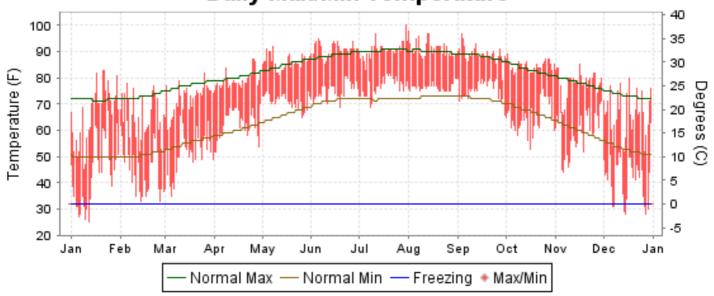


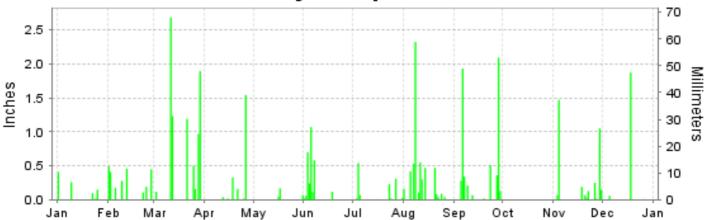
# 2010 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

# MELBOURNE, FLORIDA (KMLB)

# Daily Max/Min Temperature



# **Daily Precipitation**



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

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

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

## METEOROLOGICAL DATA FOR 2010 MELBOURNE (KMLB)

LATITUDE: LONGITUDE: ELEVATION (FT): TIME ZONE: WBAN: 12838 28 ° 6 'N -80 ° 38'W GRND: 25 BARO: 60 EASTERN (UTC -5)

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM HIGHEST DAILY MAXIMUM DATE OF OCCURRENCE MEAN DAILY MINIMUM LOWEST DAILY MINIMUM DATE OF OCCURRENCE AVERAGE DRY BULB MEAN WET BULB MEAN DEW POINT NUMBER OF DAYS WITH: MAXIMUM >= 90° MAXIMUM <= 32°	66.6 83 22+ 43.7 25 12 55.2	65.9 78 05 45.1 33 26+ 55.5	71.9 82 26 51.1 35 05 61.5	79.2 87 26+ 62.6 52 02+ 70.9	86.0 92 08 71.2 65 26 78.6 72.4 69.4	90.9 95 05 75.0 69 19 83.0 76.2 73.7	90.8 100 30 76.8 69 08 83.8 77.1 74.5	91.2 98 01 76.5 75 27+ 83.9 77.3 75.0	89.0 97 03 75.6 66 30 82.3 75.3 72.5	84.6 89 02 64.9 53 16 74.8 67.5 63.2	78.2 85 16 59.1 44 06 68.7 63.0 58.9	66.4 80 17 41.6 28 28+ 54.0 47.6 40.9	80.1 100 JUL 30 61.9 25 JAN 12 71.0
	MINIMUM $<= 32^{\circ}$ MINIMUM $<= 0^{\circ}$	0 8 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 7 0	0 15 0
Н/С	HEATING DEGREE DAYS COOLING DEGREE DAYS	338 41	273 11	124 24	1 186	0 431	0 547	0 590	0 592	0 527	0 309	31 145	338 5	1105 3408
RH	MEAN (PERCENT) HOUR 01 LST HOUR 07 LST HOUR 13 LST HOUR 19 LST					76 86 75 62 79	77 88 75 64 80	76 87 77 63 78	79 88 82 65 81	74 82 77 64 76	69 83 78 51 68	73 82 84 56 74	66 77 78 46 68	49 56 52 39 50
$\mathbf{s}$	PERCENT POSSIBLE SUNSHINE													
0/M	NUMBER OF DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI) THUNDERSTORMS	1 0	0	0 6	0 2	0 3	1 10	0 5	1 7	0 5	1 0	0	3 0	7 38
CLOUDNESS	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													
PR	MEAN STATION PRESS. (IN.) MEAN SEA-LEVEL PRESS. (IN.)					29.98 30.01	29.99 30.02	30.01 30.04	29.93 29.97	29.91 29.94	29.96 29.99	30.03 30.07	30.04 30.07	
WINDS	RESULTANT SPEED (MPH) RES. DIR. (TENS OF DEGS.) MEAN SPEED (MPH) PREVAIL.DIR.(TENS OF DEGS.) MAXIMUM 2-MINUTE WIND SPEED (MPH)	9.2	8.8	9.4	9.4	5.4 10 9.3 10	4.1 11 7.5 10	4.9 11 7.9 12	2.9 12 7.1 20	6.3 08 9.1 09	3.1 04 7.4 36	2.5 03 8.4 08	5.5 30 8.9 31	8.5 41
[M	DIR. (TENS OF DEGS.) DATE OF OCCURRENCE MAXIMUM 3-SECOND WIND:	28 25	29 12	28 03	33 26	14 02	28 05	08 23	29 20	14 27	36 05	26 26 26	28 26	28 JUN 05
	SPEED (MPH) DIR. (TENS OF DEGS.) DATE OF OCCURRENCE	37 26 17	44 29 12	45 26 02	35 33 26	31 14 02	51 29 05	38 08 23	39 03 07	35 02 28	32 36 05	36 26 26	45 27 26	51 29 JUN 05
PRECIPITATION	WATER EQUIVALENT: TOTAL (IN.) GREATEST 24-HOUR (IN.) DATE OF OCCURRENCE NUMBER OF DAYS WITH: PRECIPITATION 0.01 PRECIPITATION 0.10 PRECIPITATION 1.00	0.94 0.41 01 5 4	2.57 0.59 01-02 8 8	8.74 2.68 11 8 8	2.13 1.56 25-26 8 3	0.29 0.21 16-17 3 1	2.90 1.07 05 8 6	1.23 0.61 04-05 8 3	5.59 2.85 07-08	5.94 2.21 28-29 10 8 2	T T 25+	3.43 1.54 03-04 10 6 2	1.95 1.87 18 4 1	35.71 2.85 AUG 07-08
SNOWFALL	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	3	3	•	•	3	-	3	-	-		-	•	

