

## International Geophysical Calendar 1961

1. **Purpose.** — The International Geophysical Calendar 1961 designates selected days and intervals for special attention for geophysical experiments and analysis and is thus a framework for world-wide coordination. It serves mainly the branches of geophysics dealing with the earth's atmosphere in which many phenomena vary significantly during the course of a year. In some experiments, such as the routine recording of variations of the earth's magnetic field, the observing and analysis programs at observatories are normally carried out at a uniform level throughout the year; in these cases the Calendar is not needed. However, in many other experiments (for example, rocket experiments), it is not practical or meaningful to carry out the same program on each and every day. Here the Calendar can provide a useful mechanism for coordination: experimenters will know that their colleagues in other countries, in other laboratories and in other disciplines will tend to also carry out experiments on the days or intervals marked on the Calendar. In this way, results of experiments may later be more easily and usefully compared.

In some scientific fields, international scientific organizations have made specific recommendations for programs to be done on days or intervals marked on the Calendar. In others, the arrangements are informal or self-evident. Some examples are given below.

2. **Regular World Days (R.W.D.)** are intended for observations or analyses or special experiments which as a practical matter can be done for only about 10 % of days and should be spaced throughout the year. Examples in Ionospheric Physics are: oblique incidence pulse transmission and reception; absorption measurement by pulse reflection technique; extended observing schedule for whistlers and V.L.F. emissions; vertical sounding ionograms by  $f$ -plot,  $h'$ -plot, etc.; hourly reduction from ionograms of F-region true height parameters « $hc$ » and « $qc$ ».

The R.W.D. with highest priority are for similar work which can be undertaken for only one day each month. A specific example is the program recommended by U.R.S.I. for exchange of copies of original ionograms in ionospheric vertical sounding work.

3. **Regular World Intervals (R.W.I.)** are intended for experiments which for practical reasons cannot be carried on continuously, but for which statistics of seasonal variations are especially needed. Ionospheric drift and high atmosphere wind measurements are two examples. Schedules for interchange of sample detailed data in several disciplines have made use of the R.W.I. A combination of the R.W.I. and R.W.D. provides a sampling of variations throughout the year but with improved statistics at the equinoxes and solstices.

4. **World Meteorological Intervals (W. M. I.)** are intended to cover the times of marked seasonal change in certain upper air meteorological phenomena which tend to come about a month after the equinoxes and solstices. The W. M. I. are periods designated by COSPAR for carrying out synoptic meteorological rocket programs, with launchings at a network of stations up to 50 kilometers or more, at least once daily during the 10-days intervals. The W.M.I. have also been used during and since the I.G.Y. for balloon sounding programs either with special instruments or launchings to unusually high balloon altitudes.

5. **International Rocket Week (I.R.W.)**, selected by COSPAR, provide two periods during the year for special emphasis of scientific studies by means of rockets. The first I.R.W. includes the time of the February 15 solar eclipse and is intended for study of solar effects on the atmosphere. The second I.R.W. was selected for study of (northern hemisphere) summer atmospheric structure. Appropriate associated data from nearby ground geophysical stations will be especially useful during I.R.W.

6. **Other Special Days** marked on the Calendar include the days of the two 1961 solar eclipses when special programs may be expected to be carried out in appropriate parts of the world to study eclipse effects on the earth's atmosphere. Ionospheric stations customarily increase their observing programs even if the magnitude of eclipse at their location is small. Many solar activity observatories take extra observations and issue specially detailed reports to assist the interpretation of the geophysical efforts. Also shown are days when meteor shower activity is unusually high. Geophysicists using meteor techniques often enhance their observing programs on these days. Attention is also called to these days in case ionization produced by meteors may account for unusual effects in other geophysical experiments.

