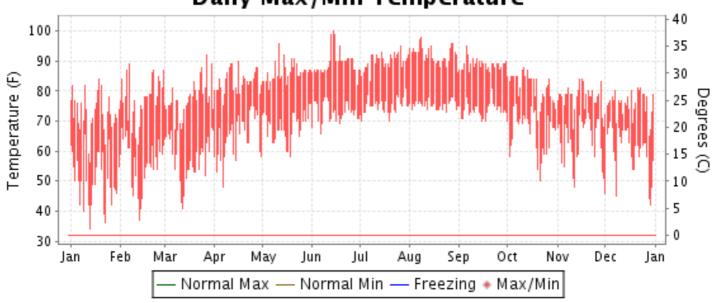


# 2011 LOCAL CLIMATOLOGICAL DATA

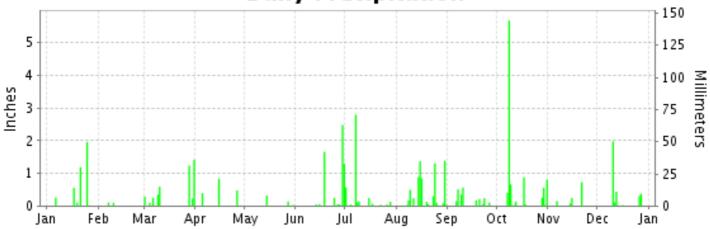
ANNUAL SUMMARY WITH COMPARATIVE DATA

# MELBOURNE, FLORIDA (KMLB)

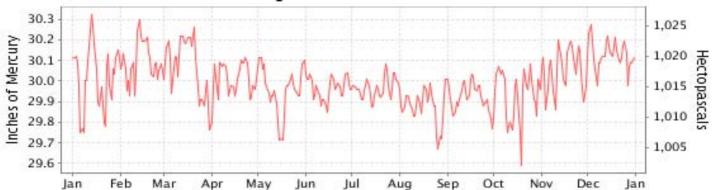




# **Daily Precipitation**



## **Daily Station Pressure**



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

DOAR

ISSN 2160-9713

## METEOROLOGICAL DATA FOR 2011 **MELBOURNE (KMLB)**

TIME ZONE:

