

Editor: Mrs Hazel McGee

Papers Secretary: Nick James
Meetings Recorder: Alan Dowdell

The *Journal* is published six times per year, in February, April, June, August, October & December.

Library subscription (UK and surface mail overseas): £50.00. To purchase single copies or individual articles please see www.britastro.org/journal.

The Association is not responsible for individual opinions expressed in articles, letters, reviews or reports of any kind. Material published in the *Journal* does not necessarily express the views of the BAA Council.

Contributions

Papers should be sent by e-mail (preferred) or by post (three copies) to the Papers Secretary at the address shown inside the back cover of each issue. They will be refereed, and, if approved by Council, published as soon as reasonably possible. Those wishing to speak at a meeting should contact the Meetings Secretary.

All other contributions should be sent to the Editor. As well as *Letters to the Editor*, she will be pleased to receive contributions to *Observers' Forum*, particularly interesting astronomical photographs, drawings and images. Colour images are especially welcomed. Photos and media will be returned only if a suitable stamped addressed envelope is enclosed.

Advertisements

Small advertisements should be sent to the Office, accompanied by the appropriate remittance. Members' small advertisements are FREE and may be sent directly to the Editor by e-mail.

Display advertisements and loose inserts: For a rate card and further information, contact Mrs Ann Davies, 11 Sedgefield Rd., Greenham, Newbury, Berks. RG14 7TZ. Tel. 01635 30598. E-mail anndavies@dsl.pipex.com.

Deadlines

All material, including short letters and notes, must be received by the Editor by the following dates:

Issue	Date	
2012 October	2012 August 25	
2012 December	2012 October 25	
Later dates apply, by arrangement	ent, to electronic advertising	
copy for which space has been reserved.		

Membership of the BAA

The annual subscription for ordinary membership of the Association for the 2012–2013 Session is £46.00. For details of concessionary rates, and other membership information, see page 228 of this issue. Subscriptions are due on 1st August each year. Members who pay UK income tax are encouraged to complete a Gift Aid certificate in order to benefit the Association, which is a registered educational charity. The annual subscription to posted BAA Circulars is £5 (UK).

Published by:

The British Astronomical Association, Burlington House, Piccadilly, London W1J 0DU Tel: 020-7734 4145

World Wide Web home pages: BAA: http://www.britastro.org/ Journal: http://www.britastro.org/journal/

Journal © British Astronomical Association 2012. Individual articles, illustrations etc. remain the copyright of the author or photographer, whose permission must also be obtained before reproduction.

ISSN 0007-0297

Printed by the Magazine Printing Co., Enfield, EN3 7NT



2012 August Vol. 122 No. 4

Contents

Refereed papers

Refereed papers			
The opposition of Mars, 2007: Part I	Richard McKim	207	
Auroral activity reliably observed from Birmingham			
southward in England, 1976–2010	Ronald J. Livesey	220	
A comparison of two simple magnetometers	Sam Dick	222	
Short paper: Isolated total lunar eclipses	Tony West	227	
Atmospheric dispersion and its effect on high-			
resolution imaging	Damian Peach	229	
The 2011 February superoutburst of the dwarf nova			
SDSS J112003.40+663632.4	Jeremy Shears et al.	233	
The orbital period of the eclipsing dwarf nova			
SDSS J081610.84+453010.2	Jeremy Shears et al.	237	

Notes and News

195

From the President	Bill Leatherbarrow
Venus transits the Sun, 2012 June 5–6	Richard McKim
Venus 2011–'12: fifth interim report	Richard McKim
Solar Section	Lyn Smith
Centenary of the Norman Lockyer Observatory	David Strange
Aurora Section	Ken Kennedy
Curiosity, Gale crater and BAA observer Walter F. Gale	Richard McKim
Comet 2011 L4 (PanSTARRS) – a visitor with a bright future?	

Nick James & Denis Buczynski

Observing basics: IV

Light pollution: penetrating the veil Bob Mizon 204

Observers' Forum NGC 7662 – a Snowball in the autumn sky Stewart L. Moore Class was a figure by a start of 2012 BY24

Close pass of Earth by asteroid 2012 BX34

The annular solar eclipse of 2012 May 20

Stewart L. Moore
Nick James
Nick James

Letters 244

Asymmetry in solar eclipses

Coma Berenices

The European Planetary Science Congress, 2013

Steve Holmes

Michael A. Covington

David Arditti

Erratum: 'Modifying DSLR cameras for astrophotography' Tony Morris 244

Meetings 245
Ordinary Meeting, 2012 January 25
Alan Dowdell

Special General Meeting & Ordinary Meeting, 2012 March 28

New Honorary Members 200
Sky notes for 2012 August & September Callum Potter 247

Membership information228Meetings diary & small advertisements250Officers and Council251

On the cover

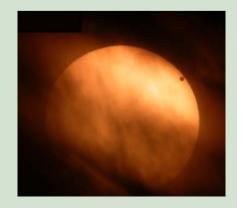
The transit of Venus, 2012 June 6.

Top left: The Sun at 02:38UT, imaged from Svalbard, Norway with a 10cm OG, Baader Astrosolar film and green filter. Pete Lawrence.

Top right: The transit glimpsed between clouds at 04:35UT from Burgh Heath, Surrey with 10cm OG, solar filter and Nikon Coolpix 4500 camera. *Ron Johnson*.

Bottom: A series of drawings of 3rd & 4th contacts by Mario Frassati (Crescentino, Italy) with 203 mm SCT and full aperture solar filter at ×133. Note the illuminated atmosphere of the planet (with brighter parts) as it exits the disk.

See report on facing page.



Alan Dowdell