

Vergleichsterne zu den Beobachtungen der grossen Planeten

am Repsold'schen Heliometer in Göttingen.

(Fortsetzung zu Bd. 142, Nr. 3405).

Hiermit gebe ich eine Fortsetzung des Verzeichnisses von Sternen zu den Beobachtungen der grossen Planeten und wiederhole die schon früher ausgesprochene Bitte um deren Beobachtung an Meridiankreisen.

Bezeichnung	Gr.		Genäherter Ort		Järl. Praec.	Zweck
BD. +12°2211	7 ^m .2	1897	10 ^h 21 ^m 45 ^s	+11° 50'.5	+3 ^s .2 —0'.3	Jupiter 1897
BD. +10.2166	4.0		10 27 23	+ 9 50.2	» »	
BD. + 9.2382	8.0		10 34 19	+ 9 22.7	» »	
BD. +11.2269	7.2		10 36 52	+10 53.7	» »	
BD. +11.2283	5.3		10 43 51	+11 5.4	» »	
BD. —16.4151	7.0	1897	15 38 10	—16 32.8	+3.4 —0.2	Saturn 1897
BD. —17.4431	6.5		15 43 59	—17 35.5	» »	
BD. —16.4174	4.8		15 47 58	—16 25.9	» »	

Zu dem früher gegebenen Verzeichnisse ist noch hinzuzufügen

BD. +23.1170	5.1	1895	5 57 44	+23 16.1	+3.6 0.0	Jupiter 1895
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während der dort aufgeführte Stern BD. +23°1087 irrthümlich aufgenommen worden ist.

Göttingen 1897 Juni.

Wilhelm Schur.

Nebulae unrecorded in the Catalogues

found on photographs by *Isaac Roberts*, D. Sc., F. R. S.

The photographs here referred to were taken with the 20 inch reflector at my observatory on Crowborough Hill on the dates affixed to each respectively, and the Catalogues referred to in the heading are the New General Catalogue and the Index Catalogue by Dr. Dreyer; published in the Memoirs of the Royal Astronomical Society. I wish to express my indebtedness to Dr. Dreyer for collecting the materials from all available sources and compiling, with manifest labour and care, this book of reference so valuable to astronomers.

The coordinates of the positions of the new nebulae are given from measurements made from the nucleus of the nearest object to them found recorded in the NGC. The epoch of which is the year 1860.

Region of H. I. 217 Aurigae NGC. 1579. — Nova RA. 4^h 21^m 38^s, NPD. 54° 51'.9. Nebulosity very faint; circular in form; 15th mag. star involved on the north margin and 17th mag. star close to the north preceding side. 1894 January 9th.

Region of H. II. 37 Virginis NGC. 4527. — Nova RA. 12^h 25^m 28^s, NPD. 86° 34'.4. Pretty faint; elongated north following to south preceding; no structure or nucleus; 17th mag. star on the north preceding side and a bright star on the south following side. 1894 March 25th.

Region of H. I. 92 Comae Berenices NGC. 4559. — Nova RA. 12^h 30^m 23^s, NPD. 61° 1'.2. Like a 15th mag. star involved and surrounded by faint nebulosity; a 15th mag. star 102" north following and a 14th mag. near it.

Nova RA. 12^h 32^m 21^s, NPD. 61° 18'.6. Very faint; elongated south following to north preceding and pointing

to a 15th mag. star 163" distance from the south following end. Within a radius of 10' with this object as a centre are several nebulous stars of 16th to 17th mag. 1894 May 1st.

Region of H. VI. 41 Draconis NGC. 6412. — Nova RA. 17^h 26^m 21^s, NPD. 14° 1'.2. Pretty bright; elongated north to south; no distinct nucleus; bright star south preceding and 15th mag. star north following. H. VI. 41 is described as a globular cluster, but it is a left-hand spiral nebula with stellar nucleus and a small bright star and five or six stellar condensations in the spirals. 1895 Sept. 11th.

Region of H. VIII. 76 Cygni NGC. 6991. — Nova RA. 20^h 51^m 11^s, NPD. 43° 7'. The nebula precedes and involves the star BD. +46°3011 mag. 6; is about 6½' in length from north to south and 5' in breadth from preceding to following; irregular in structure and in outline; nebulosity of a fleecy character with many stars both bright and faint involved in it. 1895 Sept. 13th.

Region of H. II. 240 Pegasi NGC. 7814. — Nova RA. 23^h 54^m 57^s, NPD. 74° 12'.4. Very faint; round, about 30" in diameter; no structure. 1895 Nov. 17th.

Nova RA. 23^h 55^m 28^s, NPD. 74° 9'.4. Faint; elongated north to south; one of three 15th mag. stars involved; condensation at the northern extremity; length including the star about 42". 1895 Nov. 17th.

Nova RA. 23^h 55^m 31^s, NPD. 74° 11'.8. Faint; small; slightly elongated preceding to following; faint nucleus; 17th mag. star close to the preceding end. 1895 Nov. 17th.

