

72240 LCH Lake Charles Observations at 12Z 25 Jul 2015

PRES hPa	HGHT m	TEMP C	DWPT C	RELH %	MIXR g/kg	DRCT deg	SKNT knot	THTA K	THTE K	THTV K
1015.0	10	25.6	24.6	94	19.64	270	4	297.5	354.6	301.0
1000.0	136	26.6	24.6	89	19.94	265	15	299.8	358.4	303.3
998.0	154	26.6	24.5	88	19.86	264	15	299.9	358.4	303.5
981.1	305	25.6	23.7	90	19.28	255	18	300.4	357.2	303.8
965.0	451	24.6	23.0	91	18.73	253	15	300.8	356.1	304.2
955.0	543	25.6	17.6	61	13.44	251	13	302.7	342.7	305.1
947.8	610	25.7	15.8	54	12.03	250	11	303.5	339.5	305.6
940.0	682	25.8	13.8	47	10.66	242	10	304.3	336.4	306.2
930.0	777	25.4	13.4	47	10.49	231	9	304.8	336.5	306.7
925.0	824	24.8	16.8	61	13.18	225	8	304.7	344.3	307.1
920.0	872	24.0	19.4	75	15.67	220	7	304.3	351.2	307.2
915.6	914	23.8	18.8	74	15.20	215	7	304.5	350.0	307.3
901.0	1055	23.0	17.0	69	13.72	199	6	305.1	346.4	307.6
890.0	1162	22.8	13.8	57	11.26	187	5	306.0	340.1	308.0
885.0	1211	23.2	10.2	44	8.90	181	5	306.9	334.1	308.5
884.2	1219	23.2	10.2	44	8.92	180	5	306.9	334.2	308.6
870.0	1360	22.4	10.4	47	9.18	170	4	307.6	335.7	309.2
864.0	1420	22.4	4.4	31	6.10	165	4	308.2	327.2	309.3
850.0	1562	21.6	4.6	33	6.29	155	3	308.8	328.4	309.9
843.0	1634	21.2	4.2	33	6.17	168	3	309.1	328.4	310.2
824.1	1829	20.3	-0.3	25	4.57	205	2	310.2	324.7	311.0
817.0	1904	20.0	-2.0	23	4.06	203	2	310.6	323.6	311.3
795.3	2134	18.3	-0.4	28	4.70	195	4	311.1	326.2	312.0
772.0	2388	16.4	1.4	36	5.52	216	2	311.8	329.3	312.8
767.5	2438	16.1	0.5	35	5.18	220	2	312.0	328.5	312.9
745.0	2690	14.6	-4.4	27	3.72	208	2	313.0	325.1	313.7
740.3	2743	14.2	-3.5	29	4.02	205	2	313.2	326.2	313.9
727.0	2896	13.2	-0.8	38	4.99	275	2	313.7	329.7	314.6
713.9	3048	12.2	-1.8	38	4.71	345	1	314.1	329.4	315.0
707.0	3130	11.6	-2.4	38	4.56	352	1	314.4	329.2	315.3
700.0	3213	11.0	-3.0	37	4.40	0	1	314.6	328.9	315.5
674.0	3527	8.2	-0.8	53	5.38	346	3	314.9	332.3	315.9
663.4	3658	7.4	-3.1	47	4.61	340	4	315.4	330.4	316.3
653.0	3788	6.6	-5.4	42	3.94	343	4	316.0	328.9	316.7
648.0	3851	6.0	-1.0	61	5.52	345	5	316.0	333.8	317.0
642.0	3927	5.6	-5.4	45	4.00	347	5	316.4	329.5	317.1
638.0	3979	5.2	-4.8	48	4.22	348	5	316.5	330.3	317.3
631.0	4069	4.8	-8.2	38	3.28	350	5	317.0	327.9	317.7
621.0	4199	3.8	-7.2	44	3.60	353	6	317.3	329.3	318.0
615.8	4267	3.4	-7.6	44	3.51	355	6	317.6	329.3	318.3
593.0	4572	1.4	-9.6	44	3.13	333	9	318.8	329.3	319.4
589.0	4626	1.2	-11.8	37	2.64	329	10	319.1	328.1	319.7
582.0	4723	0.4	-12.6	37	2.51	321	11	319.3	327.8	319.8
570.9	4877	-0.6	-7.3	60	3.90	310	13	319.9	332.9	320.7
567.0	4932	-0.9	-5.4	72	4.54	318	13	320.2	335.2	321.0
554.0	5117	-2.1	-9.1	59	3.48	343	12	320.9	332.6	321.6
547.0	5218	-1.9	-22.9	18	1.12	357	12	322.3	326.3	322.5
531.0	5454	-1.7	-37.7	4	0.28	30	11	325.3	326.4	325.3
528.8	5486	-1.9	-38.1	4	0.27	35	11	325.4	326.4	325.4
520.0	5620	-2.9	-39.9	4	0.23	39	13	325.8	326.7	325.8
515.0	5696	-2.5	-35.5	6	0.36	42	14	327.1	328.6	327.2
511.0	5758	-3.1	-24.1	18	1.07	44	15	327.1	331.1	327.4
508.9	5791	-3.2	-29.1	12	0.68	45	16	327.4	330.0	327.5