WBAN: 12838

ELEVATION (FT): GRND: 27 BARO: 60 -80° 38'W **EASTERN** (UTC -5) 28° 6'N **ELEMENT** JAN FEB MAY JUN JUL AUG SEP OCT NOV DEC YEAR MAR APR MEAN DAILY MAXIMUM 72.6 90.0 77.6 77.6 83.1 86.3 89.5 92.1 88.8 81.5 77.8 75.6 82.7 HIGHEST DAILY MAXIMUM 84 89 92 90 96 100 95 88 84 81 100 DATE OF OCCURRENCE 19 07 27 16 11 14 26 08 05 11 16 +23 +JUN 14 MEAN DAILY MINIMUM 50.4 55.7 64.9 68.2 73.0 75.1 73.9 66.5 59.8 57.7 75.6 63.6 65.4 LOWEST DAILY MINIMUM 34 58 70 70 50 48 37 41 48 66 73 42 34 DATE OF OCCURRENCE 13 13 12 06 18 06 19 +24 17 +21 12 29 **JAN 13** AVERAGE DRY BULB 61.5 66.7 67.7 74.0 77.3 81.3 82.6 83.9 81.4 74.0 70.7 67.7 74.1 MEAN WET BULB 55.9 68.0 69.6 75.3 67.3 60.7 61.7 73.6 76.2 76.6 64.6 62.5 67.7 MEAN DEW POINT 50.7 56.3 57.4 64.1 65.5 70.4 73.7 74.5 72.8 63.5 60.7 58.7 64.0 NUMBER OF DAYS WITH:  $MAXIMUM >= 90^{\circ}$ 0 0 5 15 18 27 0 0 0 74 MAXIMUM <= 32° 0 0 0 0 0 0 0 0 0 0 0 0 0 MINIMUM <= 32° 0 0 0 0 0 0 0 0 0 n 0 0 0 MINIMUM <= 0° 0 0 0 0 0 0 0 147 HEATING DEGREE DAYS 58 36 3 0 0 0 0 0 18 42 310 COOLING DEGREE DAYS 45 111 128 281 389 497 554 591 497 292 195 133 3713 MEAN (PERCENT) 70 73 69 HOUR 01 LST 80 85 84 83 81 82 88 89 88 83 79 83 84 HOUR 07 LST  $\Xi$ 83 86 83 75 70 75 79 82 85 76 79 82 80 HOUR 13 LST 50 52 55 57 53 61 64 65 63 60 60 60 58 HOUR 19 LST 72 70 79 70 72 71 80 79 79 75 73 76 75 PERCENT POSSIBLE SUNSHINE NUMBER OF DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI) 12 0 12 THUNDERSTORMS 2 4 1 3 8 5 9 2 0 0 46 SUNRISE-SUNSET: (OKTAS) CEILOMETER (<= 12,000 FT.) SATELLITE (> 12,000 FT.) MIDNIGHT-MIDNIGHT: (OKTAS) CEILOMETER (<= 12,000 FT.) SATELLITE (> 12,000 FT.) NUMBER OF DAYS WITH: **CLEAR** PARTLY CLOUDY CLOUDY MEAN STATION PRESS. (IN.) 30.02 30.09 30.07 30.01 29.95 29.96 29.96 29.88 29.93 29.93 30.06 30.13 30.00 MEAN SEA-LEVEL PRESS. (IN.) 30.05 30.12 30.10 30.04 29.98 30.00 30.00 29.91 29.96 29.96 30.08 30.16 30.03 RESULTANT SPEED (MPH) 2.5 0.8 2.0 4.3 4.4 4.0 3.2 2.0 2.8 4.9 4.7 3.7 2.2 RES. DIR. (TENS OF DEGS.) 28 21 10 12 11 11 12 20 05 05 06 10 11 MEAN SPEED (MPH) 8.3 7.4 8.9 9.1 8.9 8.1 6.8 7.2 6.3 10.0 10.3 8.5 8.3 PREVAIL.DIR.(TENS OF DEGS.) 28 32 08 11 10 08 12 24 09 06 08 07 11 MAXIMUM 2-MINUTE WIND 32 45 36 32 39 45 32 24 31 30 43 26 25 SPEED (MPH) 30 2.1 31 03 DIR. (TENS OF DEGS.) 29 29 28 16 28 20 06 30 29 DATE OF OCCURRENCE 25 07 30 05 14 27 05 07 APR 05 30 08 09 06 MAXIMUM 3-SECOND WIND: SPEED (MPH) 46 43 59 56 47 48 35 41 38 54 32 31 59 DIR. (TENS OF DEGS.) 30 23 29 29 22 33 20 30 19 05 05 30 29 07 30 05 14 30 09 2.5 12 05 09 05 07 **MAR 30** DATE OF OCCURRENCE WATER EQUIVALENT: PRECIPITATION 4.09 0.21 4.47 1.74 0.50 5.90 4.23 7.49 2.43 9.54 1.24 3.29 45.13 TOTAL (IN.) 1.98 0.84 0.57 5.72 1.98 GREATEST 24-HOUR (IN.) 1.42 0.33 2.48 2.80 2.26 0.73 0.115.72 DATE OF OCCURRENCE 25-26 07 31 15 14-15 29 07 14-15 10 07 - 082.1 10 OCT 07-08 NUMBER OF DAYS WITH: 9 13 7 2 8 11 19 13 8 104 PRECIPITATION 0.01 6 4 2 8 3 2 4 10 8 8 3 5 64 PRECIPITATION 0.10 2 0 3 3 0 0 13 1 1 1 PRECIPITATION 1.00 SNOW, ICE PELLETS, HAIL TOTAL (IN.) GREATEST 24-HOUR (IN.) DATE OF OCCURRENCE MAXIMUM SNOW DEPTH (IN.) DATE OF OCCURRENCE NUMBER OF DAYS WITH:

SNOWFALL >= 1.0

LATITUDE:

LONGITUDE:

## NORMALS, MEANS, AND EXTREMES MELBOURNE (KMLB)

TIME ZONE:

