ASTRONOMISCHE NACHRICHTEN.

Band 215.

Nr. 5148.

12.

Beobachtungen von Planetoiden und Kometen

am Steinheil-5-Zöller der Königstuhl-Sternwarte (Kreuzstabmikrometer, Aug- und Ohrmethode). Von *W. Malsch*

1921	M. Z. Kgst.	$\Delta\alpha$	$\Delta\delta$	Vgl.	α app.	$\log p\Delta$	δ app.	$\log p\Delta$	Red. ad l. app.	*
1 Ceres.										
Jan. 16	8 ^h 24 ^m 5 ^s	+1 ^m 8 ^s .03	+ 0' 19".8	4	5 ^h 51 ^m 8 ^s .40	9.280n	+28° 22' 38".5	0.531	+2 ^s 33 — 6".9	1
5 Astraea.										
März 1	9 12 0	+1 59.18	— 11 45.1	6	11 33 20.05	9.506n	+ 7 24 53.5	0.791	+2.28 — 16.3	2
2	9 16 10	+1 15.76	— 3 10.3	6	11 32 36.64	9.494n	+ 7 33 28.2	0.789	+2.29 — 16.4	2
3	8 38 21	+0 31.87	+ 5 18.0	6	11 31 52.76	9.534n	+ 7 41 56.4	0.795	+2.30 — 16.5	2
5	10 41 16	+0 14.04	+ 0 41.4	6	11 30 17.47	9.277n	+ 7 59 56.5	0.770	+2.36 — 16.4	3
7	8 7 48	— 0 40.16	— 8 17.5	6	11 28 49.87	9.546n	+ 8 16 23.1	0.795	+2.35 — 16.5	4
8	8 30 15	+0 24.06	+ 7 23.6	6	11 28 1.98	9.519n	+ 8 25 6.4	0.788	+2.34 — 16.5	5
14	8 22 46	+1 4.86	+ 9 2.1	6	11 23 19.92	9.442n	+ 9 14 25.9	0.779	+2.37 — 16.6	6
9 Metis.										
Febr. 11	7 43 22	+0 21.87	— 8 48.2	6	8 54 52.30	9.734n	+26 48 40.7	0.652	+2.41 — 14.8	7
17	9 19 33	— 0 29.66	— 5 5.0	6	8 49 12.02	9.261n	+27 8 7.6	0.550	+2.42 — 14.3	8
23	7 13 24	— 1 35.09	+ 11 38.5	6	8 44 31.48	9.561n	+27 18 45.3	0.624	+2.40 — 13.7	9
24	8 45 12	— 2 18.84	+ 12 45.1	4	8 43 47.72	9.294n	+27 19 52.0	0.553	+2.39 — 13.6	9
25	8 46 21	— 0 58.68	+ 4 43.7	4	8 43 8.71	9.256n	+27 20 41.0	0.544	+2.39 — 13.5	10
26	7 37 1	— 1 34.08	+ 5 16.1	6	8 42 33.30	9.449n	+27 21 13.5	0.592	+2.38 — 13.4	10
März 1	7 57 45	+1 35.45	— 8 26.5	6	8 40 48.69	9.355n	+27 21 55.8	0.564	+2.36 — 12.9	11
2	7 27 1	+1 5.24	— 8 34.8	6	8 40 18.48	9.426n	+27 21 47.6	0.584	+2.36 — 12.8	11
3	7 20 23	+0 37.21	— 8 56.4	6	8 39 50.44	9.432n	+27 21 26.1	0.586	+2.35 — 12.7	11
5	9 49 44	— 0 15.64	— 10 16.0	6	8 38 57.57	7.761	+27 20 6.6	0.514	+2.33 — 12.6	11
7	7 24 20	— 0 55.08	— 12 14.9	6	8 38 18.11	9.377n	+27 18 7.8	0.570	+2.31 — 12.5	11
9	7 33 23	+1 24.01	— 7 21.1	6	8 37 44.32	9.321n	+27 15 33.5	0.558	+2.28 — 12.2	12
10	7 32 47	+1 10.61	— 8 57.6	6	8 37 30.91	9.319n	+27 13 57.1	0.556	+2.27 — 12.1	12
11	7 47 54	+0 58.51	— 10 35.2	6	8 37 18.80	9.233n	+27 12 19.6	0.322	+2.26 — 12.0	12
12	7 37 54	+0 49.47	— 12 36.2	6	8 37 9.75	9.194n	+27 10 18.7	0.541	+2.25 — 11.9	12
10 Hygiea.										
Febr. 11	9 18 0	— 1 28.59	+ 3 44.0	6	10 6 1.73	9.475n	+ 7 38 8.2	0.787	+2.17 — 16.3	13
März 8	7 58 0	+0 17.24	— 2 22.3	6	9 46 44.53	9.406n	+ 9 5 31.0	0.769	+2.31 — 17.2	14
10	7 59 33	— 0 12.97	+ 5 52.6	6	9 45 24.20	9.378n	+ 9 12 12.7	0.773	+2.30 — 17.2	15
11	8 20 42	+0 2.38	— 4 59.3	6	9 44 45.76	9.314n	+ 9 15 22.3	0.762	+2.29 — 17.2	16
12	8 4 33	— 0 34.61	— 1 52.1	6	9 44 8.76	9.348n	+ 9 18 29.6	0.764	+2.28 — 17.1	16
14	7 40 17	+0 9.11	— 10 46.4	6	9 42 57.97	9.386n	+ 9 24 20.9	0.766	+2.27 — 17.1	17
14 Irene.										
Jan. 16	10 54 51	— 1 2.75	— 1 48.3	4	7 17 56.13	9.989n	+28 39 34.0	0.494	+2.37 — 11.3	18
20 Massalia.										
Jan. 29	7 18 6	+0 23.45	— 2 17.5	6	8 32 19.45	9.581n	+17 31 21.1	0.754	+2.26 — 14.9	19
30	10 1 33	— 0 43.70	+ 1 59.0	6	8 31 12.31	9.272n	+17 35 37.6	0.681	+2.27 — 14.9	19
40 Harmonia.										
April 16	12 57 42	— 0 56.63	+ 5 42.0	6	14 23 15.15	8.332	— 7 22 11.4	0.865	+2.71 — 9.3	20
89 Julia.										
Jan. 16	9 37 49	— 4 5.60	— 3 24.1	4	7 53 17.71	9.362n	+28 20 36.7	0.644	+2.32 — 13.4	21
247 Eukrate.										
Febr. 25	7 29 35	+1 2.33	— 2 12.2	6	10 30 6.76	9.626n	+31 30 24.7	0.668	+2.39 — 16.2	22
354 Eleonora.										
Jan. 15	10 45 9	+4 31.85	+ 1 27.5	4	7 20 5.41	9.968n	+ 7 18 47.3	0.770	+2.13 — 12.6	23
449 Hamburga.										
Jan. 16	12 21 0	— 0 50.31	— 2 56.9	2	7 39 33.52	8.658	+24 15 56.1	0.570	+2.28 — 12.5	24

