

Local Climatological Data
Daily Summary
December 2021

Current Location: Elev: 970 ft. Lat: 35.8180° N Lon: -83.9857° W

Generated on 01/12/2022

Station: **KNOXVILLE AIRPORT, TN US WBAN: 72326013891 (KTYS)**

Date	Temperature (F)							Degree Days (base 65F)		Sun (LST)		Weather	Precipitation (in)			Pressure (inHg)		Wind	Maximum Wind Speed = MPH																
	Max	Min	Avg	Dep	ARH	ADP	AWB	Heat	Cool	Rise	Set		Weather Type	TLC	Snow Fall	Snow Depth	Avg Stn		Avg SL	Avg Speed	Direction = Degrees														
												Peak Speed						Peak Dir			Sust. Speed	Sust. Dir													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23													
01	64	32	48	3.4				17	0	0727	1722		T	0.0	0	29.05		5.6	29	220	22	210													
02	69	48	59	14.7				6	0	0728	1722		0.00	0.0	0	29.00		10.1	17	220	16	220													
03	73	45	59	15.0				6	0	0729	1722		0.00	0.0	0	29.00		5.8	18	200	14	230													
04	69	47	58	14.3				7	0	0730	1722		0.00	0.0	0	29.03		2.8	13	360	10	360													
05	60	47	54	10.6				11	0	0731	1722	BR	0.02	0.0	0	29.05		2.8	10	290	8	280													
06	63	36	50	6.9				15	0	0732	1722	RA BR	0.73	0.0	0	28.92		12.5	36	210	26	230													
07	45	29	37	-5.8				28	0	0733	1722		0.00	0.0	0	29.10		6.4	20	030	14	040													
08	51	34	43	0.5				22	0	0733	1722	RA DZ BR	0.01	0.0	0	28.96		3.2	13	270	8	220													
09	52	28	40	-2.3				25	0	0734	1722		0.00	0.0	0	29.03		4.1	16	270	13	270													
10	53	46	50	8.0				15	0	0735	1722	RA	0.02	0.0	0	28.98		2.3	12	340	8	290													
11	72	40	56	14.2				9	0	0736	1723	TS RA BR	0.83	0.0	0	28.85		14.8	62	270	40	270													
12	49	30	40	-1.5				25	0	0736	1723		0.00	0.0	0	29.23		6.9	21	360	15	360													
13	56	26	41	-0.3				24	0	0737	1723		0.00	0.0	0	29.31		2.1	10	200	8	220													
14	61	28	45	4.0				20	0	0738	1723		0.00	0.0	0	29.36		2.5	14	020	10	030													
15	62	32	47	6.2				18	0	0739	1724		0.00	0.0	0	29.31		0.7	13	240	10	260													
16	71	36	54	13.4				11	0	0739	1724	RA HZ	0.04	0.0	0	29.13		7.1	36	220	29	220													
17	65	54	60	19.6				5	0	0740	1724	RA BR	0.07	0.0	0	29.10		5.5	20	230	16	220													
18	70	52	61	20.8				4	0	0741	1725	RA BR	0.43	0.0	0	28.97		6.5	28	200	22	220													
19	54	35	45	5.0				20	0	0741	1725	RA	0.07	0.0	0	29.10		10.5	23	010	16	020													
20	47	28	38	-1.9				27	0	0742	1725		0.00	0.0	0	29.17		3.5	17	030	14	030													
21	48	33	41	1.3				24	0	0742	1726		0.00	0.0	0	28.95		3.9	13	020	10	010													
22	48	31	40	0.5				25	0	0743	1726	FG BR	0.00	0.0	0	28.93		4.4	16	330	12	020													
23	56	25*	41	1.6				24	0	0743	1727		0.00	0.0	0	29.11		2.9	14	220	12	220													
24	62	36	49	9.8				16	0	0744	1728		0.00	0.0	0	28.99		10.6	41	200	29	210													
25	69	60	65	25.9				0	0	0744	1728		0.00	0.0	0	28.80		19.6	46	210	32	220													
26	72	52	62	23.0				3	0	0744	1729	BR FG	0.00	0.0	0	28.94		3.4	16	220	13	220													
27	68	50	59	20.1				6	0	0745	1729		0.00	0.0	0	28.85		12.1	38	220	23	230													
28	74*	60	67	28.3				0	2	0745	1730	RA	0.06	0.0	0	28.78		13.4	41	190	29	220													
29	67	56	62	23.4				3	0	0745	1731	TS RA BR	1.21	0.0	0	28.78		11.1	36s	320s	25	330													
30	65	53	59	20.5				6	0	0746	1731	BR FG	0.00			28.84		3.8	13	280	10	280													
Monthly Averages Totals																																			
Departure from Normal (1981-2010)																																			
Degree Days											Number of days with...																								
Monthly					Season-to-date					Temperature				Precipitation		Snow		Weather																	
Total		Departure			Total		Departure			Max		Min																							
Heating										>=90°		<=32°		<=32°		<=0°		>=0.01"		>=0.1"		>=1"		T-Storms		Heavy Fog									
Cooling																																			
Date of 5-sec to 3-sec wind equipment change								Sea Level Pressure				Greatest...																							
N/A								Maximum		Date		Time		24-Hr...		Snow Depth																			
								Minimum						Precip		Snowfall																			
Station Augmentation													Date																						
Name: N/A Lat: N/A Lon: N/A Elevation: N/A Distance: N/A Elements: N/A Equipment: N/A																																			

