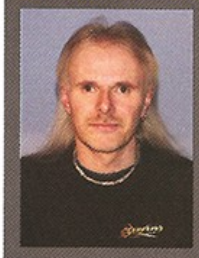
▲ Agapios Elia took this superb image of Jupiter and Ganymede from suburban Nicosia in Cyprus. Oval BA is just rotating into view below the South Equatorial Belt (SEB) and some detail is discernible on Ganymede (south is up in this image). Agapios used a Celestron C9.25 SCT working at approximately f/31.3 (using a 2× Ultima Barlow and counting in the extra focal length provided by the aftermarket Crayford focuser on the SCT) and an Imaging Source DBK21 colour camera with an Astronomik infrared cut-off filter. The original .avi file has around 2,600 frames of which about 2,000 were stacked in *Registax 5*.

NIK SZYMANEK SAYS...



Jupiter is currently putting on a fine show in the night sky and many amateur astronomers are turning their hand to acquiring high resolution images. It's incredible how high the standard is amongst planetary imagers. I remember many a fuzzy blob taken way back in the days of film. Even professional astronomers struggled to take detailed images with large telescopes. Things changed with the introduction of webcams like the venerable Phillip's ToUcam and it didn't take long for planetary enthusiasts to realise the potential of digital imaging. Rather than taking single images on insensitive film (and often using 'slow' eyepiece projection techniques) the modern planetary imager can call upon high quality astronomical video cameras that can acquire streams of thousands of images. These are then quickly analysed in *Registax* and the best frames extracted and stacked. This spectacular image of Jupiter by Agapios Elia from Cyprus demonstrates how successful planetary imaging can be. Not only does it show incredible detail in the cloud bands but also shows details on Ganymede in the frame. Needless to say, seeing conditions have to be very good to capture this level of detail and telescope optics have to be scrupulously clean and well collimated. Fortunately, off-the-shelf telescopes, Barlow lenses and cameras are readily available and once fine-tuned enable the dedicated amateur to create spectacular pictures.

Consider also how successful amateur imagers have been in detecting transient events like cometary impacts on Jupiter. Professional astronomers just don't have enough telescope time to monitor the planets regularly. Continuous imaging of Jupiter carried out by dedicated amateurs around the world has caught fleeting impacts on several occasions and the chances are that these events would have been missed altogether without such observations.

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