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

TIME ZONE:

**WBAN: 12838** 

ELEVATION (FT): GRND: 25 BARO: 6 **BARO:** 60 **EASTERN** (UTC -5) 28 ° 6 'N **ELEMENT** POR JAN APR MAY JUN JUL AUG SEP OCT NOV DEC YEAR FEB MAR 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 27 72.3 73.9 77.6 80.7 85.9 89.1 90.4 90.2 88.2 83.7 77.9 73.1 81.9 HIGHEST DAILY MAXIMUM 27 88 87 93 97 97 101 100 101 97 94 91 87 101 YEAR OF OCCURRENCE 1991 1997 1994 1999 2000 1998 1999 2010 2009 1992 2009 AUG 1999 2010 MEAN OF EXTREME MAXS. 27 83.1 88.3 89.3 93.1 95.1 95.4 94.9 93.4 90.2 85.9 83.2 84.4 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 MEAN DAILY MINIMUM 27 51.3 53.2 56.9 60.8 67.4 71.5 72.8 73.2 72.9 68.1 59.3 53.5 63.4 TEMPERATURE 27 LOWEST DAILY MINIMUM 28 41 47 60 45 32 22 22 25 33 61 67 67 YEAR OF OCCURRENCE 2010 1996 1993 1997 1992 1990 1950 1994 2006 1993 1950 1989 DEC 1989 MEAN OF EXTREME MINS. 27 42.4 68.9 54.1 36.5 52.2 34.5 37.0 47.1 58.6 66.2 69.7 67.6 43.8 NORMAL DRY BULB 30 0.0 MEAN DRY BULB 27 81.6 61.8 63.6 67.3 70.8 76.7 80.3 80.6 76.0 68.6 63.4 72.7 MEAN WET BULB 69.4 72.5 63.2 58.9 40.9 44.0 73.7 74.5 75.0 MEAN DEW POINT 72.4 76.2 77.1 77.3 75.3 67.5 63.0 47.6 46.4 NORMAL NO. DAYS WITH: MAXIMUM >= 90MAXIMUM <= 32 MINIMUM <= 32  $MINIMUM \le 0$ NORMAL HEATING DEG. DAYS NORMAL COOLING DEG. DAYS NORMAL (PERCENT) HOUR 01 LST RH HOUR 07 LST HOUR 13 LST HOUR 19 LST PERCENT POSSIBLE SUNSHINE MEAN NO. DAYS WITH: 0/M 0.7 0.9 0.1 0.6 1.4 25.3 8.4 3.1 1.7 0.1 2.6 1.6 4.1 HEAVY FOG(VISBY <= 1/4 MI) 0.9 0.3 1.9 3.9 2.3 10.4 16.9 3.9 7.6 2.6 0.9 0.3 51.9 THUNDERSTORMS MEAN: CLOUDNESS SUNRISE-SUNSET (OKTAS) MIDNIGHT-MIDNIGHT (OKTAS) MEAN NO. DAYS WITH: CLEAR PARTLY CLOUDY CLOUDY MEAN STATION PRESSURE(IN) 30.01 30.04 29.98 29 99 29 93 29 91 29 96 30.03 MEAN SEA-LEVEL PRES. (IN) 30.01 30.02 30.04 29.97 29.94 29.99 30.07 30.07 MEAN SPEED (MPH) 9.2 8.8 9.4 9.4 9.3 7.5 7.9 7.1 9.1 7.4 8.4 8.9 8.5 PREVAIL.DIR(TENS OF DEGS) 10 09 10 12 20 09 08 31 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 2.49 3.12 48.29 NORMAL (IN) 2.92 2.08 3.94 5.83 5.38 5.78 7.20 4.76 2.31 MAXIMUM MONTHLY (IN) 5.40 13.38 10.07 2.7 6.14 11.58 8.15 11.72 12.87 15.05 26.87 19.72 8.78 26.87 YEAR OF OCCURRENCE 1998 1998 1996 1951 2009 2005 2007 2008 1948 1999 1994 2002 AUG 2008 PRECIPITATION MINIMUM MONTHLY (IN) 0.38 27 0.24 0.34 0.28 0.27 0.29 0.16 1.20 1.34 1.80 Т 0.24 Т YEAR OF OCCURRENCE 1951 2000 2006 1990 2010 1998 1999 2007 2002 2010 2009 2000 OCT 2010 MAXIMUM IN 24 HOURS (IN) 27 2 97 3.76 5.24 2 92 5.21 6.57 3.59 11.85 7 98 3 97 4.70 6.77 11.85 YEAR OF OCCURRENCE 1953 AUG 2008 1998 2005 1996 2009 2007 2007 2008 1999 2000 1997 2002 NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01 PRECIPITATION >= 1.00 NORMAL (IN) MAXIMUM MONTHLY (IN) YEAR OF OCCURRENCE MAXIMUM IN 24 HOURS (IN) YEAR OF OCCURRENCE MAXIMUM SNOW DEPTH (IN) YEAR OF OCCURRENCE NORMAL NO. DAYS WITH: SNOWFALL >= 1.0

