

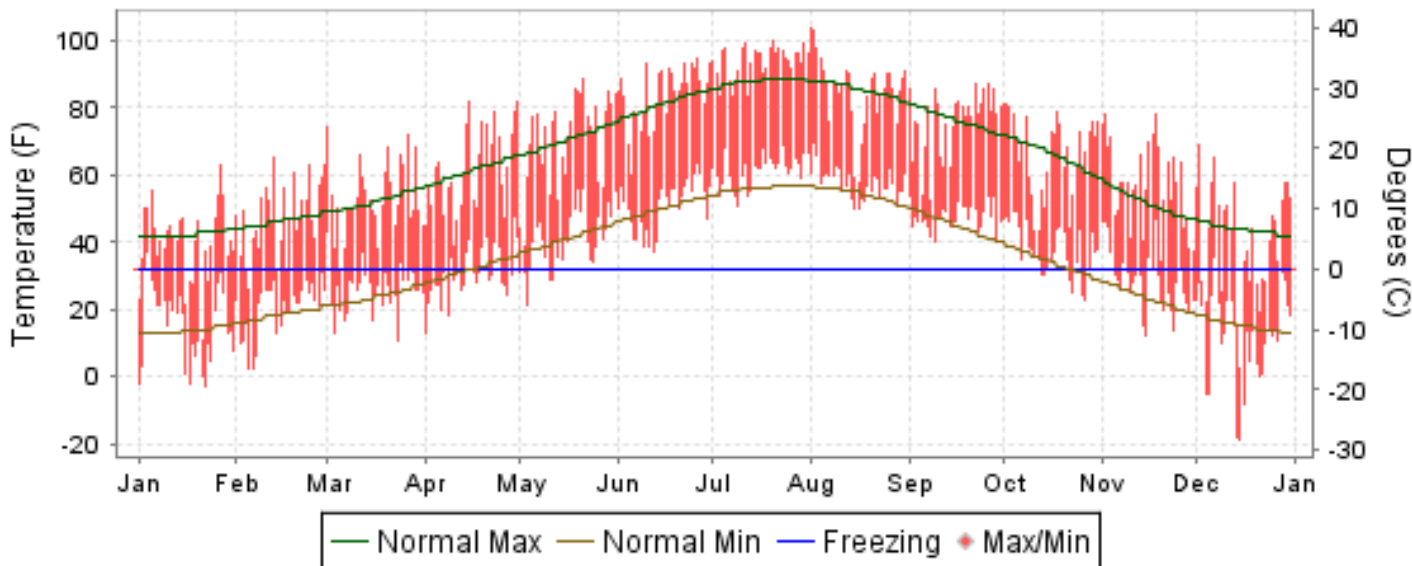


2008 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

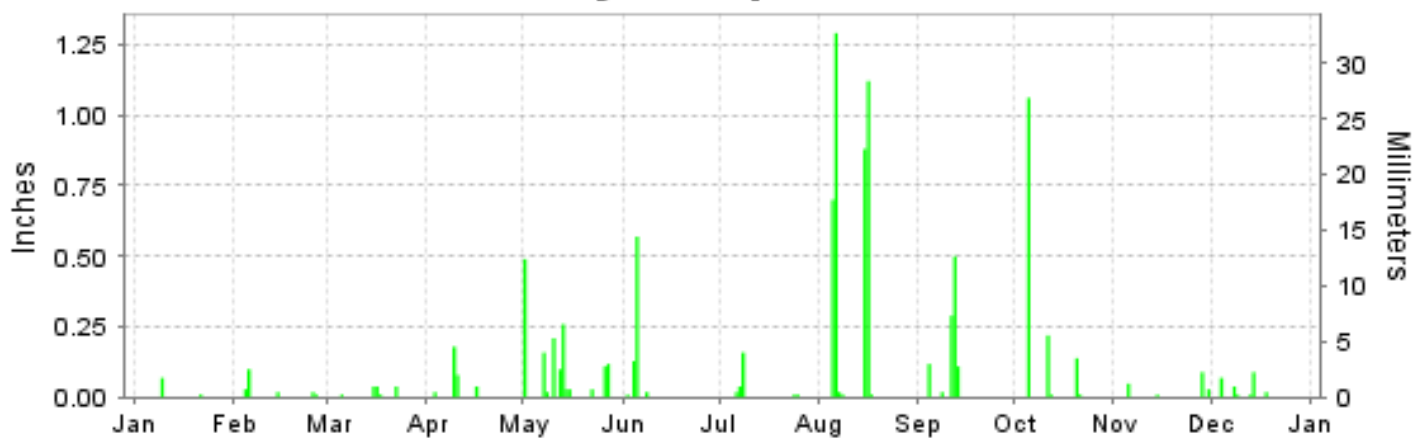
ISSN 0198-7682

DENVER, COLORADO (KDEN)

Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



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NATIONAL
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NATIONAL
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AND INFORMATION SERVICE

NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

Thomas R. Karl
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2008

DENVER (KDEN)

LATITUDE: 39° 49'N LONGITUDE: -104° 39'W ELEVATION (FT): GRND: 5437 BARO: 5382 TIME ZONE: MOUNTAIN (UTC -7) WBAN: 03017

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	40.1	47.4	53.2	61.6	70.7	83.9	93.7	85.1	76.0	66.2	57.3	41.0	64.7	
	HIGHEST DAILY MAXIMUM	63	65	74	82	89	95	100	104	87	81	78	69	104	
	DATE OF OCCURRENCE	27	13	01	30+	21	26	20	01	26+	02+	18+	02	AUG 01	
	MEAN DAILY MINIMUM	15.7	20.4	25.9	30.6	41.0	50.9	61.5	57.8	47.5	37.9	28.8	12.3	35.9	
	LOWEST DAILY MINIMUM	-3	2	11	13	21	37	51	50	40	23	12	-19	-19	
	DATE OF OCCURRENCE	22	06+	23	01	03	12	09	16+	09	27	15	15	DEC 15	
	AVERAGE DRY BULB	27.9	33.9	39.6	46.1	55.9	67.4	77.6	71.5	61.8	52.1	43.1	26.7	50.3	
	MEAN WET BULB	22.3	27.6	31.0	35.5	45.5	51.8	58.0	57.8	50.2	41.4	33.7	22.7	39.8	
	MEAN DEW POINT	11.7	18.0	18.0	18.7	34.3	36.9	43.1	49.1	40.8	30.3	20.3	14.2	28.0	
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	10	26	11	0	0	0	0	0	47
	MAXIMUM <= 32°	6	4	1	0	0	0	0	0	0	0	0	10	10	21
MINIMUM <= 32°	29	29	28	21	6	0	0	0	0	6	22	30	30	171	
MINIMUM <= 0°	4	0	0	0	0	0	0	0	0	0	0	6	6	10	
H/C	HEATING DEGREE DAYS	1143	895	781	558	303	64	0	28	116	393	651	1179	6111	
	COOLING DEGREE DAYS	0	0	0	0	28	144	395	232	26	0	0	0	825	
RH	MEAN (PERCENT)	55	58	50	42	52	39	35	54	53	51	48	61	50	
	HOUR 05 LST	59	68	67	60	69	55	51	70	72	64	61	67	64	
	HOUR 11 LST	38	41	34	24	35	24	20	37	36	33	32	48	34	
	HOUR 17 LST	59	53	41	31	36	24	24	46	42	49	46	62	43	
	HOUR 23 LST	64	67	60	54	66	54	49	65	66	60	56	67	61	
S	PERCENT POSSIBLE SUNSHINE	79	91			54						79			
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	2	1	4	1	3	0	0	0	0	1	3	3	18	
	THUNDERSTORMS	0	0	0	1	7	5	8	12	3	3	0	0	39	
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.)	24.49	24.48	24.53	24.48	24.50	24.58	24.63	24.64	24.70	24.68	24.61	24.45	24.56	
	MEAN SEA-LEVEL PRESS. (IN.)	29.97	29.91	29.93	29.84	29.78	29.82	29.82	29.86	29.99	30.04	30.01	29.94	29.91	
WINDS	RESULTANT SPEED (MPH)	4.0	1.7	1.3	0.6	0.1	0.6	2.4	1.9	1.8	1.5	2.4	2.4	1.5	
	RES. DIR. (TENS OF DEGS.)	22	25	26	24	20	17	19	19	18	25	24	23	23	
	MEAN SPEED (MPH)	9.9	9.3	10.4	12.0	10.5	10.6	10.0	9.3	8.8	9.6	10.1	9.8	10.0	
	PREVAIL.DIR.(TENS OF DEGS.)	21	17	20	21	36	23	23	17	23	23	22	23	21	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	35	38	39	40	46	36	38	40	38	39	41	37	46	
	DIR. (TENS OF DEGS.)	36	28	31	03	36	25	11	19	01	32	28	31	36	
	DATE OF OCCURRENCE	16	08	04	24	02	26	25	05	01	21	13	30	MAY 02	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	46	48	49	52	61	53	47	52	44	49	51	47	61	
DIR. (TENS OF DEGS.)	26	27	03	26	18	22	28	19	01	36	28	31	18		
DATE OF OCCURRENCE	28	08	02	23	22	25	23	05	01	21	13	30	MAY 22		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.08	0.18	0.14	0.32	1.56	0.73	0.24	4.03	1.04	1.44	0.18	0.24	10.18	
	GREATEST 24-HOUR (IN.)	0.14	0.13	0.05	0.26	0.49	0.70	0.17	1.31	0.79	1.06	0.09	0.10	1.31	
	DATE OF OCCURRENCE	08	04-05	16-17	09-10	01	04-05	07-08	06-07	11-12	05	28	13-14	AUG 06-07	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	2	5	5	4	11	4	5	7	5	5	4	6	63	
PRECIPITATION 0.10	0	1	0	1	7	2	1	4	4	3	0	0	23		
PRECIPITATION 1.00	0	0	0	0	0	0	0	2	0	1	0	0	3		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	1.9	5.1	4.5	2.9	3.4	T	T	T	0.0	T	1.7	10.3	29.8	
	GREATEST 24-HOUR (IN.)	0.9	2.0	1.8	1.6	3.1	T	T	T	0.0	T	1.6	3.6	3.6	
	DATE OF OCCURRENCE	09	05	02	10	01	20	25+	05	05	21	28	04	DEC 04	
	MAXIMUM SNOW DEPTH (IN.)	5	3	2	2	0	0	0	0	0	0	2	4	5	
	DATE OF OCCURRENCE	01	06+	03	10							29	09	JAN 01	
	NUMBER OF DAYS WITH:														
SNOWFALL >= 1.0	0	2	2	1	1	0	0	0	0	0	1	4	11		