Local Climatological Data Hourly Observations December 2021

Current Location: Elev: 970 ft. Lat: 35.8180° N Lon: -83.9857° W

Generated on 01/12/2022

Station: **KNOXVILLE AIRPORT, TN US WBAN: 72326013891 (KTYS)**

Date	Time (LST)	Station Type	Sky Conditions	Visi-bility	Weather Type (see documentation)	Dry Bulb Temp		Wet Bulb Temp		Dew Point Temp		Rel Hum %	Wind Speed (MPH)	Wind Dir (Deg)	Wind Gusts (MPH)	Station Press (inHg)	Press. Tend	Net 3-Hr Change (inHg)	Sea Level Press. (inHg)	Report Type	Precip Total (in)	Alti-meter Setting (inHg)
						AU AW MW	(F)	(C)	(F)	(C)	(F)											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
01	0039	7	FEW:02 2	10.00		37	2.8	35	1.7	33	0.6	86	0	000		29.11			FM-16		30.16	
01	0053	7	FEW:02 2	10.00		38	3.3	36	2.2	34	1.1	86	0	000		29.11	6	0.00	30.16	FM-15	0.00	30.16
01	0100	4	2	9.94		38	3.3	36	2.2	34	1.1	86	0	000		29.10	6	0.00	30.16	FM-12		30.16
01	0153	7	FEW:02 2	10.00		39	3.9	37	2.8	35	1.7	86	0	000		29.10			30.14	FM-15	0.00	30.15
01	0253	7	FEW:02 2	10.00		38	3.3	37	2.8	35	1.7	89	0	000		29.10			30.15	FM-15	0.00	30.15
01	0353	7	CLR:00	10.00		35	1.7	34	1.1	32	0.0	89	0	000		29.11	3	0.00	30.16	FM-15	0.00	30.16
01	0400	4		9.94		35	1.7	34	1.1	32	0.0	89	0	000		29.10	3	0.00	30.16	FM-12		30.16
01	0453	7	CLR:00	10.00		36	2.2	34	1.1	32	0.0	86	0	000		29.12			30.17	FM-15	0.00	30.17
01	0553	7	FEW:02 150	10.00		33	0.6	32	0.0	31	-0.6	92	3	080		29.12			30.17	FM-15	0.00	30.17
01	0653	7	SCT:04 150 BKN:07 250	10.00		33	0.6	33	0.6	32	0.0	96	0	000		29.12	1	-0.01	30.17	FM-15	0.00	30.17
01	0700	4		9.94		33	0.6	33	0.6	32	0.0	96	0	000		29.10	1	-0.01	30.17	FM-12		30.17
01	0753	7	BKN:07 150 BKN:07 250	10.00		37	2.8	36	2.2	34	1.1	89	7	360		29.13			30.18	FM-15	0.00	30.18
01	0853	7	BKN:07 150 BKN:07 250	10.00		40	4.4	39	3.9	37	2.8	89	0	000		29.15			30.20	FM-15	0.00	30.20
01	0953	7	BKN:07 170 BKN:07 250	10.00		46	7.8	43	6.1	39	3.9	77	0	000		29.15	1	-0.04	30.21	FM-15	0.00	30.21
01	1000	4		9.94		46	7.8	43	6.1	39	3.9	77	0	000		29.14	1	-0.04	30.21	FM-12		30.21