LATITUDE:

LONGITUDE:

## PRECIPITATION (inches) 2010 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 1952 1953 1989	0.24 2.30 1.97	3.04 2.97 3.25	1.05 4.11 2.92	8.15 0.35 7.37	3.16 3.12 1.75	2.62 1.64 5.39	6.02 3.94 4.58	2.18 4.15 10.88	9.81 10.40 8.83	5.52 11.31 10.72	4.19 0.70 4.87 0.80	1.49 1.05 1.49 3.84	47.47 46.04 64.02
1990	0.78	3.50	0.49	0.27	2.08	7.22	8.51	6.46	6.93	9.80	1.21	0.77	48.02
1991	2.95	1.11	4.90	4.27	5.97	6.25	11.32	6.14	9.15	4.45	1.59	0.48	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
POR= 27 YRS	2.20	2.35	3.25	2.51	3.17	6.70	6.17	7.85	8.84	5.92	2.46	2.45	53.87

WBAN: 12838

#### AVERAGE TEMPERATURE (°F) 2010 MELBOURNE (KMLB)

AVE	AVERAGE TEMPERATURE (F) 2010 MELBOURNE (RMLB)												
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1948 1949 1950	60.8 65.5 68.8	66.7 70.9 65.6	72.7 66.3 67.2	73.7 72.4 66.1	76.8 76.1 76.1	80.1 79.3 80.8	80.9 81.9 80.2	81.0 81.3 80.9	79.9 80.2 79.9	74.7 77.8 77.1	74.4 63.7 64.6	68.7 67.3 58.3	74.2 73.6 72.1
1951 1952 1953 1989	60.6 63.5 61.1	60.5 62.5 64.9	66.3 68.8 69.9	69.4 68.7 71.0	75.5 76.3 78.3	79.8 81.0 79.3	80.7 81.6 80.9	82.5 81.5 81.1	81.2 80.2 79.4	76.5 74.7 73.0	66.1 67.4 68.0 68.9	67.6 59.7 64.6 56.2	72.2 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 1992 1993 1994 1995	66.6 59.3 67.0 62.3 59.2	63.9 64.6 60.6 67.3 61.2	67.1 65.5 64.7 68.6 68.6	74.2 69.2 67.4 74.5 71.8	78.3 73.4 75.2 76.0 79.1	80.1 79.9 80.0 80.0 79.6	81.4 82.1 82.2 80.6 81.3	81.4 80.7 81.8 80.1 82.2	80.6 80.5 80.4 79.2 80.9	75.6 74.1 76.1 76.7 77.9	66.7 71.2 69.6 72.9 66.6	65.7 64.3 59.2 65.9 61.3	73.5 72.1 72.0 73.7 72.5
1996 1997 1998 1999 2000	60.4 62.0 63.5 64.6 61.6	60.4 68.2 62.1 63.8 62.7	63.6 72.3 64.2 64.6 69.9	68.9 70.1 71.5 72.9 70.1	77.1 76.1 77.7 74.6 77.4	79.1 79.5 85.1 79.5 80.2	81.8 81.6 83.9 82.3 81.4	80.9 81.7 83.1 83.1 81.0	80.6 80.5 81.4 80.5 81.0	74.7 74.6 78.3 76.4 74.3	69.3 67.1 72.1 70.2 65.9	62.9 62.4 68.0 63.1 61.2	71.6 73.0 74.2 73.0 72.2