504.0	5867	-3.5	-40.5	4	0.22	40	18	328.0	328.9	328.0
500.0	5930	-3.9	-38.9	5	0.26	35	20	328.2	329.3	328.3
493.0	6041	-4.9	-38.9	5	0.27	35	18	328.3	329.4	328.4
490.0	6089	-5.3	-28.3	15	0.76	35	17	328.4	331.3	328.6
489.5	6096	-5.3	-28.3	14	0.76	35	17	328.5	331.3	328.6
460.0	6582	-7.1	-31.1	13	0.62	19	16	332.1	334.6	332.3
452.6	6706	-8.2	-30.4	15	0.68	15	16	332.3	334.9	332.4
418.0	7315	-13.6	-27.0	31	1.01	10	21	333.0	336.8	333.2
409.0	7482	-15.1	-26.1	39	1.12	18	18	333.1	337.3	333.4
402.0	7612	-15.5	-34.5	18	0.51	25	15	334.3	336.3	334.4
401.6	7620	-15.6	-34.6	18	0.51	25	15	334.3	336.3	334.4
400.0	7650	-15.9	-34.9	18	0.50	30	14	334.2	336.2	334.3
385.6	7925	-17.3	-40.6	11	0.29	45	13	335.9	337.1	335.9
380.0	8035	-17.9	-42.9	9	0.23	47	14	336.5	337.5	336.6
370.2	8230	-17.7	-44.5	8	0.20	50	15	339.3	340.1	339.3
369.0	8255	-17.7	-44.7	8	0.19	48	15	339.6	340.5	339.7
355.4	8534	-19.7	-48.1	6	0.14	30	16	340.6	341.2	340.6
349.0	8670	-20.7	-49.7	6	0.12	37	16	341.0	341.6	341.1
341.1	8839	-22.1	-40.2	18	0.34	45	16	341.4	342.8	341.5
341.0	8841	-22.1	-40.1	18	0.34	45	16	341.4	342.8	341.5
327.1	9144	-24.5	-43.2	16	0.26	40	17	342.2	343.3	342.2
304.0	9675	-28.7	-48.7	13	0.15	40	13	343.5	344.2	343.5
300.7	9754	-29.2	-50.9	10	0.12	40	12	343.9	344.4	343.9
300.0	9770	-29.3	-51.3	10	0.11	40	13	344.0	344.5	344.0
291.0	9988	-30.1	-57.1	5	0.06	31	12	345.8	346.1	345.9
285.0	10136	-31.3	-52.3	11	0.11	25	11	346.2	346.7	346.2
271.0	10491	-34.3	-62.3	4	0.03	9	10	346.8	347.0	346.9
250.0	11050	-39.7	-56.7	15	0.07	345	7	346.9	347.2	346.9
248.0	11105	-40.3	-56.3	16	0.08	343	7	346.8	347.1	346.8
216.0	12029	-47.9	-61.9	18	0.04	302	2	349.0	349.2	349.0
210.7	12192	-49.4	-62.4	20	0.04	295	1	349.2	349.4	349.2