NORMALS, MEANS, AND EXTREMES DENVER (KDEN)

LATITUDE:
39 ° 49'N

LONGITUDE:
-104 ° 39'W

ELEVATION (FT):
GRND: 5437 BARO: 5382

TIME ZONE:
MOUNTAIN (UTC -7)

WBAN: 03017

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	43.2	47.2	53.7	60.9	70.5	82.1	88.0	86.0	77.4	66.0	51.5	44.1	64.2
	MEAN DAILY MAXIMUM	13	43.7	45.7	54.1	60.7	71.1	80.6	90.0	86.6	77.5	64.9	52.7	43.5	64.3
	HIGHEST DAILY MAXIMUM	13	72	77	79	85	94	102	105	104	97	89	80	72	105
	YEAR OF OCCURRENCE		1997	2006	2004	2006	2003	2006	2005	2008	1995	2005	2006	2007	JUL 2005
	MEAN OF EXTREME MAXS.	13	65.2	66.5	74.3	79.9	88.6	94.0	100.0	97.1	91.1	83.6	73.1	64.9	81.5
	NORMAL DAILY MINIMUM	30	15.2	19.1	25.4	34.2	43.8	53.0	58.7	57.4	47.3	35.9	23.5	16.4	35.8
	MEAN DAILY MINIMUM	13	18.1	19.7	26.1	33.1	43.0	51.0	60.1	57.9	48.5	36.6	26.1	18.4	36.6
	LOWEST DAILY MINIMUM	13	-14	-18	-4	6	21	31	44	42	25	3	-3	-19	-19
	YEAR OF OCCURRENCE		1997	2007	2002	1997	2008	2007	1997	2004	1996	1997	2003	2008	DEC 2008
	MEAN OF EXTREME MINS.	13	-1.4	-1.8	8.9	18.8	28.8	38.8	51.1	48.4	34.4	21.5	4.1	-1.8	20.8
	NORMAL DRY BULB	30	29.2	33.2	39.6	47.6	57.2	67.6	73.4	71.7	62.4	51.0	37.5	30.3	50.1
	MEAN DRY BULB	13	30.9	32.7	40.1	46.9	57.1	66.7	75.1	72.3	63.1	50.8	39.4	31.0	50.5
	MEAN WET BULB	13	22.4	24.2	29.5	34.9	44.7	50.8	56.5	56.4	48.3	38.1	28.9	23.4	38.2
	MEAN DEW POINT	13	17.4	18.3	23.3	29.7	40.0	46.3	50.8	51.0	42.2	31.5	23.3	17.1	32.6
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	*	0.5	7.3	15.0	9.4	2.9	0.0	0.0	0.0	35.1
	MAXIMUM <= 32	30	6.2	4.3	2.0	0.5	0.0	0.0	0.0	0.0	*	0.4	2.7	5.3	21.4
MINIMUM <= 32	30	29.6	25.8	23.1	11.0	1.1	0.0	0.0	0.0	1.1	8.2	23.9	28.8	152.6	
MINIMUM <= 0	30	3.2	1.5	0.2	*	0.0	0.0	0.0	0.0	0.0	0.0	0.2	2.5	7.6	
H/C	NORMAL HEATING DEG. DAYS	30	1111	892	788	524	267	60	1	9	136	436	826	1078	6128
	NORMAL COOLING DEG. DAYS	30	0	0	0	2	23	136	261	217	57	0	0	0	696
RH	NORMAL (PERCENT)	30													
	HOURLY 05 LST	30													
	HOURLY 11 LST	30													
	HOURLY 17 LST	30													
	HOURLY 23 LST	30													
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	13	3.1	2.8	3.6	2.7	2.5	0.9	1.0	1.0	1.2	1.9	2.6	1.7	25.0
	THUNDERSTORMS	13	0.0	0.2	0.6	2.4	7.2	11.1	11.6	11.4	5.3	1.0	0.0	0.0	50.8
CLOUDNESS	MEAN: SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR	1	3.0	10.0	9.0	6.0	10.0	12.0	2.0	7.0	6.0	9.0		13.0	
	PARTLY CLOUDY	1	4.0	2.0	6.0	4.0	5.5	9.0	2.0	9.0	6.0			1.0	