7. **Special Intervals not appearing on Calendar.** — Periods of great magnetic, auroral and ionospheric disturbance are also of great geophysical interest. World-wide coordination of observation is especially useful for stations not near the auroral zones places where the beginning of a major disturbance may not be immediately apparent from local observations. Notices of *Geophysical Alerts* and *Special World Intervals (SWI)* are distributed by telegram or radio broadcast on a current basis by the solar-geophysical Regional Warning Centers, whose telegraphic addresses are as follows: AGIWARN WASHINGTON (U. S. A.); AGI KOKUBUNJI (Japan); NIZMIR MOSCOW (U. S. S. R.); IONOSPHERE DARMSTADT (G.F.R.) or GENTELABO PARIS (France) or A.G.I. NEDERHORSTENBERG (Netherlands). The meteorological telecommunications network coordinated by W.M.O. carried such information once daily soon after 1600 U.T. Many geophysical stations increase their programs or carry on special experiments during disturbed periods. Prompt notification of major solar flare events which have important and sometimes long lasting geophysical effects are also undertaken through the Regional Warning Centers.

8. *The International World Day Service (I.W.D.S.)* was established in 1958 by the International Council of Scientific Unions (I.C.S.U.) and is administered by the International Scientific Radio Union (U.R.S.I.), 7, Place Emile Danco, Brussels 18, Belgium. This Calendar has been drawn up by A. H. Shapley and J. V. Lincoln in consultation with interested I.C.S.U. unions and committees and representatives of the W.M.O. A fuller description of the Calendar is appearing in the *U.R.S.I. Information Bulletin* and various widely available scientific publications.

# International Geophysical Calendar 1961

Issued November 1960 by the International World Day Service under the auspices of U. R. S. I.

1961 JANUARY 1961

S	M	T	W	T	F	S
	1	2	3	4	5	6 7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
* 22	23	24	25	26	27	28
29	30	31				

1961 FEBRUARY 1961

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
(12)	13	(14)	(15)	(16)	17	18)*
19	20	21	22	23	24	25
26	27	28				

1961 MARCH 1961

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	(21)	(22)	(23)	24	25
26	27	28	29	30	31	

1961 APRIL 1961

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	(18)	(19)	(20)	21	22
23	24	25	26	27	28	29
30						

1961 MAY 1961

S	M	T	W	T	F	S
			1	2	3	4 5 6
7	8	9	10	11	12	13
14	15	(16)	(17)	(18)	19	20
21	22	23	24	25	26	27
28	29	30	31			

1961 JUNE 1961

S	M	T	W	T	F	S
					1	2 3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	(20)	(21)	(22)	23	24
25	26	27	28	29	30	

1961 JULY 1961

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
(16)	17	(18)	(19)	(20)	21	22
23	24	25	26	27	28	29
30	31					

1961 AUGUST 1961

S	M	T	W	T	F	S
			1	2	3	4 5
6	7	8	9	10	(11)	12
13	14	(15)	(16)	(17)	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

1961 SEPTEMBER 1961

S	M	T	W	T	F	S
						1 2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	(19)	(20)	(21)	22	23
24	25	26	27	28	29	30

1961 OCTOBER 1961

S	M	T	W	T	F	S
						1 2 3 4 5 6 7
8	9	10	11	12	13	14
15	16	(17)	(18)	(19)	20	21
* 22	23	24	25	26	27	28
29	30	31				

1961 NOVEMBER 1961

S	M	T	W	T	F	S
				1	2	3 4
5	6	7	8	9	10	11
12	13	(14)	(15)	(16)	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

1961 DECEMBER 1961

S	M	T	W	T	F	S
						1 2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	(19)	(20)	(21)	22	23
24	25	26	27	28	29	30
31						

1962 JANUARY 1962

S	M	T	W	T	F	S
			1	2	3	4 5 6
7	8	9	10	11	12	13
14	15	(16)	(17)	(18)	19	20
21	22	23	24	25	26	27
28	29	30	31			

(17) Regular World Day (RWD)

(18) RWD with highest priority

21 Day with unusual meteor shower activity

(15) Day of solar eclipse

(16 17 18 19...) World Meteorological Interval (WMI)

(14 15 16 17...) Regular World Interval (RWI)

(12 13 14 15...) International Rocket Week (IRW)

Notes : (\*) WMI in January and October considered most important

(\*) Feb. 15, 1961 : RWD with highest priority