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NSV 11164 = MINOR PLANET (563) SULEIKA

In the New Catalogue of Suspected Variable Stars (Kholopov et al., 1982), it is suggested that NSV 11164 is a minor planet. An investigation by the current author shows that NSV 11164 is the minor planet (563) Suleika.

The original report of NSV 11164 is by Innes (1917a), who located the object, numbered 123 in his list, during a survey of variable stars near R Coronae Austrinae. Innes 123 appears only on a single 60-minute plate, taken by H. E. Wood on 1915 Aug. 6, where it is recorded as being magnitude 14.8. Further details are given in Innes (1917b), where it is stated that the sole image is a 'good stellar image'. It is here that the remark 'Is only image found. Minor pl.?' appears.

An addendum to the initial report remarks that a further plate, a 30-minute exposure by Wood on 1915 Aug. 3, had become available and that comparison of this plate and the plate of Aug. 6 proved that three of the objects identified initially as variable stars were actually minor planets. Innes (1917a) made identifications as follows: Innes 111 = (22) Calliope; 132 = (9) Metis; and 134 = (267) Tirza. The first two identifications are confirmed as correct, but Innes 134 is in reality (131) Vala.

Table 1. Minor-Planet Candidates Reported by Innes

Innes No.	R.A.	Dec.	Equinox	Ref.	MP No.
111	$18^{\rm h}22^{\rm m}57^{\rm s}.8$	$-35^{\circ}44'27''$	1915	Wood (1917)	(22)
123	$18 \ 32 \ 15$	$-29\ 01.1$	1875	Innes (1917a)	(563)
132	$18\ 55\ 03.1$	$-29\ 01\ 17$	1915	Wood (1917)	(9)
134	$18\ 57\ 14.7$	$-29\ 02\ 32$	1915	Wood (1917)	(131)

Table 2. J2000.0 Coordinates for Minor-Planet Candidates

Innes No.	R.A. (20	000) Dec.	MP No.
111	$18^{\rm h}28^{\rm m}40^{\rm s}.3$	$-35^{\circ}41'15''$	(22)
123	18 40 11	$-28\ 54.5$	(563)
132	$19\ 00\ 25.3$	$-28\ 54\ 12$	(9)
134	19 02 36.8	$-28\ 55\ 11$	(131)

Table 3. Predicted Minor-Planet Positions and V Magnitudes

MP No.	R.A. (20	000) Dec.	V	Innes No.
(9)	$19^{\rm h}00^{\rm m}24.8$	$-28^{\circ}54'13''$	10 ^m 2	132
(22)	$18\ 28\ 40.3$	$-35\ 41\ 12$	11.3	111
(131)	$19\ 02\ 37.0$	$-28\ 55\ 13$	13.5	134
(267)	$19\ 09\ 57$	$-28\ 50.0$	14.2	
(563)	18 40 13	$-28\ 54.9$	13.2	123

The time of exposure of the Aug. 6 plate was not given by Innes. Wood (1917) later reported precise measurements of the three recognised minor planets from both the Aug. 3 and 6 plates, repeating the misidentification of (131) as (267) and giving the times of mid-exposure as 1915 Aug. 3.78722 UT and Aug. 6.79426 UT.

Table 1 gives the original-equinox measurements for the four Innes objects that are minor planets; Table 2 lists the corresponding J2000.0 coordinates. Table 3 lists the predicted J2000.0 minor-planet coordinates and visual magnitudes for 1915 Aug. 6.79426 UT.

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