

OBSERVATIONS RELATED TO THE IMPACT OF LUNIK II

By G. FIELDER

Director, Lunar Section, British Astronomical Association

THE accompanying table gives particulars of observations which may be related to the impact of *Lunik II* with the Moon.

These observations refer to at least four different spots on the Moon's surface and cannot all refer to the impact of the instrument container of *Lunik II*. However, more than one object may have hit the Moon. From the point of view of position, it will be

noted that most of the observations are consistent with the radio result. Those not consistent in this respect are asterisked. Photographs of moderate quality taken from the Pic-du-Midi, and from G. A. Hole's Observatory at Patcham, before and after the impact of the instrument container, do not appear to confirm any of the above observations.

OBSERVATIONS WHICH MAY BE RELATED TO THE IMPACT OF *Lunik II*

Observer(s)	Location	Telescope	September 13, 1959 Univ. time	Position on Moon	Description of phenomenon (and its duration)
J. G. Davies A. C. B. Lovell (ref. 1)	Jodrell Bank	250-ft. Radio-telescope	21h. 02m. 23s.	Within 7' arc from centre of Moon's disk	Velocity of impact, $\sim 3 \pm 0.5$ km./sec. (instantaneous cessation of radio signals)
P. Moore (ref. 2)	E. Grinstead	12½-in. Reflector, × 300-400	21h. 02m. 23 ± 2s.	+ 085, + 195	Pinpoint of light (< 0.5 sec.)
H. P. Wilkins (ref. 3)	Bexleyheath	15¼-in. Reflector, × 300	21h. 02m. 23s.	Close to Schneckenberg	Pinpoint of light and dark ring (few seconds)
B. Balázs J. Balázs M. Lovas	Konkoly	7-in. Refractor	21h. 02m. 30s.	+ 024, + 434	Dark spot, 4 km. in diameter, expanding asymmetrically into a hazy, grey object elongated to N. Mean width then ~ 40 km. (14 min.)
P. A. Murray R. D. Williams	Carrickfergus Carrickfergus	6-in. Reflector, × 112 Small refractor, × 30	21h. 02m. 15s. 21h. 02m. 15s.	Auwers ~ Auwers	Distinct brightening (1.5-2 sec.)
S. Bradford*	South Shields	3-in. Refractor, × 120	22h. 03m. Some time between 21h. 01m. and 21h. 05m.	Littrow + 340, + 250	Dusky shading (> 17 min.) Patch becoming as large as Plinius 4 and doubling its diameter in 3-4 min. of time
A. Florsch	Strasbourg	6¼-in. Refractor, × 150	21h. 02m.	Near junction of M. Seren, and M. Tran.	Black spot appearing to diffuse rapidly (~ 5 min.)
R. G. Townsend*	Sanderstead	1 in. Refractor, × 15	21h. 02m.	In vicinity of Littrow, Mac- Robius, and Römer	Jet black spot, expanding and turning dark grey (> 5 min.)
R. P. Townsend*	Sanderstead	2-in. Refractor, × 20	21h. 02m.		

*-3 Nature, 184, 501 (1959).

NEWS and VIEWS

National Institute for Research in Dairying:
Dr. A. T. R. Mattick

DR. A. T. R. MATTICK, until September 30 deputy chief scientific officer on the staff of the National Institute for Research in Dairying at Shinfield, retired on that date, having reached the age limit. Apart from the period 1915-19, when he served in the First World War in the Royal Army Medical Corps, the whole of his working life has been spent at the Institute, which he has seen grow from very small beginnings to its present status as the outstanding dairy research institute in the Commonwealth, if not in the world. In 1919, he became a graduate assistant to Dr. R. Stenhouse Williams, and succeeded the latter as head of the young Institute's Bacteriology Department in 1929. He became deputy director in 1948, still retaining the headship of the Bacteriology Department. In October 1958, on the retirement of Prof. H. D. Kay, he became acting director.

The development, during the past thirty years, of sound methods of dairy hygiene, both in Britain and

in countries abroad owes a very great deal to Mattick and his colleagues. When Mattick took it over, his Department at Shinfield had a scientific staff of three only, and its resources were meagre. With increasing funds and accommodation since 1933, and a carefully selected, growing staff, the early pioneer work was extended not only to cover the wide field of the application of microbiological science to the main problems of the dairy industry, but also to make substantial contributions to our basic knowledge of micro-organisms. Thus, on one hand, his laboratory was largely responsible for defining the exact conditions of heat exposure necessary in the continuous process now almost universally employed in Britain for the pasteurization of milk (conditions duly incorporated into the official regulations), and on the other hand, for the detection, isolation and identification of the interesting and powerful antibiotic nisin, produced by a streptococcus that he isolated from milk, and now being used industrially. These are but two examples from many that could be