# BULLETIN

DE

## L'OBSERVATOIRE ASTRONOMIQUE DE BEOGRAD

*ANNÉE 1960* *№ 1* *VOLUME XXV*

### OBSERVATIONS PHOTOGRAPHIQUES DE PETITES PLANETES A BEOGRAD

par M.Protitch

Les observations suivantes de petites planètes ont été faites à l'astrographe Zeiss de 16 cm d'ouverture et de 80 cm de distance focale. Les temps d'expositions ont été choisis de telle façon que les images des objets restent pratiquement circulaires sur les clichés.

Les mesures des coordonnées orthogonales sont exécutées dans deux ou trois positions de chaque cliché à la machine Askania. Les réductions des positions avec un rattachement à trois étoiles sont faites en tenant compte des quantitées du second ordre. Les positions des étoiles des repéres étaient empruntées principalement au catalogues $AGK_2$. Dans sa majeure partie les réductions des positions ont été assurées par $M^{me}$O. Cvijanović, collaboratrice technique.

| N° | Planète | 1960 T.U. | 1950.0 | | | | /pαΔ/ | /pδΔ/ | O - C | | Rem. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7 Iris | Mars 23.90209 | $12^h 42^m 24^s.80$ | -13° | 9' | 57".2 | 9.243n | 0.863 | $0^m.0$ | 0' | |
| 2 | | | 24.80 | | | 56.9 | | | | | |
| 3 | | | 24.75 | | | 56.8 | | | | | |
| 4 | | Mars 25.90994 | 12 40 33.23 | -12 | 58 | 17.6 | 9.136n | 0.865 | 0.0 | 0 | |
| 5 | | | 33.19 | | | 18.2 | | | | | |
| 6 | | | 33.25 | | | 18.3 | | | | | |
| 7 | 10 Hygiea | Janv.21.89375 | 9 55 11.32 | + 9 | 20 | 31.6 | 9.485n | 0.731 | -0.2 | +3 | |
| 8 | | | 11.28 | | | 31.5 | | | | | |
| 9 | | Janv.21.90760 | 9 55 10.79 | + 9 | 20 | 34.1 | 9.445n | 0.727 | -0.2 | +3 | |
| 10 | | | 10.81 | | | 33.5 | | | | | |
| 11 | | Janv.21.92146 | 9 55 10.19 | + 9 | 20 | 35.6 | 9.398n | 0.721 | -0.2 | +3 | |
| 12 | | | 10.30 | | | 36.0 | | | | | |
| 13 | | Janv.22.88725 | 9 54 34.76 | + 9 | 22 | 17.1 | 9.493n | 0.732 | -0.2 | +2 | |
| 14 | | | 34.75 | | | 16.5 | | | | | |
| 15 | | | 34.81 | | | 16.8 | | | | | |
| 16 | | Janv.22.90110 | 9 54 34.31 | + 9 | 22 | 18.5 | 9.455n | 0.728 | -0.2 | +2 | |
| 17 | | | 34.26 | | | 17.7 | | | | | |
| 18 | | Janv.29.89608 | 9 49 52.05 | + 9 | 37 | 47.7 | 9.397n | 0.719 | -0.2 | +2 | |
| 19 | | | 52.04 | | | 47.5 | | | | | |
| 20 | | Févr. 1.86491 | 9 47 41.19 | + 9 | 45 | 33.1 | 9.465n | 0.725 | -0.1 | +3 | |
| 21 | | | 41.22 | | | 33.3 | | | | | |
| 22 | | | 41.10 | | | 33.2 | | | | | |
| 23 | | Févr. 3.88793 | 9 46 8.84 | + 9 | 51 | 9.5 | 9.365n | 0.714 | -0.2 | +2 | |
| 24 | | | 8.94 | | | 9.3 | | | | | |
| 25 | | | 8.81 | | | 9.1 | | | | | |
| 26 | | | 8.79 | | | 8.8 | | | | | |
| 27 | | Févr.24.84789 | 9 29 28.00 | +10 | 57 | 50.4 | 9.218n | 0.695 | -0.2 | +2 | |
| 28 | | | 27.99 | | | 50.1 | | | | | |
| 29 | | | 28.03 | | | 51.2 | | | | | |
| 30 | | Févr.25.86640 | 9 28 41.68 | +11 | 1 | 7.9 | 9.046n | 0.690 | -0.2 | +1 | |
| 31 | | | 41.72 | | | 8.9 | | | | | |
| 32 | | | 41.67 | | | 8.2 | | | | | |
| 33 | | Févr.29.93705 | 9 25 42.96 | +11 | 13 | 58.4 | 9.043 | 0.688 | -0.3 | 0 | |
| 34 | | | 43.07 | | | 58.7 | | | | | |
| 35 | | | 43.02 | | | 58.2 | | | | | |

| N° | Planète | 1960 T.U. | 1950.0 | | | /pαΔ/ | /pδΔ/ | O - C | | Rem. |
|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 10 Hygiea | Mars 6.87742 | 9h21m46s.50 | +11°31 | 35".1 | 7.631 | 0.680 | -0m.2 | +2' | |
| 37 | | | 46.47 | | 35.1 | | | | | |
| 38 | | | 46.54 | | 35.7 | | | | | |
| 39 | | Mars 22.86351 | 9 14 17.58 | +12 7 | 37.7 | 8.879n | 0.675 | -0.2 | +2 | |
| 40 | | | 17.63 | | 38.1 | | | | | |
| 41 | | | 17.63 | | 38.5 | | | | | |
| 42 | | Mars 25.90024 | 9 13 28.35 | +12 12 | 14.3 | 9.324 | 0.689 | -0.2 | +1 | |
| 43 | | | 28.40 | | 14.8 | | | | | |
| 44 | | | 28.32 | | 15.3 | | | | | |
| 45 | 11 Parthe- | Janv. 19.92337 | 5 15 29.39 | +19 26 | 3.5 | 9.374 | 0.608 | +0.0 | +4 | |
| 46 | nope | | 29.39 | | 5.3 | | | | | |
| 47 | | Janv.21.87781 | 5 14 36.08 | +19 29 | 46.6 | 9.139 | 0.583 | +0.1 | +4 | |
| 48 | | | 35.93 | | 46.9 | | | | | |
| 49 | | Janv.29.88015 | 5 12 9.47 | +19 46 | 23.9 | 9.211 | 0.578 | -0.1 | +4 | |
| 50 | | | 9.50 | | 24.0 | | | | | |
| 51 | | | 9.54 | | 24.3 | | | | | |
| 52 | | Févr. 1.84586 | 5 11 41.17 | +19 52 | 52.7 | 9.236 | 0.577 | -0.1 | +4 | |
| 53 | | | 41.13 | | 53.4 | | | | | |
| 54 | | Févr. 3.87338 | 5 11 37.98 | +19 57 | 39.7 | 9.448 | 0.597 | -0.1 | +4 | |
| 55 | | | 38.07 | | 40.6 | | | | | |
| 56 | | | 38.08 | | 39.9 | | | | | |
| 57 | 11 Parthe- | Févr.24.83473 | 5 17 14.63 | +20 49 | 24.8 | 9.412 | 0.597 | -0.1 | +3 | |
| 58 | nope | | 14.65 | | 25.4 | | | | | |
| 59 | | | 14.70 | | 24.5 | | | | | |
| 60 | | Févr.25.85531 | 5 17 48.72 | +20 52 | 1.2 | 9.487 | 0.618 | 0.0 | +3 | |
| 61 | | | 48.83 | | 2.1 | | | | | |
| 62 | | | 48.85 | | 0.5 | | | | | |
| 63 | 23 Thalia | Févr.24.85829 | 10 54 39.04 | +27 54 | 36.0 | 9.486n | 0.508 | +3.6 | -28 | |
| 64 | | | 39.10 | | 35.8 | | | | | |
| 65 | | | 39.08 | | 35.9 | | | | | |
| 66 | | Févr.25.87541 | 10 53 42.43 | +27 59 | 36.9 | 9.484n | 0.506 | +3.5 | -28 | |
| 67 | | | 42.52 | | 36.9 | | | | | |
| 68 | | | 42.42 | | 35.5 | | | | | |
| 69 | 29 Amphi- | Févr.27.96011 | 12 19 9.79 | -1 55 | 1.8 | 9.190n | 0.803 | 0.0 | -13 | |
| 70 | trite | | 9.78 | | 1.4 | | | | | |
| 71 | | | 9.79 | | 1.7 | | | | | |
| 72 | | Févr.29.92596 | 12 17 43.84 | -1 50 | 29.5 | 9.343n | 0.801 | -0.1 | -13 | |
| 73 | | | 43.86 | | 29.3 | | | | | |
| 74 | | | 43.85 | | 29.5 | | | | | |
| 75 | | Mars 6.88989 | 12 12 56.76 | -1 34 | 15.4 | 9.407n | 0.800 | -0.1 | -13 | |
| 76 | | | 56.79 | | 15.7 | | | | | |
| 77 | | Mars 22.87736 | 11 58 14.50 | -0 38 | 59.5 | 9.208n | 0.794 | -0.1 | -14 | |
| 78 | | | 14.52 | | 58.3 | | | | | |
| 79 | | | 14.48 | | 59.2 | | | | | |
| 80 | 51 Nemausa | Mars 6.90236 | 13 9 49.43 | -4 45 | 0.3 | 9.489n | 0.813 | 0.0 | 0 | 1/ |
| 81 | | | 13 9 49.41 | -4 44 | 59.9 | | | | | |
| 82 | | | 49.40 | | 59.9 | | | | | |
| 83 | | Mars 22.89122 | 13 0 56.93 | -2 1 | 54.7 | 9.362n | 0.802 | 0.0 | 0 | 1/ |
| 84 | | | 56.91 | | 55.2 | | | | | |
| 85 | | | 56.98 | | 55.0 | | | | | |
| 86 | | Mars 23.89119 | 13 0 13.56 | -1 50 | 42.1 | 9.350n | 0.801 | 0.0 | 0 | 1/ |
| 87 | | | 13.59 | | 42.8 | | | | | |
| 88 | | | 13.59 | | 43.0 | | | | | |
| 89 | | Mars 25.91964 | 12 58 43.39 | -1 27 | 48.2 | 9.147n | 0.801 | 0.0 | 0 | 1/ |
| 90 | | | 43.39 | | 48.1 | | | | | |
| 91 | | | 43.43 | | 48.7 | | | | | |

