

Newsletter of the POVG-The Perth Observatory Volunteers' Group Inc.

AUGUST 2003

APPROACHING MARS

Earth and Mars are converging for a close encounter in August. The red planet is already an appealing target for sky watchers.

Count slowly: one one-thousand, two one-thousand, three one-thousand.... You just got about 30 km closer to the planet Mars.

Earth and Mars are rapidly converging. On August 27, 2003—the date of closest approach—the two worlds will be 56 million km apart. That's a long way by Earth standards, but only a short distance on the scale of the solar system. NASA, the European Space Agency and Japan are all sending spacecraft to Mars this year. It's a good time to go.

Between now and August, Mars will brighten until it "blazes forth against the dark background of space with a splendor that outshines Sirius and rivals the giant Jupiter himself." Astronomer Percival Lowell, who famously mapped the canals of Mars, wrote those words to describe the planet during a similar close encounter in the 19th century.

Already Mars is eye-catching. You can see it this month in the morning sky--bright, steady and remarkably red. Only Venus near the sun is brighter.

Amateur astronomers looking through backyard telescopes have reported in recent days great views of Mars's south polar cap. Made of frozen water and carbon dioxide ("dry ice"), it reflects sunlight well. On June 1st Mars was 12.5 arcseconds across and it glowed like a – 1st magnitude star. On August 27th it will be twice as wide (25 arcseconds) and six times brighter (magnitude –2.9).

Much has been made of the fact that the August 27th encounter with Mars is the closest in some 60,000 years. Neanderthals were

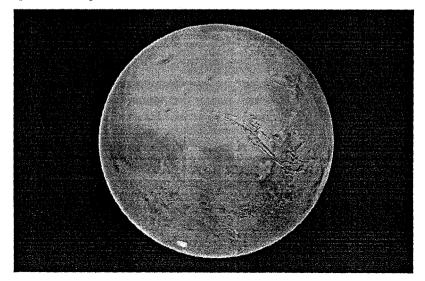
the last to observe Mars so favorably placed. This is true. It's also a bit of hype.

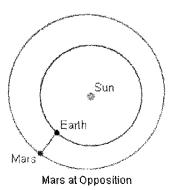
Mars and Earth have been almost this close many times in recent history. Some examples: Aug. 23, 1924; Aug. 18, 1845; Aug. 13, 1766. In each case Mars and Earth were approximately 56 million km apart.

Astronomers call these close encounters "perihelic oppositions." Perihelic means Mars is near perihelion--its closest approach to the sun. (The orbit of Mars, like that of all planets, is an ellipse, so the distance between the sun and Mars varies.) Opposition means that the sun, Earth and Mars are in a straight line with Earth in the middle. Mars and the sun are on opposite sides of the sky. When Mars is at opposition and at perihelion--at the same time--it is very close to Earth.

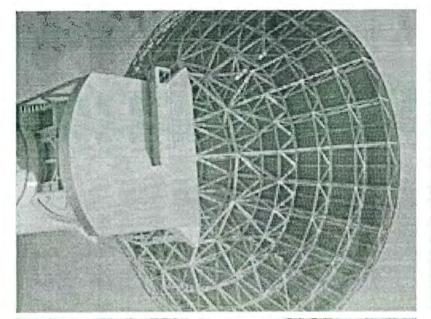
August 27th is indeed the best perihelic opposition since the days of the Neanderthals, but it scarcely differs from other more recent ones. That's fine because all perihelic oppositions of Mars are spectacular.

http://science.nasa.gov/headlines/y2003/18jun_approachingmars.htm





NEW NORCIA TRIP







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Images by Sascha Schediwy.
Just some images from the New
Norcia field trip. Another great
and interesting time was had by all,
although apparently the lunch
could have been better.

BIRCHEE'S WORD

Hi ALL. At the next vollie meeting – JULY 28 – I will give a full run down of the Observatory numbers on tours etc – and compare with the last few years worth of data.

Brochures are now available giving dates for tours for the complete season.

The revised tour methodology

- less week nights, more weekends, will also be discussed.

Further, as MARS is now big and bright, and soon to be the subject of YOUR tour night, I will give a presentation on Mars, including enough ammo for you to keep the visitors impressed with your

boundless store of knowledge.
Noticed how bright Mars is in
the East at around 9pm?? Maybe
you've noticed it in the NW at
6am ?? If not, put your woolies on
and get out there...

Astronomy is looking up. Peter B.

"Fishing is a state of mind where one cannot possibly have a bad time": Zane Gray, 1924

POVG MEETING - MINUTES

Meeting Commenced at 7.15pm. under Vice Chairman K.Kotze.

Attendance. J.Alcroft. K.Kotze. G.Colletti. F.Bilki. V.Smith. T.Beardsmore. T.Smith. J.Morris. G.Lowe. J.Biggs. E.Walker. J.Milner. T.Beston. M.Freeman. E.Cowlishaw. D.Alderton. L.Martin. V.Semmler. B.Harris. L.Robinson.

Apologies.

L.Bell. R.Boelen. B.Hollebon. J.Bell. T.Dunn.

Minutes of the Previous Meeting. Were moved as a true and correct record on the Motion of B.Harris. seconded T.Beston. Matters arising from the Minutes. K.Kotze reported that the Shoemaker Impact Crater trip had not attracted enough takers to make it viable, but thanked M.Freeman for his efforts.

Treasurers Report.

