

Special report 1999:

Total eclipse experience



On August 11th 1999, there was a total eclipse of the Sun, visible from Cornwall. This was the first total eclipse observable from British soil, since 1927. In 1999, the Hampstead Scientific society celebrated its centenary and to celebrate these two notable events, members of the society and their friends, went to Cornwall to observe the eclipse. After experiencing initial resistance from hotels and guest houses to the idea of accommodating 30 or so astronomers for a week during their peak holiday period,

an approach was made to the Cornish education authority. They proved to be most helpful and we were allowed to hire Redruth School for a week. Redruth being situated quite close to the centre line of the eclipse. Some members camped in the hall and gym, whilst the more hardy dwelt under canvas in the school playing fields. The school provided catering facilities for breakfast and packed lunches and gave access to their Internet facilities.

In the months leading up to the eclipse, members spent time and effort building and modifying equipment to record the event. Long focus telephoto lenses were obtained. Special filters were made and experiments were conducted photographing and videoing the Sun. Films were chosen and exposure times determined. In June, many members attended a meeting at the Astro. Sec's. home to discuss equipment and travel arrangements.



The media, press and television, became aware of the forthcoming event and our own eclipse chaser, Jim Brightwell, who has travelled the globe to observe 6 total solar eclipses, was much in demand for interviews. The media managed to convince much of the general public that Cornwall would be turned into a disaster zone, food and water would run out and that during eclipse week the population of the county would consume 7,500 miles of toilet paper! Presumably proving that solar eclipses have

a hitherto unknown laxative effect on rural populations! Moreover, the roads in the region would undoubtedly become gridlocked and emergency services would be unable to cope. Doctors and midwives would be unable to attend confinements. One can only admire the restraint exhibited by locals, nine months earlier, if they really believed such nonsense!

In the event, the journey to Cornwall turned out to be totally uneventful, there were no exceptional traffic jams and many of the special campsites passed on the way, appeared to be almost deserted. We arrived at Redruth School on Sunday 8th of August. We spent the next two days sorting out

Hampstead Scientific Society

equipment and enjoying the local scenery. The night of the 10th of August was totally clear and many of us spent some hours photographing the night sky and looking out for any early Perseid meteors, the maximum due to occur of the 12th. The clear Cornish air afforded fine views of the Milky Way and the star clouds in Sagittarius were easily visible right down to the horizon. Despite the clarity of the night sky, we were all too aware that cloud was on the way! Meteorological reports and charts obtained via the Internet, indicated that a front was moving in. We hoped that its progress would be slow and that it would hold off until after the eclipse.

The morning of the 11th dawned totally overcast. By 10.30 am. it was raining a fine drizzle. At this point we knew for certain that we would not see the full glory of the eclipse. As the moment of totality approached, we stood on the steps of the television room, hoping, at least to witness the sudden darkening as the Moon's shadow swept over us. The sky took on an eerie pallor, darkening steadily. Then suddenly, the shadow swept over us. All the streetlights in



Redruth snapped on and the seagulls set up a manic squawking. The temperature dropped and a chill wind blew. The rain abated and as we looked around we could see a band of light like a sunrise, all around the horizon. Thus it remained for a little over two minutes as we stood in the shadow cast by the Moon. A strange almost tangible silence gripped the land, nothing stirred. Nature seemed to be holding its breath. Then quite suddenly, the sky began to lighten, the seagulls began to squawk again, the streetlights blinked out and totality was over.

Although we had failed to see the full glory of the eclipse, we had observed the strange atmospheric effects, phenomena, that might have gone, unnoticed had we been concentrating on the Sun itself, and it was generally agreed that it was worth the journey just to experience that! Some members stated that the experience had a strong emotional effect on them. I agreed, the emotion I felt was anger! If only the cloud had been delayed by 12 hours, we would have had cloudless skies.

Meanwhile, back in London at the Hampstead Observatory, Julia Daniels, Julie Atkinson and Geoff Shelley, managed to project the 97% partial eclipse for the benefit of visitors and even managed to secure a few photographs. So at least some members of the Society saw something of the Sun on eclipse day!

Doug Daniels (Astro. sec.)