200.0	12530	-52.5	-63.5	25	0.04	20	7	349.5	349.6	349.5
193.0	12759	-54.7	-64.7	28	0.03	39	7	349.5	349.7	349.5
186.0	12995	-55.7	-66.7	24	0.03	58	7	351.6	351.7	351.6
167.0	13672	-61.5	-70.5	29	0.02	114	6	352.9	353.0	352.9
160.0	13936	-63.3	-74.3	21	0.01	136	6	354.2	354.3	354.2
150.0	14330	-66.5	-75.5	27	0.01	170	6	355.3	355.4	355.3
147.0	14452	-67.5	-76.5	27	0.01	150	7	355.7	355.7	355.7
128.6	15240	-72.6	-79.9	32	0.01	20	12	360.4	360.4	360.4
116.0	15850	-76.5	-82.5	38	0.00	70	20	363.9	363.9	363.9
114.0	15951	-76.5	-82.5	38	0.00	75	21	365.7	365.7	365.7
109.0	16211	-74.3	-80.3	39	0.01	87	22	374.6	374.6	374.6
106.0	16373	-75.7	-81.7	39	0.00	94	23	374.9	374.9	374.9
100.0	16710	-76.5	-83.5	32	0.00	110	25	379.7	379.7	379.7
95.4	16984	-71.3	-79.3	30	0.01	103	22	395.0	395.0	395.0
90.0	17327	-71.9	-82.9	18	0.00	94	19	400.4	400.5	400.4
86.9	17534	-70.5	-83.5	13	0.00	89	17	407.3	407.3	407.3
84.8	17678	-67.9	-82.6	11	0.01	85	16	415.3	415.4	415.3
84.5	17701	-67.5	-82.5	10	0.01	84	16	416.6	416.6	416.6
80.6	17983	-65.9	-85.6	5	0.00	75	19	425.5	425.5	425.5
78.8	18123	-65.1	-87.1	3	0.00	82	21	430.0	430.0	430.0
76.7	18288	-65.4	-88.0	3	0.00	90	24	432.7	432.7	432.7
71.2	18737	-66.3	-90.3	2	0.00	94	24	440.1	440.1	440.1
70.0	18840	-65.5	-89.5	2	0.00	95	24	443.9	443.9	443.9
69.2	18910	-64.1	-89.1	2	0.00	95	24	448.4	448.4	448.4
64.5	19341	-64.3	-90.3	2	0.00	95	26	457.1	457.1	457.1
60.4	19746	-61.3	-88.3	2	0.00	95	27	472.4	472.4	472.4
59.8	19812	-61.4	-88.4	2	0.00	95	27	473.7	473.7	473.7
58.2	19976	-61.5	-88.5	2	0.00	84	27	477.0	477.0	477.0
56.9	20117	-59.9	-87.7	2	0.00	75	27	483.7	483.8	483.7
56.6	20150	-59.5	-87.5	2	0.00	78	27	485.3	485.4	485.3

