



- 11: Visual astronomy by Martin Mobberley, Jeremy Perez and Peter Grego**
 Introduction 11, 41
 Tricks of the eye 11, 42
 Ten visual treats 11, 60
 How to draw the Universe 11, 64
 Moonwalking 11, 69

- 12: Black holes by Keith Cooper**
 Introduction 12, 67
 Beguiling black holes 12, 68
 The Omega Centauri mystery 12, 73
 The weirdest things about black holes 12, 76

- Gearheads**
 PARKER, G. Starizona's amazing Hyperstar 10, 78
 SHEPHERDSON, P. Quest for the magical shadow 11, 38
 HOWES, N. Under the Sun 12, 82

- In the shops**
 ARDITI, D. Atik ATK-EFW filter wheel 7, 79
 ASHFORD, A. Smartstar A-MC90 GPS 1, 81
 ASHFORD, A. Orion Premium 102mm f/7 refractor 3, 73
 ASHFORD, A. Celestron NexStar 5 SE 4, 79
 ASHFORD, A. Helios Apollo 28 x 110 binoculars 12, 88
 ASHFORD, A. Sky-Watcher synscan AZ GOTO range 12, 90
 HOWES, N. The Artemis 4021 CCD 1, 84
 HOWES, N. Meade DSII-III CCD 4, 75
 HOWES, N. Imaging Source USB2.0 CCD range 5, 73
 HOWES, N. Solarscope hydrogen-alpha telescopes 9, 76
 HOWES, N. Atik 314L and 314E CCDs 10, 84
 HOWES, N. Meade Series 5000 80mm triplet ED 11, 80
 SZYMANEK, N. Telescope House FPL-53ED 80mm refractor 2, 79
 SZYMANEK, N. QSI 532 CCD camera 3, 76
 SZYMANEK, N. Starlight Xpress SXVF-H36 CCD 6, 75
 SZYMANEK, N. AstroSib 10-inch Ritchey-Chrétien 8, 76
 THOMPSON, M. AstroGazer portable observatory 8, 73

- Key moments in astronomy By Ian Seymour**
 Ian Seymour looks back 1, 94
 Wonderful to behold – the Great Comet of 1106 2, 94
 All in the family 3, 88
 Stones from heaven 4, 86
 Class act – Alexander Aubert, gentleman astronomer 5, 88
 Norman No-Luck 6, 88
 Robert Ball: ‘screwbball’ 7, 88
 John Brinkley: the butcher’s girl’s boy 9, 92
 From Lusaka to the stars 10, 22
 Moses and myth 12, 22

- Mission status By Justin Ray and Steven Young**
 1, 19; 2, 19; 3, 19; 4, 19; 5, 19; 6, 19; 7, 19; 8, 19; 9, 19; 10, 21; 11, 21; 12, 21
- Moonwatch By Peter Grego**
 1, 60; 2, 58; 3, 54; 4, 56; 5, 56; 6, 56; 7, 57; 8, 57; 9, 56; 10, 56; 11, 56; 12, 64

- News update**
 Record quintuple planetary system revealed 1, 9
 Were the first stars dark? 1, 10
 Rosetta returns home 1, 10
 The naked white dwarfs 1, 11
 Infant galaxies filled the early Universe 1, 11
 Shock as UK withdraws from Gemini Observatory 1, 12
 How common are moons like Earth’s? 1, 14
 Neutron star is cosmic cannonball 1, 14
 Cosmic-ray astronomy enters new era 1, 17
 An excitable dwarf 1, 19
 Saturn’s recycled rings 2, 9
 Dust from dead stars 2, 10
 The GRB from nowhere 2, 10
 Black hole’s jet of death 2, 11
 Sodium haze on distant planet 2, 11
 Mars in the firing line 2, 12
 Voyager 2 reaches the final frontier 2, 14
 Fountains of gas help a star grow 2, 15
 The power behind the solar wind 2, 17
 Counter-rotation in the halo 2, 19
 Enormous eruptions on Jupiter 3, 9
 The Universe’s biggest black hole 3, 10
 A new type of Supernova? 3, 10
 Life in a galaxy supercluster 3, 11
 Did two planets smash together? 3, 11
 Stars building ‘second generation’ of planets 3, 12
 End of UK involvement in Gemini as budget crisis hits home 3, 14
 The missing gravity waves 3, 16
 Cloudy days on Mars 3, 16
 Einstein’s double ring 3, 17

