

Damage to nursery stock.....	\$30,000
Damage from rain and wind to oranges.....	232,000
Damage from rain and wind to strawberries....	125,000
Damage from rain and wind to cut flowers.....	35,000
Total.....	690,300

The damage listed above is only a fraction of the entire loss in Los Angeles County alone, when highways, railways, buildings, soil erosion, livestock, poultry, automobiles, farm equipment, power lines, telegraph and telephone lines, etc., are all considered. Extend this loss to the other four counties involved and the loss becomes tremendous. A rough estimate, at the close of the flood period for southern California, was placed at \$24,500,000. It is unlikely that any close approximation of the intangible losses, such as soil erosion can ever be made. It is known

that millions of tons of soil and subsoil were removed by floodwaters from the mountains, valleys, and lowlands; much of the eroded material was deposited over areas to become a burden or a real menace; large portions were actually washed into the ocean; large quantities filled the many storm debris basins and are being removed; untold tons were deposited in the bottoms of southern California artificial lakes and reservoirs.

Data obtained from the American Red Cross show deaths from the great flood as follows:

Los Angeles County.....	29
Orange County.....	20
San Bernardino County.....	11
Riverside County.....	15
Ventura County.....	4
Total.....	79

## NOTES AND REVIEWS

**Monthly Observed Sunspot Relative Numbers for 1937**, by CHARLES M. LENNAHAN.—The sunspot relative numbers for 1937 have recently been published in the *Astronomische Mitteilungen*, Nr. 136, Zurich 1938, by W. Brunner. These numbers are based not only upon observations made at Zurich and Arosa but also upon those made at 55 other stations distributed throughout the world; they therefore differ somewhat from the provisional numbers published regularly in the MONTHLY WEATHER REVIEW.

### Sunspot relative numbers for 1937

January.....	132.5	August.....	137.7
February.....	128.5	September.....	100.7
March.....	83.9	October.....	124.9
April.....	109.3	November.....	74.4
May.....	116.7	December.....	88.8
June.....	130.3		
July.....	145.1	Year.....	114.4

No day during the year was free of sunspots.

The same issue of *Astronomische Mitteilungen* gives the mean relative number for 1936 as 79.7 and not 80.4 as incorrectly published in *Astronomische Mitteilungen* No. 135, page 197, and as republished in the MONTHLY WEATHER REVIEW, volume 65: 338, September 1937.

## BIBLIOGRAPHY

[RICHMOND T. ZOCH, in Charge of Library]

By AMY D. PUTNAM

### RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

Abbot, C. G.

Further evidence on the dependence of terrestrial temperatures on the variations of solar radiation. Washington. 1936. 4 p. figs. 24½ cm. (Smithsonian miscellaneous collections. Arthur fund.)

Anteva, Ernst.

Rainfall and tree growth in the Great basin . . . Edited by J. K. Wright. [Washington, D. C.] 1938. 97 p. illus. (maps), diags. (2 fold. in pocket). 25½ cm. [Carnegie institution of Washington. Publication no. 469.] American geographical society of New York, Special publication no. 21. "List of references:" p. [87]-91.

Baldwin, Henry I., & Brooks, Charles F.

Forests and floods in New Hampshire. Boston, Mass. 1936. 28 l. tables, maps. 28 cm. Mimeographed. (New England regional planning commission. Publication. no. 47. December 1936.)

Barth, Richard.

Das Wetter der Heimat: Ein didaktischer Aufbau. Erfurt. 1935. 111 p. illus., tables, diags. 23 cm. Title facing titlepage: Volkhafte Schularbeit. Beiträge zur deutschen Erziehung. A. Hoffmann, W. Kramer, & R. Vogel.

Benedik, Nikolaus.

Systematische Wettervorhersagen. Betrachtungen über die Periodizität des Wetters. Wien. 1933. 63 p. tables, diags. 18 cm.

Berlage, H. P., Jr.

Metingen van de intensiteit van de zonnestraling op verschillende plaatsen in Ned.-Indië in de laatste jaren. Batavia.

1936. p. [104]-116. figs., tables. 24½ cm. [Overdruk uit het verslag van de 15e vereeniging van proefstation-personeel te Batavia, October 1935, pagina 104-116.]

Brunt, D.

Climatic cycles. London & Beccles. 1937. p. [214]-238. figs., tables. 24½ cm. [Reprinted from the Geographical journal, v. 89, no. 3, March 1937.]

Bureau, Robert.

Les foyers d'atmosphériques. Paris. 1936. 94 p. figs., plates, maps, tables. 34 cm. At head of title: Ministère de l'air. No. 25. Memorial de l'Office national météorologique de France. Publié sous la direction de M. Wehrlé.

Chapman, S.

The earth's magnetism. London. 1936. 116 p. diags. 17½ cm.

Díaz, Severo.

Mis ensayos en la previsión del tiempo. 1895-1935. Guadalajara, Jal. 1936. 29 p. fig., diagr. 22½ cm.

Jatho, Alfred.

Die Untersuchung der Niederschläge nach der Methode der Höhenordnung. Leipzig. 1934. 88 p. tables, diags. 22½ cm.

Journal of geophysics.

Periodical of the Hydro-meteorological committee of the USSR People's commissary of agriculture and of the Science section of the RSFSR People's commissary of education. Moscow. 1931- . . . 25½ cm. (In Russian.) v. 1, no. 1-2, 1931. v. 2, no. 1-3, 1932.

Skogsberg, Tage.

Hydrography of Monterey bay, California. Thermal conditions, 1929-1933. Philadelphia. 1936. 152 p. illus., tables, diags. 30 cm. (At head of title: American philosophical socy. Trans. New series, v. XXIX, Dec. 1936.)