

SMITHSONIAN MISCELLANEOUS COLLECTIONS  
VOLUME 104, NUMBER 21

---

## Roebling Fund

---

# 1945-1946 REPORT ON THE 27.0074-DAY CYCLE IN WASHINGTON PRECIPITATION

BY

C. G. ABBOT

Research Associate, Smithsonian Institution



(PUBLICATION 3842)

CITY OF WASHINGTON  
PUBLISHED BY THE SMITHSONIAN INSTITUTION  
MARCH 27, 1946



SMITHSONIAN MISCELLANEOUS COLLECTIONS  
VOLUME 104, NUMBER 21

---

## Roebling Fund

---

# 1945-1946 REPORT ON THE 27.0074-DAY CYCLE IN WASHINGTON PRECIPITATION

BY  
C. G. ABBOT  
Research Associate, Smithsonian Institution



(PUBLICATION 3842)

CITY OF WASHINGTON  
PUBLISHED BY THE SMITHSONIAN INSTITUTION  
MARCH 27, 1946

The Lord Baltimore Press  
BALTIMORE, MD., U. S. A.

## Koebling Fund

### 1945-1946 REPORT ON THE 27.0074-DAY CYCLE IN WASHINGTON PRECIPITATION

By C. G. ABBOT

*Research Associate, Smithsonian Institution*

In Smithsonian Miscellaneous Collections volume 104, No. 9, I reported on this cycle, and gave a list of dates in the year 1945 when greater average precipitation might be expected than on the other days of the year.

The year 1945 having ended, I have computed the average precipitation per day of the "preferred" days and of the others for each month, and for the entire year. The results are as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
"Preferred" .....	0.151	0.098	0.035	0.115	0.138	0.271	0.244	0.073	0.083	0.043	0.130	0.197	0.1286
Other .....	0.032	0.111	0.022	0.105	0.083	0.095	0.386	0.009	0.216	0.050	0.175	0.146	0.1207
Ratio .....	4.72	0.88	1.29	1.10	1.66	2.86	0.73	8.55	0.38	0.86	0.74	1.35	1.065
Total, inches .....	2.89	2.94	0.84	3.26	3.44	5.13	9.99	1.37	4.56	1.46	4.62	5.29	45.79
Normal, inches .....	3.55	3.27	3.75	3.27	3.70	4.13	4.71	4.01	3.24	2.84	2.37	3.32	42.16
Percent normal .....	81	90	32	100	93	124	212	34	141	51	195	159	109

Of the 12 months, "preferred" days had higher average precipitation than other days in 7, viz, January, March, April, May, June, August, and December. The contrary occurred in 5 months, viz, February, July, September, October, and November. Of these unfavorable cases, July and November were exceptionally wet months, October an exceptionally dry one. Their unfavorable ratios nearly brought the year's ratio below unity.

For the complete year the ratio of average precipitations, "preferred" to other days, is 1.065. It is the twelfth consecutive year in which the ratio of average precipitations, "preferred" to other days, has exceeded unity.

The following table gives the dates for 1946 when the average precipitation in Washington is expected to exceed the average precipitation for the other days. In the first column are given in Roman numerals the "preferred" dates in a standard cycle of approximately 27 days.<sup>1</sup> As applied to the 12 months of 1945, these standard cycle dates fall on the days specified in the remainder of the table.

It should be emphasized that these dates relate only to Washington, D. C.

<sup>1</sup> See my original paper, Smithsonian Misc. Coll. vol. 104, No. 3, 1944.

Standard "preferred" dates	Jan.	Feb.	Mar.	Apr.	May	June
I .....12		8	7	3 30	27	23
II .....13		9	8	4	1 28	24
III .....14		10	9	5	2 29	25
IV .....15		11	10	6	3 30	26
V .....16		12	11	7	4 31	27
XII .....23		19	18	14	11	7
XIII .....24		20	19	15	12	8
XV .....26		22	21	17	14	10
XVII ..... 1 28		24	23	19	16	12
XVIII ..... 2 29		25	24	20	17	13
XXII ..... 6		2	1 28	24	21	17
XXVI .....10		6	5	1 28	25	21
XXVII .....11		7	6	2 29	26	22

Standard "preferred" dates	July	Aug.	Sept.	Oct.	Nov.	Dec.
I .....20		16	12	9	5	2 29
II .....21		17	13	10	6	3 30
III .....22		18	14	11	7	4 31
IV .....23		19	15	12	8	5
V .....24		20	16	13	9	6
XII ..... 4 31		27	23	20	16	13
XIII ..... 5		1 28	24	21	17	14
XV ..... 7		3 30	26	23	19	16
XVII ..... 9		5	1 28	25	21	18
XVIII .....10		6	2 29	26	22	19
XXII .....14		10	6	3 30	26	23
XXVI .....18		14	10	7	3 30	27
XXVII .....19		15	11	8	4	1 28