- Stars in “the middle of nowhere” 3, 18
 Collision course with Smith’s Cloud 3, 18
 Galaxy lenses magnify cosmological theories 4, 9
 Caught in the dark matter web 4, 9
 Confirmed: there is water on Enceladus 4, 10
 Jodrell Bank threatened with closure 4, 11
 Mystery of the missing sunspots 4, 12
 Martian avalanches caught in action 4, 14
 Portrait of a galactic fossil 4, 15
 Neutron stars’ missing link 4, 17
 New maps of the Moon’s south pole 4, 19
 Sailing the neutrino sea 5, 10
 Life’s building blocks 5, 11
 Super-bright GRB visible to naked eye 5, 11
 Is volcanism still alive on Mars? 5, 12
 An ocean on Titan? 5, 14
 Does Saturn’s moon have rings? 5, 15
 Enceladus has comet comparisons 5, 15
 Watery Mars leaves salty taste 5, 17
 Eye of the storm on Venus 5, 19
 Volcanoes in action on Venus? 6, 9
 Is this dark matter? 6, 10
 Globulars grow up slowly 6, 12
 Galaxy’s black hole jumps back to life 6, 14
 Stunning new portrait of Phobos 6, 15
 A new pulse for white dwarfs 6, 15
 Jupiter’s rings spread out in the shade 6, 17
 Star formation in the suburbs 6, 19
 The supernova of 1900AD 7, 9
 Jupiter’s third red spot 7, 10
 Let it snow in Mercury 7, 10
 The smallest exoplanet yet 7, 11
 Red dwarf star packs a punch 7, 11
 The Universe wears sunglasses 7, 12
 Supernova’s dramatic birth captured for first time 7, 14
 Black holes remembered 7, 17
 Honours for protecting dark skies 7, 19
Astronomy Now for the blind 7, 19
 Mars’ ice disappearance act 8, 9
 Lazy pulsar gets energised 8, 10
 Seyferts feel cannibalistic urge 8, 10
 Amateurs assist discovery of dwarf nova jet 8, 11
 Saturn’s second aurora 8, 11
 Sibling stars are not identical 8, 12
 Giant impact created Mars’ north/south divide 8, 14
 Volcano holds key to Moon’s origins 8, 14
 Special meteorite lands in Britain 8, 15
 Planets are everywhere 8, 17
 Switch-offs: a year on 8, 19
 Ten years of the VLT 9, 19
 Supernova explodes in controversy 9, 9
 Axe falls as STFC announce cuts 9, 10
 New contender for brightest star 9, 10
 Makemake makes four dwarf planets 9, 11
 Fate of the Little Red Spot 9, 11
 The Pinwheel’s dead zone 9, 12
 The nova that nobody saw 9, 14
 The Moon’s damp past 9, 15
 Mars’ ancient lakes 9, 15
 Are meteorites spun off asteroids by sunlight? 9, 17
 Need more stars? Try needless 9, 19
 Grand survey wraps up four-year mission 10, 8
 Voids in space 10, 8
 Odd object in the outer Solar System 10, 9
 Dwarf spaghetti 10, 9
 No middle class black holes after all 10, 10
 Tiger stripes sighted 10, 13
 Origin of meteorites 10, 15
 Galactic magnetism on display 10, 16
 Massive mergers reveal dark matter? 10, 17
 Monster cluster shows strength of dark energy 10, 17
 Portrait of a distant world 11, 8
 Eta Carinae’s false supernova 11, 9
 Biggest bang was pointed at us 11, 9
 It’s snowing on Mars 11, 10
 Saturn’s rings are forever 11, 13
 Our wandering Sun 11, 13
 Why Jupiter’s second spot turned red 11, 15
 The dark flow from beyond the Universe 11, 17
 Opportunity’s new mission 11, 17
 Hubble’s back to work – for now 12, 8
 Mars was wet more recently 12, 8
 MESSENGER revisits Mercury 12, 9
 Phoenix’s icy future 12, 9
 The Solar System’s clone 12, 10
 Galaxy collisions can stunt star formation 12, 13
 CoRoT probes stellar interiors 12, 15
 First pure gamma-ray pulsar 12, 15
 And now, the weather 12, 16

