCL Hgt:	436	500	m AGL
Water:	2.26	2.04	cm
Hail:	0.28	0.15	cm
T2Gust:	--	--	kt
WindEx:	--	6	kt
SWEAT:	102.4	81.4	
CAP:	--	7.8	
Boyden:	98.1	98.2	
S{TT}:	36.8	34.6	
KO:	1.2	-.2	
LI:	6.3	4.5	
TT:	42.8	41.6	
KI:	24.1	21.5	
Tc:	29.1	29.2	°C
Storm:	332/30	329/30	0-6km
s-rH:	64	66	0-3km
s-rH:	37	29	0-2km
s-rH:	-3	-23	0-1km
CAPE+ only:	--	2	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-505	J/kg
DCAPE 6km:	--	458	J/kg
VGP 0-4km:	--	0.01	
EHI 0-2km:	--	.0	
MVV:	--	2	m/s
BRN:	--	0	
FOG FSI:	25.6	30.0	
Threat:	13.3	13.3	
Point:	8.3	7.4	°C
1000 - 500 mb:	5628	5623	m
1000 - 700 mb:	2995	2994	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4237	4231	m
850 - 700 mb:	1604	1602	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3080	3075	m



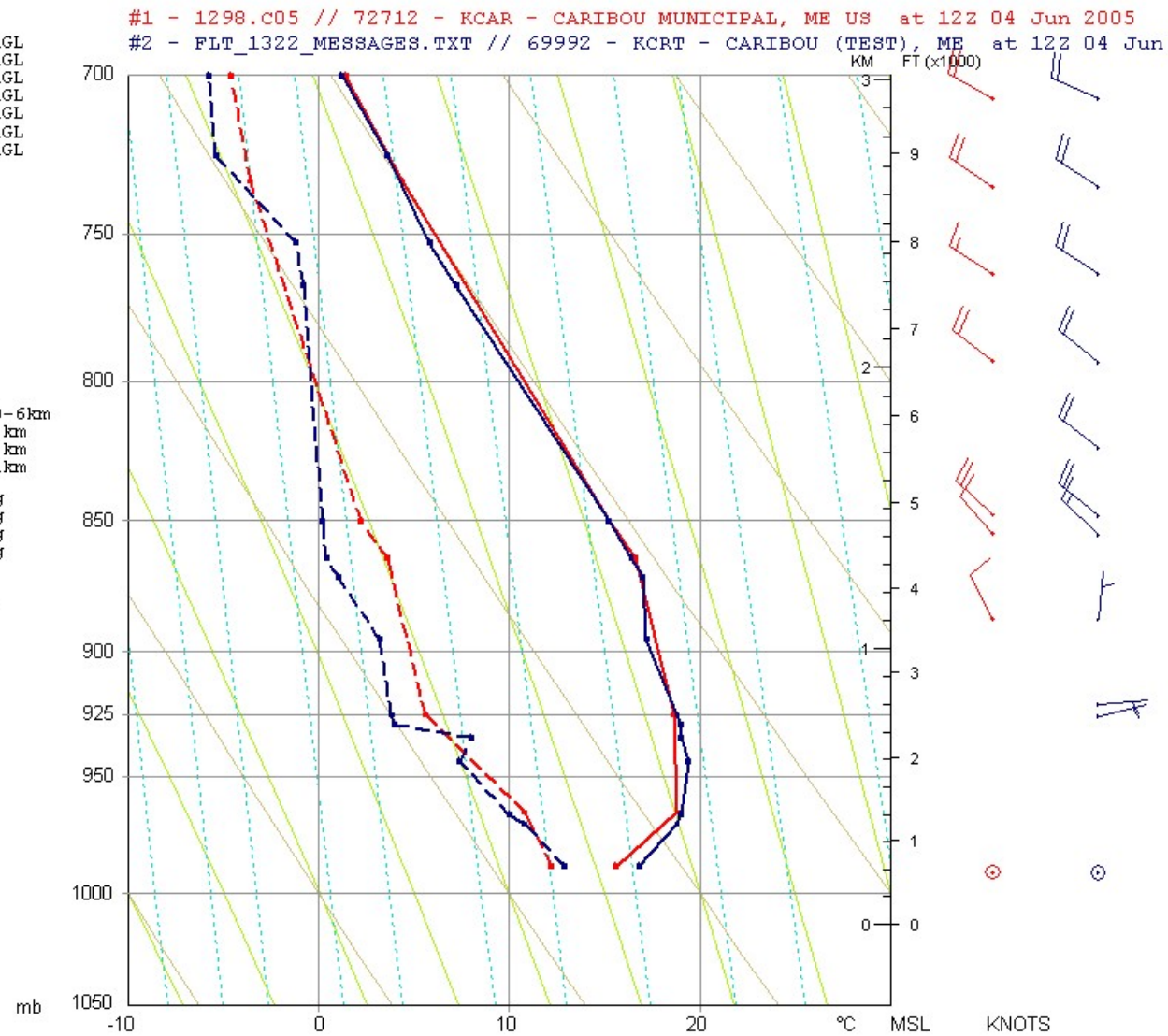
Test #63 - System Test II – 12UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12056	11971	m AGL
FRZG Lvl:	3052	3029	m AGL
cclEL Hgt:	4706	4719	m AGL
lfcEL Hgt:	--	3745	m AGL
LFC Hgt:	--	3519	m AGL
CCL Hgt:	2527	2633	m AGL
LCL Hgt:	436	500	m AGL
Water:	2.26	2.04	cm
Hail:	0.28	0.15	cm
T2Gust:	--	--	kt
WindEx:	--	6	kt
SWEAT:	102.4	81.4	
CAP:	--	7.8	
Boyden:	98.1	98.2	
S{TT}:	36.8	34.6	
KO:	1.2	-.2	
LI:	6.3	4.5	
TT:	42.8	41.6	
KI:	24.1	21.5	
Tc:	29.1	29.2	°C
Storm:	332/30	329/30	0-6km
s-rH:	64	66	0-3km
s-rH:	37	29	0-2km
s-rH:	-3	-23	0-1km
CAPE+ only:	--	2	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-505	J/kg
DCAPE 6km:	--	458	J/kg
VGP 0-4km:	--	0.01	
EHI 0-2km:	--	.0	
MVV:	--	2	m/s
BRN:	--	0	
FOG FSI:	25.6	30.0	
Threat:	13.3	13.3	
Point:	8.3	7.4°C	
1000 - 500 mb:	5628	5623	m
1000 - 700 mb:	2995	2994	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4237	4231	m
850 - 700 mb:	1604	1602	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3080	3075	m



Test #63 - System Test II – 12UTC on 06/04/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12056	11971	m AGL
FRZG Lvl:	3052	3029	m AGL
cclEL Hgt:	4706	4719	m AGL
lfcEL Hgt:	--	3745	m AGL
LFC Hgt:	--	3519	m AGL
CCL Hgt:	2527	2633	m AGL
LCL Hgt:	436	500	m AGL
Water:	2.26	2.04	cm
Hail:	0.28	0.15	cm
T2Gust:	--	--	kt
WindEx:	--	6	kt
SWEAT:	102.4	81.4	
CAP:	--	7.8	
Boyden:	98.1	98.2	
S{TT}:	36.8	34.6	
KO:	1.2	-.2	
LI:	6.3	4.5	
TT:	42.8	41.6	
KI:	24.1	21.5	
Tc:	29.1	29.2	°C
Storm:	332/30	329/30	0-6km
s-rH:	64	66	0-3km
s-rH:	37	29	0-2km
s-rH:	-3	-23	0-1km
CAPE+ only:	--	2	J/kg
CAPE 0-3km:	--	0	J/kg
CIN total:	--	-505	J/kg
DCAPE 6km:	--	458	J/kg
VGP 0-4km:	--	0.01	
EHI 0-2km:	--	.0	
MVV:	--	2	m/s
BRN:	--	0	
FOG FSI:	25.6	30.0	
Threat:	13.3	13.3	
Point:	8.3	7.4°C	
1000 - 500 mb:	5628	5623	m
1000 - 700 mb:	2995	2994	m
1000 - 850 mb:	1391	1391	m
850 - 500 mb:	4237	4231	m
850 - 700 mb:	1604	1602	m
700 - 500 mb:	2633	2629	m
600 - 400 mb:	3080	3075	m



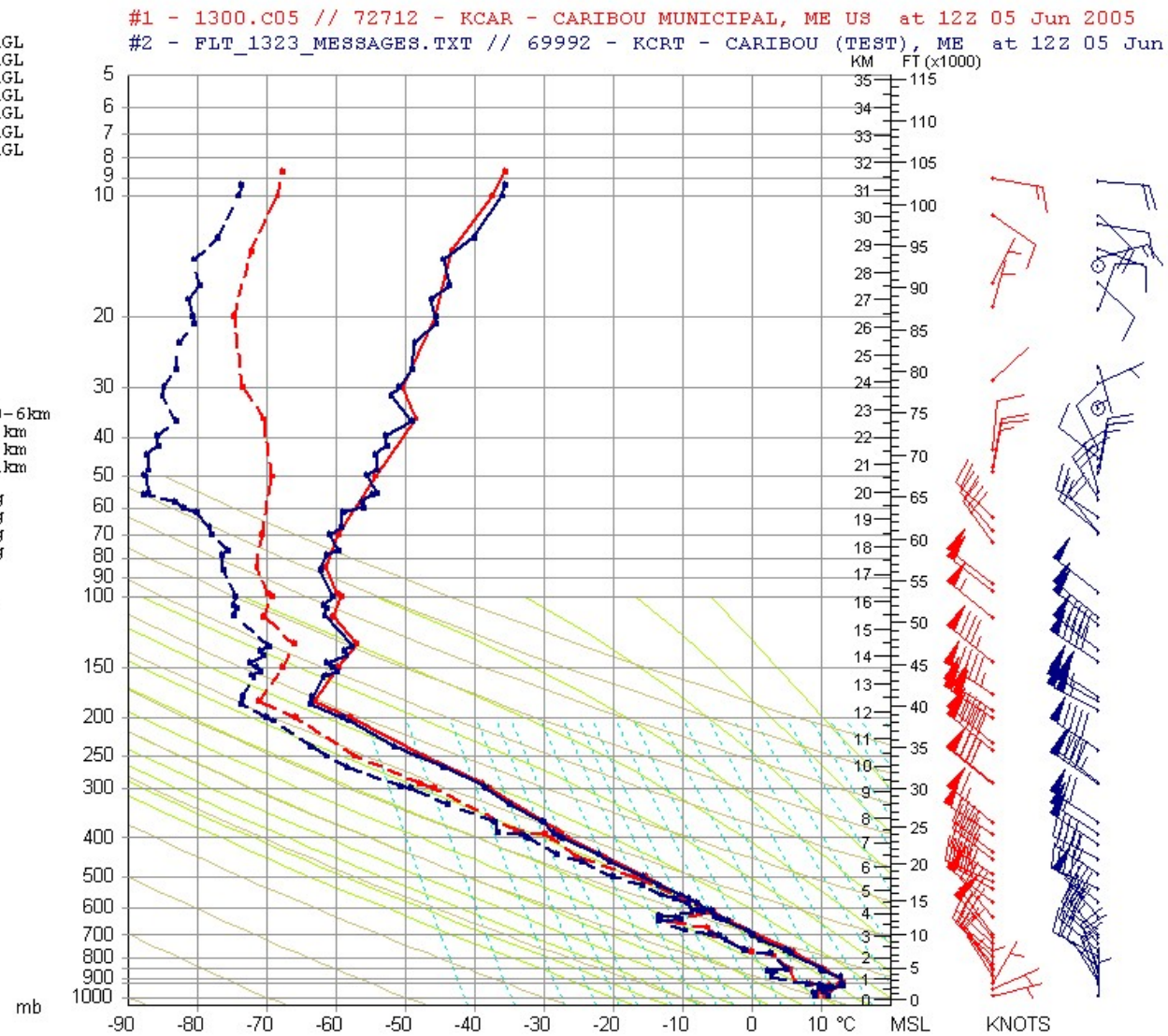
Test #65 - System Test II – 12UTC on 06/05/2005
RWS Version 1.0.4.0

TEST # 65			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12438	12308	130
Freezing Level (m AGL)	2977	2912	65
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	2124	2072	52
LCL Height (m AGL)	165	253	-88
Precipitable Water (cm)	2.7	2.48	0.22
Thickness 1000 - 500 mb (m)	5581	5574	7
Thickness 1000 - 700 mb (m)	2955	2951	4
Thickness 1000 - 850 mb (m)	1363	1363	0
Thickness 850 - 500 mb (m)	4218	4211	7
Thickness 850 - 700 mb (m)	1592	1588	4
Thickness 700 - 500 mb (m)	2626	2623	3
Thickness 600 - 400 mb (m)	3055	3048	7
Wind Shear Below	13	09	4
Wind Shear Above	04	09	-5
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

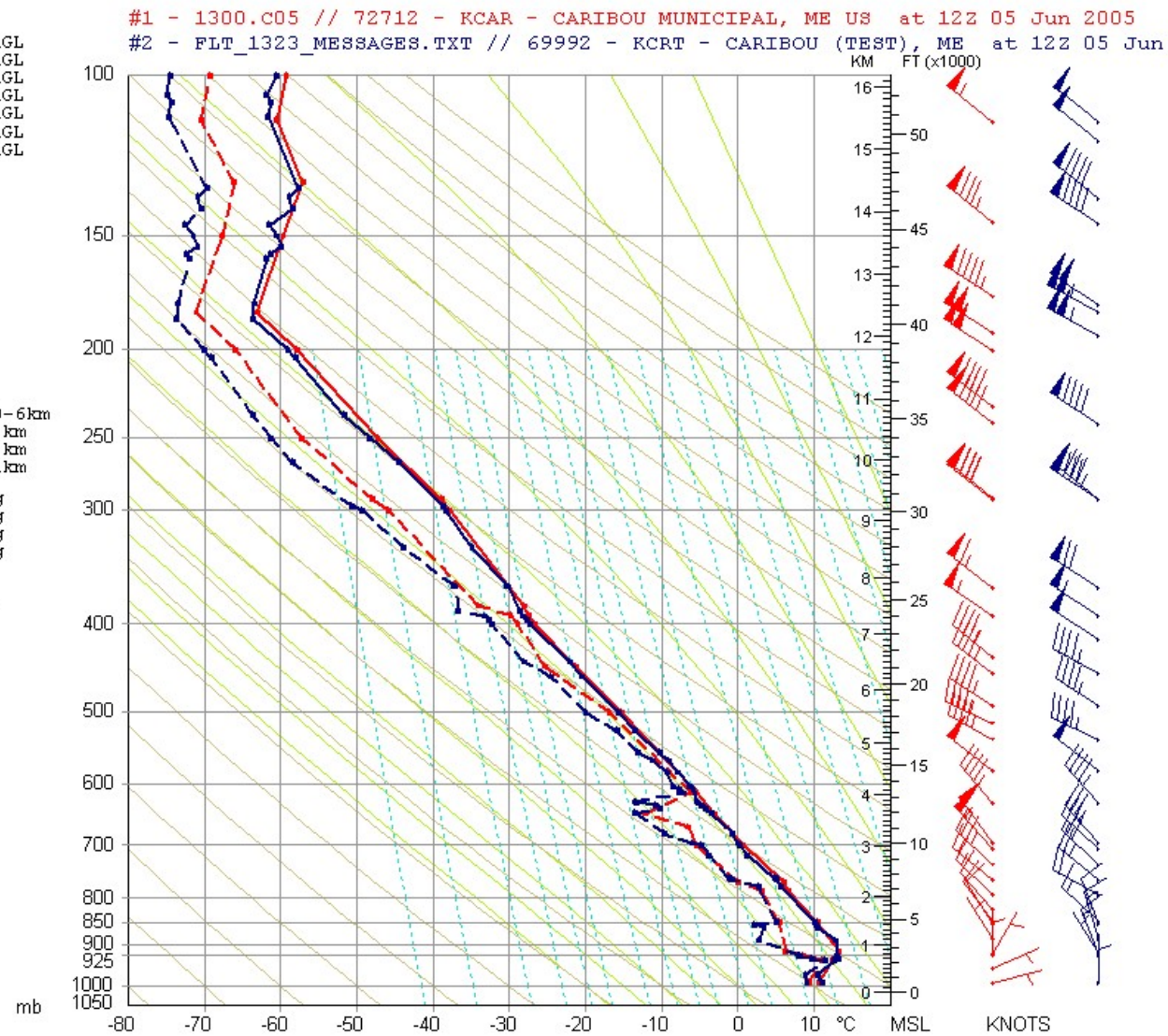
Test #65 - System Test II – 12UTC on 06/05/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12438	12308	m AGL
FRZG Lvl:	2977	2912	m AGL
cclEL Hgt:	7044	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2124	2072	m AGL
LCL Hgt:	165	253	m AGL
Water:	2.70	2.48	cm
Hail:	0.15	0.10	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	131.8	139.0	
CAP:	--	--	
Boyden:	94.9	94.9	
S{TT}:	40.4	41.4	
KO:	6.2	5.7	
LI:	10.1	9.6	
TT:	46.4	46.4	
KI:	25.1	25.7	
Tc:	27.0	25.9	°C
Storm:	336/38	332/39	0-6km
s-rH:	245	113	0-3km
s-rH:	73	84	0-2km
s-rH:	38	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	13.0	22.0	
Threat:	11.9	11.9	
Point:	9.1	8.8	°C
1000 - 500 mb:	5581	5574	m
1000 - 700 mb:	2955	2951	m
1000 - 850 mb:	1363	1363	m
850 - 500 mb:	4218	4211	m
850 - 700 mb:	1592	1588	m
700 - 500 mb:	2626	2623	m
600 - 400 mb:	3055	3048	m



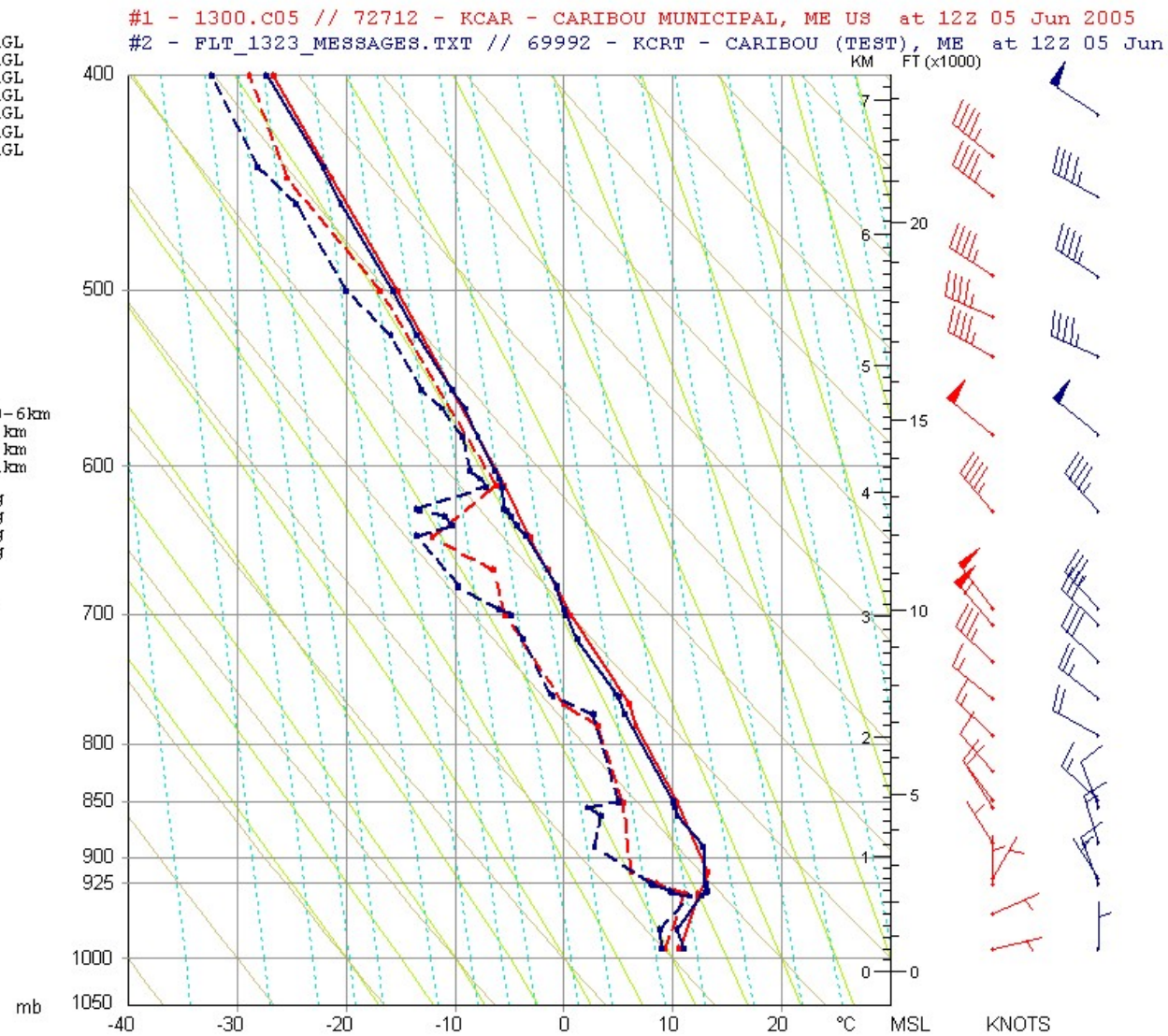
Test #65 - System Test II – 12UTC on 06/05/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12438	12308	m AGL
FRZG Lvl:	2977	2912	m AGL
cclEL Hgt:	7044	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2124	2072	m AGL
LCL Hgt:	165	253	m AGL
Water:	2.70	2.48	cm
Hail:	0.15	0.10	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	131.8	139.0	
CAP:	--	--	
Boyden:	94.9	94.9	
S{TT}:	40.4	41.4	
KO:	6.2	5.7	
LI:	10.1	9.6	
TT:	46.4	46.4	
KI:	25.1	25.7	
Tc:	27.0	25.9	°C
Storm:	336/38	332/39	0-6km
s-rH:	245	113	0-3km
s-rH:	73	84	0-2km
s-rH:	38	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	13.0	22.0	
Threat:	11.9	11.9	
Point:	9.1	8.8	°C
1000 - 500 mb:	5581	5574	m
1000 - 700 mb:	2955	2951	m
1000 - 850 mb:	1363	1363	m
850 - 500 mb:	4218	4211	m
850 - 700 mb:	1592	1588	m
700 - 500 mb:	2626	2623	m
600 - 400 mb:	3055	3048	m



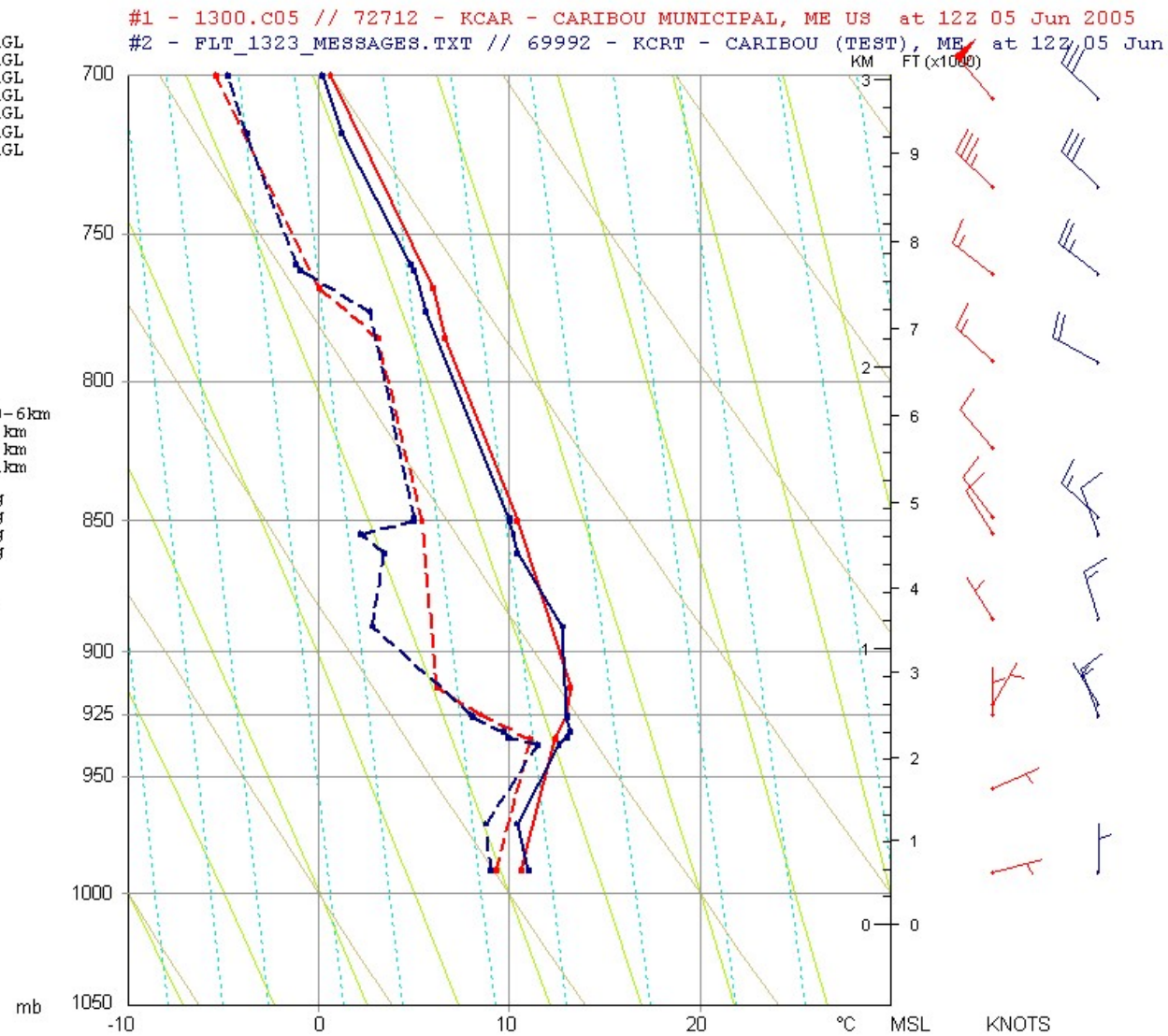
Test #65 - System Test II – 12UTC on 06/05/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12438	12308	m AGL
FRZG Lvl:	2977	2912	m AGL
cclEL Hgt:	7044	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2124	2072	m AGL
LCL Hgt:	165	253	m AGL
Water:	2.70	2.48	cm
Hail:	0.15	0.10	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	131.8	139.0	
CAP:	--	--	
Boyden:	94.9	94.9	
S{TT}:	40.4	41.4	
KO:	6.2	5.7	
LI:	10.1	9.6	
TT:	46.4	46.4	
KI:	25.1	25.7	
Tc:	27.0	25.9	°C
Storm:	336/38	332/39	0-6km
s-rH:	245	113	0-3km
s-rH:	73	84	0-2km
s-rH:	38	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	13.0	22.0	
Threat:	11.9	11.9	
Point:	9.1	8.8	°C
1000 - 500 mb:	5581	5574	m
1000 - 700 mb:	2955	2951	m
1000 - 850 mb:	1363	1363	m
850 - 500 mb:	4218	4211	m
850 - 700 mb:	1592	1588	m
700 - 500 mb:	2626	2623	m
600 - 400 mb:	3055	3048	m



Test #65 - System Test II – 12UTC on 06/05/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12438	12308	m AGL
FRZG Lvl:	2977	2912	m AGL
cclEL Hgt:	7044	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	2124	2072	m AGL
LCL Hgt:	165	253	m AGL
Water:	2.70	2.48	cm
Hail:	0.15	0.10	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	131.8	139.0	
CAP:	--	--	
Boyden:	94.9	94.9	
S{TT}:	40.4	41.4	
KO:	6.2	5.7	
LI:	10.1	9.6	
TT:	46.4	46.4	
KI:	25.1	25.7	
Tc:	27.0	25.9	°C
Storm:	336/38	332/39	0-6km
s-rH:	245	113	0-3km
s-rH:	73	84	0-2km
s-rH:	38	-17	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	13.0	22.0	
Threat:	11.9	11.9	
Point:	9.1	8.8	°C
1000 - 500 mb:	5581	5574	m
1000 - 700 mb:	2955	2951	m
1000 - 850 mb:	1363	1363	m
850 - 500 mb:	4218	4211	m
850 - 700 mb:	1592	1588	m
700 - 500 mb:	2626	2623	m
600 - 400 mb:	3055	3048	m



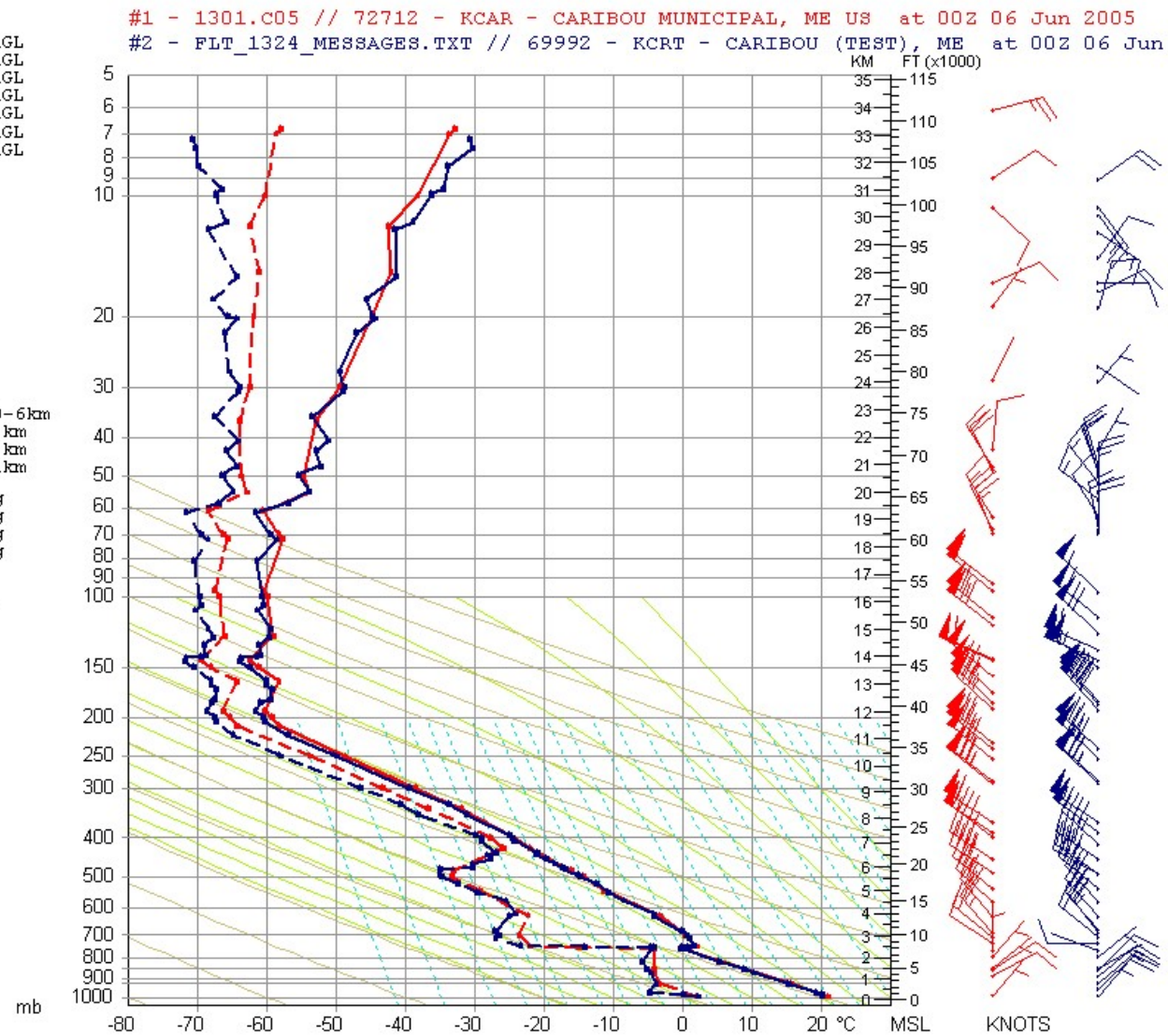
Test #66 - System Test II – 00UTC on 06/06/2005
RWS Version 1.0.4.0

TEST # 66			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12102	12074	28
Freezing Level (m AGL)	2996	2274	722
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	4478	4782	-304
LCL Height (m AGL)	2360	2240	120
Precipitable Water (cm)	1.26	1.12	0.14
Thickness 1000 - 500 mb (m)	5578	5573	5
Thickness 1000 - 700 mb (m)	2950	2947	3
Thickness 1000 - 850 mb (m)	1376	1374	2
Thickness 850 - 500 mb (m)	4202	4199	3
Thickness 850 - 700 mb (m)	1574	1572	2
Thickness 700 - 500 mb (m)	2629	2626	3
Thickness 600 - 400 mb (m)	3066	3060	6
Wind Shear Below	07	06	
Wind Shear Above	06	07	
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

