

CONTENTS

VOLUME 79

1988

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

PAGES
RUSSIAN/ENGLISH

160-Minute oscillations of the Sun: observations in 1974-1986. V. A. Kotov, A. B. Severnyi, and T. T. Tsap.....	3	1
Conditions of plasma layers formation with enhanced electric current density and temperature in the Sun's atmosphere. A. Ya. Boiko, A. G. Kosovichev, Yu. P. Popov, and V. S. Sokolov.....	11	9
H_{α} plages and electric currents in active regions of the Sun. V. I. Abramenko, S. I. Gopasyuk, and M. B. Ogir.....	23	21
Torsional oscillations of sunspots and rotation of subphotospheric layers of the Sun. S. I. Gopasyuk, F. V. Lyamova, and V. I. Khaneichuk.....	34	29
Structure of the magnetic field in a quiet region of the Sun. D. N. Rachkovskii.....	41	36
1980-1986 measurements of the solar radio radius at 2.25-cm wavelength. A. F. Bachurin.....	46	42
A model atmosphere analysis of the supergiant σ Cyg(B9Iab). Z. K. Ivanova and L. S. Lyubimkov.....	49	45
The visual binary ν Car and the chemical composition of its brighter component. Z. A. Samedov.....	57	53
A study of short-period light variations of BY Dra, 1984-1986. P. F. Chugainov and M. N. Lovkaya.....	63	60
Photometric investigations of UV Cet type flare stars with $3 \cdot 10^{-7}$ sec time resolution on a 6-m telescope. G. M. Beskin, R. E. Gershberg, S. I. Neizvestnyi, V. L. Plakhotnichenko, L. A. Pustil'nik, and V. F. Shvartsman.....	71	67
The variability of the Be-star EM Cephei. I. The results of polarimetric observations, 1985-1986. N. Kh. Minikulov and A. E. Tarasov.....	95	88
Remote photometry of the Nova Cygni 1975 (V 1500 Cyg) in 1982-1986. E. P. Pavlenko.....	103	96
Short-time variations of the atmospheric extinction. I. Simultaneous observations of extinction variations at four wavelengths. V. B. Nikonov, N. I. Bondar, and A. B. Bukach.....	111	104
Variability of emission lines and the duplicity of the Seyfert galaxy NGC 1275 nucleus. I. I. Pronik.....	122	113
Observations of H_{β} and [O III] $\lambda 4959 + 5007 \text{ \AA}$ emission line variability in the spectrum of the NGC 1275 galaxy nucleus observed at AZT-11 telescope in 1982-1987. N. I. Merkulova, D. P. Metik, and I. I. Pronik.....	133	124
160.01-Min oscillations of compact extragalactic objects and plausible cosmological consequences. V. A. Kotov and V. M. Lyutyi.....	139	130
A possible classification of radiopulsars under two types according to their probable nature. V. M. Vladimirskii.....	157	147
The molecular gas associated with Sharpless 252. L. Haikala.....	166	155
Variability of OJ 287 object. M. Valtonen, A. Sillanpaa, and L. Valtaoja.....	170	160
Millimeter wave component and receiver development at the Helsinki University of Technology. A. Raisanen, J. Peltonen, A. Lehto, T. Tolmunen, J. Tuovinen, and J. Mallat.....	172	163
Computer-based testing of the tracking and servo performance of the Metsahovi radio telescope. K. Kuittinen, N. Holsti, and S. Urpo.....	178	169

(continued)

Five-minute oscillations of the solar brightness: observations with a photodiode array. L. V. Didkovskii, V. A. Kotov, and

T. N. Tarasova.....

184 174

Two-mirror aplanatic systems with a spherical primary mirror.

