### U.S. Department of Commerce

National Oceanic & Atmospheric Administration

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## **Record of Climatological Observations**

These data are quality controlled and may not be identical to the original observations.

Generated on 02/13/2022

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			To	emperature (	F)			Precipitation	ı		Evapo	ration			Soil Temp	erature (F)		
Υ	M	D	24 Hrs. Observa	Ending at ation Time		24 Ho	ur Amoi Observa	unts Ending tion Time	at	At Obs. Time	04.11			4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	02	01	53	34		0.08												
2021	02	02	57			0.67												
2021	02	03	47			0.00												
2021	02	04	51	32		0.00												
2021	02	05	54	37		0.00												
2021	02	06	60			0.00												
2021	02	07	57	39		0.00												
2021	02	08	48			0.00												
2021	02	09	44	33		0.00												
2021	02	10		37														
2021	02	11																
2021	02	12																
2021	02	13	68															
2021	02	14	69	45		0.00												
2021	02	15	61			1.22												
2021	02	16	50			0.02												
2021	02	17	42			0.00												
2021	02	18	43	28		0.00												
2021	02	19		33														
2021	02	20																
2021	02	21																
2021	02	22	70	44		0.00												
2021	02	23	52			0.00												
2021	02	24	49			0.00												
2021	02	25	56	33		0.00							_					
2021	02	26	49			0.20												
2021	02	27	50			0.00												
2021	02	28	59	36		0.00												
		Summary	54	36		2.19		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## **Record of Climatological Observations**

These data are quality controlled and may not be identical to the original observations.

Generated on 02/13/2022

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

National Centers for Environmental Information

151 Patton Avenue

Asheville, North Carolina 28801

Station: I	KYOTO, JA	JA00004775	9					Ge	nerated	on 02/13/202	2	Observa	ation Time Te	emperature: I	Unknown Ob	servation Tim	e Precipitation	n: Unknow!
				emperature (	F)			Precipitation	1		Evapo	ration			Soil Temp	erature (F)		
Υ	M	D	24 Hrs. Observa	Ending at ation Time		24 Ho	ur Amo Observa	unts Ending tion Time	at	At Obs. Time	24 Hour			4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	03	01	68	44		0.00												
2021	03	02	58			1.38												
2021	03	03	51			0.00												
2021	03	04	61	36		0.00												
2021	03	05	58	50		0.39												
2021	03	06	62			0.04												
2021	03	07	55	41		0.00												
2021	03	08	56			0.00												
2021	03	09	62	36		0.00												
2021	03	10	60			0.00												
2021	03	11	65	36		0.00												
2021	03	12	62	45		0.12												
2021	03	13	59			1.38												
2021	03	14	60			0.00												
2021	03	15	65	42		0.00												
2021	03	16	61	46		0.00												
2021	03	17	60			0.00												
2021	03	18	67	38		0.00												
2021	03	19	71	43		0.00												
2021	03	20	72	45		0.00												
2021	03	21	63			2.05												
2021	03	22	56			0.00												
2021	03	23	61	38		0.00												
2021	03	24	70	41		0.00												
2021	03	25	61			0.04												
2021	03	26	67			0.00												
2021	03	27	72	42		0.00												
2021	03	28	63	56		0.33												
2021	03	29	73			0.00												
2021	03	30	74			0.00												
2021	03	31	74			0.00												
		Summary	63	42		5.73		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## Record of Climatological Observations

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Generated on 02/13/2022

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			Te	emperature (	F)			Precipitation		011 02/ 13/202	Evapo	ration			Soil Temp	erature (F)		
Y	M	D	24 Hrs. Observa	Ending at		24 Ho	ur Amoi Observa	unts Ending a	at	At Obs. Time				4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	04	01	75	47		0.00												
2021	04	02	74	54		0.00												
2021	04	03	71	59		0.00												
2021	04	04	66			0.67												
2021	04	05	59			0.00												
2021	04	06	68	46		0.28												
2021	04	07	71			0.00												
2021	04	08	71			0.02												
2021	04	09	61			0.00												
2021	04	10	63	38		0.00												
2021	04	11	70	41		0.00												
2021	04	12	71	49		0.00												
2021	04	13	71	58		0.04												
2021	04	14	69			0.20												
2021	04	15	67	42		0.00												
2021	04	16	62	55		0.00												
2021	04	17	58			2.40												
2021	04	18	60			0.04												
2021	04	19	69	43		0.00												
2021	04	20	77	47		0.00												
2021	04	21	81			0.00												
2021	04	22	81	51		0.00												
2021	04	23	76	51		0.00												
2021	04	24	75			0.00												
2021	04	25	72			0.00												
2021	04	26	66			0.00												
2021	04	27	73	44		0.00												
2021	04	28	67	57		0.94												
2021	04	29	61			3.39												
2021	04	30	75	53		0.08												
		Summary	69	49		8.06		0.0									· · · · · · · · · · · · · · · · · · ·	<u> </u>

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests.