1/ Ephéméride de M.P.Naur, UAI Circ.1710.-

## Etoiles de repères :

| N° | Etoiles | Dépendances /unités $10^{-5}$/ | | | N° | Etoiles | Dépendances /unités $10^{-5}$/ | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Yale XI 4602,4603,4609 | 26295 | 35698 | 38008 | 47 | $AGK_2$ +19°433,+20°487, | 40158 | 37770 | 22072 |
| 2 | | 26305 | 35682 | 38014 | 48 | +18°433 | 40218 | 37761 | 22021 |
| 3 | | 26325 | 35700 | 37975 | 49 | $AGK_2$ +19°427,+19°430, | 42118 | 28124 | 29758 |
| 4 | Yale XI 4586,4599,4603 | 26740 | 33466 | 39794 | 50 | +18°486 | 42081 | 28130 | 29788 |
| 5 | | 26756 | 33447 | 39797 | 51 | | 42043 | 28129 | 29828 |
| 6 | | 26730 | 33451 | 39819 | 52 | CC Paris +19° $5^h8^m$: | 30012 | 26919 | 43070 |
| 7 | $AGK_2$ +9°1254,+9°1259, | 34587 | 39255 | 26157 | 53 | 28 85,95 | 30028 | 26917 | 43055 |
| 8 | +8°1332 | 34624 | 39240 | 26136 | 54 | $AGK_2$ +20°482,+19°428, | 35964 | 26675 | 37361 |
| 9 | $AGK_2$ +9°1254,+9°1259, | 34918 | 39180 | 25901 | 55 | +19°432 | 35943 | 26616 | 37440 |
| 10 | +8°1332 | 34922 | 39166 | 25913 | 56 | | 35926 | 26627 | 37447 |
| 11 | $AGK_2$ +9°1254,+9°1259, | 35311 | 39059 | 25630 | 57 | $AGK_2$ +20°490,+21°508 | 25905 | 53208 | 20887 |
| 12 | +8°1332 | 35235 | 39099 | 25666 | 58 | +20°500 | 25881 | 53238 | 20880 |
| 13 | $AGK_2$+10°1272,+9°1259, | 27024 | 28050 | 44926 | 59 | | 25895 | 53196 | 20909 |
| 14 | +8°1330 | 27035 | 28027 | 44938 | 60 | $AGK_2$ +20°494,+21°508, | 22212 | 57122 | 20666 |
| 15 | | 26994 | 28080 | 44925 | 61 | +20°502 | 22178 | 57119 | 20703 |
| 16 | $AGK_2$+10°1272,+9°1259, | 27271 | 27794 | 44935 | 62 | | 22225 | 57056 | 20719 |
| 17 | +8°1330 | 27315 | 27728 | 44957 | 63 | $AGK_2$ +28°1134,+27°1108 | 39887 | 34070 | 26044 |
| 18 | $AGK_2$ +9°1248,+9°1251, | 23686 | 51052 | 25263 | 64 | +28°1137 | 39838 | 34095 | 26067 |
| 19 | +8°1322 | 23689 | 51043 | 25268 | 65 | | 39858 | 34082 | 26058 |
| 20 | $AGK_2$+10°1259,+9°1247, | 26366 | 32650 | 40984 | 66 | $AGK_2$ +28°1130,+27°1108, | 33014 | 42895 | 24091 |
| 21 | +10°1251 | 26364 | 32643 | 40993 | 67 | +28°1137 | 32996 | 42891 | 24114 |
| 22 | | 26384 | 32661 | 40955 | 68 | | 33005 | 42933 | 24063 |
| 23 | $AGK_2$+10°1259,+9°1247, | 39752 | 30913 | 29336 | 69 | $AGK_2$ -1°1664, -2°731, | 24446 | 35395 | 40158 |
| 24 | +9°1248 | 39699 | 30890 | 29411 | 70 | -1°1668 | 24451 | 35380 | 40169 |
| 25 | | 39764 | 30936 | 29300 | 71 | | 24445 | 35394 | 40161 |
| 26 | | 39768 | 30950 | 29281 | 72 | $AGK_2$ -1°1662, -1°1667, | 41857 | 27080 | 31063 |
| 27 | $AGK_2$+10°1222,+11°1116, | 26057 | 35760 | 38183 | 73 | -2°732 | 41850 | 27088 | 31061 |
| 28 | +10°1230 | 26068 | 35741 | 38191 | 74 | | 41854 | 27082 | 31064 |
| 29 | | 26015 | 35822 | 38163 | 75 | $AGK_2$ -2°722, -0°1714, | 34068 | 26854 | 39078 |
| 30 | $AGK_2$+10°1222,+11°1113, | 37176 | 29499 | 33325 | 76 | -1°1663 | 34067 | 26844 | 39090 |
| 31 | +10°1230 | 37099 | 29565 | 33336 | 77 | $AGK_2$ -0°1675, -0°1682, | 39211 | 32583 | 28205 |
| 32 | | 37170 | 29512 | 33318 | 78 | -1°1641 | 39193 | 32617 | 28190 |
| 33 | $AGK_2$+11°1108,+11°1111, | 51553 | 25202 | 23245 | 79 | | 39220 | 32584 | 28195 |
| 34 | +10°1222 | 51465 | 25229 | 23307 | 80 | Yale XVII 4780 A,4796, | 45322 | 28093 | 26585 |
| 35 | | 51519 | 25200 | 23282 | 81 | 4798 | 45344 | 28088 | 26568 |
| 36 | CC Bord,+12° $9^h20^o$:127, | 42300 | 30128 | 27572 | 82 | | 45337 | 28093 | 26570 |
| 37 | 142,150 | 42332 | 30126 | 27542 | 83 | $AGK_2$ -2°771, -1°1716, | 30784 | 38223 | 30992 |
| 38 | | 42273 | 30115 | 27612 | 84 | -2°777 | 30787 | 38203 | 31011 |
| 39 | $AGK_2$+12°1111,+11°1089, | 23635 | 42747 | 33618 | 85 | | 30774 | 38211 | 31016 |
| 40 | +12°1123 | 23626 | 42738 | 33637 | 86 | $AGK_2$ -2°771, -1°1715, | 33146 | 42452 | 24402 |
| 41 | | 23626 | 42726 | 33648 | 87 | -2°777 | 33148 | 42434 | 24418 |
| 42 | $AGK_2$+12°1111,+11°1089, | 39269 | 29057 | 31674 | 88 | | 33149 | 42427 | 24425 |
| 43 | +12°1123 | 39258 | 29038 | 31704 | 89 | $AGK_2$ -0°1794, -2°772, | 37527 | 33427 | 29046 |
| 44 | | 39282 | 29022 | 31696 | 90 | -1° 715 | 37531 | 33417 | 29052 |
| 45 | $AGK_2$+19°434, +19°435, | 33498 | 41621 | 24881 | 91 | | 37498 | 33431 | 29071 |
| 46 | +18°434 | 33437 | 41688 | 24874 | | | | | |

# MESURES MICROMÉTRIQUES D'ÉTOILES DOUBLES
faites au réfracteur de 0.65 m

par P.M.Djurković

Nous donnons ici, outres θ et ρ, aussi: la position des yeux /..ou:/ et l'angle horaire t au cours de la mesure; la distance focalle de l'occulaire utilisé, en mm; le poids qu'on employe dans le calcul de θ et ρ moyennes, obtenu par la somme des chifres qui donnent l'estimation de la qualité de l'immage /1,2,3=la meilleure/ et de mesure /1,2,3=la meilleure/.

En parenthèses on trouvent: ADS No,la désignation et les grandeurs des composentes d'après le Catalogue. Puis nous donnons les grandeurs /G/ d'après notre estimation visuelle approximative.

Dans la colonne Rem. on trouvent quelques notes sur les conditions qui pouvaient influencer à la mesure, à savoir: f= immage floue; v = vent; C=Cirus ou les nuages qui passent; d=couple difficile à cause de grande Δm, des composantes faibles et étroites, ect; q = quadrant incertain.

| Époque | θ ° | ρ " | t h | Occ. mm | Rem. |
|---|---|---|---|---|---|
| /100=Roe 82;10.2-10.3/ G:10.7-10.8 | | | | | |
| 60.917 | 283.0.. | 0.64 | +0.2 | 15 | 2,f |
| .925 | 277.3: | 0.56 | +2.7 | 15 | 3 |
| .961 | 270.5: | 0.79 | +3.0 | 15 | 2,f,d |
| 60.933 | 277.0 | 0.65 | | | 3 |
| Presque sans changement depuis 1916 | | | | | |
| /1135=Es 1713;9.4-9.5/ G:9.6-9.5 | | | | | |
| 60.917 | 144.0.. | 1.47 | +1.2 | 15 | 3 |
| .925 | 145.1.. | 1.62 | +1.9 | 15 | 5 |
| .930 | 146.4.. | 1.55 | +0.4 | 15 | 3,f |
| 60.924 | 145.2 | 1.56 | | | 3 |
| Chaque fois la composante B fut estimée plus brillante de 0.1 à 0.2. Le quadrant de θ est celui d'Espin. | | | | | |
| /1738= Σ 235;8.5-9.0/ G:8.9-9.1 | | | | | |
| 60.930 | 45.5.. | 1.77 | +0.4 | 15 | 3 |
| .958 | 44.6.. | 1.60 | +0.4 | 15 | 2,f |
| .961 | 44.7.. | 1.80 | +1.4 | 15 | 4 |
| 60.950 | 44.9 | 1.75 | | | 3 |
| Presque sans changement depuis 1830 | | | | | |
| /1745= Σ 236;8.5-9.3/ G:8.9-9.6 | | | | | |
| 60.931 | 248.5.. | 1.17 | +0.8 | 15 | 3,f |
| .961 | 249.8.. | 1.38 | +1.8 | 15 | 3,f |
| .971 | 250.0.. | 1.24 | +0.4 | 18 | 4 |
| 60.956 | 249.5 | 1.26 | | | 3 |
| /1880=Doo 5;10.3-10.5/ G:10.6-10.5 | | | | | |
| 60.925 | 185.8.. | 1.05 | +1.5 | 15 | 4 |
| .971 | 184.7.. | 1.07 | +0.8 | 18 | 4 |
| 60.948 | 185.2 | 1.06 | | | 2 |

| Époque | θ ° | ρ " | t h | Occ. mm | Rem. |
|---|---|---|---|---|---|
| /1951=Hu 203;9.5-9.5/ G:9.4-9.6 | | | | | |
| 60.925 | 74.6.. | 0.54 | +1.8 | 15 | 5 |
| .972 | 74.6.. | 0.71 | +1.4 | 18 | 4,f |
| 60.946 | 74.6 | 0.62 | | | 2 |
| /7054=A 1584;8.1-8.1/ G:8.6-8.7 | | | | | |
| 60.265 | 108.2.. | 0.74 | +0.2 | 18 | 2,v,f |
| .339 | 110.1: | 0.56 | +2.5 | 15 | 4 |
| 60.314 | 109.4 | 0.62 | | | 2 |
| Ce couple a tourné de 121° depuis 1907 | | | | | |
| /8056=A 1775;9.0-9.5/ G:9.6 tot. | | | | | |
| 60.339 | 70.1.. | 0.23 | +1.5 | 12 | 3,d |
| Couple extrêmement difficile. Mesure incertaine. | | | | | |
| /8791=OΣ 260;8.5-8.5/ G:8.7-8.7 | | | | | |
| 60.339 | 141.7.. | 0.41 | +0.2 | 12 | 2,f |
| .366 | 149.4: | 0.42 | +0.0 | 15 | 4 |
| .372 | 147.3: | 0.42 | -0.3 | 15 | 3 |
| 60.362 | 147.0 | 0.42 | | | 3 |
| /8805=β 608;5.5-10.5/ G:5.7-10.0 | | | | | |
| 60.339 | 270.5.. | 1.28 | +0.8 | 15 | 3 |
| .366 | 269.1.. | 1.14 | +0.6 | 15 | 4 |
| .372 | 265.8.. | 1.07 | +1.2 | 15 | 2,f,d |
| 60.358 | 268.8 | 1.17 | | | 3 |
| /8986=Hu 645;9.2-9.6/ G:10.5-10.6 | | | | | |
| 60.388 | 19.7: | 0.77 | +0.2 | 15 | 3,d |
| Le changement depuis 1903 en limites des erreurs d'observation. | | | | | |

| Époque | θ ° | ρ " | t h | Occ. mm | Rem. |
|---|---|---|---|---|---|
| /9060=0Σ 273;8.0-8.5/ G:8.5-8.6 | | | | | |
| 60.388 | 109.4.. | 1.06 | -0.7 | 15 | 3 |
| .429 | 110.5.. | 1.07 | +0.9 | 15 | 4 |
| .468 | 108.0.. | 1.04 | +1.4 | 15 | 4 |
| 60.432 | 109.3 | 1.06 | | | 3 |
| /9214=Hu 901;8.7-10.0/ G:8.8-10.5 | | | | | |
| 60.388 | 18.1: | 0.59 | +0.1 | 15 | 4,d |
| .585 | 16.6.. | 0.59 | +3.9 | 15 | 3 |
| 60.472 | 17.5 | 0.59 | | | 2 |
| /9340=Σ1867;7.7-8.2/ G:8.1-8.7 | | | | | |
| 60.339 | 6.7: | 0.97 | -0.2 | 15 | 4 |
| .367 | 5.4: | 0.96 | +0.4 | 15 | 4 |
| .372 | 5.0: | 0.95 | +0.3 | 15 | 4 |
| .429 | 6.8: | 0.87 | +1.0 | 15 | 3,C |
| .451 | 2.4.. | 0.90 | +2.2 | 15 | 3 |
| .468 | 1.9.. | 0.93 | +2.5 | 15 | 4 |
| 60.401 | 4.7 | 0.93 | | | 6 |

Couple optique.

| | | | | | |
|---|---|---|---|---|---|
| /9578=Σ1932;5.6-6.1/ G:6.1-6.0 | | | | | |
| 60.367 | 235.8.. | 0.88 | +0.7 | 15 | 4 |
| .372 | 236.0.. | 0.95 | +0.1 | 15 | 4 |
| .388 | 236.7.. | 0.81 | -0.4 | 15 | 3 |
| 60.375 | 236.1 | 0.89 | | | 3 |

La composante B était chaque fois plus brillante.VBs /Publ.Y.O.Vol. 8 P.6/ donne les Grandeurs: 7.1-7.6.
Résudus:
-3°.4+0".03 JO.Vol.36,No 6-7;orb.de Sup.
-0.5-0.14 Publ.Y.O.V. 8,P.6;orb.de VBs

| | | | | | |
|---|---|---|---|---|---|
| /9634=Σ1940;8.2-8.7/ G:8.4-8.9 | | | | | |
| 60.372 | 323.6.. | 0.63 | +0.5 | 15 | 3 |
| .389 | 320.4.. | 0.70 | +0.5 | 15 | 3 |
| .430 | 320.2.. | 0.67 | +0.7 | 15 | 3,f |
| 60.397 | 321.4 | 0.67 | | | 3 |

Couple optique.

| | | | | | |
|---|---|---|---|---|---|
| /9807=A 1858;10.0-10.0/ G:10.2-10.2 | | | | | |
| 60.372 | 276.8.. | 0.46 | +0.5 | 15 | 2,f |
| .389 | 282.2.. | 0.53 | +0.8 | 15 | 3 |
| 60,382 | 280.1 | 0.50 | | | 2 |

Sans changement depuis 1908.

| | | | | | |
|---|---|---|---|---|---|
| /9997=Σ2037;9.0-9.0/ G:9.2-9.2 | | | | | |
| 60.372 | 247.4.. | 1.46 | +0.4 | 15 | 3 |
| .389 | 246.6.. | 1.24 | +0.7 | 15 | 3 |
| .430 | 245.3.. | 1.29 | +1.2 | 15 | 3 |
| 60.397 | 246.4 | 1.33 | | | 3 |

| Époqu | θ ° | ρ " | t h | Occ. mm | Rem. |
|---|---|---|---|---|---|
| /10087=Σ2055;4.0-6.1/ G:4.0-6.5 | | | | | |
| 60.441 | 342.8: | 0.80 | +0.1 | 15 | 3 |
| .452 | 341.7: | 1.03 | +1.0 | 15 | 2 |
| .468 | 343.2: | 0.81 | +1.4 | 15 | 4 |
| 60.455 | 342.8 | 0.86 | | | 3 |

Résudus:
+4°.5-0".03 JO.Vol.36,No 6-7,orb.de Rabe.

| | | | | | |
|---|---|---|---|---|---|
| /10230=0Σ 315;6.2-8.1/ G:6.6-8.6 | | | | | |
| 60.441 | 123.8.. | 0.46 | +0.6 | 15 | 2,v |
| .468 | 131.7.. | 0.41 | +1.6 | 15 | 3 |
| .512 | 124.0.. | 0.52 | +0.5 | 15 | 3 |
| 60.478 | 126.8 | 0.46 | | | 3 |

