2002JBAA..112..157C

technology has appeared, which has made possible many new advances for the amateur. One area involves the use of highly sensitive video cameras (such as the Watec 902H) which can achieve remarkable results as demonstrated by Andrew Elliott, who in September (with David Strange at his observatory in Worth Matravers) was able to record an occultation of a 7th magnitude star by Uranus' satellite, Titania. The beauty of the video record is the ability to process the results frame by frame to provide a time resolution of 20 milliseconds. Indeed, the software and hardware now available (such as the Cuno video inserter) is able to overwrite part of the video frame with the actual time as transmitted by the standard DCF transmitter, accurate to a few milliseconds.

Another area that has benefited from recent technological advances is that of photometry. During the early years of the Section, photoelectric photometers incorporating photomultiplier tubes were constructed to enable highly precise photometry of asteroids, some of which exhibited variations in brightness of less than 0.1 mag. Richard Miles explained how such devices were used to attain high precision: the latest example being that of (14) Parthenope in 1997. However, with the rapid development of CCD cameras during the 1990s, these have now replaced photomultipliers as the preferred detector for photometry. Furthermore, software developments have also progressed apace as illustrated by George Sallit, who described their application to the field of astrometry and asteroid discovery.

A further session of the afternoon dealt with the options available for processing observational data. Andy Hollis showed his spreadsheet used to reduce visual observations. Richard Miles also briefly demonstrated other spreadsheets for differential and absolute photometry. John Howarth has carried out extensive investigations of period searching for variable stars, and with the help of a physical model of his own construction, he described how such analyses could be applied to the analysis of asteroid rotation rates from photometric data.

The last session of the day, greatly assisted by a good deal of audience participation, involved an assessment of the present-day means by which the work of the Section can be both published and publicised. Some very positive ideas were voiced on a future strategy for Section activities. For example, the concept of a 'Beginners Workshop' on topics of mutual interest to the ARPS, Comet and VSS Sections was envisaged: this could be jointly organised and staged by all three BAA Sections.

Richard Miles

A detailed report of the Workshop including full summaries of all contributions may be found at http://www.ast.cam.ac.uk/~baa/aow.2001.htm

Obituary

Eddie Watson–Jones, 1920–2001

Eddie Watson–Jones, who was Assistant Secretary of the BAA from 1982–1987, died in December 2001. With his passing, astronomy has lost a dedicated champion, and the world has lost a kind and generous human being.

Eddie was born in Penmaenmawr, North Wales, in 1920, and served in the war with the Royal Artillery. He moved to London in 1950, and worked for some thirty years in the shipping department of the Danish Bacon Company. A highly sociable person, he joined the Victory Club in London in 1951–'52, one of the oldest armed servicemen's clubs in the world.

But it was in the context of another club that I first came across Eddie – and his devoted wife Gywneth. The two were inseparable. They always turned up to BAA meetings together, but I was aware that they appeared to be part of a wider fraternity of people who clearly knew each other very well. It transpired that they were all members of the Morley College Astronomical Society – a group which Eddie set up and served for many years as its Chairman.



Eddie with a young Japanese visitor during his time as BAA Assistant Secretary.

I got to know more about Morley, and the traditions of astronomy teaching there, when J. L. White asked me to take over his evening classes. As well as the 'formal' teaching (it was anything but!), the Society met regularly and had some extremely memorable weekend courses. With Eddie's sense of humour, these weekends often bordered on the hilarious. And Eddie loved to party. We'd all end up getting very little sleep, but came away having enjoyed a great time with friends, and learned some astronomy too.

In 1982, Eddie retired from the Danish Bacon Company and came to work for the BAA as Assistant Secretary. It's a job which requires excellent administrative skills, an outgoing, friendly personality (you never know which BAA member from the other side of the world might just drop in unannounced), and the ability to climb up dozens of stairs (the office is on the top floor of Burlington House). And the icing on the cake was that Eddie came complete with extensive astronomical knowledge.

Eddie's feet were firmly under the desk by the time I was appointed President of the Association in 1984. It was so reassuring to have him there. The BAA was undergoing a period of great change: Halley's Comet was on its way, membership levels were shooting up accordingly, and there was much lively discussion about whether the office records should be computerised. In all of this, Eddie did not lose his head, and he was also able to offer wise counsel to this young and inexperienced President, who was completely new to the business of heading up a national organisation.

During one particularly busy part of my Presidency, I had a book, a script for a TV series and my Presidential Address to finish in no time at all. Living in London, where the phone never stopped ringing, was hopeless; so I fled to a quiet and secret location in Herefordshire where I could not be disturbed. When I got back, Eddie presented me with his musings on my absence – in characteristic poetical form. Entitled 'A Load of (Hereford) Bull', it ran:

I think it rotten of the Pres
To leave me in the ruddy mess
Whilst she relaxes with the cows,
With not a thought for this old House.
To hide without address or phone
Is cruelty to the Office Jones.
Across the border Celtic tribes
Will heed my call upon the vibes
And strike one dark and lune-less night,
And swiftly put wrong matters right.
Do send us souls a card or two
So we can see the audit through! ▶

© British Astronomical Association • Provided by the NASA Astrophysics Data System

2002JBAA..112..157C

Letters

Mercury's craters seen from Earth?

