

Meteors.

SUMMARY OF METEORS FOR 1930.

Place.				New Zealand Date.				Notes.	
					d.	h.	m.		
Auckland	..	..	..	February	9	13	12	Daylight meteor.	
Cambridge	..	..	..	February	10	—	—	Very brilliant.	
Wellington	..	..	..	February	20	—	—	Very brilliant.	
Wellington	..	..	..	March	1	4	30	Very brilliant. Exploded.	
Cook Strait	}	..	..	June	18	22	15	Very brilliant.	
Auckland									
Hamilton									
Wellington	..	..	..	July	1	22	5	Very brilliant. Exploded.	
Christchurch	}	..	..	July	16	22	25	Very brilliant	
Geraldine									
Te Kuiti									
New Plymouth	..	..	..	July	20	20	15	Exploded.	
Wellington	..	..	..	July	23	20	42	Observations made at Observatory only faint meteors recorded. Six meteor-paths plotted.	
					to	21	7		
Oamaru	..	..	..	July	30	23	0	Brilliant, detonating.	
Wellington	..	..	..	November	8	20	20	Brilliant.	

Rumbling noises which were heard in the Ohaupo district on June 13 were attributed to an earthquake, but after an intensive investigation Mr. R. A. McIntosh, F.R.A.S., of Auckland, found that this was due to a brilliant meteor which fell at 6.30 p.m. There are no records of an earthquake at the Dominion Observatory at this time.

Photographs of Moon and Surrounding Stars.

This research was begun at the Lick Observatory in 1915, and has been continued from time to time in Wellington. The method is available for—

- (1) Fundamental determination of the position of the moon, and was undertaken originally in response to an invitation from Professor E. W. Brown to provide material for testing his tables of the motion of the moon.
- (2) This method may also be used as an independent one in the determination of longitude.
- (3) In the determination of latitude.

In (2) and (3) the errors are different from those in the determination of longitude by wireless telegraphy and in the determination of latitude by zenith telescope observations.

Comets.

Owing to their faintness and unsuitable positions in the sky, none of the comets reported was observed.

Total Solar Eclipse of 1930, October 21-22.

The first action taken with reference to this eclipse was in October, 1929, when the New Zealand Government authorized Dr. L. J. Comrie, Superintendent of His Majesty's Nautical Almanac Office, London, to borrow the 19 ft. coronagraph and the 12 in. coelostat and to forward them to New Zealand. The coronagraph was lent by the Royal Irish Academy and the coelostat was lent by the Royal Astronomical Society. The apparatus was received in Wellington early in April, 1930. Other apparatus in Wellington was also adapted and fitted for use at the eclipse.

On 30th May, 1930, the President of the New Zealand Astronomical Society was advised that owing to the altered financial situation the Government could not undertake to provide the whole cost of an Eclipse Expedition. The Society acted promptly on this notice and decided to issue an appeal for contributions. The Government was approached again by the Society, through the President, Sir Thomas Kay Sidey, and agreed to subsidize voluntary contributions on a £1-for-£1 basis up to £200, being £100 grant direct and £100 through the New Zealand Institute. The friends of the Society responded to the appeal, and sufficient funds were obtained to enable the Eclipse Expedition to proceed.

The instruments were erected at the Dominion Observatory, Wellington, and practices were undertaken. His Excellency the Governor-General, the Right Honourable Lord Bledisloe, the Patron of the Society, showed great interest in the work of preparation, and visited the Observatory and inspected the equipment.

The cash donations were supplemented by generous donations of goods and services, with the result that the expedition was enabled to leave Auckland in September for Suva on the R.M.S. "Niagara." At Suva the expedition transferred to H.M.S. "Laburnum" and was landed safely by that ship at Niuafou'u. The members of the expedition were: Dr. C. E. Adams, F.R.A.S. (leader); Dr. William C. Burns; Mr. R. W. de Montalk, F.N.Z.I.A.; Mr. F. Gawith, F.R.A.S.; Mr. P. W. Glover, F.R.A.S.; Mr. C. B. Michie, F.R.A.S.; Mr. P. L. Overton.