01	1053	7	BKN:07 160 BKN:07 250	10.00		49	9.4	44	6.7	39	3.9	69	5	200		29.12			30.17	FM-15	0.00	30.17
01	1153	7	FEW:02 160 OVC:08 250	10.00		54	12.2	47	8.3	40	4.4	59	0	000		29.07			30.12	FM-15	0.00	30.12
01	1253	7	FEW:02 160 OVC:08 200	10.00		60	15.6	52	11.1	44	6.7	56	10	240		29.04	8	+0.12	30.08	FM-15	0.00	30.09
01	1300	4		9.94		60	15.6	52	11.1	44	6.7	56	10	240		29.03	8	+0.12	30.08	FM-12		30.09
01	1353	7	FEW:02 200 OVC:08 250	10.00		64	17.8	53	11.7	44	6.7	48	15	220		29.02			30.07	FM-15	0.00	30.07
01	1453	7	BKN:07 200 OVC:08 250	10.00		62	16.7	53	11.7	44	6.7	52	16	220		29.00			30.05	FM-15	0.00	30.05
01	1553	7	BKN:07 200 OVC:08 250	10.00		61	16.1	52	11.1	44	6.7	54	9	250		29.00	6	+0.04	30.05	FM-15	0.00	30.05
01	1600	4		9.94		61	16.1	52	11.1	44	6.7	54	9	250		28.99	6	+0.04	30.05	FM-12		30.05
01	1653	7	BKN:07 200 OVC:08 250	10.00		58	14.4	51	10.6	44	6.7	60	6	230		28.98			30.03	FM-15	0.00	30.03
01	1753	7	FEW:02 180 OVC:08 250	10.00		56	13.3	50	10.0	44	6.7	65	5	250		29.00			30.05	FM-15	0.00	30.05
01	1853	7	OVC:08 250	10.00		54	12.2	48	8.9	42	5.6	64	7	210		28.99	6	+0.01	30.04	FM-15	0.00	30.04
01	1900	4		9.94		54	12.2	48	8.9	42	5.6	64	7	210		28.98	6	+0.01	30.04	FM-12		30.04
01	1953	7	FEW:02 100 OVC:08 250	10.00		55	12.8	49	9.4	42	5.6	62	10	240		29.00			30.05	FM-15	0.00	30.05
01	2053	7	BKN:07 85 OVC:08 100	10.00		55	12.8	48	8.9	41	5.0	59	8	220		29.01			30.06	FM-15	0.00	30.06
01	2153	7	OVC:08 55	10.00		58	14.4	49	9.4	40	4.4	51	10	230	22	29.03	3	-0.04	30.07	FM-15	T	30.08
01	2200	4	57	9.94		58	14.4	49	9.4	40	4.4	51	10	230		29.02	3	-0.04	30.07	FM-12		30.08
01	2253	7	BKN:07 60 OVC:08 75	10.00		56	13.3	49	9.4	41	5.0	57	10	220		29.02			30.07	FM-15	0.00	30.07
01	2353	7	SCT:04 55 OVC:08 65	10.00		56	13.3	49	9.4	41	5.0	57	13	220	22	29.02			30.06	FM-15	0.00	30.07

U.S. Department of Commerce
 National Oceanic & Atmospheric Administration
 National Environmental Satellite, Data, and Information Service

Local Climatological Data
Hourly Remarks
December 2021

National Centers for Environmental Information
 151 Patton Avenue
 Asheville, North Carolina 28801

