

演習林 Miscellaneous Information

No. 20 65—80, Jan. 1976

The Tokyo University Forests

千葉演習林気象報告(1960～1974年)

Meteorological Data of the Tokyo University Forest in Chiba(1960—1974)

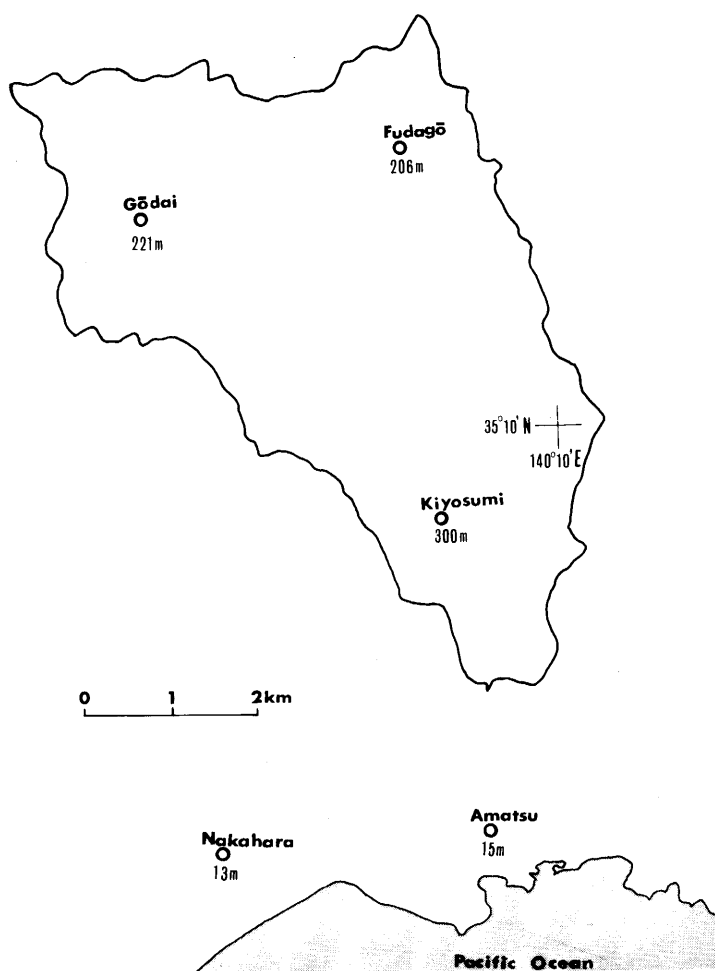
千葉演習林・演習林研究部

The Tokyo University Forest in Chiba and

Research Section of the Tokyo University Forests

各演習林の気象資料は砂防学教室が中心になってとりまとめられ、演習林18号¹⁾までに、発表されている。しかし千葉演習林に関しては清澄のもののみが報告され、他の観測地(図一1)、天津、中原、札郷、郷台は未発表であった。第9次経営案編成を機に、今回は札郷での観測が始まった1960年以降の資料をとりまとめた。郷台での観測が1970年に中断しているので、全観測地が共通の1960～1969年の10ヶ年間の平均値も計算した。

観測には千葉演習林の職員のはほぼ全員が交替であつた。この報告をとりまとめるための作業は蒲谷肇、米本千恵子によって行われた。なおこの報告のもととなった月報は千葉演習林清澄作業所に保管さ



図一1 観測地の位置と海拔高

Fig-1. Situation and altitude of the stations observed.

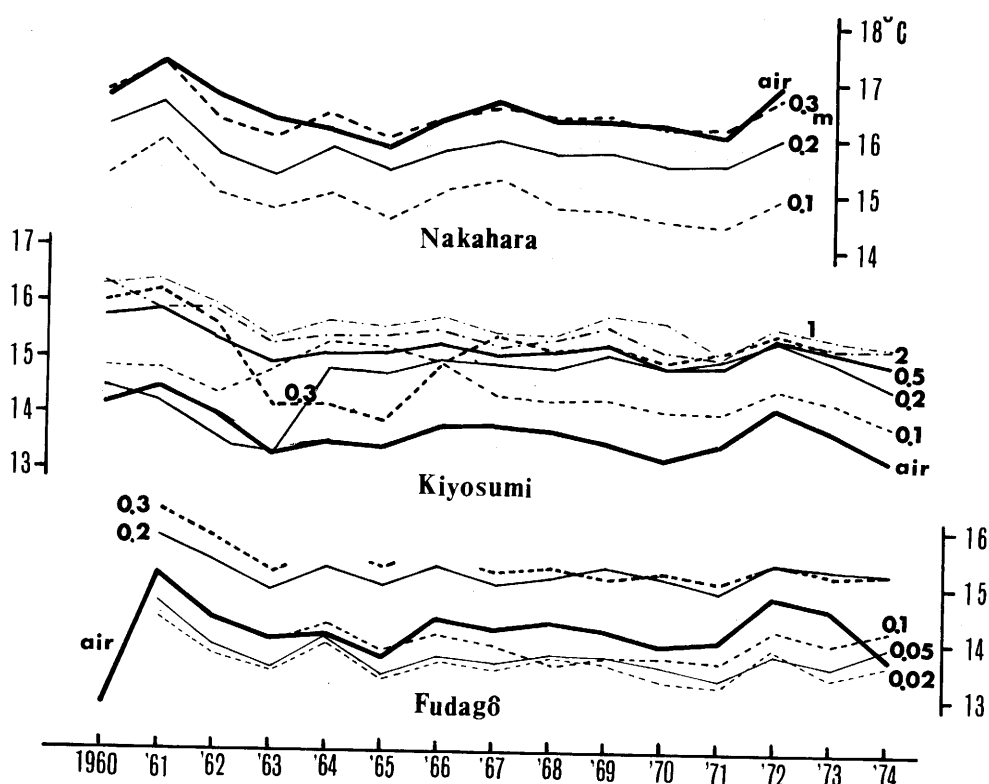


図-2 年平均地中温度と年平均気温の変動（上から，中原，清澄，札郷）

Fig.-2 Variations of mean annual underground-temperature and mean annual air-temperature (1960-1974)

れている。

とりまとめの要領は演習林気象報告（自昭和41年至昭和45年）¹⁾と同じであり，平均気温は午前9時の観測値，温度が氷点下のときは100を加えた。降水量は当日午前9時～翌日午前9時までの値である。

なお樹木の気象害，林地被害との関係上重要と考えられる，5cm以上の積雪があった日付と量，1日80mm以上の降水の記録を抽出した。

図-2から読みとれるように清澄の1960～1965年の0.1m，0.2m，0.3m深の値（何かの事故が考えられる）を除いて，地中温度は気温にほぼパラレルに変動しているので，0.2m深の値だけを詳しくとりあげた。蒸発量，相対湿度は10ヶ年の平均値だけにとどめた。

（1975年6月2日受理）

文 献

- 1) 演習林研究部：演習林気象報告，演習林18，193—277，1973.