**WBAN: 12838** 

ELEVATION (FT): GRND: 27 BARO: 60 -80° 38'W (UTC -5) 28° 6'N EASTERN SEP **ELEMENT** POR JAN MAY JUN JUL OCT NOV DEC FEB MAR APR AUG YEAR NORMAL DAILY MAXIMUM 30 71.7 72.9 77.2 80.5 85.0 88.6 90.5 90.0 88.1 83.3 78.3 73.3 81.6 MEAN DAILY MAXIMUM 28 72.3 74.1 77.6 80.7 86.0 89.1 90.4 90.2 88.2 83.7 77.8 73.2 81.9 HIGHEST DAILY MAXIMUM 28 88 89 93 97 97 101 100 101 97 94 91 87 101 YEAR OF OCCURRENCE 1991 2011 1994 1999 2000 1998 1999 2010 2009 1992 2009 AUG 1999 2010 MEAN OF EXTREME MAXS. 28 89.3 93.2 95.3 95.4 95.0 93.4 83.1 83.1 84.5 88.4 90.1 85.8 89.7 NORMAL DAILY MINIMUM 30 50.0 50.8 55 2 60.1 66.3 71.2 719 72.7 71.9 67.4 60.0 53.0 62.5 63.5 MEAN DAILY MINIMUM 28 51.3 53.3 56.9 61.0 67.5 71.6 72.9 73.3 73.0 68.1 59.4 53.8 TEMPERATURE 28 LOWEST DAILY MINIMUM 28 47 45 32 22 22 25 33 41 61 67 67 60 YEAR OF OCCURRENCE 2010 1996 1993 1997 1992 1990 1950 1994 2006 1993 1950 1989 DEC 1989 52.2 MEAN OF EXTREME MINS. 28 42.4 53.9 43.9 34.5 37.0 47.1 58.5 66.2 68.9 69.8 67.7 36.7 NORMAL DRY BULB 30 null 0.0 28 MEAN DRY BULB 61.8 63.7 67.3 70.9 76.7 80.4 81.6 81.8 80.6 75.9 68.7 63.5 72.7 MEAN WET BULB 64.1 67.5 72.7 59.8 49.8 63.6 50.7 56.3 57.4 72.174.8 63.4 1 74.1 MEAN DEW POINT 1 55.9 60.7 61.7 68.0 71.0 74.9 76.7 77.0 75.3 67.4 63.8 55.0 67.3 NORMAL NO. DAYS WITH: 30 null MAXIMUM >= 90null null null null null null null null null null MAXIMUM <= 32 30 null MINIMUM <= 32 30 null  $MINIMUM \le 0$ 30 null NORMAL HEATING DEG. DAYS 30 null 30 NORMAL COOLING DEG. DAYS null NORMAL (PERCENT) 30 30 HOUR 01 LST RH HOUR 07 LST 30 HOUR 13 LST 30 30 HOUR 19 LST PERCENT POSSIBLE SUNSHINE MEAN NO. DAYS WITH: 0/M 2.3 0.9 0.3 3.9 24.0 8 7.4 3.4 0.6 0.1 0.8 1.3 1.4 HEAVY FOG(VISBY <= 1/4 MI) 1.6 8 1.0 0.3 2.1 3.5 2.4 10.1 15.4 4.5 2.5 0.8 0.3 51.0 THUNDERSTORMS 8.1 MEAN: CLOUDINESS SUNRISE-SUNSET (OKTAS) MIDNIGHT-MIDNIGHT (OKTAS) MEAN NO. DAYS WITH: CLEAR PARTLY CLOUDY CLOUDY MEAN STATION PRESSURE(IN) 30.09 30.07 29 99 30.09 30.00 30.02 30.01 29 97 29 98 29 91 29 92 29 95 30.05 MEAN SEA-LEVEL PRES. (IN) 30.05 30.12 30.10 30.04 30.00 30.01 30.02 29.94 29.95 29.98 30.08 30.12 30.03 MEAN SPEED (MPH) 8.8 8.1 9.2 9.3 9.1 7.8 7.3 7.2 7.7 9.4 8.4 8.7 PREVAIL.DIR(TENS OF DEGS) 28 32 08 10 12 21 09 07 08 31 10 MAXIMUM 2-MINUTE: SPEED (MPH) DIR. (TENS OF DEGS) YEAR OF OCCURRENCE MAXIMUM 3-SECOND SPEED (MPH) DIR. (TENS OF DEGS) YEAR OF OCCURRENCE 2.48 48.29 2.49 2.92 2.08 3.94 5.83 5.38 5.78 7.20 4.76 3.12 2.31 NORMAL (IN) MAXIMUM MONTHLY (IN) 13.38 28 5.40 6.14 11.58 8.15 11.72 12.87 15.05 26.87 19.72 8.78 10.07 26.87 1998 1998 1996 1951 2009 2005 2007 2008 1948 1999 1994 2002 AUG 2008 YEAR OF OCCURRENCE PRECIPITATION MINIMUM MONTHLY (IN) 0.38 28 0.24 0.21 0.28 0.27 0.29 0.16 1.20 1.34 1.80 Т 0.24 0.16 YEAR OF OCCURRENCE 1951 2011 2006 1990 2010 1998 1999 2007 2002 2010 2009 2000 JUN 1998 MAXIMUM IN 24 HOURS (IN) 28 2 97 3.76 5.24 2 92 5.21 6.57 3.59 11.85 7 98 5.72 4.70 6.77 11.85 YEAR OF OCCURRENCE 1998 2005 1996 1953 2009 2007 2007 2008 1999 2011 1997 2002 AUG 2008 NORMAL NO. DAYS WITH: 30 0.0 PRECIPITATION >= 0.01 null PRECIPITATION >= 1.00 30 null null null null null null 0.0 null null null null null null NORMAL (IN) 30 MAXIMUM MONTHLY (IN) YEAR OF OCCURRENCE MAXIMUM IN 24 HOURS (IN) SNOWFALI YEAR OF OCCURRENCE MAXIMUM SNOW DEPTH (IN) YEAR OF OCCURRENCE NORMAL NO. DAYS WITH: 30 SNOWFALL >= 1.0