Current Location: Elev: 970 ft. Lat: 35.8180° N Lon: -83.9857° W

Generated on 01/12/2022

Station: **KNOXVILLE AIRPORT, TN US WBAN: 72326013891 (KTYS)**

Date	Time (LST)	Remarks
01	0039	MET09212/01/21 00:39:02 SPECI KTYS 010539Z 0000KT 10SM FEW002 03/01 A3016 RMK AO2 T00280006 (ALG)
01	0053	MET11712/01/21 00:53:02 METAR KTYS 010553Z 0000KT 10SM FEW002 03/01 A3016 RMK AO2 SLP212 T00330011 10111 20028 56001 (ALG)
01	0100	SYN08072326 32166 20000 10033 20011 39853 40212 56001 90553 333 10139 20000 555 90106=
01	0153	MET09912/01/21 01:53:02 METAR KTYS 010653Z 0000KT 10SM FEW002 04/02 A3015 RMK AO2 SLP208 T00390017 (ALG)
01	0253	MET09912/01/21 02:53:02 METAR KTYS 010753Z 0000KT 10SM FEW002 03/02 A3015 RMK AO2 SLP210 T00330017 (ALG)
01	0353	MET10212/01/21 03:53:02 METAR KTYS 010853Z 0000KT 10SM CLR 02/00 A3016 RMK AO2 SLP212 T00170000 53001 (ALG)
01	0400	SYN06472326 32966 00000 10017 20000 39853 40212 53001 90853 555 90109=
01	0453	MET09612/01/21 04:53:02 METAR KTYS 010953Z 0000KT 10SM CLR 02/00 A3017 RMK AO2 SLP217 T00220000 (ALG)
01	0553	MET10012/01/21 05:53:02 METAR KTYS 011053Z 0800KT 10SM FEW150 01/M01 A3017 RMK AO2 SLP217 T00061006 (ALG)
01	0653	MET12412/01/21 06:53:02 METAR KTYS 011153Z 0000KT 10SM SCT150 BKN250 01/00 A3017 RMK AO2 SLP217 T00060000 10039 20000 51003 (ALG)
01	0700	SYN08072326 32966 60000 10006 20000 39856 40217 51003 91153 333 10150 20000 555 90112=
01	0753	MET10612/01/21 07:53:02 METAR KTYS 011253Z 3600KT 10SM BKN150 BKN250 03/01 A3018 RMK AO2 SLP220 T00280011 (ALG)
01	0853	MET10612/01/21 08:53:02 METAR KTYS 011353Z 0000KT 10SM BKN150 BKN250 04/03 A3020 RMK AO2 SLP228 T00440028 (ALG)
01	0953	MET11112/01/21 09:53:02 METAR KTYS 011453Z 0000KT 10SM BKN170 BKN250 08/04 A3021 RMK AO2 SLP230 T00780039 51014 (MB)
01	1000	SYN06472326 32966 60000 10078 20039 39869 40230 51014 91453 555 90115=
01	1053	MET10512/01/21 10:53:02 METAR KTYS 011553Z 2000KT 10SM BKN160 BKN250 09/04 A3017 RMK AO2 SLP217 T00940039 (MB)
01	1153	MET10512/01/21 11:53:02 METAR KTYS 011653Z 0000KT 10SM FEW160 OVC250 12/04 A3012 RMK AO2 SLP200 T01220044 (MB)
01	1253	MET12312/01/21 12:53:02 METAR KTYS 011753Z 2400KT 10SM FEW160 OVC200 16/07 A3009 RMK AO2 SLP187 T01560067 10156 20006 58040 (MB)
01	1300	SYN08072326 32966 82409 10156 20067 39830 40187 58040 91753 333 10156 20006 555 90118=
01	1353	MET10512/01/21 13:53:02 METAR KTYS 011853Z 2201KT 10SM FEW200 OVC250 18/07 A3007 RMK AO2 SLP182 T01780067 (MB)
01	1453	MET10512/01/21 14:53:02 METAR KTYS 011953Z 2201KT 10SM BKN200 OVC250 17/07 A3005 RMK AO2 SLP175 T01670067 (MB)
01	1553	MET11112/01/21 15:53:02 METAR KTYS 012053Z 2500KT 10SM BKN200 OVC250 16/07 A3005 RMK AO2 SLP175 T01610067 56013 (MB)
01	1600	SYN06472326 32966 82508 10161 20067 39817 40175 56013 92053 555 90121=
01	1653	MET10512/01/21 16:53:02 METAR KTYS 012153Z 2300KT 10SM BKN200 OVC250 14/07 A3003 RMK AO2 SLP171 T01440067 (GW)
01	1753	MET10512/01/21 17:53:02 METAR KTYS 012253Z 2500KT 10SM FEW180 OVC250 13/07 A3005 RMK AO2 SLP176 T01330067 (GW)
01	1853	MET11612/01/21 18:53:02 METAR KTYS 012353Z 2100KT 10SM OVC250 12/06 A3004 RMK AO2 SLP173 T01220056 10178 20122 56002 (GW)
01	1900	SYN08072326 32966 82106 10122 20056 39814 40173 56002 92353 333 10178 20000 555 90200=
01	1953	MET10012/01/21 19:53:01 METAR KTYS 020053Z 2400KT 10SM FEW100 OVC250 13/06 A3005 RMK AO2 SLP176 T01280056
01	2053	MET10012/01/21 20:53:01 METAR KTYS 020153Z 2200KT 10SM BKN085 OVC100 13/05 A3006 RMK AO2 SLP178 T01280050
01	2153	MET12312/01/21 21:53:01 METAR KTYS 020253Z 2300G19KT 10SM OVC055 14/04 A3008 RMK AO2 RAB21E31 SLP184 P0000 60000 T01440044 53013
01	2200	SYN08072326 12766 82309 10144 20044 39827 40184 53013 69907 90253 333 91019 555 90203=
01	2253	MET10012/01/21 22:53:01 METAR KTYS 020353Z 2200KT 10SM BKN060 OVC075 13/05 A3007 RMK AO2 SLP182 T01330050
01	2353	MET11312/01/21 23:53:02 METAR KTYS 020453Z 2201G19KT 10SM SCT055 OVC065 13/05 A3007 RMK AO2 SLP180 T01330050 401780000

