



LOCAL CLIMATOLOGICAL DATA

ANNUAL SUMMARY WITH COMPARATIVE DATA

WILMINGTON, DELAWARE

1973

U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
ENVIRONMENTAL DATA SERVICE

NARRATIVE CLIMATOLOGICAL SUMMARY

Delaware is part of the Atlantic Coastal Plain consisting mainly of the flat low land with many marshes. Small streams and tidal estuaries comprise the drainage of the state. Wilmington, at the northern end of the state, marks the beginning of low rolling hills extending northward and northwestward into Pennsylvania. The Delaware River, the Delaware Bay, and the Atlantic Ocean are along the eastern boundary of the state. The broad Chesapeake Bay lies 35 miles, or less, to the west of the western boundary of nearly the entire state. These large water areas influence to a considerable extent the climate of the Wilmington, Delaware, region.

Summers are warm and humid and winters are usually mild. During the summer maximum temperatures are usually in the eighties. The maximum temperature reaches 100° on the average of one year in six. During the coldest part of the year, mid-January, the normal daily average temperature is 33°. On the average, zero temperatures may be expected one year in three. Most of the winter precipitation falls as rain. Seasonal snowfall has been as little as 1 inch, and there has been a season with nearly 50 inches snowfall. Snow is frequently mixed with rain and sleet. Snow seldom remains on the ground more than a few days.

The average date for the last occurrence in spring of temperature as low as 32° F. is mid-April. The average date for the first occurrence in fall of temperature as low as 32° F. is late October. The average freeze-free period is approximately

200 days.

The proximity of large water areas and the inflow of southerly winds cause the relative humidity to be quite high all year. During the summer months the average relative humidity is approximately 75 percent. Fog is relatively frequent and may occur in any month. Light southeast winds blowing up the Delaware Bay favor the formation of fog. Light north-northeast winds bring in smoke from Philadelphia and from the heavy industry area located along the Delaware River north of Wilmington.

Rainfall distribution throughout the year is fairly uniform; however, the greatest amounts normally come during the summer months. Mostly, the summer rainfall comes in the form of thunderstorms. Moisture deficiencies for crops occur occasionally, but severe droughts are rare. During the fall, winter, and spring seasons, much of the rainfall comes as a result of storms forming over the southern states, or the south Atlantic and then moving northward along the Atlantic Coast. During the late summer and early fall, hurricanes occasionally cause heavy rainfall, but winds seldom reach hurricane force in Wilmington. Heavy rains occasionally cause minor flash flooding, but the streams and rivers of northern Delaware are not subject to major flooding. Strong easterly and southeasterly winds sometimes cause high tides in the Delaware Bay and the Delaware River, resulting in the flooding of lowlands and damage to bay front and river front properties.