1. 天津 Amatsu

1—1 平均气温 Mean monthly air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	6.7	8.2	11.4	14.7	18.4	21.4	25.1	26.8	25.2	18.0	14.7	9.1	16.6
1961	5.8	6.4	10.6	16.7	19.9	22.8	27.0	27.3	26.4	19.8	15.0	9.0	17.2
1962	6.4	7.6	10.5	16.1	13.3	21.1	24.7	27.4	25.5	19.2	—	9.9	—
1963	5.7	6.1	9.1	15.0	19.0	21.6	24.8	25.8	22.3	17.5	14.4	10.4	16.0
1964	6.5	5.0	9.0	16.9	20.1	21.1	24.1	27.2	23.6	17.7	13.7	9.2	16.2
1965	6.4	6.5	8.7	12.6	17.9	21.8	24.2	26.5	23.1	18.3	15.5	9.1	15.9
1966	6.5	8.6	11.1	15.0	18.3	20.6	23.8	26.4	24.1	19.7	14.3	7.6	16.3
1967	5.5	5.8	10.5	15.0	20.1	22.9	25.8	27.4	23.8	18.3	13.7	8.0	16.4
1968	6.8	5.0	10.8	15.1	18.3	21.4	24.3	27.0	23.0	17.2	15.3	11.8	16.3
1969	7.1	7.2	9.8	15.5	19.7	21.0	23.8	26.0	23.2	18.1	13.8	8.8	16.2
1970	5.7	7.4	7.4	14.3	19.9	20.3	24.0	26.4	24.4	18.8	14.1	8.7	16.0
1971	5.6	6.8	9.5	14.1	18.2	21.5	25.0	26.7	22.6	16.8	13.3	9.9	15.8
1972	8.8	6.4	10.8	14.5	19.0	22.0	25.3	26.1	23.6	19.6	14.3	9.9	16.7
1973	7.3	8.3	9.1	16.4	18.6	20.8	25.3	27.4	23.8	18.4	14.0	8.0	16.5
1974	5.2	6.3	9.1	14.8	19.2	22.1	23.5	25.9	22.7	18.7	12.5	7.7	15.6

1—2 平均最高气温 Mean monthly maximum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	11.4	13.0	15.4	18.0	20.8	24.1	27.8	29.5	27.4	21.3	17.7	13.4	20.0
1961	10.4	10.7	13.8	19.8	22.5	24.9	29.5	29.9	28.9	22.8	18.3	13.6	20.4
1962	10.3	11.5	13.9	18.8	21.8	23.5	26.9	29.6	28.0	20.8	—	14.1	—
1963	9.6	10.2	12.5	18.1	21.8	23.8	27.4	28.1	24.7	20.3	17.6	14.1	19.0
1964	9.9	9.0	12.9	19.7	22.6	23.3	26.8	29.3	26.5	20.5	17.3	13.2	19.3
1965	11.0	11.3	12.5	15.8	20.6	24.4	26.5	29.1	25.6	21.4	19.2	13.1	19.2
1966	10.3	13.8	15.1	17.7	20.3	22.7	25.2	28.7	26.3	22.7	17.6	11.4	19.3
1967	10.1	9.5	14.5	17.8	22.3	24.9	27.5	27.6	26.3	20.9	16.0	11.7	19.1
1968	11.1	9.0	13.9	17.5	20.5	23.0	25.7	28.7	24.3	19.2	18.4	15.6	18.9
1969	11.4	10.4	13.3	18.7	22.0	22.8	25.8	28.1	25.4	20.5	17.0	12.6	19.0
1970	9.9	11.2	10.4	17.3	22.5	22.1	26.3	28.8	25.6	21.7	17.1	12.1	18.8
1971	10.5	10.9	13.7	17.2	21.3	23.8	27.9	29.0	25.5	20.1	16.0	13.8	19.1
1972	11.4	10.5	13.9	17.7	21.9	24.2	28.0	29.2	27.0	22.6	18.2	13.5	19.8
1973	11.5	12.6	13.1	19.7	22.0	23.2	28.4	30.0	26.3	21.0	16.8	11.7	19.7
1974	9.3	10.2	12.7	18.6	21.8	24.4	25.9	28.7	24.9	21.3	15.9	11.2	18.7

1—3 平均最低气温 Mean monthly minimum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	2.3	3.4	6.5	9.9	14.6	17.5	21.9	24.5	21.3	14.2	10.5	4.5	12.5
1961	0.9	1.2	5.6	10.6	15.7	18.9	22.8	23.8	22.0	17.2	11.0	4.7	12.9
1962	1.3	2.0	4.1	10.2	13.3	17.9	22.1	24.0	21.0	13.6	—	4.3	—
1963	99.0	0.8	4.0	9.7	15.7	18.6	22.0	23.0	18.8	14.1	10.0	5.3	11.8
1964	3.3	2.0	4.0	13.3	14.6	17.3	20.9	24.1	20.5	14.0	8.5	4.7	12.3
1965	1.7	1.5	3.1	6.8	13.2	18.0	21.1	22.1	19.3	13.0	10.7	4.3	11.2
1966	1.2	4.0	6.4	10.6	12.3	16.8	20.8	22.4	20.5	14.3	9.2	2.2	11.7
1967	0.7	1.0	4.1	9.4	13.7	17.9	22.2	23.2	19.6	12.9	9.2	1.8	11.3
1968	0.6	98.6	5.2	8.9	12.4	16.7	20.7	22.4	17.5	12.7	8.8	6.0	10.9
1969	1.6	2.6	3.7	10.0	14.1	16.4	19.8	21.5	18.2	13.2	8.5	2.6	11.0
1970	0.4	3.1	1.0	8.3	13.9	15.8	20.1	21.0	20.2	13.3	7.7	2.0	10.6
1971	0.7	0.9	2.7	8.3	12.5	17.1	20.1	21.6	18.1	12.0	6.7	3.4	10.3
1972	3.3	1.4	3.7	8.3	13.3	16.3	20.6	21.0	18.1	13.9	8.2	2.9	10.9
1973	1.0	2.3	2.3	10.1	11.1	15.7	19.6	22.0	17.9	13.4	8.5	1.9	10.5
1974	0.3	1.5	3.6	10.8	14.2	17.9	20.9	23.2	20.3	15.3	8.5	3.8	11.7

1—4 降水量 Monthly precipitation mm

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	計 Total
1960	36.4	36.3	143.2	286.6	306.4	124.1	176.6	381.1	291.4	404.0	347.3	88.9	2,622.3
1961	58.1	79.3	175.3	175.2	160.5	230.7	20.9	124.5	128.0	340.9	145.8	25.6	1,664.8
1962	80.8	11.0	144.8	142.6	91.2	263.2	167.3	87.6	47.7	129.2	—	84.6	—
1963	27.3	52.3	173.6	102.1	275.4	298.6	201.1	151.0	148.8	390.4	150.7	44.5	2,015.8
1964	140.6	147.1	166.1	94.9	240.1	169.8	24.1	160.4	151.4	142.5	44.4	26.1	1,557.5
1965	62.5	32.8	110.0	86.5	319.7	211.3	148.8	129.9	172.5	82.4	159.0	141.5	1,656.9
1966	38.1	162.2	198.1	179.9	286.8	324.1	146.0	92.0	125.4	134.8	77.1	44.7	1,809.2
1967	77.9	79.6	141.6	204.9	50.8	311.8	141.8	60.8	315.5	193.7	166.3	35.1	1,779.8
1968	40.5	148.6	201.1	113.0	241.2	206.3	207.4	403.0	106.5	327.9	11.7	259.0	2,266.2
1969	125.8	110.9	215.4	76.7	157.5	456.4	173.7	100.2	76.2	278.9	134.7	35.9	1,942.3
1970	63.7	82.6	66.0	147.9	198.8	327.8	119.4	34.5	215.4	189.7	352.6	133.0	1,931.4
1971	83.2	126.1	141.3	156.4	142.0	119.7	64.9	136.9	368.5	412.0	44.6	122.0	1,917.6
1972	243.6	172.1	62.3	263.2	104.8	123.4	220.0	171.3	148.5	169.2	237.8	306.7	2,222.9
1973	166.0	94.5	32.5	252.0	216.5	97.5	53.5	66.5	198.0	316.0	89.5	0.0	1,582.5
1974	56.5	83.0	163.5	150.0	111.0	249.0	139.5	144.0	171.0	183.5	36.5	66.5	1,554.0