Couple à surveiller.Les changements augmenteront en θ et ρ .

| | | | | | |
|---|---|---|---|---|---|
| /10233=A 575;8.7-9.4/ G:9.0-9.6 | | | | | |
| 60.452 | 136.0.. | 0.68 | +1.4 | 15 | 3,f |
| .468 | 137.3.. | 0.69 | +2.0 | 15 | 4 |
| .512 | 137.5.. | 0.77 | +1.7 | 15 | 3 |
| 60.476 | 137.0 | 0.71 | | | 3 |
| /10742=Ho 560;8.0-8.0/ G:8.9-8.9 | | | | | |
| 60.441 | 85.4.. | 1.05 | +0.2 | 15 | 3 |
| .452 | 84.6.. | 0.98 | +1.1 | 15 | 3 |
| .468 | 83.3.. | 1.04 | +1.6 | 15 | 4 |
| 60.455 | 84.3 | 1.03 | | | 3 |

Couple optique.

| | | | | | |
|---|---|---|---|---|---|
| /10796=Hu 1288;8.0-8.5/ G:8.6-9.2 | | | | | |
| 60.441 | 146.5.. | 0.44 | +0.7 | 15 | 2,f |
| .512 | 139.8.. | 0.44 | +1.2 | 15 | 2,f |
| .586 | 142.4.. | 0.43 | +1.5 | 15 | 3 |
| 60.523 | 142.8 | 0.44 | | | 3 |
| /11775=β 421;9.1-9.3/ G:9.4-9.5 | | | | | |
| 60.517 | 293.2.. | 1.18 | +0.4 | 15 | 2,v |
| .586 | 292.3.. | 1.13 | +1.9 | 15 | 4 |
| .602 | 293.3.. | 1.09 | +0.8 | 15 | 3,f |
| 60.576 | 292.8 | 1.13 | | | 3 |
| /11810=Es 1746;9.6-9.8/ G:9.3-9.4 | | | | | |
| 60.517 | 121.1.. | 1.81 | +1.4 | 15 | 2,f |
| .586 | 115.2.. | 1.69 | +2.8 | 15 | 3 |
| 60.558 | 117.5 | 1.74 | | | 2 |
| /11897=∠2438;7.0-7.6/ G:7.7-8.1 | | | | | |
| 60.602 | 2.2.. | 0.80 | +1.5 | 15 | 2,v |
| .834 | 4.1.. | 0.70 | +3.5 | 15 | 4 |
| 60.757 | 3.5 | 0.73 | | | 2 |

Résudus:
-5°.1-0".21 Jo.Vol.36,No 6-7,orb.de See

| Époque | θ ° | ρ " | t h | Occ. mm | Rem. |
|---|---|---|---|---|---|
| /11956=Σ2437;7.8-8.0/ G:8.3-8.5 | | | | | |
| 60.512 | 35.9.. | 0.68 | +0.5 | 15 | 3 |
| .586 | 36.8: | 0.75 | +3.0 | 15 | 3 |
| 60.549 | 36.3 | 0.72 | | | 2 |

Le couple a tourné de 44° depuis 1830.

| | | | | | |
|---|---|---|---|---|---|
| /13572=OΣ: 403;7.0-7.2/ G:7.8-8.0 | | | | | |
| 60.602 | 169.2.. | 0.85 | +0.9 | 15 | 3,f |
| .802 | 167.3.. | 0.82 | +1.8 | 15 | 2,f |
| .834 | 167.8.. | 0.72 | +2.7 | 15 | 4,C |
| 60.750 | 168.2 | 0:79 | | | 3 |

| Époque | θ ° | ρ " | t h | Occ. mm | Rem. |
|---|---|---|---|---|---|
| /15350=Σ2835;8.5-9.3/ G:8.6-9.5 | | | | | |
| 60.802 | 270.6.. | 1.53 | +1.2 | 15 | 3 |
| .892 | 271.4: | 1.33 | +3.0 | 15 | 3,C |
| .916 | 272.6.. | 1.71 | +1.8 | 15 | 4 |
| 60.875 | 271.6 | 1.54 | | | 3 |

## CIRCULAR ELEMENTS AND DOUBLE DESIGNATION

by R.S. MITRINOVIĆ

Circular Elements:

| Planet | Epoch $0^h$ U.T. | $u_o$ | Equinox 1950.0 Ω | i | μ | a | Observations | |
|---|---|---|---|---|---|---|---|---|
| 1959 RJ | 59 - X - 7 | 194°.551 | 167°.055 | 9°.713 | 0°.19857 | 2.91 | Sep.7, | Oct. 7 |
| 1959 UA | 59 - XI - 3 | 48.956 | 340.251 | 7.420 | 0.23776 | 2.58 | Oct.28, | Nov. 3 |
| 1959 UB | 59 - XI - 3 | 35.351 | 353.388 | 6.462 | 0.26337 | 2.41 | Oct.28, | Nov. 3 |
| 1959 UD | 59 - XI - 3 | 112.182 | 275.635 | 6.658 | 0.26785 | 2.38 | Oct.28, | Nov. 3 |
| 1959 UO | 59 - XI - 9 | 329.558 | 88.403 | 2.947 | 0.18378 | 3.063 | Oct.29, | Nov. 9 |
| 1959 UP | 59 - XI - 9 | 259.043 | 158.694 | 2.809 | 0.19305 | 2.9655 | Oct.29, | Nov. 9 |
| 1959 VE | 59 - XI -30 | 209.436 | 223.904 | 3.896 | 0.29202 | 2.25 | Nov.8, | 30 |
| 1959 VF | 59 - XI -30 | 81.112 | 353.373 | 1.045 | 0.17287 | 3.1927 | Nov.8, | 30 |
| 1959 VJ | 59 - XII- 2 | 34.015 | 39.215 | 2.167 | 0.15359 | 3.453 | Nov.10, | Dec. 2 |

MPC - 2031.

Double Designation:

1959 RG = 1959 RR

Epoch: $0^h$ U.T.

1959 - IX - 7

$u_o$ = 3°.575

$\omega$ = 341.950

i = 12.156

$\mu$ = 0.11629

a = 4.16

Equinox 1950.0

Observations: Sep. 1.99931 /Heidelberg/ and 7.21 /Link/, MPC-1958, 1960.

# ÉLÉMENTS DES ORBITES DES PETITES PLANÈTES

par R.S.Mitrinović

| Nº | Désignation | Époque 0h U.T. | $l_0$ | 1950.0 Ω | i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1959 AA | I - 9 | 94°.9 | 86°.5 | 4°.6 | 0°.1843 | 3.064 | 15.4 | 1958-XII-24 | 1884 | |
| 2 | 1959 AB | I - 9 | 94.7 | 44.3 | 2.2 | 0.1795 | 3.112 | 15.99 | 1958-XII-24 | 1884 | |
| 3 | 1959 CA | II - 4 | 138.0 | 249.2 | 3.0 | 0.1523 | 3.541 | 13.6 | 1959- II- 8 | 1885 | |
| 4 | 1959 CB | II - 4 | 139.2 | 314.1 | 29.7 | 0.0805 | 4.286 | 13.9 | 1959- II- 9 | 1885 | |
| 5 | 1959 CD | II - 5 | 130.4 | 93.1 | 10.7 | 0.2251 | 2.700 | 15.0 | 1959- I-29 | 1885 | |
| 6 | 1959 CE | II - 5 | 131.2 | 50.4 | 5.1 | 0.2732 | 2.356 | 15.3 | 1959- I-30 | 1885 | |
| 7 | 1959 CF | II - 5 | 132.3 | 104.1 | 10.0 | 0.2069 | 2.900 | 15.2 | 1959- II- 1 | 1885 | |
| 8 | 1959 CG | II - 8 | 140.6 | 153.5 | 9.1 | 0.2345 | 2.720 | 15.1 | 1959- II-10 | 1885 | |
| 9 | 1959 CH | II - 8 | 140.1 | 140.8 | 1.6 | 0.2733 | 2.362 | 15.3 | 1959- II-10 | 1885 | |
| 10 | 1959 CJ | II - 8 | 141.4 | 206.5 | 2.0 | 0.3492 | 2.005 | 14.5 | 1959- II-12 | 1886 | |
| 11 | 1959 CK | II - 8 | 142.2 | 147.2 | 0.3 | 0.1973 | 2.941 | 15.0 | 1959- II-12 | 1886 | |
| 12 | 1959 CN | II -16 | 145.2 | 136.2 | 6.6 | 0.2152 | 2.889 | 14.8 | 1959- II-14 | 1886 | |
| 13 | 1959 CO | II -16 | 145.5 | 100.6 | 1.6 | 0.3676 | 2.085 | 15.3 | 1959- II-14 | 1886 | |
| 14 | 1959 CP | II -16 | 145.7 | 112.3 | 2.5 | 0.4097 | 1.941 | 15.5 | 1959- II-14 | 1886 | |
| 15 | 1959 CQ | II -16 | 145.8 | 126.8 | 4.1 | 0.4824 | 1.703 | 15.2 | 1959- II-14 | 1886 | |
| 16 | 1959 CR | II -15 | 146.6 | 100.9 | 2.0 | 0.2575 | 2.572 | 15.0 | 1959- II-16 | 1886 | |
| 17 | 1959 CU | II - 7 | 119.0 | 305.2 | 20.3 | 0.1147 | 3.408 | 14.92 | 1959- I-17 | 1908 | |
| 18 | 1959 CV | II - 7 | 115.5 | 33.2 | 1.0 | 0.1230 | 3.838 | 16.15 | 1959- I-13 | 1908 | |
| 19 | 1959 CW | II - 7 | 139.1 | 142.3 | 6.4 | 0.2665 | 2.478 | 16 | 1959- II- 9 | 1908 | |
| 20 | 1959 CY | II -12 | 138.3 | 101.2 | 20.6 | 0.2019 | 2.895 | 16.38 | 1959- II- 6 | 1908 | |
| 21 | 1959 EA | III - 5 | 159.0 | 127.3 | 1.0 | 0.2052 | 2.858 | 14.2 | 1959- II-27 | 1887 | |
| 22 | 1959 EB | III - 5 | 159.4 | 340.4 | 17.1 | 0.1503 | 3.594 | 14.0 | 1959- II-28 | 1887 | |
| 23 | 1959 EC | III - 5 | 161.4 | 122.3 | 4.0 | 0.1593 | 3.374 | 14.5 | 1959-III- 2 | 1887 | |
| 24 | 1959 ED | III -10 | 168.0 | 359.6 | 3.8 | 0.4508 | 1.780 | 15.3 | 1950-III- 9 | 1887 | |
| 25 | 1959 EE | III - 4 | 154.4 | 179.1 | 8.9 | 0.3748 | 1.907 | 15.8 | 1959- II-19 | 1908 | |
| 26 | 1959 EF | III - 8 | 154.3 | 177,2 | 2.9 | 0.2080 | 2.825 | 16.04 | 1959- II-20 | 1909 | |
| 27 | 1959 EG | III - 8 | 153.1 | 137.2 | 1.3 | 0.2001 | 2.902 | 16.01 | 1959- II-19 | 1909 | |
| 28 | 1959 FA | III -16 | 189.7 | 84.9 | 11.9 | 0.2300 | 2.641 | 15.8 | 1959- IV- 4 | 1909 | |
| 29 | 1959 GA | IV - 3 | 191.1 | 45.3 | 9.1 | 0.2578 | 2.500 | 15.6 | 1959- IV- 1 | 1888 | |
| 30 | 1959 GC | IV - 4 | 196.4 | 201.5 | 6.1 | 0.2757 | 2.368 | 15.3 | 1959- IV- 8 | 1888 | |
| 31 | 1959 GD | IV - 4 | 196.5 | 195.6 | 3.0 | 0.2893 | 2.273 | 15.7 | 1959- IV- 8 | 1888 | |
| 32 | 1959 GE | IV -15 | 207.2 | 30.0 | 1.2 | 0.2163 | 2.802 | 15.2 | 1959- IV-19 | 1888 | |
| 33 | 1959 GF | IV -15 | 207.1 | 187.6 | 1.9 | 0.2009 | 2.986 | 15.1 | 1959- IV-18 | 1888 | |
| 34 | 1959 GG | IV -15 | 208.0 | 199.0 | 10.7 | 0.2145 | 2.764 | 14.7 | 1959- IV-20 | 1888 | 1 |
| 35 | 1959 GM | IV -15 | 209.0 | 192.8 | 8.5 | 0.3787 | 1.893 | 16.5 | 1959- IV-23 | 1954 | |
| 36 | 1959 GN | IV -15 | 210.7 | 76.7 | 3.1 | 0.2570 | 2.447 | 17 | 1959- IV-24 | 1954 | |
| 37 | 1959 GO | IV -15 | 210.5 | 191.6 | 4.0 | 0.2360 | 2.599 | 17 | 1959- IV-23 | 1954 | |
| 38 | 1959 GP | IV -15 | 210.5 | 201.0 | 10.3 | 0.2286 | 2.654 | 16.6 | 1959- IV-23 | 1954 | |
| 39 | 1959 GQ | IV -15 | 211.1 | 26.2 | 10.6 | 0.2355 | 2.606 | 17 | 1959- IV-24 | 1954 | 2 |

