ING Welcomes Young Cornish Astronomers

Michael Willmott (Cornwall Schools Astronomy Project) and Javier Méndez (ING)

In mid June, young Cornish astronomers Amanda Willmott (14) and Aaron Shrimpton (13) travelled to the Roque de Los Muchachos Observatory to work with ING astronomers on an observational programme at the 1-m Jacobus Kapteyn Telescope (JKT). Amanda and Aaron are both members of the Cornwall Schools Astronomy Project, a pioneering scheme organised by some local science teachers to give pupils the chance to study for GCSE Astronomy out of school hours by means of a virtual classroom environment. Having realised the potential of such a group of youngsters and the use of the JKT for educational purposes, ING allocated time on a discretionary night on the JKT, and invited Amanda and Aaron to La Palma.

Acclimatising themselves quickly to the altitude (2350m), they toured the various locations, including the William Herschel and Isaac Newton telescopes, before concentrating on their own programme. Under expert tutoring, they were fully involved at all stages of the observational programme. On the first day, they undertook preliminary work, which included checking position, apparent diameters and magnitude of candidate objects, and determining the position and suitability of possible guide stars for each of these objects. During the following night, they initially assisted in an ongoing programme monitoring microlensing events associated with the Galactic Bulge in an attempt to discover extra-solar planets around other stars. For their own work, they used the SITe2 CCD, with a variety of filters, to obtain multiple images of a planetary nebula (M27), a globular cluster (M15) and a spiral galaxy (NGC7331). In the JKT control room, they specified the location of the guide stars to the control system, then initiated the CCD image taking and monitored progress until a successful conclusion at 5am. The following evening, they worked with an astronomer, using a series of data reduction procedures to enhance the images, by compensating for electronic noise and different sensitivities between pixels, and removing the effects of cosmic rays. They have now returned to the UK with their results, and can continue to work on their data.

This visit was an outstanding success, and demonstrated what can be achieved when youthful enthusiasm and hard work meets with skilful guidance and expertise at an international location of renowned and groundbreaking facilities. Both pupils were extremely grateful for everyone's hard work which made their visit possible, and especially for ING astronomer's unstinting commitment. ¤

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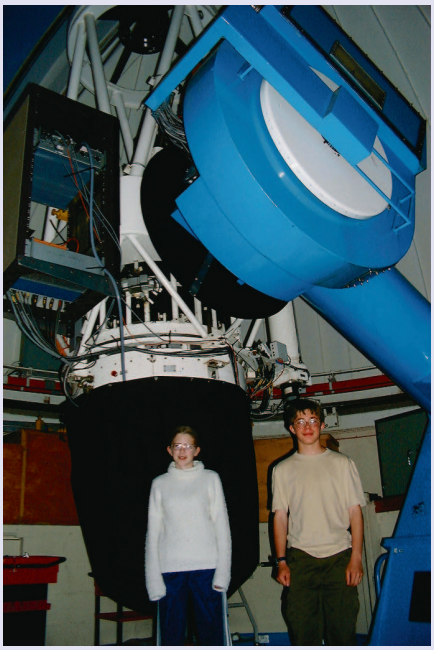

From top to bottom: 1) Amanda and Aaron inside the JKT dome; 2) 'True-colour' image of M27 Planetary Nebula obtained by the young astronomers. Combining images taken with different filters allow students to learn about the meaning of colours in astronomy; 3) Amanda, Aaron and their tutor at the JKT control room.

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