

FEATURES

Cover Story:

14 How To Shoot a Solar Eclipse
A little advance planning can help make your pictures memorable.
By Dennis di Cicco

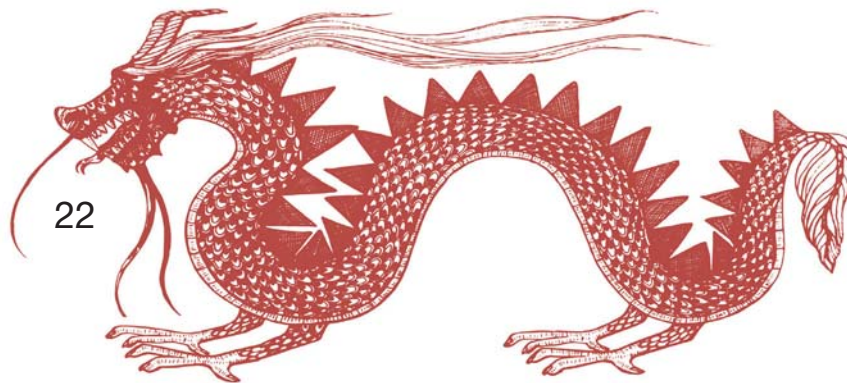
20 The Eclipse Megamovie Project
Join a citizen-science campaign on August 21st to record 90 minutes of the Sun's changing corona.
By Hugh Hudson & Mark Bender

22 Eyes of the Dragon
Look the fiery beast in the face as you track down these binocular doubles in Draco. *By Mathew Wedel*

28 In the Dark About Dark Matter
Astronomers' favorite candidate for the universe's invisible matter is running out of places to hide. Maybe we should be looking for something else.
By Leonidas Moustakas

36 Vera Rubin's Universe
By looking at things others didn't think were interesting, the astronomer often labeled the "mother of dark matter" forever changed our picture of the cosmos.
By Ashley Yeager

68 "The Moon Is Up . . .
A Single Star Is at Her Side"
Lord Byron's famous evening yields up its mystery: He wrote what he saw.
By Donald W. Olson



August 2017

VOL. 134, NO. 2

OBSERVING

- 41** August's Sky at a Glance
- 42** Lunar Almanac & Sky Chart
- 43** Binocular Highlight
By Mathew Wedel
- 44** Planetary Almanac
- 45** Under the Stars
By Fred Schaaf
- 46** Sun, Moon & Planets
By Fred Schaaf
- 48** Celestial Calendar
By Alan MacRobert
- 52** Exploring the Moon
By Charles A. Wood
- 54** Deep-Sky Wonders
By Sue French

Find us on
Facebook & Twitter

S&T TEST REPORT

- 58** The Zhumell Z130 Dob
By Tony Flanders
- 62** Quick Look: Sky Guide
By Sean Walker

COLUMNS / DEPARTMENTS

- 4** Spectrum
By Peter Tyson
- 6** From Our Readers
- 8** 75, 50 & 25 Years Ago
By Roger W. Sinnott
- 10** News Notes
- 57** Book Review
By S. N. Johnson-Roehr
- 64** New Product Showcase
- 66** Astronomer's Workbench
By Jerry Oltion
- 74** Gallery
- 84** Focal Point
By Andrew Fraknoi

ON THE COVER



August 21st is coming. Are you ready?

PHOTO: IGOR KOVALCHUK / GETTY IMAGES PLUS

ONLINE

2017 ECLIPSE GUIDE
Prepare for August's total solar eclipse with our comprehensive resource hub. We have bilingual videos, education materials, observing tips, and more.
skyandtelescope.com/2017-eclipse

TIPS FOR BEGINNERS
New to astronomy? From learning the night sky to tips on buying your first telescope, here's everything you need to jump into the fun.
skyandtelescope.com/letsgo

ONLINE STORE
Check out our 2017 eclipse section and find maps, eclipse glasses, and webinars about watching and photographing solar eclipses.
shopatsky.com/eclipse-2017

SKY & TELESCOPE (ISSN 0037-6604) is published monthly by Sky & Telescope, a division of F+W Media, Inc., 90 Sherman St., Cambridge, MA 02140-3264, USA. Phone: 800-253-0245 (customer service/subscriptions), 888-253-0230 (product orders), 617-864-7360 (all other calls). Fax: 617-864-6117. Website: skyandtelescope.com. ©2017 F+W Media, Inc. All rights reserved. Periodicals postage paid at Boston, Massachusetts, and at additional mailing offices. Canada Post Publications Mail sales agreement #40029823. Canadian return address: 2744 Edna St., Windsor, ON, Canada N8Y 1V2. Canadian GST Reg. #R128921855. POSTMASTER: Send address changes to Sky & Telescope, PO Box 420235, Palm Coast, FL 32142-0235. Printed in the USA.