| N° | Désignation | Epoque 0h U. T. | $l_0$ | 1950.0 Ω | i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ° | ° | ° | ° | | | | | |
| 40 | 1959 GQ | V - 5 | 218.3 | 31.1 | 5.6 | 0.2997 | 2.221 | 14.9 | 1959- IV-27 | 1954 | 2 |
| 41 | 1959 GR | IV -15 | 208.3 | 52.6 | 6.1 | 0.3546 | 1.983 | 16 | 1959- IV-21 | 1954 | |
| 42 | 1959 GS | IV -15 | 208.8 | 203.5 | 4.3 | 0.2552 | 2.483 | 17 | 1959- IV-21 | 1954 | |
| 43 | 1959 GT | IV -15 | 207.5 | 195.9 | 7.8 | 0.2893 | 2.280 | 16.6 | 1959- IV-19 | 1954 | |
| 44 | 1959 GU | IV -15 | 208.2 | 27.2 | 12.5 | 0.2183 | 2.711 | 17 | 1959- IV-20 | 1954 | |
| 45 | 1959 JA | V - 7 | 221.6 | 199.9 | 10.8 | 0.2641 | 2.407 | 14.2 | 1959- V- 1 | 1924 | |
| 46 | 1959 JB | V - 9 | 228.0 | 2.8 | 4.3 | 0.4949 | 1.683 | 15.1 | 1959- V-10 | 1924 | |
| 47 | 1959 JC | V -13 | 233.0 | 207.7 | 4.6 | 0.2600 | 2.526 | 14.0 | 1959- V-15 | 1924 | |
| 48 | 1959 JD | V - 2 | 213.1 | 193.7 | 6.4 | 0.3160 | 2.140 | 15 | 1959- IV-20 | 1954 | 3 |
| 49 | 1959 JE | V - 2 | 211.7 | 64.6 | 3.4 | 0.2277 | 2.666 | 16 | 1959- IV-19 | 1954 | |
| 50 | 1959 JF | V - 2 | 209.4 | 126.9 | 0.6 | 0.1146 | 3.746 | 16.17 | 1959- IV-18 | 1954 | |
| 51 | 1959 JG | V - 2 | 211.7 | 28.1 | 7.9 | 0.2782 | 2.327 | 15.73 | 1959- IV-18 | 1954 | |
| 52 | 1959 JH | V - 2 | 208.4 | 37.0 | 9.4 | 0.1857 | 3.056 | 16.33 | 1959- IV-16 | 1954 | |
| 53 | 1959 JJ | V - 3 | 220.6 | 156.5 | 10.3 | 0.1975 | 2.674 | 15.9 | 1959- V- 1 | 1954 | |
| 54 | 1959 JK | V - 5 | 215.9 | 207.4 | 14.4 | 0.2639 | 2.413 | 15.13 | 1959- IV-24 | 1954 | |
| 55 | 1959 JL | V - 5 | 226.1 | 342.1 | 1.3 | 0.4409 | 1.709 | 15.41 | 1959- V- 9 | 1954 | |
| 56 | 1959 JN | V - 8 | 219.6 | 215.1 | 6.6 | 0.2932 | 2.253 | 16.5 | 1959- IV-27 | 1955 | |
| 57 | 1959 JO | V - 8 | 219.9 | 216.1 | 11.2 | 0.2584 | 2.444 | 16.1 | 1959- IV-28 | 1955 | |
| 58 | 1959 JP | V - 8 | 221.2 | 64.9 | 3.0 | 0.3751 | 1.904 | 16.12 | 1959- IV-28 | 1955 | |
| 59 | 1959 LC | VI - 4 | 236.9 | 239.8 | 6.2 | 0.2269 | 2.670 | 17 | 1959- V-13 | 1955 | |
| 60 | 1959 LD | VI - 4 | 240.1 | 21.1 | 1.3 | 0.3483 | 2.001 | 15.1 | 1959- V-14 | 1955 | |
| 61 | 1959 LE | VI - 4 | 235.5 | 330.4 | 2.9 | 0.1660 | 3.273 | 16.2 | 1959- V-13 | 1955 | |
| 62 | 1959 LG | VI - 4 | 230.4 | 34.3 | 16.2 | 0.1380 | 3.744 | 16.8 | 1959- V- 8 | 1955 | |
| 63 | 1959 LJ | VI - 4 | 246.2 | 130.1 | 7.8 | 0.2561 | 2.468 | 15.90 | 1959- V-25 | 1955 | |
| 64 | 1959 LK | VI - 4 | 246.6 | 117.5 | 6.4 | 0.4350 | 1.728 | 16.7 | 1959- V-23 | 1955 | |
| 65 | 1959 NE | VII - 8 | 275.2 | 239.0 | 0.7 | 0.4122 | 1.793 | 15.92 | 1959- VI-20 | 1956 | |
| 66 | 1959 NF | VII - 8 | 275.3 | 211.5 | 7.0 | 0.2169 | 2.748 | 16 | 1959- VI-24 | 1956 | |
| 67 | 1959 NG | VII -10 | 284.5 | 265.2 | 2.7 | 0.4131 | 1.801 | 15 | 1959-VII- 5 | 1956 | |
| 68 | 1959 NH | VII -10 | 289.6 | 241.2 | 0.6 | 0.2788 | 2.343 | 17 | 1959-VII-14 | 1956 | |
| 69 | 1959 NJ | VII -10 | 289.6 | 254.1 | 2.5 | 0.2470 | 2.574 | 16 | 1959-VII-13 | 1956 | |
| 70 | 1959 NK | VII -10 | 288.9 | 114.9 | 2.1 | 0.3600 | 1.978 | 15.81 | 1959-VII-13 | 1956 | |
| 71 | 1959 NL | VII -10 | 288.6 | 115.8 | 7.0 | 0.2583 | 2.474 | 15.76 | 1959-VII-12 | 1956 | |
| 72 | 1959 NM | VII -10 | 288.0 | 121.5 | 3.3 | 0.4083 | 1.861 | 16 | 1959-VII-12 | 1956 | |
| 73 | 1959 NN | VII -10 | 287.8 | 106.9 | 2.7 | 0.3666 | 1.997 | 16 | 1959-VII-11 | 1957 | 4 |
| 74 | 1959 NO | VII -12 | 297.7 | 150.0 | 10.6 | 0.3402 | 2.035 | 15.9 | 1959-VII-26 | 1957 | |
| 75 | 1959 OA | VII -30 | 312.6 | 208.0 | 16.7 | 0.2166 | 2.760 | 16 | 1959-VIII-7 | 1957 | |
| 76 | 1959 PA | VIII - 7 | 331.3 | 228.1 | 7.5 | 0.2125 | 2.779 | 14.5 | 1959-VIII-30 | 1925 | |
| 77 | 1959 PC | VIII -14 | 328.1 | 151.8 | 7.3 | 0.1497 | 3.530 | 14.3 | 1959-VIII-23 | 1925 | |
| 78 | 1959 PD | VIII - 8 | 300.7 | 234.1 | 9.4 | 0.3308 | 2.074 | 16. | 1959-VII-16 | 1957 | |
| 79 | 1959 PE | VIII -10 | 316.9 | 331.3 | 5.3 | 0.5223 | 1.576 | 15.15 | 1959-VIII-10 | 1957 | |
| 80 | 1959 PF | VIII - 9 | 316.1 | 353.8 | 1.9 | 0.4476 | 1.824 | 15.27 | 1959-VIII-10 | 1957 | |
| 81 | 1959 PG | VIII - 9 | 315.9 | 28.1 | 0.8 | 0.5974 | 1.448 | 15.45 | 1959-VIII-10 | 1957 | |
| 82 | 1959 PH | VIII -11 | 315.3 | 323.3 | 5.6 | 0.3662 | 1.968 | 16 | 1959-VIII- 7 | 1957 | |

| N° | Désignation | Époque 0h U. T. | $l_0$ | Ω 1950.0 | i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 83 | 1959 QA | VIII -29 | 341°.5 | 335°.0 | 6°.1 | 0°.5723 | 1.429 | - | 1959- IX-15 | 1957 | |
| 84 | 1959 QB | VIII -29 | 351.1 | 311.5 | 5.7 | 0.0805 | 3.811 | 16 | 1959- IX-16 | 1958 | 5 |
| 85 | 1959 QC | VIII -29 | 347.9 | 347.1 | 24.5 | 0.2241 | 2.257 | 16 | 1959- IX-15 | 1958 | |
| 86 | 1959 QD | VIII -30 | 318.9 | 300.2 | 9.5 | 0.1495 | 3.501 | 14.5 | 1959-VIII- 9 | 1960 | |
| 87 | 1959 RA | IX - 5 | 336.0 | 131.3 | 0.8 | 0.3441 | 2.017 | 15.44 | 1959-VIII-27 | 1958 | |
| 88 | 1959 RB | IX - 5 | 334.2 | 46.4 | 2.5 | 0.2691 | 2.384 | 15.42 | 1959-VIII-25 | 1958 | |
| 89 | 1959 RC | IX - 5 | 333.3 | 106.5 | 1.8 | 0.1778 | 3.151 | 15.81 | 1959-VIII-25 | 1958 | |
| 90 | 1959 RD | IX - 5 | 349.8 | 123.8 | 9.0 | 0.3982 | 1.850 | 16.3 | 1959- IX-19 | 1958 | |
| 91 | 1959 RE | IX - 7 | 327.5 | 212.4 | 13.0 | 0.1599 | 3.359 | 16 | 1959-VIII-18 | 1958 | |
| 92 | 1959 RF | IX - 7 | 344.6 | 165.8 | 7.3 | 0.5135 | 1.558 | 16 | 1959- IX- 9 | 1958 | |
| 93 | 1959 RG | IX - 7 | 344.5 | 337.6 | 4.3 | 0.4329 | 1.771 | 15 | 1959- IX- 8 | 1958 | 6 |
| 94 | 1959 RJ | IX - 7 | 354.6 | 165.3 | 8.2 | 0.2444 | 2.539 | 15.06 | 1959- IX-22 | 1958 | |
| 95 | 1959 RK | IX - 7 | 355.5 | 1.0 | 45.2 | 0.0757 | 5.662 | 16 | 1959- IX-20 | 1958 | |
| 96 | 1959 RL | IX - 7 | 351.8 | 118.3 | 1.5 | 0.2713 | 2.371 | 16 | 1959- IX-18 | 1958 | |
| 97 | 1959 RP | IX - 2 | 341.5 | 344.1 | 11.9 | 0.2467 | 2.555 | 14.4 | 1959- IX- 6 | 1960 | |
| 98 | 1959 RQ | IX - 2 | 342.0 | 338.5 | 9.2 | 0.4029 | 1.821 | 14.1 | 1959- IX- 7 | 1960 | |
| 99 | 1959 RR | IX - 2 | 343.6 | 338.4 | 5.5 | 0.2501 | 2.498 | 14.3 | 1959- IX- 8 | 1960 | 7 |
| 100 | 1959 RS | IX - 3 | 335.2 | 19.9 | 2.8 | 0.3088 | 2.179 | 13.9 | 1959-VIII-27 | 1960 | |
| 101 | 1959 RT | IX - 4 | 339.4 | 228.6 | 6.0 | 0.2532 | 2.521 | 13.7 | 1959- IX- 2 | 1960 | |
| 102 | 1959 RU | IX - 2 | 339.3 | 204.9 | 4.4 | 0.4810 | 1.710 | 13.9 | 1959- IX- 3 | 1960 | |
| 103 | 1959 RV | IX - 3 | 341.1 | 318.0 | 10.8 | 0.2366 | 2.802 | 13.2 | 1959- IX- 5 | 1960 | |
| 104 | 1959 RW | IX - 3 | 342.3 | 193.8 | 9.1 | 0.2190 | 2.764 | 14.2 | 1959- IX- 6 | 1960 | |
| 105 | 1959 RX | IX - 3 | 343.1 | 312.0 | 11.9 | 0.2042 | 2.907 | 14.4 | 1959- IX- 7 | 1960 | |
| 106 | 1959 RY | IX - 4 | 333.5 | 36.2 | 10.7 | 0.2384 | 2.580 | 14.3 | 1959-VIII-25 | 1961 | |
| 107 | 1959 RZ | IX - 4 | 334.0 | 359.3 | 11.0 | 0.2834 | 2.303 | 14.0 | 1959-VIII-25 | 1961 | |
| 108 | 1959 $RA_1$ | IX - 4 | 334.9 | 37.1 | 6.6 | 0.2292 | 2.647 | 14.4 | 1959-VIII-27 | 1961 | |
| 109 | 1959 $RB_1$ | IX - 4 | 334.5 | 41.1 | 8.0 | 0.1691 | 3.264 | 13.8 | 1959-VIII-27 | 1961 | |
| 110 | 1959 $RC_1$ | IX - 9 | 340.3 | 294.0 | 16.3 | 0.2491 | 2.518 | 14.3 | 1959- IX- 1 | 1961 | |
| 111 | 1959 $RD_1$ | IX -10 | 344.6 | 64.3 | 8.9 | 0.0824 | 4.378 | 14.4 | 1959- IX- 7 | 1961 | |
| 112 | 1959 $RE_1$ | IX -11 | 346.7 | 28.1 | 6.6 | 0.4440 | 1.810 | 13.2 | 1959- IX- 9 | 1961 | |
| 113 | 1959 SA | IX -29 | 353.9 | 28.9 | 4.2 | 0.2360 | 2.593 | 14.1 | 1959- IX-14 | 1961 | |
| 114 | 1959 SB | IX -29 | 353.9 | 2.6 | 17.1 | 0.2338 | 2.609 | 13.5 | 1959- IX-14 | 1961 | |
| 115 | 1959 SC | IX -29 | 356.7 | 331.5 | 12.5 | 0.2068 | 2.840 | 15.4 | 1959- IX-18 | 1961 | |
| 116 | 1959 SD | IX -29 | 358.2 | 345.2 | 10.3 | 0.2007 | 2.901 | 15.3 | 1959- IX-20 | 1961 | |
| 117 | 1959 SE | IX -30 | 359.0 | 353.6 | 12.7 | 0.2495 | 2.509 | 15.1 | 1959- IX-20 | 1961 | |
| 118 | 1959 SF | IX -30 | 359.5 | 356.2 | 12.4 | 0.2501 | 2.509 | 15.0 | 1959- IX-21 | 1961 | |
| 119 | 1959 SG | IX -30 | 359.2 | 12.9 | 7.8 | 0.3324 | 2.920 | 15.0 | 1959- IX-21 | 1961 | |
| 120 | 1959 SH | IX -30 | 0.0 | 191.0 | 4.3 | 0.1541 | 3.514 | 13.8 | 1959- IX-22 | 1962 | |
| 121 | 1959 SJ | X - 1 | 353.5 | 58.2 | 14.0 | 0.2147 | 2.766 | 15.0 | 1959- IX-13 | 1962 | |
| 122 | 1959 SK | X - 1 | 355.1 | 117.2 | 15.0 | 0.2484 | 2.509 | 13.7 | 1959- IX-14 | 1962 | |
| 123 | 1959 SL | X - 1 | 357.7 | 136.0 | 14.7 | 0.3379 | 2.043 | 14.2 | 1959- IX-16 | 1962 | |
| 124 | 1959 SM | X - 1 | 2.9 | 289.2 | 7.2 | 0.2196 | 2.751 | 14.8 | 1959- IX-25 | 1962 | |

