

ASTRONOMICAL SOCIETY OF FRANKSTON
 Newsletter April 1982

C O M I N G E V E N T S

April 28 Monthly ASF Meeting, 8 pm , Room 16,
 Wed. State College, Frankston.

At this month's meeting, Ken Bryant will present a talk on " The Galaxy ". He intends to mainly discuss objects which members may easily view in the night sky , by naked eye, binoculars or a small telescope.

May 1 International Astronomy Day
 Sat.

To share in the worldwide celebration of International Astronomy Day, the ASF will be holding its monthly Viewing Night on Saturday May 1 (not Friday April 30 as previously listed).

It is hoped that a large number of visitors will attend, so the assistance of members (with 'scopes where possible) will be welcome.

S P A C E S C I E N C E

Two space science projects depend on Federal funding in the 1982 budget in order to proceed. They are:

- the AUSTRALIA TELESCOPE , in which six new 22-metre radio telescope dishes will be linked to the existing 64-metre Parkes dish, and
- the STARLAB space telescope for which Australia should provide the instrument package. Canada will construct the telescope, and NASA will use the Space Shuttle to launch it.

An article describing these two projects, and how you can assist by lobbying Federal MPs will be on display at the monthly meeting.

(There was an article on the Australia Telescope in 'The Age', 'Saturday Extra', page 6, on April 10.)

GRAZING OCCULTATION

On 31 March 1982, at about 8.51 pm Australian Eastern Standard Time, a star of magnitude 6.9 (just below the naked eye threshold) called ZC 907, grazed the northern limb of the Moon, as seen from a narrow band which passed through southern Victoria. This band crossed the Mornington Peninsula from an area between Mt Eliza and Mornington to an area surrounding Tyabb.

Accurate timings of the disappearance and reappearance of a star as it appears to pass behind the mountains of the Moon can improve the knowledge and accuracy of the positions of the Earth, Moon and star, as all three bodies are virtually in line at the time of occultation.

Therefore a number of members of this society assisted in setting up an observing "fence" almost at right angles to the abovementioned band. Nine sites were manned along Stumpy Gully Road, between Mornington Tyabb and Eramosa Roads, and the sites were 300 metres apart, giving an overall length of the "fence" of 2.4 km. The main observers at each site, starting at the southern end and going roughly northwards, were Clive Nichols, Aubrey Mather, Peter Norman, Steve Wilbourne, Arthur Higginson, Jim Drewery, Ken Bryant, Nigel Masen and Bruce Tregaskis.

The weather and general seeing conditions were perfect for the event, although the observation itself was difficult because the star at one period seemed to merge with the bright northern cusp of the Moon in the telescopes.

Each observer started a tape recorder well before the predicted time of the event and recorded the time pips which are transmitted each second from VNG, Lyndhurst, on either 4.5 or 7.5 MHz. He also taped his comments about the event using a microphone. Thus, by replaying the tapes later, the times of disappearance and reappearance (sometimes multiple, depending on the lunar mountains) of the star could be determined for each of the observers. Some observers had problems which spoilt their results, but six tapes were collected and later passed on to Peter Raw of the Astronomical Society of Victoria. He led a similar sized observing team to an area near the You Yangs. It is hoped to give you more details, including results, next month.