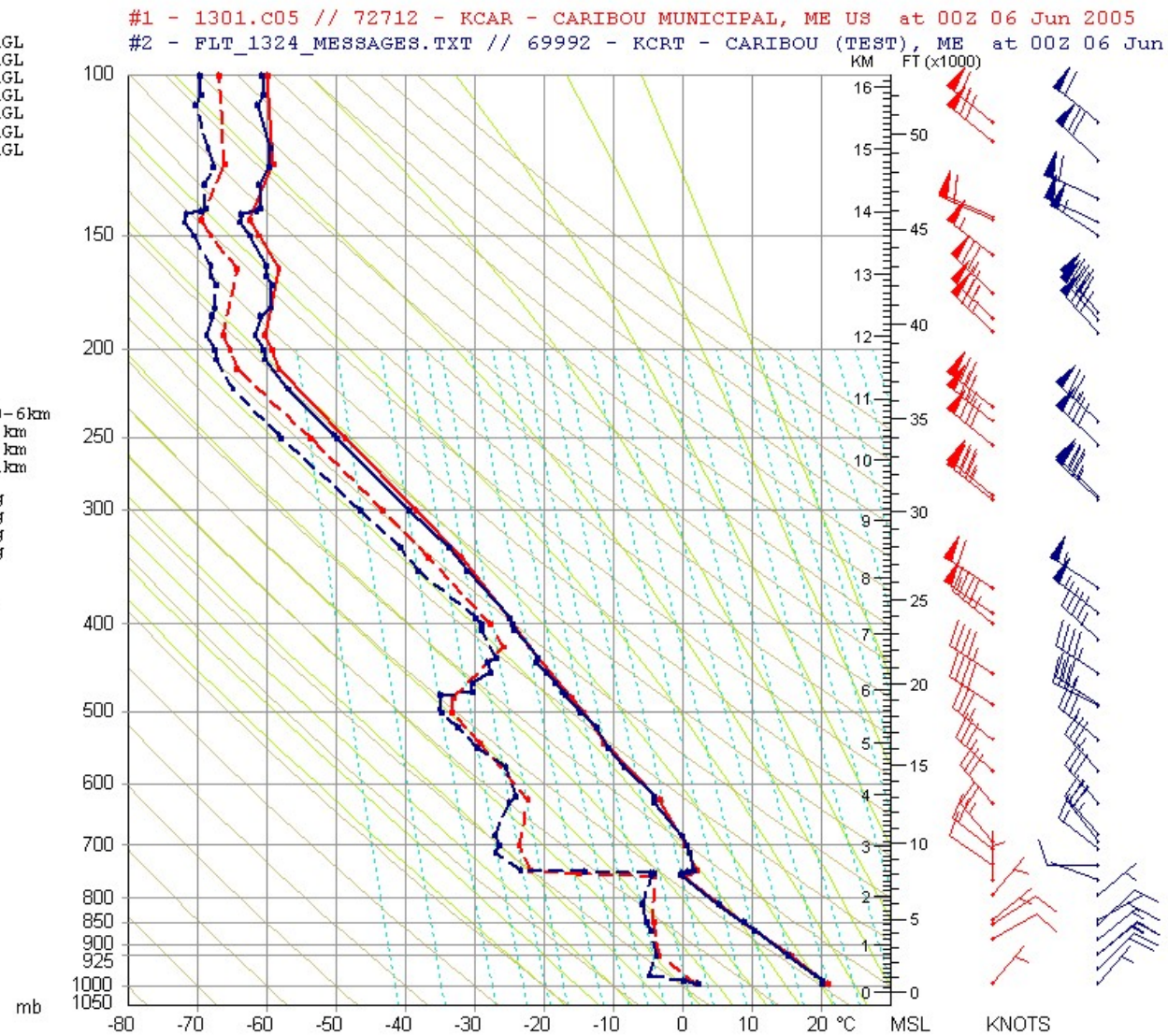
Test #66 - System Test II – 00UTC on 06/06/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12102	12074	m AGL
FRZG Lvl:	2996	2274	m AGL
cclEL Hgt:	5103	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4478	4782	m AGL
LCL Hgt:	2360	2240	m AGL
Water:	1.26	1.12	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	40	50	kt
SWEAT:	52.0	49.0	
CAP:	--	--	
Boyden:	94.6	94.1	
S{TT}:	7.2	4.0	
KO:	4.8	5.1	
LI:	9.4	9.4	
TT:	33.2	33.0	
KI:	-5.1	-8.7	
Tc:	37.1	37.9	°C
Storm:	346/29	344/31	0-6km
s-rH:	137	172	0-3km
s-rH:	6	14	0-2km
s-rH:	-24	-54	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	68.4	64.8	
Threat:	30.2	16.4	
Point:	-14.0	-.6	°C
1000 - 500 mb:	5578	5573	m
1000 - 700 mb:	2950	2947	m
1000 - 850 mb:	1376	1374	m
850 - 500 mb:	4202	4199	m
850 - 700 mb:	1574	1572	m
700 - 500 mb:	2629	2626	m
600 - 400 mb:	3066	3060	m



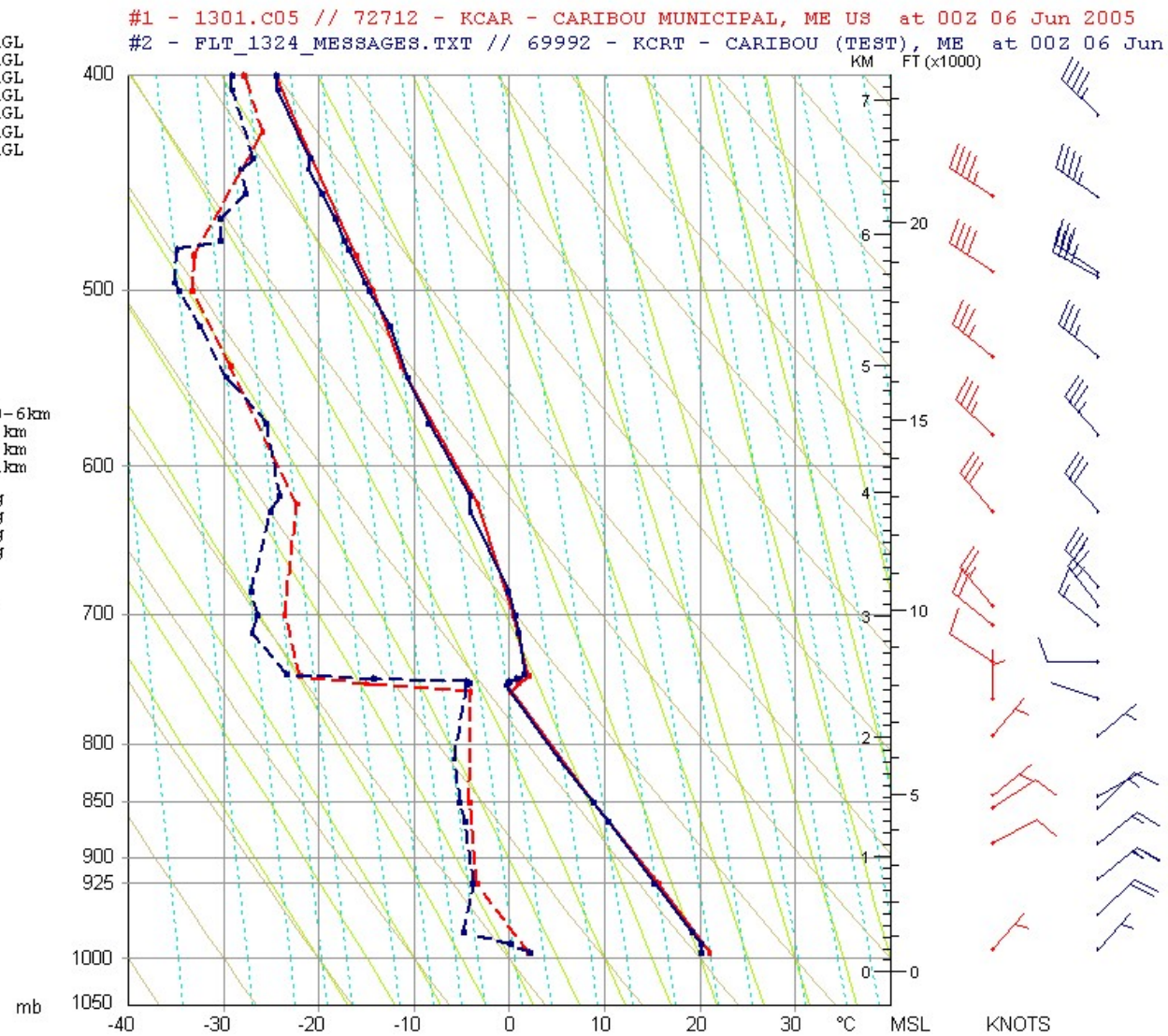
Test #66 - System Test II – 00UTC on 06/06/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12102	12074	m AGL
FRZG Lvl:	2996	2274	m AGL
cclEL Hgt:	5103	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4478	4782	m AGL
LCL Hgt:	2360	2240	m AGL
Water:	1.26	1.12	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	40	50	kt
SWEAT:	52.0	49.0	
CAP:	--	--	
Boyden:	94.6	94.1	
S{TT}:	7.2	4.0	
KO:	4.8	5.1	
LI:	9.4	9.4	
TT:	33.2	33.0	
KI:	-5.1	-8.7	
Tc:	37.1	37.9	°C
Storm:	346/29	344/31	0-6km
s-rH:	137	172	0-3km
s-rH:	6	14	0-2km
s-rH:	-24	-54	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	68.4	64.8	
Threat:	30.2	16.4	
Point:	-14.0	-.6	°C
1000 - 500 mb:	5578	5573	m
1000 - 700 mb:	2950	2947	m
1000 - 850 mb:	1376	1374	m
850 - 500 mb:	4202	4199	m
850 - 700 mb:	1574	1572	m
700 - 500 mb:	2629	2626	m
600 - 400 mb:	3066	3060	m



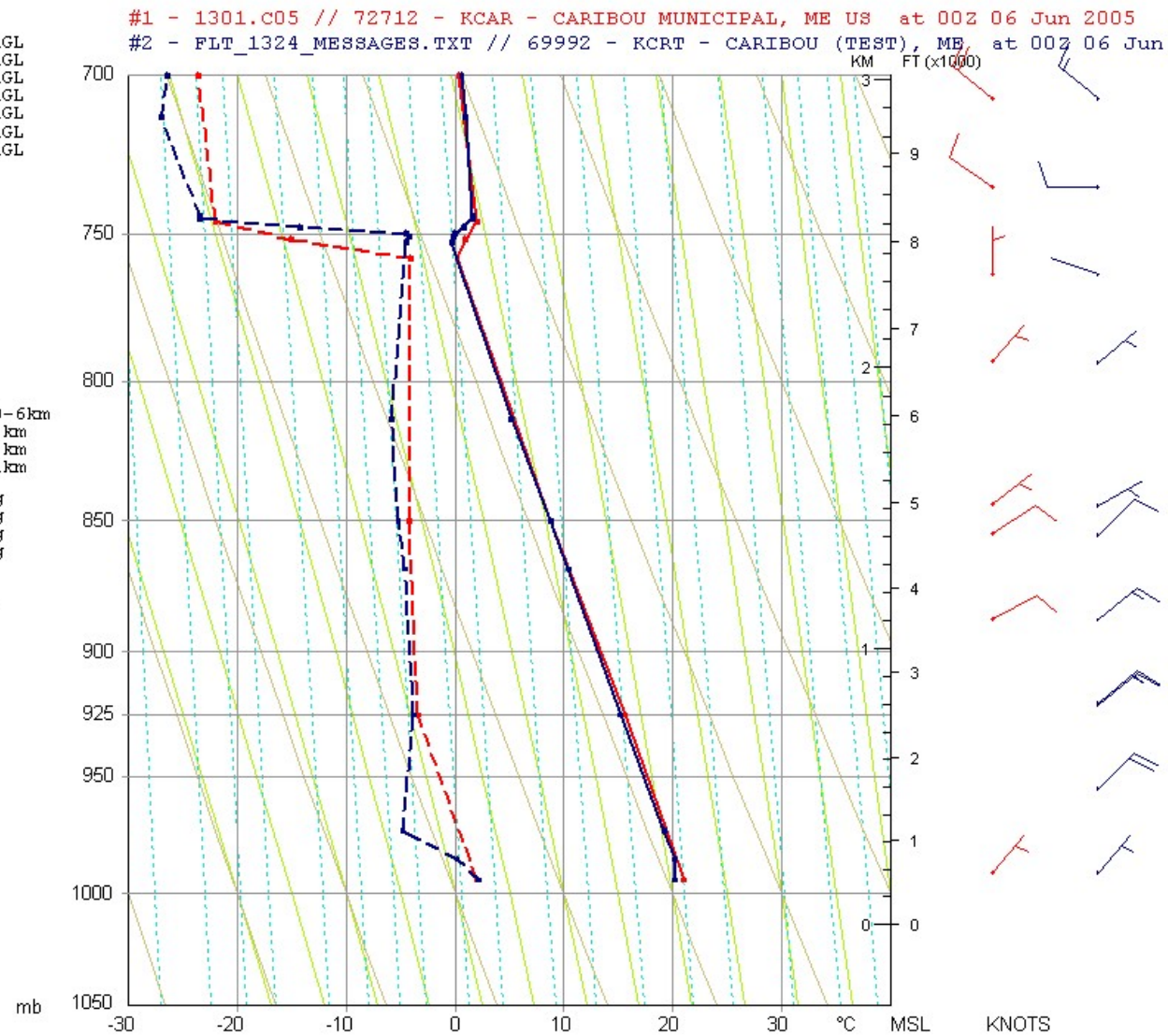
Test #66 - System Test II – 00UTC on 06/06/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12102	12074	m AGL
FRZG Lvl:	2996	2274	m AGL
cclEL Hgt:	5103	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4478	4782	m AGL
LCL Hgt:	2360	2240	m AGL
Water:	1.26	1.12	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	40	50	kt
SWEAT:	52.0	49.0	
CAP:	--	--	
Boyden:	94.6	94.1	
S{TT}:	7.2	4.0	
KO:	4.8	5.1	
LI:	9.4	9.4	
TT:	33.2	33.0	
KI:	-5.1	-8.7	
Tc:	37.1	37.9	°C
Storm:	346/29	344/31	0-6km
s-rH:	137	172	0-3km
s-rH:	6	14	0-2km
s-rH:	-24	-54	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	68.4	64.8	
Threat:	30.2	16.4	
Point:	-14.0	-.6°C	
1000 - 500 mb:	5578	5573	m
1000 - 700 mb:	2950	2947	m
1000 - 850 mb:	1376	1374	m
850 - 500 mb:	4202	4199	m
850 - 700 mb:	1574	1572	m
700 - 500 mb:	2629	2626	m
600 - 400 mb:	3066	3060	m



Test #66 - System Test II – 00UTC on 06/06/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12102	12074	m AGL
FRZG Lvl:	2996	2274	m AGL
cclEL Hgt:	5103	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4478	4782	m AGL
LCL Hgt:	2360	2240	m AGL
Water:	1.26	1.12	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	40	50	kt
SWEAT:	52.0	49.0	
CAP:	--	--	
Boyden:	94.6	94.1	
S{TT}:	7.2	4.0	
KO:	4.8	5.1	
LI:	9.4	9.4	
TT:	33.2	33.0	
KI:	-5.1	-8.7	
Tc:	37.1	37.9	°C
Storm:	346/29	344/31	0-6km
s-rH:	137	172	0-3km
s-rH:	6	14	0-2km
s-rH:	-24	-54	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	68.4	64.8	
Threat:	30.2	16.4	
Point:	-14.0	-.6°C	
1000 - 500 mb:	5578	5573	m
1000 - 700 mb:	2950	2947	m
1000 - 850 mb:	1376	1374	m
850 - 500 mb:	4202	4199	m
850 - 700 mb:	1574	1572	m
700 - 500 mb:	2629	2626	m
600 - 400 mb:	3066	3060	m



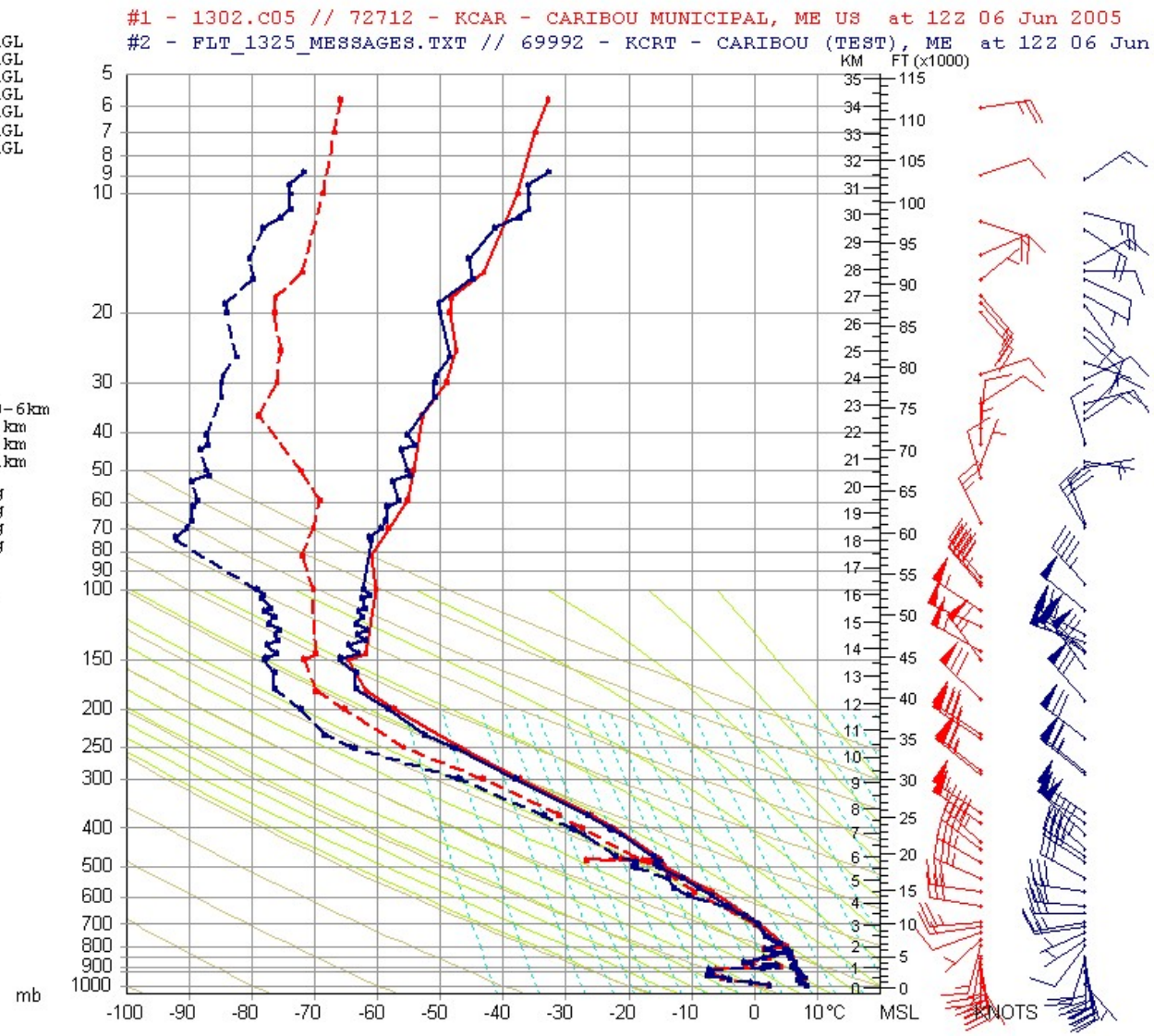
Test #67 - System Test II – 12UTC on 06/06/2005
RWS Version 1.0.4.0

TEST # 67			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	13726	13676	50
Freezing Level (m AGL)	3070	3031	39
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	5051	4849	202
LCL Height (m AGL)	757	755	2
Precipitable Water (cm)	2.47	2.36	0.11
Thickness 1000 - 500 mb (m)	5555	5544	11
Thickness 1000 - 700 mb (m)	2918	2915	3
Thickness 1000 - 850 mb (m)	1338	1337	1
Thickness 850 - 500 mb (m)	4217	4207	10
Thickness 850 - 700 mb (m)	1580	1578	2
Thickness 700 - 500 mb (m)	2637	2629	8
Thickness 600 - 400 mb (m)	3082	3072	10
Wind Shear Below	3	7	
Wind Shear Above	16	34	
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Warmer	Colder	

NC= Not Calculated

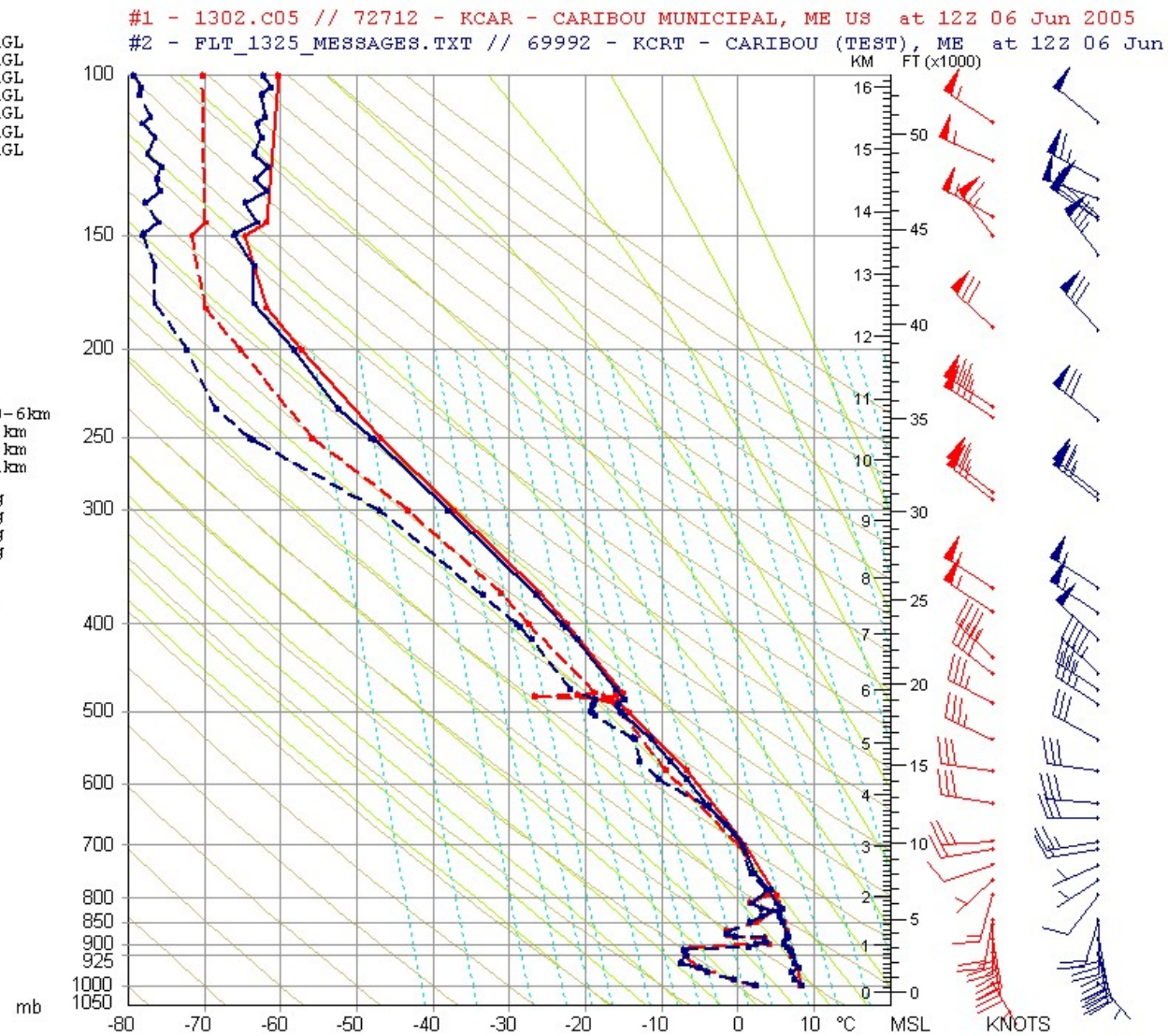
Test #67 - System Test II – 12UTC on 06/06/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13726	13676	m AGL
FRZG Lvl:	3070	3031	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5051	4849	m AGL
LCL Hgt:	757	755	m AGL
Water:	2.47	2.36	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	244.3	233.5	
CAP:	--	--	
Boyden:	91.0	90.9	
S{TT}:	30.3	31.8	
KO:	20.8	19.6	
LI:	19.0	17.6	
TT:	37.0	37.9	
KI:	22.0	22.5	
Tc:	40.5	38.9	°C
Storm:	326/10	332/10	0-6km
s-rH:	175	200	0-3km
s-rH:	107	147	0-2km
s-rH:	47	64	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	35.4	36.2	
Threat:	21.9	21.4	
Point:	-4.6	-4.6	°C
1000 - 500 mb:	5555	5544	m
1000 - 700 mb:	2918	2915	m
1000 - 850 mb:	1338	1337	m
850 - 500 mb:	4217	4207	m
850 - 700 mb:	1580	1578	m
700 - 500 mb:	2637	2629	m
600 - 400 mb:	3082	3072	m



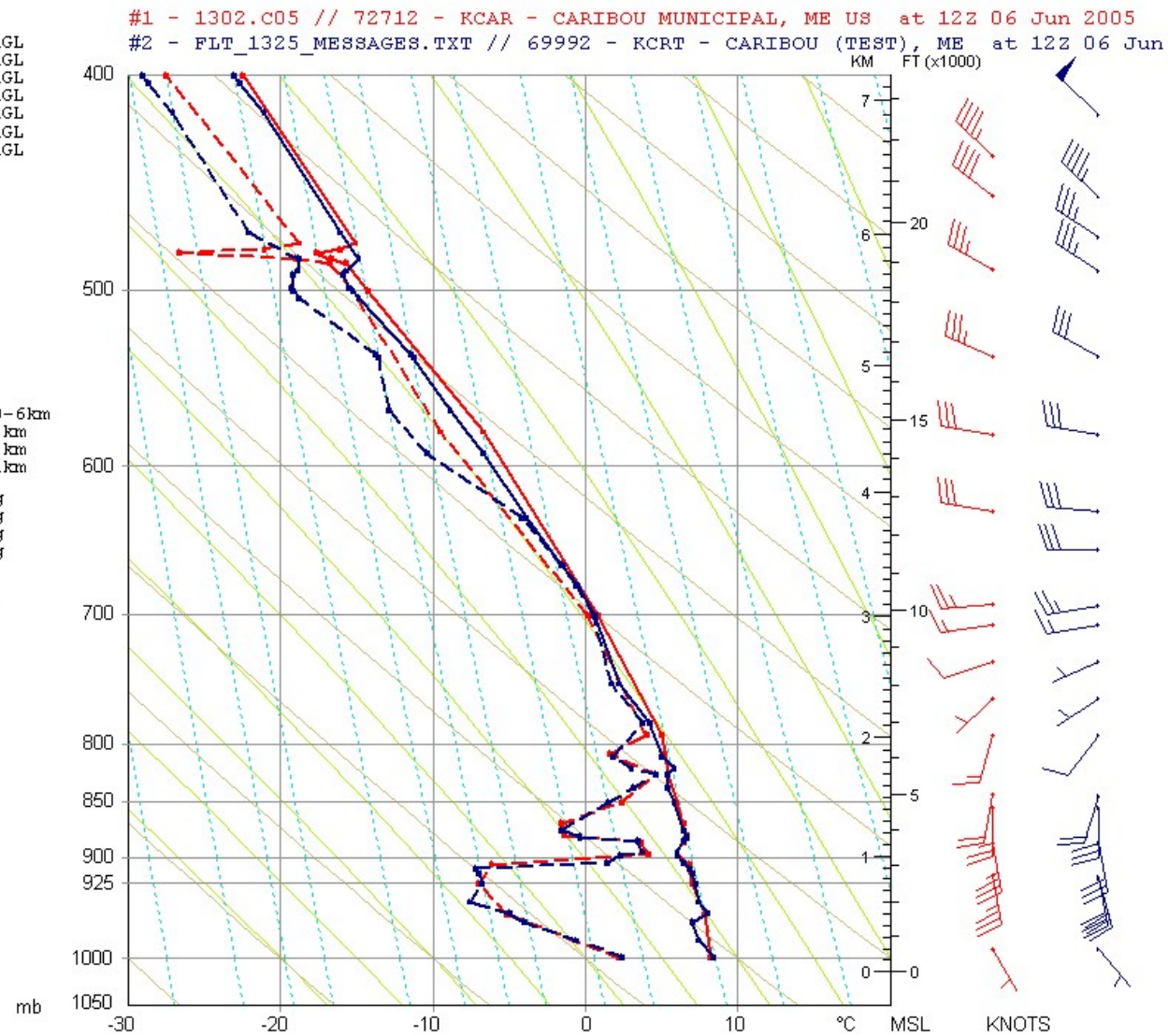
Test #67 - System Test II – 12UTC on 06/06/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13726	13676	m AGL
FRZG Lvl:	3070	3031	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5051	4849	m AGL
LCL Hgt:	757	755	m AGL
Water:	2.47	2.36	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	244.3	233.5	
CAP:	--	--	
Boyden:	91.0	90.9	
S{TT}:	30.3	31.8	
KO:	20.8	19.6	
LI:	19.0	17.6	
TT:	37.0	37.9	
KI:	22.0	22.5	
Tc:	40.5	38.9	°C
Storm:	326/10	332/10	0-6km
s-rH:	175	200	0-3km
s-rH:	107	147	0-2km
s-rH:	47	64	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	35.4	36.2	
Threat:	21.9	21.4	
Point:	-4.6	-4.6	°C
1000 - 500 mb:	5555	5544	m
1000 - 700 mb:	2918	2915	m
1000 - 850 mb:	1338	1337	m
850 - 500 mb:	4217	4207	m
850 - 700 mb:	1580	1578	m
700 - 500 mb:	2637	2629	m
600 - 400 mb:	3082	3072	m



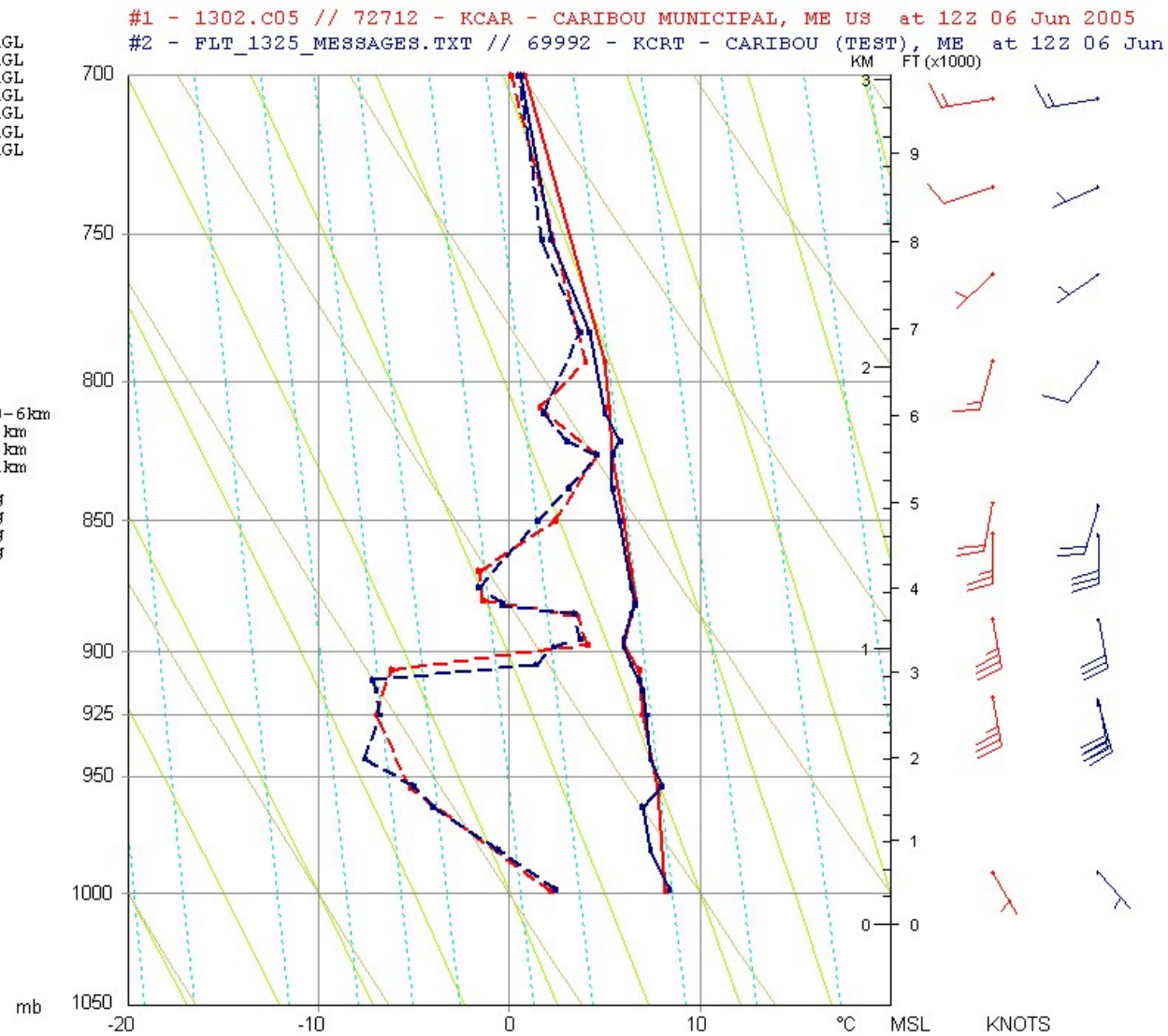
Test #67 - System Test II – 12UTC on 06/06/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13726	13676	m AGL
FRZG Lvl:	3070	3031	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5051	4849	m AGL
LCL Hgt:	757	755	m AGL
Water:	2.47	2.36	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	244.3	233.5	
CAP:	--	--	
Boyden:	91.0	90.9	
S{TT}:	30.3	31.8	
KO:	20.8	19.6	
LI:	19.0	17.6	
TT:	37.0	37.9	
KI:	22.0	22.5	
Tc:	40.5	38.9	°C
Storm:	326/10	332/10	0-6km
s-rH:	175	200	0-3km
s-rH:	107	147	0-2km
s-rH:	47	64	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	35.4	36.2	
Threat:	21.9	21.4	
Point:	-4.6	-4.6	°C
1000 - 500 mb:	5555	5544	m
1000 - 700 mb:	2918	2915	m
1000 - 850 mb:	1338	1337	m
850 - 500 mb:	4217	4207	m
850 - 700 mb:	1580	1578	m
700 - 500 mb:	2637	2629	m
600 - 400 mb:	3082	3072	m

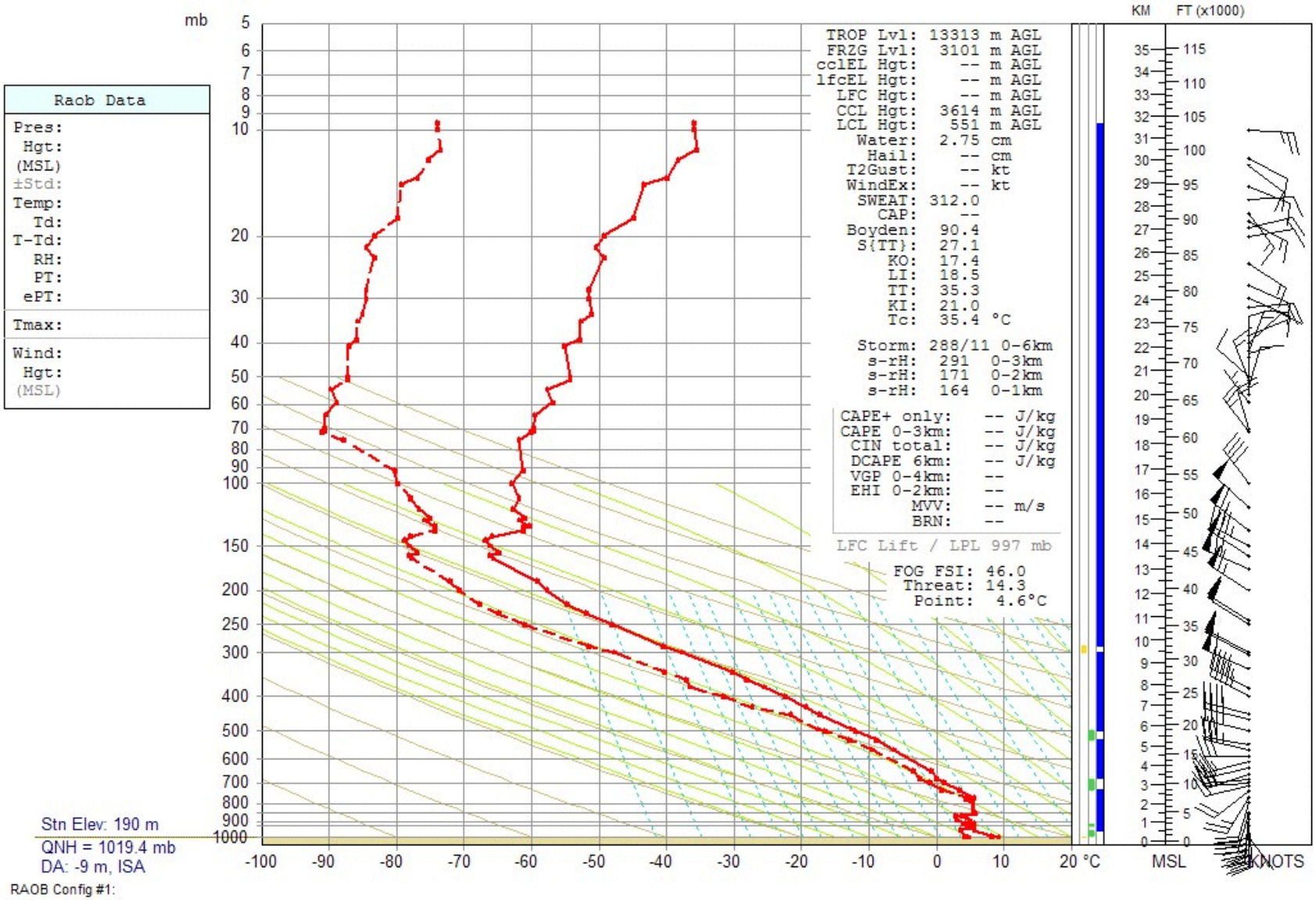


Test #67 - System Test II – 12UTC on 06/06/2005
RWS Version 1.0.4.0

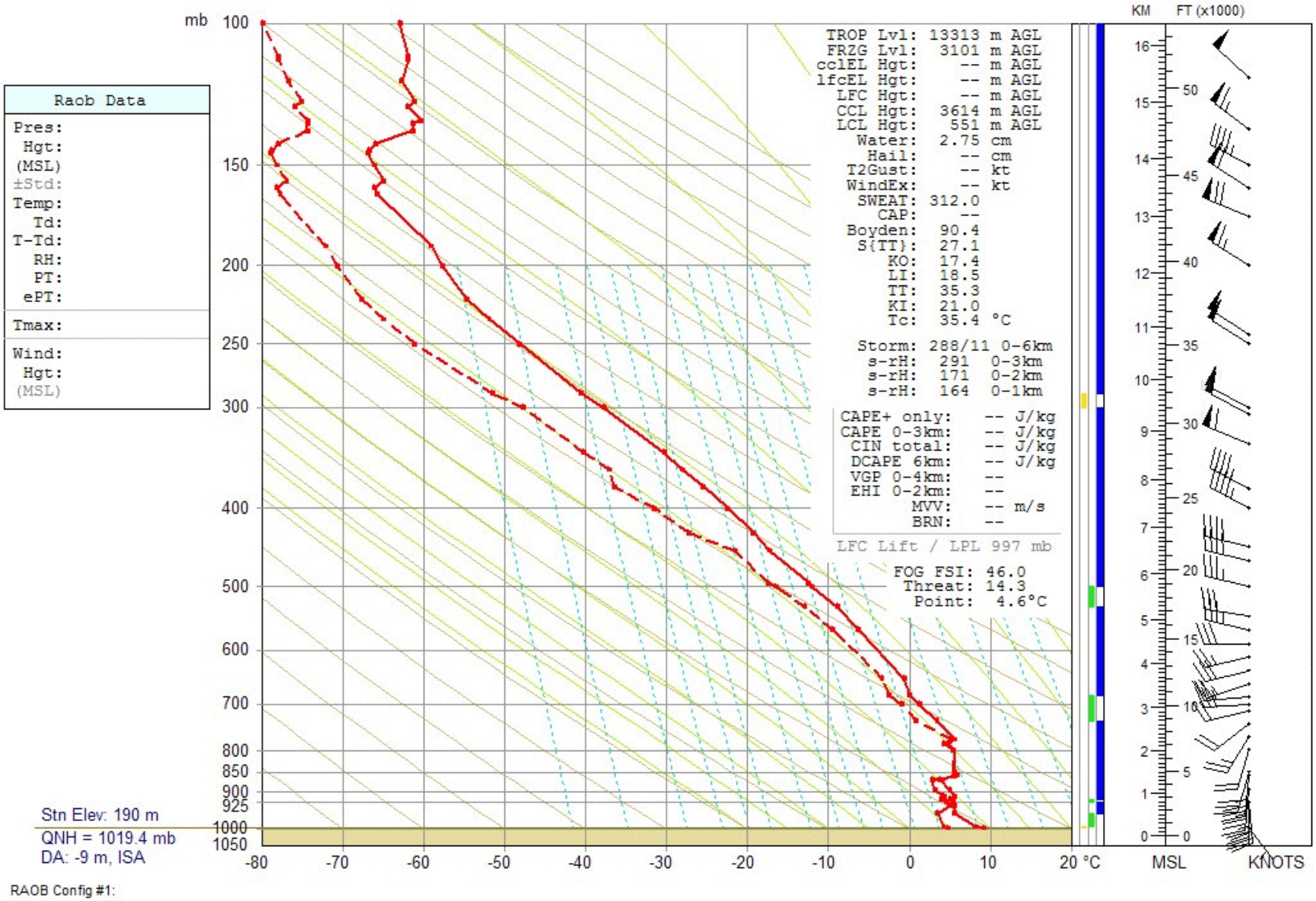
	#1	#2	
TROP Lvl:	13726	13676	m AGL
FRZG Lvl:	3070	3031	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	5051	4849	m AGL
LCL Hgt:	757	755	m AGL
Water:	2.47	2.36	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	244.3	233.5	
CAP:	--	--	
Boyden:	91.0	90.9	
S{TT}:	30.3	31.8	
KO:	20.8	19.6	
LI:	19.0	17.6	
TT:	37.0	37.9	
KI:	22.0	22.5	
Tc:	40.5	38.9	°C
Storm:	326/10	332/10	0-6km
s-rH:	175	200	0-3km
s-rH:	107	147	0-2km
s-rH:	47	64	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	35.4	36.2	
Threat:	21.9	21.4	
Point:	-4.6	-4.6	°C
1000 - 500 mb:	5555	5544	m
1000 - 700 mb:	2918	2915	m
1000 - 850 mb:	1338	1337	m
850 - 500 mb:	4217	4207	m
850 - 700 mb:	1580	1578	m
700 - 500 mb:	2637	2629	m
600 - 400 mb:	3082	3072	m



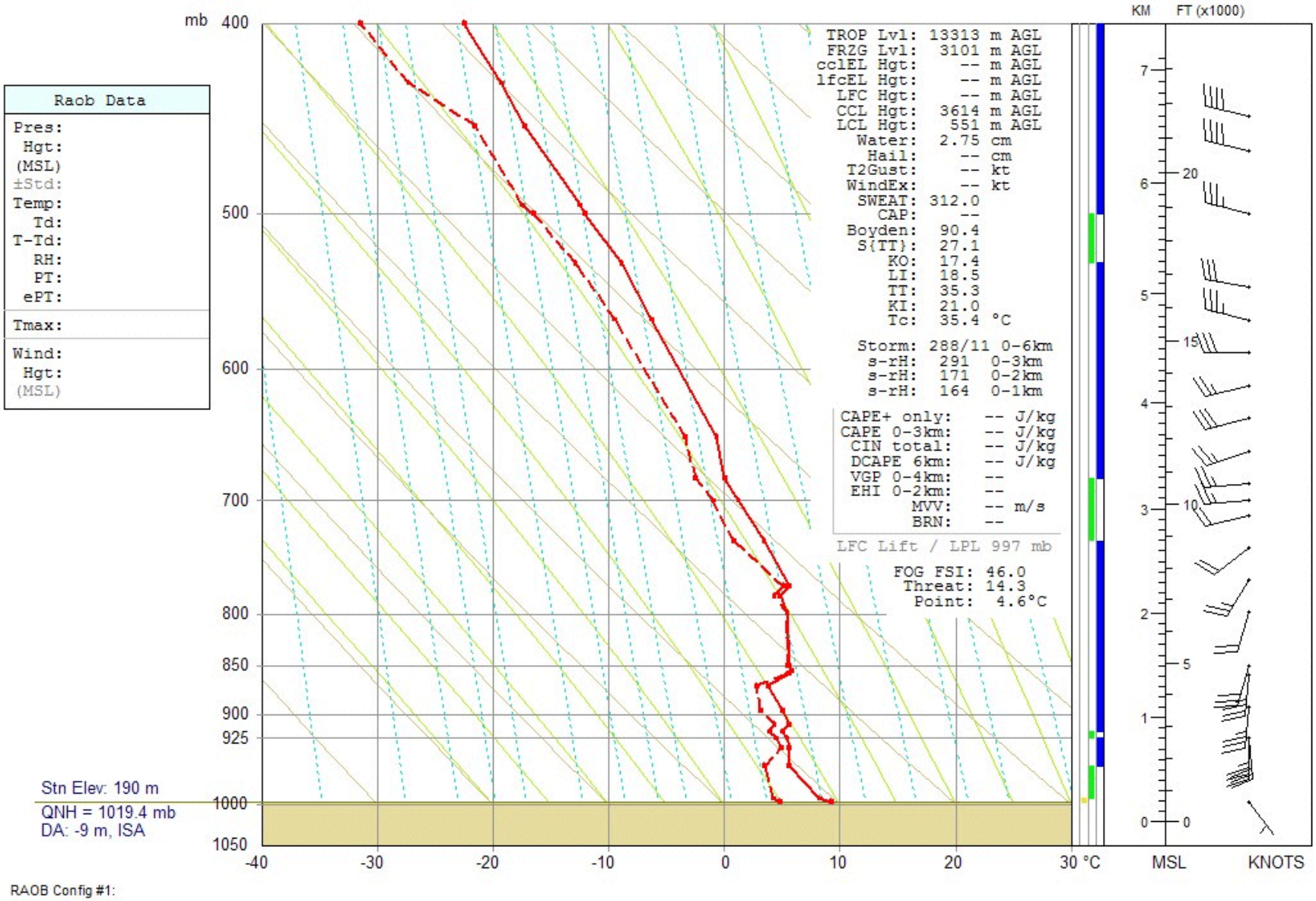
Test #68 - System Test II – 15UTC on 06/06/2005
RWS Version 1.0.4.0



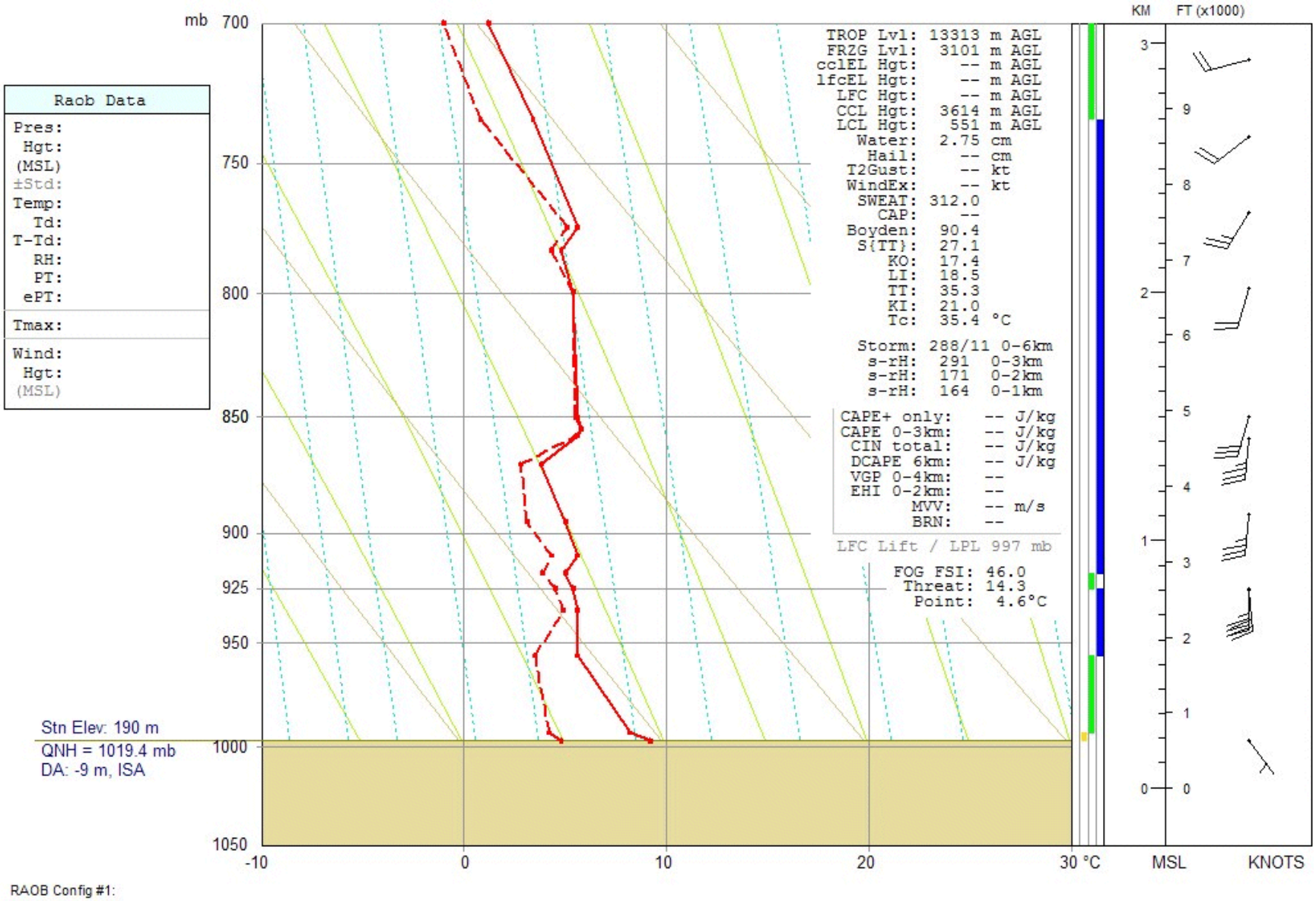
Test #68 - System Test II – 15UTC on 06/06/2005
RWS Version 1.0.4.0



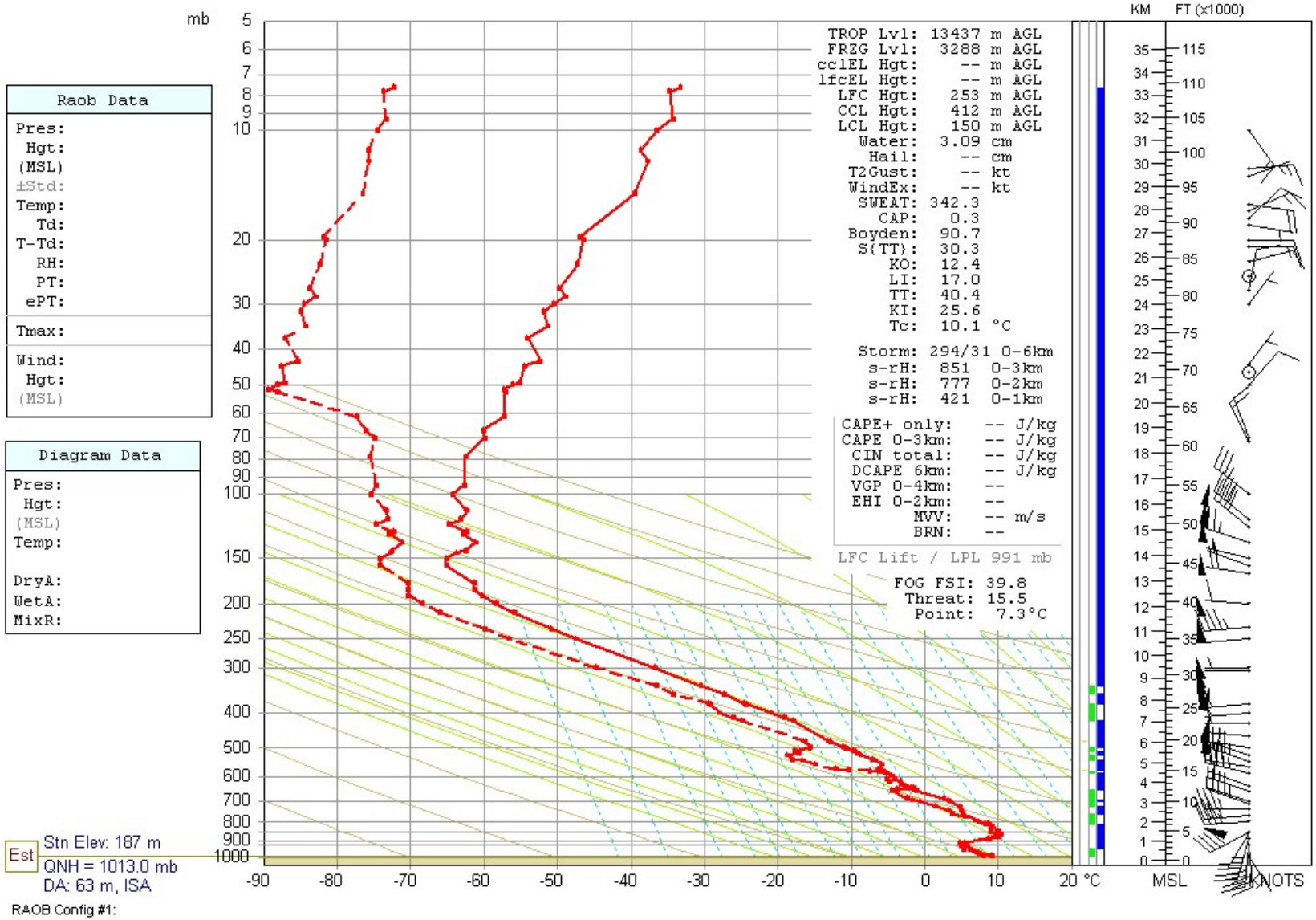
Test #68 - System Test II – 15UTC on 06/06/2005
RWS Version 1.0.4.0



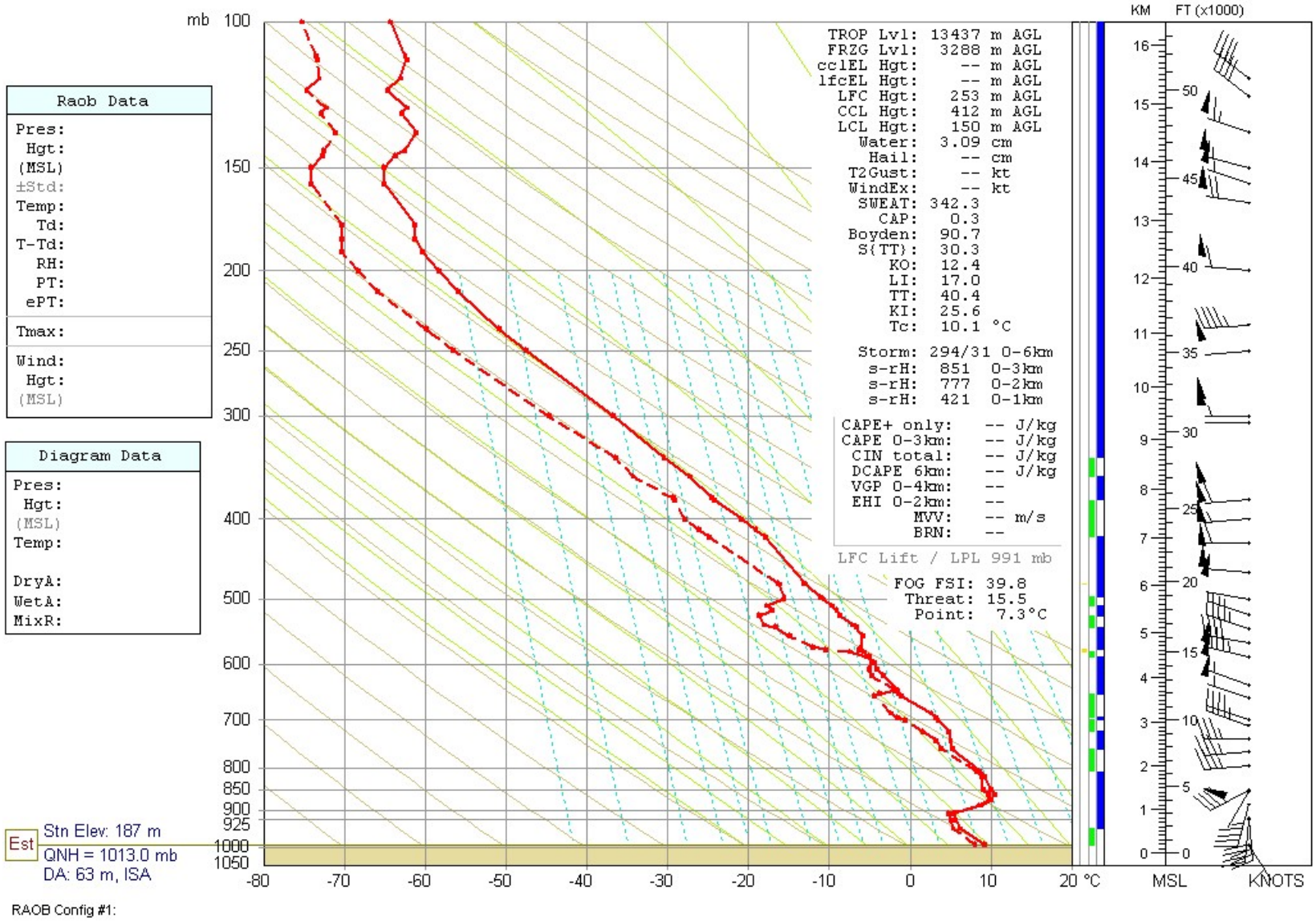
Test #68 - System Test II – 15UTC on 06/06/2005
RWS Version 1.0.4.0



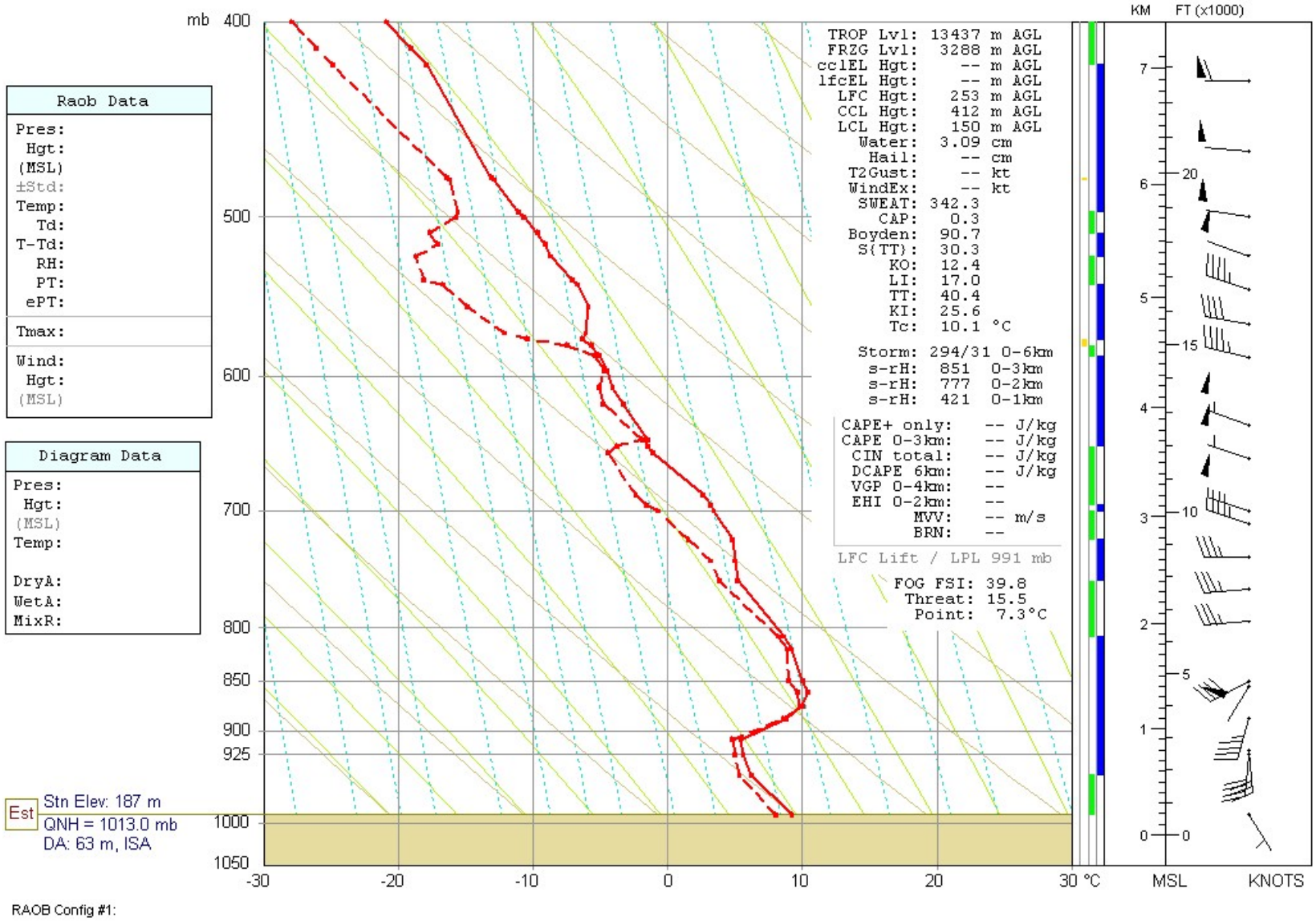
Test #69 - System Test II – 20UTC on 06/06/2005
RWS Version 1.0.4.0



Test #69 - System Test II – 20UTC on 06/06/2005
RWS Version 1.0.4.0

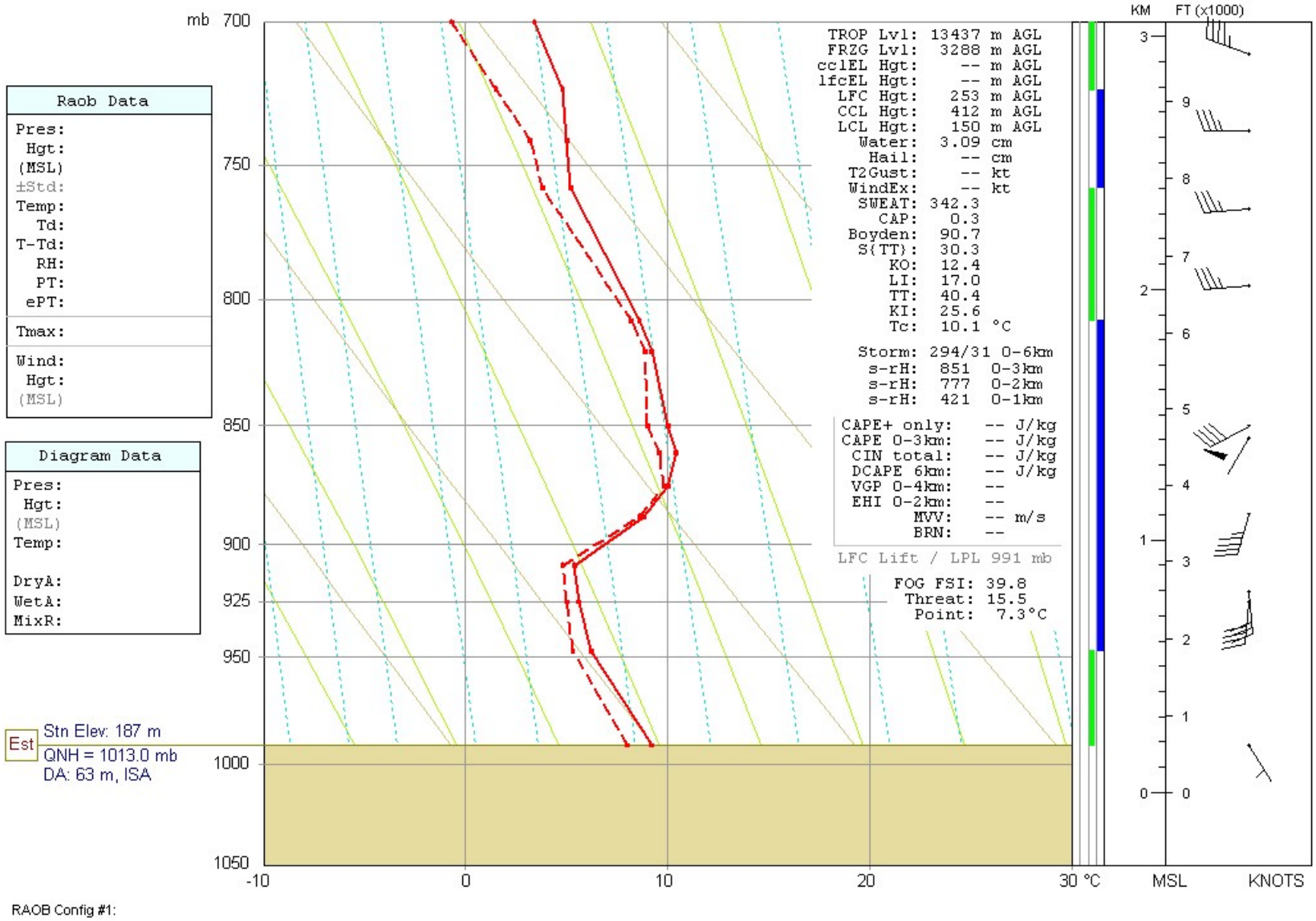


Test #69 - System Test II – 20UTC on 06/06/2005
RWS Version 1.0.4.0



RAOB Config #1:

Test #69 - System Test II – 20UTC on 06/06/2005
RWS Version 1.0.4.0



RAOB Config #1:

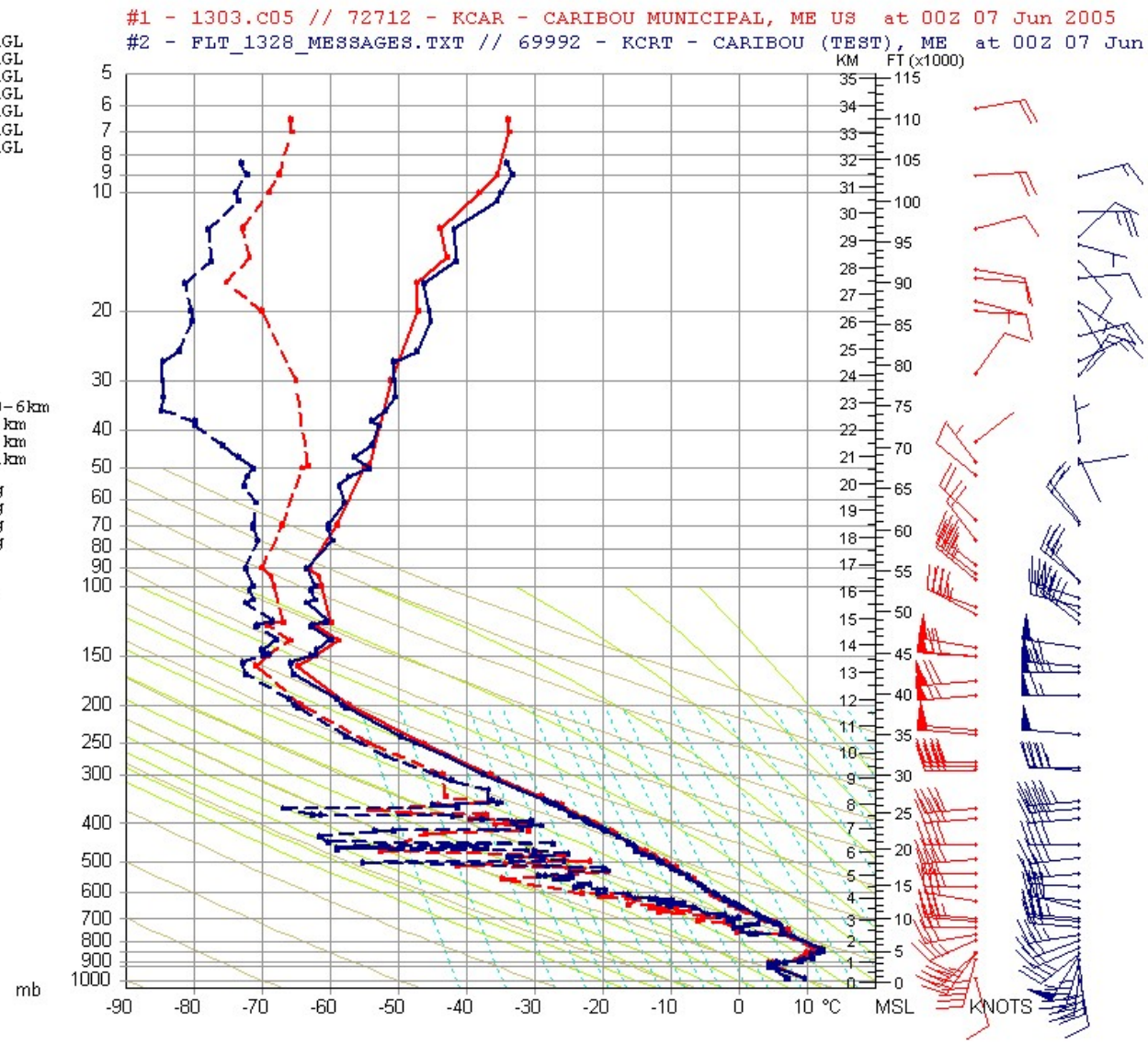
Test #70 - System Test II – 00UTC on 06/07/2005
RWS Version 1.0.4.0