"At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W **Record of Climatological Observations** 

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

These data are quality controlled and may not be identical to the original observations.

		JA0000477		LUII. 133.733						original obse on 02/13/2022		Observa	ation Time Te	emperature:	Unknown Ob	servation Tim	e Precipitatio	วท: Unknowr
			Т	emperature (I	F)			Precipitation	)		Evapo	ration			Soil Temp	perature (F)		
Υ	М	D	24 Hrs. Observa	Ending at attion Time		24 Ho	ur Amo Observa	unts Ending tion Time	at	At Obs. Time	24 Hour			4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	05	01	79	53		0.12												
2021	05	02	61			0.04												
2021	05	03	71	48		0.00												
2021	05	04	79	51		0.00												
2021	05	05	64			0.63												
2021	05	06	80	51		0.04												
2021	05	07	68	59		0.08												
2021	05	08	75	59		0.00												
2021	05	09	81			0.00												
2021	05	10	80	51		0.00												
2021	05	11	74			0.00												
2021	05	12	70	55		0.24												
2021	05	13	77	61		0.24												
2021	05	14	86	63		0.00												
2021	05	15	81	67		0.00												
2021	05	16		67		0.47												
2021	05	17	76			0.22												
2021	05	18	77	67		0.32												
2021	05	19	73															
2021	05	20		62		2.09												
2021	05	21	75			2.72												
2021	05	22	73			0.02												
2021	05	23	84	57		0.00												
2021	05	24	78			0.24												
2021	05	25	80			0.00												
2021	05	26	75			0.00												
2021	05	27		58		1.65												
2021	05	28	78	60		0.00												
2021	05	29	83			0.00												
2021	05	30	83			0.00												
2021	05	31	85	57		0.00												
		Summar	y 77	58		9.12		0.0			<u> </u>							

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National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

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Generated on 02/13/2022

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			Te	emperature (	F)			Precipitation		011 02/ 13/202	Evapo	ration			Soil Temp	erature (F)		
Υ	М	D	24 Hrs. l Observa	Ending at Ition Time		24 Ho	ur Amou Observa	unts Ending a	at	At Obs. Time	04.11			4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	06	01	88	61		0.00												
2021	06	02	83			0.00												
2021	06	03	83	67		0.00												
2021	06	04	72			1.69												
2021	06	05	77	59		0.00												
2021	06	06	84	65		0.00												
2021	06	07	91			0.00												
2021	06	08	91			0.00												
2021	06	09	90	66		0.00												
2021	06	10	92	68		0.00												
2021	06	11	87	71		0.00												
2021	06	12	85			0.00												
2021	06	13	76			0.18												
2021	06	14	84	69		0.26												
2021	06	15	89	69		0.35												
2021	06	16				0.43												
2021	06	17	86	68		0.00												
2021	06	18	77			0.00												
2021	06	19	73			0.94												
2021	06	20	84			0.00												
2021	06	21	91	63														
2021	06	22	83	69		0.00												
2021	06	23	87			0.00												
2021	06	24	89	66		0.00												
2021	06	25	86	70		0.00												
2021	06	26	81	69		0.00												
2021	06	27	78			0.00												
2021	06	28	86	69		0.04												
2021	06	29	85	69		0.55												
2021	06	30	87	69		0.35												
		Summary	84	67		4.79		0.0			_				_			

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<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

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<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

## Record of Climatological Observations

Generated on 02/13/2022

These data are quality controlled and may not be identical to the original observations.

