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ADDENDUM

A Bibliography on Zodiacal Light and Gegenschein during the Triennium 1961–1964

By J. L. Weinberg

This non-annotated bibliography is a compilation of zodiacal light and gegenschein references during the period January 1961 through June 1964 which were available to or known of by the author. Also included are papers on closely related problems which make use of zodiacal light results. It was not our intent to provide another bibliography on the closely-related topic of interplanetary matter, but we have included several references on this and other related subjects on the basis of our bias as to what should be included in such a bibliography.

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APPENDIX. SPECTRAL INVESTIGATIONS OF THE NIGHT AIRGLOW IN U.S.S.R.

(prepared by N. N. Shefov)

During the IGY and the later years spectrographic and photometric investigations of the airglow have been performed in the U.S.S.R. Observations were obtained at: the Loparskaya (at Murmansk), Roshchino (at Leningrad), Zvenigorod (at Moscow), Yakutsk, Tiksy, Alma-Ata, Ashkhabad, Abastumani and Simferopol. Spectrographs SP–47, SP–48, and SP–50 (**1**) were used for spectrographic investigations. For the photography of spectra in the infra-red, the photocontact image converters FKT–1 (**2, 3**) proved to be very sensitive. Reliable records of the hydroxyl band emission from 8000 Å to 13 000 Å are being obtained now (**4**) with the aid of spectro-electrophotometers with the resolving power about 5 Å within several tens of minutes.

At present, from the Zvenigorod observational data, N. N. Shefov obtained photographs of the night airglow spectrum with hydroxyl bands within 5000 Å–12 500 Å. From these data, he determined the intensity of the OH bands in this interval, among them the OH (10·4) band (5–9). The wavelengths of these OH bands have been determined by L. V. Mironova and N. N. Shefov (**10**). The intensities of some OH bands have been measured in Yakutsk by V. I. Yarin (**8, 11**), in Alma-Ata by V. I. Kariuguina (**12**), in Abastumani by L. M. Fishkova (**13–16**) and in Loparskaya and Simferopol by V. I. Moroz (**17, 18**). The mean distribution of the population in the vibrational levels of the OH molecules is well represented by the Boltzmann distribution with T_k about 10 000°K. However, from V. I. Yarin's data (**19**), a deviation from such distribution is sometimes observed. Observations obtained at a number of stations discovered a change in the relative populations of the vibrational levels (**7, 8, 11, 12, 15, 19**). N. N. Shefov (**9**) and V. I. Yarin (**19**) have shown that the distribution in the vibrational levels of the newly formed excited OH molecules is not uniform.