TEST # 70			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	13373	13046	327
Freezing Level (m AGL)	3379	3492	-113
LFC Height (m AGL)	NC	493	NC
CCL Height (m AGL)	588	457	131
LCL Height (m AGL)	236	326	-90
Precipitable Water (cm)	2.52	2.73	-0.21
Thickness 1000 - 500 mb (m)	5603	5608	-5
Thickness 1000 - 700 mb (m)	2950	2952	-2
Thickness 1000 - 850 mb (m)	1343	1345	-2
Thickness 850 - 500 mb (m)	4260	4263	-3
Thickness 850 - 700 mb (m)	1607	1608	-1
Thickness 700 - 500 mb (m)	2654	2656	-2
Thickness 600 - 400 mb (m)	3102	3098	4
Wind Shear Below	04	07	-3
Wind Shear Above	15	27	-12
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

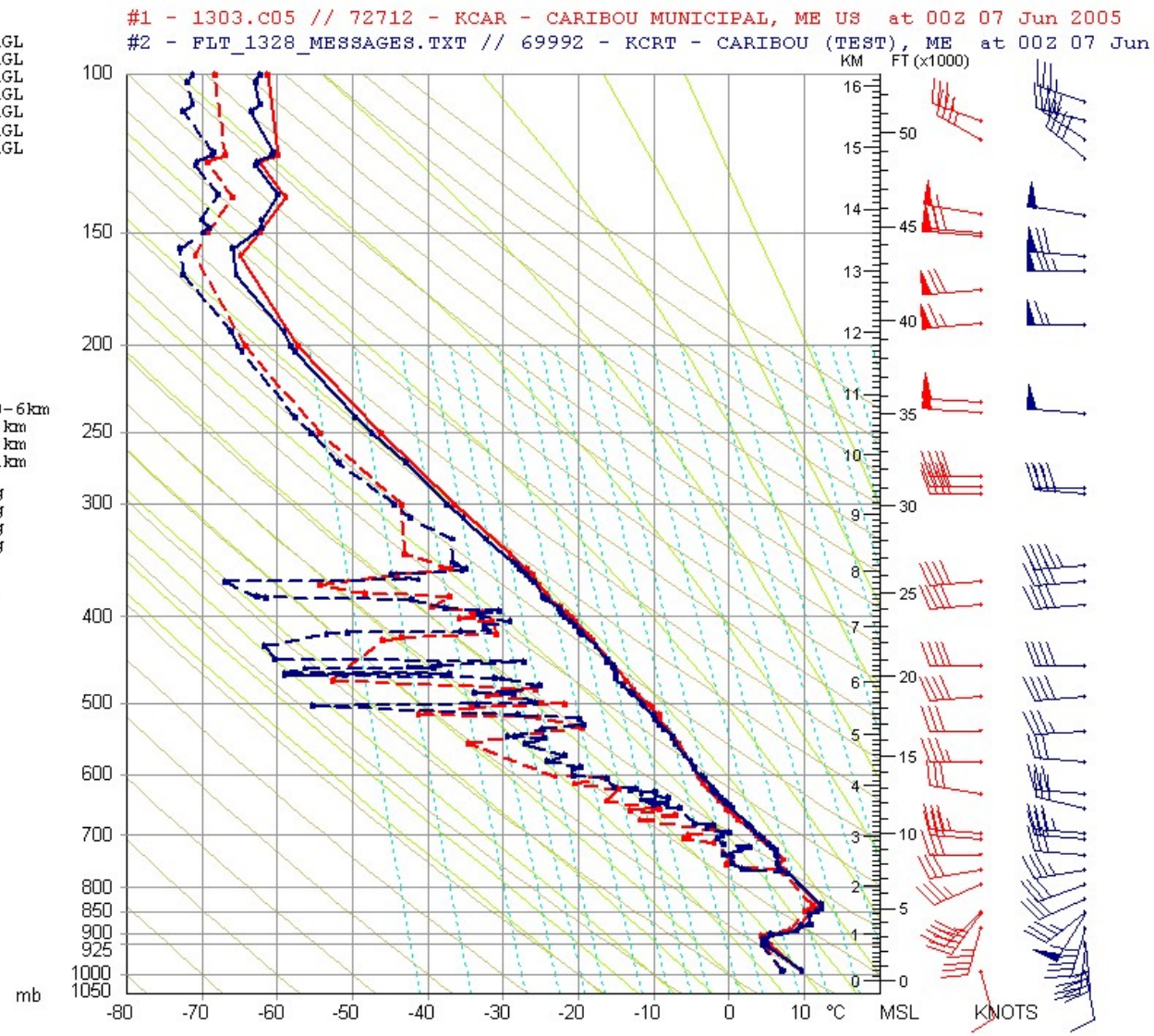
Test #70 - System Test II – 00UTC on 06/07/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13373	13046	m AGL
FRZG Lvl:	3379	3492	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	493	m AGL
CCL Hgt:	588	457	m AGL
LCL Hgt:	326	326	m AGL
Water:	2.52	2.73	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	350.3	349.9	
CAP:	--	0.5	
Boyden:	91.4	91.2	
S{TT}:	27.6	39.2	
KO:	7.3	5.8	
LI:	17.2	16.6	
TT:	42.6	46.2	
KI:	22.7	29.7	
Tc:	11.1	10.3	°C
Storm:	281/21	284/20	0-6km
s-rH:	585	661	0-3km
s-rH:	531	617	0-2km
s-rH:	266	306	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	44.8	38.2	
Threat:	17.5	18.9	
Point:	6.3	6.2	°C
1000 - 500 mb:	5603	5608	m
1000 - 700 mb:	2950	2952	m
1000 - 850 mb:	1343	1345	m
850 - 500 mb:	4260	4263	m
850 - 700 mb:	1607	1608	m
700 - 500 mb:	2654	2656	m
600 - 400 mb:	3102	3098	m



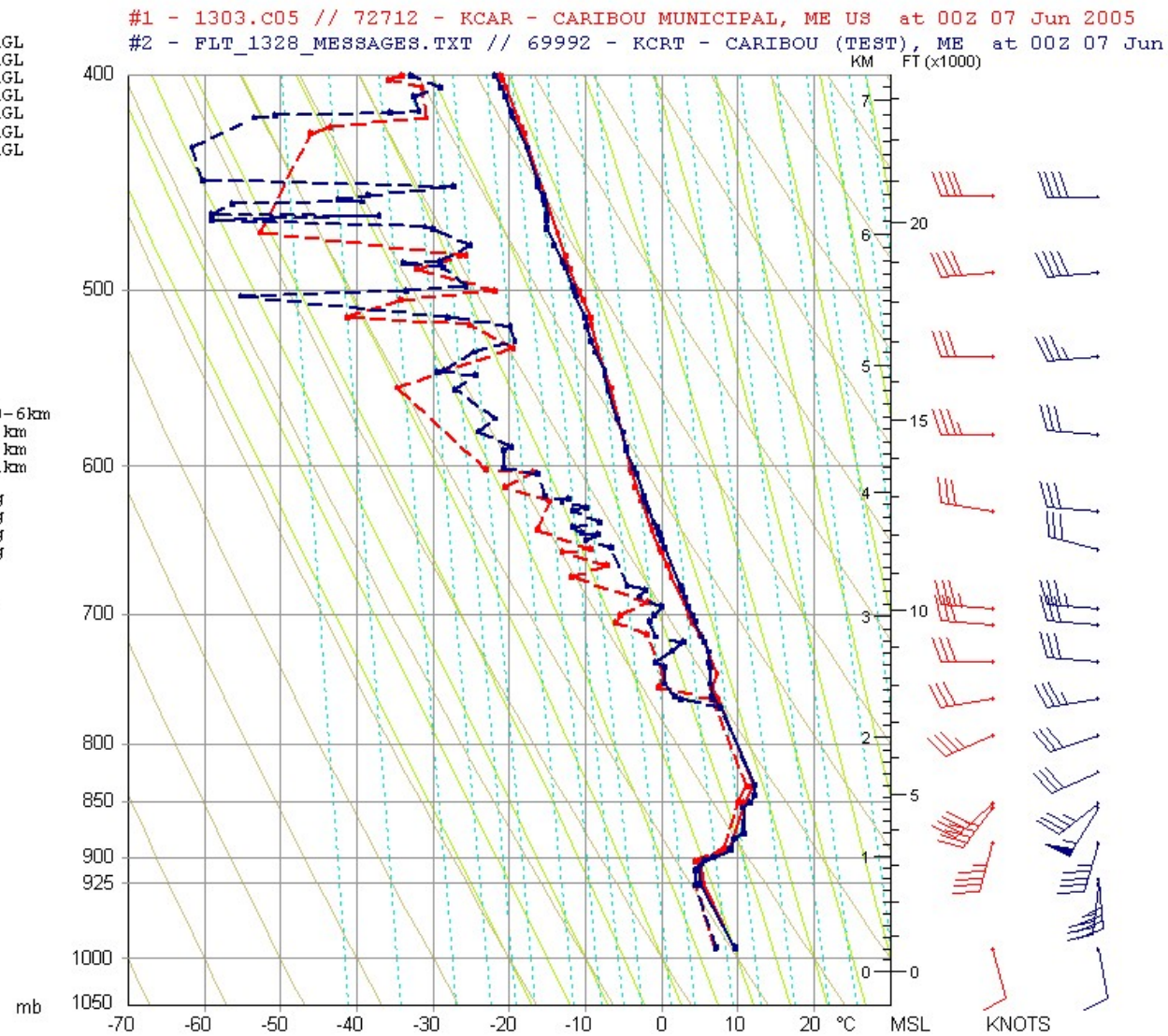
Test #70 - System Test II – 00UTC on 06/07/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13373	13046	m AGL
FRZG Lvl:	3379	3492	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	493	m AGL
CCL Hgt:	588	457	m AGL
LCL Hgt:	326	326	m AGL
Water:	2.52	2.73	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	350.3	349.9	
CAP:	--	0.5	
Boyden:	91.4	91.2	
S{TT}:	27.6	39.2	
KO:	7.3	5.8	
LI:	17.2	16.6	
TT:	42.6	46.2	
KI:	22.7	29.7	
Tc:	11.1	10.3	°C
Storm:	281/21	284/20	0-6km
s-rH:	585	661	0-3km
s-rH:	531	617	0-2km
s-rH:	266	306	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	44.8	38.2	
Threat:	17.5	18.9	
Point:	6.3	6.2	°C
1000 - 500 mb:	5603	5608	m
1000 - 700 mb:	2950	2952	m
1000 - 850 mb:	1343	1345	m
850 - 500 mb:	4260	4263	m
850 - 700 mb:	1607	1608	m
700 - 500 mb:	2654	2656	m
600 - 400 mb:	3102	3098	m



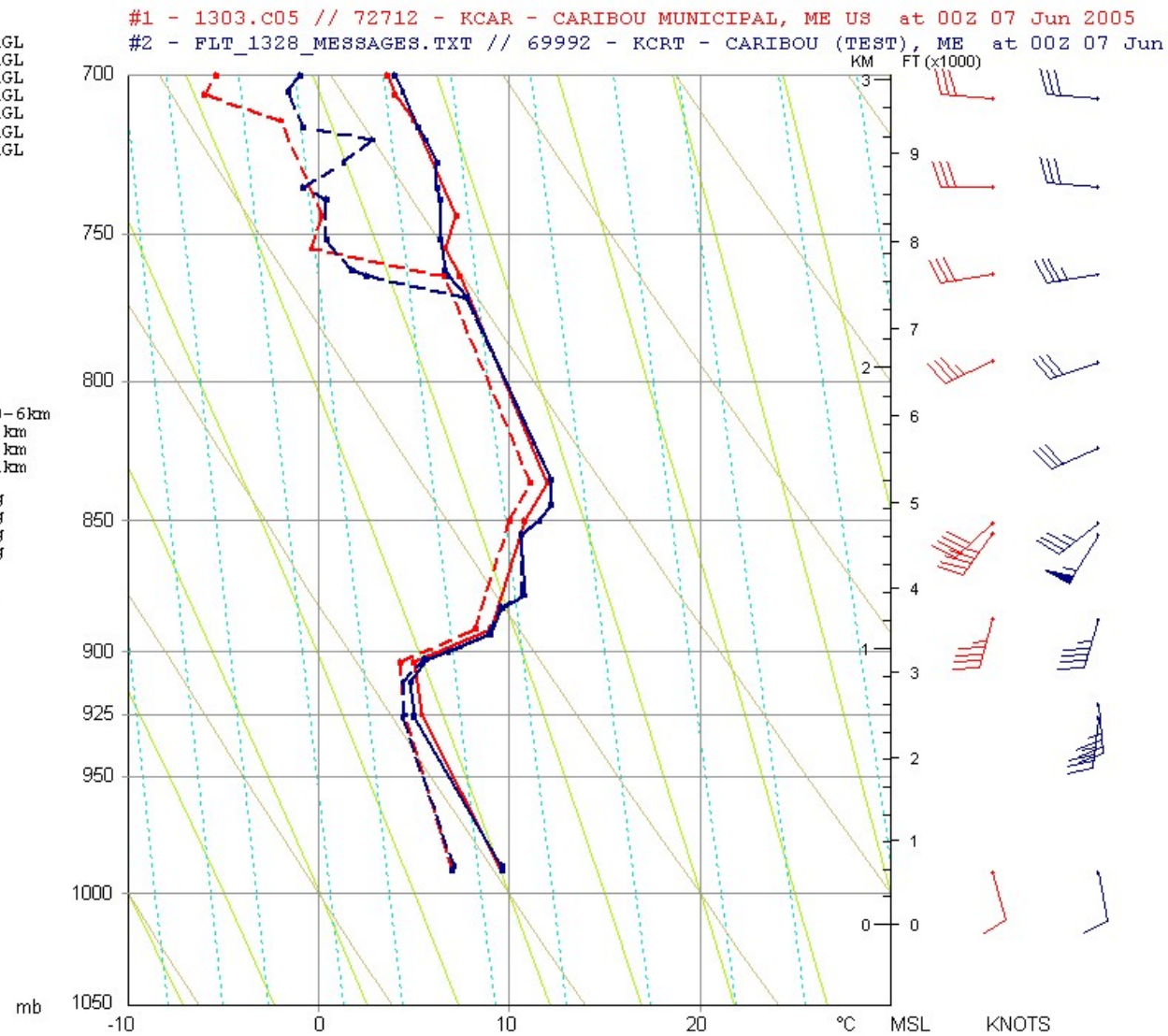
Test #70 - System Test II – 00UTC on 06/07/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13373	13046	m AGL
FRZG Lvl:	3379	3492	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	493	m AGL
CCL Hgt:	588	457	m AGL
LCL Hgt:	326	326	m AGL
Water:	2.52	2.73	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	350.3	349.9	
CAP:	--	0.5	
Boyden:	91.4	91.2	
S{TT}:	27.6	39.2	
KO:	7.3	5.8	
LI:	17.2	16.6	
TT:	42.6	46.2	
KI:	22.7	29.7	
Tc:	11.1	10.3	°C
Storm:	281/21	284/20	0-6km
s-rH:	585	661	0-3km
s-rH:	531	617	0-2km
s-rH:	266	306	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	44.8	38.2	
Threat:	17.5	18.9	
Point:	6.3	6.2	°C
1000 - 500 mb:	5603	5608	m
1000 - 700 mb:	2950	2952	m
1000 - 850 mb:	1343	1345	m
850 - 500 mb:	4260	4263	m
850 - 700 mb:	1607	1608	m
700 - 500 mb:	2654	2656	m
600 - 400 mb:	3102	3098	m



Test #70 - System Test II – 00UTC on 06/07/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13373	13046	m AGL
FRZG Lvl:	3379	3492	m AGL
cclEL Hgt:	--	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	493	m AGL
CCL Hgt:	588	457	m AGL
LCL Hgt:	326	326	m AGL
Water:	2.52	2.73	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	350.3	349.9	
CAP:	--	0.5	
Boyden:	91.4	91.2	
S{TT}:	27.6	39.2	
KO:	7.3	5.8	
LI:	17.2	16.6	
TT:	42.6	46.2	
KI:	22.7	29.7	
Tc:	11.1	10.3	°C
Storm:	281/21	284/20	0-6km
s-rH:	585	661	0-3km
s-rH:	531	617	0-2km
s-rH:	266	306	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	44.8	38.2	
Threat:	17.5	18.9	
Point:	6.3	6.2	°C
1000 - 500 mb:	5603	5608	m
1000 - 700 mb:	2950	2952	m
1000 - 850 mb:	1343	1345	m
850 - 500 mb:	4260	4263	m
850 - 700 mb:	1607	1608	m
700 - 500 mb:	2654	2656	m
600 - 400 mb:	3102	3098	m



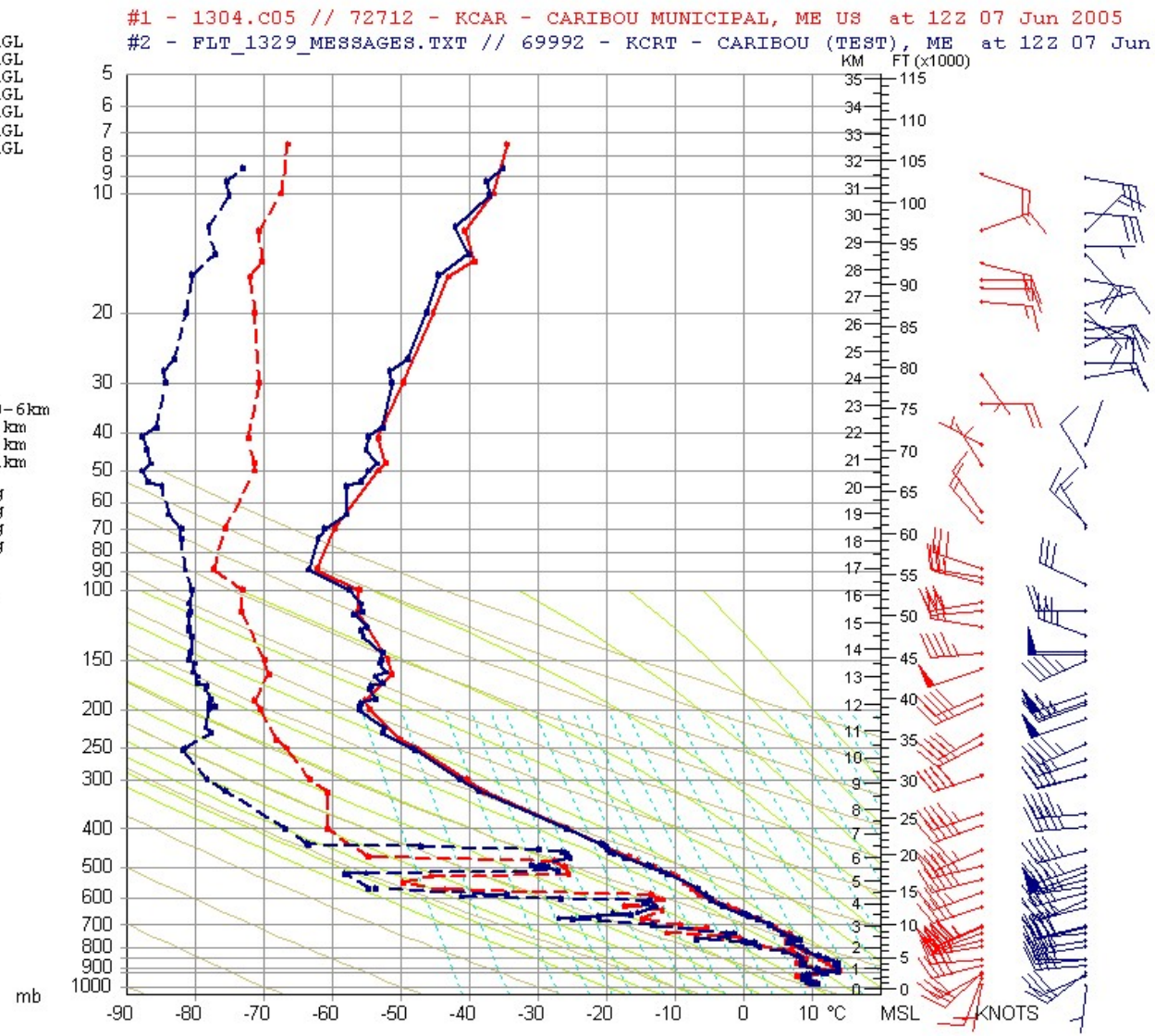
Test #71 - System Test II – 12UTC on 06/07/2005
RWS Version 1.0.4.0

TEST # 71			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12131	11780	351
Freezing Level (m AGL)	3395	3342	53
LFC Height (m AGL)	NC	179	NC
CCL Height (m AGL)	1751	1852	-101
LCL Height (m AGL)	101	101	0
Precipitable Water (cm)	2.28	2.16	0.12
Thickness 1000 - 500 mb (m)	5606	5608	-2
Thickness 1000 - 700 mb (m)	2960	2964	-4
Thickness 1000 - 850 mb (m)	1360	1362	-2
Thickness 850 - 500 mb (m)	4246	4246	0
Thickness 850 - 700 mb (m)	1600	1601	-1
Thickness 700 - 500 mb (m)	2645	2645	0
Thickness 600 - 400 mb (m)	3070	3070	0
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Warmer	Colder	

NC= Not Calculated

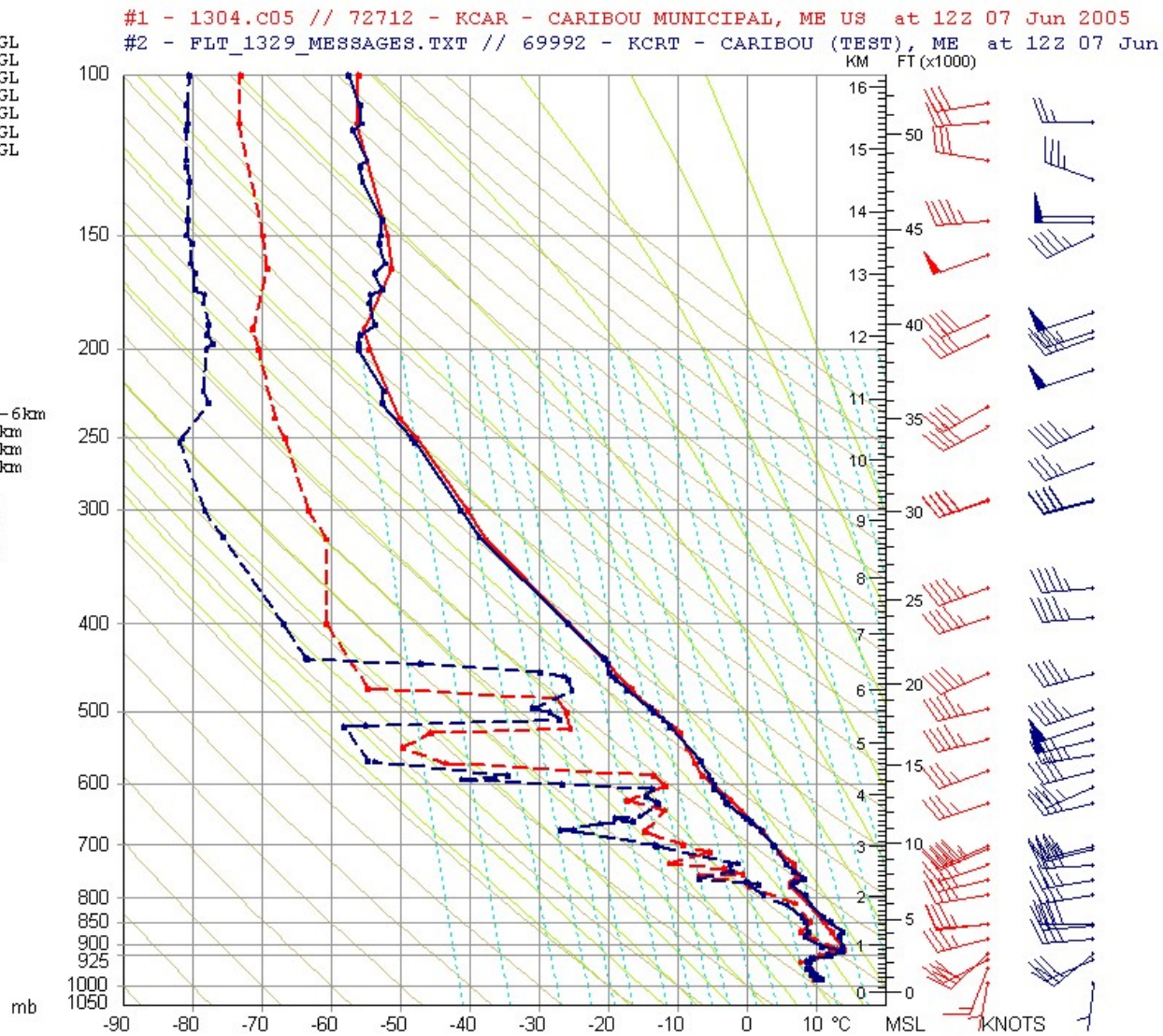
Test #71 - System Test II – 12UTC on 06/07/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12131	11780	m AGL
FRZG Lvl:	3395	3342	m AGL
cclEL Hgt:	2042	2014	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	179	m AGL
CCL Hgt:	1751	1852	m AGL
LCL Hgt:	101	101	m AGL
Water:	2.28	2.16	cm
Hail:	--	0.03	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	221.4	209.0	
CAP:	--	0.0	
Boyden:	92.2	92.6	
S{TT}:	31.6	30.5	
KO:	1.4	-.4	
LI:	11.2	10.4	
TT:	46.6	47.5	
KI:	20.5	17.0	
Tc:	25.1	26.0	°C
Storm:	274/36	278/39	0-6km
s-rH:	222	145	0-3km
s-rH:	201	146	0-2km
s-rH:	204	154	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	33.4	29.2	
Threat:	13.3	12.4	
Point:	10.1	10.9	°C
1000 - 500 mb:	5606	5608	m
1000 - 700 mb:	2960	2964	m
1000 - 850 mb:	1360	1362	m
850 - 500 mb:	4246	4246	m
850 - 700 mb:	1600	1601	m
700 - 500 mb:	2645	2645	m
600 - 400 mb:	3070	3070	m



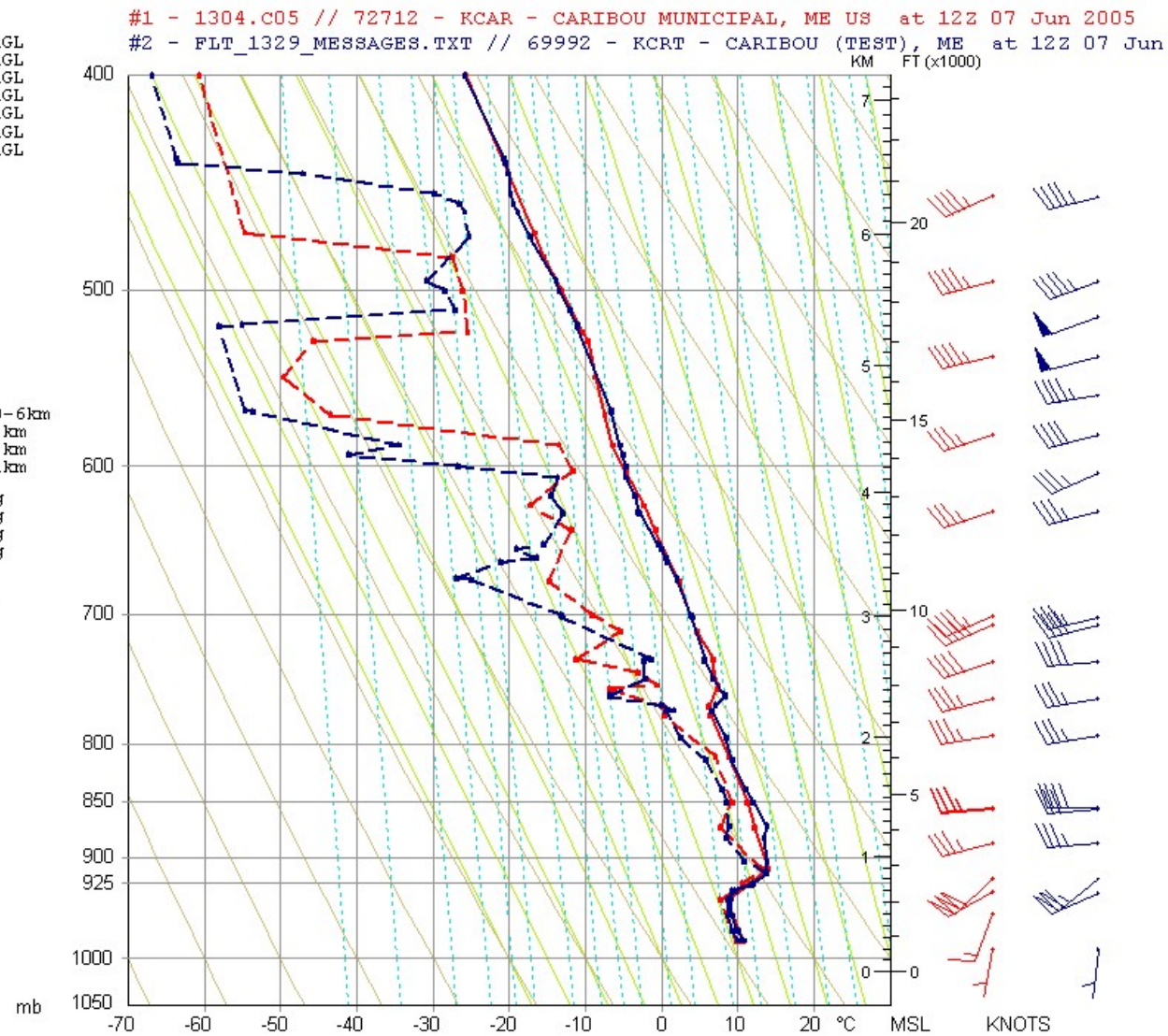
Test #71 - System Test II – 12UTC on 06/07/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12131	11780	m AGL
FRZG Lvl:	3395	3342	m AGL
cclEL Hgt:	2042	2014	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	179	m AGL
CCL Hgt:	1751	1852	m AGL
LCL Hgt:	101	101	m AGL
Water:	2.28	2.16	cm
Hail:	--	0.03	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	221.4	209.0	
CAP:	--	0.0	
Boyden:	92.2	92.6	
S{TT}:	31.6	30.5	
KO:	1.4	-.4	
LI:	11.2	10.4	
TT:	46.6	47.5	
KI:	20.5	17.0	
Tc:	25.1	26.0	°C
Storm:	274/36	278/39	0-6km
s-rH:	222	145	0-3km
s-rH:	201	146	0-2km
s-rH:	204	154	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	33.4	29.2	
Threat:	13.3	12.4	
Point:	10.1	10.9	°C
1000 - 500 mb:	5606	5608	m
1000 - 700 mb:	2960	2964	m
1000 - 850 mb:	1360	1362	m
850 - 500 mb:	4246	4246	m
850 - 700 mb:	1600	1601	m
700 - 500 mb:	2645	2645	m
600 - 400 mb:	3070	3070	m



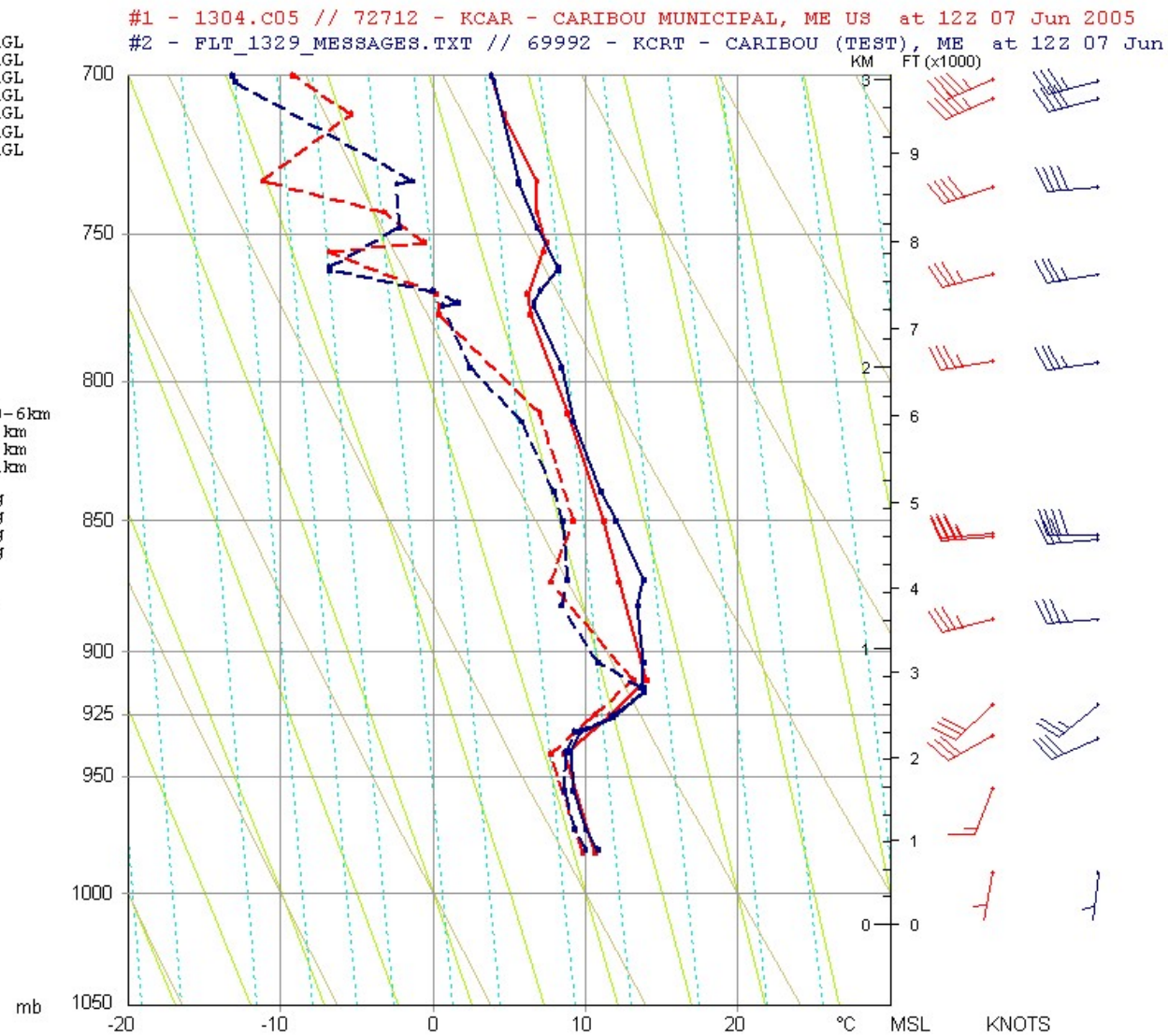
Test #71 - System Test II – 12UTC on 06/07/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12131	11780	m AGL
FRZG Lvl:	3395	3342	m AGL
cclEL Hgt:	2042	2014	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	179	m AGL
CCL Hgt:	1751	1852	m AGL
LCL Hgt:	101	101	m AGL
Water:	2.28	2.16	cm
Hail:	--	0.03	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	221.4	209.0	
CAP:	--	0.0	
Boyden:	92.2	92.6	
S{TT}:	31.6	30.5	
KO:	1.4	-.4	
LI:	11.2	10.4	
TT:	46.6	47.5	
KI:	20.5	17.0	
Tc:	25.1	26.0	°C
Storm:	274/36	278/39	0-6km
s-rH:	222	145	0-3km
s-rH:	201	146	0-2km
s-rH:	204	154	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	33.4	29.2	
Threat:	13.3	12.4	
Point:	10.1	10.9	°C
1000 - 500 mb:	5606	5608	m
1000 - 700 mb:	2960	2964	m
1000 - 850 mb:	1360	1362	m
850 - 500 mb:	4246	4246	m
850 - 700 mb:	1600	1601	m
700 - 500 mb:	2645	2645	m
600 - 400 mb:	3070	3070	m

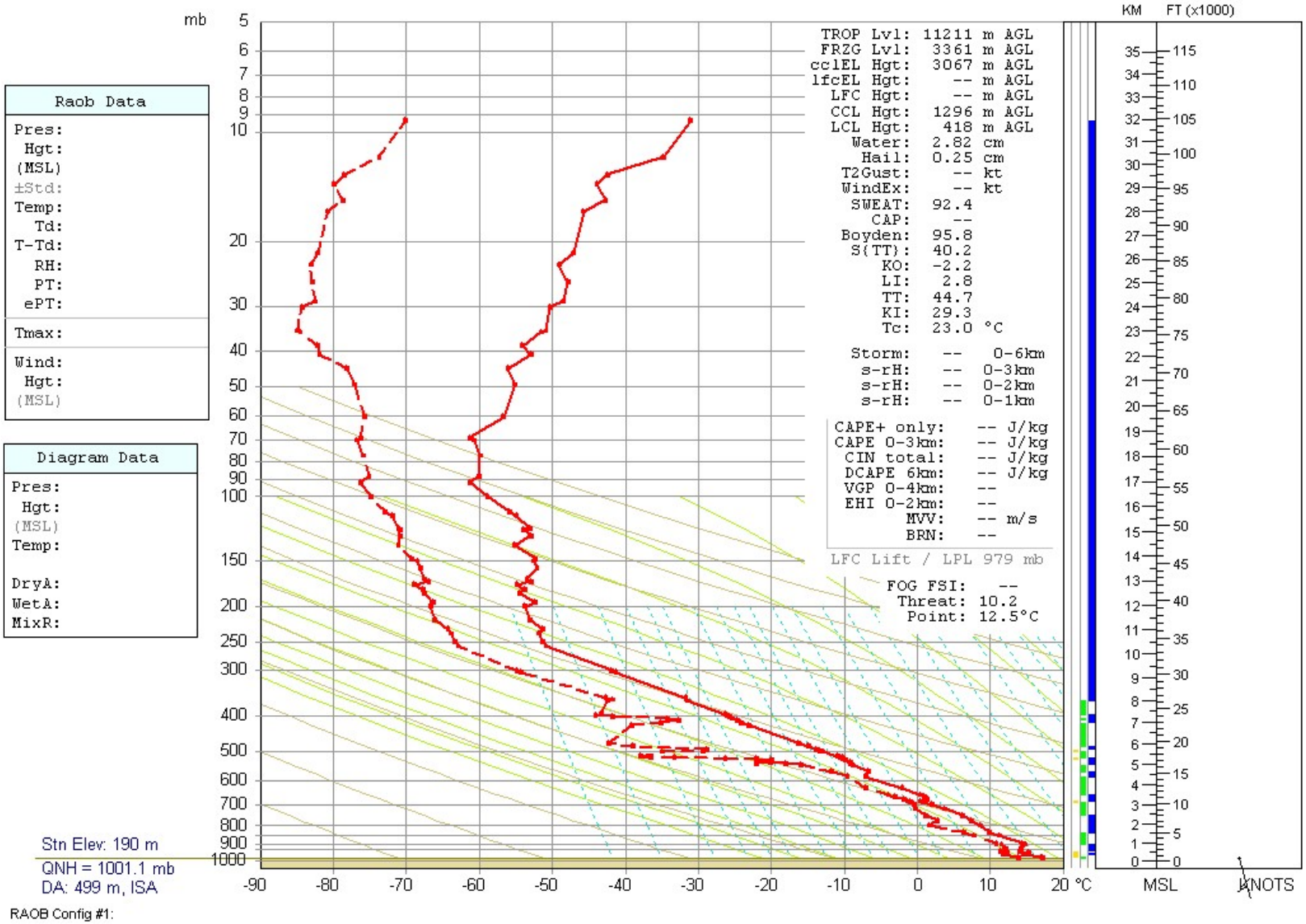


Test #71 - System Test II – 12UTC on 06/07/2005
RWS Version 1.0.4.0

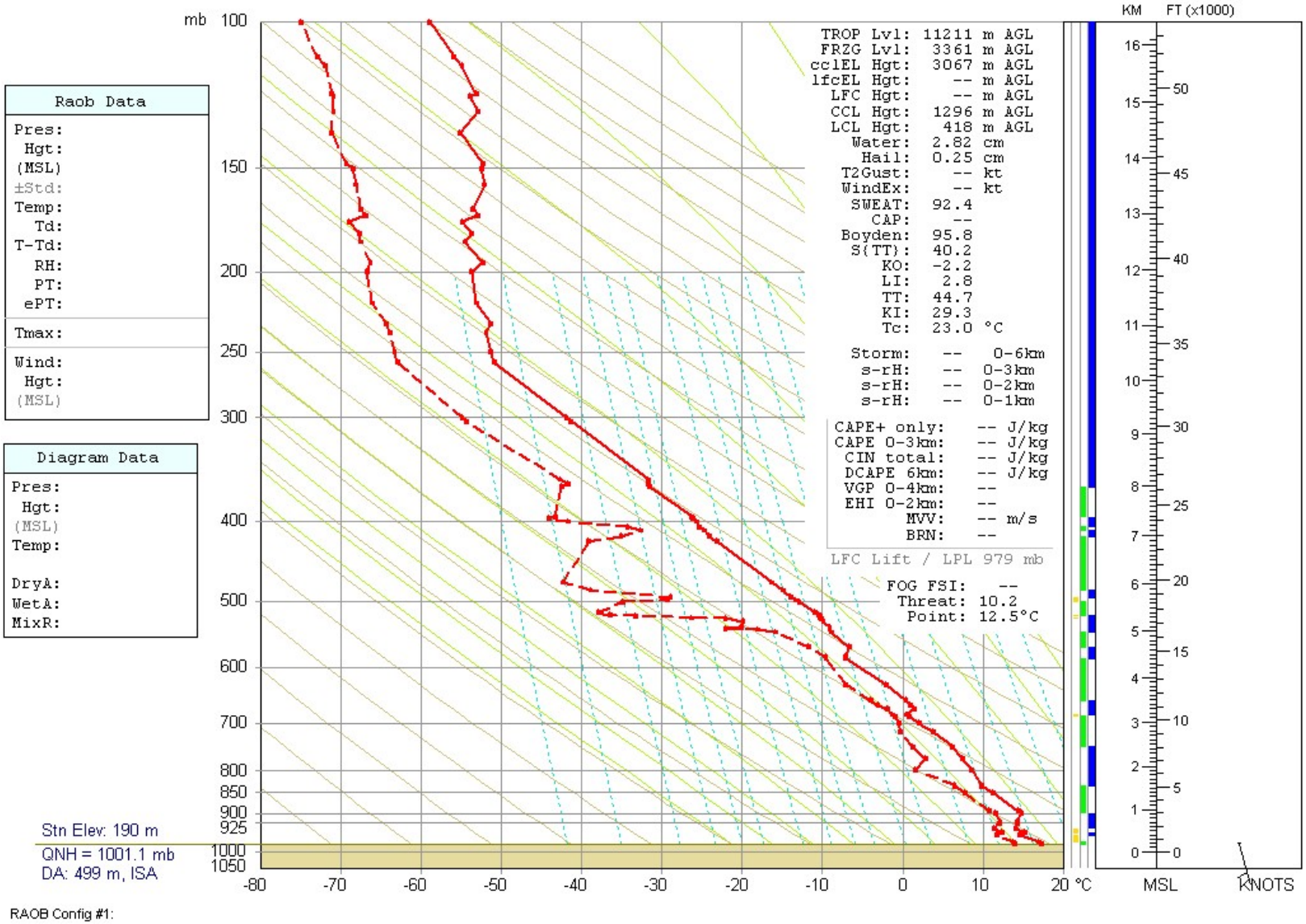
	#1	#2	
TROP Lvl:	12131	11780	m AGL
FRZG Lvl:	3395	3342	m AGL
cclEL Hgt:	2042	2014	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	179	m AGL
CCL Hgt:	1751	1852	m AGL
LCL Hgt:	101	101	m AGL
Water:	2.28	2.16	cm
Hail:	--	0.03	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	221.4	209.0	
CAP:	--	0.0	
Boyden:	92.2	92.6	
S{TT}:	31.6	30.5	
KO:	1.4	-.4	
LI:	11.2	10.4	
TT:	46.6	47.5	
KI:	20.5	17.0	
Tc:	25.1	26.0	°C
Storm:	274/36	278/39	0-6km
s-rH:	222	145	0-3km
s-rH:	201	146	0-2km
s-rH:	204	154	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	33.4	29.2	
Threat:	13.3	12.4	
Point:	10.1	10.9°C	
1000 - 500 mb:	5606	5608	m
1000 - 700 mb:	2960	2964	m
1000 - 850 mb:	1360	1362	m
850 - 500 mb:	4246	4246	m
850 - 700 mb:	1600	1601	m
700 - 500 mb:	2645	2645	m
600 - 400 mb:	3070	3070	m



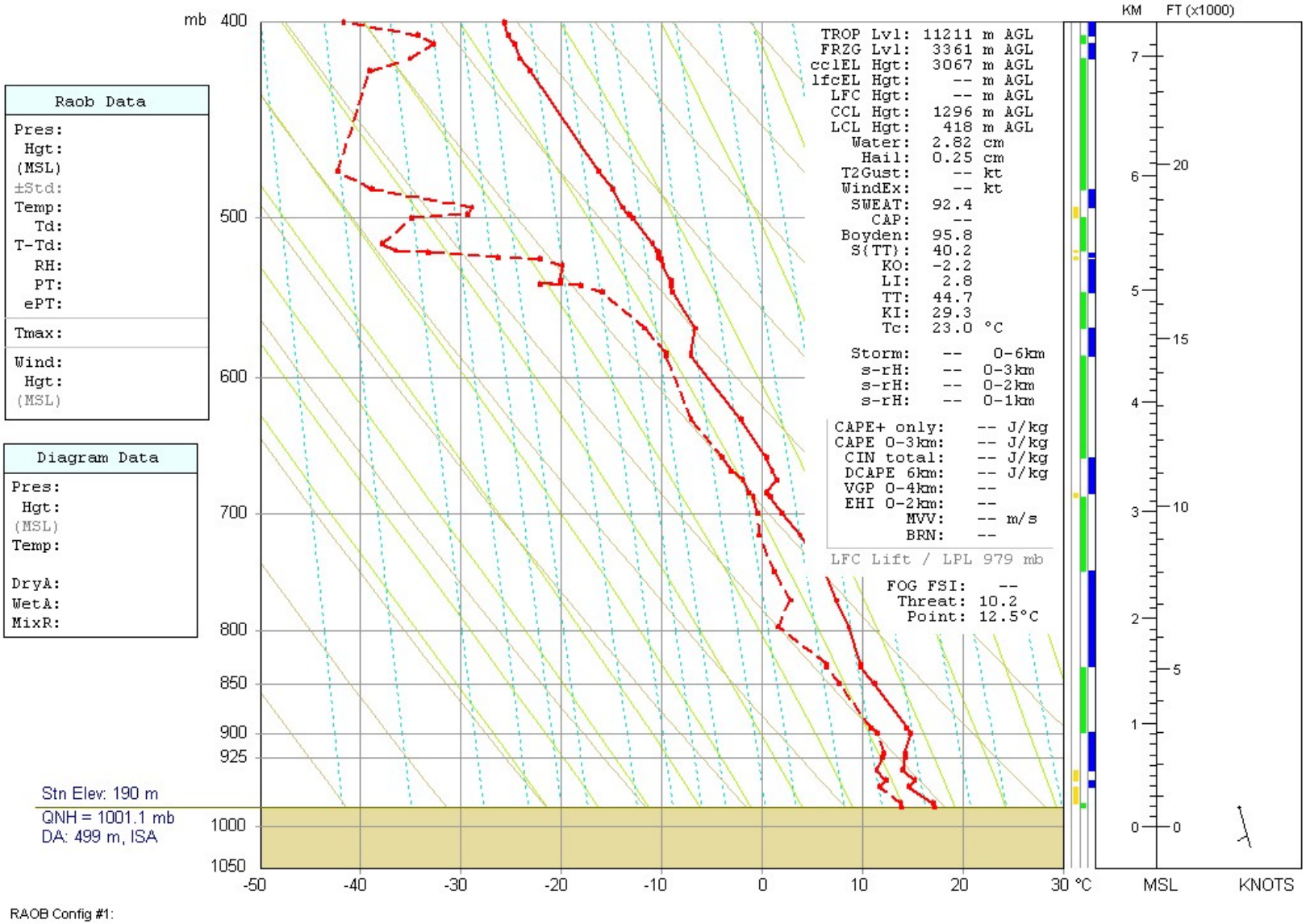
Test #72 System Test II – 15UTC on 06/07/2005
RWS Version 1.0.4.0



Test #72 System Test II – 15UTC on 06/07/2005
RWS Version 1.0.4.0

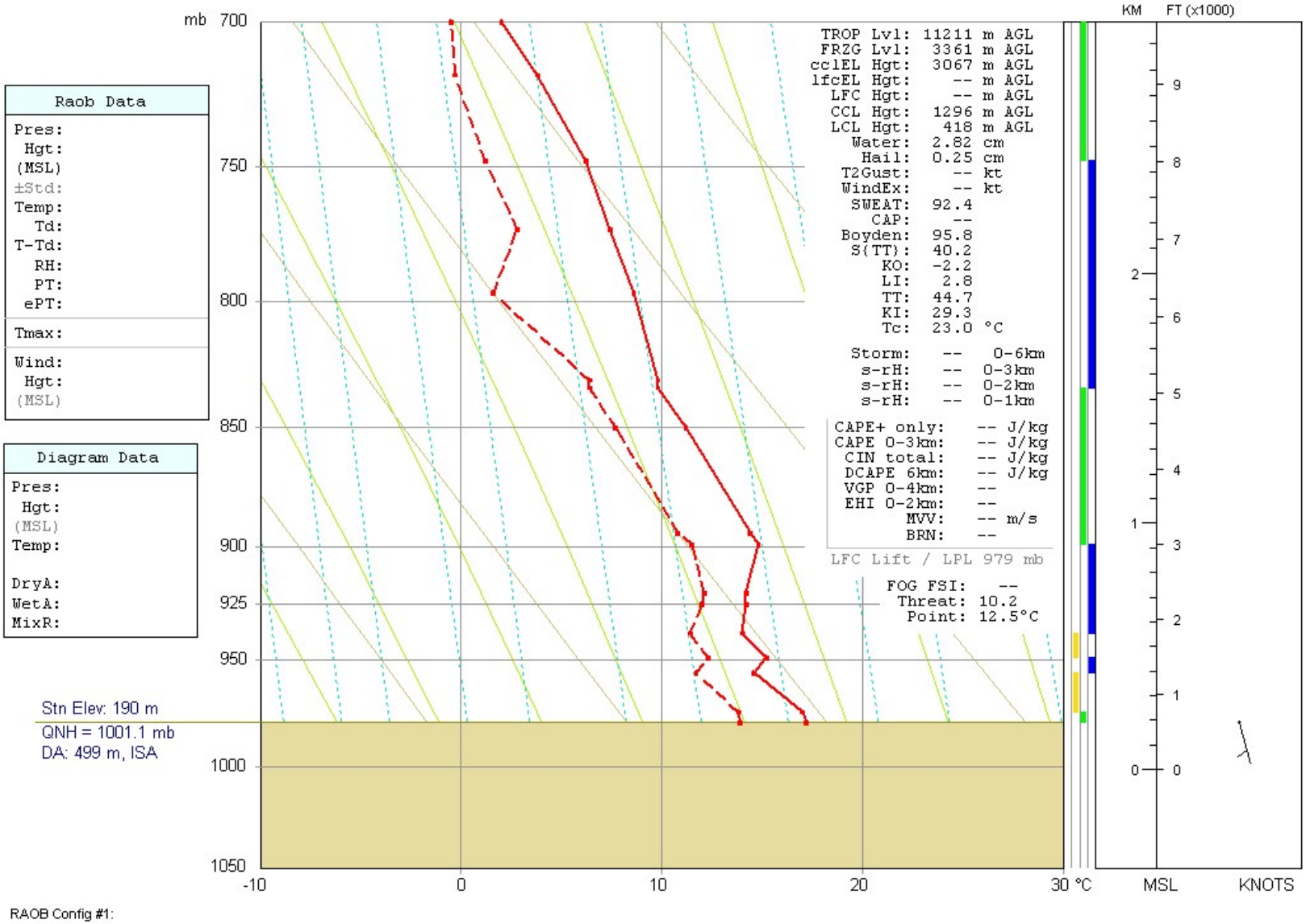


Test #72 System Test II – 15UTC on 06/07/2005
RWS Version 1.0.4.0

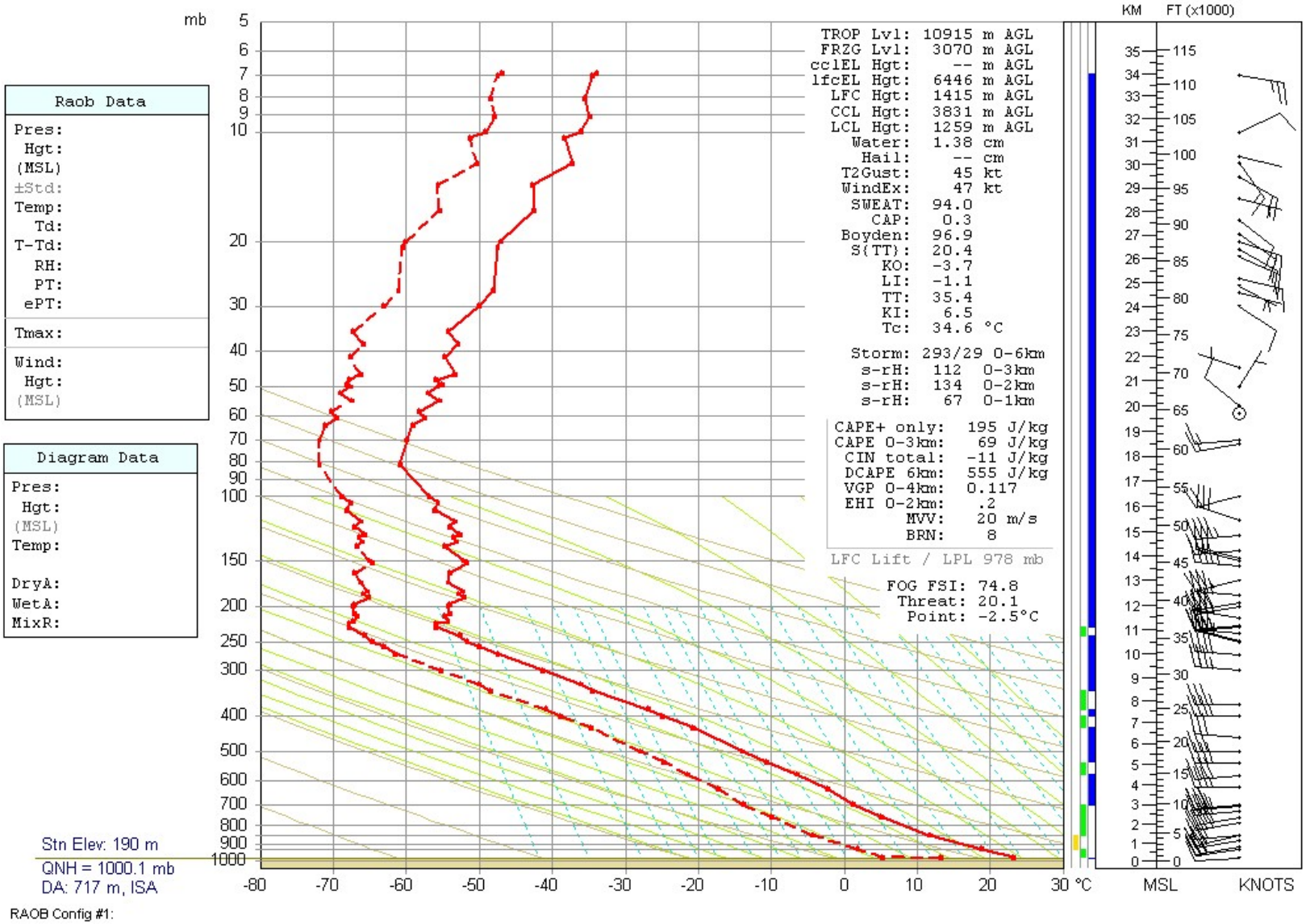


RAOB Config #1:

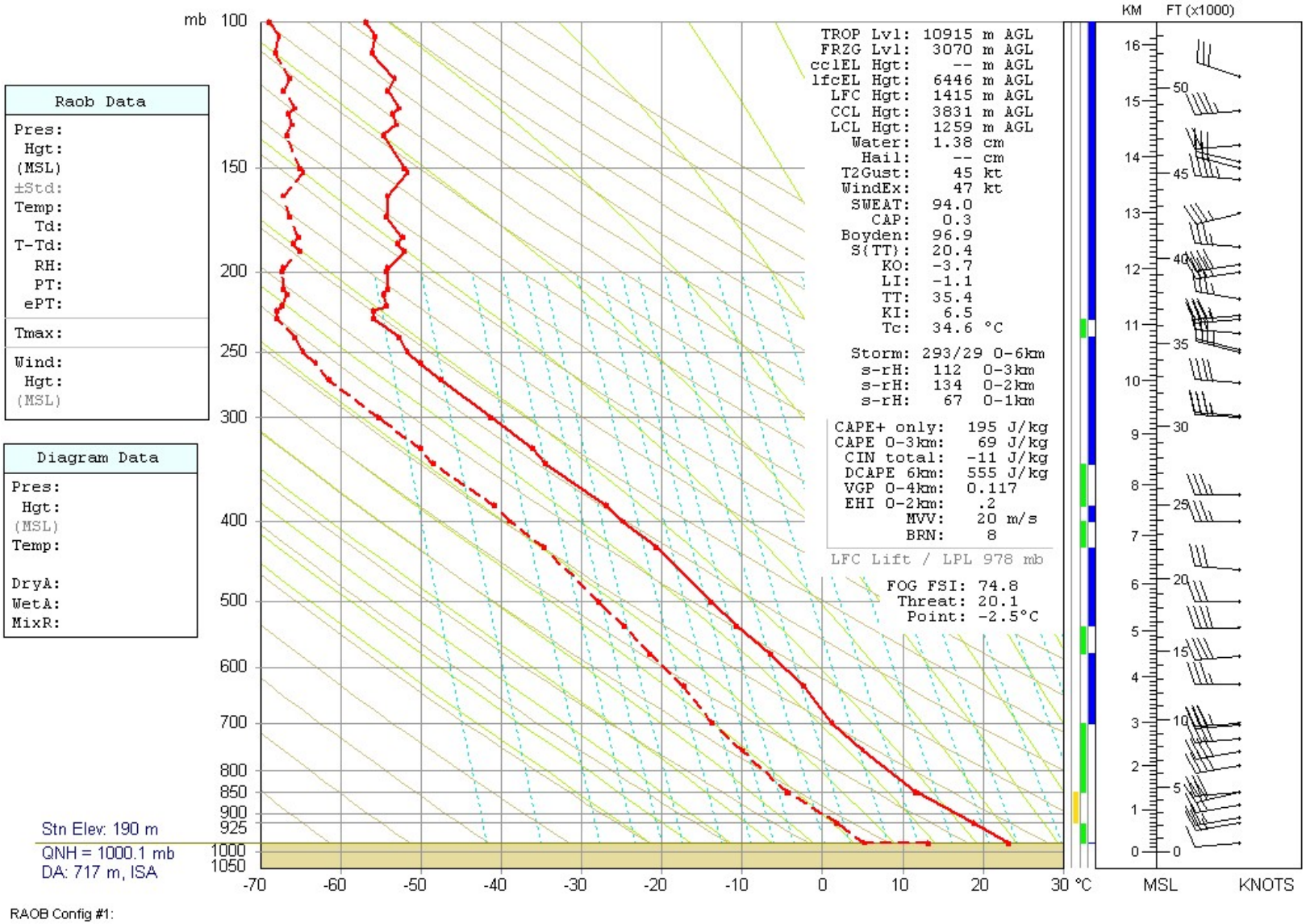
Test #72 System Test II – 15UTC on 06/07/2005
RWS Version 1.0.4.0



Test #73 System Test II – 20 UTC on 06/07/2005
RWS Version 1.0.4.0

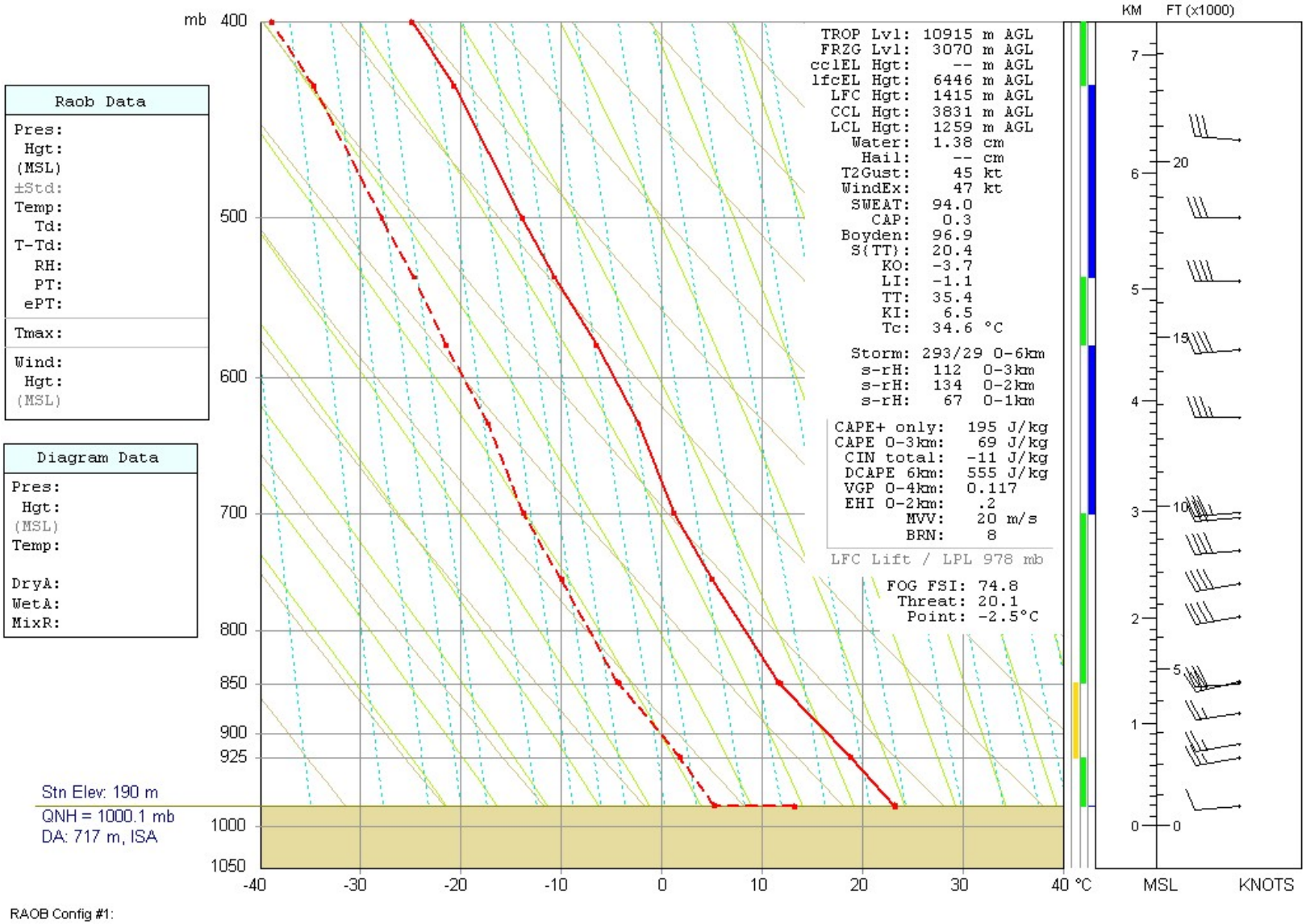


Test #73 System Test II – 20 UTC on 06/07/2005
RWS Version 1.0.4.0

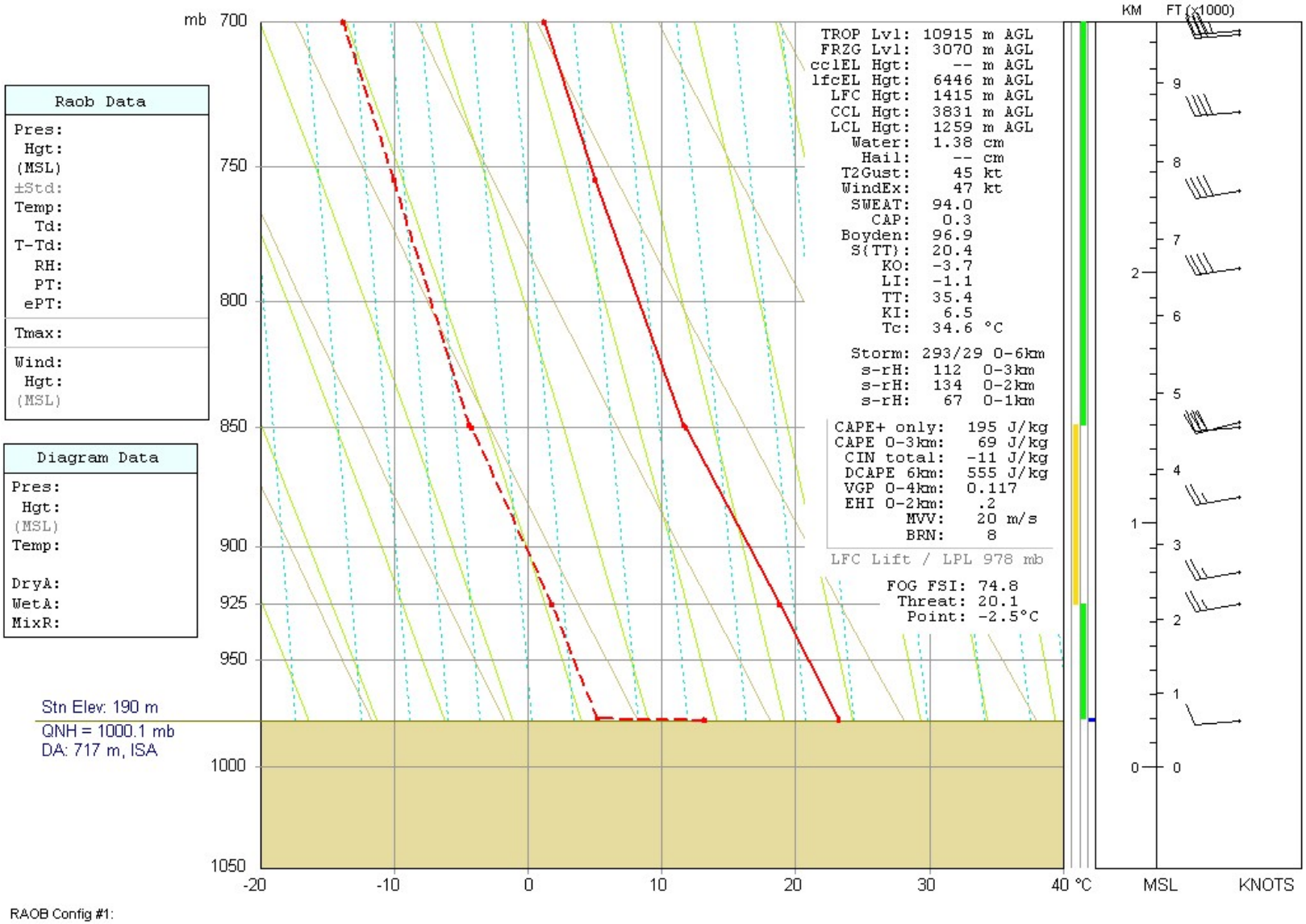


RAOB Config #1:

