

AIRPORT Portland: HEATING DEGREE DAYS

What are Heating Degree Days? Heating Degree Day (HDD) units are used by utility companies and other institutions for determining energy consumption. The heating season is July 1st through June 30th.

How are Heating Degree Days calculated? Calculate the mean temperature for the day (*maximum and minimum added, then divide by 2*), then subtract this mean from 65 (*baseline value*). All negative values are recorded as a zero. Monthly and seasonal values are sums of the daily values for that period.

Example: Max Temp: 57 Mean Temp = $(57 + 35) \div 2 = 46$
 Min Temp: 35 HDD for the day = $65 - 46 = \mathbf{19}$ (rounded)

Season	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	total	Δ normal ¹
1940-41	---	---	---	168	666	697	728	523	394	307	240	99	3822	---
1941-42	3	24	133	313	500	677	913	616	570	357	263	142	4511	-124
1942-43	6	17	67	282	598	671	977	594	599	317	284	153	4565	+30
1943-44	23	13	38	313	559	768	794	655	602	415	238	122	4540	+5
1944-45	19	25	78	196	586	791	694	570	608	432	197	125	4321	-314
1945-46	19	11	137	328	588	774	740	617	563	400	164	120	4461	-174
1946-47	24	14	108	436	647	710	855	545	467	326	135	98	4365	-270
1947-48	15	32	81	296	531	675	782	695	620	473	275	41	4516	-119
1948-49	28	14	137	349	632	828	1142	721	591	371	182	106	5101	+466
1949-50	42	27	97	503	447	722	1170	727	612	487	319	115	5268	+633
1950-51	20	17	120	382	548	571	776	612	709	337	253	64	4409	-226
1951-52	18	43	90	343	570	845	901	667	600	371	230	144	4822	-187
1952-53	18	15	66	197	725	718	539	586	586	445	326	186	4407	-228
1953-54	32	41	91	323	485	653	797	624	649	456	254	205	4610	-25
1954-55	63	57	142	365	452	741	777	681	724	552	368	152	5074	+439
1955-56	80	33	173	346	701	793	770	838	639	364	201	174	5112	+477
1956-57	22	47	120	407	662	746	1041	648	578	390	190	95	4946	+311
1957-58	25	35	45	370	624	644	656	451	599	420	128	62	4059	-576
1958-59	3	5	105	295	579	657	755	618	559	375	280	89	4320	-315
1959-60	26	32	142	326	659	781	910	653	612	424	337	78	4980	+345
1960-61	18	52	114	316	548	807	654	494	530	442	261	66	4302	-333
1961-62	11	4	169	360	656	740	811	613	605	364	339	118	4790	+155
1962-63	49	24	71	299	515	687	925	477	606	486	272	168	4579	-56
1963-64	72	24	41	329	561	830	739	718	650	539	380	182	5065	+430
1964-65	67	81	191	358	711	859	761	599	533	388	325	113	4986	+351
1965-66	22	16	139	227	451	786	759	620	545	425	249	99	4338	-297
1966-67	27	16	56	345	531	635	655	591	647	535	246	50	4334	-301
1967-68	3	0	29	306	558	758	789	482	515	500	261	110	4311	-324
1968-69	17	43	123	395	544	852	1022	703	570	442	178	51	4940	+305
1969-70	17	22	85	357	526	678	751	526	553	493	246	71	4325	-310
1970-71	14	14	130	369	530	771	757	615	653	454	253	149	4709	+74
1971-72	33	5	123	388	578	756	793	607	466	501	174	61	4485	-307
1972-73	10	6	153	363	497	848	799	560	525	378	202	89	4430	-362
1973-74	6	47	59	326	618	624	832	610	545	403	282	72	4424	-368
1974-75	32	16	29	301	500	640	722	660	615	523	240	127	4405	-387
1975-76	24	41	48	354	565	686	698	658	632	437	258	155	4556	-236
1976-77	15	41	47	319	536	783	901	564	596	358	340	68	4568	-224
1977-78	40	19	131	339	644	707	764	561	485	430	317	58	4495	-297
1978-79	29	26	134	312	772	915	1058	615	434	351	162	57	4865	+73
1979-80	8	2	19	214	592	631	920	647	575	329	232	125	4294	-498
1980-81	15	25	64	284	485	644	650	583	494	372	229	108	3953	-839
1981-82	23	5	76	355	478	687	780	596	502	472	229	71	4274	-417
1982-83	22	10	99	307	614	715	635	492	435	363	184	81	3957	-734