Observation Time

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			Te	emperature (I	F)			Precipitation		011 02/ 13/202	Evapo	ration			Soil Temp	erature (F)		
Υ	M	D		Ending at tion Time		24 Ho	ur Amoi	unts Ending tion Time		At Obs. Time				4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	07	01	78	72		1.12												
2021	07	02	82	73		0.28												
2021	07	03	89	74														
2021	07	04	90	77		0.04												
2021	07	05	87			0.12												
2021	07	06	90			0.00												
2021	07	07	79			2.83												
2021	07	08		74		0.87												
2021	07	09	86			0.28												
2021	07	10	90	76		0.08												
2021	07	11	93			0.04												
2021	07	12	86			0.12												
	07		91	71		0.16												
2021	07	14	87	73		0.43												
2021	07	15	90	74		1.52												
2021	07	16	87	73		0.39												
2021	07	17	90	77		0.00												
2021	07	18	92			0.02												
2021	07		99	77		0.00												
2021	07	20	99			0.00												
2021	07	21	97	78		0.00												
2021	07	22	97	79		0.00												
2021	07	23	97	78		0.00												
2021	07	24	97	78		0.00												
2021	07	25	96			0.00												
2021	07	26	98	78		0.00												
2021	07	27	93			0.00												
2021	07		91	76		0.39												
2021	07	29	95	76		0.00												
2021	07	30	97			0.04												
	07		95			1.73												
	•	Summary		75		10.46		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests.

"At Obs." = Temperature at time of observation

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Station: KYOTO, JA JA000047759

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			Te	emperature (	F)			Precipitation		011 02/ 13/202	Evapo	ration		-	Soil Temp	erature (F)	-	
Υ	M	D	24 Hrs. I Observa	Ending at tion Time		24 Ho	ur Amou Observa	unts Ending a	at	At Obs. Time				4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	08	01	94	76		0.00												
2021	08	02	95	78		0.00												
2021	08	03	87	78		0.20												
2021	08	04	98	78		0.00												
2021	08	05	102	79		0.00												
2021	08	06	95			0.00												
2021	08	07	95			0.00												
2021	08	08	100			0.00												
2021	08	09	89			1.54												
2021	08	10	87			0.02												
2021	08	11	87	73		0.00												
2021	08	12	79			1.69												
2021	08	13	79	73		2.87												
2021	08	14	81			4.45												
2021	08	15	85	71		2.17												
2021	08	16	85	73		0.00												
2021	08	17	78			1.93												
2021	08	18	85			1.18												
2021	08	19				1.06												
2021	08	20	88	71		0.35												
2021	08	21	84	72		0.00												
2021	08	22	92	76		0.08												
2021	08	23	92	76		0.67												
2021	08	24	91	77		0.00												
2021	08	25	95			0.00												
2021	08	26	92	78		0.00												
2021	08	27	97			0.00												
2021	08	28	97	77		0.00												
2021	08	29	96			0.00												
2021	08	30	96			0.47												
2021	08	31	92			0.00												
		Summary	90	75		18.68		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

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National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## Record of Climatological Observations

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Generated on 02/13/2022

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			Те	emperature (I	F)			Precipitation		011 02/ 13/2022	Evapo	ration			Soil Temp	erature (F)		
Υ	M	D		Ending at tion Time		24 Ho	ur Amou Observa	unts Ending a	at	At Obs. Time	0411			4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	09		88	74		0.00												
2021	09	02	81			0.63												
2021	09	03	75	72		0.49												
2021	09	04	81			0.28												
2021	09	05	89	71		0.00												
2021	09	06	89			0.00												
2021	09	07	84	68		0.00												
2021	09	08	80			0.16												
2021	09	09	87			2.48												
2021	09	10	90	67		0.00												
2021	09	11	85	73		0.08												
2021	09	12	81			0.00												
2021	09	13	84			0.00												
2021	09	14	73	69		0.39												
2021	09	15	85			0.00												
2021	09	16	81	66		0.00												
2021	09	17	78			0.12												
2021	09	18	86	73		1.46												
2021	09	19	85			0.00												
2021	09	20	88	71		0.00												
2021		21	85	72		0.00												
2021	09	22	91			0.08												
2021	09	23	87			0.00												
2021	09	24	84			0.00												
2021	09	25	85	67		0.00												
2021	09	26	72			1.06												
2021	09	27	83	64		0.00												
2021	09	28	83	68														
2021	09	29	85	73		0.00												
2021	09	30	83	73		0.00												
		Summary	84	70		7.23		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests.

"At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/13/2022

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			Te	mperature (	F)			Precipitation		311 02/ 13/2022	Evapo	ration			Soil Temp	erature (F)		
Υ	M	D	24 Hrs. I Observa	Ending at tion Time		24 Ho	ur Amou Observa	unts Ending a	at	At Obs. Time				4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	10		81			0.00												
2021	10	02	85			0.00												
2021	10	03	87	63		0.00												
2021	10	04	88	68		0.00												
2021	10	05	87			0.00												
2021	10		83			0.00												
2021	10	07	85	65		0.00												
2021	10	08	88			0.00												
2021	10	09	88	69		0.00												
2021	10	10	87			0.00												
2021	10	11	85			0.00												
2021	10	12	83	70		0.16												
2021	10	13	80			0.00												
2021	10	14	81			0.00												
2021	10	15	83	62		0.00												
2021	10	16	83			0.00												
2021	10	17	68			0.35												
2021	10	18	68	51		0.00												
2021	10	19	70			0.04												
2021	10	20	64			0.00												
2021	10	21	64	50		0.00												
2021	10	22	70	50		0.00												
2021	10	23	65			0.00												
2021	10	24	64	46		0.00												
2021	10	25	59			1.10												
2021	10	26	71			0.00												
2021	10	27	71	52		0.00												
2021	10	28	70			0.00												
2021	10	29	68			0.00												
2021	10	30	71	49		0.00												
2021	10	31	72			0.02												
		Summary	76	58		1.67		0.0						<u> </u>				

