



# The annular solar eclipse of 2012 May 20

There are two solar eclipses in 2012. A total eclipse will be visible in Australia and across the southern Pacific on November 13, and an annular eclipse was visible across the northern Pacific and southwestern USA on May 20/21. Even though an annular does not have any of the majesty of a total eclipse they are still interesting events to observe. I had previously seen two (Durness, 2003 and Valencia, 2005) and since this one was passing over a very accessible part of the world and had very good weather prospects I decided that it would be worth the trip.

The centre line crossed the US west coast on the California/Oregon border and tracked south-east through Nevada, Utah, Arizona and New Mexico. The eclipse ended at sunset in Texas. We decided to fly to Las Vegas since there were direct flights available from London at reasonable rates. On arrival we picked up our car and drove to Flagstaff where we included a night of observing with the 24-inch Clark refractor at Lowell. We then drove up to Bryce Canyon, Utah where we met up with John Mason's group for the eclipse itself.

I had brought my standard eclipse equipment which consists of a Canon EOS-550D camera and a Megrez 72 refractor which I use with a  $\times 2$  Barlow. With this setup the Sun almost fills the frame and the camera allows high definition stills and video to be shot simultaneously.

On eclipse day the weather conditions were perfect and our observing site at Bryce Point ( $37^{\circ} 36' 16''\text{N}$ ,  $112^{\circ} 09' 28''\text{W}$ ) overlooked one of the spectacular canyon amphitheatres. From this location the partial eclipse started at 18:23

local time (00:23 UTC) with the Sun  $24^{\circ}$  above the horizon and observations would end at sunset (20:33 local) with the Sun still in eclipse.

Thousands of local people had come to Bryce for the eclipse and we were afraid they might be disappointed. This was a particularly large annular since the Moon was near apogee and the Earth was near perihelion. At maximum only 87% of the Sun's area was obscured by the Moon and it wasn't obvious that an eclipse was in progress unless you actually looked at it through appropriate filters. Some US newspapers had included pictures of a total eclipse in their reports and it certainly wasn't going to look like that!

In the end, most people seem to have been impressed by the spectacle and I certainly had a good view through the telescope. For me, the best part was seeing the partially eclipsed Sun set behind the pines on the far side of the canyon.

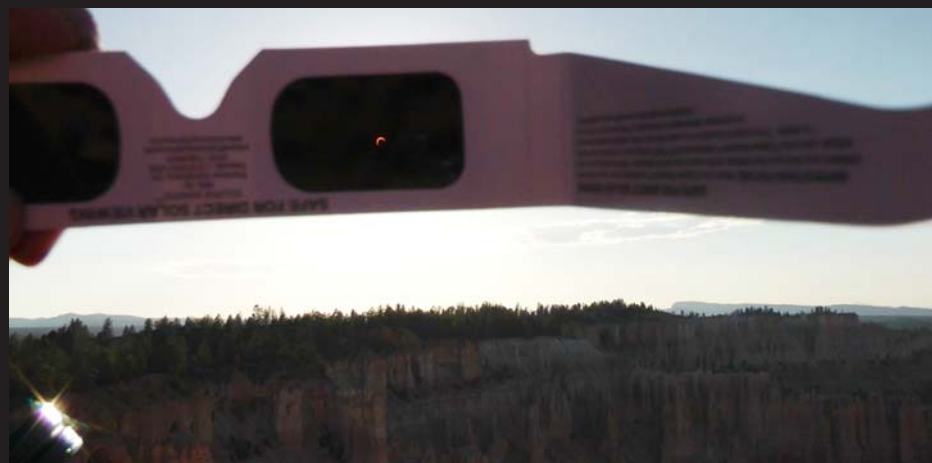
**Nick James**



Partially eclipsed Sun at sunset, 02:27:20 UTC, Canon EOS 550D, Megrez 72, HD video framegrab.



Annularity just after second contact at 01:31:38 UTC. Good Bailey's beads were seen at both second and third contacts. Canon EOS 550D, Megrez 72, 1/4000s.



The naked eye view from Bryce Point at 01:27 UTC (19:25 local) when the Sun was  $11^{\circ}$  above the canyon wall.

## GREEN WITCH Telescopes & Binoculars

Please  
Note our  
NEW  
Address

Greenwich House,  
2 Bakers Court,  
Great Gransden,  
Sandy, Beds SG19 3PF

A well-stocked showroom,  
warm welcome &  
friendly advice.

FREE PARKING

**01954 211288**

Also mail order and on-line sales

**www.green-witch.com**

Less 50%  
to BAA  
members