received in Washington, beginning in 1915, and more accurate measurements since 1922. Some preliminary results are shown in the figures.

In Figure 1 the annual averages of sun-spot numbers and of daylight signal strength of Nauen, reduced to a constant antenna current, from 1915 to 1926, are given. The earlier years of the Nauen reception curve have little claim to accuracy, but it is certain that there was a reception maximum in 1917 and low values from 1920 to 1924.

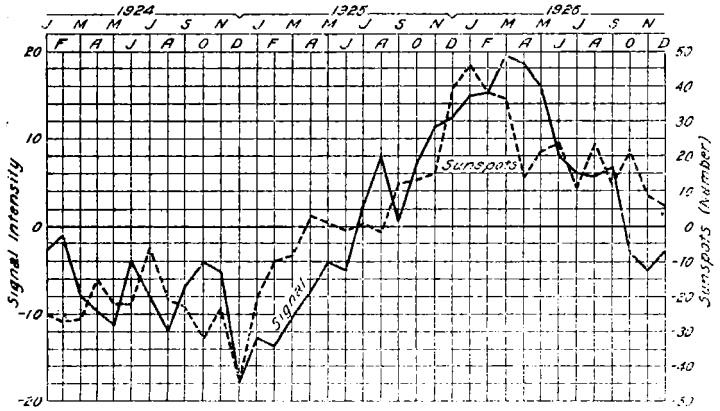


FIG. 2.—Monthly deviation from three-year monthly averages of sun-spot numbers and signal (LY, KET, AGS, FU, FT, 10 a. m. and 3 p. m.)

Figure 2 shows the relationship between the monthly average sun-spot numbers and the deviations of the individual monthly daylight means of several stations from the averages of the corresponding months for the three years—1924, 1925, and 1926. The deviations rather than the monthly averages are used to eliminate the rather large seasonal variations. These curves of sun spots and signals, while not following each other exactly from month to month, appear to show a quite definite positive correlation between solar activity and strength of long-wave daylight radio transmission averaged over long periods.—*L. W. Austin.*

## INTERRELATIONS OF PRESSURE ANOMALIES OVER THE EARTH[1]

By F. M. EXNER

[Reprinted from Science Abstracts, April, 1927, sec. No. 917]

The author tabulates as in a previous paper [see Abstract 1836 (1925)] the mean monthly pressure anomalies for the winter and summer half-years for 71 stations scattered over the world. The pressure at Obdorsk is correlated with the other places, and a region between 40° and 60° N. quite round the earth has with this place almost a zero correlation. Eight stations on or near this area are chosen and their pressure anomalies for the winter half-year correlated with the whole of the 71 stations. A shorter method of arriving at the results is then examined, using an extreme positive or negative anomaly at each of the 8 selected stations and finding the corresponding values for all the others. The results are exhibited in a series of charts and explained in detail. The method gives the influence of abnormal pressure at one place on the pressure at other parts of the earth. The possible dynamical and thermal considerations which may produce these results are examined and applied in several cases. Polar regions are mostly places of maximum influence, while southwards over the sea there are also places of large correlation. Continental regions have a small influence. Next, assuming particular anomalies at 2 selected stations, the author considers how the average pressure distribution is produced, and gives tables and graphs of his tests for six combinations of two places in the Northern Hemisphere when their pressure anomalies are of the same sign and of opposite sign, using again the winter half-year. For a clearer picture of the origin of the pressure distribution over the earth a longer series of observations than 30 years would be necessary, and combinations of pressure anomalies at three places should then be taken, with also due consideration to the temperature anomalies.—*R. S. R.*

[1] Akad. Wiss. Wien. Ber. 135. 2a. No. 7–8, pp. 333, 355, 1926.

## WEATHER BUREAU STAFF MEETINGS, 1926–27

By EDGAR W. WOOLARD, Secretary

The regular biweekly meetings of the scientific and technical staff of the Central Office of the United States Weather Bureau, initiated in the autumn of 1923, have been continued on the same plan as heretofore during the winter of 1926–27. Following is a list of the discussions. (Asterisks denote speakers not officially connected with the Weather Bureau.) Meetings during previous seasons have been reported in the MONTHLY WEATHER REVIEW, 1924, **52**, 35–36, 166; 1925, **53**, 264; 1926, **54**, 215–216.

### October 6, 1926

*E. W. Woolard.* Seiches in lakes, and the application of Chrystal's theory to Lake Vetter.

**C. G. Rossby.* Remarks on the influence of winds on lake levels.

### October 20, 1926

*W. R. Gregg* and *L. T. Samuels.* National and international sounding balloon explorations; preliminary results of the sounding balloon observations made at Royal Center, Ind., during May, 1926.

### November 3, 1926

**L. Gorczynski.* Demonstration of thermoelectric radiation instruments, and some solar radiation measurements obtained in the Sahara Desert.

### November 17, 1926

*H. H. Kimball.* A review of Ångström's paper on "Radiation and Climate."

### December 1, 1926

*E. W. Woolard.* The thermodynamical relations of the free atmosphere.

*L. T. Samuels.* The graphical reduction and representation of aerological data at the Lindenberg Observatory.

*W. R. Stevens.* The tephigram.

### December 15, 1926

*W. J. Humphreys.* The tornado.

### January 12, 1927

*W. C. Haines.* The Byrd Arctic expedition.

*S. P. Fergusson.* The University of Michigan expedition to Greenland.

### January 26, 1927

*R. H. Weightman.* The application of the polar front theory to American weather maps.