METEOROLOGICAL DATA FOR THE CURRENT YEAR

Station: WILMINGTON, DELAWARE	GREATER WILMINGTON AIRPORT				Standard time used: EASTERN	Latitude: 39° 40' N	Longitude: 75° 36' W	Elevation (ground): 74 feet	Year: 1973																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Month	Temperature			(Base 65°)	Degree days				Precipitation				Relative humidity				Wind &				Number of days																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	Daily maximum	Daily minimum	Monthly		Total	Greatest in 24 hrs.	Date	Total	Greatest in 24 hrs.	Date	Total	Snow, ice pellets	Hour	Hour	Hour	Hour	Resultant	Average speed	Fastest mile	Percent of possible sunshine	Sunrise to sunset	Number of days	Temperatures	Maximum	Minimum																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	High	Low	Date		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	8010	8011	8012	8013	8014	8015	8016	8017	8018	8019	8020	8021	8022	8023	8024	8025	8026	8027	8028	8029	8030	8031	8032	8033	8034	8035	8036	8037	8038	8039	8040	8041	8042	8043	8044	8045	8046	8047	8048	8049	8050	8051	8052	8053	8054	8055	8056	8057	8058	8059	8060	8061	8062	8063	8064	8065	8066	8067	8068	8069	8070	8071	8072	8073	8074	8075	8076	8077	8078	8079	8080	8081	8082	8083	8084	8085	8086	8087	8088	8089	8090	8091	8092	8093	8094	8095	8096	8097	8098	8099	80100	80101	80102	80103	80104	80105	80106	80107	80108	80109	80110	80111	80112	80113	80114	80115	80116	80117	80118	80119	80120	80121	80122	80123	80124	80125	80126	80127	80128	80129	80130	80131	80132	80133	80134	80135	80136	80137	80138	80139	80140	80141	80142	80143	80144	80145	80146	80147	80148	80149	80150	80151	80152	80153	80154	80155	80156	80157	80158	80159	80160	80161	80162	80163	80164	80165	80166	80167	80168	80169	80170	80171	80172	80173	80174	80175	80176	80177	80178	80179	80180	80181	80182	80183	80184	80185	80186	80187	80188	80189	80190	80191	80192	80193	80194	80195	80196	80197	80198	80199	80200	80201	80202	80203	80204	80205	80206	80207	80208	80209	80210	80211	80212	80213	80214	80215	80216	80217	80218	80219	80220	80221	80222	80223	80224	80225	80226	80227	80228	80229	80230	80231	80232	80233	80234	80235	80236	80237	80238	80239	80240	80241	80242	80243	80244	80245	80246	80247	80248	80249	80250	80251	80252	80253	80254	80255	80256	80257	80258	80259	80260	80261	80262	80263	80264	80265	80266	80267	80268	80269	80270	80271	80272	80273	80274	80275	80276	80277	80278	80279	80280	80281	80282	80283	80284	80285	80286	80287	80288	80289	80290	80291	80292	80293	80294	80295	80296	80297	80298	80299	80300	80301	80302	80303	80304	80305	80306	80307	80308	80309	80310	80311	80312	80313	80314	80315	80316	80317	80318	80319	80320	80321	80322	80323	80324	80325	80326	80327	80328	80329	80330	80331	80332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AVERAGE TEMPERATURE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	36.2	20.2	38.0	51.0	64.2	74.0	77.4	68.8	56.0	48.0	34.4	53.1	