	CLOUDY	1	3.0	6.0	10.0	13.0	5.5	5.0	1.0	3.0	5.0	2.0		2.0	
PR	MEAN STATION PRESSURE(IN)	13	24.55	24.53	24.54	24.52	24.56	24.61	24.68	24.69	24.65	24.62	24.60	24.57	24.59
	MEAN SEA-LEVEL PRES. (IN)	13	30.01	29.98	29.93	29.86	29.84	29.84	29.88	29.92	29.92	29.96	30.02	30.02	29.93
WINDS	MEAN SPEED (MPH)	13	9.6	9.8	10.5	11.5	10.5	10.3	9.7	9.5	9.4	9.7	9.4	9.8	10.0
	PREVAIL.DIR(TENS OF DEGS)	12	22	22	22	22	23	17	22	23	23	22	22	22	22
	MAXIMUM 2-MINUTE: SPEED (MPH)	13	41	48	53	53	49	49	54	49	45	46	52	54	54
	DIR. (TENS OF DEGS)		31	36	28	33	22	30	13	28	31	29	32	28	28
	YEAR OF OCCURRENCE		2002	2007	1995	2001	2002	1999	1999	2001	2006	2001	2005	2005	DEC 2005
	MAXIMUM 3-SECOND SPEED (MPH)	13	49	60	56	60	61	63	64	61	54	54	61	64	64
	DIR. (TENS OF DEGS)		31	36	18	33	18	29	13	29	31	29	32	28	28
	YEAR OF OCCURRENCE		2002	2007	2007	2001	2008	1999	1999	2001	2006	2001	2005	2005	DEC 2005
PRECIPITATION	NORMAL (IN)	30	0.51	0.49	1.28	1.93	2.32	1.56	2.16	1.82	1.14	0.99	0.98	0.63	15.81
	MAXIMUM MONTHLY (IN)	13	0.78	0.64	3.05	5.86	4.67	3.99	5.92	4.03	2.34	3.03	0.72	1.21	5.92
	YEAR OF OCCURRENCE		2001	2001	2003	1999	1995	2005	1998	2008	1996	2007	2001	2006	JUL 1998
	MINIMUM MONTHLY (IN)	13	0.03	.02	0.14	0.23	.71	0.12	0.24	0.56	.07	0.08	0.05	0.04	0.02
	YEAR OF OCCURRENCE		2003	2005	2008	2002	2005	2006	2008	1996	2005	2001	2003	2004	FEB 2005
	MAXIMUM IN 24 HOURS (IN)	13	0.51	0.42	1.64	2.10	2.00	2.43	3.06	1.71	1.22	2.65	0.47	0.84	3.06
	YEAR OF OCCURRENCE		2001	2007	2003	2007	2000	2003	1997	2004	1996	2007	1999	2006	JUL 1997
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	5.8	5.6	8.1	8.8	11.4	8.6	9.3	9.3	7.0	5.1	6.3	5.7	91.0
	PRECIPITATION >= 1.00	30	0.0	0.0	0.2	0.2	0.4	0.2	0.6	0.4	0.2	0.1	0.0	0.1	2.4
SNOWFALL	NORMAL (IN)	30	7.7	6.3	11.6	8.8	1.3	0.*	0.0	0.0	1.9	3.9	10.6	8.9	61.0
	MAXIMUM MONTHLY (IN)	3	15.9	7.4	8.6	2.9	3.4	T	T	T	0.0	9.8	4.4	29.4	29.4
	YEAR OF OCCURRENCE		2007	2007	2006	2008	2008	2008	2008	2008		2006	2006	2006	DEC 2006
	MAXIMUM IN 24 HOURS (IN)	3	3.3	1.9	5.0	0.3	0.2	T	T	T	0.0	5.3	2.8	17.4	17.4
	YEAR OF OCCURRENCE		2006	2006	2006	2006	2006	2006	2008	2006		2006	2006	2006	DEC 2006
	MAXIMUM SNOW DEPTH (IN)	3	14	11	3	2	T	0	0	0	0	3	3	21	21
	YEAR OF OCCURRENCE		2007	2007	2006	2008	2006					2006	2006	2006	DEC 2006
	NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	2.3	2.2	3.3	2.7	0.3	0.0	0.0	0.0	0.5	1.2	3.1	2.8	18.4