G. M. Popov.....

189 179

1988

VOLUME 79

PAGES
RUSSIAN/ENGLISH

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

1	3	100-minute oscillations of the Sun: observations in 1974-1986. V. A. Kotov, A. B. Zvezdnyy, and T. T. Zasp.....	184	174
9	11	Conditions of plasma layer formation with expanded electric corona density and temperature in the Sun's atmosphere. A. Ye. Borkov, A. G. Kabanikhin, V. P. Popov, and V. S. Sokolov.....	189	179
21	23	5-class and electric currents in active regions of the Sun. V. I. Abramenko, S. I. Gopasnyk, and M. B. Gzir.....		
29	31	Topical oscillations of sunspots and rotation of supergranular layers of the Sun. S. I. Gopasnyk, F. V. Ivanova, and V. I. Kanelchikov.....		
35	37	Structure of the magnetic field in a quiet region of the Sun. D. M. Radikovskii.....		
43	45	1980-1986 measurements of the solar radio radius at 2.25-cm wavelength. A. F. Sazonkin.....		
49	51	A model atmosphere analysis of the supergranular (SG) field. S. K. Ivanova and L. S. Lyubimov.....		
53	55	The visual binary ν Cor and the chemical composition of its brighter component. E. A. Gamedov.....		
61	63	A study of short-period light variations of BY Dra, 1984-1986. P. P. Chuganinov and M. N. Lomayeva.....		
67	69	Photometric investigations of UV Cor type flare stars with $3 \cdot 10^{-7}$ sec time resolution on a 6-m telescope. G. M. Beskin, M. E. Gerasimov, G. I. Melnyuk, V. L. Plakhotnichenko, S. A. Prut'nik, and V. V. Suvartman.....		
71	73	The variability of the Be-star κ Cephei. I. The results of collaborative observations, 1982-1986. N. Kh. Minkulov and A. E. Tarasova.....		
75	77	Remote photometry of the Nova Cygni 1975 (V 1500 Cyg) in 1982-1986. S. E. Pavlenko.....		
81	83	Short-time variations of the atmospheric extinction. I. Simultaneous observations of extinction variations at four wavelengths. V. S. Nishnev, M. E. Bondar, and A. B. Bukach.....		
85	87	Variability of emission lines and the brightness of the Seyfert galaxy NGC 1275 nucleus. I. I. Prontk.....		
91	93	Observations of H α and [O III] λ 4959 + 5007 λ emission line variability in the spectrum of the NGC 1275 galaxy nucleus observed at AET-11 telescope in 1982-1987. M. E. Morkulov, D. P. Matik, and I. I. Prontk.....		
95	97	100- μ m oscillations of compact extragalactic objects and planetary cosmological consequences. V. A. Kotov and V. M. Lyutyl.....		
101	103	A possible classification of redquasars under two types according to their peculiar nature. V. M. Vladimirovskii.....		
105	107	The molecular gas associated with Spax class S22. L. Hakala, J. Valsta, and M. Valtonen.....		
109	111	Millimeter wave component and receiver development at the Helsinki University of Technology. A. Rissanen, J. Valtonen, A. Leino, T. Toivanen, J. Toivanen, and J. Kalita.....		
113	115	Computer-based testing of the tracking and servo performance of the Helsinki radio telescope. K. Kuitinen, M. Holsti, and S. Urho.....		

(continued)

Publication of this journal is supported by the Academy of Sciences of the USSR. The journal is published in Russian and English. The Russian text is the original. The English text is a translation. The journal is published quarterly. The subscription price for 1988 is 100 rubles. The subscription price for 1989 is 110 rubles. The subscription price for 1990 is 120 rubles. The subscription price for 1991 is 130 rubles. The subscription price for 1992 is 140 rubles. The subscription price for 1993 is 150 rubles. The subscription price for 1994 is 160 rubles. The subscription price for 1995 is 170 rubles. The subscription price for 1996 is 180 rubles. The subscription price for 1997 is 190 rubles. The subscription price for 1998 is 200 rubles. The subscription price for 1999 is 210 rubles. The subscription price for 2000 is 220 rubles. The subscription price for 2001 is 230 rubles. The subscription price for 2002 is 240 rubles. The subscription price for 2003 is 250 rubles. The subscription price for 2004 is 260 rubles. The subscription price for 2005 is 270 rubles. The subscription price for 2006 is 280 rubles. The subscription price for 2007 is 290 rubles. The subscription price for 2008 is 300 rubles. The subscription price for 2009 is 310 rubles. The subscription price for 2010 is 320 rubles. The subscription price for 2011 is 330 rubles. The subscription price for 2012 is 340 rubles. The subscription price for 2013 is 350 rubles. The subscription price for 2014 is 360 rubles. The subscription price for 2015 is 370 rubles. The subscription price for 2016 is 380 rubles. The subscription price for 2017 is 390 rubles. The subscription price for 2018 is 400 rubles. The subscription price for 2019 is 410 rubles. The subscription price for 2020 is 420 rubles. The subscription price for 2021 is 430 rubles. The subscription price for 2022 is 440 rubles. The subscription price for 2023 is 450 rubles. The subscription price for 2024 is 460 rubles. The subscription price for 2025 is 470 rubles. The subscription price for 2026 is 480 rubles. The subscription price for 2027 is 490 rubles. The subscription price for 2028 is 500 rubles. The subscription price for 2029 is 510 rubles. The subscription price for 2030 is 520 rubles.