LATITUDE:

LONGITUDE:

## PRECIPITATION (inches) 2011 MELBOURNE (KMLB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1948	3.94	1.21	3.15	1.41	5.47	3.17	4.88	6.80	19.72	2.69	1.32	2.28	56.04
1949	0.40	1.72	0.97	2.50	2.15	9.19	1.46	9.99	9.97	3.96	1.31	3.14	46.76
1950	0.57	2.02	6.06	2.10	5.08	1.44	3.95	2.93	3.91	10.45	0.93	0.93	40.37
1951	0.24	3.04	1.05	8.15	3.16	2.62	6.02	2.18	9.81	5.52	4.19	1.49	47.47
1952 1953 1989 1990 1991	2.30 1.97 0.78 2.95	2.97 3.25 3.50 1.11	4.11 2.92 0.49 4.90	0.35 7.37 0.27 4.27	3.12 1.75 2.08 5.97	1.64 5.39 7.22 6.25	3.94 4.58 8.51 11.32	4.15 10.88 6.46 6.14	10.40 8.83 6.93 9.15	11.31 10.72 9.80 4.45	0.70 4.87 0.80 1.21 1.59	1.05 1.49 3.84 0.77 0.48	46.04 64.02 48.02 58.58
1992	1.41	3.26	4.01	4.21	1.46	12.30	2.88	5.83	7.22	2.67	2.59	1.52	49.36
1993	5.24	1.75	8.55	1.75	2.01	1.30	3.97	3.01	5.37	4.63	1.22	0.49	39.29
1994	3.20	3.34	0.74	2.73	2.42	11.17	6.90	10.09	9.21	6.92	8.78	4.35	69.85
1995	2.57	2.04	2.82	3.08	4.58	8.65	7.86	19.05	7.94	10.05	0.65	0.82	70.11
1996	3.64	0.81	11.58	0.95	2.44	8.98	3.18	5.58	3.57	5.07	1.97	1.75	49.52
1997	1.99	1.78	1.65	5.19	5.35	5.85	8.86	9.04	8.62	3.77	5.95	6.57	64.62
1998	5.40	6.14	4.90	0.84	0.85	0.16	9.11	8.04	10.36	1.30	5.53	2.55	55.18
1999	3.63	0.47	0.61	1.25	6.50	5.67	1.20	6.82	17.10	13.38	2.47	2.41	61.51
2000	2.34	0.34	2.18	2.64	0.41	7.03	6.74	4.36	10.79	5.60	0.54	0.24	43.21
2001	0.51	1.50	2.89	1.40	6.77	8.38	11.25	7.22	14.05	5.42	4.91	0.59	64.89
2002	2.25	3.18	0.50	2.43	1.21	9.85	6.04	9.40	1.80	6.32	2.39	10.07	55.44
2003	1.68	1.39	4.36	1.24	1.22	11.73	4.44	6.92	5.03	0.93	1.49	3.61	44.04
2004	1.48	3.75	1.01	1.16	1.15	8.93	2.81	11.72	16.65	3.95	0.99	3.53	57.13
2005	1.75	4.19	4.77	2.45	3.57	12.87	2.63	7.19	8.94	13.36	1.39	2.90	66.01
2006	0.61	2.20	0.28	1.10	2.06	6.40	8.17	8.99	6.19	0.73	3.73	1.72	42.18
2007	2.79	2.14	0.62	1.94	1.74	10.72	15.05	1.34	8.97	5.53	1.17	1.00	53.01
2008	3.79	2.99	2.82	2.58	1.16	6.72	11.15	26.87	4.24	10.24	2.35	1.19	76.10
2009	0.97	0.84	0.98	2.27	11.72	4.40	8.33	5.44	8.08	1.01	0.38	5.96	50.38
2010	0.94	2.57	8.74	2.13	0.29	2.90	1.23	5.59	5.94	T	3.43	1.95	35.71
2011	4.09	0.21	4.47	1.74	0.50	5.90	4.23	7.49	2.43	9.54	1.24	3.29	45.13
POR= 28 YRS	2.27	2.28	3.29	2.48	3.08	6.67	6.10	7.84	8.62	6.05	2.42	2.48	53.58