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests.

"At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/13/2022

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

	1		1	emperature (	E)			Precipitation		on 02/13/2022	Evapo				Soil Temp		ie i recipitatio	
Y	м			Ending at ation Time		24 Ho	ur Amoi	unts Ending a tion Time		At Obs. Time	Ечаро	lation		4 in. Depth	Jon Temp		8 in. Depth	
e a r	o n t h	D a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	11	01	75	54		0.00												
2021	11	02	72			0.00												
2021	11	03	72			0.00												
2021	11	04	71	51		0.00												
2021	11	05	68															
2021	11	06	68	49		0.00												
2021	11	07	73	54		0.00												
2021	11	08	72	57		0.00												
2021	11	09	62			0.94												
2021	11	10	62			0.02												
2021	11	11	64			0.00												
2021	11	12	62			0.00												
2021	11	13	63	42		0.00												
2021	11	14	62			0.00												
2021	11	15	68	45		0.00												
2021	11	16	67			0.00												
2021	11	17	66	47		0.00												
2021	11	18																
2021	11	19	67	46		0.00												
2021	11	20	68			0.00												
2021	11	21	67	47		0.00												
2021	11	22	61			0.94												
2021	11	23	57			0.00												
2021	11	24	56	42		0.00												
2021	11	25	62	46		0.00												
2021	11	26	64			0.00												
2021	11	27	52			0.12												
2021	11	28	57			0.00												
2021	11	29	59	36		0.00												
2021	11	30	65	41		0.00												
		Summary	65	47		2.02		0.0										

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests.

"At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/13/2022

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

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

			To	emperature (l	F)			Precipitation	l		Evapo	ration			Soil Temp	perature (F)		
Υ	M	D	24 Hrs. Observa	Ending at attion Time		24 Ho	ur Amoi Observa	unts Ending a	at	At Obs. Time	04.11			4 in. Depth			8 in. Depth	
e a r	n t h	a y	Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2021	12	01	55			1.26												
2021	12	02	54	37		0.00												
2021	12	03	56	38		0.00												
2021	12	04	54			0.00												
2021	12	05	49	40		0.00												
2021	12	06	58	40		0.00												
2021	12	07	53	50		1.18												
2021	12	08	55			0.16												
2021	12	09	60	43		0.00												
2021	12	10	60	43		0.00												
2021	12	11	61	44		0.00												
2021	12	12	60			0.00												
2021	12	13	51			0.00												
2021	12	14	53			0.00												
2021	12	15	57	38		0.00												
2021	12	16	60	39		0.00												
2021	12	17	58			0.79												
2021	12	18	43	34		0.12												
2021	12	19	49	34		0.00												
2021	12	20	54	39		0.00												
2021	12	21	58	39		0.00												
2021	12	22	54			0.00												
2021	12	23	54	36		0.00												
2021	12	24	57	37		0.00												
2021	12	25	52			0.06												
2021	12	26	40			0.02												
2021	12	27	42	30		0.04												
2021	12	28	46			0.00												
2021	12	29	51	34		0.00												
2021	12	30	51			0.00												
2021	12	31	37			0.08												
		Summary	+	39		3.71		0.0			•				•			

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests.

"At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

National Environmental Satellite, Data, and Information Service Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

## **Record of Climatological Observations**

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

These data are quality controlled and may not be identical to the original observations.