Night Sky

- 1, 51; 2, 48; 3, 45; 4, 45; 5, 45; 6, 45; 7, 45; 8, 45; 9, 45; 10, 45; 11, 45; 12, 51

- Observations with Neil Bone**
 Holmes sweet Holmes 1, 21
 Seeing Red 2, 21
 Ringing in the new 3, 21
 On the front line 4, 21
 Friends in the north 5, 21
 How low can you go? 6, 21
 The twilight zone 7, 21
 Shooting star season 8, 21
 Taking stock 9, 21
 Beginnings 10, 23
 The joy of sketching 11, 23
 Smoke on the water 12, 23

Picture gallery

- 1, 104; 2, 104; 3, 96; 4, 96; 5, 96; 6, 96; 7, 96; 8, 96; 9, 96; 10, 96; 11, 92; 12, 108

Picture this

- CHADHA, K. S. A colourful exit 1, 46
 COOPER, K. Exorcising the Phantom Galaxy 2, 44
 COOPER, K. Explosive jellyfish 4, 22
 COOPER, K. Victoria’s fascination 5, 80
 COOPER, K. The Jet-set nebula 6, 77
 COOPER, K. Superlative Saturn 8, 40
 PARKER, G. Headlong into the Veil Nebula 7, 72

Sky tour

- BONE, N. Hopping around Hercules 5, 54
 BONE, N. Sweeping in the heart of the Milky Way 7, 54
 BONE, N. A constellation fit for heroes 11, 54
 MOBBERLEY, M. A tour of the twins 2, 60
 MOBBERLEY, M. Vega’s stomping ground 6, 54
 MOBBERLEY, M. A walk through the autumn sky 10, 54
 MOBBERLEY, M. A collection of clusters 12, 60
 PRIVETT, G. Denizens of the winter void 1, 62
 PRIVETT, G. A pride of galaxies in Leo and the bear 3, 56
 PRIVETT, G. Spring’s southern horizon 4, 54
 PRIVETT, G. Winging it through Pegasus 9, 54
 RIDPATH, I. The small constellations of summer 8, 54

Society news By Neil Bone

- 1, 90; 2, 90; 3, 84; 4, 82; 5, 84; 6, 84; 7, 84; 8, 86; 9, 87; 10, 88; 11, 84; 12, 98

Society spotlight

- Newcastle-upon-Tyne 1, 93
 Loughton AS 2, 93
 Thurrock AS 3, 87
 Wolverhampton AS 4, 85
 Mid-Kent AS 5, 87
 Breckland AS 6, 87
 Mexborough and Swinton AS 7, 87
 Callington Community Astronomy Centre 8, 88
 Furness and South Lakeland AS 9, 91
 Manchester AS 11, 88
 Doncaster AS 12, 102

Talking point By Alan Longstaff

- Perchlorate on Mars 10, 19
 What will the Large Hadron Collider do for us? 11, 19
 Planet or brown dwarf? 12, 19

Tech talk By Martin Mobberley

- Head to head: DSLR vs CCD 1, 88
 Civilised observing 2, 88
 Going fast and wide 3, 82
 Tracking tricks 4, 88
 Star testing 5, 82
 Robotic observatories 6, 82
 Coping with coma 7, 82
 Generating light curves 8, 81
 The ‘mark 1 eyeball’ versus CCD 9, 81
 Cooling your optics 10, 80
 Collimating your telescope 11, 74
 Alt-azimuth tracking tips 12, 80

Variable star scene By Tony Markham

- 1, 51; 2, 53; 3, 49; 4, 49; 5, 49; 6, 49; 7, 49; 8, 49; 9, 49; 10, 49; 11, 49; 12, 55

Your views

- 1, 20; 2, 20; 3, 20; 4, 20; 5, 20; 6, 20; 7, 20; 8, 20; 9, 20; 10, 22; 11, 22; 12, 22

Supplements

- Year Planner 2008 January
 Starlight April
 Interacting Galaxies Poster June
 Four hundred years of the telescope October

