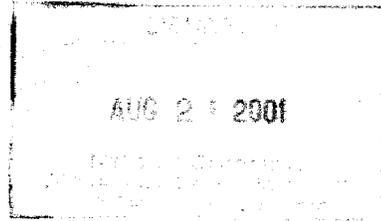


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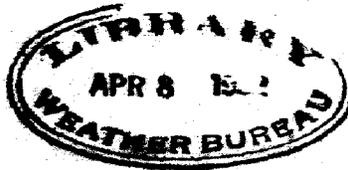


Jamaica Meteorological Office.

SOME NEW SHORT TERM TEMPERATURE  
MEANS FOR ELEVEN STATIONS  
IN JAMAICA

By

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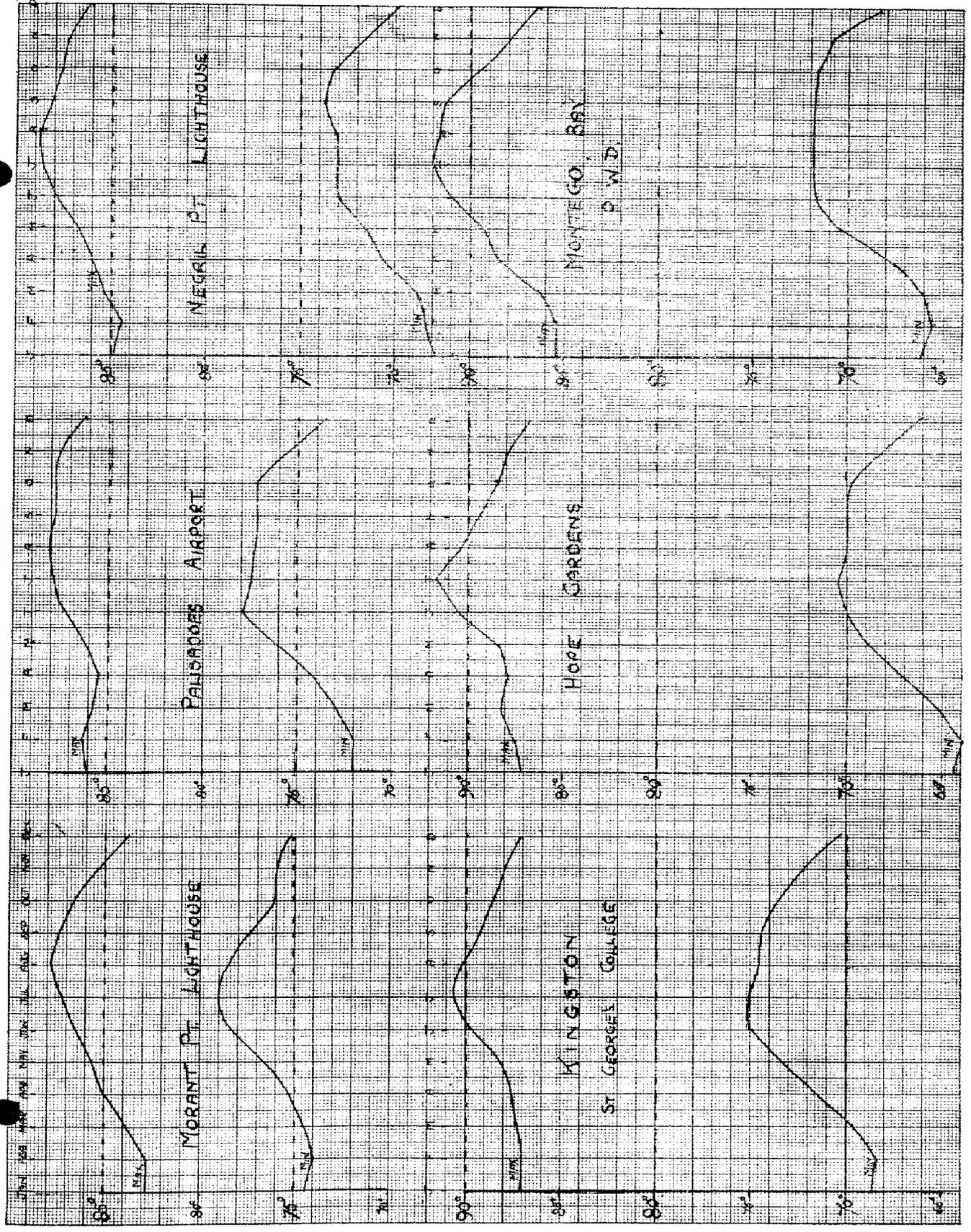
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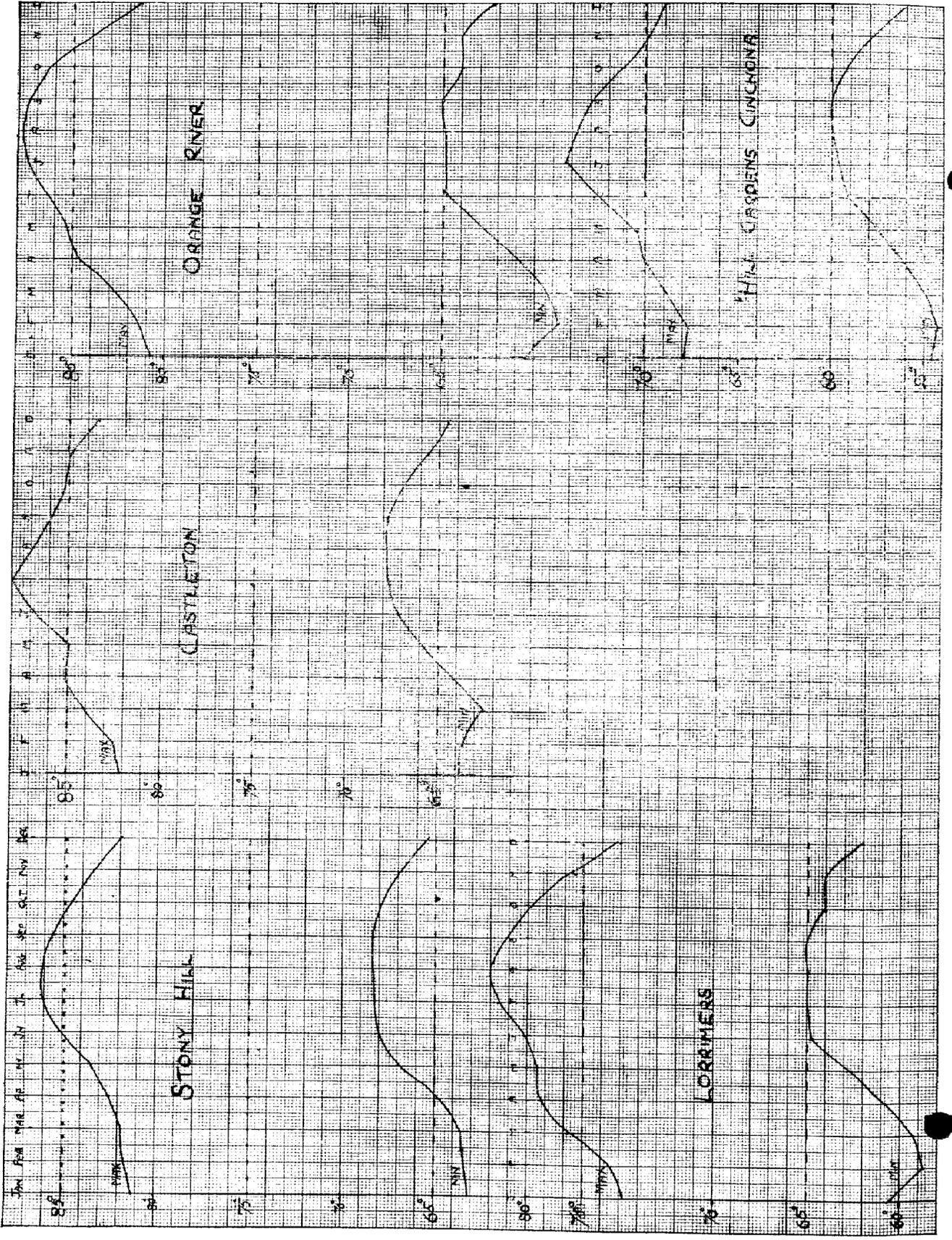
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LIST OF STATIONS