	(YOTO, JA			LUII. 133.733						original obse on 02/13/2022		Observa	ation Time Te	emperature:	Unknown Ob	servation Tim	e Precipitatio	วท: Unknowr
Y e a r	M o n t	D a y	Temperature (F)				Precipitation Evaporation						Soil Temperature (F)					
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at Observation Time				At Obs. Time			4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F I a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	01	01	42			0.04												
2022	01	02	49	30		0.00												
2022	01	03	53			0.00												
2022	01	04	47	35		0.00												
2022	01	05	44	36		0.00												
2022	01	06	44			0.00												
2022	01	07	44	36		0.02												
2022	01	08	50			0.00												
2022	01	09	54	33		0.00												
2022	01	10	56	38		0.00												
2022	01	11	45			0.39												
2022	01	12	41	34		0.02												
2022	01	13	45			0.00												
2022	01	14	39	30		0.20												
2022	01	15	47			0.00												
2022	01	16	51	31		0.00												
2022	01	17	50	34		0.00												
2022	01	18	42			0.00												
2022	01	19	45	32		0.00												
2022	01	20	43	32		0.12												
2022	01	21	39	31		0.35												
2022	01	22	45			0.00												
2022	01	23	41	32		0.43												
2022	01	24	49			0.08												
2022	01	25	49	32		0.00												
2022	01	26	52	33		0.00												
2022	01	27	49			0.00												
2022	01	28	50	34		0.00												
2022	01	29	49	35		0.00												
2022	01	30	49			0.00												
2022	01	31	48			0.00												
	•	Summar		33		1.65		0.0						•	•			

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

## U.S. Department of Commerce

National Oceanic & Atmospheric Administration

National Environmental Satellite, Data, and Information Service

Current Location: Elev: 151 ft. Lat: 35.0170° N Lon: 135.7330° W

Station: KYOTO, JA JA000047759

## Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 02/13/2022

Asheville, North Carolina 28801

National Centers for Environmental Information

151 Patton Avenue

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Y e a r	M o n t	D a y	Temperature (F)			Precipitation					Evapo	ration	Soil Temperature (F)					
			24 Hrs. Ending at Observation Time			24 Hour Amounts Ending at At Ob Observation Time Time				At Obs. Time	24 Have		4 in. Depth			8 in. Depth		
			Max.	Min.	At Obs.	Rain, Melted Snow, Etc. (in)	F I a g	Snow, Ice Pellets, Hail (in)	F l a g	Snow, Ice Pellets, Hail, Ice on Ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
2022	02	01	51	32		0.00												
2022	02	02	46			0.00												
2022	02	03	48	33		0.00												
2022	02	04	51			0.00												
2022	02	05	43			0.00												
2022	02	06		31														
2022	02	07	47	31		0.00												
2022	02	08	53			0.02												
2022	02	09	52	35		0.00												
2022	02	10	49			0.00												
2022	02	11																
2022	02	12																
2022	02	13																
2022	02	14																
2022	02	15																
2022	02	16																
2022	02	17																
2022	02	18																
2022	02	19																
2022	02	20																
2022	02	21																
2022	02	22																
2022	02	23																
2022	02	24																
2022	02	25																
2022	02	26																
2022	02	27																
2022	02	28																
	Summary		0.02		0.0													

Empty, or blank, cells indicate that a data observation was not reported.

<sup>\*</sup>Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown

<sup>&</sup>quot;s" This data value failed one of NCDC's quality control tests. "At Obs." = Temperature at time of observation

<sup>&</sup>quot;T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.

<sup>&</sup>quot;A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.

# GHCN (Global Historical Climatology Network) – Daily Documentation

or txt output formats depending on user specification. NOTE: English units are displayed on pdf output format; Either Metric or standard English units on csv

## I. Description

complete list) including temperature daily maximum/minimum, temperature at observation time, quality assurance reviews. The archive includes over 40 meteorological elements (see Table 4 below for composite of climate records from numerous sources that were merged and then subjected to a suite of historical daily temperature, precipitation, and snow records over global land areas. GHCN-Daily is a cloudiness, and more precipitation, snowfall, snow depth, evaporation, wind movement, wind maximums, soil temperature, GHCN (Global Historical Climatology Network)-Daily is a database that addresses the critical need for

of the above elements at more than 100,000 stations that are distributed across all continents, the extend back to the 19th century, are updated daily where possible and are usually available one to two totals, and 200 million observations each for snowfall and snow depth. Station records, some of which includes 250 million values each for maximum and minimum temperatures, 500 million precipitation dataset is the world's largest collection of daily climatological data. The total of 1.4 billion data values activities related to the frequency and magnitude of extremes. Containing observations of one or more System (GCOS) Surface Network (GSN) and is particularly well suited for monitoring and assessment DSI 3210, etc.). It will function as the official archive for daily data from the Global Climate Observing designated for daily temporal resolution (i.e. DSI 3200, DSI 3201, DSI 3202, DSI 3205, DSI 3206, DSI 3208, days after the date and time of the observation. GHCN-Daily will serve as a replacement product for older NCDC-maintained data sets that are

allows WMO member countries to place restrictions on the use or re-export of their data for commercial to other users or be used for the re-export of commercial services. commercial activities. For non-U.S. locations data, the data or any derived product shall not be provided available here are intended for free and unrestricted use in research, education, and other nonpurposes outside of the receiving country. Those countries' data summaries and products which are Organization (WMO) World Weather Watch Program according to WMO Resolution 40 (Cg-XII). This Some of the data provided here are based on data exchanged under the World Meteorological