1—5 日降水量80mm以上の記録 Records of heavy rainfall

Daily precipitation > 80mm

年	月	日	降水量	年	月	日	降水量	年	月	日	降水量
1960	IV	20	99.2mm	1963	X	9	81.0mm	1970	XI	20	146.5mm
	V	15	88.3	1967	VI	28	240.0	1971	IX	6	122.1
	VII	19	95.2	1968	II	15	92.0		IX	7	198.1
	VIII	20	207.5		VIII	30	84.1		X	11	155.6
	X	7	176.1	1969	VI	21	104.7		X	29	87.7
	XI	23	104.5	1970	IX	29	108.2	1972	I	11	101.0
1961	VI	28	82.1		XI	19	137.0		XI	5	123.0
								1973	IV	15	90.0
									X	27	139.0

2. 中原 Nakahara

2—1 平均気温 Mean monthly air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	年平均 Average
1960	7.0	8.6	11.1	14.1	18.4	21.6	24.9	26.8	25.2	18.2	14.7	9.2	16.7
1961	6.0	6.5	10.2	16.4	20.0	22.8	27.0	27.4	26.3	19.7	15.2	9.8	17.3
1962	6.8	7.7	10.5	15.6	19.2	21.2	24.8	27.7	25.4	18.1	13.7	10.1	16.7
1963	6.4	6.0	9.3	15.1	19.6	21.7	25.4	26.4	22.8	17.5	14.5	10.5	16.3
1964	6.5	4.8	8.9	16.7	19.9	21.1	24.4	27.9	23.6	17.4	13.1	8.7	16.1
1965	6.1	6.4	8.5	12.2	17.5	21.8	24.5	27.0	23.2	18.1	15.2	8.6	15.8
1966	6.0	8.4	11.1	14.7	18.1	20.7	23.9	27.2	24.2	19.7	14.0	7.3	16.3
1967	5.9	5.7	10.3	15.0	20.1	23.3	26.2	28.4	23.9	18.1	13.7	8.2	16.6
1968	6.7	4.2	10.3	14.9	18.3	21.7	24.8	27.9	22.8	17.5	15.3	11.6	16.3
1969	6.7	6.7	9.6	15.4	19.7	21.5	24.6	26.2	24.1	18.3	13.9	9.3	16.3
1970	6.0	7.5	7.5	14.0	20.1	20.6	24.6	27.3	25.3	19.3	13.9	8.3	16.2
1971	5.7	6.1	9.3	14.2	18.3	21.6	25.7	27.4	23.0	16.8	13.4	9.9	16.0
1972	8.7	6.6	10.4	14.3	19.2	22.3	26.1	27.2	22.2	19.7	14.3	9.2	16.9

2—2. 平均最高気温 Mean monthly maximum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	年平均 Average
1960	11.5	13.0	14.8	17.3	20.9	24.3	27.4	29.0	27.5	21.2	17.6	13.4	19.8
1961	10.3	10.5	13.7	19.5	22.5	24.8	29.3	29.6	29.4	23.0	19.6	13.5	20.3
1962	10.5	11.5	13.6	18.1	21.5	23.9	27.1	30.2	28.0	20.9	16.7	14.2	19.7
1963	9.7	10.0	12.5	18.2	22.2	24.5	27.8	28.7	25.0	20.3	17.9	14.4	19.3
1964	9.8	8.6	13.1	19.8	22.5	23.3	27.7	29.6	26.7	20.6	17.6	13.3	19.4
1965	10.9	11.0	12.6	15.6	20.6	24.5	27.3	29.4	25.9	21.5	19.1	12.8	19.3

1966	11.0	13.9	15.4	18.2	21.6	24.1	26.9	29.4	26.9	23.1	19.6	11.0	20.1
1967	10.3	9.3	14.0	17.7	22.8	25.4	27.9	30.4	27.0	21.1	17.2	12.0	19.6
1968	11.2	9.5	13.9	17.5	20.1	23.4	25.8	29.9	25.0	20.1	19.0	16.2	19.3
1969	12.2	10.9	13.1	18.8	22.5	23.7	27.1	29.6	26.5	21.2	17.6	13.7	19.7
1970	10.8	12.1	11.4	17.1	22.5	22.7	27.2	30.0	28.3	22.4	17.8	13.0	19.6
1971	10.7	11.1	13.9	17.4	21.3	24.2	28.6	29.8	25.9	20.5	17.4	14.6	19.6
1972	13.6	11.0	14.5	18.0	22.1	24.7	28.6	30.0	27.1	22.8	18.5	14.3	20.4

2—3 平均最低气温 Mean monthly minimum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平 均 Average
1960	2.2	3.0	6.4	9.8	14.4	17.7	21.7	22.8	20.6	14.1	10.5	4.3	12.3
1961	1.1	3.3	5.1	10.5	15.5	18.8	22.4	23.4	21.4	16.7	10.5	4.6	12.8
1962	0.9	1.4	3.5	9.3	13.6	17.8	21.7	23.8	21.7	13.3	8.9	4.5	11.7
1963	98.7	0.6	3.6	9.2	15.7	18.4	23.4	22.5	17.9	13.4	9.0	5.0	11.5
1964	2.8	1.3	3.8	13.0	14.8	17.7	20.6	24.3	20.1	13.6	8.0	4.2	12.0
1965	1.3	1.2	3.0	6.2	13.6	18.0	20.7	21.9	19.1	13.1	10.6	3.6	11.0
1966	0.5	3.4	6.3	10.5	12.8	16.8	21.3	—	—	—	—	2.8	—
1967	0.7	2.0	4.9	10.6	15.1	19.3	23.1	24.1	20.5	14.1	10.1	2.7	12.3
1968	1.8	99.7	6.3	10.2	14.3	18.0	22.0	24.2	19.4	14.1	10.1	6.8	12.2
1969	2.2	3.0	4.8	10.6	15.2	17.4	21.0	22.8	19.9	13.9	8.6	3.8	11.9
1970	0.9	2.1	1.8	9.5	15.4	17.1	21.5	23.1	21.4	15.0	9.2	3.2	11.7
1971	2.7	2.1	4.4	9.4	14.4	18.4	21.9	23.1	19.5	13.4	8.0	4.8	11.8
1972	4.3	2.7	5.5	10.3	15.3	18.2	22.6	22.7	19.9	15.3	9.3	4.8	12.6

2—4 平均地中温度 (20cm深) Mean monthly underground-temperature(20cm deep)°C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平 均 Average
1960	6.4	7.7	10.9	13.6	17.8	21.0	25.2	27.1	25.0	17.8	13.8	8.4	16.2
1961	4.9	5.7	9.0	15.1	19.5	22.0	27.3	27.8	25.5	19.4	13.9	8.7	16.6
1962	5.3	6.6	8.8	13.3	17.7	21.2	24.7	28.2	24.9	17.4	12.5	7.5	15.7
1963	4.2	5.1	8.0	14.2	18.6	21.4	25.9	26.9	22.1	16.5	12.7	8.4	15.3
1964	6.5	5.3	8.0	15.7	18.9	20.8	24.7	29.0	23.8	17.0	11.9	8.0	15.8
1965	5.8	6.1	8.3	12.1	17.3	21.6	24.2	27.9	22.9	16.8	14.0	8.1	15.4
1966	5.3	8.3	10.8	13.3	17.5	20.3	24.8	27.3	23.9	18.3	13.1	6.8	15.8
1967	4.8	5.2	8.9	13.8	19.6	24.0	25.6	28.1	23.9	17.1	13.0	7.2	15.9
1968	5.3	4.2	9.9	14.3	18.0	21.7	24.6	27.6	22.2	17.1	13.3	10.1	15.7
1969	6.1	7.2	8.5	14.2	19.3	21.1	24.4	26.8	23.5	16.8	13.1	7.6	15.7

1970	5.3	6.6	7.2	13.0	18.5	20.5	24.4	27.2	25.2	17.8	12.8	7.4	15.5
1971	5.2	6.0	9.2	13.7	18.1	21.1	25.3	28.1	22.5	16.5	11.8	8.3	15.5
1972	7.4	6.6	9.0	13.6	18.5	21.3	25.2	27.3	24.1	18.4	12.8	8.1	16.0

2-5 降水量 Monthly precipitation mm

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	計 Total
1960	32.4	35.8	170.2	238.1	252.8	116.1	157.4	307.4	256.8	202.8	294.0	83.9	2,147.7
1961	53.2	52.3	129.4	186.4	147.5	246.8	24.5	123.0	121.6	246.1	168.7	17.9	1,517.4
1962	50.5	8.7	102.1	160.6	372.6	277.8	192.2	81.3	77.6	158.6	184.4	55.2	1,721.6
1963	28.9	33.0	165.5	87.8	270.9	263.0	230.7	191.2	137.3	297.9	144.5	38.1	1,888.8
1964	102.8	53.0	135.6	101.3	235.8	203.8	25.0	166.8	133.4	153.0	37.5	59.7	1,407.7
1965	44.4	37.0	96.1	86.3	348.1	227.7	150.9	101.6	169.9	76.8	183.4	135.9	1,658.1
1966	34.7	172.7	187.7	189.6	285.6	306.1	146.2	75.4	171.7	128.1	70.8	33.4	1,802.0
1967	49.2	61.5	126.3	217.0	50.7	304.2	129.0	62.9	254.9	191.8	152.4	29.4	1,629.3
1968	45.1	119.2	203.2	117.2	253.5	153.6	659.2	431.7	127.0	309.5	12.1	300.2	2,731.6
1969	104.9	100.3	206.9	57.2	163.5	502.4	181.7	107.4	85.8	281.5	139.9	34.8	1,966.3
1970	68.8	72.2	80.0	138.3	218.5	330.1	128.8	41.0	185.4	186.3	288.8	138.7	1,876.9
1971	86.0	106.4	148.1	144.0	152.2	117.8	81.5	129.7	321.0	389.1	32.7	102.9	1,811.4
1972	194.8	147.8	60.5	242.9	133.6	127.0	218.8	136.1	172.2	142.5	223.6	293.0	2,092.8

2-6 日降水量80mm以上の記録 Records of heavy rainfall Daily precipitation > 80mm

年	月 日	降水量	年	月 日	降水量	年	月 日	降水量	年	月 日	降水量
1960	Ⅳ 20	90.5mm	1963	Ⅵ 23	99.7mm	1968	Ⅶ 5	86.3mm	1971	X 11	139.1mm
	Ⅷ 20	166.2		Ⅶ 28	96.7		Ⅷ 29	112.3		X 29	94.5
	X 7	91.7	1964	V 2	85.0	1969	Ⅵ 21	115.2	1972	I 11	85.5
	XI 23	92.6		Ⅷ 21	90.0		Ⅸ 29	106.0		XI 5	89.0
1961	Ⅵ 28	101.3	1965	V 4	113.0		XI 19	157.3		Ⅻ 23	160.5
1962	V 27	88.6	1967	Ⅵ 28	235.7	1971	Ⅸ 6	154.7			
	X 11	119.2		Ⅸ 11	80.3		Ⅸ 7	101.3			

3. 清澄 Kiyosumi

3—1 平均気温 Mean monthly air-temperature °C

月 年	1 Jan	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平 均 Average
1960	4.3	6.3	8.4	11.6	16.3	19.6	23.5	24.2	22.5	15.2	12.0	6.0	14.2
1961	2.9	3.5	7.1	14.3	17.9	20.3	25.0	24.6	23.1	17.0	12.2	6.6	14.5
1962	3.7	4.4	7.4	13.0	17.1	18.8	22.3	25.2	22.3	15.1	10.5	7.6	14.0
1963	3.2	2.4	7.1	12.4	16.6	19.5	22.6	23.8	19.6	14.3	10.9	7.6	13.3
1964	3.6	1.5	5.7	14.1	17.2	19.0	23.3	24.9	20.5	14.7	11.0	6.6	13.5
1965	3.8	3.6	5.6	9.7	15.8	19.8	23.0	24.7	20.4	15.2	12.3	7.0	13.4
1966	3.8	5.9	8.5	12.2	15.8	18.2	22.1	24.3	21.3	17.0	11.2	4.8	13.8
1967	3.2	2.6	7.7	12.8	17.7	20.5	23.5	24.9	20.5	15.3	10.9	5.9	13.8
1968	4.1	1.8	8.0	12.6	15.7	19.4	22.2	24.4	20.0	14.8	12.6	9.2	13.7
1969	4.1	3.9	6.3	12.4	16.9	18.9	21.8	24.6	20.9	15.2	11.2	6.0	13.5
1970	2.2	4.8	3.9	11.1	17.2	18.4	22.6	23.9	21.9	16.2	11.1	5.6	13.2
1971	2.7	3.5	6.5	12.1	16.5	19.8	23.7	24.2	19.8	14.5	11.0	7.9	13.5
1972	6.2	3.8	7.2	11.9	16.8	19.6	23.0	24.2	21.0	16.8	11.9	7.6	14.2
1973	4.7	5.2	5.5	14.2	16.1	18.0	23.5	25.6	21.2	15.5	11.1	5.5	13.8
1974	2.0	3.2	6.3	12.9	16.9	20.0	21.5	24.5	20.5	16.8	9.9	5.1	13.3

3—2 降水量 Monthly precipitation mm

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	計 Total
1960	34.9	27.1	195.1	291.3	354.9	134.1	141.2	479.0	256.0	422.2	395.0	63.4	2,794.2
1961	66.5	78.6	183.1	193.0	159.1	306.7	37.1	76.6	153.3	420.7	200.6	31.5	1,906.8
1962	66.9	12.3	141.1	197.1	400.6	278.6	250.0	97.4	65.4	239.2	248.6	92.1	2,089.3
1963	27.7	41.2	190.9	108.3	309.0	351.0	178.4	191.0	151.5	530.4	180.8	46.3	2,306.5
1964	208.3	100.5	177.2	105.7	283.6	259.4	26.8	177.2	170.5	169.4	70.0	96.2	1,844.8
1965	60.5	38.2	129.5	101.6	391.9	284.6	157.9	124.5	215.4	114.2	183.8	162.2	1,964.3
1966	37.3	196.0	268.3	239.4	360.0	371.3	158.4	95.6	168.8	148.3	83.5	46.0	2,172.9
1967	80.3	108.5	139.1	279.3	60.6	275.2	139.1	72.7	401.6	235.0	171.6	39.6	2,002.6
1968	43.1	167.5	243.5	135.7	278.5	202.7	243.0	483.0	107.3	340.4	12.5	292.7	2,549.9
1969	128.6	159.1	242.1	76.7	170.5	501.3	200.0	107.9	97.3	337.4	153.7	32.0	2,206.6
1970	54.4	74.6	85.4	173.5	280.4	363.5	235.2	30.9	196.8	205.3	318.6	164.0	2,182.6
1971	96.5	139.6	162.1	180.8	161.7	145.0	108.2	138.5	449.8	437.8	52.8	132.0	2,204.8
1972	281.2	203.8	80.8	344.4	177.4	162.5	241.1	193.0	204.7	182.0	205.6	394.0	2,670.5
1973	180.5	111.0	29.0	277.0	304.5	105.0	77.5	77.5	199.5	420.0	51.0	1.5	1,834.0
1974	67.5	103.5	162.0	204.0	157.5	305.5	226.0	203.0	166.5	219.0	54.0	72.5	1,941.0

