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COMMUNICATION FROM THE OBSERVATORY AT LEIDEN.

Positions of Comet Beyer (1930 b), measured on plates taken by H. van Gent, by G. Pels.

This comet was supposed to be present on plates taken by Mr. VAN GENT with the 10-inch Franklin-Adams telescope at Johannesburg. After computing an ephemeris it was found on plates with the centre $7^h 53^m$, $-22^\circ 41'$ (1930), and as far back as 8 October 1929 it was sufficiently bright to be measured. So these observations extend to more than six months before the perihelion passage of the comet.

The plates were measured in the Repsold measuring machine of this observatory in four positions differing

by 90° . The comet was referred to three comparison stars, sometimes to two sets of three stars. The comparison stars were taken from the Carte du Ciel catalogues as faint as could be found. The measurements were reduced by the method of COMRIE (*J. B. A. A.* Vol. **39** p. 203). On most plates the comet was quite near the edge of the plate so that the images were not very good. The exposure time of the plates is 30^m .

The observed positions given below are geocentric.

Plate	Date	G. M. T. (Astr.)	$\alpha_{1930.0}$	$\delta_{1930.0}$	Comparison stars.
5759	1929 Oct. 8	^h ^m ^s 12 13 10	^h ^m ^s — [°] ['] 7 50 24.03 — 19° 1' 15.6		Hyderabad — 19° , $7^h 48^m$ Nos 25011, 25050, 25051 and Nos 25008, 25081, 25084 id.
5760	„ 8	12 44 50	7 50 24.56 19 1 17.6		
5782	„ 30	11 4 38	8 2 57.60 19 8 4.7		„ — 19° , $8^h 4^m$ Nos 27044, 27089, 27126 and Nos 27045, 27088, 27125 id.
5783	„ 30	11 36 33	8 2 58.13 19 8 3.8		
5799	Nov. 6	11 22 57	8 5 10.59 19 2 28.0		„ — 19° , $8^h 4^m$ Nos 27058, 27059, 27095 and Nos 27023, 29057, 27060 id.
5800	„ 6	11 54 37	8 5 10.86 19 2 25.8		
5814	„ 7	10 30 39	8 5 23.67 19 1 10.3		id.
5815	„ 7	11 2 4	8 5 24.03 19 1 10.6		id.
5835	„ 27	10 36 17	8 4 42.76 17 51 42.0		„ — 17° , $8^h 4^m$ Nos 24388, 24390, 24391 id.
5836	„ 27	11 8 12	8 4 42.34 17 51 35.3		

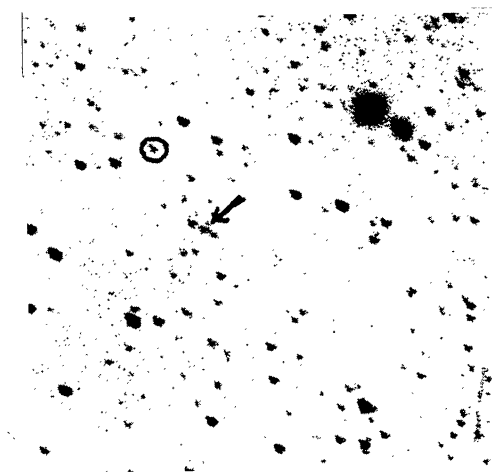
The positions of the comet computed from the elements mentioned in "Circulaire" N°. 291 by Mr and

Mrs SMILEY agree very well with the measured places. The residuals are:

plate	$O-C$	
	α	δ
5759/60	^s — 2	— 1'0
5782/83	— 2	— 0'9
5799/5800	— 1 ^s	— 0'9
5814/15	— 1 ^s	— 0'9
5835/36	— 2	— 0'9

As it was difficult to estimate the magnitude, Mr. OOSTERHOFF has looked on some plates for a star at a short distance from the comet of which the magnitude agreed with that of the comet. The positions of these stars are:

Plate	Date	α_{1900}	δ_{1900}
	1929		
5759	Oct. 8	^h 7 ^m 48 ^s 53'6	— 18° 56' 19"
5799	Nov. 6	8 3 59'1	— 18 53 50
5835	„ 27	8 3 15'3	— 17 43 38



The accompanying reproduction is from plate 5799. The comet is indicated by an arrow. The star of the same magnitude is enclosed in a circle. The side of the square is 20'. North on top.