Moonage

– a brief history of time in the eye of a DSLR

by
David Hough

In late October, we were treated to one of the thinnest crescent Moons in a long time. Then on the *very* next night the observing treat for the week was further enhanced when the celestial trio of the Moon, Mercury and Jupiter formed a majestic line-up that just begged to be photographed. Join keen Wallsend astro-imager, David Hough, as he shares with you this unique experience …

When one is confronted with '*Moonage*', you could be forgiven for automatically thinking of days gone by … with school pranks such as the age-old art of '*dropping the daks!*'

Now to me, '*Moonage*' means much, much more but yet has the same thrill!! You don't have to be into astronomy to admire the Moon's age or phase … just an appreciation for one of nature's most beautiful vistas of the night sky.

In late October 2006, we were treated on the east coast of Australia to one of the thinnest crescent Moons in a long time. Coincidentally, this also marked the end of Ramadan for the Islamic community … so this was an important astronomical calendar event.

To enhance the observing treat for the week – the *very* next night the optic nerve was in 'vista overload' with an eyeful of earthshine-lit Moon, Mercury and Jupiter (including the Jovian moons). They formed a majestic line-up of celestial bodies just begging to be photographed.

Now anyone with a 'point-and-shoot' camera – be it a digital SLR camera or that old forgotten format of film-SLR camera – could have captured this really well on a tripod … or resting on the car bonnet, fence post or anything stable enough to stop the jiggles occurring *(this does happen to everyone)*.

To get involved all you need is a little bit of interest in your subject. My affinity with observing the Moon has been heightened by the interactions with the planets – in 2005, the

Image: David Hough

Left: The crescent Moon over Wallsend NSW on 23 October 2006 at 18:48 AEST, taken with a Canon 350D, Sigma 18-200mm lens, ISO 200 film, FL 200mm, 1/5 second exposure.

Moon danced with Jupiter and Venus several times and displayed to the observer several enchanting encounters. I tried my best to capture the grandeur of that moment. I only really began to come to grips with photography as a hobby as I stumbled my way through experimenting and remembering combinations of ISO settings, shutter speeds etc. The one thing I did learn was to try and frame my subjects to make the images more inviting and memorable.

With astrophotography, I think any mug can have a go although it takes time to develop the skills of a seasoned lunar hunter (I still have my 'L' plates!). For quick and pleasing results, I developed a photography kit for myself that comprised a Pentax *istDS digital DSLR camera and a big Sigma 50-500 APO telephoto lens with the ability to mount it on either a tripod or a telescope EQ mount. ▶

Image: David Hough

This is an image of the conjunction with Spica, the Moon and Venus on 7 September 2005. Taken from my backyard in Wallsend NSW, on a borrowed Meade LXD55 mount with my Pentax *istDS mounted on it, 10 seconds exposure at f/13, ISO 200, FL420mm at 18:52 AEST.

Image: David Hough

The crescent Moon, Mercury and Jupiter on 24 October 2006 from Wallsend NSW. If you look hard enough you can just make out three Jovian Moons (just remember to squint real hard!) Taken with a Pentax *istDS , Sigma APO 50-500 lens, f/5.6, FL 190mm, 3 second exposure at 18:47 AEST.

Moon, Mercury and Jupiter in a majestic line-up

Image: David Hough

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Above: Jupiter and the Moon, taken on 16 June 2005 at 17:22 AEST from Newcastle NSW, using a Pentax *istDS, Sigma APO 50-500 lens on a tripod. Also used was ISO 200, FL500mm f/8 with 1/60 second exposure.

Left: Partial Lunar Eclipse on the night of the 17 October 2005, taken with a Pentax *istDS and Sigma APO 50-500 lens on a tripod. F/6.7 FL 500mm ISO 800 at 1/125 second exposure. Time taken was 21:59 AEST.

I even have a solar filter for it and a 2X teleconverter making it a portable astro-kit ready for any lunar or solar challenge.

Even though camera technologies are advancing at a far greater rate than one can keep up with, I realised the importance of getting something that will last. The Pentax DSLR camera is an excellent all rounder. However, I will be the first to admit that the new batch of Canon Digital SLRs is a cut above everything else, together with the Nikon DSLR cameras (especially for astrophotography).

The biggest advantage of having a good camera set-up is the portability and flexibility that it gives the user … in saying that, the cheap pocket digital cameras can give you the vista views of the observing experience, without the zoom!

So, what is a fellow like me doing in the *'New' SKY & SPACE Magazine* telling you all this. Well … it's simple really – *you too can have a go!* There are lots of amateur astronomers out there who think you need a huge set-up to get astro-imaging. Well, you don't really … just an eye for detail, an air of anticipation and a pinch of the black arts (digital manipulation) … and being prepared to set-up at a moment's notice. But an average person can obtain good shots. With a little effort, and using a basic DSLR or digital camera, you can get good results. Clear skies and keep that camera handy! Keep sending those images into the *'New' SKY & SPACE Magazine.* S&S

Good web links:

- Overseas forum: *www.cloudynights.com*
- Australian forum: *www.iceinspace.com.au*
- Brand new Australian forum: *www.MyAstroSpace.com*
- Recent Australian forum: *www.southcelestialpole.org*
- NASA'S Space Weather News: *www.spaceweather.com*
- NASA's Astronomical Picture of the Day: *http://antwrp.gsfc.nasa.gov/apod/astropix.html*

David Hough is Vice-President of the Newcastle Astronomical Society and actively participates in the IceInSpace online astronomy forum where he can be found most nights.

All images in this article were taken by David Hough from Wallsend, NSW.