

Contents

VOLUME 63

1983

BULLETIN OF THE CRIMEAN ASTROPHYSICAL OBSERVATORY
(USSR ACADEMY OF SCIENCES)

PAGES
RUSSIAN/ENGLISH

Flare-associated changes in sunspot magnetic fields. A. N. Koval and N. N. Stepanyan.....	3	1
Activation of plages before and during a flare. L. G. Kartashova.....	15	12
Changes in the radio emission flux at 1.9, 2.5, 3.2, and 3.5 cm during the development of bursts. A. F. Bachurin, A. S. Dvoryashin, N. N. Eryushev, V. P. Nefed'ev, and L. I. Tsvetkov.....	25	22
Comparison of magnetic field distributions across sunspot umbrae obtained from absorption lines with different temperature sensitivities. M. Dzh. Guseinov and V. I. Russkikh.....	31	28
Magnetic field polarity in umbral bright dots in sunspots. M. Dzh. Guseinov.....	36	34
Variations in the line He I $\lambda 10830 \text{ \AA}$ over the solar disk. A. G. Shcherbakov and Z. A. Shcherbakova.....	39	37
Discrete solar rotation frequencies deduced from the solar and interplanetary magnetic fields. V. A. Kotov and L. S. Levitskii.....	56	50
Changes in the solar radio radium at 2.25 and 3.5 cm with the phase of the solar activity cycle. A. F. Bachurin.....	68	61
160-Min pulsations in the Earth's magnetosphere possibly due to solar oscillations. B. M. Vladimirkii, V. P. Bobova, N. M. Bondarenko, and V. K. Veretennikova.....	75	68
Variability of emission line spectrum of the nucleus of the Seyfert galaxy NGC 3227. I. I. Pronik.....	81	75
Experience in observing rapid variations in the emission spectrum of the nucleus of the peculiar galaxy NGC 1275. N. I. Merkulova and I. I. Pronik.....	93	85
Observations of variable extragalactic radio sources at 8 and 13 mm on the RT-22 of the CAO and the RT-14 of the RHUT. V. A. Efanov, I. G. Moiseev, N. S. Nesterov, M. Tiuri, and S. Urpo.....	104	95
Symbiotic eclipsing variable star CI Cyg: analysis of light curve. T. S. Belyakina.....	108	99
Flare activity of G1 718 = BD + 22°3406. P. F. Chugainov.....	114	106
Period of 34 days in the radio emission of the source Cyg X-3. Yu. I. Neshpor.....	118	110
Model-atmosphere analysis of the Am star 16 Ori. L. S. Lyubimkov and I. S. Savanov.....	121	113
Stellar component of the UV sky background. A. M. Zvereva.....	133	124
Two-lens superachromat objectives for a broad spectral region. A. N. Babin, G. M. Popov, and M. B. Popova.....	141	133
Fast lens systems for large light detectors. G. M. Popov and M. B. Popova.....	149	140
Quantitative evaluation of the extent to which the characteristics of an apparatus meet the technical requirements. A. V. Bruns and G. S. Cheremukhin.....	152	144