1921	M. Z. Kgst.	$\Delta\alpha$	$\Delta\delta$	Vgl.	α app.	$\log p \cdot \Delta$	δ app.	$\log p \cdot \Delta$	Red. ad l. app.	*
Komet 1921a (Reid).										
April 13	14 ^h 10 ^m 16 ^s	-1 ^m 32 ^s 85	- 2' 21.7	6	20 ^h 32 ^m 29 ^s 38	9.572 _n	+11° 3' 44".1	0.793	+1.00 +0.6	25
16	13 48 59	-0 31.76	- 7 36.1	6	20 35 1.61	9.592 _n	+17 27 43.4	0.775	+1.05 -1.0	26
19	12 47 11	-0 13.23	- 9 37.0	6	20 38 3.30	9.624 _n	+24 58 39.2	0.785	+1.14 -2.7	27
22	12 45 34	-1 2.70	+10 38.0	6	20 41 59.34	9.663 _n	+33 50 58.8	0.736	+1.19 -4.3	28
27	10 6 3	-1 47.42	+ 6 7.5	6	20 52 9.01	9.685 _n	+50 31 28.1	0.836	+1.18 -6.9	29
28	10 17 9	+2 50.51	- 8 36.4	6	20 55 17.13	9.743 _n	+54 8 48.0	0.806	+1.20 -7.3	30
30	10 30 2	+0 6.39	- 9 18.8	5	21 3 30.11	9.576 _n	+61 21 2.6	0.858	+1.19 -7.7	31
Mai 5	9 35 19	-4 5.38	- 4 18.9	6	21 55 28.39	0.045 _n	+77 41 58.7	0.765	+0.86 -7.6	32

April 13 u. 16 nebelig, ohne Kern. — April 19 (C!) schwacher Kern, ganz feiner Schweif ca. 8' lang, P.-W. ca. 260°. — April 27 Schweif ca. 15' lang, P.-W. ca. 260°. — April 28 Kern ca. 8^m, Schweif schwächer. — April 30 Kern verwaschen, kein Schweif. — Mai 5 Kern verwaschen, kein Schweif.

Winnekescher Komet 1921b.

