The Bulletin in 2013



November-December 2013 | #3

Gaia space observatory launched into space • Epsilon Aurigae: a rare stellar eclipse • O-C diagrams basics • Eclipsing binary systems with eccentric orbits • The nearby eclipsing stellar system Delta Velorum • Wolf-Rayet stars: extremely hot, luminous and massive • NSVS 5907410 = MISAO V1119: a Mira variable confirmed • Four new BY Draconis variables



September-October 2013 | #2

The FU Orionis phenomenon • NSVS 5860878: a new Mira variable in Cygnus • Twenty new W Ursae Majoris-type eclipsing binaries from the Catalina Sky Survey • New elements and classification for 10 MISC records • Carbon in the sky: a few remarkable carbon stars • Nova Delphini 2013: a naked-eye visible flare in northern skies • Twelve new High-Amplitude Delta Scuti variables • The "Heavenly Owl" observatory: Seeing above the Black Sea waterfront



July-August 2013 | #1

NSVS 15314262 A new ACV variable • Six new close binary systems with O'Connell effect • Elements for two T Tauri variables • NSV 13636 Classification Revised • Debris Disk Around T Pyxidis • Expanding the list of W Virginis variables • Bright and interesting Cepheid variable stars • What are the R Coronae Borealis stars? • The Blazhko Effect mystery • Six new RR Lyrae stars with Blazhko effect • Public Photometry Banks as a Source for Data Mining

amateurs' guide to variable stars science Variable Stars Observer bulletin November-December 2013 | Issue #3 ISSN 2309-5539 In this issue: **Epsilon Aurigae:** a rare stellar eclipse, p.4 **O-C diagrams** basics, p.8 **Eclipsing binary systems** with eccentric orbits, p.10 The nearby **eclipsing** stellar system **Delta Velorum**, p.14 V1369 Cen: a naked-eye nova erupts in Centaurus!, p.15 Wolf-Rayet stars: extremely hot, luminous and massive, p.17 VS-COMPAS Research, p.20 MISAO V1119: a Mira confirmed Four new BY Draconis variables **VS-COMPAS** Project: variable stars research and data mining. More at http://vs-compas.belastro.net

VS-COMPAS Project: variable stars research and data mining.

Variable Stars Observer Bulletin is all about variable stars science. It's made by amateurs and for amateurs. Here simplified contemporary data about different aspects of variable stars research is published.

The bulletin is available as a free PDF at VS-COMPAS project's website: http://www.vs-compas.belastro.net/bulletin

Want to contribute an article? Feel free to contact us at:

http://www.vs-compas.belastro.net/bulletin-contribute

Issue #3

November-December 2013

Variable Stars Observer Bulletin ISSN 2309-5539

Published by the VS-COMPAS Project http://www.vs-compas.belastro.net/team

Hrodna, 230005, Belarus

Editor: Ivan Adamin ivan.adamin@gmail.com

Front cover:

Morning clouds from the above LaGuardia Airport, New York



Image courtesy of Ivan Adamin (2009)