Test #73 System Test II – 20 UTC on 06/07/2005
RWS Version 1.0.4.0



Test #73 System Test II – 20 UTC on 06/07/2005
RWS Version 1.0.4.0



RAOB Config #1:

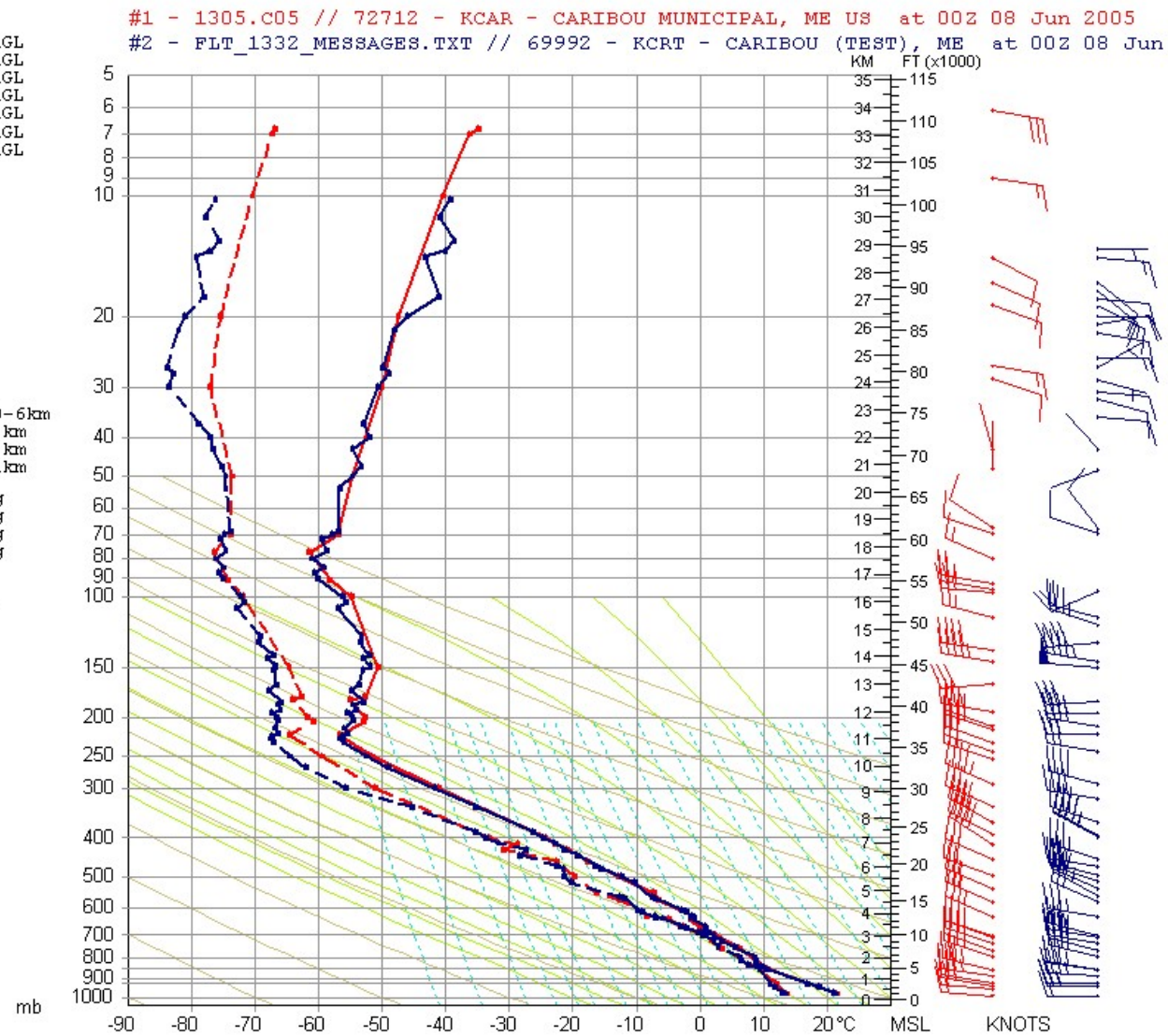
Test #74 - System Test II – 00UTC on 06/08/2005
RWS Version 1.0.4.0

TEST # 74			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	11139	10983	156
Freezing Level (m AGL)	3191	3342	-151
LFC Height (m AGL)	1120	1123	-3
CCL Height (m AGL)	1177	1284	-107
LCL Height (m AGL)	1010	1010	0
Precipitable Water (cm)	3.14	3.08	0.06
Thickness 1000 - 500 mb (m)	5636	5636	0
Thickness 1000 - 700 mb (m)	2985	2984	1
Thickness 1000 - 850 mb (m)	1386	1386	0
Thickness 850 - 500 mb (m)	4250	4250	0
Thickness 850 - 700 mb (m)	1599	1598	1
Thickness 700 - 500 mb (m)	2651	2652	-1
Thickness 600 - 400 mb (m)	3084	3082	2
Wind Shear Below	NC	NC	NC
Wind Shear Above	NC	NC	NC
Max Winds Agree (Y/N)	Y (no max winds)		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

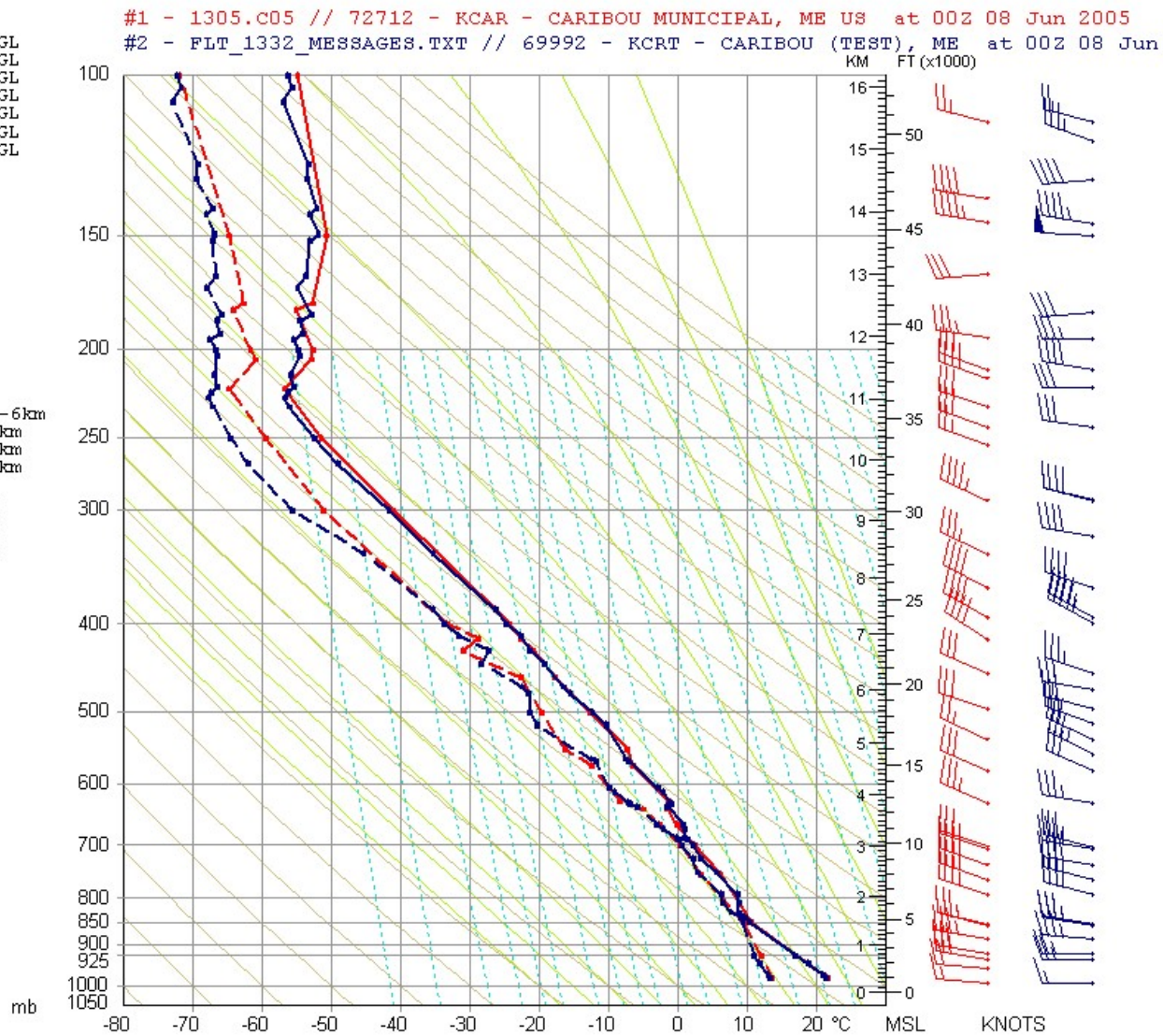
Test #74 - System Test II – 00UTC on 06/08/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11139	10983	m AGL
FRZG Lvl:	3191	3342	m AGL
cclEL Hgt:	3429	2683	m AGL
lfcEL Hgt:	1759	3068	m AGL
LFC Hgt:	1120	1123	m AGL
CCL Hgt:	1177	1284	m AGL
LCL Hgt:	1010	1010	m AGL
Water:	3.14	3.08	cm
Hail:	--	--	cm
T2Gust:	28	28	kt
WindEx:	36	31	kt
SWEAT:	211.0	214.8	
CAP:	0.5	0.5	
Boyden:	96.1	96.2	
S{TT}:	41.5	40.7	
KO:	-2.5	-2.1	
LI:	0.6	1.3	
TT:	45.5	44.4	
KI:	30.8	30.4	
Tc:	22.2	22.4	°C
Storm:	318/25	312/30	0-6km
s-rH:	105	131	0-3km
s-rH:	118	129	0-2km
s-rH:	82	113	0-1km
CAPE+ only:	4	17	J/kg
CAPE 0-3km:	4	17	J/kg
CIN total:	-6	-22	J/kg
DCAPE 6km:	312	315	J/kg
VGP 0-4km:	0.01	0.031	
EHI 0-2km:	.0	.0	
MVV:	3	6	m/s
BRN:	0	1	
FOG FSI:	72.0	74.0	
Threat:	11.4	11.6	
Point:	12.0	11.6	°C
1000 - 500 mb:	5636	5636	m
1000 - 700 mb:	2985	2984	m
1000 - 850 mb:	1386	1386	m
850 - 500 mb:	4250	4250	m
850 - 700 mb:	1599	1598	m
700 - 500 mb:	2651	2652	m
600 - 400 mb:	3084	3082	m



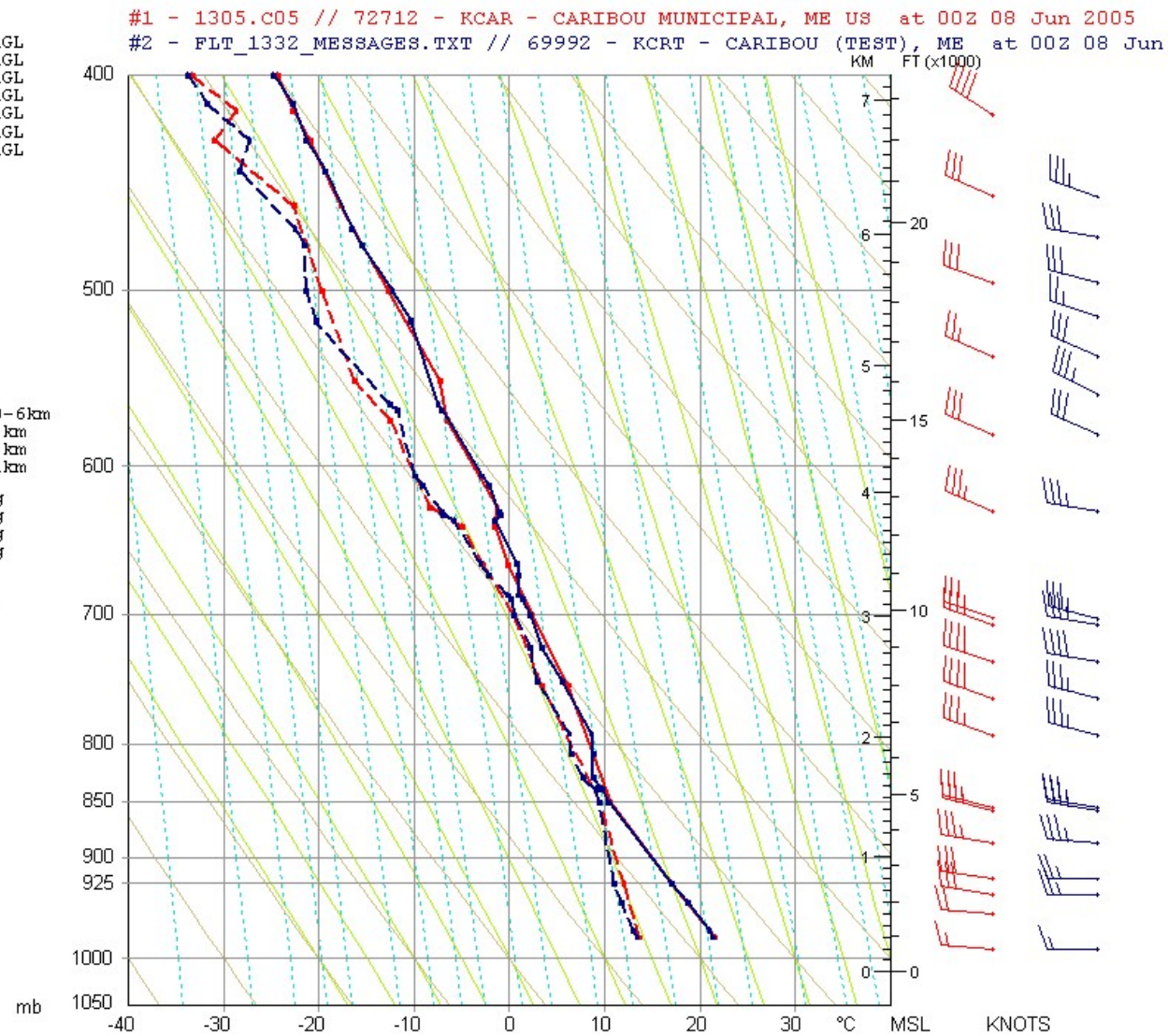
Test #74 - System Test II – 00UTC on 06/08/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11139	10983	m AGL
FRZG Lvl:	3191	3342	m AGL
cclEL Hgt:	3429	2683	m AGL
lfcEL Hgt:	1759	3068	m AGL
LFC Hgt:	1120	1123	m AGL
CCL Hgt:	1177	1284	m AGL
LCL Hgt:	1010	1010	m AGL
Water:	3.14	3.08	cm
Hail:	--	--	cm
T2Gust:	28	28	kt
WindEx:	36	31	kt
SWEAT:	211.0	214.8	
CAP:	0.5	0.5	
Boyden:	96.1	96.2	
S{TT}:	41.5	40.7	
KO:	-2.5	-2.1	
LI:	0.6	1.3	
TT:	45.5	44.4	
KI:	30.8	30.4	
Tc:	22.2	22.4	°C
Storm:	318/25	312/30	0-6km
s-rH:	105	131	0-3km
s-rH:	118	129	0-2km
s-rH:	82	113	0-1km
CAPE+ only:	4	17	J/kg
CAPE 0-3km:	4	17	J/kg
CIN total:	-6	-22	J/kg
DCAPE 6km:	312	315	J/kg
VGP 0-4km:	0.01	0.031	
EHI 0-2km:	.0	.0	
MVV:	3	6	m/s
BRN:	0	1	
FOG FSI:	72.0	74.0	
Threat:	11.4	11.6	
Point:	12.0	11.6°C	
1000 - 500 mb:	5636	5636	m
1000 - 700 mb:	2985	2984	m
1000 - 850 mb:	1386	1386	m
850 - 500 mb:	4250	4250	m
850 - 700 mb:	1599	1598	m
700 - 500 mb:	2651	2652	m
600 - 400 mb:	3084	3082	m



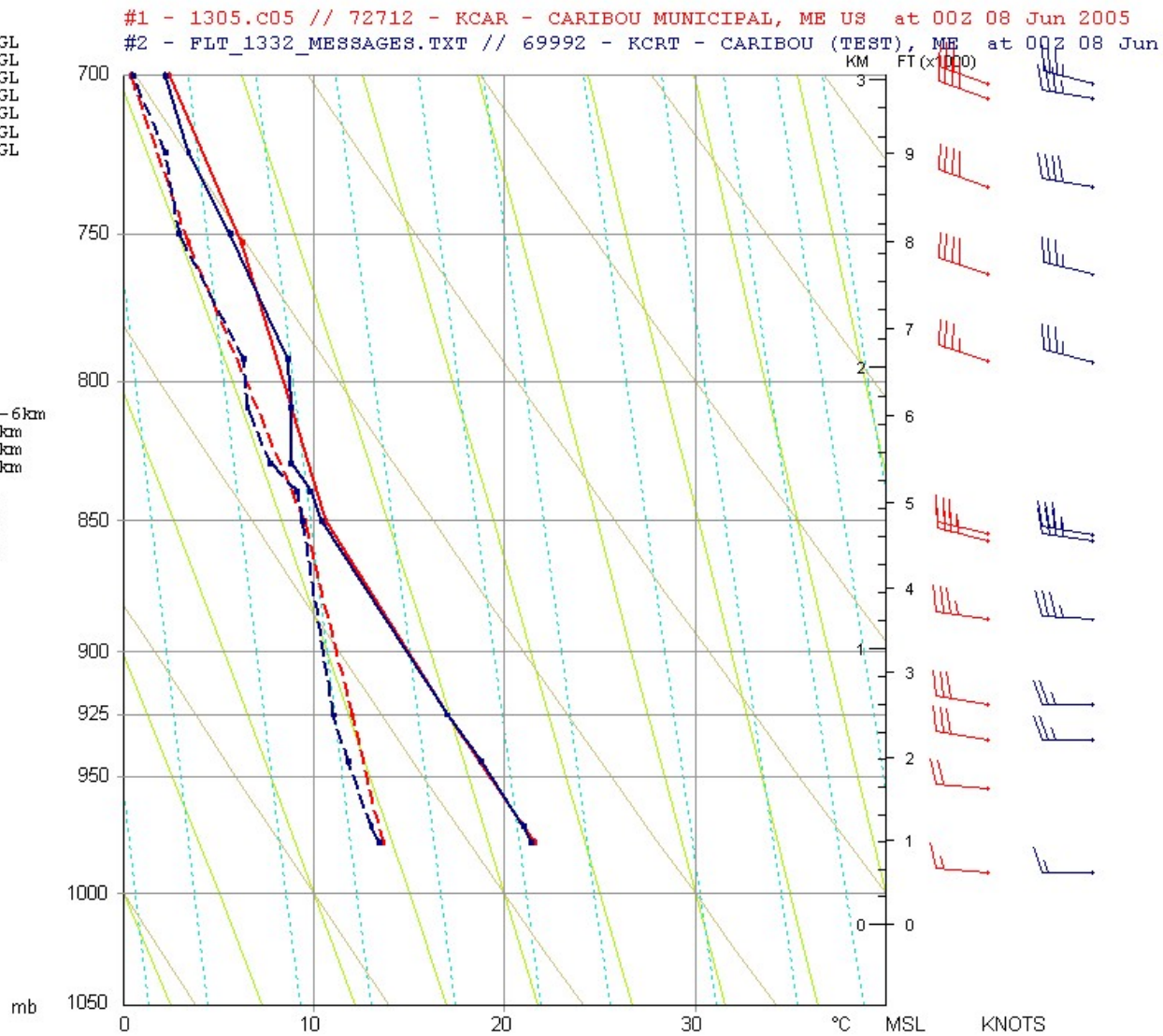
Test #74 - System Test II – 00UTC on 06/08/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11139	10983	m AGL
FRZG Lvl:	3191	3342	m AGL
cclEL Hgt:	3429	2683	m AGL
lfcEL Hgt:	1759	3068	m AGL
LFC Hgt:	1120	1123	m AGL
CCL Hgt:	1177	1284	m AGL
LCL Hgt:	1010	1010	m AGL
Water:	3.14	3.08	cm
Hail:	--	--	cm
T2Gust:	28	28	kt
WindEx:	36	31	kt
SWEAT:	211.0	214.8	
CAP:	0.5	0.5	
Boyden:	96.1	96.2	
S{TT}:	41.5	40.7	
KO:	-2.5	-2.1	
LI:	0.6	1.3	
TT:	45.5	44.4	
KI:	30.8	30.4	
Tc:	22.2	22.4	°C
Storm:	318/25	312/30	0-6km
s-rH:	105	131	0-3km
s-rH:	118	129	0-2km
s-rH:	82	113	0-1km
CAPE+ only:	4	17	J/kg
CAPE 0-3km:	4	17	J/kg
CIN total:	-6	-22	J/kg
DCAPE 6km:	312	315	J/kg
VGP 0-4km:	0.01	0.031	
EHI 0-2km:	.0	.0	
MVV:	3	6	m/s
BRN:	0	1	
FOG FSI:	72.0	74.0	
Threat:	11.4	11.6	
Point:	12.0	11.6°C	
1000 - 500 mb:	5636	5636	m
1000 - 700 mb:	2985	2984	m
1000 - 850 mb:	1386	1386	m
850 - 500 mb:	4250	4250	m
850 - 700 mb:	1599	1598	m
700 - 500 mb:	2651	2652	m
600 - 400 mb:	3084	3082	m



Test #74 - System Test II – 00UTC on 06/08/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	11139	10983	m AGL
FRZG Lvl:	3191	3342	m AGL
cclEL Hgt:	3429	2683	m AGL
lfcEL Hgt:	1759	3068	m AGL
LFC Hgt:	1120	1123	m AGL
CCL Hgt:	1177	1284	m AGL
LCL Hgt:	1010	1010	m AGL
Water:	3.14	3.08	cm
Hail:	--	--	cm
T2Gust:	28	28	kt
WindEx:	36	31	kt
SWEAT:	211.0	214.8	
CAP:	0.5	0.5	
Boyden:	96.1	96.2	
S{TT}:	41.5	40.7	
KO:	-2.5	-2.1	
LI:	0.6	1.3	
TT:	45.5	44.4	
KI:	30.8	30.4	
Tc:	22.2	22.4	°C
Storm:	318/25	312/30	0-6km
s-rH:	105	131	0-3km
s-rH:	118	129	0-2km
s-rH:	82	113	0-1km
CAPE+ only:	4	17	J/kg
CAPE 0-3km:	4	17	J/kg
CIN total:	-6	-22	J/kg
DCAPE 6km:	312	315	J/kg
VGP 0-4km:	0.01	0.031	
EHI 0-2km:	.0	.0	
MVV:	3	6	m/s
BRN:	0	1	
FOG FSI:	72.0	74.0	
Threat:	11.4	11.6	
Point:	12.0	11.6°C	
1000 - 500 mb:	5636	5636	m
1000 - 700 mb:	2985	2984	m
1000 - 850 mb:	1386	1386	m
850 - 500 mb:	4250	4250	m
850 - 700 mb:	1599	1598	m
700 - 500 mb:	2651	2652	m
600 - 400 mb:	3084	3082	m



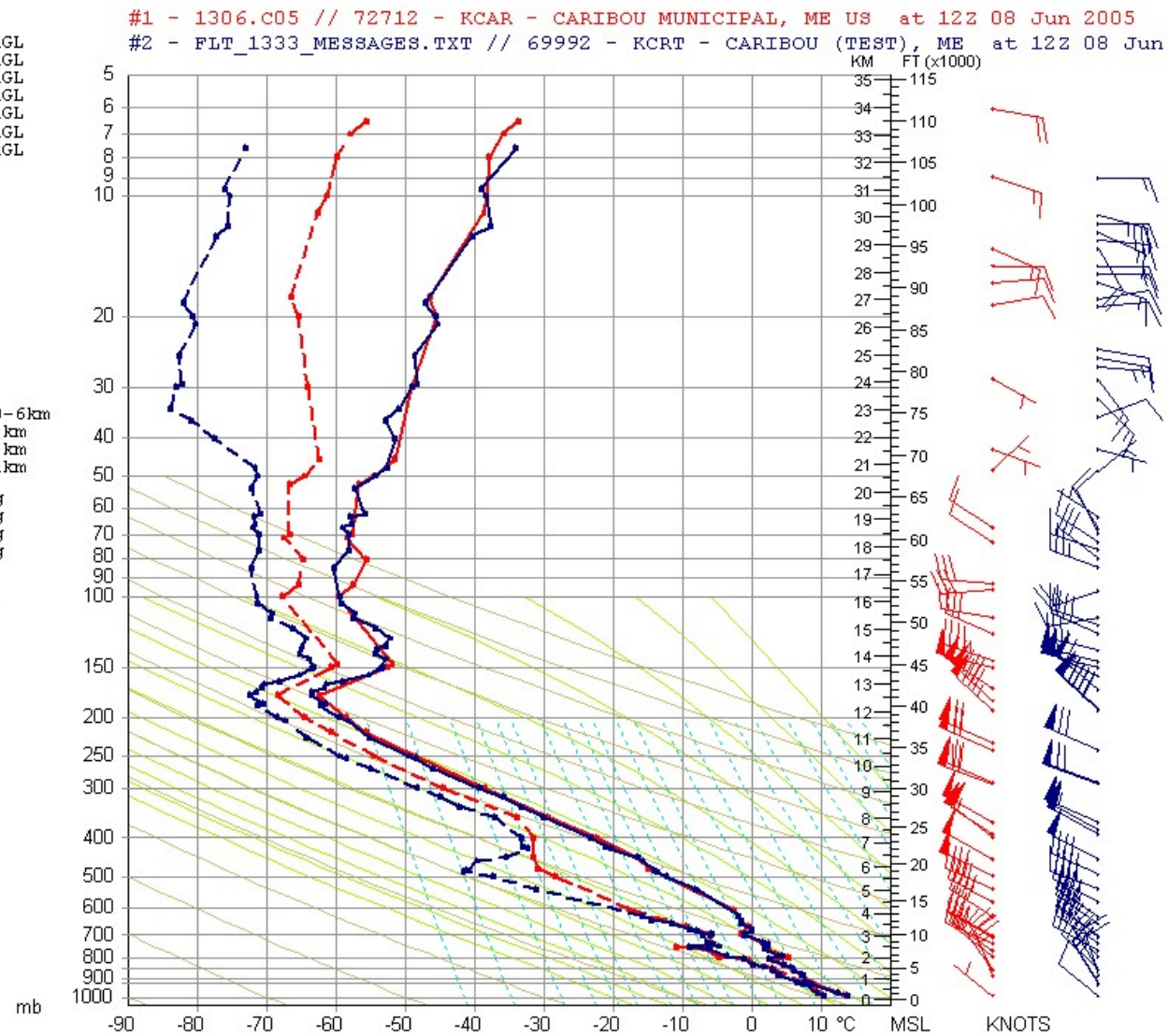
Test #75 - System Test II – 12 UTC on 06/08/2005
RWS Version 1.0.4.0

TEST # 75			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12633	12617	16
Freezing Level (m AGL)	2646	2692	-46
LFC Height (m AGL)	523	428	95
CCL Height (m AGL)	904	1113	-209
LCL Height (m AGL)	378	428	-50
Precipitable Water (cm)	2.08	1.94	0.14
Thickness 1000 - 500 mb (m)	5570	5569	1
Thickness 1000 - 700 mb (m)	2922	2922	0
Thickness 1000 - 850 mb (m)	1350	1349	1
Thickness 850 - 500 mb (m)	4220	4220	0
Thickness 850 - 700 mb (m)	1572	1572	0
Thickness 700 - 500 mb (m)	2647	2647	0
Thickness 600 - 400 mb (m)	3094	3093	1
Wind Shear Below	21	23	-2
Wind Shear Above	18	34	-16
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

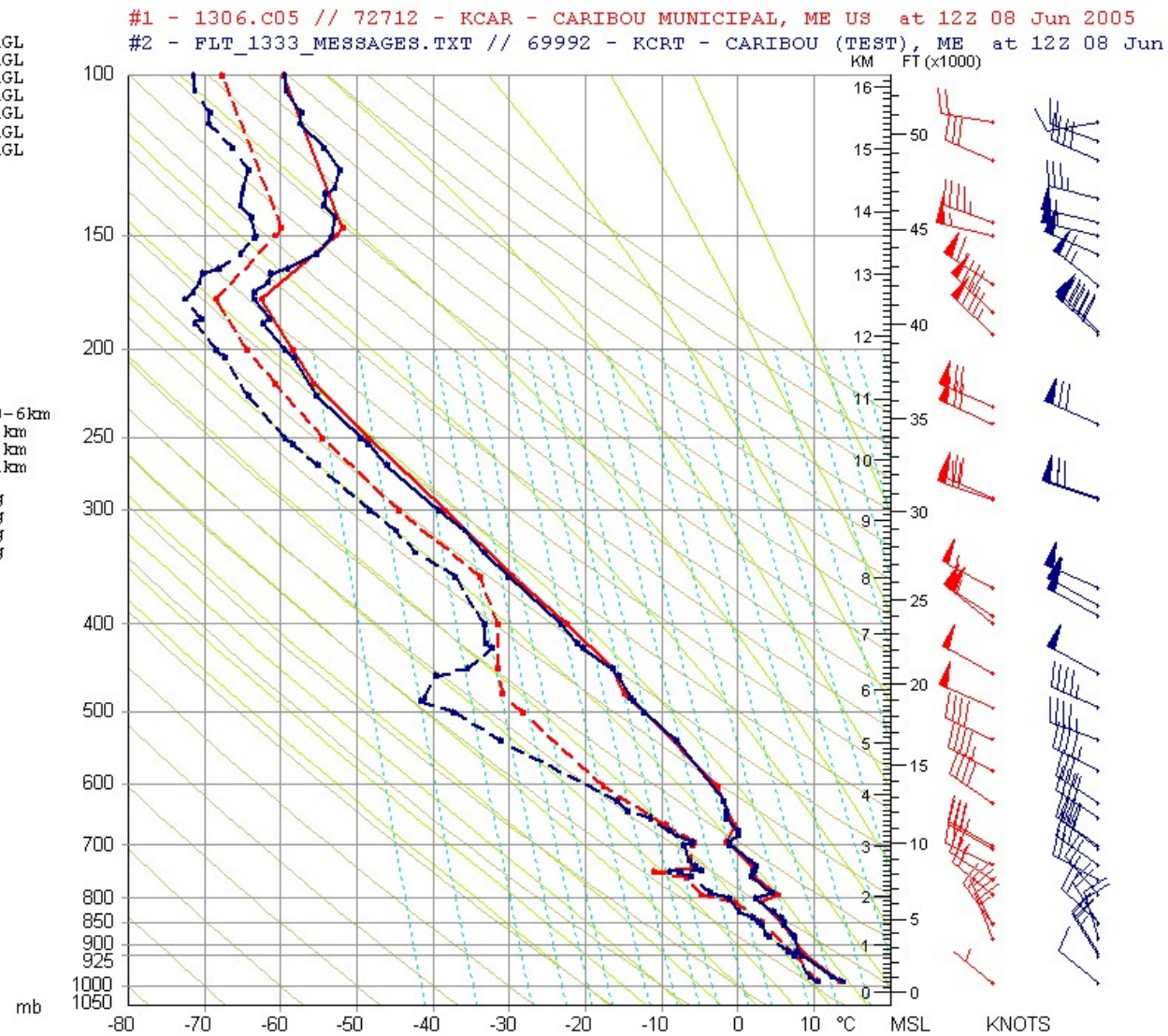
Test #75 - System Test II – 12 UTC on 06/08/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12633	12617	m AGL
FRZG Lvl:	2646	2692	m AGL
cclEL Hgt:	--	1768	m AGL
lfcEL Hgt:	--	1746	m AGL
LFC Hgt:	523	428	m AGL
CCL Hgt:	904	1113	m AGL
LCL Hgt:	378	428	m AGL
Water:	2.08	1.94	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	122.2	123.6	
CAP:	0.5	-0.2	
Boyden:	93.3	93.3	
S{TT}:	22.6	21.4	
KO:	6.0	4.8	
LI:	9.9	9.6	
TT:	33.5	33.4	
KI:	16.3	15.1	
Tc:	16.1	17.4	°C
Storm:	324/40	324/42	0-6km
s-rH:	82	78	0-3km
s-rH:	6	-4	0-2km
s-rH:	-71	-60	0-1km
CAPE+ only:	--	7	J/kg
CAPE 0-3km:	--	7	J/kg
CIN total:	--	-14	J/kg
DCAPE 6km:	--	74	J/kg
VGP 0-4km:	--	0.026	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	0	
FOG FSI:	38.2	44.4	
Threat:	8.5	8.8	
Point:	9.2	8.8	°C
1000 - 500 mb:	5570	5569	m
1000 - 700 mb:	2922	2922	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4220	4220	m
850 - 700 mb:	1572	1572	m
700 - 500 mb:	2647	2647	m
600 - 400 mb:	3094	3093	m