1935	30.0	32.0	45.8	50.1	59.1	70.1	76.6	74.0	65.2	56.4	49.0	53.2	
1936	28.2	25.0	46.8	49.6	65.0	70.8	75.9	75.8	68.8	57.5	43.0	38.3	53.7
1937	41.0	35.2	37.6	51.0	63.8	72.0	75.7	75.8	65.1	54.4	44.6	34.2	54.2
1938	32.8	36.4	45.0	54.1	60.9	70.4	75.9	76.5	66.0	57.6	47.8	35.8	54.9
1939	32.6	38.6	42.2	50.2	64.2	72.4	74.6	76.0	68.4	57.0	42.8	36.8	54.6
1940	22.9	33.0	36.4	46.8	61.2	70.3	75.4	70.8	64.8	52.1	44.8	39.0	51.5
1941	30.8	30.2	35.6	56.3	64.9	70.7	75.0	73.0	70.2	61.4	48.0	38.8	54.6
1942	31.0	30.7	43.8	54.8	65.6	71.4	75.4	72.6	67.9	57.4	46.2	31.3	54.0
1943	31.9	34.8	42.6	47.4	63.4	75.4	75.0	72.5	67.0	54.5	44.3	33.6	53.8
1944	34.4	34.2	38.8	50.9	60.7	67.3	71.7	75.8	74.7	71.2	55.2	45.6	54.2
1945	26.1	33.4	51.6	55.4	60.2	71.0	74.2	71.6	70.2	54.7	47.3	30.0	53.8
1946	34.2	35.0	50.4	50.2	61.6	67.4	73.4	69.6	68.4	59.1	47.8	37.4	54.5
#1947	37.8	27.8	36.5	51.4	60.9	68.0	73.8	75.2	67.5	62.2	42.9	33.4	53.1
1948	23.5	21.0	43.4	51.0	61.4	70.6	75.7	73.3	66.8	54.2	49.4	36.3	53.2
1949	39.2	38.6	52.3	52.0	62.9	72.9	78.7	75.1	64.2	60.4	44.5	37.5	55.8
1950	42.7	33.6	37.6	48.3	60.1	69.7	74.0	72.5	63.4	57.6	45.0	32.4	53.1
1951	34.2	34.8	41.5	51.6	61.9	70.4	75.9	73.8	67.0	59.1	41.5	37.6	54.1
1952	37.0	37.6	40.5	54.6	61.0	73.4	78.4	74.3	67.4	52.4	45.3	37.4	55.0
1953	37.6	38.4	44.4	52.3	65.0	72.2	77.0	74.5	68.2	58.0	45.2	38.7	56.0
1954	31.3	40.4	41.5	55.6	60.6	72.0	76.2	72.9	68.3	59.6	43.8	35.1	54.8
1955	31.5	34.1	43.9	54.6	64.8	68.7	81.2	77.7	67.2	58.1	43.3	29.9	54.6
1956	31.8	37.5	38.6	49.9	59.9	71.7	73.4	72.4	64.6	56.8	45.2	41.3	53.7
1957	28.6	37.1	42.2	53.4	60.7	67.4	76.5	73.2	66.7	59.3	46.6	34.8	54.6
1958	30.8	27.3	39.0	53.4	60.7	67.4	76.5	73.0	65.8	55.4	45.8	28.6	52.0
1959	30.9	33.0	41.1	54.3	55.6	62.0	70.4	70.0	70.4	59.5	44.7	38.0	55.1
1960	35.1	35.9	32.8	56.4	60.6	71.0	73.1	74.9	68.0	55.3	45.2	33.1	53.1
1961	25.6	34.7	42.6	48.9	58.9	70.5	75.6	74.0	72.5	56.9	46.7	33.2	53.3
1962	31.2	31.8	41.2	52.2	64.2	71.5	72.9	63.6	56.7	52.5	30.3	52.5	
1963	28.4	27.5	44.1	52.6	60.3	70.6	76.3	71.7	63.7	58.4	48.0	28.4	52.9
1964	33.2	31.6	43.1	49.6	64.3	72.1	75.8	71.5	67.2	52.8	47.6	37.3	53.6
1965	29.0	33.6	38.4	49.3	60.0	70.2	74.5	73.3	69.4	53.6	45.0	37.7	53.3
1966	29.3	31.9	42.9	47.9	50.9	60.3	72.5	77.2	70.4	60.7	46.6	33.6	53.1
1967	36.2	29.1	39.4	51.5	55.4	61.2	74.4	72.8	65.1	54.7	40.7	36.8	52.3
1968	28.0	30.5	44.6	54.1	59.6	71.4	76.7	77.1	71.9	59.0	47.0	34.2	54.3
1969	30.8	33.6	39.6	55.1	64.2	73.6	75.7	75.4	68.2	56.0	44.6	32.7	54.1
1970	24.5	33.5	38.9	51.9	64.8	71.7	76.6	76.7	72.1	60.4	48.5	35.9	54.6
1971	27.4	35.5	40.7	51.1	60.4	73.4	75.9	74.0	71.1	62.9	45.7	42.1	55.0
1972	36.1	32.6	41.3	50.0	62.5	68.6	75.9	75.5	69.6	53.5	45.2	41.6	54.4
1973	35.6	35.5	49.4	54.7	61.4	75.8	78.1	78.1	70.4	59.9	49.1	37.7	57.2
RECORD	32.5	33.1	41.9	52.2	62.6	71.4	76.0	74.1	68.0	56.8	45.6	35.2	54.1
MAX	40.3	41.8	51.3	62.7	73.3	81.7	85.6	83.6	77.7	66.7	54.2	42.8	63.4
MIN	24.7	24.8	32.5	41.6	51.9	61.0	66.3	64.6	58.2	46.9	36.9	27.5	44.7

