

Mittlere Örter der Vergleichsterne.

| * | α | δ | Autorität | * | α | δ | Autorität |
|---|--|----------------|--------------------|----|--|----------------|---|
| | 1902.0 | 1902.0 | | | 1903.0 | 1903.0 | |
| 1 | 3 ^h 14 ^m 57 ^s .75 | +35° 55' 13".8 | AG. Lund | 10 | 21 ^h 32 ^m 0 ^s .48 | + 9° 50' 51".9 | AG. Leipzig II 10834 |
| 2 | 3 13 12.33 | +36 31 11.0 | » » | 11 | 20 23 53.43 | +42 49 37.1 | AG. Bonn 14234 |
| 3 | 1 44 40.24 | +51 27 4.4 | AG. Cambr. 846 | 12 | 19 19 39.26 | +57 31 41.8 | AG. Hels. 10424 |
| 4 | 7 5 34.48 | + 2 38 16.6 | AG. Albany 2666 | 13 | 18 5 13.91 | +65 3 53.6 | 1/2 (AG. Hels. 9646 + AG. Christiania 2790) |
| | 1903.0 | 1903.0 | | | | | |
| 5 | 6 46 16.50 | +11 31 14.3 | AG. Leipzig I 2537 | 14 | 14 46 41.09 | +67 48 47.6 | AG. Christiania 2207 |
| 6 | 6 37 29.43 | +18 3 30.6 | AG. Berlin A. 2342 | 15 | 12 25 31.98 | +59 18 17.2 | AG. Hels. 7186 |
| 7 | 6 37 11.27 | +19 14 47.0 | » » » 2337 | 16 | 11 50 26.18 | +51 32 45.9 | AG. Cambr. 3957 |
| 8 | 6 37 10.21 | +21 41 12.9 | » » B. 2543 | 17 | 11 22 20.43 | +46 49 46.1 | AG. Bonn 8033 |
| 9 | 6 38 33.48 | +22 40 25.0 | » » » 2557 | 18 | 11 17 30.52 | +44 0 54.2 | » » 8008 |

Bemerkungen.

Instrument: Refraktor (245 mm Öffnung). — Beobachter: *Rob. Vogel*.Komet 1902 III, beobachtet mittels Fadenmikrometer (Distanzen und Positionswinkel) mit Fadenbeleuchtung.
Sept. 4 Luft dunstig, Bilder verwaschen.

Komet 1903 II. Kreuzstarmikrometer. Komet äußerst schwach.

Komet 1903 c. Kreuzstarmikrometer. Komet sehr hell.

Kiew, Universitätssternwarte, 1903 September.

Robert Vogel.

Observations de petites planètes et de la comète 1903 II

faites à l'Observatoire d'Alger à l'équatorial coudé de 0.318 m par MM. *Rambaud* et *Sy*.