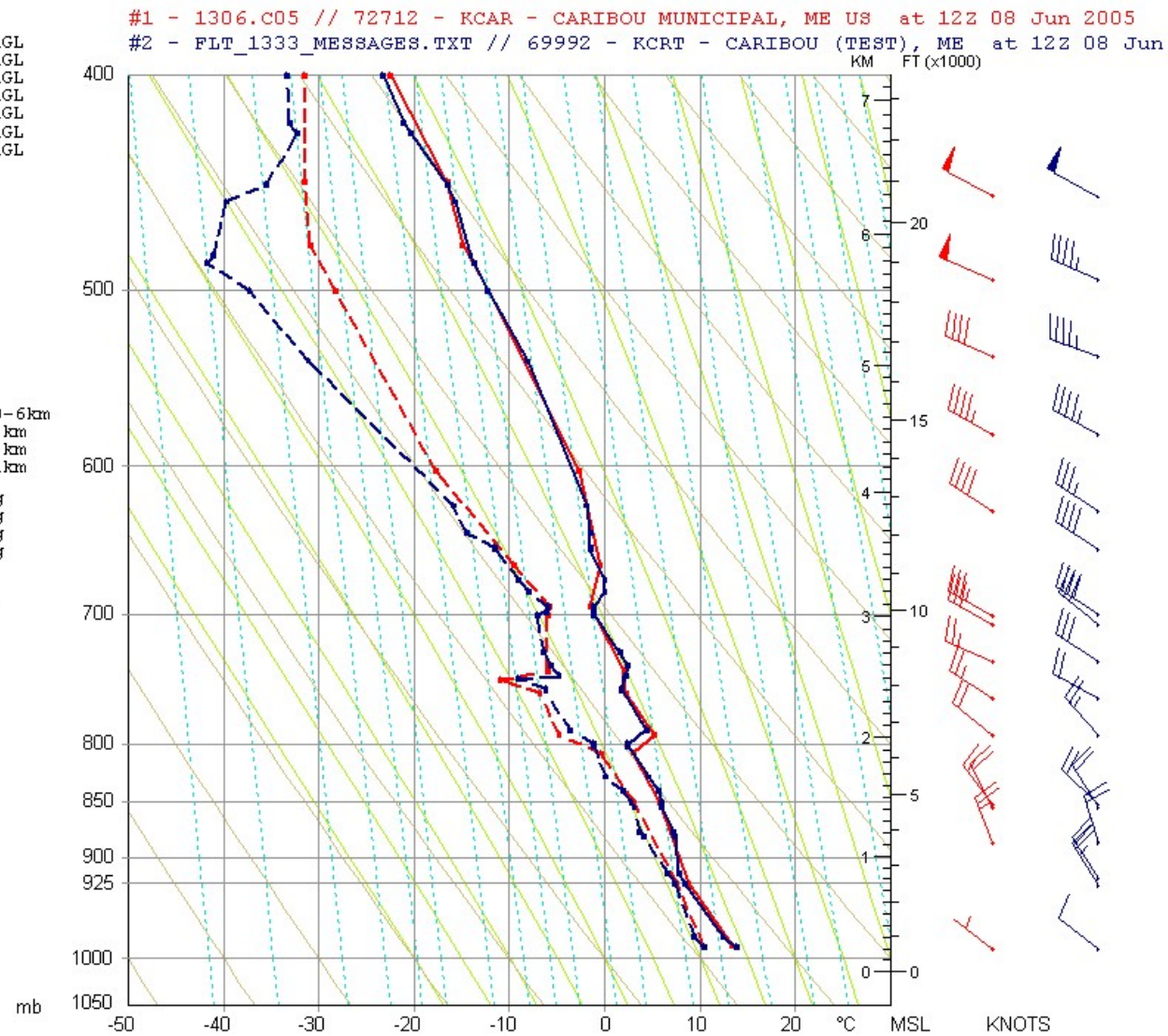
Test #75 - System Test II – 12 UTC on 06/08/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12633	12617	m AGL
FRZG Lvl:	2646	2692	m AGL
cclEL Hgt:	--	1768	m AGL
lfcEL Hgt:	--	1746	m AGL
LFC Hgt:	523	428	m AGL
CCL Hgt:	904	1113	m AGL
LCL Hgt:	378	428	m AGL
Water:	2.08	1.94	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	122.2	123.6	
CAP:	0.5	-0.2	
Boyden:	93.3	93.3	
S{TT}:	22.6	21.4	
KO:	6.0	4.8	
LI:	9.9	9.6	
TT:	33.5	33.4	
KI:	16.3	15.1	
Tc:	16.1	17.4	°C
Storm:	324/40	324/42	0-6km
s-rH:	82	78	0-3km
s-rH:	6	-4	0-2km
s-rH:	-71	-60	0-1km
CAPE+ only:	--	7	J/kg
CAPE 0-3km:	--	7	J/kg
CIN total:	--	-14	J/kg
DCAPE 6km:	--	74	J/kg
VGP 0-4km:	--	0.026	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	0	
FOG FSI:	38.2	44.4	
Threat:	8.5	8.8	
Point:	9.2	8.8°C	
1000 - 500 mb:	5570	5569	m
1000 - 700 mb:	2922	2922	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4220	4220	m
850 - 700 mb:	1572	1572	m
700 - 500 mb:	2647	2647	m
600 - 400 mb:	3094	3093	m



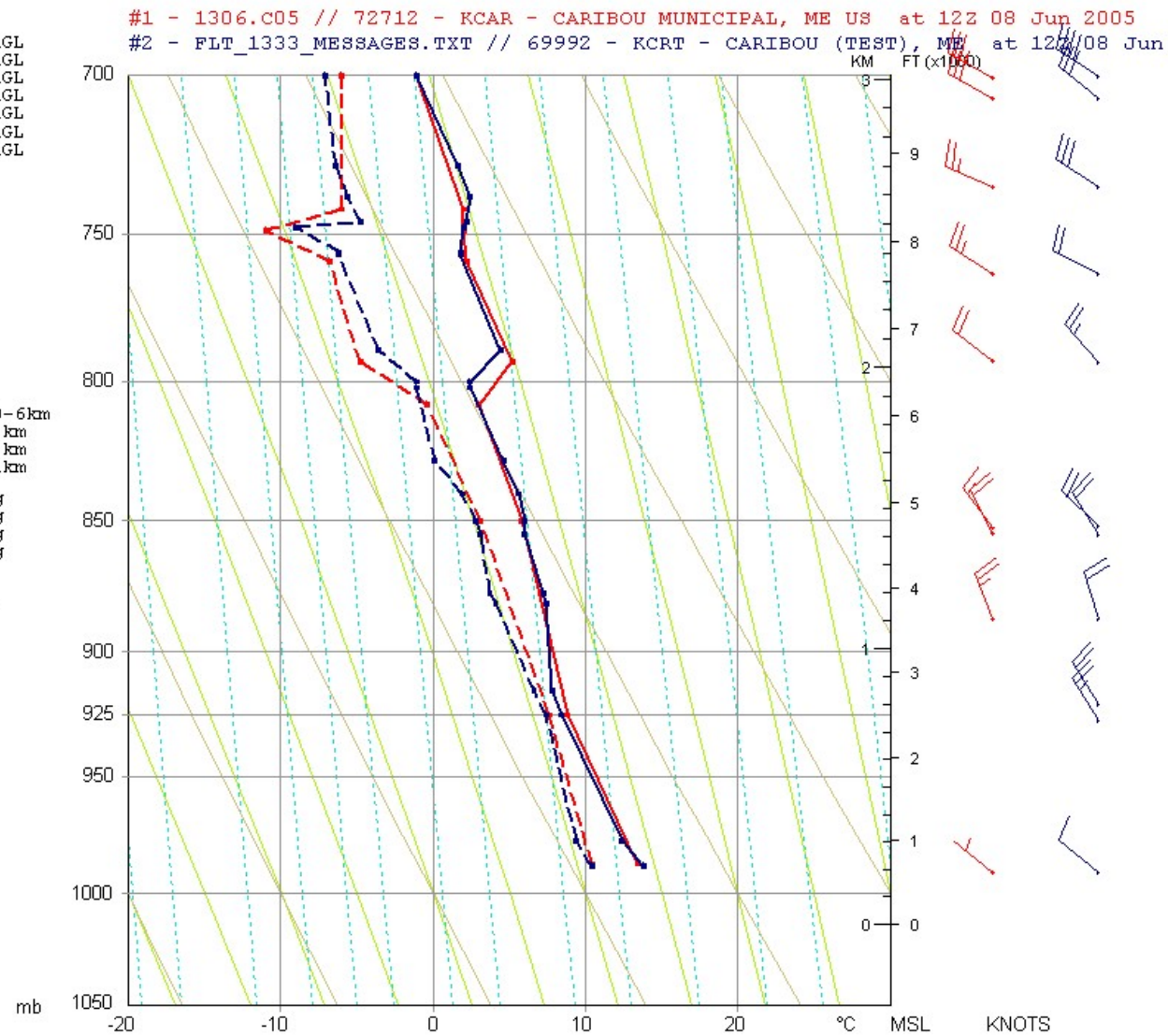
Test #75 - System Test II – 12 UTC on 06/08/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12633	12617	m AGL
FRZG Lvl:	2646	2692	m AGL
cclEL Hgt:	--	1768	m AGL
lfcEL Hgt:	--	1746	m AGL
LFC Hgt:	523	428	m AGL
CCL Hgt:	904	1113	m AGL
LCL Hgt:	378	428	m AGL
Water:	2.08	1.94	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	122.2	123.6	
CAP:	0.5	-0.2	
Boyden:	93.3	93.3	
S{TT}:	22.6	21.4	
KO:	6.0	4.8	
LI:	9.9	9.6	
TT:	33.5	33.4	
KI:	16.3	15.1	
Tc:	16.1	17.4	°C
Storm:	324/40	324/42	0-6km
s-rH:	82	78	0-3km
s-rH:	6	-4	0-2km
s-rH:	-71	-60	0-1km
CAPE+ only:	--	7	J/kg
CAPE 0-3km:	--	7	J/kg
CIN total:	--	-14	J/kg
DCAPE 6km:	--	74	J/kg
VGP 0-4km:	--	0.026	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	0	
FOG FSI:	38.2	44.4	
Threat:	8.5	8.8	
Point:	9.2	8.8°C	
1000 - 500 mb:	5570	5569	m
1000 - 700 mb:	2922	2922	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4220	4220	m
850 - 700 mb:	1572	1572	m
700 - 500 mb:	2647	2647	m
600 - 400 mb:	3094	3093	m

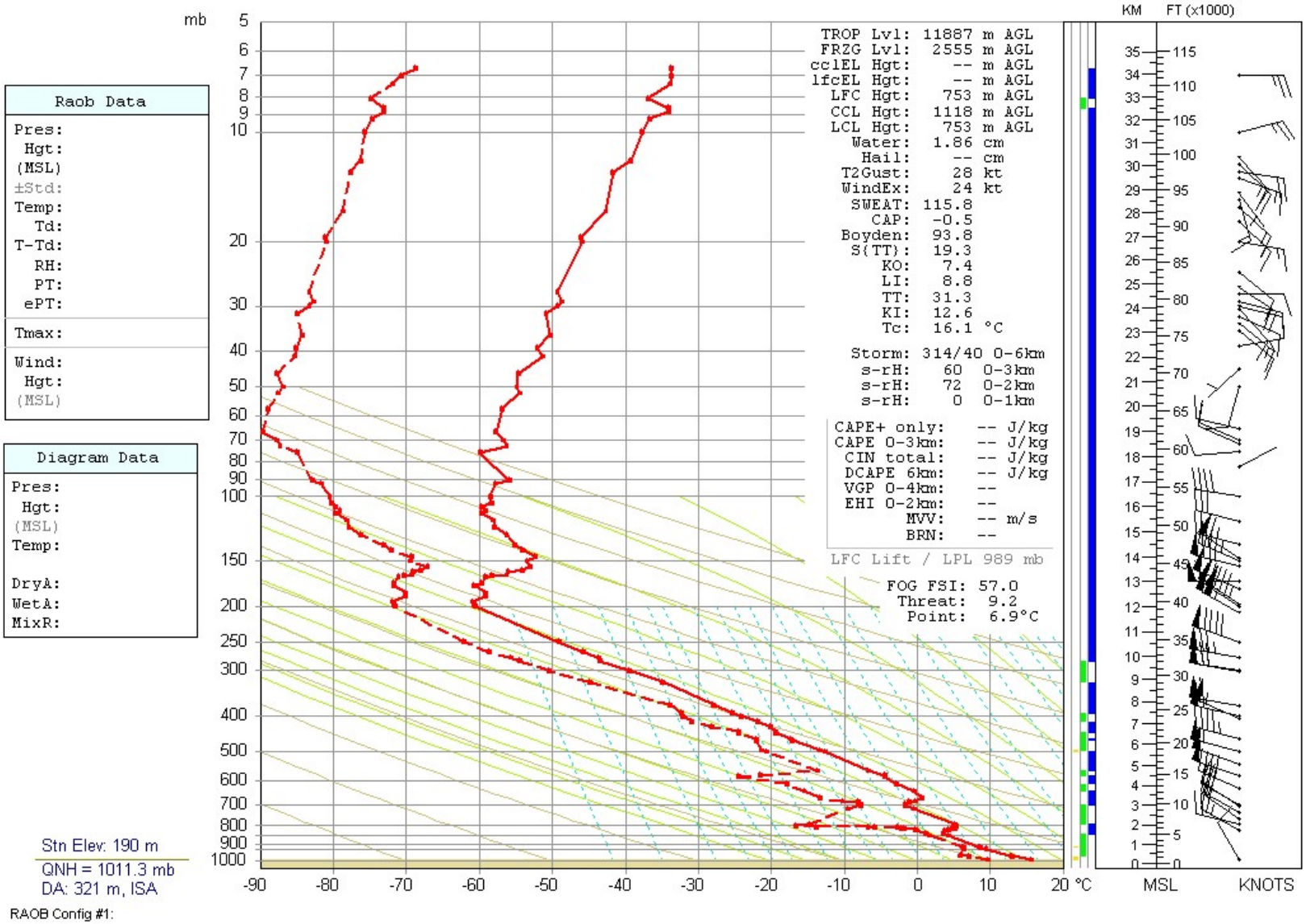


Test #75 - System Test II – 12 UTC on 06/08/2005
RWS Version 1.0.4.0

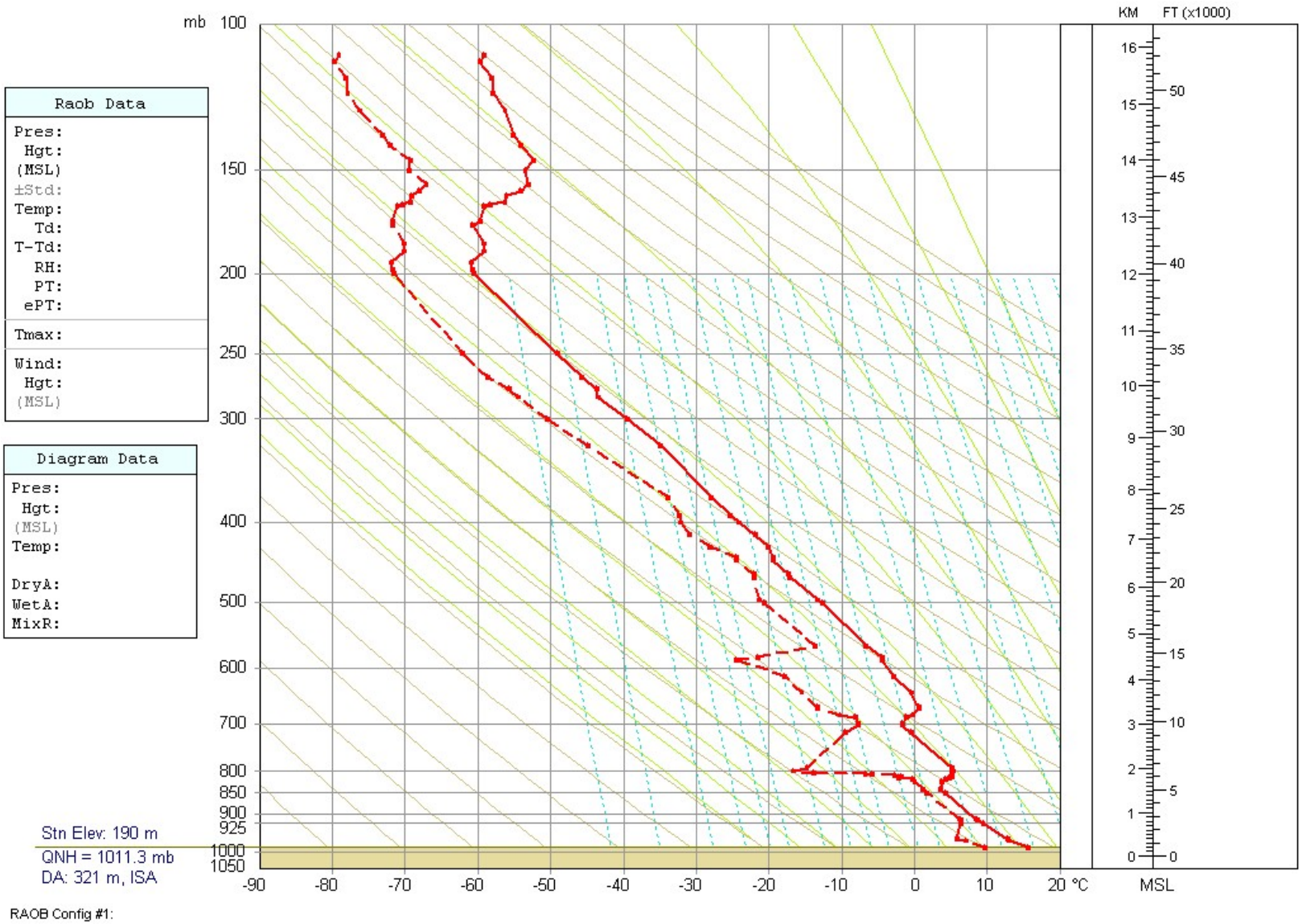
	#1	#2	
TROP Lvl:	12633	12617	m AGL
FRZG Lvl:	2646	2692	m AGL
cclEL Hgt:	--	1768	m AGL
lfcEL Hgt:	--	1746	m AGL
LFC Hgt:	523	428	m AGL
CCL Hgt:	904	1113	m AGL
LCL Hgt:	378	428	m AGL
Water:	2.08	1.94	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	122.2	123.6	
CAP:	0.5	-0.2	
Boyden:	93.3	93.3	
S{TT}:	22.6	21.4	
KO:	6.0	4.8	
LI:	9.9	9.6	
TT:	33.5	33.4	
KI:	16.3	15.1	
Tc:	16.1	17.4	°C
Storm:	324/40	324/42	0-6km
s-rH:	82	78	0-3km
s-rH:	6	-4	0-2km
s-rH:	-71	-60	0-1km
CAPE+ only:	--	7	J/kg
CAPE 0-3km:	--	7	J/kg
CIN total:	--	-14	J/kg
DCAPE 6km:	--	74	J/kg
VGP 0-4km:	--	0.026	
EHI 0-2km:	--	.0	
MVV:	--	4	m/s
BRN:	--	0	
FOG FSI:	38.2	44.4	
Threat:	8.5	8.8	
Point:	9.2	8.8°C	
1000 - 500 mb:	5570	5569	m
1000 - 700 mb:	2922	2922	m
1000 - 850 mb:	1350	1349	m
850 - 500 mb:	4220	4220	m
850 - 700 mb:	1572	1572	m
700 - 500 mb:	2647	2647	m
600 - 400 mb:	3094	3093	m



Test #76 System Test II – 14 UTC on 06/08/2005
RWS Version 1.0.4.0

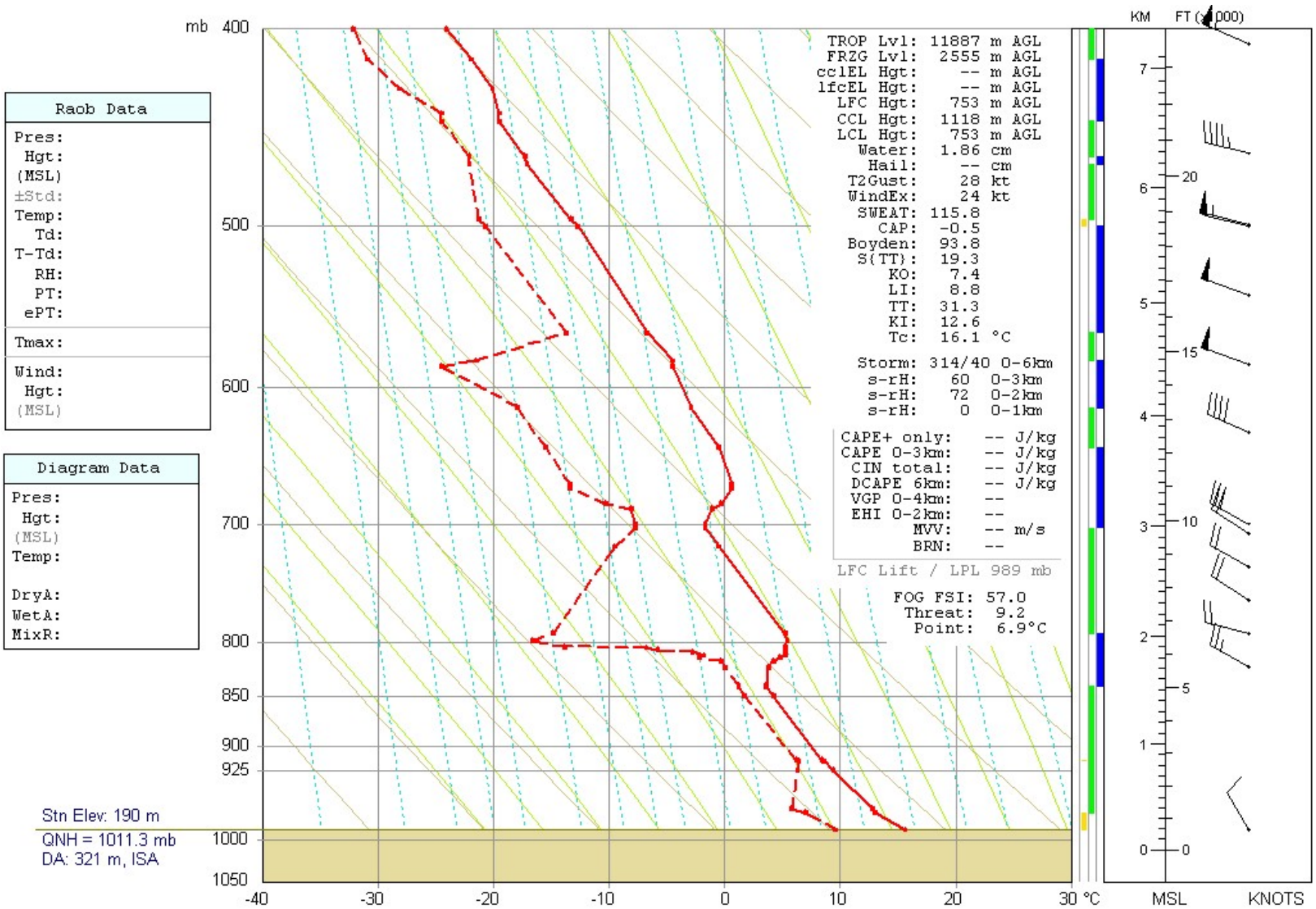


Test #76 System Test II – 14 UTC on 06/08/2005
RWS Version 1.0.4.0



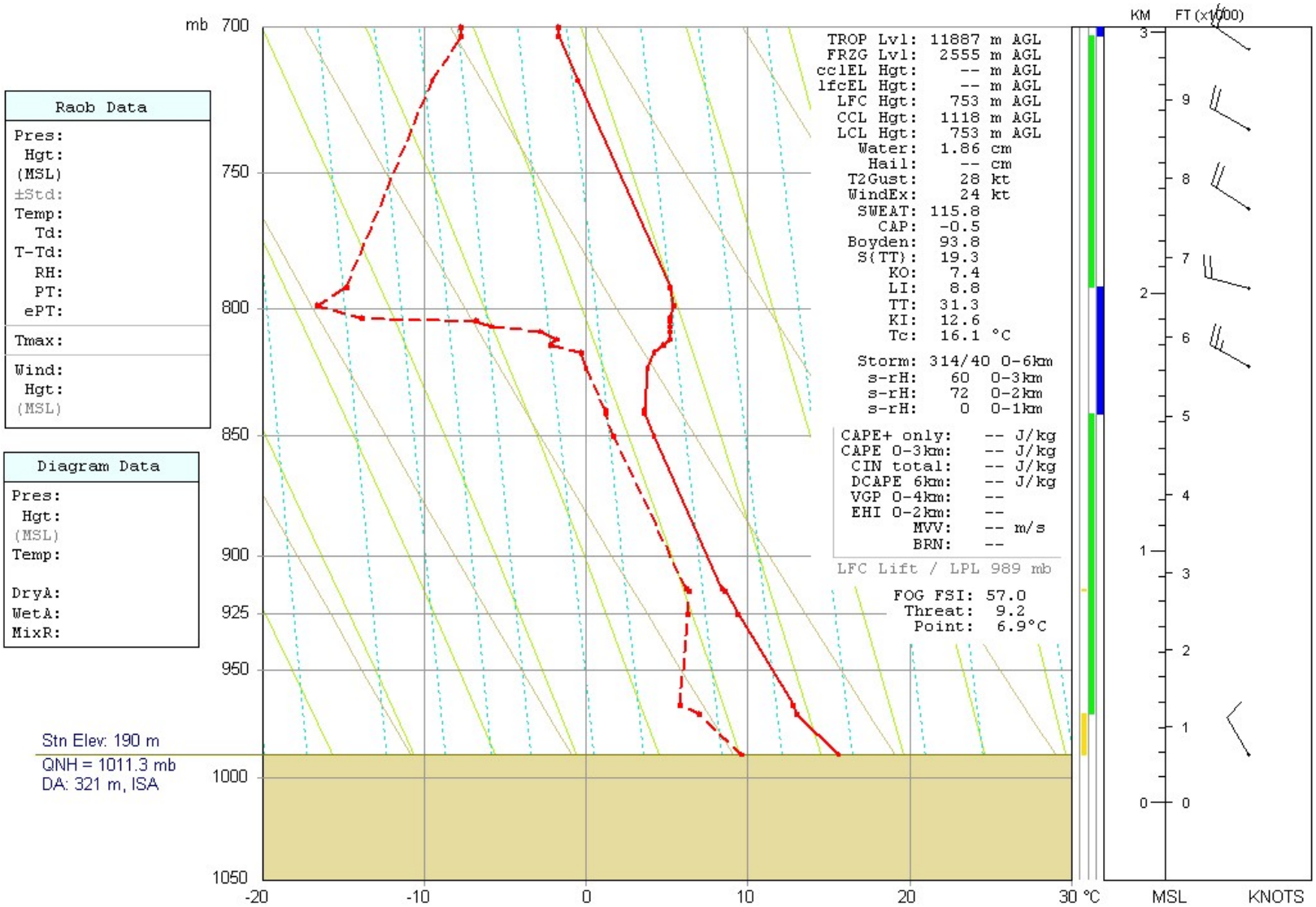
RAOB Config #1:

Test #76 System Test II – 14 UTC on 06/08/2005
RWS Version 1.0.4.0



RAOB Config #1:

Test #76 System Test II – 14 UTC on 06/08/2005
RWS Version 1.0.4.0



RAOB Config #1:

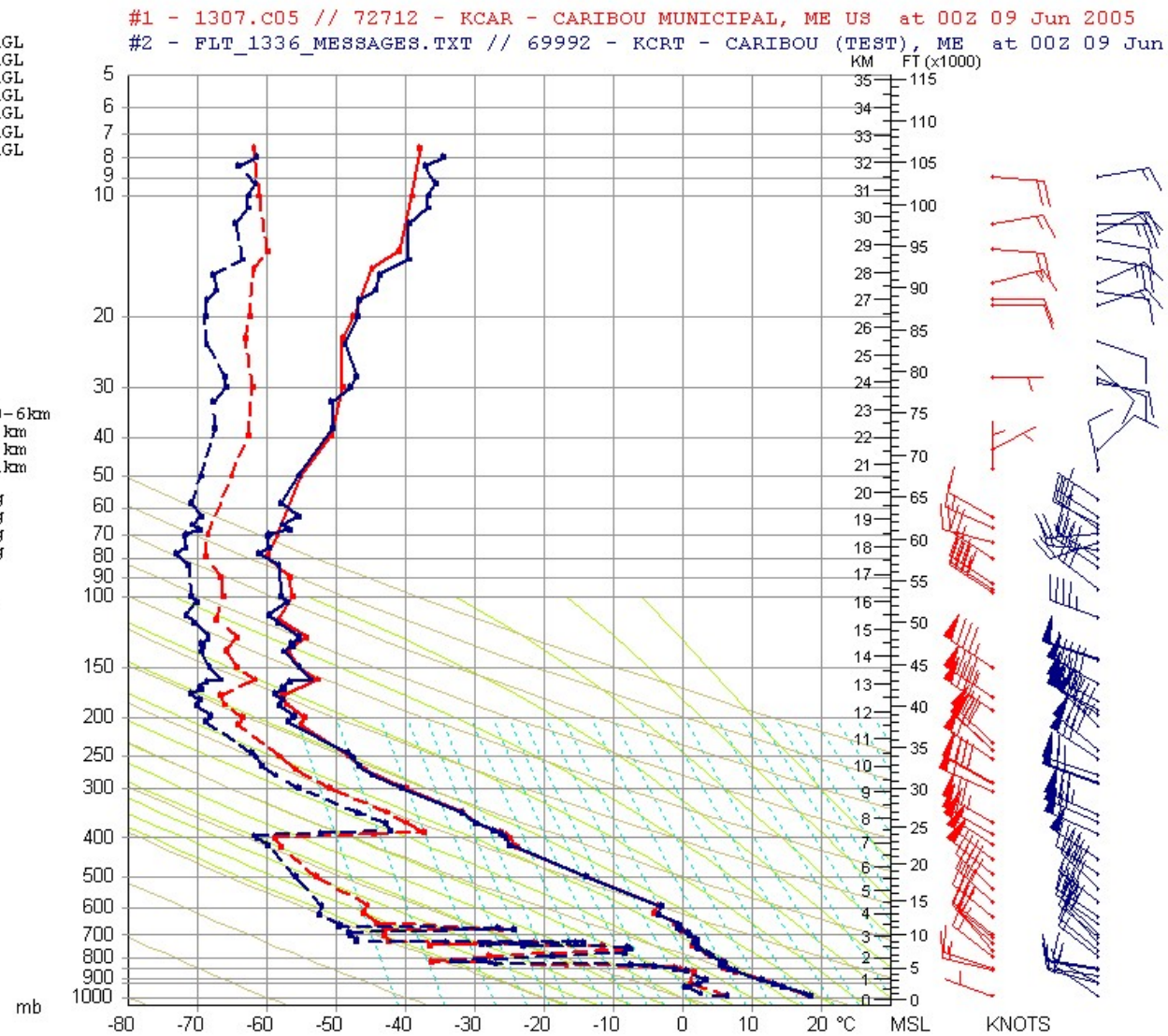
Test #78 - System Test II – 00 UTC on 06/09/2005
RWS Version 1.0.4.0

TEST # 78			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	12315	12272	43
Freezing Level (m AGL)	3083	3093	-10
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	3614	3776	-162
LCL Height (m AGL)	1502	1502	0
Precipitable Water (cm)	1	0.98	0.02
Thickness 1000 - 500 mb (m)	5580	5584	-4
Thickness 1000 - 700 mb (m)	2939	2941	-2
Thickness 1000 - 850 mb (m)	1365	1367	-2
Thickness 850 - 500 mb (m)	4215	4217	-2
Thickness 850 - 700 mb (m)	1574	1575	-1
Thickness 700 - 500 mb (m)	2641	2643	-2
Thickness 600 - 400 mb (m)	3069	3067	2
Wind Shear Below	12	27	-15
Wind Shear Above	26	33	-7
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	Y		
Stratospheric temperature (Colder/Warmer/Agree)	Colder	Warmer	

NC= Not Calculated

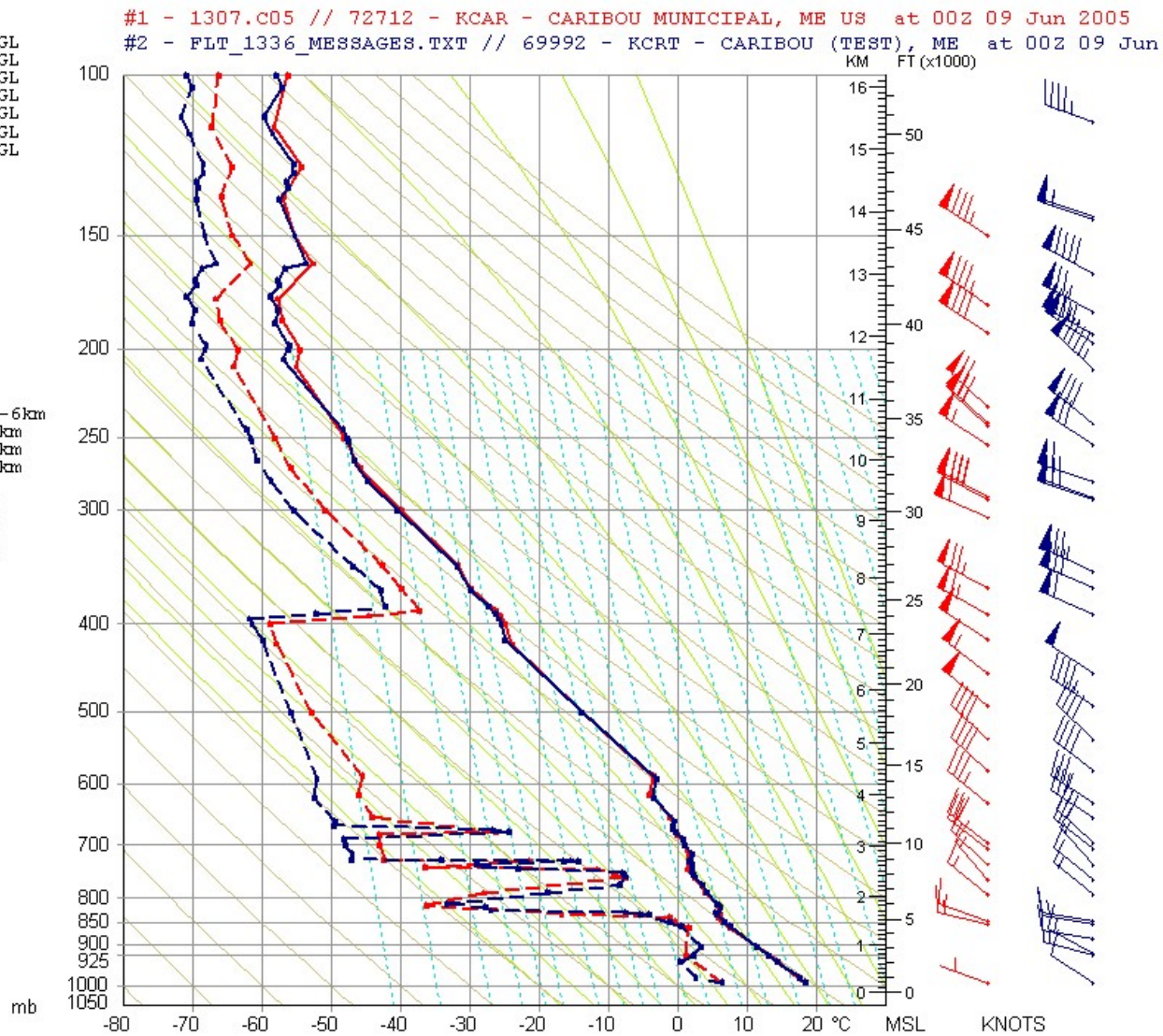
Test #78 - System Test II – 00 UTC on 06/09/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12315	12272	m AGL
FRZG Lvl:	3083	3093	m AGL
cclEL Hgt:	3906	3822	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3614	3776	m AGL
LCL Hgt:	1502	1502	m AGL
Water:	1.00	0.98	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	28	27	kt
SWEAT:	79.0	75.0	
CAP:	--	--	
Boyden:	92.9	93.1	
S{TT}:	-16.0	-21.6	
KO:	1.9	2.1	
LI:	8.5	8.5	
TT:	34.0	33.4	
KI:	-23.9	-29.5	
Tc:	34.1	34.9	°C
Storm:	339/30	335/31	0-6km
s-rH:	86	77	0-3km
s-rH:	39	36	0-2km
s-rH:	0	30	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	62.6	61.2	
Threat:	34.5	26.5	
Point:	-18.0	-10.3	°C
1000 - 500 mb:	5580	5584	m
1000 - 700 mb:	2939	2941	m
1000 - 850 mb:	1365	1367	m
850 - 500 mb:	4215	4217	m
850 - 700 mb:	1574	1575	m
700 - 500 mb:	2641	2643	m
600 - 400 mb:	3069	3067	m



