

Meteor Shower



WHAT ADELAIDE MAY SEE early tomorrow morning. The Leonid meteor shower, which recurs at intervals of 33 years. This is what the north-eastern portion of the sky may look like, and how it actually appeared to startled inhabitants of Florida in 1799. The meteors were last seen in 1866, but did not appear in 1899.

100 MILES A SECOND

Meteors' Dress Rehearsal

SKY FIREWORKS

BRILLIANT white and red-tinged Leonid meteors, sweeping across the sky at speeds approaching 100 miles a second, thrilled astronomers last night with their full dress rehearsal of what is expected to be a magnificent fireworks display some time tonight or early tomorrow morning.

Moonlight and broken clouds may interfere with the spectacle, but the Government Astronomer (Mr. G. F. Dodwell) says the meteor shower will be worth missing sleep to see.

The display will be the fourteenth in 1,000 years. On 19 occasions scientists have been disappointed because of weather conditions or the deflection of the meteor swarm from its normal track by the gravitational attractions of major planets.

Amateur photographers and observers can play their part in providing information that may be valuable to scientists in determining more exactly the orbit of the Leonid meteor stream and the associated comet, Temple's.

This comet has been lost, and scientists hope the celestial phenomenon early tomorrow morning will give some clue to its location.

A vivid description of last night's spectacle was given today by Mr. Dodwell, who was tired but enthusiastic after his long vigil.

10 BRILLIANT METEORS

"The bright moonlight," he said, "obscured the fainter meteors and the beginning of the flight of the very bright ones, but between 2.30 and 3.30 I counted 10 really brilliant meteors."

"Some of the meteors were as bright as Jupiter, and were a brilliant white, tinged with red. Their flight lasted from half a second to a second, and their trail in the sky was visible for two seconds."

"One particularly fine meteor shot right across the south-eastern quadrant of the sky and disappeared in a ball of fire near the Southern Cross."

NO DANGER

Mr. Dodwell said there was no danger of meteorites developing and striking the earth. The Leonid shower was composed of a nebulous material that was burnt up completely in the atmosphere.

Meteors generally became visible at an average distance of 70 miles from the

earth, and disappeared at a distance of about 50 miles after a flight of 35 miles. There is a school of thought among scientists which subscribes to the belief that the aggregation of meteors in time forms small planets. Meteors are described as the debris of disintegrated comets, and those in the Leonid swarm vary in size from a small speck to pieces as big as a large marble.

Adv. 17-11-32
ALL READY TO SEE METEORS

Brilliant Spectacle Expected

HUNDREDS WATCH

Hundreds of amateur astronomers and photographers remained out of bed last night to see the expected Leonid showers of meteors. In the early hours of yesterday morning astronomers watched a display which promised well for the more brilliant exhibition expected this morning.

The Government Astronomer (Mr. G. F. Dodwell) regarded this first shower as a most promising portent of a successor. The only factor which might have mitigated against the brilliance of the display was unfavorable weather, and Mr. Dodwell watched each cloud disappear over the horizon yesterday with undisguised relish.

"Last night the fainter meteors were obscured by the bright moonlight," he said, "but between 2.30 and 3.30 I distinctly counted ten beautiful meteors. Jupiter did not exceed in brightness some of the more vivid meteors, which were a dazzling white tinged with red. The duration of their flight was from half a second to a second, and their trail in the sky was visible for two seconds."

"One particularly fine meteor went right across the south-eastern quadrant of the sky, and disappeared in a ball of fire near the Southern Cross."

Preparations At Observatory

Preparations were being made at the Observatory last night for the recording of the phenomenon. Several cameras were in position, focussed on a wide angle so that a large field of view could be covered.

The sky conditions were fairly clear as the Government Astronomer (Mr. Dodwell) and a party of University students waited at the Observatory at 2 a.m. today with one large telescopic camera and ordinary cameras to record the observations which were expected to be noted between 2 and 3 a.m.

Revolving Beam Trouble

Last night fears were expressed that the revolving light on North terrace would spoil the view of the meteors and would negate any effort to secure a photographic record of the display.

Representations were made to the Shell Company, and as the light is registered as a maritime bearing, the desirability of shutting it off from 2 a.m. to 3 a.m. was discussed with harbor authorities, who decided that nothing could be done without reference to the board.

Adv. 18-11-32

The following were appointed to the Council of the School of Mines by the Executive Council yesterday:—Sir Langdon Bonython, Professors R. W. Chapman and Kerr Grant, Drs. C. E. Fenner and L. Keith Ward, Messrs. E. A. Anstey, E. Anthony, M.P., J. A. V. Brown, D. M. Charleston, W. H. Harvey, M.L.C., G. Jeffrey, and A. McArthur, M.P.

ONLY THREE LEONIDS

Night Sky Display Disappoints

MAY BE MORE

ONLY three of the Leonid meteors shot across the Adelaide sky last night—in- stead of the 200,000 "shoot- ing stars" expected.

"It is evident that we missed the main stream," said the Government Astronomer (Mr. Dodwell) today, after his all-night vigil.

This is the Leonids' second failure since 1866. They were brilliant then, but failed in 1899.