## II. Format/Observation Definitions

meteorological/climatological measurement or statistical value such as temperature, precipitation (amount), etc.) (note: the term 'element 'or 'value' is used throughout this documentation and refers to an individual

Users are given the choice between the following two delivery formats:

- 1) was not reported. preference for both CSV and text output. Empty, or blank, cells indicate that a data observatior as per table 3 below). Units for data values can be in metric or standard depending on user pdf file other than measurement flag "T" (trace value for precipitation, snowfall or snow depth values are in Table 4 (below). There are no flags (attributes) given with the GHCN- Daily Form (minimum soil temperature) and SX\*# (maximum soil temperature). More details about these EVAP (evaporation of water from evaporation pan), WDMV (24-hour wind movement), SN\*# and, if available, the following additional values: TOBS (temperature at the time of observation), GHCN-Daily Form- Portable Document Format (PDF) output giving 5 core values (see Table 4)
- 2) the elements listed in Table 4 (below) to include in the data request. include flags, station name or geographic location in data request. The user can define which of usage (i.e. delimited file). Besides unit preference, user is also given the choice whether to Custom GHCN-Daily CSV- Output files contain .csv extension and optimized for spreadsheet
- $\omega$ of the elements listed in Table 4 (below) to include in the data request. to include flags, station name or geographic location in data request. Custom GHCN-Daily ASCII Form-Output is ASCII text file and the user is given the choice whether The user can define which

## A. Data observations (values)

section of each record is ordered as follows with the following definitions: Each record represents all selected observations (values) available for a given station-day. The initial

**STATION** (17 characters) is the station identification code. Please see

http://www1.ncdc.noaa.gov/pub/data/ghcn/daily/ghcnd-stations.txt

for a complete list of stations and their metadata.

output field **STATION\_NAME** (max 50 characters) is the name of the station (usually city/airport name). Optional

values < 0, eastern hemisphere values > 0) and elevation above mean sea level (tenths of meters). This is values > 0, southern hemisphere values < 0), longitude (decimated degrees w/western hemisphere GEOGRAPHIC\_LOCATION (31 characters) is the latitude (decimated degrees w/northern hemisphere an optional output field

**DATE** is the year of the record (4 digits) followed by month (2 digits) and day (2 digits).

# B. Observations (values) and flags (attributes)

order: Following this initial section of the record, all selected observations and flags are given in the following

element (when more than one element is selected), where: Observation(s) | Measurement Flag | Quality Flag | Source Flag | Time of Observation | repeat for next

Observation(s) is/are defined in Table 4 below. 9's in a field (e.g.9999) indicate missing data or data that has not been received.

Measurement Flag (attribute) is defined in Table 1 below

Quality Flag (attribute) is defined in Table 2 below

Source Flag (attribute) is defined in Table 3 below

the local time at the station of record Time of Observation is the (2 digit hour, 2 digit minute) 24 hour clock time of the observation given as

Note: The 4 flags listed above are optional on the Custom GHCN-Daily ASCII Form.

## Table 1 (Measurement Flag/Attribute)

Blank = no measurement information applicable

- $\triangleright$ = value in precipitation or snow is a multi-day total, accumulated since last measurement (used on Daily Form pdf file)
- precipitation total formed from two twelve-hour totals
- T D B precipitation total formed from four six-hour totals
- or average of hourly values (TAVG) represents highest or lowest hourly temperature (TMAX or TMIN)
- $\neg$ converted from knots
- temperature appears to be lagged with respect to reported hour of observation
- PΟ = converted from oktas
- = identified as "missing presumed zero" in DSI 3200 and 3206
- = trace of precipitation, snowfall, or snow depth
- = converted from 16-point WBAN code (for wind direction)

## Table 2 (Quality Flag/Attribute)

Blank = did not fail any quality assurance check

- = failed duplicate check
- G = failed gap check
- failed internal consistency check
- = failed streak/frequent-value check
- failed check on length of multiday period
- P O Z  $\leq$   $\Gamma$   $\wedge$ = failed mega-consistency check
  - failed naught check
  - failed climatological outlier check
- failed lagged range check