| 1903 | T.m. d'Alger | $\Delta\alpha$ | $\Delta\delta$ | Cp. | Obs. | α app. | $\log p.\Delta$ | δ app. | $\log p.\Delta$ | Red. ad l. app. | * |
|------------------|--|------------------------------------|----------------|-------|------|--|--------------------|----------------|-----------------|----------------------------|---|
| (24) Themis. | | | | | | | | | | | |
| Mars 6 | 9 ^h 38 ^m 18 ^s | +3 ^m 1 ^s .70 | — 9' 22".8 | 12.8 | R | 11 ^h 21 ^m 6 ^s .90 | 9.504 _n | + 5° 12' 12".6 | 0.679 | +2 ^s 13 — 15".4 | 1 |
| 9 | 10 44 48 | +0 41.16 | + 4 54.9 | 12.12 | S | 11 18 46.38 | 9.252 _n | + 5 26 30.2 | 0.665 | +2.15 — 15.5 | 1 |
| 9 | 10 58 45 | +0 40.71 | + 4 57.6 | 10.10 | R | 11 18 45.93 | 9.180 _n | + 5 26 32.9 | 0.664 | +2.15 — 15.5 | 1 |
| 10 | 9 13 25 | +1 23.21 | — 3 40.4 | 15.10 | S | 11 18 3.26 | 9.517 _n | + 5 30 49.5 | 0.709 | +2.15 — 15.6 | 2 |
| 10 | 9 29 40 | +1 22.71 | — 3 37.0 | 15.10 | R | 11 18 2.76 | 9.482 _n | + 5 30 52.9 | 0.674 | +2.15 — 15.6 | 2 |
| 24 | 9 40 38 | —1 5.05 | + 3 57.5 | 15.10 | R | 11 7 44.94 | 9.224 _n | + 6 31 43.7 | 0.652 | +2.16 — 15.7 | 3 |
| 24 | 10 28 5 | —1 6.75 | + 4 6.4 | 15.10 | S | 11 7 43.24 | 8.857 _n | + 6 31 52.6 | 0.647 | +2.16 — 15.7 | 3 |
| 25 | 9 32 38 | +0 41.58 | + 6 37.9 | 12.12 | R | 11 7 5.39 | 9.241 _n | + 6 35 31.8 | 0.651 | +2.16 — 15.8 | 4 |
| 25 | 10 9 49 | +0 40.88 | + 6 43.2 | 12.12 | S | 11 7 4.69 | 9.001 _n | + 6 35 37.1 | 0.648 | +2.16 — 15.8 | 4 |
| Comète 1903 II. | | | | | | | | | | | |
| Mars 24 | 8 56 14 | +0 55.55 | + 9 56.2 | 15.10 | S | 6 49 20.21 | 9.462 | +27 44 31.1 | 0.277 | +1.38 — 8.1 | 5 |
| 24 | 9 24 1 | +0 56.42 | +10 9.4 | 15.10 | R | 6 49 21.08 | 9.534 | +27 44 44.3 | 0.328 | +1.38 — 8.1 | 5 |
| 25 | 8 38 43 | —0 53.43 | + 1 14.8 | 15.10 | S | 6 50 9.30 | 9.418 | +27 55 58.3 | 0.245 | +1.38 — 8.1 | 6 |
| 25 | 8 59 18 | —0 53.05 | + 1 24.1 | 15.10 | R | 6 50 9.68 | 9.481 | +27 56 7.6 | 0.282 | +1.38 — 8.1 | 6 |
| 30 | 9 9 53 | +1 49.08 | + 4 15.5 | 15.10 | S | 6 54 37.78 | 9.548 | +28 51 40.6 | 0.307 | +1.29 — 7.7 | 7 |
| 30 | 9 36 26 | +1 50.08 | + 4 28.3 | 15.10 | R | 6 54 38.78 | 9.600 | +28 51 53.4 | 0.363 | +1.29 — 7.7 | 7 |
| 31 | 8 33 2 | +1 44.24 | — 1 35.4 | 15.10 | S | 6 55 33.61 | 9.462 | +29 1 52.5 | 0.231 | +1.27 — 7.6 | 8 |
| 31 | 8 54 43 | +1 45.20 | — 1 27.4 | 15.10 | R | 6 55 34.57 | 9.521 | +29 2 0.5 | 0.277 | +1.27 — 7.6 | 8 |
| (29) Amphitrite. | | | | | | | | | | | |
| Mars 30 | 10 12 49 | +1 29.03 | — 3 1.0 | 12.10 | R | 12 58 7.13 | 9.431 _n | — 9 21 45.0 | 0.789 | +2.41 — 12.2 | 9 |
| 30 | 10 36 40 | +1 28.21 | — 2 57.2 | 12.8 | S | 12 58 6.31 | 9.356 _n | — 9 21 41.2 | 0.794 | +2.41 — 12.2 | 9 |
| 31 | 9 13 23 | +0 35.29 | + 0 8.8 | 15.10 | R | 12 57 13.40 | 9.551 _n | — 9 18 35.3 | 0.776 | +2.42 — 12.3 | 9 |
| 31 | 10 22 22 | +0 32.47 | + 0 18.7 | 15.10 | S | 12 57 10.58 | 9.387 _n | — 9 18 25.4 | 0.792 | +2.42 — 12.3 | 9 |
| Avril 1 | 10 26 12 | —0 23.87 | + 3 42.3 | 12.10 | S | 12 56 14.24 | 9.364 _n | — 9 15 1.8 | 0.793 | +2.42 — 12.3 | 9 |
| 1 | 10 46 34 | —0 24.82 | + 3 45.3 | 12.10 | R | 12 56 13.29 | 9.278 _n | — 9 14 58.8 | 0.796 | +2.42 — 12.3 | 9 |