WBAN: 12838

## AVERAGE TEMPERATURE (°F) 2011 MELBOURNE (KMLB)

AVEN	AVERAGE TEMPERATURE (F) 2011 MELBOURNE (RIVILD)												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1948	60.8	66.7	72.7	73.7	76.8	80.1	80.9	81.0	79.9	74.7	74.4	68.7	74.2
1949	65.5	70.9	66.3	72.4	76.1	79.3	81.9	81.3	80.2	77.8	63.7	67.3	73.6
1950	68.8	65.6	67.2	66.1	76.1	80.8	80.2	80.9	79.9	77.1	64.6	58.3	72.1
1951	60.6	60.5	66.3	69.4	75.5	79.8	80.7	82.5	81.2	76.5	66.1	67.6	72.2
1952 1953 1989	63.5 61.1	62.5 64.9	68.8 69.9	68.7 71.0	76.3 78.3	81.0 79.3	81.6 80.9	81.5 81.1	80.2 79.4	74.7 73.0	67.4 68.0 68.9	59.7 64.6 56.2	72.2 72.6
1990	65.7	68.8	68.4	71.2	78.1	80.1	81.5	81.4	80.7	77.0	69.7	66.6	74.1
1991	66.6	63.9	67.1	74.2	78.3	80.1	81.4	81.4	80.6	75.6	66.7	65.7	73.5
1992	59.3	64.6	65.5	69.2	73.4	79.9	82.1	80.7	80.5	74.1	71.2	64.3	72.1
1993	67.0	60.6	64.7	67.4	75.2	80.0	82.2	81.8	80.4	76.1	69.6	59.2	72.0
1994	62.3	67.3	68.6	74.5	76.0	80.0	80.6	80.1	79.2	76.7	72.9	65.9	73.7
1995	59.2	61.2	68.6	71.8	79.1	79.6	81.3	82.2	80.9	77.9	66.6	61.3	72.5
1996	60.4	60.4	63.6	68.9	77.1	79.1	81.8	80.9	80.6	74.7	69.3	62.9	71.6
1997	62.0	68.2	72.3	70.1	76.1	79.5	81.6	81.7	80.5	74.6	67.1	62.4	73.0
1998	63.5	62.1	64.2	71.5	77.7	85.1	83.9	83.1	81.4	78.3	72.1	68.0	74.2
1999	64.6	63.8	64.6	72.9	74.6	79.5	82.3	83.1	80.5	76.4	70.2	63.1	73.0
2000	61.6	62.7	69.9	70.1	77.4	80.2	81.4	81.0	81.0	74.3	65.9	61.2	72.2
2001	55.1	67.9	67.2	70.8	75.6	79.9	81.1	80.7	78.8	75.1	69.7	67.0	72.4
2002	61.0	62.8	68.1	74.1	77.8	79.6	80.9	81.2	82.2	78.3	66.2	60.5	72.7
2003	54.5	64.2	72.7	70.0	78.8	80.3	81.4	80.7	79.8	75.9	71.9	59.6	72.5
2004	59.5	62.5	66.6	68.6	76.1	81.3	81.5	81.5	81.6	75.4	69.9	61.4	72.2
2005	62.3	62.3	64.3	67.7	75.4	79.7	83.5	83.3	80.9	76.5	70.6	61.2	72.3
2006	62.8	59.9	65.9	74.0	76.0	80.1	80.9	82.0	80.2	74.3	66.4	69.5	72.7
2007 2008 2009	65.4 62.0 59.2	60.9 66.5 59.4	68.0 66.7 66.3	70.0 70.5 70.9	75.8 77.8 77.2	79.6 80.7 81.7	81.8 80.4	82.9 81.4 82.7	81.3 80.8 80.8	79.6 74.4 77.8	68.3 64.1 70.5	67.7 65.3 65.1	73.4 72.6
2010	55.2	55.5	61.5	70.9	78.6	83.0	83.8	83.9	82.3	74.8	68.7	54.0	71.0
2011	61.5	66.7	67.7	74.0	77.3	81.3	82.6	83.9	81.4	74.0	70.7	67.7	74.1
POR= 28 YRS	61.8	63.7	67.3	70.9	76.7	80.4	81.6	81.8	80.6	75.9	68.7	63.5	72.7
publish	ed by: NC	CDC Asher	ville, NC				4					WBA	N: 12838