55.2	20307	-60.1	-88.1	1	0.00	91	30	487.4	487.5	487.4
54.2	20422	-59.4	-87.8	1	0.00	100	31	491.5	491.6	491.5
50.0	20930	-56.5	-86.5	1	0.00	90	27	509.9	509.9	509.9
49.5	20994	-56.1	-86.1	1	0.00	89	26	512.3	512.4	512.3
46.9	21336	-55.8	-85.8	1	0.01	85	22	520.9	520.9	520.9
44.7	21641	-55.6	-85.6	1	0.01	100	26	528.6	528.7	528.6
43.7	21785	-55.5	-85.5	1	0.01	88	21	532.3	532.4	532.4
42.6	21946	-56.1	-86.0	1	0.01	75	16	534.8	534.8	534.8
38.7	22555	-58.4	-87.7	1	0.00	110	27	543.9	544.0	543.9
36.9	22851	-59.5	-88.5	1	0.00	100	27	548.4	548.5	548.4
33.7	23419	-57.7	-87.7	1	0.01	82	28	567.6	567.6	567.6
33.4	23470	-57.8	-87.7	1	0.01	80	28	568.5	568.6	568.6
31.6	23823	-58.7	-87.7	1	0.01	85	31	575.4	575.5	575.4
30.0	24150	-57.3	-87.3	1	0.01	90	33	587.8	587.9	587.8
29.1	24343	-57.1	-87.1	1	0.01	90	33	593.5	593.6	593.5
28.9	24384	-56.8	-86.9	1	0.01	90	33	595.6	595.6	595.6
26.9	24846	-52.9	-84.9	1	0.01	79	40	618.8	618.9	618.8
26.3	24994	-52.8	-84.3	1	0.01	75	42	623.1	623.3	623.1
25.6	25166	-52.7	-83.7	1	0.01	77	41	628.2	628.3	628.2
22.0	26157	-47.3	-81.3	1	0.02	90	38	672.1	672.3	672.1
20.8	26518	-46.7	-80.7	1	0.03	95	37	684.3	684.6	684.3
20.0	26790	-46.3	-80.3	1	0.03	95	35	693.7	694.0	693.7
18.1	27432	-47.0	-81.0	1	0.03	100	37	710.9	711.2	710.9
18.0	27487	-47.1	-81.1	1	0.03	99	36	712.4	712.7	712.4
17.3	27737	-45.9	-80.5	1	0.04	95	34	723.9	724.2	723.9
16.8	27946	-44.9	-79.9	1	0.04	94	36	733.6	734.0	733.6
16.0	28270	-46.1	-80.1	1	0.04	92	40	740.0	740.5	740.0
15.1	28651	-44.8	-79.4	1	0.05	90	44	756.6	757.2	756.7
14.7	28835	-44.1	-79.1	1	0.05	82	45	764.8	765.4	764.8
13.8	29261	-45.1	-79.5	1	0.05	65	46	775.4	776.0	775.5
11.9	30240	-47.5	-80.5	1	0.05	77	56	800.4	801.0	800.4
11.5	30480	-46.3	-80.1	1	0.06	80	59	812.9	813.6	812.9
10.5	31090	-43.3	-79.2	1	0.07	100	48	845.4	846.3	845.5
10.4	31137	-43.1	-79.1	1	0.07	99	48	848.0	848.9	848.0
10.1	31333	-44.3	-79.3	1	0.07	96	50	850.6	851.6	850.7
10.0	31400	-43.7	-78.7	1	0.08	95	50	855.3	856.3	855.3
9.1	32037	-41.3	-78.3	1	0.10	97	54	887.9	889.1	887.9
8.6	32423	-37.7	-75.7	1	0.15	98	56	916.3	918.4	916.4
8.2	32751	-38.5	-75.5	1	0.17	99	58	925.7	927.9	925.8
7.7	33223	-35.8	-73.7	1	0.23	100	61	954.8	958.0	954.9
7.6	33276	-35.5	-73.5	1	0.24			958.1	961.4	958.3

Station information and sounding indices

Station identifier: LCH

Station number: 72240

Observation time: 150725/1200

Station latitude: 30.11

Station longitude: -93.21

Station elevation: 10.0

Showalter index: 8.19

Lifted index: -2.98

LIFT computed using virtual temperature: -4.12

SWEAT index: 81.19

K index: 16.10

Cross totals index: 8.50

Vertical totals index: 25.50

Totals totals index: 34.00

Convective Available Potential Energy: 1551.02

CAPE using virtual temperature: 1806.18

Convective Inhibition: -145.60
CINS using virtual temperature: -52.92
Equilibrium Level: 145.08
Equilibrium Level using virtual temperature: 144.98
Level of Free Convection: 737.51
LFCT using virtual temperature: 807.04
Bulk Richardson Number: 79.81
Bulk Richardson Number using CAPV: 92.94
Temp [K] of the Lifted Condensation Level: 296.40
Pres [hPa] of the Lifted Condensation Level: 958.79
Mean mixed layer potential temperature: 300.00
Mean mixed layer mixing ratio: 19.18
1000 hPa to 500 hPa thickness: 5794.00
Precipitable water [mm] for entire sounding: 38.07

Description of the [data columns](#) or [sounding indices](#).

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