3-3. 日降水量80mm以上の記録 Records of heavy rainfall Daily precipitation > 80mm

年	月	日	降水量	年	月	日	降水量	年	月	日	降水量	年	月	日	降水量
1960	Ⅷ	19	123.0 mm	1963	X	9	113.8 mm	1968	V	19	84.5 mm	1971	IX	7	209.3 mm
	Ⅷ	20	237.0		X	26	117.0		Ⅷ	26	114.0		X	11	110.7
	X	7	170.0		X	28	91.2		Ⅷ	29	92.0		X	29	113.0
	XI	23	120.0	1964	V	1	114.8		Ⅷ	31	82.5	1972	I	11	126.0
1961	VI	28	152.0		Ⅷ	20	92.3	1969	X	23	95.7		Ⅷ	7	87.5
	X	9	95.5		V	3	103.8		XII	5	80.3		XI	5	92.8
	XI	22	85.5		VI	26	82.7		VI	21	122.3		XII	23	174.0
1962	V	27	87.4	1966	II	27	86.5		X	8	82.0	1973	XII	24	132.0
	X	11	142.2		V	7	80.2	1970	Ⅷ	1	131.1		IV	15	89.0
1963	V	17	81.5		V	22	91.5		IX	29	84.7		V	28	94.0
	VI	3	80.3		VI	9	81.5		XI	19	171.3		X	27	178.0
	VI	4	119.0		VI	28	90.8		XI	20	86.2	1974	Ⅶ	7	95.0
	Ⅷ	28	116.1	1967	VI	28	197.0		IX	6	164.0				

3-4. 積雪 5 cm以上の記録 Records of snowfall Depth > 5 cm

年	月	日	積雪深 Depth	年	月	日	積雪深	年	月	日	積雪深	年	月	日	積雪深
1961	II	27	5.0 cm	1964	II	22	6.5 cm	1967	II	10~12	58.8 cm	1972	II	24	5.2 cm
1963	II	4	7.0		II	25	21.0	1968	II	15~16	67.2		III	28	8.0
	III	13	52.0		I	6	5.0	1971	III	23	8.0				
1964	I	25	17.5		I	30	5.4	1972	II	7	5.5				
	II	18	7.5		III	3	7.5		II	10	11.5				

4. 札郷 Fudagō

4-1. 平均気温 Mean monthly air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	99.7	1.7	5.1	8.8	14.6	17.9	24.4	25.3	23.1	15.8	11.7	5.8	12.8
1961	3.0	3.7	7.7	14.6	18.7	21.2	26.3	25.8	23.9	17.5	12.4	6.2	15.1
1962	3.2	4.8	8.0	13.5	17.8	19.7	23.5	26.6	23.2	15.3	10.4	6.3	14.4
1963	2.7	3.0	7.1	13.1	17.5	20.6	24.2	25.1	20.9	15.2	11.6	6.6	14.0
1964	3.7	2.3	6.6	15.5	18.2	19.8	24.8	26.0	21.4	15.1	10.6	5.3	14.1
1965	2.8	3.3	6.1	10.6	16.7	20.7	24.1	25.4	21.1	15.1	12.9	5.7	13.7
1966	2.2	5.7	8.9	13.0	16.9	19.3	25.2	25.8	22.2	17.4	11.6	4.2	14.4

1967	2.7	2.7	7.9	13.0	18.6	21.4	24.7	26.1	21.2	15.7	11.0	4.9	14.2
1968	3.5	1.5	8.6	13.7	17.1	20.6	23.8	26.4	21.0	15.1	12.4	8.9	14.4
1969	3.6	3.9	6.4	13.7	18.4	22.4	22.6	26.3	21.9	15.5	10.5	5.2	14.2
1970	2.0	4.3	4.0	12.0	18.5	19.6	24.6	25.6	23.4	17.0	10.9	4.7	13.9
1971	2.2	3.3	7.0	12.9	17.5	20.9	25.4	26.1	20.9	14.8	10.4	6.8	14.0
1972	5.4	4.0	8.3	12.7	17.8	21.0	24.6	26.1	22.1	17.2	11.9	6.3	14.8
1973	4.2	5.3	6.5	15.0	17.2	19.3	25.3	27.7	22.6	16.4	11.3	4.9	14.6
1974	2.2	3.6	6.1	13.5	17.6	20.9	22.3	25.1	21.3	16.3	9.9	4.3	13.6

4—2. 平均最高气温 Mean monthly maximum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	9.7	11.9	12.7	15.7	20.0	22.9	27.7	28.1	26.2	19.4	15.9	11.6	18.5
1961	8.3	8.9	11.8	18.3	22.0	24.2	29.3	29.2	27.4	20.8	17.4	12.0	19.1
1962	9.3	10.1	12.5	17.0	20.9	22.9	26.4	29.6	26.8	19.1	14.9	12.0	18.5
1963	7.6	8.0	10.7	16.6	20.5	23.5	27.1	27.8	23.6	18.1	15.4	12.0	17.6
1964	7.2	5.6	10.7	18.2	21.1	22.1	27.5	29.0	24.3	18.3	15.1	10.9	17.5
1965	8.6	8.8	10.7	14.2	19.7	23.1	26.2	28.8	23.8	19.0	17.0	10.7	17.6
1966	8.6	11.6	12.9	14.8	19.3	21.4	26.1	28.4	25.0	21.0	15.3	9.2	17.8
1967	7.8	6.4	11.6	16.3	21.5	24.3	27.4	29.2	24.3	18.9	15.1	10.3	17.8
1968	8.7	6.8	12.2	16.6	19.8	23.0	25.8	28.2	23.9	18.2	17.2	13.8	17.9
1969	9.7	9.1	11.4	16.5	21.4	23.0	25.9	29.2	24.7	19.0	15.2	11.4	18.0
1970	8.4	9.9	8.6	15.1	21.2	21.9	26.2	28.6	26.2	20.1	15.2	10.6	17.7
1971	8.3	8.8	11.9	15.8	20.6	23.3	27.8	28.4	23.6	18.3	15.0	12.2	17.8
1972	10.6	8.2	12.2	16.2	20.8	23.6	27.3	27.5	25.2	20.7	16.3	12.0	18.4
1973	9.4	10.7	11.1	18.9	20.1	21.3	28.0	30.0	25.0	19.9	15.4	10.4	18.4
1974	7.4	8.7	11.2	17.5	21.2	23.6	25.1	28.1	24.2	20.1	14.8	9.5	17.6

4—3. 平均最低气温 Mean monthly minimum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	98.4	99.1	2.5	6.9	11.7	15.7	20.6	21.7	18.7	11.3	7.4	0.9	9.6
1961	97.6	98.3	2.5	8.6	13.5	16.4	21.1	21.4	19.2	14.1	7.1	0.9	10.1
1962	97.8	99.0	1.6	7.3	11.2	16.2	20.5	22.4	19.2	11.1	6.5	1.4	9.5
1963	96.0	98.3	1.3	7.3	13.2	16.8	20.4	21.5	15.8	11.5	6.8	1.9	9.2
1964	0.4	99.2	1.6	10.7	12.1	16.1	20.7	22.5	18.4	11.0	5.3	1.1	9.9
1965	98.9	98.6	0.0	4.7	12.6	17.1	20.5	20.9	17.5	10.4	8.2	1.1	9.2
1966	97.6	1.1	3.9	8.8	11.4	15.3	20.4	21.4	19.4	12.9	6.8	99.6	9.9

1967	97.5	98.1	2.1	7.7	12.4	16.6	21.5	22.8	18.6	11.9	6.8	0.5	9.7
1968	99.5	96.3	4.1	8.0	10.3	15.5	20.7	22.6	17.3	11.7	6.5	3.5	9.7
1969	99.1	0.3	1.6	8.5	12.7	15.8	19.7	21.9	17.9	11.9	6.5	0.6	9.7
1970	97.6	99.4	99.2	7.2	13.0	14.8	20.3	21.7	19.4	12.3	6.7	3.5	9.6
1971	99.0	99.4	1.5	7.3	12.2	16.6	21.2	21.9	17.1	11.0	5.8	1.6	9.6
1972	1.5	0.6	3.2	8.0	12.7	16.7	21.6	21.4	18.0	13.0	7.0	1.9	10.5
1973	0.2	0.8	1.9	9.7	11.3	15.7	20.4	23.4	18.0	11.8	6.0	99.4	9.9
1974	97.8	0.3	1.4	8.9	13.0	17.1	19.7	21.6	19.0	12.9	9.1	1.1	10.2