## HEATING DEGREE DAYS (base 65°F) 2011 MELBOURNE (KMLB)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1948-49 1949-50 1950-51 1951-52													
1952-53 1953-54 1989-90 1990-91 1991-92													
1992-93 1993-94 1994-95 1995-96 1996-97													
1997-98 1998-99 1999-00 2000-01 2001-02													
2002-03 2003-04 2004-05 2005-06 2006-07													
2007-08 2008-09 2009-10 2010-11 2011-	0 0	0 0	0 0	0 6	31 18	338 42	338 147	273 58	124 36	1 3	0	0	613

WBAN: 12838

WBAN: 12838

## COOLING DEGREE DAYS (base 65°F) 2011 MELBOURNE (KMLB)

COOL	LING D	EGKEE	DAYS	(base 65	5°F) 201	I MEL	MELBOURNE (KMLB)						
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1948 1949 1950 1951													
1952 1953 1989 1990 1991													
1992 1993 1994 1995 1996													
1997 1998 1999 2000 2001													
2002 2003 2004 2005 2006													
2007 2008 2009 2010 2011	41 45	11 111	24 128	186 281	431 389	547 497	590 554	592 591	527 497	309 292	145 195	5 133	3408 3713

#### **SNOWFALL (inches) 2011 MELBOURNE (KMLB)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1948-49 1949-50	0.0 0.0	0.0 0.0	$0.0 \\ 0.0$	0.0 0.0	0.0 0.0	$0.0 \\ 0.0$	$0.0 \\ 0.0$	$0.0 \\ 0.0$	0.0 0.0	0.0 0.0	0.0 0.0	$0.0 \\ 0.0$	0.0 0.0
1950-51 1951-52 1952-53 1953-54 1989-90	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0						
1990-91 1991-92 1992-93 1993-94 1994-95	0.0 0.0 0.0 0.0 0.0												
1995-96 1996-97 1997-98 1998-99 1999-00	0.0 0.0 0.0 0.0 0.0												
2000-01 2001-02 2002-03 2003-04 2004-05	0.0 0.0 0.0 0.0 0.0												
2005-06 2006-07 2007-08 2008-09 2009-10	0.0 0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0	0.0 0.0 0.0 0.0								
POR= 26 YRS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

WBAN: 12838

#### **REFERENCE NOTES:**

#### PAGE 1:

THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).

PAGE 2 AND 3:

H/C INDICATES HEATING AND COOLING DEGREE DAYS.

RH INDICATES RELATIVE HUMIDITY

W/O INDICATES WEATHER AND OBSTRUCTIONS

S INDICATES SUNSHINE.

PR INDICATES PRESSURE

CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).

#### GENERAL:

T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE.

+ INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES.

BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.

NORMALS ARE 30-YEAR AVERAGES (1971 - 2000).

ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA

MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING.

WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED.

0.\* OR \* INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05.

CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET.

THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.

CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED.