	<u>Approx. Height above sea-level</u>	<u>Years used for Means</u>
1. Kingston—St. Georges College	80	7
2. Hope Gardens	668	8
3. Palisadoes Airport	19	5
4. Montego Bay (P.W.D.)	33	7
5. Stony Hill Reformatory	1,400	16
6. Morant Point Lighthouse	8	10
7. Negril Point Lighthouse	33	7
8. Cinchona—Hill Gardens	4,900	10
9. Castleton Gardens	496	9
10. Orange River Agricultural Station	450	6
11. Lorrimers Banana Research Station	2,700	5







## SOME SHORT-TIME TEMPERATURE MEANS FOR JAMAICA

As there have been no temperature data published for Jamaica other than for Kingston, some short-term means have been calculated for eleven stations, varying in altitude from 8 feet above sea-level to 4,900 feet. In addition, means have been calculated for the highest maximum and lowest minimum temperatures taken at monthly intervals on Blue Mountain Peak (7,400 ft.) during the ten years 1891-1900. For comparison, the 33-year means for Kingston (published in the Jamaica Monthly Weather Report Series No. 553A) are given together with the means calculated for the present site at St. Georges College. (1943 onwards).

As would be expected, the station with the least range of temperature is Morant Point Lighthouse. At this site, on the extreme eastern end of the Island, the Easterly Trade winds blow with great constancy from the sea and there are no nearby mountains to give a cool night breeze. The mean monthly range is only 9.1°F. and the mean annual range 13.8°F. Palisadoes Airport, surrounded by water is somewhat similar to Morant Point in that it has such a small range of temperature. However, the proximity of the mountains give a gentle Katabatic night wind at times and lower the night temperature a degree below Morant Point. The daytime winds occasionally blow slightly from the land and cause the Palisadoes day temperature to be 1½% above the Morant figure.

The effect of the annual variation of wind, stronger north-easterly in Winter and stronger east-south-easterly in Summer and early Autumn have a profound effect on the Montego Bay temperatures. This station is cooler during the day than Kingston in December-March but warmer the rest of the year. The inland station at Hope is slightly warmer than Kingston during the day. At night, however, Montego Bay and Hope are both much cooler than Kingston all the year round.

It is unexpected to find that the inland station at Castleton, although some 170 feet lower in altitude than Hope, is considerably cooler both by day and night. It is only slightly warmer than Stony Hill Reformatory (1,400 ft.) and very similar to Morant during the day. Orange River is very similar to Castleton both during the day and the night.

At all stations, it is coolest in January and February, with a rapid rise in minimum temperature from March-May. The very small range of minimum temperature from June-September is a characteristic feature of all stations, whilst, in general, July is the hottest month at inland stations and August at coastal stations.

The following Kingston observations are of interest. The new site at St. Georges College is about one degree warmer both by day and night than the 33-year means formerly used.

Since records began in 1884, the following highest and lowest temperatures have been recorded in Kingston.

<i>Lowest:</i>	56.7	..	..	..	4th Dec., 1887
	56.9	..	..	..	1918
	58.2	..	..	..	1885
	59.7	..	..	..	1888 and 1910
<i>Highest:</i>	97.8	..	..	..	11th Aug., 1923
	97.5	..	..	..	1919
	97.3	..	..	..	1945

1888 had the highest annual mean maximum temperature with 89.5°F., closely followed by 1948 with 89.4°F. 1948 was the warmest year on record with a mean annual temperature of 80.5°, whilst 1887 was the coolest with 77.2°F., closely followed by 1917 (77.7°) 1910 (77.8°) and 1916 (77.9°).