4—4. 平均地中温度 (20cm深) Mean monthly underground-temperature (20cm deep) °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	—	—	—	12.8	16.7	19.7	24.1	24.9	24.2	18.0	13.9	9.0	—
1961	5.7	5.9	8.2	13.4	17.9	20.3	25.3	25.0	24.5	19.3	14.9	9.6	15.8
1962	6.1	7.1	8.9	12.6	16.5	20.3	23.3	26.2	24.7	18.2	12.9	8.1	15.4
1963	5.6	5.8	7.7	12.8	17.0	20.0	24.3	25.3	21.9	16.6	13.3	8.7	14.9
1964	6.7	5.3	7.2	13.7	17.1	20.0	24.0	26.6	23.6	17.6	12.8	8.4	15.3
1965	6.2	6.7	7.8	10.7	15.8	20.2	23.3	26.0	22.5	17.5	14.7	8.9	15.0
1966	5.8	7.9	10.1	12.1	15.6	18.8	23.3	25.5	23.5	19.0	13.9	7.5	15.3
1967	5.1	5.2	8.2	12.5	17.0	20.6	24.0	25.8	23.1	17.3	13.4	8.3	15.0
1968	6.1	5.0	8.4	12.8	16.4	20.0	23.2	25.5	22.4	17.8	13.7	10.3	15.1
1969	6.6	7.3	7.7	12.7	17.4	19.9	23.6	25.7	23.1	17.1	13.5	8.5	15.3
1970	5.9	6.9	6.6	11.6	17.1	19.4	23.2	25.3	23.6	18.9	13.9	8.6	15.1
1971	6.2	6.4	8.4	12.5	16.5	19.9	23.5	25.3	21.9	16.9	12.5	9.1	14.9
1972	7.5	6.3	8.2	12.5	17.0	19.5	23.5	25.1	23.4	19.0	13.8	9.2	15.4
1973	7.1	7.5	8.1	13.7	16.4	18.9	23.7	25.7	23.1	17.9	13.0	7.9	15.3
1974	5.3	5.8	7.8	12.5	16.9	20.6	22.9	25.6	23.6	19.1	13.9	8.9	15.2

4—5. 降水量 Monthly precipitation mm

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	計 Total
1960	—	—	211.0	344.4	296.9	134.1	123.7	520.1	177.4	430.1	368.0	110.3	—
1961	62.7	45.8	192.3	304.2	153.8	423.8	53.7	81.9	91.6	547.1	238.9	36.8	2,232.6
1962	76.4	17.2	147.4	282.0	412.4	290.6	221.7	119.6	36.0	348.5	290.6	74.7	2,317.1
1963	23.4	38.4	223.7	118.0	304.7	406.2	141.1	215.5	156.2	587.8	229.5	52.4	2,496.9
1964	187.2	129.8	201.2	138.4	339.5	299.1	35.9	192.0	212.2	206.7	56.6	89.2	2,087.8
1965	82.6	43.9	124.2	125.3	474.1	327.8	134.2	199.4	288.7	117.5	207.4	169.0	2,294.1
1966	48.9	218.0	293.0	317.8	448.4	491.2	167.2	121.2	235.6	158.0	87.2	55.9	2,642.4

1967	81.3	127.5	149.3	316.5	56.1	204.0	128.7	76.0	439.6	309.6	174.9	36.3	2099.8
1968	48.3	204.2	287.8	119.1	312.3	255.0	277.6	481.8	103.9	327.1	18.0	353.6	2788.7
1969	95.4	179.0	303.7	110.6	179.0	561.1	246.7	155.0	134.1	338.6	181.9	52.3	2537.4
1970	91.3	69.8	126.9	176.0	360.7	377.9	513.5	53.8	189.4	217.2	294.3	141.9	2612.7
1971	108.8	152.2	186.4	184.5	144.0	145.6	134.0	182.2	450.0	442.3	49.8	124.2	2304.0
1972	252.6	267.3	121.8	372.1	191.3	188.1	231.5	218.1	248.3	191.1	187.5	318.3	2788.0
1973	173.5	119.0	30.0	277.5	272.0	149.0	93.0	77.5	189.0	395.5	103.0	0.5	1879.5
1974	45.0	121.0	261.5	268.0	184.5	321.0	215.0	263.0	252.5	228.0	71.0	68.5	2299.0

4—6. 日降水量80mm以上の記録 Records of heavy rainfall Daily precipitation>80mm

年	月	日	降水量	年	月	日	降水量	年	月	日	降水量	年	月	日	降水量
1960	Ⅲ	11	83.5mm	1963	Ⅺ	25	130.0mm	1967	Ⅸ	11	103.0mm	1971	Ⅹ	11	94.0mm
	Ⅲ	27	80.0		Ⅴ	2	172.0		Ⅹ	27	109.5		Ⅹ	29	94.0
	Ⅳ	20	143.5		Ⅵ	28	86.0		Ⅱ	15	107.5		Ⅰ	11	116.5
	Ⅷ	19	124.0	1965	Ⅷ	21	104.5	1968	Ⅲ	30	80.0		Ⅴ	3	82.0
	Ⅷ	20	266.8		Ⅴ	4	106.5		Ⅶ	5	109.0		Ⅷ	7	86.2
	Ⅹ	7	165.4		Ⅵ	27	126.5		Ⅷ	26	107.2		Ⅸ	15	100.7
1961	Ⅺ	23	91.2		Ⅷ	23	116.5		Ⅹ	23	113.0		Ⅺ	23	136.5
	Ⅳ	26	136.5		Ⅸ	10	91.5		Ⅺ	5	102.0		Ⅺ	24	92.5
	Ⅵ	28	262.5	1966	Ⅱ	28	94.0	1969	Ⅲ	30	82.5	1973	Ⅴ	2	83.0
	Ⅹ	9	165.5		Ⅲ	16	113.0		Ⅵ	25	125.0		Ⅴ	28	98.0
	Ⅺ	22	98.0		Ⅳ	8	80.2		Ⅶ	4	92.0		Ⅹ	27	160.0
	Ⅴ	27	87.0		Ⅴ	8	122.6		Ⅹ	8	113.9		Ⅺ	9	92.0
	Ⅹ	11	222.8		Ⅴ	23	115.0	1970	Ⅰ	30	86.3		Ⅶ	7	93.0
	Ⅷ	28	148.5		Ⅵ	10	88.5		Ⅶ	1	390.3		Ⅷ	31	87.0
1962	Ⅹ	9	140.0		Ⅵ	29	166.2		Ⅺ	19	155.5		Ⅸ	4	117.5
	Ⅹ	26	105.0	1967	Ⅳ	19	95.0	1971	Ⅸ	6	122.0				
	Ⅹ	28	106.8		Ⅵ	28	143.5		Ⅸ	7	227.9				

5. 郷台 Gōdai

5—1. 平均気温 Mean monthly air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	1.8	2.3	5.6	9.4	14.8	18.0	24.7	25.3	23.3	16.3	12.7	7.0	13.4
1961	4.0	5.0	8.5	15.2	19.1	21.4	26.3	25.9	24.2	17.5	12.8	7.1	15.6
1962	4.3	5.6	8.5	13.7	18.2	19.9	23.6	26.7	24.1	16.3	11.3	7.7	15.0

