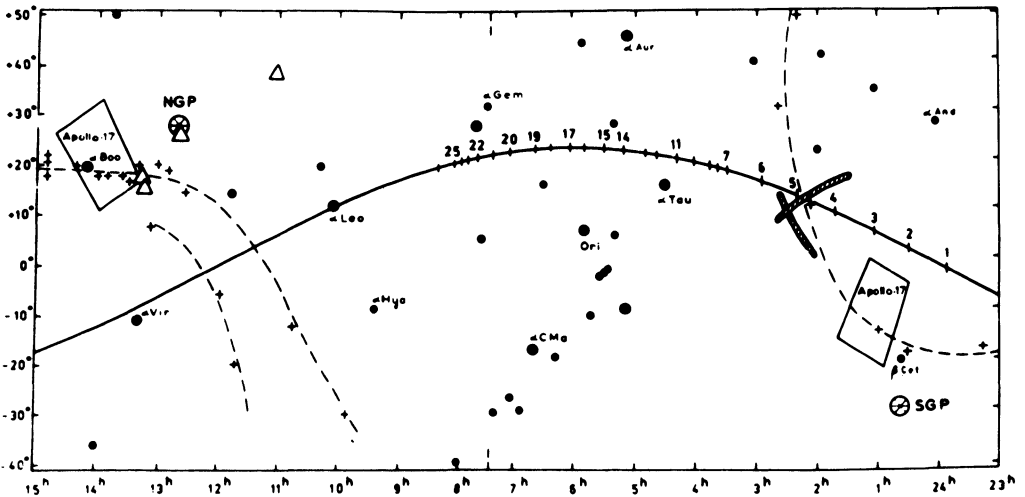


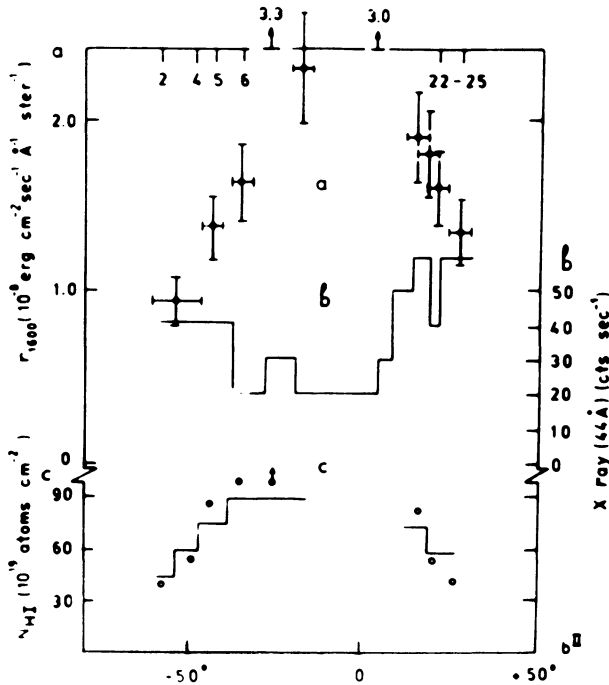
ON THE ULTRAVIOLET BACKGROUND RADIATION OF THE GALAXY

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Observations of the far-UV spectrum (1300-1800 Å) of the sky background at different galactic latitudes are presented. The measurements were made in deep space, at distances up to 2×10^5 km from the Earth with the photoelectric spectrometer ("Galaktika") on board the "Prognoz-6" satellite. The highly elongated orbit of the satellite permitted corrections for scattered L_{α} -light. The contribution of stars was eliminated using fluxes measured in the TD-I and OAO-2 experiments.

Figure 1 shows a map of the sky in celestial coordinates, indicating the location of our targets along the ecliptic (marked by serial numbers) with 36 square degree field-of-view for each. Some other interesting data are exhibited on this map: 1) The regions observed in other UV-background experiments, e.g. "Apollo-17"; "Aries-8" - triangles and D2B observations - shaded areas. 2) The mean position of two spurs or remnants of Supernovae (Shklovsky and Sheffer, 1971) is labelled by a dashed line. As displayed on the map observed regions coincide pretty well with the position of spurs.





The UV-background radiation r_λ (at λ 1600) shows a good correlation with galactic latitude. For $|b^{\text{II}}| < 30^\circ$ the dependence of r on latitude is consistent with that predicted by DGL models for scattering (see Zvereva et al., 1982).

We note in Figure 2 the correlation between r_λ (a), enhanced soft X-ray brightness (b), and the deficient neutral hydrogen density (c). The background UV radiation in high-latitude areas might be interpreted as the emission from hot gas (Severny and Zvereva, 1983).

REFERENCES

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 Shklovsky, I.S., and Sheffer, E.K.: 1971, *Nature* 231, 173
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