Nova RA. 23^h 56^m 2^s, NPD. 74° 49'.8. Bright; elongated north following to south preceding about 50"; stellar

nucleus about 17th mag.; four 12 to 16 mag. stars on the south near it. 1895 Nov. 17th.

Region of H. I. 157 Trianguli NGC. 672. — Nova RA. 1^h 39^m 39^s, NPD. 63° 22'.3. It is nearly as large and prominent as H. I. 157 and distant from centre to centre 8' only: nucleus consists of 6 faint stellar condensations forming a straight line in the direction south following to north preceding and there are 6 or 7 very faint condensations of nebulosity near the preceding margin; 15th mag. star on the north preceding margin and a 16th mag. star at the south following end of the nucleus. 1896 Nov. 29th.

It is remarkable that this object should have escaped detection by the many keen observers who have examined the nebula H. I. 157, which is only four minutes of arc distance from it, and it appears to me that we are justified by the evidence in inferring that this nebula has come into the state of visibility during the past half century. Lord Rosse in 1876 made seven observations of the nebula adjoining, but does not refer to this one. It is remarkable also that the nuclei of the two nebulae are straight lines of faint nebulous stars immersed in nebulosity, and they are so clearly depicted on the photograph that I think they should be visible to the eye by aid of telescopic power.

Nova RA. 1^h 42^m 19^s, NPD. 63° 29'.7. Faint; elongated south following to north preceding; faint stellar nucleus; probably a spiral; cluster of stars 9 to 15 mag. on the south side 13" following the nucleus. 1896 Nov. 29th.

Starfield, Crowborough, Sussex, 1897 May 1.

I find that the nebula Swift IX No. 165 Index Catalogue is the same object as H. II. 612 NGC. No. 684.

Region of M. 87, 89, and 90 Virginis. — Nova RA. 12^h 26^m 7^s, NPD. 76° 22'.0. Faint; small; round; no structure. 1892 April 29th.

Nova RA. 12^h 26^m 13^s, NPD. 76° 22'.3. Probably a small spiral nebula with a nucleus like a 16th mag. star surrounded by nebulosity. 1892 April 29th.

Nova RA. 12^h 26^m 44^s, NPD. 75° 54'.0. Faint; round; small; with a nucleus like a 16th mag. star. 1892 April 29th.

Nova RA. 12^h 28^m 22^s, NPD. 76° 28'.5. Small; round; some nebulous condensations involved. 1892 April 29th.

Nova RA. 12^h 29^m 40^s, NPD. 75° 58'.5. A streak of nebulosity extending in north preceding direction from a 13th mag. star; two 12th mag. stars near, and the faint comes of the one on the north following side seems to touch the nebulosity. 1892 April 29th.

It is necessary to distinguish on photographs between faint stars and small stars for I find on numerous plates, taken during the past eleven years, stars which have a small bright nucleus surrounded by nebulosity and they are quite distinct from the normal faint stars which appear as small round spots without a nucleus. If I were to register all those faint stars having a small bright nucleus the list would be a very long one, and the objects classified as »small circular nebulae with small bright stellar nuclei«.

Isaac Roberts.

Benennung eines kleinen Planeten.

(350) Ornamenta, 1892 U, découverte à Nice le 14 Déc. 1892. *Charlois*.

Anzeige.

Die Herren Abonnenten, welche die Astronomischen Nachrichten ferner zu erhalten wünschen, werden ersucht, ihre Bestellung und Vorausbezahlung auf den folgenden Band baldmöglichst einzusenden, wofern es der Expedition nicht bekannt ist, dass sie als ständige Abonnenten angesehen werden wollen.

Man pränumerirt bei der Expedition der Astronomischen Nachrichten in Kiel mit netto 12 Mark für den Band von 24 Nummern nebst Inhaltsverzeichnis und Register. Für die von der Expedition nummerweise franco versandten Exemplare beträgt der Preis 15 Mark. Einzelne Nummern werden zur Completirung, wenn sie vorrätbig sind, zum Preise von 60 Pfennig abgelassen.

Den Hauptdebit dieses Blattes hat, wie bisher, die Buchhandlung von W. Mauke Söhne in Hamburg.

Geschlossene Bände, von Band 100 an, können jederzeit von der Expedition in Kiel zum Preise von 12 Mark pro Band bezogen werden. Von den älteren Bänden sind noch Band 32–99 vorrätbig und zu gleichem Preise bei Frau Dr. Pape, Kiel, Kirchenstrasse 5, verkäuflich.

Berichtigungen zu Nr. 3428 Bd. 143 p. 319–322. In der Ueberschrift zu Tafel III statt: siebenten Decimale lies: sechsten Decimale.

» » » » » 319. Tafel III $\hat{h} = 48^\circ$, $x = 2400''$ statt: 33 lies: 43.

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