| N° | Désignation | Epoque 0h U. T. | $l_0$ | Ω | 1950.0 i | dl/dt | r | Gr | Opposition en longitude | | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 125 | 1959 SN | X - 1 | 4°.3 | 249°.9 | 8°.6 | 0°.1883 | 3.051 | 15.0 | 1959- | IX-27 | 1962 | |
| 126 | 1959 SO | X - 1 | 4.3 | 258.8 | 6.3 | 0.1884 | 3.090 | 15.6 | 1959- | IX-27 | 1962 | |
| 127 | 1959 SP | X - 1 | 5.5 | 329.4 | 8.2 | 0.3126 | 2.250 | 14.9 | 1959- | IX-28 | 1962 | |
| 128 | 1959 TA | X - 2 | 359.9 | 22.2 | 5.3 | 0.2122 | 2.793 | 15.2 | 1959- | IX-21 | 1962 | |
| 129 | 1959 TB | X - 2 | 358.6 | 10.6 | 12.4 | 0.0820 | 3.780 | 15.7 | 1959- | IX-21 | 1962 | |
| 130 | 1959 TC | X - 2 | 0.2 | 136.1 | 3.3 | 0.1880 | 3.039 | 14.0 | 1959- | IX-22 | 1962 | |
| 131 | 1959 TD | X - 2 | 1.1 | 15.7 | 13.0 | 0.1533 | 3.488 | 13.7 | 1959- | IX-23 | 1962 | |
| 132 | 1959 TE | X - 2 | 3.2 | 202.1 | 8.1 | 0.2249 | 2.691 | 15.3 | 1959- | IX-25 | 1962 | |
| 133 | 1959 TF | X - 2 | 5.1 | 214.3 | 3.7 | 0.3440 | 2.043 | 15.0 | 1959- | IX-27 | 1962 | |
| 134 | 1959 TG | X - 2 | 6.5 | 227.3 | 2.0 | 0.3397 | 2.089 | 14.6 | 1959- | IX-29 | 1962 | |
| 135 | 1959 TH | X - 3 | 11.0 | 318.6 | 11.3 | 0.2625 | 2.505 | 14.2 | 1959- | X- 5 | 1962 | |
| 136 | 1959 TJ | X - 6 | 10.6 | 200.9 | 1.8 | 0.2482 | 2.567 | 13.7 | 1959- | X- 4 | 1963 | |
| 137 | 1959 TK | X - 6 | 11.0 | 9.2 | 4.6 | 0.3793 | 2.000 | 14.3 | 1959- | X- 4 | 1963 | |
| 138 | 1959 TL | X - 7 | 10.3 | 15.6 | 14.6 | 0.1821 | 3.245 | 15.4 | 1959- | X- 3 | 1963 | |
| 139 | 1959 TM | X - 7 | 11.5 | 32.3 | 6.3 | 0.2724 | 2.499 | 14.5 | 1959- | X- 5 | 1963 | |
| 140 | 1959 TN | X - 8 | 12.9 | 85.8 | 1.7 | 0.3309 | 2.264 | 15.2 | 1959- | X- 6 | 1963 | |
| 141 | 1959 TO | X - 7 | 13.5 | 20.1 | 3.7 | 0.4410 | 1.851 | 14.3 | 1959- | X- 8 | 1963 | |
| 142 | 1959 TP | X - 7 | 14.1 | 20.3 | 7.1 | 0.2351 | 2.716 | 15.1 | 1959- | X- 8 | 1963 | |
| 143 | 1959 TQ | X - 7 | 3.9 | 42.8 | 11.8 | 0.2572 | 2.450 | 14.7 | 1959- | IX-24 | 1963 | |
| 144 | 1959 TR | X - 7 | 3.3 | 134.3 | 11.8 | 0.1880 | 3.029 | 14.0 | 1959- | IX-25 | 1963 | |
| 145 | 1959 TS | X - 7 | 5.1 | 48.4 | 10.5 | 0.2721 | 2.366 | 14.9 | 1959- | IX-28 | 1963 | |
| 146 | 1959 TT | X - 7 | 14.1 | 243.2 | 12.8 | 0.2583 | 2.550 | 15.2 | 1959- | X- 8 | 1963 | |
| 147 | 1959 TU | X - 9 | 19.2 | 327.1 | 5.4 | 0.3526 | 2.006 | 14.8 | 1959- | X-15 | 1963 | |
| 148 | 1959 TV | X -10 | 13.5 | 109.7 | 6.1 | 0.3370 | 2.072 | 15.7 | 1959- | X- 6 | 1963 | |
| 149 | 1959 TW | XI - 9 | 35.5 | 146.0 | 5.5 | 0.1782 | 3.002 | 14.3 | 1959- | X-27 | 1964 | |

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[1] 1959 GG = 1959 JD [2] 1959 GQ/IV-15/ ≠ 1959 GQ/V-5/ [3] 1959 JD = 1959 GG

[4] 1959 NN = 1141 Bohmia /?/ [5] 1959 QB ≠ 1285 Julietta [6] 1959 RG = 1959 RR

[7] 1959 RR = 1959 RG.

## Elements of 1957 HK, Double Designation and Circular Elements

by R.S.Mitrinović

### 1. Elements of 1957 HK /MPC - 1948/

Elements: Epoch 1957 May 7.0 UT

| | | | | | |
|---|---|---|---|---|---|
| M = 338°.2311431 | | | $\varphi$ = 6°.0544483 | $\tilde{P}$ | $\tilde{Q}$ |
| $\omega$ = 30.3434809 | | | $\mu$ = 0.2631933 | -0.5122400 | +0.8562343 |
| $\Omega$ = 208.9994498 | 1950.0 | | a = 2.4114940 | -0.8130646 | -0.5085491 |
| i = 7.9295723 | | | g = 13$^m$.1 | -0.2766514 | -0.0907795 |

Residuals:

| 1957 | $\Delta\alpha$ | $\Delta\delta$ | 1957 | $\Delta\alpha$ | $\Delta\delta$ |
|---|---|---|---|---|---|
| Apr. 24 | 0$^s$.00 | 0".0 | May 7 | 0$^s$.00 | 0".0 |
| May 1 | +5.98 | -38.7 | May 24 | -0.05 | 0.0 |

### 2. Double Designation

1959 GG /MPC-1888/ = 1959 JD /MPC-1954/

Epoch: 1959 May 2.0 U.T.

$u_o$ = 11°.438
$\Omega$ = 200.527 1950.0
i = 12.775
$\mu$ = 0.22218
a = 2.7

Observations: Apr. 15.01056 /Heidelberg/ May 2.21 /Link/, 1959. /MPC - 2015/.

### 3. Circular Elements:

| Planet | Epoch 0$^h$ UT | | | Equinox 1950.0 $u_o$ | $\Omega$ | i | $\mu$ | a | Observations |
|---|---|---|---|---|---|---|---|---|---|
| 1957 DE | 57 | III | 6 | 7°.661 | 151.409 | 13.134 | 0°.18786 | 3.0192 | Feb. 20, Mar.6 |
| 1959 GH | 59 | IV | 15 | 144.325 | 46.727 | 21.458 | 0.23100 | 2.6300 | Apr. 6,15 |
| 1959 GJ | 59 | IV | 15 | 93.992 | 146.023 | 12.200 | 0.18140 | 3.0915 | Apr. 6,15 |
| 1959 GK | 59 | IV | 15 | 140.022 | 50.923 | 16.953 | 0.21977 | 2.7200 | Apr. 6,15 |
| 1959 GL | 59 | IV | 15 | 114.163 | 77.031 | 10.596 | 0.26947 | 2.3739 | Apr. 6,15 |
| 1959 JM | 59 | V | 8 | 75.529 | 53.760 | 3.575 | 0.27337 | 2.3200 | May 7,8 |
| 1959 NC | 59 | VII | 9 | 194.021 | 89.911 | 11.319 | 0.15387 | 3.4500 | July 4,9 |
| 1959 ND | 59 | VII | 9 | 189.141 | 94.315 | 8.079 | 0.24184 | 2.5500 | July 4,9 |
| 1959 RN | 59 | IX | 11 | 26.851 | 316.987 | 33.207 | 0.16253 | 3.3300 | Sep. 9,11 |

/MPC - 2015/

## Eléments des Orbites des petites planètes

par Ružica S.Mitrinović

| N° | Désignation | Époque 0h U. T. | 1950.0 $l_0$ | $\Omega$ | i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1955 BB | I -16 | 97°.1 | 81°.3 | 14°.8 | 0°.1923 | 2.981 | 15.9 | 1954- XII-25 | 1199 | |
| 2 | 1955 BC | I -16 | 99.9 | 288.9 | 21.9 | 0.2645 | 2.138 | 14 | 1954- XII-27 | 1199 | |
| 3 | 1955 BE | I -27 | 115.1 | 56.7 | 10.1 | 0.1838 | 3.077 | 14.4 | 1955- I-13 | 1209 | |
| 4 | 1955 BH | I -27 | 125.4 | 293.2 | 4.4 | 0.3921 | 2.073 | 15.0 | 1955- I-25 | 1754 | |
| 5 | 1955 BJ | I -26 | 132.1 | 303.0 | 14.3 | 0.1530 | 3.395 | 15.0 | 1955- II- 3 | 1321 | |
| 6 | 1955 BK | I -26 | 143.1 | 160.6 | 2.7 | 0.2107 | 2.805 | 14.6 | 1955- II-17 | 1321 | |
| 7 | 1955 BM | I -26 | 141.7 | 10[illegible].3 | 4.9 | 0.2359 | 2.598 | 14.5 | 1955- II-16 | 1321 | |
| 8 | 1955 BS | I -26 | 125.9 | 116.3 | 4.8 | 0.2948 | 2.525 | 15.0 | 1955- I-26 | 1754 | |
| 9 | 1955 CA | II -15 | 131.3 | 315.1 | 12.3 | 0.2504 | 2.494 | 16.2 | 1955- I-27 | 1200 | |
| 10 | 1955 CB | II -18 | 138.1 | 333.7 | 1.0 | 0.2022 | 2.881 | 17 | 1955- II- 5 | 1200 | |
| 11 | 1955 CC | II -11 | 128.0 | 10.2 | 3.3 | 0.3337 | 2.122 | 14.8 | 1955- I-22 | 1754 | |
| 12 | 1955 DD | II -23 | 168.5 | 17.1 | 24.0 | 0.1742 | 3.181 | 16 | 1955- III-13 | 1200 | |
| 13 | 1955 DG | II -23 | 169.4 | 81.1 | 3.8 | 0.1969 | 2.934 | 16 | 1955- III-14 | 1200 | |
| 14 | 1955 DH | II -23 | 168.1 | 29.8 | 5.5 | 0.2301 | 2.638 | 16 | 1955- III-13 | 1200 | |
| 15 | 1955 DJ | II -24 | 165.0 | 81.2 | 0.8 | 0.4082 | 1.796 | 16.5 | 1955- III-13 | 1200 | |
| 16 | 1955 DL | II -24 | 165.5 | 68.2 | 5.0 | 0.2928 | 2.249 | 15.5 | 1955- III-11 | 1200 | |
| 17 | 1955 DM | II -25 | 144.6 | 127.0 | 5.1 | 0.5695 | /1.414/ | 16.6 | 1955- I-30 | 1200 | |
| 18 | 1955 DN | II -28 | 172.6 | 349.8 | 7.0 | 0.2061 | 2.782 | 12.6 | 1955- III-17 | 1216 | |
| 19 | 1955 DO | II -18 | 139.4 | 19.7 | 2.9 | 0.6277 | /1.336/ | 15.0 | 1955- I-24 | 1223 | |
| 20 | 1955 DP | II -18 | 126.0 | 117.8 | 22.8 | 0.1379 | 3.744 | - | 1955- I-23 | 1223 | |
| 21 | 1955 EA | III -12 | 160.3 | 133.7 | 6.9 | 0.5843 | /1.380/ | - | 1955- II-15 | 1223 | |
| 22 | 1955 EB | III -14 | 137.7 | 318.9 | 32.5 | 0.0399 | /5.232/ | 16.3 | 1955- II- 5 | 1223 | |
| 23 | 1955 EC | III -14 | 135.7 | 323.3 | 23.5 | 0.0765 | 4.976 | 16.0 | 1955- II- 1 | 1223 | |
| 24 | 1955 EF | III -14 | 159.1 | 344.1 | 6.6 | 0.3583 | /1.964/ | 16 | 1955- II-20 | 1224 | |
| | 1955 EF | III -23 | 162.5 | 345.2 | 6.1 | 0.3508 | 1.969 | 17.3 | 1955- II-20 | 1224 | |
| 25 | 1955 EG | III -14 | 156.8 | 353.8 | 1.1 | 0.2716 | 2.367 | 17 | 1955- II-20 | 1224 | 1 |
| | 1955 EG | III -23 | 159.3 | 347.8 | 2.1 | 0.2475 | /2.373/ | 17.3 | 1955- II-20 | 1224 | |
| 26 | 1955 EH | III -14 | 156.9 | 151.2 | 5.8 | 0.2931 | 2.249 | 17 | 1955- II-19 | 1224 | |
| | 1955 EH | III -23 | 159.5 | 152.8 | 7.4 | 0.2743 | 2.255 | 17.3 | 1955- II-19 | 1224 | |
| 27 | 1955 EJ | III -14 | 163.9 | 109.9 | 1.3 | 0.5924 | /1.400/ | 16 | 1955- II-20 | 1224 | |
| 28 | 1955 EK | III -14 | 162.1 | 4.9 | 0.7 | 0.5094 | 1.553 | 17 | 1955- II-19 | 1224 | |
| 29 | 1955 EL | III -14 | 156.4 | 322.1 | 4.0 | 0.2919 | 2.249 | 17 | 1955- II-18 | 1224 | |
| 30 | 1955 EM | III -14 | 164.1 | 182.9 | 2.1 | 0.5959 | /1.381/ | 17 | 1955- II-20 | 1224 | |
| 31 | 1955 EN | III -14 | 163.9 | 181.9 | 0.9 | 0.6031 | 1.381 | 16 | 1955- II-20 | 1224 | |
| 32 | 1955 EO | III -16 | 165.7 | 71.1 | 0.7 | 0.5910 | 1.401 | 15.0 | 1955- II-20 | 1321 | |
| 33 | 1955 EP | III -16 | 158.5 | 356.3 | 4.8 | 0.3219 | 2.116 | >15.0 | 1955- II-20 | 1321 | |
| 34 | 1955 FD | III -23 | 182.2 | 39.0 | 9.7 | 0.3938 | 2.045 | 17.7 | 1955- III-24 | 1216 | |
| 35 | 1955 FE | III -23 | 185.8 | 341.1 | 10.8 | 0.1992 | 2.848 | 15.5 | 1955- III-28 | 1216 | |
| 36 | 1955 FJ | III -20 | 158.0 | 246.0 | 3.6 | 0.2948 | 2.258 | 16.1 | 1955- II-19 | 1224 | |
| 37 | 1955 FK | III -20 | 155.0 | 187.2 | 1.8 | 0.2509 | 2.490 | 16.6 | 1955- II-16 | 1224 | |
| 38 | 1955 FL | III -20 | 167.6 | 264.9 | 2.2 | 0.5866 | 1.403 | 16.7 | 1955- II-22 | 1224 | |
| 39 | 1955 FM | III -20 | 166.5 | 294.3 | 2.6 | 0.5627 | 1.421 | 16.6 | 1955- II-21 | 1224 | |