PRECIPITATION (inches) 2008 DENVER (KDEN)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1995			0.28	2.44	4.67	3.07	2.31	1.04	2.28	0.72	0.31	0.06	
1996	0.29	0.09	0.77	0.33	2.40	1.77	1.01	0.56	2.34	0.39	0.38	0.06	10.39
1997	0.26	0.54	0.26	1.30	1.57	2.57	5.60	3.52	0.97	1.87	0.61	0.50	19.57
1998	0.05	0.23	0.86	2.47	1.73	0.73	5.92	1.19	0.73	1.20	0.40	0.42	15.93
1999	0.38	0.15	0.19	5.86	2.37	2.52	3.84	3.37	1.20	0.31	0.47	0.29	20.95
2000	0.24	0.23	1.96	0.71	3.09	0.79	1.42	3.06	1.52	0.52	0.61	0.27	14.42
2001	0.78	0.64	1.10	1.20	3.80	1.53	4.76	0.71	1.00	0.08	0.72	0.14	16.46
2002	0.48	0.32	0.53	0.23	0.94	1.45	1.39	0.78	0.58	0.49	0.24	0.05	7.48
2003	0.03	0.47	3.05	2.22	1.91	3.95	0.54	1.24	0.26	0.08	0.05	0.12	13.92
2004	0.23	0.21	0.14	1.76	1.30	2.33	2.51	2.84	1.99	0.86	0.45	0.04	14.66
2005	0.37	0.02	0.59	2.45	0.71	3.99	0.27	1.33	0.07	2.16	0.48	0.35	12.79
2006	0.28	0.15	0.56	0.67	0.94	0.12	1.37	1.13	0.84	1.03	0.34	1.21	8.64
2007	0.55	0.36	0.57	2.65	1.79	0.52	0.43	2.76	0.54	3.03	0.20	0.60	14.00
2008	0.08	0.18	0.14	0.32	1.56	0.73	0.24	4.03	1.04	1.44	0.18	0.24	10.18
POR= 13 YRS	0.31	0.28	0.79	1.76	2.06	1.86	2.26	1.97	1.10	1.01	0.39	0.31	14.10