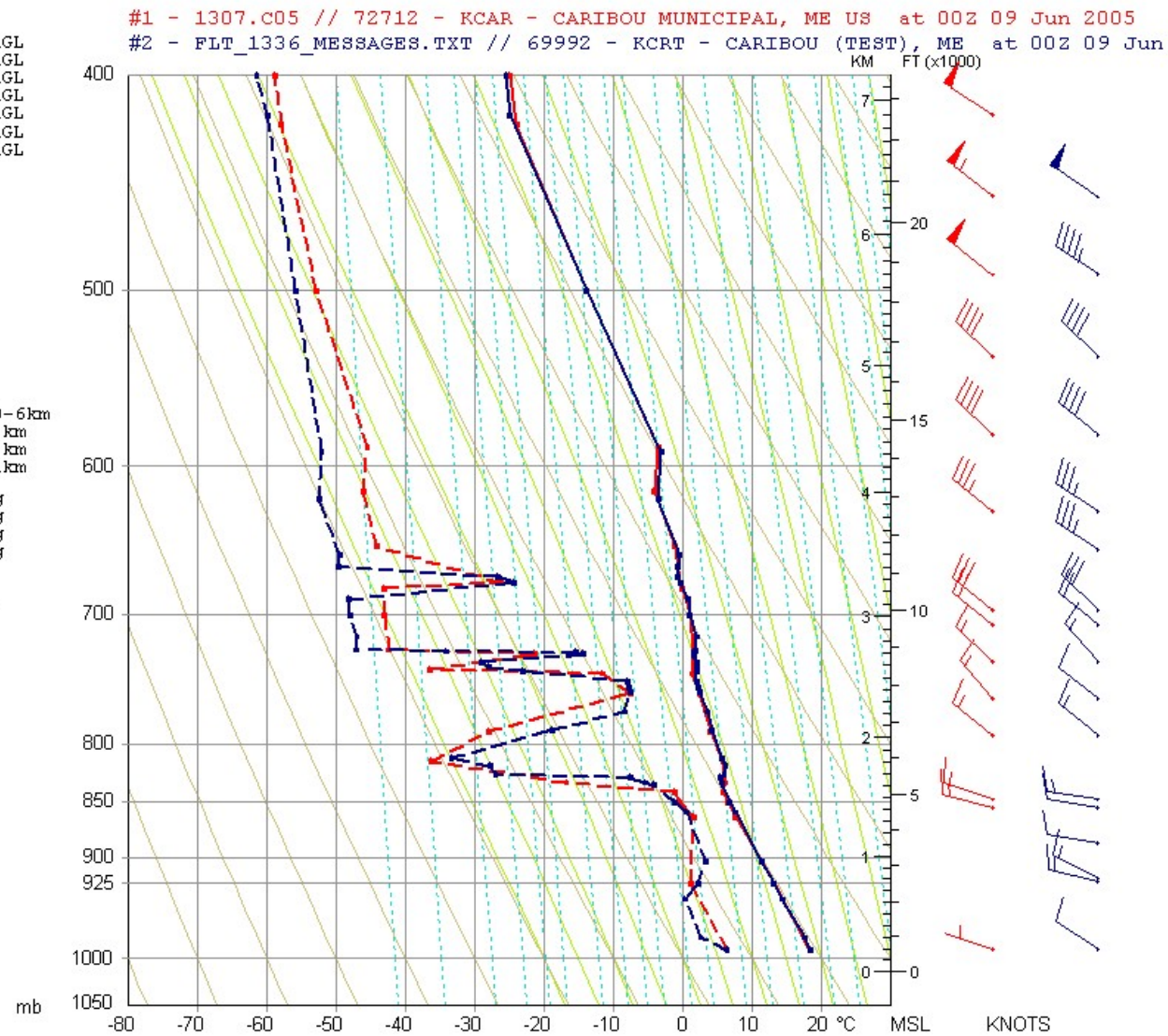
Test #78 - System Test II – 00 UTC on 06/09/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12315	12272	m AGL
FRZG Lvl:	3083	3093	m AGL
cclEL Hgt:	3906	3822	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3614	3776	m AGL
LCL Hgt:	1502	1502	m AGL
Water:	1.00	0.98	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	28	27	kt
SWEAT:	79.0	75.0	
CAP:	--	--	
Boyden:	92.9	93.1	
S{TT}:	-16.0	-21.6	
KO:	1.9	2.1	
LI:	8.5	8.5	
TT:	34.0	33.4	
KI:	-23.9	-29.5	
Tc:	34.1	34.9	°C
Storm:	339/30	335/31	0-6km
s-rH:	86	77	0-3km
s-rH:	39	36	0-2km
s-rH:	0	30	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	62.6	61.2	
Threat:	34.5	26.5	
Point:	-18.0	-10.3	°C
1000 - 500 mb:	5580	5584	m
1000 - 700 mb:	2939	2941	m
1000 - 850 mb:	1365	1367	m
850 - 500 mb:	4215	4217	m
850 - 700 mb:	1574	1575	m
700 - 500 mb:	2641	2643	m
600 - 400 mb:	3069	3067	m



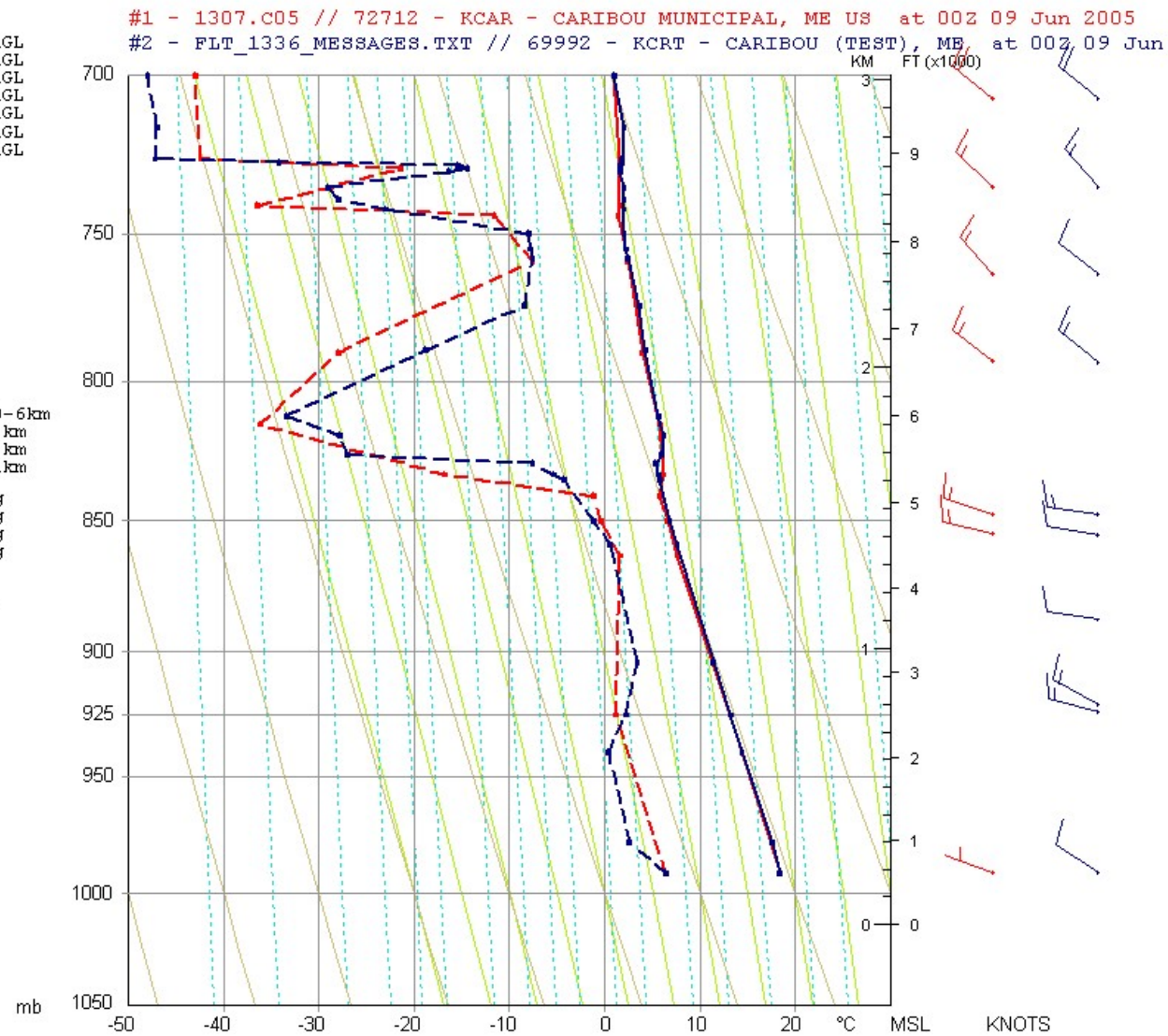
Test #78 - System Test II – 00 UTC on 06/09/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12315	12272	m AGL
FRZG Lvl:	3083	3093	m AGL
cclEL Hgt:	3906	3822	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3614	3776	m AGL
LCL Hgt:	1502	1502	m AGL
Water:	1.00	0.98	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	28	27	kt
SWEAT:	79.0	75.0	
CAP:	--	--	
Boyden:	92.9	93.1	
S{TT}:	-16.0	-21.6	
KO:	1.9	2.1	
LI:	8.5	8.5	
TT:	34.0	33.4	
KI:	-23.9	-29.5	
Tc:	34.1	34.9	°C
Storm:	339/30	335/31	0-6km
s-rH:	86	77	0-3km
s-rH:	39	36	0-2km
s-rH:	0	30	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	62.6	61.2	
Threat:	34.5	26.5	
Point:	-18.0	-10.3	°C
1000 - 500 mb:	5580	5584	m
1000 - 700 mb:	2939	2941	m
1000 - 850 mb:	1365	1367	m
850 - 500 mb:	4215	4217	m
850 - 700 mb:	1574	1575	m
700 - 500 mb:	2641	2643	m
600 - 400 mb:	3069	3067	m



Test #78 - System Test II – 00 UTC on 06/09/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	12315	12272	m AGL
FRZG Lvl:	3083	3093	m AGL
cclEL Hgt:	3906	3822	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	3614	3776	m AGL
LCL Hgt:	1502	1502	m AGL
Water:	1.00	0.98	cm
Hail:	--	--	cm
T2Gust:	40	39	kt
WindEx:	28	27	kt
SWEAT:	79.0	75.0	
CAP:	--	--	
Boyden:	92.9	93.1	
S{TT}:	-16.0	-21.6	
KO:	1.9	2.1	
LI:	8.5	8.5	
TT:	34.0	33.4	
KI:	-23.9	-29.5	
Tc:	34.1	34.9	°C
Storm:	339/30	335/31	0-6km
s-rH:	86	77	0-3km
s-rH:	39	36	0-2km
s-rH:	0	30	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	62.6	61.2	
Threat:	34.5	26.5	
Point:	-18.0	-10.3	°C
1000 - 500 mb:	5580	5584	m
1000 - 700 mb:	2939	2941	m
1000 - 850 mb:	1365	1367	m
850 - 500 mb:	4215	4217	m
850 - 700 mb:	1574	1575	m
700 - 500 mb:	2641	2643	m
600 - 400 mb:	3069	3067	m



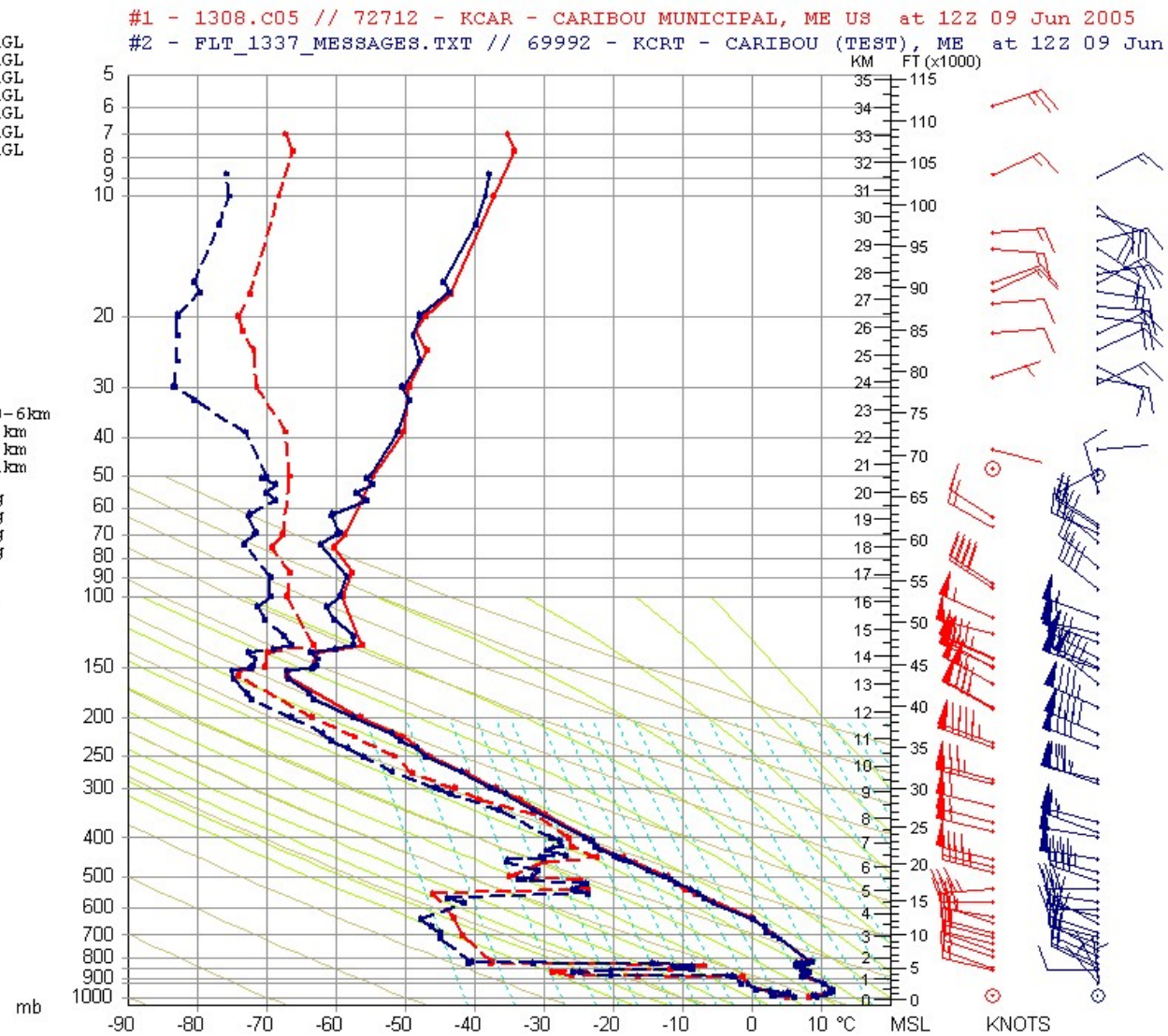
Test #79 - System Test II – 12 UTC on 06/09/2005
RWS Version 1.0.4.0

TEST # 79			
RAOB Comparison ART vs. RRS	**ART**	**RRS**	**Difference**
Tropopause Level (m AGL)	13433	13332	101
Freezing Level (m AGL)	3717	3681	36
LFC Height (m AGL)	NC	NC	NC
CCL Height (m AGL)	4450	4409	41
LCL Height (m AGL)	407	419	-12
Precipitable Water (cm)	0.86	0.81	0.05
Thickness 1000 - 500 mb (m)	5588	5588	0
Thickness 1000 - 700 mb (m)	2937	2938	-1
Thickness 1000 - 850 mb (m)	1348	1349	-1
Thickness 850 - 500 mb (m)	4239	4239	0
Thickness 850 - 700 mb (m)	1588	1589	-1
Thickness 700 - 500 mb (m)	2651	2650	1
Thickness 600 - 400 mb (m)	3084	3078	6
Wind Shear Below	30	16	14
Wind Shear Above	58	02	56
Max Winds Agree (Y/N)	N		
Ekman spiral in the first 2 km Agree (Y/N)	N		
Stratospheric temperature (Colder/Warmer/Agree)	Agree	Agree	

NC= Not Calculated

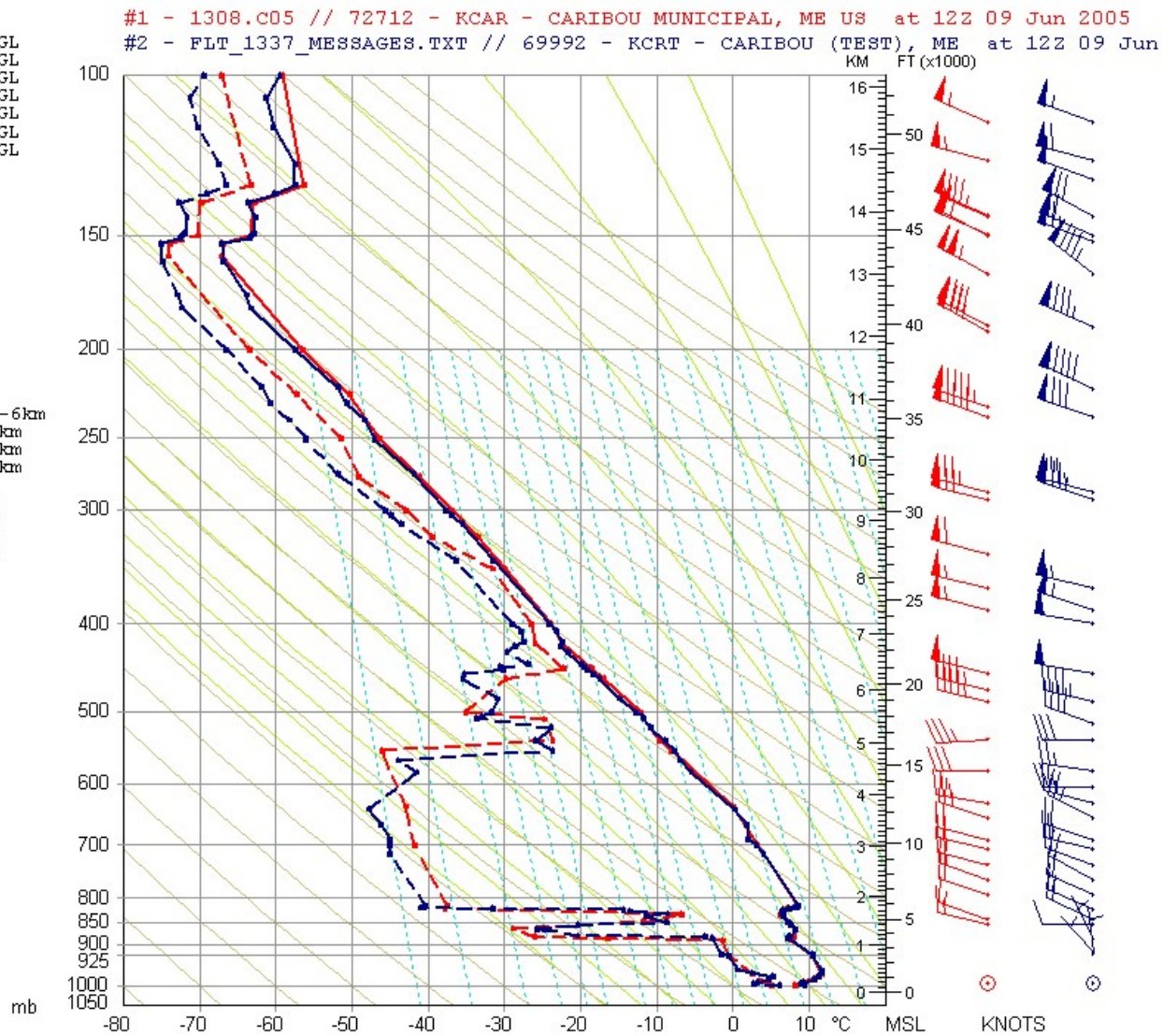
Test #79 - System Test II – 12 UTC on 06/09/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13433	13332	m AGL
FRZG Lvl:	3717	3681	m AGL
cclEL Hgt:	5464	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4450	4409	m AGL
LCL Hgt:	407	419	m AGL
Water:	0.86	0.81	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	75.0	83.0	
CAP:	--	--	
Boyden:	90.5	90.8	
S{TT}:	-31.4	-30.2	
KO:	14.7	12.4	
LI:	19.2	16.8	
TT:	19.6	23.8	
KI:	-37.5	-36.9	
Tc:	39.9	39.1	°C
Storm:	314/27	317/29	0-6km
s-rH:	72	69	0-3km
s-rH:	57	65	0-2km
s-rH:	0	-14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	23.4	29.0	
Threat:	10.9	12.5	
Point:	2.2	1.3	°C
1000 - 500 mb:	5588	5588	m
1000 - 700 mb:	2937	2938	m
1000 - 850 mb:	1348	1349	m
850 - 500 mb:	4239	4239	m
850 - 700 mb:	1588	1589	m
700 - 500 mb:	2651	2650	m
600 - 400 mb:	3084	3078	m



Test #79 - System Test II – 12 UTC on 06/09/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13433	13332	m AGL
FRZG Lvl:	3717	3681	m AGL
cclEL Hgt:	5464	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4450	4409	m AGL
LCL Hgt:	407	419	m AGL
Water:	0.86	0.81	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	75.0	83.0	
CAP:	--	--	
Boyden:	90.5	90.8	
S{TT}:	-31.4	-30.2	
KO:	14.7	12.4	
LI:	19.2	16.8	
TT:	19.6	23.8	
KI:	-37.5	-36.9	
Tc:	39.9	39.1	°C
Storm:	314/27	317/29	0-6km
s-rH:	72	69	0-3km
s-rH:	57	65	0-2km
s-rH:	0	-14	0-1km
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	23.4	29.0	
Threat:	10.9	12.5	
Point:	2.2	1.3	°C
1000 - 500 mb:	5588	5588	m
1000 - 700 mb:	2937	2938	m
1000 - 850 mb:	1348	1349	m
850 - 500 mb:	4239	4239	m
850 - 700 mb:	1588	1589	m
700 - 500 mb:	2651	2650	m
600 - 400 mb:	3084	3078	m



Test #79 - System Test II – 12 UTC on 06/09/2005
RWS Version 1.0.4.0

	#1	#2	
TROP Lvl:	13433	13332	m AGL
FRZG Lvl:	3717	3681	m AGL
cclEL Hgt:	5464	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4450	4409	m AGL
LCL Hgt:	407	419	m AGL
Water:	0.86	0.81	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	75.0	83.0	
CAP:	--	--	
Boyden:	90.5	90.8	
S{TT}:	-31.4	-30.2	
KO:	14.7	12.4	
LI:	19.2	16.8	
TT:	19.6	23.8	
KI:	-37.5	-36.9	
Tc:	39.9	39.1	°C
Storm:	314/27	317/29	0-6km
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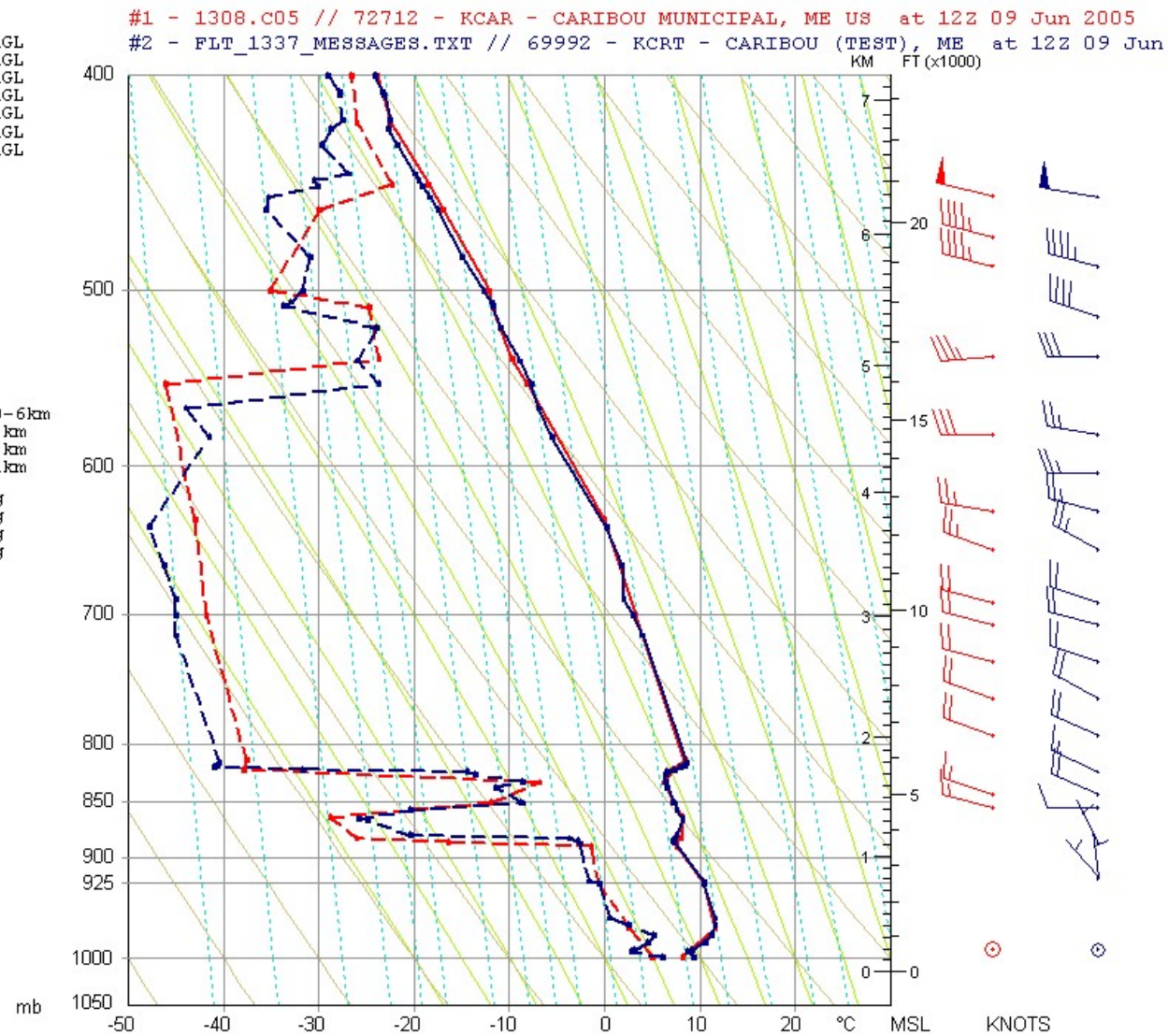
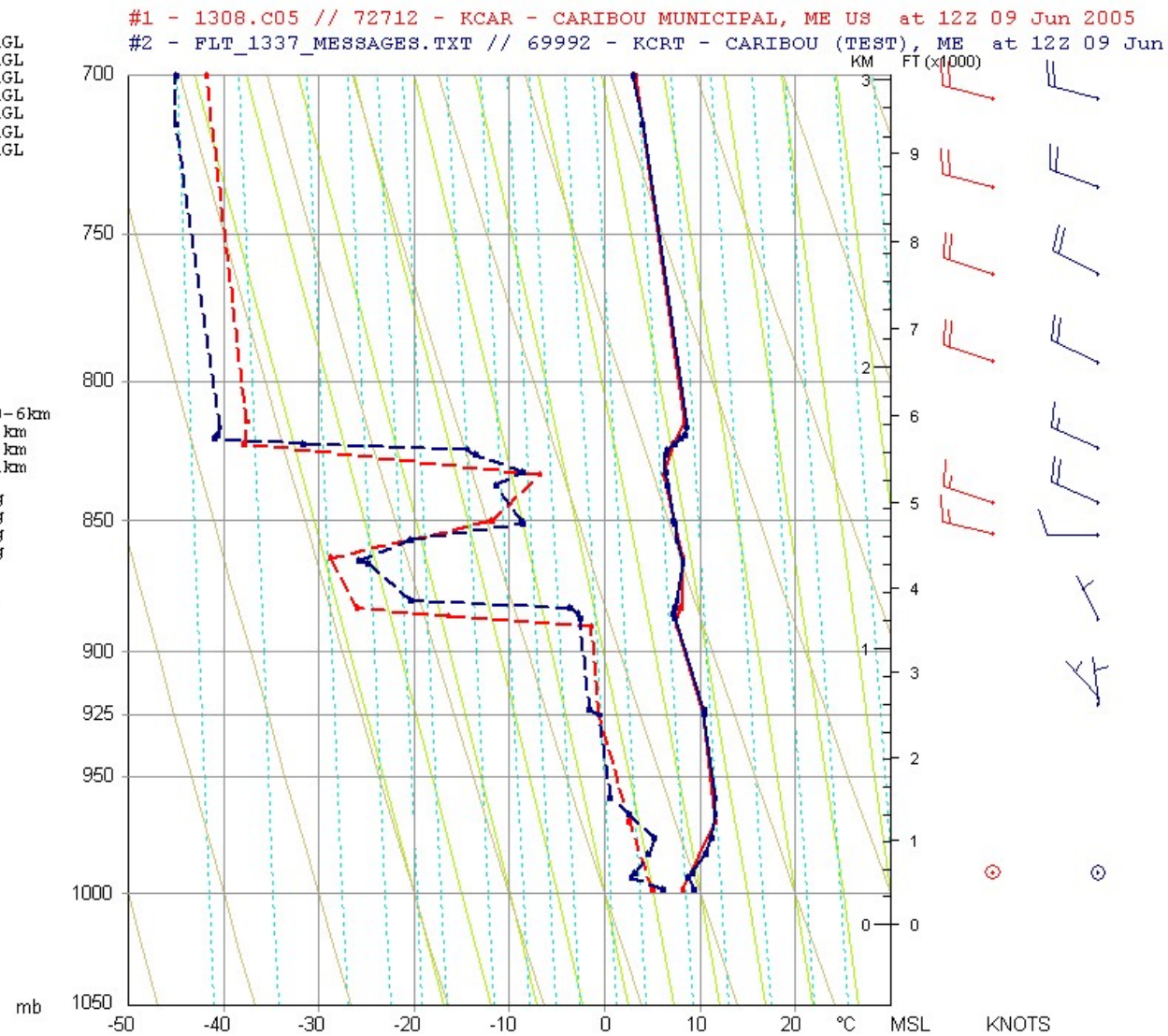
CAPE+ only:	--	--	J/kg
CAPE 0-3km:	--	--	J/kg
CIN total:	--	--	J/kg
DCAPE 6km:	--	--	J/kg
VGP 0-4km:	--	--	
EHI 0-2km:	--	--	
MVV:	--	--	m/s
BRN:	--	--	
FOG FSI:	23.4	29.0	
Threat:	10.9	12.5	
Point:	2.2	1.3	°C
1000 - 500 mb:	5588	5588	m
1000 - 700 mb:	2937	2938	m
1000 - 850 mb:	1348	1349	m
850 - 500 mb:	4239	4239	m
850 - 700 mb:	1588	1589	m
700 - 500 mb:	2651	2650	m
600 - 400 mb:	3084	3078	m



Test #79 - System Test II – 12 UTC on 06/09/2005
RWS Version 1.0.4.0

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TROP Lvl:	13433	13332	m AGL
FRZG Lvl:	3717	3681	m AGL
cclEL Hgt:	5464	--	m AGL
lfcEL Hgt:	--	--	m AGL
LFC Hgt:	--	--	m AGL
CCL Hgt:	4450	4409	m AGL
LCL Hgt:	407	419	m AGL
Water:	0.86	0.81	cm
Hail:	--	--	cm
T2Gust:	--	--	kt
WindEx:	--	--	kt
SWEAT:	75.0	83.0	
CAP:	--	--	
Boyden:	90.5	90.8	
S{TT}:	-31.4	-30.2	
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FOG FSI:	23.4	29.0	
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