| N° | Désignation | Époque 0h U. T. | $l_0$ | Ω | 1950.0 i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 1955 FN | III -20 | 166°.4 | 74°.8 | 6°.2 | 0°.3917. | 1.848 | 16.0 | 1955- II-27 | 1224 | |
| 41 | 1955 FO | III -20 | 163.0 | 41.2 | 8.9 | 0.2822 | /2.213/ | 16.1 | 1955- II-26 | 1224 | |
| 42 | 1955 FP | III -23 | 168.6 | 164.4 | 4.1 | 0.5356 | /1.384/ | - | 1955- II-23 | 1224 | |
| 43 | 1955 FR | III -23 | 189.2 | 150.3 | 3.7 | 0.2700 | 2.379 | 16 | 1955- IV- 2 | 1224 | |
| 44 | 1955 FS | III -28 | 187.5 | 86.3 | 4.3 | 0.3597 | 1.996 | 16 | 1955- III-29 | 1224 | |
| 45 | 1955 FV | III -29 | 199.1 | 17.1 | 3.3 | 0.2476 | 2.515 | 17.6 | 1955- IV-13 | 1225 | |
| 46 | 1955 FW | III -17 | 182.9 | 83.3 | 4.4 | 0.1342 | 3.812 | 14.5 | 1955- III-25 | 1242 | |
| 47 | 1955 FY | III -23 | 166.8 | 304.5 | 16.2 | 0.3001 | 2.215 | 14.9 | 1955- III- 1 | 1754 | |
| 48 | 1955 FZ | III -23 | 165.1 | 113.7 | 16.1 | 0.2263 | 2.672 | 14.2 | 1955- III- 1 | 1754 | |
| 49 | 1955 $FC_1$ | III -23 | 171.7 | 113.5 | 2.1 | 0.5932 | /1.384/ | 14.0 | 1955- II-27 | 1754 | |
| 50 | 1955 $FD_1$ | III -23 | 195.5 | 59.8 | 0.8 | 0.2259 | 2.672 | 15.0 | 1955- IV-10 | 1754 | |
| 51 | 1955 $FE_1$ | III -23 | 194.5 | 9.0 | 17.0 | 0.1752 | 3.174 | 14.5 | 1955- IV- 7 | 1754 | |
| 52 | 1955 $FF_1$ | III -23 | 196.5 | 23.2 | 17.7 | 0.2408 | 2.562 | 14.0 | 1955- IV-11 | 1754 | |
| 53 | 1955 $FL_1$ = | III -23 | 171.8 | 113.5 | 2.2 | 0.5931 | 1.384 | 14.5 | 1955- II-27 | 1633, | |
| | = 1955 $FP_1$ | | | | | | | | | 1754 | |
| 54 | 1955 $FM_1$ = | III -23 | 171.8 | 122.0 | 2.9 | 0.5840 | 1.404 | 14.8 | 1955- II-28 | 1633, | |
| | 1955 $FQ_1$ | | | | | | | | | 1754 | |
| 55 | 1955 $FR_1$ | III -23 | 192.9 | 6.9 | 6.7 | 0.2291 | 2.651 | 15.0 | 1955- IV- 6 | 1754 | |
| 56 | 1955 $FS_1$ | III -23 | 192.8 | 0.1 | 4.0 | 0.2368 | 2.589 | 14.9 | 1955- IV- 6 | 1754 | |
| 57 | 1955 $FT_1$ | III -23 | 193.3 | 191.0 | 26.0 | 0.2149 | 2.738 | 14.8 | 1955- IV- 7 | 1754 | |
| 58 | 1955 GC | IV -15 | 202.3 | 320.8 | 6.7 | 0.3994 | 1.837 | 14.5 | 1955- IV-11 | 1393 | |
| 59 | 1955 GD | IV -15 | 202.5 | 345.1 | 10.2 | 0.3491 | 2.[illegible]39 | 15.0 | 1955- IV-12 | 1393 | |
| 60 | 1955 HB | IV -16 | 182.1 | 9.9 | 17.7 | 0.2220 | 2.509 | 16.4 | 1955- III-16 | 1225 | |
| 61 | 1955 HC | IV -22 | 197.0 | 296.8 | 3.0 | 0.2458 | 2.388 | 17.7 | 1955- IV- 2 | 1225 | |
| 62 | 1955 HD | IV -22 | 193.4 | 32.7 | 7.3 | 0.2876 | 2.279 | 17 | 1955- III-27 | 1225 | |
| 63 | 1955 HE | IV -22 | 190.4 | 31.0 | 5.7 | 0.2456 | 2.577 | 17 | 1955- III-24 | 1225 | |
| 64 | 1955 HG | IV -27 | 221.8 | 194.9 | 2.6 | 0.2832 | 2.750 | 17.6 | 1955- V- 5 | 1226 | |
| 65 | 1955 HH | IV -27 | 223.7 | 143.6 | 2.1 | 0.3857 | 1.867 | 17.5 | 1955- V-10 | 1226 | |
| 66 | 1955 HJ | IV -27 | 223.1 | 183.3 | 5.2 | 0.3684 | 1.928 | 17.2 | 1955- V- 8 | 1226 | |
| 67 | 1955 HN | IV -26 | 218.4 | 60.0 | 3.3 | 0.2988 | 2.236 | 14.5 | 1955- V- 1 | 1259 | |
| 68 | 1955 HO | IV -26 | 220.6 | 49.9 | 2.5 | 0.2486 | 2.528 | 14.6 | 1955- V- 3 | 1259 | |
| 69 | 1955 HQ | IV -27 | 213.8 | 58.3 | 4.3 | 0.2510 | 2.523 | 14.8 | 1955- IV-24 | 1353 | |
| 70 | 1955 KC | V -20 | 230.2 | 211.1 | 16.5 | 0.1027 | 4.538 | 17.6 | 1955- V-10 | 1309 | |
| 71 | 1955 KF | V -23 | 229.7 | 66.3 | 11.0 | 0.3129 | 2.150 | 14.6 | 1955- V- 5 | 1754 | |
| 72 | 1955 KG | V -23 | 253.6 | 223.1 | 2.7 | 0.2388 | 2.576 | 14.8 | 1955- VI- 9 | 1754 | |
| 73 | 1955 KH | V -18 | 226.3 | 26.0 | 7.6 | 0.3260 | 2.107 | 15.0 | 1955- V- 2 | 1393 | |
| 74 | 1955 KJ | V -18 | 223.6 | 29.5 | 12 4 | 0.1437 | 3.[illegible]13 | 16.0 | 1955- V- 2 | 1393 | |
| 75 | 1955 MB | VI -16 | 247.6 | 73.7 | 29.5 | 0.1891 | /2,540/ | 16.2 | 1955- V-26 | 1309 | 2 |
| | 1955 MB | VI -22 | 249.1 | 73 0 | 35.3 | 0.1692 | /2.541/ | 16 | 1955- V-26 | 1310 | |
| 76 | 1955 MC | VI -16 | 250.2 | 230.2 | 8.3 | 0.3506 | 1.992 | 16.9 | 1955- V-24 | 1309 | |
| 77 | 1955 ME | VI -19 | 255.1 | 142.4 | 7.3 | 0.3021 | 2.204 | 16.8 | 1955- VI- 1 | 1309 | |
| 78 | 1955 MF | VI -19 | 257.4 | 229.8 | 11.2 | 0.2646 | 2.408 | 16.7 | 1955- VI- 5 | 1309 | |