| 1903 | T. m. d'Alger | $\Delta\alpha$ | $\Delta\delta$ | Cp. | Obs. | α app. | $\log p.A$ | δ app. | $\log p.A$ | Red. ad l. app. | * |
|---------|--|------------------------------------|----------------|-------|------|--|--------------------|---------------|------------|-----------------|----|
| Avril 3 | 10 ^h 1 ^m 28 ^s | +0 ^m 15 ^s 99 | +11' 0".2 | 18.12 | R | 12 ^h 54 ^m 21 ^s 83 | 9.407 _n | — 9° 8' 9".1 | 0.790 | +2.44 — 12.5 | 10 |
| 3 | 10 30 6 | +0 14.80 | +11 3.3 | 18.12 | S | 12 54 20.64 | 9.306 _n | — 9 8 6.0 | 0.794 | +2.44 — 12.5 | 10 |
| 4 | 9 13 42 | +0 59.55 | + 9 30.9 | 12.8 | R | 12 53 26.74 | 9.514 _n | — 9 4 37.9 | 0.780 | +2.45 — 12.5 | 11 |
| 4 | 9 24 15 | +0 59.06 | + 9 31.8 | 12.8 | S | 12 53 26.25 | 9.491 _n | — 9 4 37.0 | 0.782 | +2.45 — 12.5 | 11 |
| 7 | 9 12 0 | +1 15.85 | + 7 6.7 | 10.10 | R | 12 50 36.70 | 9.485 _n | — 8 53 47.7 | 0.782 | +2.45 — 13.0 | 12 |
| 8 | 9 17 18 | +0 19.28 | +10 47.9 | 17.10 | R | 12 49 40.13 | 9.461 _n | — 8 50 6.6 | 0.784 | +2.45 — 13.1 | 12 |
| 10 | 8 35 31 | +0 14.57 | — 0 32.7 | 16.12 | R | 12 48 18.72 | 9.532 _n | — 8 42 48.2 | 0.776 | +2.45 — 13.2 | 13 |
| 23 | 10 10 39 | +0 52.23 | — 0 16.4 | 17.12 | S | 12 36 34.60 | 8.677 _n | — 7 55 10.0 | 0.792 | +2.42 — 14.1 | 14 |
| 24 | 8 46 11 | +0 9.45 | + 2 52.9 | 18.12 | S | 12 35 51.82 | 9.317 _n | — 7 52 0.7 | 0.785 | +2.42 — 14.1 | 14 |
| 24 | 9 17 15 | +0 8.31 | + 2 57.7 | 18.12 | R | 12 35 50.68 | 9.167 _n | — 7 51 55.9 | 0.789 | +2.42 — 14.1 | 14 |

(246) Asporina.