WBAN : 03017

AVERAGE TEMPERATURE (°F) 2008 DENVER (KDEN)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1995			39.3	42.9	50.0	62.2	70.9	75.3	61.7	48.5	41.8	33.0	
1996	27.0	33.9	36.0	48.0	58.1	68.2	73.4	71.6	60.8	50.9	37.2	33.0	49.8
1997	27.9	30.0	42.1	40.5	56.6	67.8	73.1	69.7	64.3	49.7	34.8	27.9	48.7
1998	32.7	33.9	36.9	44.8	59.1	63.0	74.3	71.7	68.0	50.2	42.1	28.9	50.5
1999	33.7	38.6	43.7	42.6	54.8	64.2	73.9	71.2	59.2	52.5	47.3	33.8	51.3
2000	33.0	39.2	40.4	49.8	59.2	67.0	76.7	74.5	63.6	50.5	28.9	28.3	50.9
2001	30.0	28.3	39.8	49.6	57.1	69.4	76.7	73.5	66.8	51.5	40.9	31.7	51.3
2002	29.3	33.6	33.8	50.0	56.1	71.1	76.3	71.5	63.6	44.0	37.5	33.6	50.0
2003	36.9	27.6	39.9	50.4	57.5	62.1	76.9	73.7	59.3	55.1	36.2	32.5	50.7
2004	31.9	30.4	46.4	47.5	59.3	63.7	70.8	68.2	62.7	50.9	37.2	34.9	50.3
2005	32.5	35.8	39.4	46.4	57.0	66.0	77.7	71.6	67.2	52.0	42.5	30.2	51.5
2006	37.4	30.9	38.4	51.5	60.4	72.8	76.2	72.8	58.9	49.5	40.5	31.7	51.8
2007	20.8	29.1	46.1	46.8	58.0	68.8	76.4	75.4	65.1	53.5	41.4	26.7	50.7
2008	27.9	33.9	39.6	46.1	55.9	67.4	77.6	71.5	61.8	52.1	43.1	26.7	50.3
POR= 13 YRS	30.9	32.7	40.1	46.9	57.1	66.7	75.1	72.3	63.1	50.8	39.4	31.0	50.5

HEATING DEGREE DAYS (base 65°F) 2008 DENVER (KDEN)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1994-95									788	655	457	132	
1995-96	26	2	188	505	686	981	1166	894	893	230	29	0	5600
1996-97	0	4	192	444	824	985	1142	975	704	728	264	35	6297
1997-98	2	11	92	475	895	1142	996	865	865	597	186	137	6263
1998-99	1	1	46	453	680	1113	962	731	654	666	311	85	5703
1999-00	1	3	194	383	528	962	984	744	754	446	215	61	5275
2000-01	0	5	149	447	1074	1131	1079	1021	775	455	256	46	6438
2001-02	0	4	65	416	717	1026	1098	870	961	448	302	26	5933
2002-03	0	5	118	643	816	966	865	1041	770	430	260	107	6021
2003-04	0	10	192	312	858	1001	1022	998	569	519	192	99	5772
2004-05	17	31	131	431	830	926	999	810	786	552	274	84	5871
2005-06	3	19	54	412	670	1075	848	948	817	398	192	4	5440
2006-07	7	8	195	487	727	1028	1361	1001	582	544	223	45	6208
2007-08	0	0	76	354	701	1181	1143	895	781	558	303	64	6056
2008-	0	28	116	393	651	1179							