| N° | Désignation | Époque 0h U. T. | $l_o$ | Ω | 1950.0 i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 79 | 1955 MG | VI -22 | 276°.7 | 113°.9 | 18°.1 | 0°.3913 | 1.831 | 16 | 1955- VII- 4 | 1310 | |
| 80 | 1955 MH | VI -22 | 286.5 | 120.3 | 5.8 | 0.1881 | /2.541/ | 16.9 | 1955- VII-13 | 1310 | |
| 81 | 1955 MJ | VI -22 | 275.7 | 188.9 | 4.9 | 0.3116 | 2.162 | 17.2 | 1955- VII- 1 | 1310 | |
| 82 | 1955 MK | VI -27 | 281.7 | 119.9 | 8.7 | 0.2815 | 2.316 | 16.9 | 1955- VII- 7 | 1310 | |
| 83 | 1955 MN | VI -28 | 286.4 | 268.3 | 4.5 | 0.2165 | 2.755 | 16.8 | 1955- VII-12 | 1310 | |
| 84 | 1955 MP | VI -29 | 285.0 | 223.7 | 7.8 | 0.2993 | 2.220 | 16.2 | 1955- VII-12 | 1310 | |
| 85 | 1955 MT | VI -17 | 257.7 | 242.0 | 9.1 | 0.1596 | 3.398 | 14.5 | 1955- VI- 7 | 1754 | |
| 86 | 1955 MU | VI -17 | 259.3 | 238.4 | 7.3 | 0.1903 | 2.997 | 14.8 | 1955- VI- 9 | 1754 | |
| 87 | 1955 MV | VI -18 | 264.6 | 193.9 | 6.0 | 0.2136 | 2.862 | 14.8 | 1955- VI-16 | 1754 | 3 |
| | 1955 MV | VI -18 | 264.4 | 208.0 | 6.6 | 0.2557 | 2.626 | 15.6 | 1955- VI-15 | 1786 | |
| 88 | 1955 MW | VI -24 | 271.1 | 177.8 | 0.7 | 0.4453 | 1.815 | 14.0 | 1955- VI-23 | 1393 | |
| 89 | 1955 MX | VI -25 | 272.0 | 265.3 | 5.4 | 0.3928 | 2.033 | 14.5 | 1955- VI-23 | 1393 | |
| 90 | 1955 MZ | VI -17 | 277.3 | 186.2 | 6.5 | 0.4287 | 1.728 | 15.0 | 1955- VII-10 | 1754 | |
| 91 | 1955 $MA_1$ | VI -17 | 279.6 | 184.9 | 10.8 | 0.2812 | 2.314 | 15.0 | 1955- VII- 8 | 1754 | |
| 92 | 1955 $MB_1$ | VI -17 | 258.7 | 254.3 | 5.9 | 0.1980 | 2.945 | 15.0 | 1955- VI- 8 | 1754 | |
| 93 | 1955 $MC_1$ | VI -17 | 259.1 | 233.2 | 2.2 | 0.2341 | 2.625 | 12.9 | 1955- VI- 8 | 1754 | |
| 94 | 1955 $MD_1$ | VI -17 | 277.4 | 185.1 | 6.4 | 0.4308 | 1.722 | 15.0 | 1955- VII-10 | 1754 | |
| 95 | 1955 $ME_1$ | VI -24 | 260.3 | 246.1 | 4.6 | 0.2432 | 2.548 | 14.5 | 1955- VI- 8 | 1755 | |
| 96 | 1955 $MF_1$ | VI -24 | 261.8 | 250.1 | 3.0 | 0.2980 | 2.224 | 15.0 | 1955- VI- 8 | 1755 | |
| 97 | 1955 $MG_1$ | VI -24 | 263.3 | 254.2 | 2.8 | 0.3992 | 1.825 | 15.7 | 1955- VI- 8 | 1786 | |
| 98 | 1955 OA | VII -19 | 306.2 | 230.6 | 9.7 | 0.4139 | 1.777 | 14.5 | 1955-VIII- 7 | 1259 | |
| 99 | 1955 OB | VII -19 | 312.0 | 253.6 | 14.5 | 0.1730 | 2.258 | 14.4 | 1955-VIII-12 | 1259 | |
| 100 | 1955 OD | VII -28 | 309.1 | 149.4 | 10.5 | 0.3111 | 2.165 | 17.1 | 1955-VIII- 4 | 1311 | |
| 101 | 1955 OE | VII -28 | 307.4 | 213.5 | 3.3 | 0.3821 | 1.886 | 17.6 | 1955-VIII- 2 | 1311 | |
| 102 | 1955 QA | VIII -18 | 304.4 | 124.9 | 11.5 | 0.1592 | 3.374 | 13.8 | 1955- VII-24 | 1311 | |
| 103 | 1955 QB | VIII -19 | 314.3 | 311.5 | 35.1 | 0.1054 | 4.774 | 17.6 | 1955-VIII- 6 | 1311 | |
| 104 | 1955 QC | VIII -20 | 312.6 | 303.0 | 28.5 | 0.1450 | 2.530 | 17.1 | 1955-VIII- 3 | 1311 | |
| 105 | 1955 QD | VIII -20 | 309.0 | 269.6 | 15.8 | 0.1752 | 3.172 | 17.3 | 1955- VII-29 | 1311 | |
| 106 | 1955 QF | VIII -20 | 342.8 | 179.3 | 18.6 | 0.2006 | 2.899 | 16.0 | 1955- XI-11 | 1311 | |
| 107 | 1955 QG | VIII -21 | 317.1 | 300.7 | 19.2 | 0.2550 | 2.468 | 16 | 1955-VIII- 6 | 1311 | |
| 108 | 1955 QM | VIII -23 | 326.7 | 203.5 | 6.0 | 0.4472 | 2.175 | 16.5 | 1955-VIII-19 | 1311 | |
| 109 | 1955 QP | VIII -23 | 325.0 | 296.7 | 15.3 | 0.3092 | 2.175 | 16.4 | 1955-VIII-16 | 1311 | |
| 110 | 1955 QQ | VIII -23 | 324.9 | 255.0 | 6.7 | 0.2529 | 2.473 | 16.7 | 1955-VIII-17 | 1311 | |
| 111 | 1955 QS | VIII -23 | 339.8 | 97.3 | 3.8 | 0.2330 | 2.617 | 16.9 | 1955- IX- 6 | 1312 | |
| 112 | 1955 QV | VIII -24 | 320.5 | 234.5 | 2.7 | 0.4924 | 1.585 | 17 | 1955-VIII- 3 | 1312 | |
| 113 | 1955 QX | VIII -24 | 340.3 | 249.5 | 7.3 | 0.5100 | 1.539 | 17.1 | 1955- IX-15 | 1312 | |
| 114 | 1955 QY | VIII -24 | 352.1 | 235.5 | 12.5 | 0.2208 | 2.718 | 16.9 | 1955- IX-22 | 1312 | |
| 115 | 1955 QZ | VIII -25 | 335.1 | 344.5 | 9.8 | 0.3963 | 1.825 | 16.7 | 1955- IX- 1 | 1312 | 4 |
| | 1955 QZ | VIII -25 | 336.4 | 348.5 | 9.7 | 0.3997 | 2.413 | 17.5 | 1955- IX- 1 | 1312 | |
| 116 | 1955 $QA_1$ | VIII -25 | 335.1 | 4.5 | 3.9 | 0.3755 | 1.907 | 15.7 | 1955-VIII-31 | 1312 | 5 |
| | 1955 $QA_1$ | VIII -25 | 334.5 | 16.7 | 2.5 | 0.4374 | 1.713 | 16.2 | 1955-VIII-31 | 1312 | |
| 117 | 1955 $QB_1$ | VIII -25 | 337.4 | 341.3 | 28.1 | 0.1056 | 4.395 | 16.7 | 1955- IX- 1 | 1312 | |

| N° | Désignation | Époque O U. T. | $l_o$ | $\Omega$ | 1950.0 i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 118 | 1955 $QC_1$ | VIII -25 | 335°.5 | 75°.6 | 3°.0 | 0°.2352 | 2.540 | 17.0 | 1955-VIII-31 | 1312 | 6 |
| | 1955 $QC_1$ | VIII -25 | 335.6 | 60.0 | 3.1 | 0.2247 | 2.703 | 17.3 | 1955-VIII-31 | 1312 | |
| 119 | 1955 $QD_1$ | VIII -25 | 333.8 | 1.6 | 8.6 | 0.3499 | 2.022 | 17.3 | 1955-VIII-29 | 1312 | |
| 120 | 1955 $QG_1$ | VIII -25 | 333.5 | 127.3 | 1.2 | 0.4477 | 1.690 | 17.5 | 1955-VIII-29 | 1312 | |
| 121 | 1955 $QH_1$ | VIII -25 | 333.3 | 351.6 | 2.7 | 0.3342 | 2.089 | 17.0 | 1955-VIII-28 | 1312 | |
| 122 | 1955 $QJ_1$ | VIII -25 | 333.7 | 81.3 | 1.6 | 0.2451 | 2.592 | 15.2 | 1955-VIII-28 | 1312 | |
| 123 | 1955 $QK_1$ | VIII -25 | 333.2 | 107.6 | 2.3 | 0.3313 | 2.110 | 17.5 | 1955-VIII-28 | 1312 | |
| 124 | 1955 $QL_1$ | VIII -25 | 333.1 | 75.1 | 2.1 | 0.2557 | 2.540 | 17.5 | 1955-VIII-28 | 1312 | |
| 125 | 1955 $QM_1$ | VIII -25 | 332.8 | 334.9 | 5.1 | 0.4930 | 1.630 | 16.5 | 1955-VIII-28 | 1312 | |
| 126 | 1955 $QQ_1$ | VIII -26 | 345.6 | 335.8 | 3.0 | 0.2453 | 2.539 | 14.3 | 1955- IX-14 | 1338 | |
| 127 | 1955 RF | IX -13 | 326.1 | 351.2 | 3.3 | 0.1724 | 3.205 | 16.7 | 1955-VIII-15 | 1312 | |
| 128 | 1955 RO | IX -13 | 343.0 | 124.5 | 4.7 | 0.2408 | 2.574 | 17.7 | 1955- IX- 4 | 1313 | |
| 129 | 1955 RQ | IX -13 | 342.7 | 152.2 | 15.4 | 0.2607 | 2.436 | 14.6 | 1955- IX- 3 | 1313 | |
| 130 | 1955 RU | IX -13 | 355.9 | 155.4 | 2.3 | 0.6093 | 1.371 | 17.4 | 1955- X- 1 | 1313 | |
| 131 | 1955 $RA_1$ | IX -14 | 359.0 | 329.2 | 10.0 | 0.4198 | 1.750 | 17.4 | 1955- IX-29 | 1313 | |
| 132 | 1955 $RH_1$ | IX -16 | 344.8 | 302.5 | 1.7 | 0.6293 | 1.341 | 14.8 | 1955-VIII-25 | 1755 | |
| 133 | 1955 $RK_1$ | IX -16 | 343.5 | 295.5 | 13.6 | 0.1695 | 3.254 | 14.8 | 1955- IX- 5 | 1755 | |
| 134 | 1955 SG | IX -16 | 359.6 | 330.5 | 3.2 | 0.5800 | 1.416 | 16.7 | 1955- X- 4 | 1314 | |
| 135 | 1955 SH | IX -16 | 6.7 | 13.6 | 6.9 | 0.2209 | 2.717 | 17 | 1955- X- 5 | 1660 | 7 |
| 136 | 1955 SJ | IX -17 | 349.1 | 90.9 | 8.2 | 0.3133 | 2.157 | 16.7 | 1955- IX-10 | 1314 | |
| 137 | 1955 SK | IX -17 | 351.4 | 121.4 | 13.8 | 0.2969 | 2.289 | 17.4 | 1955- IX-14 | 1314 | |
| 138 | 1955 SL | IX -17 | 345.5 | 143.0 | 26.0 | 0.2353 | 2.611 | 18.2 | 1955- IX- 6 | 1314 | |
| 139 | 1955 SM | IX -17 | 0.6 | 208.0 | 9.9 | 0.2762 | 2.338 | 17.5 | 1955- IX-27 | 1314 | |
| 140 | 1955 SN | IX -17 | 0.9 | 232.4 | 5.8 | 0.2511 | 2.494 | 14.5 | 1955- IX-27 | 1314 | |
| 141 | 1955 SQ | IX -17 | 357.2 | 199.6 | 6.2 | 0.3484 | 1.994 | 16.1 | 1955- IX-23 | 1314 | |
| 142 | 1955 SR | IX -17 | 358.2 | 343.2 | 10.9 | 0.2313 | 2.625 | 17.0 | 1955- IX-23 | 1314 | |
| 143 | 1955 SS | IX -17 | 358.6 | 292.2 | 5.6 | 0.1655 | 3.362 | 16.6 | 1955- IX-23 | 1314 | |
| 144 | 1955 SV | IX -18 | 2.4 | 154.1 | 5.2 | 0.5194 | 1.523 | 17.5 | 1955- X- 6 | 1314 | |
| 145 | 1955 SW | IX -18 | 9.4 | 74.4 | 3.9 | 0.1836 | 3.073 | 16.6 | 1955- X- 7 | 1314 | 8 |
| 146 | 1955 SX | IX -18 | 7.7 | 50.4 | 3.0 | 0.2381 | 2.583 | 17.6 | 1955- X- 6 | 1314 | |
| 147 | 1955 SY | IX -18 | 5.7 | 150.2 | 6.7 | 0.3194 | 2.125 | 17.5 | 1955- X- 5 | 1314 | |
| 148 | 1955 SZ | IX -18 | 7.2 | 185.5 | 12.8 | 0.2100 | 2.807 | 17.4 | 1955- X- 4 | 1314 | |
| 149 | 1955 $SA_1$ | IX -18 | 359.1 | 13.1 | 6.5 | 0.6372 | 1.322 | 17.5 | 1955- X- 2 | 1314 | |
| 150 | 1955 $SB_1$ | IX -18 | 7.2 | 166.3 | 12.3 | 0.2734 | 2.357 | 16.0 | 1955- X- 6 | 1314 | |
| 151 | 1955 $SJ_1$ | IX -18 | 19.3 | 294.3 | 5.2 | 0.2299 | 2.512 | 16.4 | 1955- X-21 | 1315 | |
| 152 | 1955 $SK_1$ = | IX -18 | 19.6 | 264.9 | 4.5 | 0.2309 | 2.624 | 16.6 | 1955- X-21 | 1315 | |
| | =1955 $SR_1$ | | | | | | | | | | |
| 153 | 1955 $SL_1$ | IX -18 | 21.0 | 327.4 | 9.4 | 0.2046 | 2.896 | 14.9 | 1955- X-23 | 1315 | |
| 154 | 1955 $SO_1$ | IX -19 | 324.9 | 156.2 | 4.0 | 0.1064 | 3.614 | 16.0 | 1955-VIII-15 | 1315 | |
| 155 | 1955 $SQ_1$ | IX -19 | 27.1 | 15.4 | 25.9 | 0.0759 | 5.419 | 17.4 | 1955- X-24 | 1315 | |
| 156 | 1955 $SS_1$ | IX -19 | 20.5 | 231.5 | 4.8 | 0.1542 | 3.220 | 16.5 | 1955- X-20 | 1315 | |
| 157 | 1955 $SW_1$ | IX -21 | 2.4 | 218.3 | 8.6 | 0.2680 | 2.391 | 17.3 | 1955- IX-28 | 1315 | |