The lowest mean minimum temperature was in 1887 with 69.3°, whilst 1890 recorded 69.8° and 1910 69.9°.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Mean	Monthly Range	Annual Range
KINGSTON — 37 YEAR MEANS (1881-1898 AND 1908-1922)															
Maximum ..	86.0	85.8	86.0	86.7	87.3	88.5	89.8	89.8	89.5	88.3	87.4	86.6	87.6	..	..
Minimum ..	67.4	67.3	68.1	70.2	72.4	73.6	73.4	73.5	73.5	72.6	70.9	68.8	71.0	16.6	21.5
Average Highest Max. ..	89.9	89.4	89.4	90.3	90.7	92.2	93.4	93.1	92.6	92.0	90.9	90.1	91.2	..	..
Average Lowest Min. ..	63.2	63.3	64.4	66.7	68.9	70.5	70.4	70.5	70.8	69.3	67.0	64.7	67.5	23.7	30.2
7 A.M. ..	69.0	69.2	71.1	74.7	77.7	78.4	78.0	77.2	76.8	75.4	73.1	70.6	74.3	..	..
3 P.M. ..	82.6	82.4	82.7	83.1	83.5	85.0	86.2	85.5	84.8	84.0	83.7	83.0	83.9	..	..
KINGSTON — ST. GEORGES COLLEGE (1943-1949)															
Maximum ..	87.1	87.0	87.4	87.6	88.2	89.9	90.7	90.2	89.2	88.5	88.0	87.1	88.4	..	..
Minimum ..	68.6	68.4	69.6	71.7	73.4	75.0	75.0	74.6	74.5	73.6	72.1	70.3	72.2	..	22.3
Average Highest Max. ..	91.2	90.0	91.2	90.9	90.8	93.6	94.8	93.3	93.5	91.9	90.9	90.2	91.9	..	..
Average Lowest Min. ..	65.1	65.2	66.3	68.2	70.0	72.0	72.1	71.6	71.3	71.2	68.5	66.0	69.0	..	29.7
7 A.M. ..	69.7	69.9	72.0	75.4	77.2	78.6	78.5	77.6	76.8	76.2	73.6	71.7	74.8	..	..
3 P.M. ..	84.5	83.7	84.1	84.0	84.1	86.1	87.0	87.8	85.1	84.7	84.8	83.6	85.0	..	..
HOPE GARDENS — (1941-1949)															
Maximum ..	87.2	87.5	88.2	87.9	88.3	90.7	91.7	90.4	89.3	88.4	88.0	87.0	88.7	..	..
Minimum ..	64.3	63.8	65.1	67.2	69.0	70.0	70.4	70.0	69.9	69.8	68.1	66.0	67.8	..	27.9
Average Highest Max. ..	90.7	90.9	92.1	92.7	92.8	94.9	96.3	94.9	94.6	92.3	91.7	90.6	92.1	..	..
Average Lowest Minimum ..	60.4	59.7	61.1	63.5	65.7	66.4	67.6	66.4	67.3	66.7	63.9	62.1	64.2	..	36.3
MORANT POINT LIGHTHOUSE — (1940-1949)															
Maximum ..	82.8	82.8	83.9	85.1	85.6	86.5	87.2	87.8	87.5	86.6	85.3	83.9	85.4	..	..
Minimum ..	74.4	74.0	74.4	75.4	76.6	78.5	79.0	78.5	77.3	76.0	76.0	75.3	76.3	9.1	13.8
NEGREL POINT LIGHTHOUSE — (1940-1949)															
Maximum ..	84.8	84.4	85.4	86.0	86.8	87.9	88.5	88.5	88.1	87.6	87.3	86.0	86.8	..	..
Minimum ..	67.8	68.3	68.8	70.6	71.5	73.0	73.0	73.2	73.7	73.3	71.6	69.9	71.2	15.6	19.7
MONTEGO BAY P.W.D. (1937-1943)															
Maximum ..	85.5	85.5	87.3	88.6	89.4	91.1	91.9	91.7	91.3	89.2	87.9	86.3	88.6	..	..
Minimum ..	66.2	65.6	66.0	67.8	70.4	71.7	71.9	71.9	71.7	71.7	70.9	68.4	69.5	19.1	25.3
PALMADOES AIRPORT — (1945-1949)															
Maximum ..	86.1	86.3	85.7	85.4	86.2	87.4	87.9	88.1	87.8	87.8	87.5	86.3	86.9	..	..
Minimum ..	71.9	72.0	72.9	74.1	76.2	77.9	77.5	77.3	77.3	77.3	75.4	73.5	75.3	11.6	16.1
STONY HILL — (1893-1908)															
Maximum ..	81.3	81.7	81.8	82.5	83.4	85.0	86.0	85.9	85.5	84.3	83.3	81.8	83.5	..	..
Minimum ..	63.2	63.3	63.5	64.9	67.1	68.1	68.2	68.3	68.3	68.0	66.6	64.3	66.1	17.4	22.8
CASTLETON GARDENS — (1940-1949)															
Maximum ..	82.1	82.5	84.0	85.1	84.9	86.9	87.8	86.9	85.8	85.2	84.8	83.4	84.9	..	..
Minimum ..	63.8	63.6	62.5	64.1	65.7	67.2	67.7	67.8	67.8	66.8	65.6	64.3	65.6	19.3	25.3
ORANGE RIVER — (1944-1949)															
Maximum ..	80.8	81.4	82.7	84.8	85.2	86.4	87.5	87.7	87.3	86.4	83.9	81.5	84.6	..	..
Minimum ..	64.4	63.9	63.0	64.6	67.0	69.4	69.3	69.2	68.9	68.8	67.5	66.4	66.9	17.7	24.7
LOBRIMERS — (1946-1950)															
Maximum ..	74.8	75.6	77.9	79.3	79.4	80.2	81.6	82.0	81.0	79.9	77.5	75.0	78.7	..	..
Minimum ..	60.4	58.7	59.3	60.8	62.8	64.8	64.9	64.9	65.0	64.0	64.1	62.2	62.7	16.0	23.3
CINCIONA, HILL GARDENS — (1940-1949)															
Maximum ..	67.9	67.7	69.1	70.0	70.5	72.8	74.2	73.8	72.9	71.2	69.9	68.9	70.7	..	..
Minimum ..	54.5	54.2	54.8	56.1	57.5	59.1	59.5	59.9	60.0	59.3	57.8	56.2	57.4	13.3	20.0
BLUE MOUNTAIN PEAK (1891-1900)															
Highest Mean Maximum ..	69.3	67.5	69.0	69.7	69.1	70.6	69.1	70.9	70.9	69.9	68.1	69.3	69.5	..	..
Lowest Mean Minimum ..	38.0	41.4	42.0	41.2	44.7	45.7	46.8	46.6	46.4	45.3	43.5	39.8	43.5	26.0	32.9