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COOLING DEGREE DAYS (base 65°F) 2008 DENVER (KDEN)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1995			0	0	0	55	212	327	98	0	0	0	
1996	0	0	0	3	26	133	269	215	71	13	0	0	730
1997	0	0	0	0	11	126	260	160	77	8	0	0	642
1998	0	0	0	0	13	88	296	215	143	0	0	0	755
1999	0	0	0	0	2	69	283	203	30	2	0	0	589
2000	0	0	0	0	43	127	368	305	115	5	0	0	963
2001	0	0	0	0	18	184	373	274	125	5	0	0	979
2002	0	0	0	7	34	218	355	214	84	0	0	0	912
2003	0	0	0	0	36	28	376	289	29	13	0	0	771
2004	0	0	0	0	23	67	204	138	67	0	0	0	499
2005	0	0	0	0	34	119	405	230	125	14	0	0	927
2006	0	0	0	0	56	247	363	261	20	14	0	0	961
2007	0	0	0	5	15	167	359	329	86	2	0	0	963
2008	0	0	0	0	28	144	395	232	26	0	0	0	825

SNOWFALL (inches) 2008 DENVER (KDEN)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
2005-06							3.6	3.0	8.6	0.3	0.2	T	
2006-07	0.0	T	0.0	9.8	4.4	29.4	15.9	7.4	4.8	0.9	0.0	0.0	72.6
2007-08	0.0	0.0	0.0	3.0	2.5	20.9	1.9	5.1	4.5	2.9	3.4	T	44.2
2008-	T	T	0.0	T	1.7	10.3							
POR= 3 YRS	T	T	0.0	4.3	2.9	20.2	7.1	5.2	6.0	1.4	1.2	T	48.3

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REFERENCE NOTES :

<p>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).</p> <p>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).</p> <p>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.</p>	<p>GENERAL CONTINUED: 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. 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.</p> <p>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.</p> <p>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.</p>
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2008 DENVER COLORADO (KDEN)

Denver enjoys the invigorating climate that prevails over much of the central Rocky Mountain region, without the extremely cold mornings of the high elevations during winter, or the hot afternoons of summer at lower altitudes. Extremely warm or cold weather in Denver is usually of short duration.

Situated a long distance from any moisture source, and separated from the Pacific Ocean by several high mountain barriers, Denver enjoys low relative humidity, light precipitation, and abundant sunshine.

Air masses from four different sources influence Denver weather. These include arctic air from Canada and Alaska, warm, moist air from the Gulf of Mexico, warm, dry air from Mexico and the southwestern deserts, and Pacific air modified by its passage over mountains to the west.

In winter, the high altitude and mountains to the west combine to moderate temperatures in Denver. Invasions of cold air from the north, intensified by the high altitude, can be abrupt and severe. However, many of the cold air masses that spread southward out of Canada never reach the altitude of Denver, but move off over the lower plains to the east. Surges of air from the west are moderated in their descent down the east face of the Rockies, and reach Denver in the form of chinook winds that often raise temperatures into the 60s, even in midwinter.

In spring, polar air often collides with warm, moist air from the Gulf of Mexico and these collisions result in frequent, rapid and drastic weather changes. Spring is the cloudiest, windiest, and wettest season in the city. Much of the precipitation falls as snow, especially in March and early April. Stormy periods are interspersed with stretches of mild, sunny weather that quickly melt previous snow cover.

Summer precipitation falls mainly from scattered thunderstorms during the afternoon and evening. Mornings are usually clear and sunny, with clouds forming during early afternoon to cut off the sunshine at what would otherwise be the hottest part of the day. Severe thunderstorms, with large hail and heavy rain occasionally occur in the city, but these conditions are more common on the plains to the east.

Autumn is the most pleasant season. Few thunderstorms occur and invasions of cold air are infrequent. As a result, there is more sunshine and less severe weather than at any other time of the year.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 8 and the average last occurrence in the spring is May 3.

Station Location

DENVER

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	Latitude		Longitude		ELEVATION ABOVE								REMARKS	
				NORTH	WEST	SEA LEVEL	GROUND							AUTOMATIC OBSERVING EQUIPMENT *			
						GROUND TEMPERATURE SITE	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET RAIN GAUGE	WEIGHING RAIN GAUGE	8 INCH RAIN GAUGE		HYGROTHERMOMETER		
<u>AIRPORT</u> Denver Int'l Airport	03/01/95	Present	NA	39° 50'	104° 39'	b5379											* TYPE M = AMOS T = AUTOB S = ASOS W = AWOS a. Hourly and summary of the day observations began at the new Denver International Airport 03/01/95. ASOS Commissioned 03/01/95 b. Ground Elevation

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