Like Mr. Dodwell last night, Oxford scientists and students waited up all night in 1899. In December, 1899, the follow- ing appeared in the Oxford magazine:—

*"Astronomers are blank with shame,
All their prognostics came to grief;
An expletive I will not name
Would give each scientist relief;
We feel that decency forbids
All mention of the Leonids."*

MAIN STREAM GONE

"There is a chance that more may be seen tonight," said Mr. Dodwell today, "but considering the display on Tuesday night, I think that the main stream passed us in the daytime yesterday."

With several students and enthusiastic amateurs, he took up his vigil for the rare spectacle at 1.30 this morning. The sky was clear, the air was fresh, and moon- light was the only hindrance.

At 2.4 a.m. the first Leonid appeared a little north of Mars, and shot towards the watchers. It left a train of white light that lasted for two seconds.

At 2.46 the brightest described a vast arc in the sky, and fled towards the South- ern Cross, in a trail of brilliant white light tinged with red. It left a milky train 20 deg. long. Then it vanished.

NEXT LOT IN 1965

Eleven minutes later the third and last Leonid raced from near Mars.

The next minute a meteor four times as bright as Jupiter flamed near the Southern Cross, and appeared to fall headlong. But Mr. Dodwell doubts whether this was a Leonid.

At 3.30 a.m. the sky became overcast, and watching was useless.

"We must wait until 1965 for the next," said Mr. Dodwell cheerfully.

The main stream is visible in all its glory only once every 33 years.

"It has evidently been deflected from its normal course owing to gravitational causes," said Mr. Dodwell.

Melbourne Display Fails, Too

MELBOURNE, Thursday.—The meteor display expected early today was a failure. It disappointed many Melbourne watchers. Three meteors only were seen by the Government Astronomer (Mr. Baldwin) between 1.30 a.m. and 4 a.m.

Clouds developed soon after 2 a.m. These may have obscured part of the stream.

It was apparent, said Mr. Baldwin, that although Australia was calculated to be in favorable longitudes for observing the phenomenon, the major portion was not visible in Melbourne.

DOCTOR OF MUSIC AT 32

Success Of Mr. Alex Burnard

HAS CREATIVE GIFT

Mr. Alex Burnard, Mus. Bac., has, by examination, gained the degree of Doctor of Music. Doctors of Music are rare in South Australia. The success of Dr. Burnard brings the number to three. The others are Dr. E. Harold Davies (1902) and Dr. Ruby Davy (1918). Dr. Burnard has devoted himself zealously to academic study for many years. In 1927 he graduated Mus. Bac. in the University of Adelaide, his final examiners being Professors W. A. Laver, Melbourne, and E. Harold Davies. Included in the pianoforte recital programme then submitted was a set of original variations on an old Somerset folk song, "The Watchet Sailor," which deeply impressed both his examiners as revealing a creative gift of exceptional promise. Proceeding three years later to the doctorate course Mr. Burnard essayed an original composition of some magnitude in a setting of Milton's "L'Allegro" for double chorus, solo voices, and full orchestra. Dr. Percy Buck, King Edward Professor, of London University, was appointed by the University Council as co-ex- aminer with Professor Davies.

Commenting upon this, Professor Buck wrote:—"I have not the slightest hesitation in passing the work. It is full of ideas, shows acquaintance with both traditional and modern develop- ments, and in every way displays a gift for composition."

Professor Davies also reported that the work "showed a wealth of origi- nality, as well as a complete mastery of technical device. Indeed, in many



Dr. Burnard

ways Mr. Burnard's composition strikes me as one of the most promising achievements among Australian musi- cians."

In 1925 Dr. Burnard went to Lon- don to continue his musical studies at the Royal College of Music, receiv- ing instruction in composition from Dr. Vaughan Williams, and in piano- forte playing from Herbert Fryer. There he greatly broadened his choral and orchestral experience. At the request of Sir Hugh Allen, he played his "Watchet Sailor Variations" at an R.C.M. concert.

Orchestral compositions of Dr. Bur- nard include a rhapsody, a suite for strings, and a "characterisation" en- titled "The Jovial Spirit." Among his chamber music is a set of five Shakespearean songs for baritone and string quartet. Somerset folk song arrangements from his pen were sung by Clive Carey in Adelaide recently. Percy Grainger, during his 1926 visit, commented in very encouraging fashion on Dr. Burnard's work, and frequently writes to him.

Since 1930 Dr. Burnard has been music critic of "The Advertiser."

Born at Adelaide in 1900, the young- est son of Mr. R. T. Burnard, an edu- cationist now retired, the new Mus. Doc. was educated at Unley High School and Prince Alfred College. At ten years he received his first musical instruction from Dr. Harold Davies, and continued with him for six years. For seven years Dr. Burnard was a clerk in the Commonwealth Bank. In 1920 he studied the pianoforte at the Elder Conservatorium with Mr. George Pearce. In 1924, Dr. Burnard de- cided to take up music profession- ally, and began his study for the A.M.U.A. diploma, which he secured in the following year. He graduated Mus. Bac. after two years' study, a remarkable achievement.