| | | | | | | | | | | | |
|----------|----------|----------|----------|-------|---|-------------|--------------------|-------------|-------|-------------|----|
| Avril 28 | 9 51 5 | +0 49.66 | +12 53.5 | 17.12 | S | 13 22 25.19 | 9.151 _n | + 9 37 32.0 | 0.609 | +2.31 — 9.6 | 15 |
| 28 | 10 36 47 | +0 48.35 | +13 5.9 | 11.8 | R | 13 22 23.88 | 8.678 _n | + 9 37 44.4 | 0.604 | +2.31 — 9.6 | 15 |
| 29 | 10 37 31 | —1 37.67 | —13 26.6 | 8.12 | R | 13 21 44.75 | 8.562 _n | + 9 44 15.0 | 0.602 | +2.31 — 9.3 | 16 |
| 29 | 11 6 39 | —1 38.32 | —13 18.3 | 8.12 | S | 13 21 44.10 | 8.386 | + 9 44 23.3 | 0.602 | +2.31 — 9.3 | 16 |
| 30 | 9 12 43 | —2 13.49 | — 7 37.6 | 12.12 | S | 13 21 8.93 | 9.299 _n | + 9 50 4.1 | 0.612 | +2.31 — 9.2 | 16 |
| 30 | 10 19 13 | —2 15.33 | — 7 20.1 | 12.12 | R | 13 21 7.09 | 8.814 _n | + 9 50 21.6 | 0.601 | +2.31 — 9.2 | 16 |
| Mai 2 | 10 7 23 | —2 5.76 | + 2 43.7 | 18.12 | R | 13 19 53.50 | 8.851 _n | +10 1 46.8 | 0.599 | +2.31 — 9.1 | 17 |
| 2 | 10 24 16 | —2 6.22 | + 2 47.9 | 18.12 | S | 13 19 53.04 | 8.553 _n | +10 1 51.0 | 0.598 | +2.31 — 9.1 | 17 |
| 4 | 9 7 15 | —3 14.35 | +12 54.8 | 15.10 | S | 13 18 44.91 | 9.242 _n | +10 11 58.2 | 0.604 | +2.31 — 8.8 | 17 |
| 4 | 9 50 23 | —3 15.25 | +13 3.5 | 15.10 | R | 13 18 44.01 | 8.942 _n | +10 12 6.9 | 0.597 | +2.31 — 8.8 | 17 |
| 13 | 9 32 22 | +3 27.57 | — 1 0.4 | 14.10 | S | 13 14 23.78 | 8.628 _n | +10 44 37.6 | 0.587 | +2.24 — 8.1 | 18 |
| 13 | 10 43 52 | +3 26.88 | — 0 52.9 | 14.10 | R | 13 14 23.09 | 9.030 | +10 44 45.1 | 0.590 | +2.24 — 8.1 | 18 |
| 14 | 9 36 20 | +3 5.31 | + 1 13.9 | 15.10 | S | 13 14 1.52 | 8.399 _n | +10 46 52.1 | 0.586 | +2.24 — 8.0 | 18 |
| 14 | 10 37 54 | +3 4.33 | + 1 18.0 | 15.10 | R | 13 14 0.54 | 9.016 | +10 46 56.2 | 0.589 | +2.24 — 8.0 | 18 |
| 15 | 9 32 52 | +2 43.86 | + 3 9.0 | 16.10 | S | 13 13 40.07 | 8.368 _n | +10 48 47.3 | 0.585 | +2.24 — 7.8 | 18 |
| 19 | 9 21 43 | +1 31.97 | + 8 5.0 | 15.10 | S | 13 12 28.16 | 8.048 _n | +10 53 43.7 | 0.584 | +2.22 — 7.4 | 18 |
| 19 | 10 13 2 | +1 31.39 | + 8 5.9 | 15.10 | R | 13 12 27.58 | 8.984 | +10 53 44.6 | 0.587 | +2.22 — 7.4 | 18 |
| 20 | 8 45 13 | +1 17.96 | + 8 39.3 | 15.10 | S | 13 12 14.27 | 8.898 _n | +10 54 18.1 | 0.586 | +2.21 — 7.3 | 18 |
| 20 | 9 13 41 | +1 17.69 | + 8 37.9 | 15.10 | R | 13 12 14.00 | 8.286 _n | +10 54 16.7 | 0.584 | +2.21 — 7.3 | 18 |
| 27 | 9 48 20 | +0 16.43 | + 5 21.3 | 12.10 | S | 13 11 12.57 | 9.052 | +10 51 0.9 | 0.589 | +2.17 — 6.5 | 18 |
| 27 | 10 22 32 | +0 16.09 | + 5 18.3 | 12.10 | R | 13 11 12.23 | 9.258 | +10 50 57.9 | 0.596 | +2.17 — 6.5 | 18 |
| 30 | 9 23 20 | +0 12.28 | + 0 14.8 | 12.12 | S | 13 11 8.39 | 8.933 | +10 45 54.8 | 0.588 | +2.14 — 6.1 | 18 |
| 30 | 10 38 26 | +0 12.43 | + 0 10.0 | 12.12 | R | 13 11 8.54 | 9.369 | +10 45 50.0 | 0.604 | +2.14 — 6.1 | 18 |