- = failed spatial consistency check
- = failed temporal consistency check
- = temperature too warm for snow
- = failed bounds check
- = flagged as a result of an official Datzilla investigation

## Table 3 (Source Flag/Attribute)

Blank = No source (i.e., data value missing)

- 6 0 = U.S. Cooperative Summary of the Day (NCDC DSI-3200)
- = CDMP Cooperative Summary of the Day (NCDC DSI-3206)
- = U.S. Cooperative Summary of the Day -- Transmitted via WxCoder3 (NCDC DSI-3207)
- = U.S. Automated Surface Observing System (ASOS) real-time data (since January 1, 2006)
- Australian data from the Australian Bureau of Meteorology
- U.S. ASOS data for October 2000-December 2005 (NCDC DSI-3211)
- = Belarus update
- = Environment Canada
- = European Climate Assessment and Dataset (Klein Tank et al., 2002)
- т п С в в
- Official Global Climate Observing System (GCOS) or other government-supplied data
- T G High Plains Regional Climate Center real-time data
- = International collection (non U.S. data received through personal contacts)
- = U.S. Cooperative Summary of the Day data digitized from paper observer forms (from 2011 to present)
- $z \le$ Monthly METAR Extract (additional ASOS data)
- = Community Collaborative Rain, Hail, and Snow (CoCoRaHS)
- Q = Data from several African countries that had been "quarantined", that is, withheld from public release until permission was granted from the respective meteorological services
- $\mathbf{z}$ = NCDC Reference Network Database (Climate Reference Network and Historical Climatology Network-Modernized)
- S = All-Russian Research Institute of Hydrometeorological Information-World Data Center
- Global Summary of the Day (NCDC DSI-9618)
- exchanged on the Global Telecommunications System (GTS). NOTE: "S" values are derived from hourly synoptic reports
- from "true" daily data, particularly for precipitation(i.e., use with caution). Daily values derived in this fashion may differ significantly
- China Meteorological Administration/National Meteorological Information Center/ Climate Data Center (<a href="http://cdc.cma.gov.cn">http://cdc.cma.gov.cn</a>)
- SNOwpack TELemtry (SNOTEL) data obtained from the Western Regional Climate Center
- $\subset$ = Remote Automatic Weather Station (RAWS) data obtained from the Western **Regional Climate Center**
- = Ukraine update
- × ≤ ⊏ = WBAN/ASOS Summary of the Day from NCDC's Integrated Surface Data (ISD).
- = U.S. First-Order Summary of the Day (NCDC DSI-3210)
- Datzilla official additions or replacements
- = Uzbekistan update

## Table 4 (observation/value)

Note: 9's in a field (e.g.9999) indicate missing data or data that has not been received

The five core values are:

SNOW = Snowfall (mm or inches as per user preference, inches to tenths on Daily Form pdf file) PRCP = Precipitation (mm or inches as per user preference, inches to hundredths on Daily Form pdf file) SNWD = Snow depth (mm or inches as per user preference, inches on Daily Form pdf file)

Daily Form pdf file TMAX = Maximum temperature (Fahrenheit or Celsius as per user preference, Fahrenheit to tenths on

Daily Form pdf file TMIN = Minimum temperature (Fahrenheit or Celsius as per user preference, Fahrenheit to tenths on

## The other values are:

ACMC = Average cloudiness midnight to midnight from 30-second ceilometer data (percent)

ACMH = Average cloudiness midnight to midnight from manual observations (percent)

ACSC = Average cloudiness sunrise to sunset from 30-second ceilometer data (percent)

ACSH = Average cloudiness sunrise to sunset from manual observations (percent)

AWND = Average daily wind speed (meters per second or miles per hour as per user preference)

DAEV = Number of days included in the multiday evaporation total (MDEV)

DAPR = Number of days included in the multiday precipitation total (MDPR)

DASF = Number of days included in the multiday snowfall total (MDSF)

DATN = Number of days included in the multiday minimum temperature (MDTN)

DATX = Number of days included in the multiday maximum temperature (MDTX)

DAWM = Number of days included in the multiday wind movement (MDWM)

DWPR = Number of days with non-zero precipitation included in multiday precipitation total (MDPR)

of inches on Daily Form pdf file) EVAP = Evaporation of water from evaporation pan (mm or inches as per user preference, or hundredths

FMTM = Time of fastest mile or fastest 1-minute wind (hours and minutes, i.e., HHMM)

FRGB = Base of frozen ground layer (cm or inches as per user preference)

FRGT = Top of frozen ground layer (cm or inches as per user preference)