Mai 6	9 54 43	-1 5.09	- 7 40.9	6	17 11 8.07	9.690 _n	+45 8 51.7	0.474	+1.93 -8.5	33
11	9 49 5	-2 19.80	+ 2 46.4	6	17 34 56.69	9.706 _n	+46 5 34.4	0.481	+2.40 -3.5	34
12	9 43 9	+0 54.43	- 8 22.3	6	17 40 16.14	9.715 _n	+46 13 13.5	0.493	+2.42 -3.3	35
29	10 0 41	-0 18.11	+ 0 13.2	6	19 53 58.19	9.706 _n	+41 49 58.8	0.642	+2.54 +0.5	36
31	10 33 5	-0 14.34	- 1 14.7	6	20 15 11.73	9.686 _n	+39 51 17.0	0.629	+2.53 +1.0	37
Juni 1	10 32 43	-0 38.61	- 5 37.4	6	20 25 57.19	9.682 _n	+38 35 35.7	0.651	+2.51 +1.3	38
6	10 31 42	+0 25.36	-10 50.9	6	21 20 33.62	9.647 _n	+30 35 51.5	0.748	+2.42 +3.4	39
7	10 11 31	+0 26.93	+ 2 19.7	6	21 31 8.49	9.640 _n	+28 38 39.7	0.763	+2.41 +4.2	40

Mai 6 sehr schwach ohne Kern, vielleicht im P.-W. 130° länglich. — Mai 11 sehr schwacher Kern. — Alle folgenden Tage wie Nebelfleck mit feinem Kern ohne deutlichen Schweif.

Mittlere Örter der Vergleichsterne.

*	α 1921.0	δ 1921.0	Autorität	*	α 1921.0	δ 1921.0	Autorität
1	5 ^h 49 ^m 58 ^s 04	+28° 22' 25".6	Cbr E. 2776	24	7 ^h 40 ^m 21 ^s 55	+24° 19' 5".5	Berl B 3103
2	11 31 18.59	+ 7 36 54.9	Lpz II 5847	25	20 34 1.23	+11 6 5.2	Lpz I 8043
3	11 30 1.07	+ 7 59 31.5	" 5841	26	20 35 32.31	+17 35 20.5	Berl A 8309
4	11 29 27.69	+ 8 24 57.1	" 5837	27	20 38 15.39	+25 8 18.9	+24° 42' 14", 1921.32 von Dr. Mündler v. m.
5	11 27 35.58	+ 8 17 59.3	" 5830	27a	20 38 29.18	+25 3 21.6	Berl B 7873
6	11 22 12.69	+ 9 5 40.4	" 5810	28	20 43 0.85	+33 40 25.1	B. J. (1921) 780
7	8 54 28.02	+26 57 43.7	Cbr E. 4762	29	20 53 55.25	+50 25 27.5	Cbr M. 6835
8	8 49 39.26	+27 13 26.9	" 4730	30	20 52 25.42	+54 17 31.7	" 6826
9	8 46 4.17	+27 7 20.5	" 4707	31	21 3 22.53	+61 30 29.1	Hels 11898
10	8 44 5.00	+27 16 10.8	+27° 16' 10", 1921.15 v. m.	32	21 59 32.91	+77 46 25.2	Kas 3835
10a	8 44 55.41	+27 5 30.6	Cbr E. 4703	33	17 12 11.23	+45 16 41.1	Bo 11046
11	8 39 10.88	+27 30 35.2	" 4670	34	17 37 14.09	+46 2 51.5	" 11344
12	8 36 18.03	+27 23 6.8	" 4649	35	17 39 19.29	+46 21 39.1	" 11364
13	10 7 28.15	+ 7 34 40.5	Kü 4508	36	19 54 13.76	+41 49 45.1	" 13573
14	9 46 24.98	+ 9 8 10.5	Lpz II 5267	37	20 15 23.54	+39 52 30.7	Lu 9234
15	9 45 34.87	+ 9 6 37.3	" 5263	38	20 26 33.29	+38 41 11.8	" 9429
16	9 44 41.09	+ 9 20 38.8	" 5259	39	21 20 5.84	+30 46 39.0	Lei 8891
17	9 42 46.59	+ 9 35 24.4	Kü 4321	40	21 30 39.15	+28 36 15.8	Cbr E. 12651
18	7 18 56.51	+28 41 33.6	Cbr E. 3942	41	11 34 28.82	+ 6 56 16.7	Lpz II 5868
19	8 31 53.74	+17 33 53.5	Berl A 3418	Ferner wurde 1921.156 der Stern BD +7° 24' 67" (9 ^m 4) an * 41 angeschlossen; sein mittlerer Ort für 1921.0 ist: 11 ^h 33 ^m 46 ^s 58 +7° 7' 17".0 (6 Vergleichen).			
20	14 24 9.07	- 7 27 44.1	Ott 5103				
21	7 57 20.99	+28 24 14.2	Cbr E. 4300				
22	10 29 2.04	+31 32 53.1	Lei 4218				
23	7 15 31.43	+ 7 17 32.4	Lpz II 3726				

Königstuhl-Sternwarte, 1921 Juni 20.

W. Malsch.