From Richard Baum & Raffaello Braga

'I may say,' confided T. J. J. See in 1909, 'that on one or two occasions when the seeing was at its best during the observations of the planet Mercury at Washington in 1901 and 1902, I believed I obtained glimpses of the planet's surface of the same type as that of the Moon.'[1] Serendipity or reasoned inference? We can never know. Whatever the answer, the claim, as startling for its boldness as for its content, aroused little passion until Andrew T. Young of the Texas A & M University chanced upon it in 1978.[2] By then *Mariner 10* had visited Mercury, and See's conjecture, in spite of its verification, was regarded more as a curiosity, an 'interesting if controversial sidelight', but utterly without substance and therefore unreliable. Indeed some researchers argued it is simply impossible to see the craters of Mercury from Earth, even with the best of telescopes (See used the 26-inch (66 cm) refractor of the US Naval Observatory in Washington DC.) Could this be a misconception?

Interest in the possibility was recently revived by John K. Harmon and Donald B. Campbell when they reported to the 33rd Annual Lunar and Planetary Conference in March 2002, on their radar studies of Mercury at the Arecibo Observatory, Puerto Rico.[3] Among their results is the discovery in a region of the planet not mapped by *Mariner 10*, of an 85km crater radiating a pattern of bright streaks some 900km across.

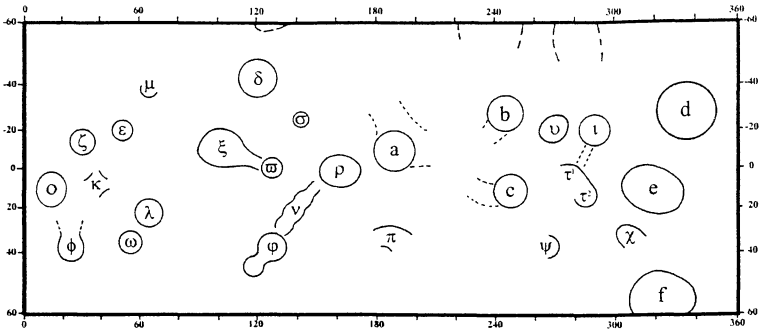


Figure 1. Map of bright albedo features on Mercury prepared by Mario Frassati from visual observations of the planet at Crescentino, Italy, in the period 1997–2002. Greek characters designate bright spots and diffuse bright spots. Lower case Roman characters refer to extended diffuse bright areas.

Bright spots observed by G.V. Schiaparelli in 1882

Date (1882)	*ST*	*CM°*	*Bright spots*	*Notes*
Jan 30	21:30	52	Pieria, Pentas, Apollonia	Pentas probably seen as limb brightening
Feb 5	21:42	81	ε, ο, φ	Pieria and Apollonia on the limb, κ uncertain
Feb 6	22:59	86	ε, ο, φ, κ	κ and ο merged
Apr 1	22:06	47	ε	
Apr 19	22:58	128	π (Liguria)	Spot (a) not seen
May 25	01:50	279	c	
Aug 4	06:10	320	ο, λ	On the limb, merged

ST = local sidereal time
CM = Central Meridian (rounded to the closest integer, calculated by JPL *Ephemeris Generator*)

The crater is located between long. 340° and 360°, and latitudes –25° to –40°, and was imaged in June 2001 with the radio telescope when Mercury was near inferior conjunction. The planet was at aphelion (the farthest point on its orbit from the Sun, and the closest to the Earth), and subtended an apparent angular diameter of 11 arcsecs, almost the maximum possible as seen from Earth.

Little more than an orbit and a half later, in December 2001, Mario Frassati pointed his 20.3cm f/10 Schmidt–Cassegrain at the planet to notice on Dec 22 (CM long. 345°) and again on Dec 27 (CM long 7°), a large bright area on the gibbous disk in the southwest quadrant at approx. lat. –10° to –40°, and long. 300° to 340° (Figure 1). The region is designated Pieria (approx. lat. –10° to –30°, long. 320° to 350°) on the IAU albedo chart (Dollfus, 1977), and is the site of the newly discovered crater. This, of course, is not to say the crater itself was seen, rather its bright ejecta blanket.

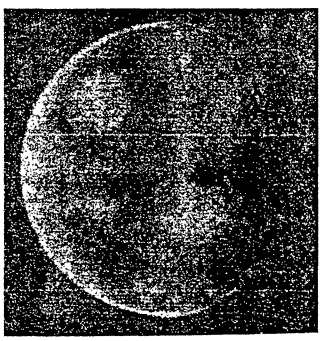


Figure 2. Albedo features observed on Mercury on 2001 December 27. The large white spot on the upper left is the albedo area Pieria, a region of the planet unmapped by *Mariner 10* and the site of the large young crater recently discovered with the Arecibo radio telescope. Drawing by Mario Frassati, Crescentino (VC), Italy.

► After five years with the BAA, Eddie and Gwyneth returned to their beloved North Wales – and ultimately to Eddie's home town of Penmaemawr. BAA member Richard Hopkins, who I met at Eddie's funeral, sent me these recollections: 'He continued to actively pursue his interest in astronomy, and was instrumental in the formation of the Aberconwy Astronomical Society. At the Society's first meeting, he was unanimously voted in as Chairman, a position he was to retain for over five years.

'His enthusiasm and encouragement of others was a constant inspiration, especially to myself, who – having reluctantly taken up the position of Secretary – was grateful for his support.

'He became well-known locally for his lectures and slide shows, with the constant assistance of Gwyneth, and was able to capture the attention of his audience by imparting vast amounts of information in a way that was both entertaining and easy to understand.

'His last act as Chairman took place in September 2001, when he presented a cheque for £150.00 to the St David's Hospice in Llandudno, the proceeds from our WEA lectures and Society funds.

'I will forever miss his kindness, understanding, knowledge and friendship, together with his willingness for a joke and a party'.

There are a lot of people out there in the world who would echo exactly the same sentiments.

Heather Couper

I am indebted to Gwyneth Watson–Jones and Richard Hopkins for information which greatly assisted in preparing this obituary.

© British Astronomical Association • Provided by the NASA Astrophysics Data System