Season	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total	Δ normal ¹
1983-84	27	2	109	325	463	880	701	546	425	430	269	115	4292	-399
1984-85	9	2	80	377	539	820	893	664	588	327	213	62	4574	-117
1985-86	0	7	124	373	826	982	691	591	417	437	265	43	4756	+65
1986-87	37	0	148	242	510	750	780	550	495	321	173	51	4057	-634
1987-88	22	2	54	214	479	798	801	581	544	380	272	109	4256	-435
1988-89	33	15	91	208	518	705	699	805	594	263	219	77	4227	-464
1989-90	32	27	44	306	486	759	664	641	476	308	251	78	4072	-619
1990-91	10	5	14	336	492	933	802	446	575	420	310	156	4499	-192
1991-92	4	13	25	295	517	685	627	483	387	282	108	35	3461	-1061
1992-93	5	9	107	274	556	789	877	692	522	366	135	94	4426	-96
1993-94	37	17	57	231	698	726	630	668	451	316	143	85	4059	-463
1994-95	16	0	23	330	662	696	666	514	510	405	149	95	4066	-456
1995-96	3	15	20	318	391	693	747	671	530	340	294	72	4094	-428
1996-97	16	8	113	340	581	717	737	612	563	413	116	79	4295	-227
1997-98	7	0	42	341	452	734	676	523	498	376	268	72	3989	-533
1998-99	12	4	32	323	475	753	677	592	587	424	312	150	4341	-181
1999-00	38	16	73	298	441	648	774	612	593	323	229	62	4107	-415
2000-01	19	13	75	296	661	759	733	640	517	455	201	140	4509	-13
2001-02	22	5	55	347	504	706	730	572	618	375	282	72	4288	-94
2002-03	8	9	58	330	516	662	620	573	490	418	245	67	3996	-386
2003-04	1	1	41	219	586	691	815	568	420	258	151	60	3811	-571
2004-05	1	3	72	265	568	667	714	595	460	376	171	105	3997	-385
2005-06	5	3	93	262	620	774	597	638	579	349	187	36	4143	-239
2006-07	5	10	64	334	523	767	826	574	453	393	217	88	4254	-128
2007-08	0	7	116	361	600	740	805	578	598	490	223	147	4665	+283
2008-09	6	17	57	349	465	847	767	656	599	374	175	29	4341	-41
2009-10	7	11	45	312	510	906	609	510	510	413	303	145	4281	-101
2010-11	37	26	54	299	592	689	714	683	577	505	331	110	4617	+235
2011-12	13	2	36	286	596	797	740	618	609	356	222	131	4406	+128
2012-13	14	3	41	270	481	678	835	569	498	372	172	49	3988	-290
2013-14	2	3	85	349	572	880	724	683	484	332	136	62	4312	+34
2014-15	1	0	17	163	552	640	662	437	382	361	133	19	3367	-911
2015-16	0	0	76	149	583	659	688	448	449	227	109	67	3455	-823
2016-17	3	3	72	259	373	854	969	672	530	421	196	69	4421	143
2017-18	1	1	76	326	521	776	595	625	546	338	89	44	3938	-340
2018-19	2	6	61	254	498	644	670	760	562	312	109	46	3924	-354
2019-20	3	0	80	414	537	672	588	605	568	305	174	75	4021	-257
2020-21	11	1	35	276	549	649	620	641	544	290	167	41	3824	-454
2021-22	0	9	45	309	432	730	710	591	460	454	242	64	4046	-57
2022-23	0	0	6	147	631	798	667	658	602	404	105	45	4063	-40
2023-24	0	1	44	230	511	578								
2024-25														
2025-26														
2026-27														
2027-28														
2028-29														
normal	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Season	H D D
	10	7	61	296	538	727	718	584	519	367	196	80	4103	
Least	0	0	6	147	373	571	539	437	382	227	89	19	3367	
Most	80	81	191	503	826	982	1170	838	724	552	380	205	5268	
	1955	1964	1964	1949	1985	1985	1950	1956	1955	1955	1964	1954	1949-50	

¹Last year of multiple occurrences. Departure from normal is from the appropriate normal for that time frame.