2001 2002 2003 2004 2005	55.1 61.0 54.5 59.5 62.3	67.9 62.8 64.2 62.5 62.3	67.2 68.1 72.7 66.6 64.3	70.8 74.1 70.0 68.6 67.7	75.6 77.8 78.8 76.1 75.4	79.9 79.6 80.3 81.3 79.7	81.1 80.9 81.4 81.5 83.5	80.7 81.2 80.7 81.5 83.3	78.8 82.2 79.8 81.6 80.9	75.1 78.3 75.9 75.4 76.5	69.7 66.2 71.9 69.9 70.6	67.0 60.5 59.6 61.4 61.2	72.4 72.7 72.5 72.2 72.3
2006 2007 2008 2009 2010	62.8 65.4 62.0 59.2 55.2	59.9 60.9 66.5 59.4 55.5	65.9 68.0 66.7 66.3 61.5	74.0 70.0 70.5 70.9 70.9	76.0 75.8 77.8 77.2 78.6	80.1 79.6 80.7 81.7 83.0	80.9 81.8 80.4 83.8	82.0 82.9 81.4 82.7 83.9	80.2 81.3 80.8 80.8 82.3	74.3 79.6 74.4 77.8 74.8	66.4 68.3 64.1 70.5 68.7	69.5 67.7 65.3 65.1 54.0	72.7 73.4 72.6 71.0
POR= 27 YRS	61.8	63.6	67.3	70.8	76.7	80.3	81.6	81.7	80.6	76.0	68.6	63.4	72.7

published by: NCDC Asheville, NC

# HEATING DEGREE DAYS (base 65°F) 2010 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-	0	0	0	0	31	338	338	273	124	1	0	0	

WBAN: 12838

WBAN: 12838

#### COOLING DEGREE DAYS (base 65°F) 2010 MELBOURNE (KMLB)

COOLING DEGREE DAYS (base 65°F) 2010 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	41	11	24	186	431	547	590	592	527	309	145	5	3408

#### **SNOWFALL (inches) 2010 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.

 $0.\ast$  OR  $\ast$  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://mi3.ncdc.noaa.gov/mi3qry/login.cfm
SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER

SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.

#### NOTE:

6

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.

# 2010 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).

Non-Subscription Request: NCDC Customer Services; Phone: 828-271-4800 Fax: 828-271-4876

Email: ncdc.orders@noaa.gov

OFFICAL BUSINESS PENALTY FOR PRIVATE USE \$300 CHANGE SERVICE REQUESTED

FIRST CLASS POSTAGE & FEES PAID United States Department of Commerce NOAA Permit No. G - 19

INQUIRES/COMMENTS CALL: Toll Free (866) 742-3322 Visit our Web Site for other weather data: www.ncdc.noa.gov

#### For Hard Copy Subscription:

Price and ordering information: NCDC Subscripting Service Center, 310 State Route 956, Building 300, Rocket Center, WV 26726.