1963	4.2	4.5	7.2	13.7	17.4	21.0	23.9	25.4	20.7	15.7	12.3	8.8	14.6
1964	4.4	3.0	7.0	16.0	18.5	20.2	24.9	26.6	21.8	16.0	11.7	6.8	14.7
1965	4.3	4.8	6.9	10.9	16.7	21.1	24.2	26.1	21.5	16.1	13.7	7.6	14.5
1966	4.6	6.8	9.9	13.2	17.5	19.8	23.6	25.9	22.3	18.2	12.4	6.4	15.1
1967	4.3	3.8	8.7	14.1	19.4	22.0	25.1	26.6	21.6	16.2	11.5	6.9	15.0
1968	5.3	3.2	9.1	13.8	17.0	20.7	23.4	25.9	20.9	15.5	13.3	9.6	14.8
1969	5.2	4.6	7.5	14.4	18.5	20.7	23.5	26.0	22.0	16.2	11.6	7.2	14.8
1972	—	—	—	—	—	—	—	21.9	22.4	17.8	12.0	6.4	—
1973	3.5	5.1	5.6	14.3	16.2	18.3	24.6	27.2	22.0	15.3	10.9	3.9	13.9

5—2. 平均最高气温 Mean monthly maximum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	9.8	11.7	12.9	15.7	19.8	22.8	27.4	27.6	25.6	19.3	15.6	11.2	18.3
1961	8.5	9.0	11.7	18.2	21.7	24.0	28.9	28.8	26.9	20.5	16.7	11.7	18.9
1962	9.6	10.0	11.8	16.6	20.8	22.8	25.7	29.7	26.7	19.1	14.8	12.2	18.3
1963	7.6	8.4	11.0	16.6	20.7	23.3	27.2	28.1	23.8	18.6	16.1	12.8	17.9
1964	7.8	6.4	11.3	18.5	21.3	22.8	27.9	29.1	25.0	18.6	15.2	11.5	18.0
1965	8.9	9.4	10.9	14.7	20.1	23.5	26.7	29.3	24.1	19.9	17.3	10.9	18.0
1966	9.2	11.7	13.2	16.0	19.7	22.2	26.1	28.1	21.7	21.3	15.7	10.0	17.9
1967	8.4	7.3	12.5	16.5	22.0	24.8	27.4	29.3	24.3	19.3	15.1	10.5	18.1
1968	9.5	7.3	12.2	16.4	19.5	23.6	24.7	28.2	23.5	18.1	17.4	13.4	17.8
1969	9.8	9.3	13.2	18.9	22.6	24.3	27.1	30.2	26.6	20.6	16.7	12.9	19.4
1972	—	—	—	—	—	—	—	26.9	25.6	20.9	16.0	11.5	—
1973	8.8	10.4	10.5	17.5	19.6	20.6	27.4	29.8	24.8	19.2	15.7	10.2	17.9

5—3. 平均最低气温 Mean monthly minimum air-temperature °C

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	平均 Average
1960	98.8	99.5	2.6	6.6	12.2	15.8	20.0	21.4	19.0	11.5	7.8	1.7	9.7
1961	98.5	98.3	2.3	5.4	10.1	16.5	21.2	21.2	19.1	13.8	7.6	1.3	9.6
1962	99.7	99.2	1.6	5.2	10.8	15.0	19.9	22.3	18.5	10.6	6.2	1.5	9.2
1963	96.8	98.3	1.5	7.7	13.1	16.9	20.1	21.3	15.9	10.5	6.7	2.3	9.3
1964	0.9	98.8	1.4	10.4	11.9	15.6	20.2	22.2	17.6	10.7	5.5	1.7	9.7
1965	99.7	99.0	0.5	4.2	12.3	17.1	20.6	20.9	17.8	10.8	8.5	1.6	9.4
1966	98.7	1.5	4.1	8.4	11.3	15.1	20.1	21.4	18.5	12.4	6.9	0.2	9.9
1967	98.5	98.9	2.6	7.8	12.8	16.8	21.2	22.4	18.3	11.2	6.7	1.0	9.9
1968	99.7	97.2	4.0	7.7	11.6	16.0	20.2	22.3	16.9	11.4	7.5	4.7	9.9

1969	5.2	1.1	3.5	10.1	13.9	17.3	21.0	23.1	18.5	12.5	8.4	3.0	11.5
1972	—	—	—	—	—	—	—	20.2	17.7	13.1	6.9	1.4	—
1973	0.0	0.6	1.7	9.6	11.2	15.5	20.3	22.8	17.9	11.8	5.8	99.2	9.7

5—4. 降水量 Monthly precipitation mm

月 年	1 Jan.	2 Feb.	3 Mar.	4 Apr.	5 May	6 June	7 July	8 Aug.	9 Sep.	10 Oct.	11 Nov.	12 Dec.	計 Total
1960	38.1	24.0	197.6	—	318.3	—	114.2	469.0	215.7	370.0	284.0	121.0	—
1961	45.4	61.1	186.8	236.1	135.3	146.2	99.6	52.8	156.6	441.1	209.6	27.5	1,798.1
1962	68.7	15.9	133.9	265.3	415.4	294.4	235.0	77.9	43.3	233.0	291.8	99.8	2,174.4
1963	4.0	47.1	190.9	115.6	319.8	388.7	153.9	201.6	139.1	546.8	190.2	52.9	2,350.6
1964	189.1	126.8	198.0	139.0	336.5	304.4	34.6	161.0	227.8	193.8	58.1	88.2	2,067.3
1965	82.6	34.6	114.3	112.2	465.0	291.0	135.1	167.5	224.2	114.1	183.3	147.6	2,071.5
1966	43.1	230.1	269.1	314.9	421.5	443.8	162.1	87.7	269.6	165.2	82.4	47.3	2,536.8
1967	81.5	115.6	143.7	319.0	65.9	211.2	124.3	100.0	415.1	289.7	161.2	45.0	2,072.2
1968	52.4	158.8	236.2	138.5	284.6	219.8	254.7	490.4	111.6	306.6	32.9	373.9	2,660.4
1969	123.2	191.3	284.8	101.4	162.6	416.5	230.2	153.4	118.2	342.9	166.5	42.5	2,333.5
1972	—	—	—	—	—	—	—	—	263.5	162.5	195.0	258.0	—
1973	233.0	113.0	28.0	285.5	272.5	149.0	83.5	71.0	192.0	390.0	120.5	0.5	1,938.5
1974	65.5	111.0	214.5	264.5	184.5	226.0	261.0	244.5	172.5	232.0	70.0	65.0	2,111.0

5—5. 日降水量80mm以上の記録 Records of heavy rainfall Daily precipitation > 80mm

年	月	日	降水量	年	月	日	降水量	年	月	日	降水量	年	月	日	降水量
1960	Ⅷ	19	111.6mm	1963	Ⅹ	26	98.5mm	1966	Ⅴ	8	119.5mm	1968	Ⅻ	5	94.4
		20	198.8			28	92.6			23	98.5			29	83.0
	Ⅸ	1	96.0		Ⅺ	25	120.7		Ⅵ	10	88.2		Ⅵ	25	118.0
	Ⅹ	7	129.4	1964	Ⅴ	2	175.8	1967	Ⅵ	29	139.2	1969	Ⅶ	4	87.5
1961	Ⅺ	23	84.5		Ⅵ	4	82.0		Ⅳ	19	96.2		Ⅹ	8	123.5
	Ⅳ	26	111.5		Ⅵ	28	92.0		Ⅵ	28	141.5		Ⅸ	15	125.0
	Ⅹ	9	139.2	1965	Ⅷ	21	90.7	1968	Ⅸ	11	96.5	1972	Ⅻ	23	130.0
1962	Ⅴ	27	91.9		Ⅴ	4	96.0		Ⅹ	27	109.9		Ⅰ	18	82.0
	Ⅹ	11	120.3		Ⅵ	27	100.3		Ⅱ	15	93.8		Ⅴ	28	101.0
	Ⅺ	3	83.6		Ⅷ	23	89.5		Ⅲ	30	86.5		Ⅶ	7	113.0
1963	Ⅵ	4	151.0		Ⅸ	10	91.6		Ⅶ	5	105.0	1974	Ⅳ	8	80.0
	Ⅷ	28	141.5	1966	Ⅱ	28	102.0		Ⅷ	26	100.1				
	Ⅹ	8	133.8		Ⅲ	16	100.7		Ⅹ	23	104.5				