(442) Eichsfeldia.

| | | | | | | | | | | | |
|--------|----------|----------|----------|------|---|-------------|--------------------|-------------|-------|-------------|----|
| Mai 19 | 11 19 16 | +1 42.88 | — 0 42.6 | 12.8 | R | 13 53 31.24 | 9.162 | — 0 25 31.2 | 0.726 | +2.49 — 7.9 | 19 |
| 19 | 11 34 2 | +1 42.28 | — 0 41.4 | 12.8 | S | 13 53 30.64 | 9.240 | — 0 25 30.0 | 0.726 | +2.49 — 7.9 | 19 |
| 20 | 9 30 50 | +1 12.66 | — 0 24.9 | 12.8 | R | 13 53 0.62 | 8.829 _n | — 0 25 13.5 | 0.726 | +2.49 — 7.9 | 19 |
| 20 | 9 48 56 | +1 12.06 | — 0 25.6 | 12.8 | S | 13 53 0.02 | 8.479 _n | — 0 25 14.2 | 0.850 | +2.49 — 7.9 | 19 |

Positions moyennes des étoiles de comparaison.

| * | α 1903.0 | δ 1903.0 | Autorité | * | α 1903.0 | δ 1903.0 | Autorité |
|----|---|-----------------|-----------------------|----|--|-----------------|---|
| 1 | 11 ^h 18 ^m 3 ^s 07 | + 5° 21' 50".8 | AG. Leipzig 5788 | 11 | 12 ^h 52 ^m 24 ^s 74 | — 9° 13' 56".3 | M ₁ 1699 |
| 2 | 11 16 37.90 | + 5 34 45.5 | » » 5782 | 12 | 12 49 18.40 | — 9 0 41.4 | 1/2 (Rad ₃ 3355 + Paris 15882) |
| 3 | 11 8 47.83 | + 6 28 1.9 | » » 5733 | 13 | 12 48 1.70 | — 8 42 2.3 | BB. VI |
| 4 | 11 6 21.65 | + 6 29 9.7 | » » 5718 | 14 | 12 35 39.95 | — 7 54 39.5 | 1/2 (Rad ₃ 3290 + Schj. 4562) |
| 5 | 6 48 23.28 | +27 34 43.0 | AG. Cambr. 3578 | 15 | 13 21 33.22 | + 9 24 48.1 | AG. Leipzig I 6400 |
| 6 | 6 51 1.35 | +27 54 51.6 | » » 3614 | 16 | 13 23 20.11 | + 9 57 50.9 | » » » 4851 |
| 7 | 6 52 47.41 | +28 47 32.8 | » » 3635 | 17 | 13 21 56.95 | + 9 59 12.2 | » » » 4845 |
| 8 | 6 53 48.10 | +29 3 35.5 | » » 3653 | 18 | 13 10 53.97 | +10 45 46.1 | » » » 4826 |
| 9 | 12 56 35.69 | — 9 18 31.8 | Schj. 4695 | 19 | 13 51 45.47 | — 0 24 40.7 | AG. Nicolajew 3658 |
| 10 | 12 54 3.40 | — 9 18 56.8 | Rad ₃ 3380 | | | | |