GENERAL CONTINUED:

WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH.

RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION.

AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2.

SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL.

A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F.

DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR.

DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY.

WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY

ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.

STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED HISTORY GO TO "MULTI-NETWORK MEDADATA SYSTEM", URL IS: https://mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gr/noia.gov/mii.gov/noia.gov/noia.g

https://mi3.ncdc.noaa.gov/mi3qry/login.cfm SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.

#### NOTE:

The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.

# 2011 MELBOURNE FLORIDA (KMLB)

Melbourne is located along the east central Florida coastline and is separated from the Atlantic Ocean by the Intracoastal Waterway and a narrow barrier island to the east. Its climate is strongly influenced by this maritime environment, especially during the summer when the sea breeze boundary is highly pronounced during the afternoon hours.

Normal high temperatures during the summer range from 87-91 degrees Fahrenheit with normal summer lows ranging from 70-73 degrees. Humid conditions during the summer, with average dew points in the low to mid 70s, can easily allow for heat index values to reach around 100 degrees many afternoons. In contrast, during the winter months normal highs vary from 71-75 degrees and normal lows range from 50-55 degrees. While freezing temperatures during the winter months are not common, they do occur an average of two nights each year. However, some years freezing temperatures may not occur at all. This has happened with generally one third of all years in the period of record. The hottest maximum temperature ever recorded at this station is 102 degrees on July 14, 1980, and the coldest temperature ever recorded was 17 degrees on January 19, 1977.

There are generally two rainfall regimes across Florida: the wet season and the dry season. The wet season generally runs from late May through mid October and is characterized by an increase in rainfall due to daily, mainly midday to evening, sea breeze generated showers and thunderstorms. Normal rainfall from May through October is around 33 inches total, with generally around 5 to 7 inches of rainfall experienced each month during this time frame.

The dry season, which normally occurs from late October through early May, is marked by lower humidity values and a general lack of sea breeze boundary activity. Therefore these months tend to be drier, with the main source of precipitation being from storm systems and frontal boundaries that cross the area. Normal rainfall from November through April is around 15 inches with generally around 2 to 3 inches of rainfall observed during each of these months.

Rainfall can vary widely during the dry season as the number of storm systems that impact the region is usually heavily dependent on the phase of the El-Nino and Southern Oscillation (ENSO) pattern over the equatorial Pacific waters. During times of El Nino, or warmer than normal sea surface temperatures (SSTs) over the tropical Pacific, a higher number of storm systems typically push across Florida, which brings above normal rainfall, cooler temperatures and generally more severe weather to the region. This pattern is reversed during times of La Nina, or cooler than normal SSTs over the tropical Pacific waters, with the passage of fewer storm systems and ordinarily below normal rainfall amounts during the winter and much of the spring.

The Atlantic tropical season, which runs from June 1st through November 30th, can also have a huge influence on rainfall amounts across the area. The greatest precipitation total from a tropical system came with Tropical Storm Fay in August of 2008. During the course of that storm from the 18th through the 24th, 19.08 inches was observed at the Melbourne Airport with even higher totals up to 20-27 inches farther north of the station. Most of the hurricane activity that impacts Melbourne occurs during the peak of the tropical season from August through October. Many of the Atlantic basin hurricanes tend to recurve northward well offshore of the Florida east coast or move farther south of the area, either moving into the Gulf or making landfall over south Florida. From 1900-2010, only 16 hurricanes have passed within 65 nautical miles of Melbourne with 6 of these being major hurricanes (Category 3-5).

## Station History

## MELBOURNE, FL

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform

# Element History

Element	Begin	End	Frequency	Time Of	Equipment *	Equipment *	Equipment
	Date	Date		Observation	·	Modifications	Exposure

#### Other Station Information can be found at:

ASOS Implementation by NWS: http://www.nws.noaa.gov/ops2/Surface/asosimplementation.htm Station Metadata website: http://www.ncdc.noaa.gov/homr

INQUIRES/COMMENTS CALL: (828) 271-4800, option 2

Fax Number : (828) 271-4876

TDD : (828) 271-4010 Email : ncdc.info@noaa.gov NOAA/National Climatic Data Center Attn: User Engagement & Services Branch

151 Patton Avenue

Asheville, NC 28801-5001

<sup>\*</sup> For explanation of codes and abbrevitions see Station Metadata link below.