FRTH = Thickness of frozen ground layer (cm or inches as per user preference)

GAHT = Difference between river and gauge height (cm or inches as per user preference)

MDEV = Multiday evaporation total (mm or inches as per user preference; use with DAEV)

MDPR = Multiday precipitation total (mm or inches as per user preference; use with DAPR and DWPR, if available)

MDSF = Multiday snowfall total (mm or inches as per user preference)

MDTN = Multiday minimum temperature (Fahrenheit or Celsius as per user preference; use with DATN)

MDTX = Multiday maximum temperature (Fahrenheit or Celsius as per user preference ; use with DATX)

MDWM = Multiday wind movement (miles or km as per user preference)

preference) MNPN = Daily minimum temperature of water in an evaporation pan (Fahrenheit or Celsius as per user

preference) MXPN = Daily maximum temperature of water in an evaporation pan (Fahrenheit or Celsius as per user

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PGTM = Peak gust time (hours and minutes, i.e., HHMM)
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PSUN = Daily percent of possible sunshine (percent)

SN\*# = Minimum soil temperature where \* corresponds to a code

for ground cover and # corresponds to a code for soil depth (Fahrenheit or Celsius as per user

# Ground cover codes include the following

0 = unknown

1 = grass

= fallow

3 = bare ground

4 = brome grass

5 = sod

= straw mulch

= grass muck

= bare muck

## Depth codes include the following:

= 5 cm

2 = 10 cm

= 20 cm

= 50 cm

6 = 150 cmi = 100 cm

SX\*# = Maximum soil temperature where \* corresponds to a code for ground

Celsius as per user preference) cover and # corresponds to a code for soil depth. See SN\*# for depth codes. (Fahrenheit or

THIC = Thickness of ice on water (inches or mm as per user preference)

TOBS = Temperature at the time of observation (Fahrenheit or Celsius as per user preference)

TSUN = Daily total sunshine (minutes)

WDF1 = Direction of fastest 1-minute wind (degrees)

WDF2 = Direction of fastest 2-minute wind (degrees)

WDF5 = Direction of fastest 5-second wind (degrees)

WDFG = Direction of peak wind gust (degrees)

WDFI = Direction of highest instantaneous wind (degrees)

WDFM = Fastest mile wind direction (degrees)

WDMV = 24-hour wind movement (km or miles as per user preference, miles on Daily Form pdf file)

WESD = Water equivalent of snow on the ground (inches or mm as per user preference)

WESF = Water equivalent of snowfall (inches or mm as per user preference)

WSF1 = Fastest 1-minute wind speed (miles per hour or meters per second as per user preference)

WSF2 = Fastest 2-minute wind speed (miles per hour or meters per second as per user preference)

WSF5 = Fastest 5-second wind speed (miles per hour or meters per second as per user preference)

WSFG = Peak guest wind speed (miles per hour or meters per second as per user preference)

WSFM = Fastest mile wind speed (miles per hour or meters per second as per user preference) WSFI = Highest instantaneous wind speed (miles per hour or meters per second as per user preference)

WT\*\* = Weather Type where \*\* has one of the following values:

01 = Fog, ice fog, or freezing fog (may include heavy fog)

02 = Heavy fog or heaving freezing fog (not always

distinguished from fog)

03 = Thunder

04 = Ice pellets, sleet, snow pellets, or small hail

05 = Hail (may include small hail)

06 = Glaze or rime

07 = Dust, volcanic ash, blowing dust, blowing sand, or blowing obstruction

08 = Smoke or haze

09 = Blowing or drifting snow

10 = Tornado, waterspout, or funnel cloud

11 = High or damaging winds

12 = Blowing spray

13 = Mist

14 = Drizzle

15 = Freezing drizzle

16 = Rain (may include freezing rain, drizzle, and freezing drizzle)

17 = Freezing rain

18 = Snow, snow pellets, snow grains, or ice crystals

19 = Unknown source of precipitation

21 = Ground fog

22 = Ice fog or freezing fog

WVxx = Weather in the Vicinity where "xx" has one of the following values

01 = Fog, ice fog, or freezing fog (may include heavy fog)

03 = Thunder

07 = Ash, dust, sand, or other blowing obstruction

18 = Snow or ice crystals

20 = Rain or snow shower

same, other than a few differences in units noted in table 4 above). (note the readme file does not apply to the Daily Form pdf file or CSV outputs, however values are the Additional details are available online at <a href="http://www1.ncdc.noaa.gov/pub/data/ghcn/daily/readme.txt">http://www1.ncdc.noaa.gov/pub/data/ghcn/daily/readme.txt</a>