HEATING DEGREE DAYS

WILMINGTON, DELAWARE

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total	
1934-35	0	12	21	333	504	944	1080	919	587	448	220	12	5080	
1935-36	0	3	55	264	474	1086	1133	1152	557	458	90	6	5278	
1936-37	0	0	33	238	680	822	739	828	841	410	102	0	4673	
1937-38	0	2	87	333	603	945	987	792	617	337	145	17	4685	
1938-39	0	0	53	238	515	900	995	734	700	445	132	6	4718	
1939-40	0	3	21	274	658	863	1298	924	876	539	144	15	5015	
1940-41	3	23	83	392	600	1049	968	904	288	104	19	19	5234	
1941-42	1	6	29	198	501	802	1048	954	651	311	56	8	4562	
1942-43	0	9	70	234	556	1037	1022	837	688	519	105	5	5085	
1943-44	2	0	62	323	611	975	888	808	801	443	37	12	5081	
1944-45	0	3	38	307	577	1029	1197	877	841	284	174	54	4966	
1945-46	1	6	314	526	951	1049	968	904	288	104	19	19	4915	
1946-47	0	8	22	196	505	836	1036	876	876	410	182	25	4942	
#1947-48	0	0	113	122	656	972	1230	982	681	419	156	11	5342	
1948-49	0	0	55	338	682	905	741	681	394	122	13	4509		
1949-50	0	3	87	184	613	854	682	872	841	494	163	13	4806	
1950-51	0	2	114	232	598	1001	948	838	718	396	125	19	4991	
1951-52	0	4	214	59	699	842	862	789	751	309	140	8	4661	
1952-53	0	4	32	391	579	848	864	740	631	377	67	18	4533	
1953-54	0	0	53	215	589	810	1040	684	723	289	183	7	4573	
1954-55	0	0	36	249	630	920	1031	857	660	300	83	30	4796	
1955-56	0	0	43	226	645	1081	1021	790	810	456	199	13	5286	
1956-57	1	1	120	249	589	877	1120	764	703	344	129	16	4763	
1957-58	0	0	65	359	544	836	1056	1050	800	347	149	31	5237	
1958-59	0	0	64	297	565	1123	1051	890	734	325	102	22	5174	
1959-60	0	0	44	256	605	831	920	840	994	279	144	2	4915	
1960-61	0	0	18	297	565	1103	1215	843	687	507	186	24	5152	
1961-62	0	0	36	250	553	976	1042	940	729	400	122	6	5054	
1962-63	0	0	4	266	672	1072	1130	1044	641	370	180	10	5502	
1963-64	0	3	104	199	502	1128	982	962	669	467	91	21	5128	
1964-65	0	9	49	372	514	834	1108	873	816	467	63	27	5152	
1965-66	0	0	12	40	349	593	819	703	671	507	186	24	5250	
1966-67	0	0	84	346	543	931	888	791	788	402	295	5	5275	
1967-68	0	0	80	327	522	866	1139	994	626	319	171	6	5250	
1968-69	0	0	7	205	532	949	1052	874	780	298	92	1	4790	
1969-70	0	0	41	288	606	993	1250	876	803	389	95	1	5342	
1970-71	0	0	25	175	487	805	1159	821	746	411	153	3	4875	
1971-72	0	0	22	23	93	585	702	889	935	732	443	105	27	4536
1972-73	0	0	20	356	586	716	902	820	477	322	143	0	4342	
1973-74	0	0	15	179	469	839	15	0	0	0	0	0		

TOTAL SNOWFALL

Season	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total

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STATION LOCATION

WILMINGTON, DELAWARE

Location	Occupied from	Occupied to	Airline distance and direction from previous location	Latitude North	Longitude West	Elevation above										Remarks	
						Sea level	Ground					Sea level					
						Ground at temp-erature site	Wind instruments	Extreme thermometers	Psychrometer	Telepsychrometer	Tipping bucket rain gage	Weighing rain gage	8" rain gage	Hygrothermometer	Pyranometer		
<u>COOPERATIVE</u>																	
Wilmington, Delaware 6th and King Streets	4- 1-94	7-12-16		39° 45'	75° 33'	86							35'				Ordinary thermometer exposed outside N window; Sept. '09 max. and min. in use, exposure of thermometers poor.
Porter Reservoir Wilmington, Delaware 1.9 miles NNE of P. O.	3- 1-12	Present		39° 46'	75° 33'	260		3'					3'				Home made shelter in use; C. R. shelter September 1936, good exposure over sod. Precipitation record began 7-12-12.
Wilmington, Delaware 10th and King Streets 1 block S of P. O.	7-12-16	10-31-58	1.9 mi.SSW	39° 45'	75° 33'	99							47'				Precipitation only most of time.
<u>AIRPORT</u>																	
Bellanca Field New Castle, Delaware 6.1 miles SSW Wilmington Post Office	4-20-31	6- ?-34		39° 40'	75° 36'												
DuPont Airport Wilmington Delaware 3 miles WNW Wilmington Post Office	4-27-42	12- 8-42	6.8 mi. N	39° 46'	75° 36'												
New Castle County Airport Tower, Wilmington, Delaware, 5.6 miles SW of Post Office	5-19-47	11- 6-47	5.6 mi.SSW	39° 40'	75° 36'	75											Airway Observation by County Tower employees.
New Castle County Airport, Adm. Bldg.	11- 7-47	12- 5-47	125 yds.SW	39° 40'	75° 36'	73	75	5	5				3				Wind instruments of previous location used.
New Castle County Airport, Terminal Bldg.	12- 5-47	7-16-56	150 ft. NE	39° 40'	75° 36'	73	34	5	5				4				Exposure of instruments good.
New Terminal Building New Castle County AP *	7-16-56	Present	7/8 mi. SE	39° 40'	75° 36'	b74	20	s5	s5				5	4	a4		Exposure of instruments excellent. * Name changed to Greater Wilmington Airport in May 1961. a - Commissioned 1,000 feet from thermometer site 4-11-67. b - 78 feet to 4-11-67. s - Standby after 4-11-67.

Requests for additional climatic information should be addressed to: Director, National Climatic Center, Federal Building, Asheville, N. C. 28801

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