Local Climatological Data
Hourly Precipitation
December 2021

Current Location: Elev: 970 ft. Lat: 35.8180° N Lon: -83.9857° W

Generated on 01/12/2022

Station: **KNOXVILLE AIRPORT, TN US WBAN: 72326013891 (KTYS)**

Date	For Hour (LST) Ending at																					Date				
	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	NOON	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM		10 PM	11 PM	MID	
01																									01	
02																									02	
03																									03	
04																									04	
05												0.02	T												05	
06				T				T	T	0.05	0.25	0.35	0.08			T	T								06	
07																									07	
08				T		T	0.01	T																	08	
09																									09	
10		T	T	0.01		T				0.01						T	T								10	
11										T		0.44	0.11	0.14	0.05	0.08	0.01	T							11	
12																									12	
13																									13	
14																									14	
15																									15	
16																									16	
17					0.02	0.02	T	0.02	T	0.01		T									T	0.01	0.02	0.01	17	
18						0.04	0.01	0.09	0.17	0.10	0.02					T	T				T				18	
19		T	0.01	0.01	T	0.02	0.02	0.01																	19	
20																									20	
21																									21	
22																									22	
23																									23	
24																									24	
25																									25	
26																									26	
27																									27	
28																T	T				T	T		T	0.06	28
29	0.08	0.03	0.02	T	0.06	0.01	T	0.15	0.01		T		T	0.05	0.05	0.03	0.01	T	T	0.02	T	0.38s	0.27	0.04	29	
30																								M		30
31	M	M	M	M	M	M	M	M	M	M	T	T	0.01	M	0.02	T	M	M	M	M	M	M	M	M	T	31

Maximum Short Duration Precipitation

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (inches)												
Ending Date Time (yyyy-mm-dd hh:mi)												

Hourly, daily, and monthly totals on the Daily Summary page and the Hourly Precipitation Table are shown as reported by the instrumentation at the site. However, NWS does not edit hourly values for its ASOS sites, but may edit the daily and monthly totals for selected sites which will be reflected on the Daily Summary page.

T = Trace
 s = Suspect
 * = Erroneous
 blank = No precipitation observed
 M = Missing