

THE INTERNATIONAL HELIOPHYSICAL YEAR 2007-2009 AND IMMEDIATE TASKS OF MODERN METEOR SCIENCE

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The IGY had given impetus to the development of meteor research all over the world and first of all in the republics of the former Soviet Union in Russian language. Meteors have appeared extremely important in numerous aspects for IGY1957 taking into account the incoming space era and revolutionary implementation of radar methods in scientific researches. Meteor particles in the terrestrial atmosphere together with the Sun influence on the conditions in the ionosphere. Geophysical aspects (turbulence, composition, etc.) and meteor activity were in the ranks of meteor research tasks of the IGY. Meteor researches were included into the section V "The Ionosphere. Meteors" in the IGY 1957 Program (Fig. 1, 2).

The IHY Conveners had included the meteor researches into the IHY program under the title "Meteors, Meteoroids and an Interplanetary Dust". This title emphasizes the widening of area of meteor research in new Heliophysical year <http://ihy2007.org>. During the Geophysical year 1957 the phenomena caused by meteor particles (the meteors) were studied directly in the terrestrial atmosphere (Kolomiyets & Sidorov, 2007). During the incoming Heliophysical year meteor particles (meteoroids) will be an object of study on all an extent from the Sun up to borders of Solar system will be studied, actually on all an extent of a heliosphere (Kolomiyets & Slipchenko, 2007). Using meteor monitoring in the frame of the International Year Planet Earth (IYPE) together with preserving orbital data in the frame of the Electronics Geophysic Year (eGY) is discussed. The coordinated investigation program CIP at number 65 "Meteors in the Earth atmosphere and Meteoroids in the Solar system" in the list of the IHY is presented <http://www.ukssdc.ac.uk/cgi-bin/ihy/cip-filter.pl>.

References

- Kolomiyets S.V., Sidorov V.V.: 2007, *In Proc. IAU Special Session 5*, eds. J.B. Hearnshaw, P. Martinez, Cambridge University Press, Cambridge, U.K., 4, 189.
- Kolomiyets S.V., Slipchenko M.I.: 2007, *in Proc. Meteoroids 2007, Springer: Moon, Earth and Planets*, eds. Trigo-Rodriguez J.M., Rietmeijer F.J.M., Llorca J., Dordrecht, the Netherlands, No 9209, 60, 2.

Tabl. 1. Participants of program IGY 1957 on meteor research in the USSR

R - radar, Ph - photographic, V - visual

N	City	φ	λ	H m	Scientific institutes / Country / Chairs	Program, N igy
1	<i>Ashkhabad</i>	37 ° 56'	58 ° 24'	200	Astrophysical Laboratory of the Institute of Physics and Geophysics AS Turkmen SSR I.A. Astapovich, Ya.F. Sadykov.	R, Ph, V N696 (C126)
2	<i>Kazan</i>	55 ° 47'	49° 07'	80	Astronomical observatory named Engelgardt of the Kazan University Russian SFSR K.V. Kostilyov.	R N233
3	<u>Kiev</u>	50 ° 27'	30° 30'	185	Astronomical observatory of the Kiev University Ukrainian SSR A.F. Bogorodskiy,	R, Ph, N320
4	<u>Odessa</u>	46 ° 29'	30° 46'	50	Astronomical observatory of the Odessa University Ukrainian SSR V.P. Tsesevich, E.N. Kramer	R, Ph, V N621
5	Stalinabad <i>Dushanbe</i>	38 ° 34'	68° 46'	820	Institute of Astrophysics AS Tajik SSR L.A. Katasev, P.B. Babadzhanov, A.M. Bakharev.	R, Ph, V N680 (C115)
6	<i>Tomsk</i>	56 ° 29'	84° 59'	120	Tomsk Polytechnical Institute (<i>faculty of Radiophysics</i>) Russian SFSR Ye.F. Fialko.	R N224
7	<u>Kharkov</u>	50 ° 00'	36° 14'	140	Kharkov Polytechnical Institute (<i>faculty of Radioengineering</i>) Ukrainian SSR B.L. Kashcheyev	R N358(B141)

Figure 1:

Addresses of the organizations coordinating meteor researches in the USSR during time IGY (as of 1957):

- 1) **Moscow, B. Gruzinskaja 10, Astronomical Council AS of the USSR, the Commission on Comets and Meteors.**
- 2) **Odessa, Park named Shevchenko, Astronomical observatory of the Odessa University (parent organization of meteor service of the USSR during period IGY).**

On organizational questions also:

- 3) **Moscow, the Kaluga highway 71, Interdepartmental Committee on carrying out IGY at Presidium AS of the USSR, working group on studying meteors.**

Materials should be sent to the address:

- 4) **the Moscow area, post Vatutenki, the Scientific research Institute of Terrestrial Magnetism, an Ionosphere and Distribution of Radiowaves (now IZMIRAN)**



Figure 2: