CORRESPONDENCE

Seven-Day Periods

Dr. Langmuir's provocative suggestion (Dec. 1950, BULLETIN, pp. 386–7) that his scheduled operated silver iodide generator may have caused a seven-day periodicity in weather over the United States recalled to mind some Soviet researches that I was assigned to study during the early days of World War II. These were mainly papers relating to Soviet techniques of extended forecasting, the basis for which I could never understand. However, I was very much impressed with the approaches to and the investigations on natural synoptic periods which can be, and to some measure have been, used as a basis for so-called synoptic climatology. The natural synoptic period is defined as a sequence of weather whose daily weather patterns are genetically associated with a particular synoptic process.

The following table was taken from Pagava's book on *Basic Principles of the Synoptic Method of Long-Range Weather Forecasting,* published by the Hydrometeorological Publishing House, Leningrad, 1940.

The data rather clearly indicate that the most common natural synoptic period is seven days in duration—in fact, over 65 percent of the weather processes tabulated have a period between six and eight days. This does suggest that a seven-day period in the atmosphere is at least not foreign to the Eurasian continent.

DURATION OF SYNOPTIC PERIODS 1926–1935

Duration of the period (in days)	No. of periods in each year										No. of periods during all the years	Percent
	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935		
4	—	—	—	1	—	—	—	1	—	—	2	0.4
5	—	—	1	3	2	5	3	5	6	3	28	6.1
6	8	1	4	14	3	10	11	18	17	10	96	20.6
7	3	6	5	14	11	13	17	16	14	19	118	25.3
8	8	13	6	4	8	9	11	7	9	16	91	19.5
9	8	5	7	4	7	6	6	2	6	4	55	11.8
10	9	10	4	2	4	3	—	—	—	—	32	6.8
11	1	2	4	3	3	2	1	1	1	—	18	3.9
12	4	3	4	1	3	—	—	—	—	—	15	3.2
13	2	1	3	—	—	—	—	—	—	—	6	1.3
14	—	—	2	—	—	—	—	—	—	—	2	0.5
15	—	—	—	1	—	—	—	—	—	—	1	0.2
16	—	—	—	2	—	—	—	—	—	—	2	0.4

COL. B. G. HOLZMAN, *USAF,*
Washington, 2 March 1951.

Program of the 110th National Meeting, American Meteorological Society, Washington, May 2–4, 1951

All sessions are to be held in the auditorium of the Natural History Building (National Museum) on Constitution Avenue, at 10th Street. (*Note:* The Meteorology Section of the American Geophysical Union will hold sessions on May 1, in the morning at the National Academy of Sciences and in the afternoon at the General Services Auditorium, F St. between 18th and 19th.)

Wednesday morning, May 2nd, 9 A.M.

TURBULENCE

"Turbulence Research at M.I.T.'s Round Hill Field Station." E. W. Hewson. 10 minutes.

"Micrometeorological Instrumentation at M.I.T.'s Round Hill Field Station." G. C. Gill. 20 minutes.

"Preliminary Results of a Program for Measuring the Intensity and Scale of Turbulent Flow Near the Ground." H. E. Cramer. 20 minutes.

"An Investigation of the Diurnal Variation in the Behavior of Smoke from a Continuous Point Source at Ground Level." F. A. Record. 20 minutes.

"An Application of Statistical Mechanics to Turbulent Transport Processes." W. V. R. Malkus. 20 minutes.

"Some Observations of the Scale, Intensity and Frequency Spectrum of Atmospheric Turbulence." J. R. Gerhardt. 15 minutes.

Wednesday afternoon, May 2nd, 2 P.M.

TURBULENCE (Continued)

"An Analysis of the Eddy Flux of Heat During a 24-Hour Period in January, 1950, at Manor, Tex." K. H. Jehn and J. R. Gerhardt. (To be read by Mr. Jehn.) 20 minutes.

"Low-Level Temperature Sounding System for Routine Use." R. F. Myers. 15 minutes.

"Time-Sections of the Lowest 5000 Feet." J. Z. Holland. 15 minutes.

"Onset of Turbulence near the Ground after Sunrise and the Richardson Criterion." R. C. Wanta. 20 minutes.

"A Study of the Dependence of Eddy Conductivity on Height." R. G. Fleagle. 20 minutes.

"Sampling Theory as Applied to the Measurement of Turbulence by Radar." A. Fleisher. 20 minutes.

Thursday morning, May 3rd, 9 A.M.

RADAR METEOROLOGY

"Some Observations of Precipitation Processes Within Natural Clouds." R. M. Cunningham. 20 minutes.

"Intensity of Radar Echoes from Snow." J. Marshall. 20 minutes.

"The Interpretation of Microwave Reflections from Rainfall." D. Atlas. 20 minutes.