6. 千葉演習林の気象 (1960~1969年) 10ヶ年の平均

Average value of meteorological data of The Tokyo University Forest in Chiba(1960~1969)

	1月 Jan.	2月 Feb.	3月 Mar.	4月 Apr.	5月 May.	6月 June	7月 July	8月 Aug.	9月 Sep.	10月 Oct.	11月 Nov.	12月 Dec.	年平均 Annual
月平均気温 Mean monthly air-temperature °C													
天津 Amatsu	6.3	6.6	10.2	15.3	18.5	21.6	24.8	26.8	24.0	18.4	14.5	9.3	16.3
中原 Nakahara	6.4	6.5	10.0	15.0	19.1	21.7	25.1	27.3	24.2	18.3	14.3	9.3	16.4
清澄 Kiyosumi	3.7	3.6	7.2	12.5	16.7	19.4	22.9	24.6	21.1	15.4	11.5	6.7	13.8
札郷 Fudagô	2.7	3.3	7.2	13.0	17.5	20.4	24.4	25.9	22.0	15.8	11.5	5.9	14.1
郷台 Gôdai	4.2	4.4	7.9	13.4	17.7	20.5	24.3	26.0	22.0	16.4	12.3	7.5	14.8
月平均最高気温 Mean monthly maximum air-temperature °C													
天津 Amatsu	10.6	10.8	13.8	18.2	21.5	23.7	26.9	28.9	26.3	21.0	17.7	13.3	19.4
中原 Nakahara	10.7	10.8	13.7	18.1	21.7	24.2	27.4	29.6	26.8	21.3	18.2	13.5	19.7
清澄 Kiyosumi	8.4	8.5	11.4	16.0	19.6	22.3	25.5	27.3	24.3	18.8	15.1	10.9	17.3
札郷 Fudagô	8.6	8.7	11.7	16.4	20.6	23.0	26.9	28.8	25.0	19.2	15.9	11.4	18.0
郷台 Gôdai	8.9	9.1	12.1	16.8	20.8	23.4	26.9	28.8	24.8	19.5	16.1	11.7	18.2
月平均最低気温 Mean monthly minimum air-temperature °C													
天津 Amatsu	1.2	1.7	4.7	9.9	14.0	17.6	21.4	23.1	19.9	13.9	9.6	4.0	11.8
中原 Nakahara	1.2	1.9	4.8	10.0	14.5	18.0	21.8	23.3	20.1	14.0	9.6	4.2	12.0
清澄 Kiyosumi	0.8	0.6	3.5	8.9	13.3	16.5	20.4	22.0	18.7	12.9	8.6	3.9	10.8
札郷 Fudagô	98.3	98.8	2.1	7.9	12.1	16.2	20.6	21.9	18.2	11.8	6.8	1.2	9.7
郷台 Gôdai	99.7	99.2	2.4	7.4	12.0	16.2	20.5	21.9	18.0	11.5	7.2	1.9	9.8
月平均地中温度 Mean monthly underground-temperature °C													
中原 Nakahara													
0.1m deep	3.7	4.5	7.8	13.3	18.4	21.6	25.3	27.5	23.2	16.4	11.7	6.3	15.0
0.2m	5.5	6.1	9.1	14.0	18.4	21.5	25.1	27.7	23.8	17.4	13.1	8.1	15.8
0.3m	6.4	7.0	9.8	14.4	18.8	21.8	25.3	28.0	24.4	18.3	14.0	9.0	16.4
清澄 Kiyosumi													
0.1m deep	4.4	4.9	7.7	12.5	17.1	20.2	23.7	26.0	23.0	17.1	12.5	7.5	14.7
0.2m	4.4	5.9	7.3	12.0	16.6	19.6	23.1	25.3	22.8	17.0	12.6	7.6	14.5
0.3m	5.1	5.4	7.9	12.6	16.9	20.1	23.6	25.8	23.5	17.7	13.5	8.5	15.1
0.5m	6.4	6.1	8.2	12.3	16.7	19.6	22.9	25.3	23.3	18.2	14.2	9.5	15.2
1.0m	8.8	7.8	8.8	11.9	15.8	18.8	21.8	24.3	23.7	19.9	16.1	12.0	15.8
2.0m	13.5	11.9	11.1	11.5	13.2	15.3	17.5	19.3	20.4	19.8	17.9	15.8	15.6

札郷 Fudagô														
0.02m	deep	2.5	3.0	6.1	12.1	16.9	20.4	24.3	25.8	22.3	15.6	10.3	4.7	13.7
0.05m		3.4	3.9	6.6	11.9	16.4	19.8	23.8	25.4	22.2	15.8	11.0	5.6	13.8
0.1 m		4.1	4.7	7.1	12.0	16.3	19.6	23.6	25.3	22.2	16.2	11.8	6.6	14.1
0.2 m		6.0	6.2	8.2	12.6	16.7	20.0	23.8	25.7	23.4	17.8	13.7	8.7	15.2
0.3 m		7.2	6.8	8.3	12.5	16.6	19.5	23.0	25.0	23.1	18.5	14.7	10.1	15.4
		月平均湿度 Mean monthly relative humidity %												
天津 Amatsu		62.7	62.9	64.8	69.9	74.6	80.7	84.9	80.5	78.6	76.2	72.5	68.2	73.0
中原 Nakahara		68.0	70.9	72.1	75.0	78.6	84.0	86.7	81.3	80.5	80.1	77.9	76.2	77.6
清澄 Kiyosumi		58.1	61.4	65.3	71.0	74.1	80.7	85.7	82.8	83.3	78.1	72.0	65.4	73.2
札郷 Fudagô		65.9	63.4	65.1	72.6	76.8	82.8	84.6	81.4	83.5	82.2	76.4	70.1	75.4
郷台 Gôdai		62.2	63.1	65.5	70.0	75.1	80.7	83.0	79.4	83.1	81.0	74.6	67.3	73.7
		月間降水量 Monthly precipitation mm												
天津 Amatsu		68.8	86.0	166.9	146.2	213.0	259.6	140.8	169.1	156.3	242.5	137.4	78.6	1865.2
中原 Nakahara		54.6	67.4	152.3	144.2	238.1	260.2	189.7	164.9	153.6	204.6	138.8	78.9	1847.1
清澄 Kiyosumi		75.4	92.9	191.0	172.8	276.9	296.5	153.2	190.5	178.7	295.7	170.0	90.2	2183.8
札郷 Fudagô		78.5	111.5	213.4	217.6	297.7	339.3	153.1	216.3	187.5	337.1	185.3	103.1	2440.4
郷台 Gôdai		72.8	100.5	195.5	193.6	292.5	301.8	154.4	196.1	192.1	300.3	166.0	104.6	2220.7
		日蒸発量 Mean daily evaporation mm												
天津 Amatsu		1.9	2.0	2.1	2.5	2.4	2.1	2.5	3.0	2.4	1.9	2.0	1.8	2.2
中原 Nakahara		2.4	2.8	3.2	3.6	4.0	3.9	4.5	5.5	4.0	2.9	2.4	2.1	3.5
清澄 Kiyosumi		2.1	2.2	2.2	2.3	2.4	2.2	2.4	3.0	2.3	2.1	2.1	2.0	2.3