B.Harris stated that after a call and a meeting with a person from the Taxation Office regarding G.S.T. they were now satisfied with the way the matter had been handled. We had received a refund from the Tax Office of \$86.00, plus a further refund of \$8.00. The Bank statement was now \$118.13

General Business. K.Kotze thanked and congratulated J.Biggs for the very pleasant and interesting trip to New Norcia, 35 people had attended and had a very enjoyable day. J.Biggs responded by saying that the Observatory was very grateful for, and appreciated the efforts of the Volunteers and this was one way of saying Thank You. L.Martin reported that a letter had been received from the CommunityFacilities Grants Program stating that our application for funds had not been successful.

There being no further General Business the Meeting closed at 7.40pm

SKYWATCH FOR AUGUST

All Month - Mercury now easy to spot (without a telescope) in the early evening sky above the Western horizon.

1st - Alpha Capricornids meteor shower peak.

4th - Neptune At Opposition. · 6th - Southern Iota Aquarids meteor shower peak.

12th - Full Moon. Avoid nights around this date for star parties.

13th & 14th - The Moon passes Mars.

14th - Mercury greatest Eastern elongation (27 Degrees).

16th - Asteroid 37655 (1994 PM) near-Earth flyby (0.025 AU).

23rd - 25th - The Moon passes Saturn and the stars Castor and Pollux (the brightest stars in the constellation Gemini The Twins)

(morning sky).

24th - Uranus at Opposition.

25th - Northern Iota Aquarids Meteor Shower Peak.

25th - Asteroid 2000 BM19 near-Mercury flyby (0.045 AU).

27th - Asteroid 1998 CS1 near-Venus flyby (0.033 AU).

28th - Mars reaches opposition. Mars makes it closest approach to Earth since 1924 (56 million km), and is closer than it will be

again until the year 2287 (from http://heritage.stsci.edu/2001/24/supplemental.html).

28th - Asteroid 2002 JR 100 near-Earth flyby (0.050 AU)

http://www.ozskywatch.com/amaz/space/skyevent/2003/summary.html#anchor488707

MOON PHASES - AUGUST 2003

2nd Quarter ~ August 5th 2:28AM Scorpio

Full Moon ~ August 11th 11:48PM Aquarius

4th Quarter ~ August 19th 7:48PM Taurus

New Moon ~ August 27th 12:26PM Virgo

CONGRATULATIONS AND THANK YOU

Dear Vollies

I just been reviewing the performance measures for 2002/2003. We set a new Observatory visitor attendance record of 9,772 in 2002/2003, up 68 from the number in 2001/2002!

Congratulations and thank you for directly, or indirectly, assisting with this accomplishment. Regards, Jamie.

PERTH OBSERVATORY VOLUNTEERS GROUP INC. MEMBER LIST

JEFF ALCROFT DICK ALDERSON JEANNE BELL

TREVOR BEARDSMORE LYALL BELL FRANK BILKI TONY BESTON RIC BOELEN **EVE COWLISHAW** GIUSEPPE COLETTI PETER CRAKE. TREVOR DUNN DAVID EMICH MARCEL FORTSCH MIKE FREEMAN LYNDA FREWER BEVAN HARRIS DON HARTLEY MARK HASLAM

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VERA SMITH

ROBERT TAYLOR.

PATRICIA TURNER

ELAINE WALKER

SANDRA WALKER

MATTHEW ZENGERER

PERTH OBSERVATORY STAFF

Dr Jamie Biggs Director and Govt Astronomer

Peter Birch Astronomer Ralph Martin Astronomer Dr Andrew Williams Astronomer

Tom Smith Astronomer Assistant Greg Lowe Astronomer Assistant Janet Bell Administration Officer Di Johns Clerical Officer Arie Verveer Technical manager

John Pearce Mechanical technician David Tiggerdine Maintenance Person

Shervle Smith Cleaner

POVG VOLUNTEERS

POVG Inc. Chairperson Trevor Dunn Karen Koltze POVG Inc, Vice Chair Bob Taylor POVG Inc, Secretary

Bevan Harris POVG Inc, Treasurer and newsgroup

moderator (contact bevan on ngc2070@bigpond.com)

HAVE YOU JOINED THE VOLLIE NEWSGROUP YET?

If you've got any news, information or pic simply post them on the newsgroup for all (newsgroup members only) to enjoy or respond to.

To join simply send your email address to BEVAN HARRIS at: ngc2070@bigpond.com

To unsubscribe send an email to: perthobsvollies-unsubscribe@yahoogroups.com.au

To modify your subscription, visit the group website at: http://au.groups.yahoo.com/mygroups

HAPPY BIRTHDAY VOLLIES & STAFF FOR JUNE & AUGUST

Eve Cowlishaw, Greg Lowe, Ralph Martin, Lyall Bell

2003/2004 TRAINING NIGHTS SCHEDULE

2003	2004
May 26	Jan 19
Jun 30	Feb 23
Jul 28	Mar 15
Aug 25	Apr 19
Sep 22	May 17
Oct 20	Jun 14
Nov 24	Jul 12
	Aug 9

Training is important for our volunteers, they enjoy it and we need to support these staff members in return for the assistance they render.

Generally, these training nights are scheduled for 7pm the Monday after the week of Last Quarter.

This list is also displayed on the volunteer noticeboard.

Your cooperation is appreciated. Jamie Biggs. Govt Astronomer





PERTH OBSERVATORY

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