| N° | Désignation | Époque 0h U. T. | $l_o$ | Ω | 1950.0 i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 158 | 1955 $SX_1$ | IX -21 | 1°.7 | 231°.6 | 8°.4 | 0°.2441 | 2.548 | 17.2 | 1955- IX-27 | 1316 | |
| 159 | 1955 $SD_2$ | IX -23 | 5.0 | 282.1 | 3.6 | 0.2648 | 2.401 | 14.5 | 1955- X- 1 | 1338 | |
| **160** | 1955 $SE_2$ | IX -23 | 7.0 | 314.0 | 6.4 | 0.2030 | 2.866 | 14.6 | 1955- X- 3 | 1338 | |
| 161 | 1955 $SF_2$ | IX -23 | 6.8 | 333.0 | 5.2 | 0.2140 | 2.786 | 14.3 | 1955- X- 3 | 1338 | |
| 162 | 1955 $SM_2$ | IX -24 | 16.9 | 46.9 | 2.1 | 0.2388 | 2.619 | 14.5 | 1955- X-16 | 1338 | |
| 163 | 1955 $SN_2$ | IX -24 | 17.7 | 37.7 | 7.6 | 0.1883 | 3.022 | 14.3 | 1955- X-16 | 1338 | |
| 164 | 1955 $SO_2$ | IX -24 | 16.9 | 200.2 | 1.3 | 0.2740 | 2.353 | 14.2 | 1955- X-17 | 1338 | |
| 165 | 1955 $SP_2$ | IX -16 | 342.8 | 268.7 | 10.5 | 0.1454 | 3.612 | 14.5 | 1955- IX- 4 | 1755 | |
| 166 | 1955 $SQ_2$ | IX -16 | 344.7 | 202.9 | 13.2 | 0.2228 | 2.696 | 14.8 | 1955- IX- 5 | 1755 | 9 |
| | 1955 $SQ_2$ | IX -19 | 346.6 | 221.9 | 8.7 | 0.2926 | 2.253 | >15.0 | 1955- IX- 6 | 1354 | |
| 167 | 1955 $SS_2$ | IX -19 | 12.9 | 28.8 | 1.6 | 0.2555 | 2.462 | 14.5 | 1955- X-13 | 1355 | |
| 168 | 1955 $ST_2$ | IX -17 | 346.6 | 290.2 | 9.7 | 0.2188 | 2.739 | 16.8 | 1955- IX- 8 | 1774 | |
| 169 | 1955 $SU_2$ | IX -17 | 348.0 | 207.0 | 7.7 | 0.3910 | 1.851 | 17.2 | 1955- IX- 7 | 1774 | |
| 170 | 1955 $SV_2$ | IX -16 | 5.8 | 340.8 | 0.7 | 0.2405 | 2.564 | 16.9 | 1955- X- 4 | 1786 | |
| 171 | 1955 TA | X -10 | 359.3 | 223.9 | 18.6 | 0.2361 | 2.594 | 16.1 | 1955- IX-18 | 1316 | |
| 172 | 1955 TB | X -10 | 0.6 | 265.5 | 10.7 | 0.3631 | /2.497/ | 17 | 1955- IX-15 | 1316 | |
| 173 | 1955 TC | X -10 | 2.7 | 221.4 | 14.5 | 0.0975 | 4.733 | 17 | 1955- IX-25 | 1316 | |
| 174 | 1955 TD | X -10 | 6.3 | 229.7 | 10.7 | 0.2100 | 2.813 | 17 | 1955- IX-27 | 1660 | 10 |
| | 1955 TD | X -11 | 6.1 | 250.7 | 8.5 | 0.1862 | 3.043 | 16.5 | 1955- IX-27 | 1316 | |
| 175 | 1955 TE | X -11 | 357.9 | 223.2 | 6.6 | 0.3489 | 1.997 | 16 | 1955- IX-11 | 1316 | |
| 176 | 1955 TG | X -11 | 6.9 | 284.7 | 9.3 | 0.2071 | 2.840 | 17.4 | 1955- IX-28 | 1316 | |
| 177 | 1955 TH | X -11 | 9.0 | 353.9 | 21.5 | 0.1943 | 2.967 | 17 | 1955- X- 1 | 1316 | |
| 178 | 1955 TJ | X -11 | 8.5 | 208.7 | 20.5 | 0.1749 | 3.180 | 17.0 | 1955- IX-30 | 1316 | 11 |
| | 1955 TJ | X -12 | 7.7 | 236.2 | 10.7 | 0.1174 | 4.141 | 16.2 | 1955- IX-30 | 1316 | |
| 179 | 1955 TM | X -11 | 10.6 | 194.3 | 7.0 | 0.4672 | 1.645 | 17 | 1955- IX-29 | 1316 | |
| 180 | 1955 TQ | X -12 | 6.6 | 259.0 | 10.7 | 0.3217 | 2.113 | 16.5 | 1955- IX-25 | 1316 | |
| 181 | 1955 UD | X -20 | 12.3 | 190.3 | 7.2 | 0.2545 | 2.471 | 17.5 | 1955- X- 1 | 1317 | |
| 182 | 1955 UE | X -20 | 12.8 | 300.2 | 3.0 | 0.2348 | 2.607 | 17.5 | 1955- X- 2 | 1317 | |
| 183 | 1955 UJ | X -20 | 23.0 | 188.5 | 9.2 | 0.2575 | 2.435 | 15.9 | 1955- X-16 | 1317 | |
| 184 | 1955 UK | X -20 | 22.6 | 166.9 | 4.1 | 0.2258 | 2.691 | 17.2 | 1955- X-15 | 1317 | |
| 185 | 1955 UL | X -20 | 21.5 | 28.0 | 29.8 | 0.1149 | 5.383 | 13 | 1955- X-15 | 1317 | |
| 186 | 1955 UM | X -20 | 23.1 | 244.8 | 1.7 | 0.3193 | 2.126 | 17.3 | 1955- X-16 | 1317 | |
| 187 | 1955 UP | X -20 | 22.4 | 210.8 | 2.9 | 0.3241 | 2.132 | 16.2 | 1955- X-14 | 1317 | |
| 188 | 1955 UQ | X -20 | 21.2 | 19.6 | 20.3 | 0.1936 | 3.001 | 17.4 | 1955- X-14 | 1317 | |
| 189 | 1955 UR | X -20 | 21.4 | 150.3 | 1.8 | 0.2860 | 2.305 | 17.4 | 1955- X-13 | 1317 | |
| 190 | 1955 UT | X -20 | 20.0 | 47.1 | 2.5 | 0.2058 | 2.857 | 16.5 | 1955- X-12 | 1317 | |
| 191 | 1955 UU | X -20 | 20.0 | 170.6 | 3.3 | 0.2295 | 2.648 | 17.4 | 1955- X-12 | 1317 | |
| 192 | 1955 UW | X -20 | 27.9 | 341.9 | 7.6 | 0.1585 | 3.342 | 16 | 1955- X-22 | 1317 | |
| 193 | 1955 UX | X -20 | 26.9 | 4.1 | 4.6 | 0.3741 | 1.992 | 17.4 | 1955- X-21 | 1317 | |
| 194 | 1955 UY | X -20 | 27.2 | 283.4 | 5.1 | 0.2842 | 2.409 | 15 | 1955- X-22 | 1317 | |
| 195 | 1955 UZ | X -20 | 26.2 | 226.6 | 11.3 | 0.4270 | 1.817 | 17.4 | 1955- X-20 | 1317 | |
| 196 | 1955 $UA_1$ | X -20 | 25.2 | 318.8 | 1.6 | 0.4433 | 1.841 | 15.5 | 1955- X-19 | 1317 | |

| No | Désignation | Époque O.M.U.T. | $l_o$ | 1950.0 $\Omega$ | i | dl/dt | r | Gr | Opposition en longitude | Autorité MPC | R. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 197 | 1955 $UB_1$ | X -20 | 25°.3 | 271°.1 | 3°.8 | 0°.5047 | 1.665 | 16 | 1955- X-19 | 1317 | |
| 198 | 1955 $UC_1$ | X -20 | 23.8 | 359.7 | 5.5 | 0.2599 | 2.500 | 17 | 1955- X-17 | 1317 | |
| 199 | 1955 $UD_1$ | X -21 | 25.6 | 225.0 | 8.0 | 0.2546 | 2.660 | 17.4 | 1955- X-19 | 1317 | |
| 200 | 1955 $UE_1$ | X -25 | 35.8 | 339.9 | 3.9 | 0.3715 | 1.920 | 17.3 | 1955- XI- 2 | 1317 | |
| 201 | 1955 $UF_1$ | X -25 | 36.7 | 236.4 | 12.2 | 0.2720 | 2.373 | 16.1 | 1955- XI- 2 | 1317 | |
| 202 | 1955 $UG_1$ | X -25 | 36.8 | 252.6 | 6.4 | 0.2439 | 2.530 | 17.3 | 1955- XI- 2 | 1317 | |
| 203 | 1955 $UH_1$ | X -25 | 35.5 | 229.3 | 9.0 | 0.3294 | 2.080 | 17.3 | 1955- XI- 1 | 1317 | |
| 204 | 1955 $UJ_1$ | X -25 | 35.3 | 18.0 | 5.0 | 0.3215 | 2.120 | 16.4 | 1955- X-31 | 1317 | |
| 205 | 1955 $UK_1$ | X -25 | 36.3 | 337.4 | 1.2 | 0.2340 | 2.615 | 17.2 | 1955- XI- 1 | 1317 | |
| 206 | 1955 $UL_1$ | X -25 | 35.8 | 328.0 | 3.5 | 0.2317 | 2.570 | 17.2 | 1955- X-31 | 1317 | |
| 207 | 1955 $UM_1$ | X -25 | 35.3 | 237.2 | 9.2 | 0.2256 | 2.688 | 17.2 | 1955- X-30 | 1317 | |
| 208 | 1955 $UO_1$ | X -25 | 34.8 | 228.3 | 14.3 | 0.2225 | 2.732 | 16.1 | 1955- X-30 | 1317 | |
| 209 | 1955 $UQ_1$ | X -19 | 37.4 | 213.3 | 4.4 | 0.0980 | 4.721 | 14.9 | 1955- XI- 2 | 1364 | |
| 210 | 1955 $UR_1$ | X -19 | 36.3 | 70.7 | 1.9 | 0.1741 | 3.189 | 14.9 | 1955- XI- 2 | 1364 | |
| 211 | 1955 $UT_1$ | X -23 | 15.3 | 194.2 | 8.3 | 0.2383 | 2.580 | - | 1955- X- 5 | 1755 | |
| 212 | 1955 $UU_1$ | X -20 | 14.5 | 14.3 | 4.8 | 0.2458 | 2.527 | 17.2 | 1955- X- 4 | 1786 | 12 |
| 213 | 1955 VA | XI - 7 | 17.2 | 75.0 | 4.2 | 0.1594 | 3.429 | 17.5 | 1955- X- 7 | 1351 | 13 |
| 214 | 1955 VB | XI - 7 | 19.6 | 154.6 | 7.5 | 0.1824 | /2.478/ | 17.5 | 1955- X- 9 | 1351 | |
| 215 | 1955 VC | XI - 7 | 16.4 | 23.4 | 24.7 | 0.1557 | /2.832/ | 17.0 | 1955- X- 6 | 1351 | |
| 216 | 1955 VD | XI - 7 | 16.2 | 191.8 | 47.1 | 0.1020 | /2.608/ | 16.5 | 1955- X- 7 | 1351 | |
| 217 | 1955 VE | XI -10 | 35.4 | 199.8 | 2.1 | 0.5399 | 1.474 | 17.4 | 1955- X-17 | 1351 | |
| 218 | 1955 VH | XI -10 | 36.6 | 222.5 | 6.3 | 0.4991 | 1.572 | - | 1955- X-21 | 1351 | |
| 219 | 1955 VJ | XI -10 | 37.6 | 148.1 | 5.8 | 0.2199 | 2.721 | 15.6 | 1955- X-29 | 1351 | |
| 220 | 1955 VK | XI -10 | 37.9 | 116.4 | 2.3 | 0.2805 | 2.319 | 17.5 | 1955- X-28 | 1351 | |
| 221 | 1955 VL | XI -10 | 36.8 | 89.0 | 3.7 | 0.2147 | 2.769 | 16.7 | 1955- X-28 | 1351 | |
| 222 | 1955 VM | XI -10 | 35.0 | 132.3 | 6.8 | 0.1735 | 3.184 | 16.5 | 1955- X-27 | 1351 | |
| 223 | 1955 VO | XI -10 | 34.2 | 119.0 | 2.4 | 0.0860 | 5.564 | 17.5 | 1955- X-27 | 1351 | |
| 224 | 1955 VP | XI -10 | 40.4 | 59.6 | 7.5 | 0.5351 | 1.501 | 15.0 | 1955- X-27 | 1351 | |
| 225 | 1955 VQ | XI - 5 | 34.1 | 221.1 | 7.5 | 0.5369 | 1.498 | 14 | 1955- X-19 | 1395 | |
| 226 | 1955 WC | XI -23 | 80.1 | 146.4 | 6.7 | 0.1973 | 2.922 | 14.8 | 1955- XII-17 | 1755 | |
| 227 | 1955 XC | XII - 5 | 62.9 | 316.7 | 8.1 | 0.2104 | 2.800 | 16 | 1955- XI-23 | 1352 | |
| 228 | 1955 XE | XII - 6 | 65.1 | 86.2 | 1.9 | 0.2184 | 2.745 | 17.6 | 1955- XI-26 | 1352 | |
| 229 | 1955 XJ | XII - 6 | 62.2 | 63.1 | 39.1 | 0.1432 | 2.783 | 16.3 | 1955- XI-23 | 1352 | |
| | 1955 XJ | XII -13 | 70.0 | 70.3 | 7.2 | 0.4822 | 1.611 | 16.5 | 1955- XI-24 | 1353 | |
| 230 | 1955 XK | XII - 8 | 82.4 | 167.1 | 10.5 | 0.2936 | 2.244 | 17.3 | 1955- XII-18 | 1352 | |
| 231 | 1955 XL | XII -12 | 71.5 | 241.1 | 5.3 | 0.2277 | 2.661 | 17.3 | 1955- XII- 2 | 1352 | |
| 232 | 1955 XM | XII -12 | 70.3 | 98.2 | 3.4 | 0.1715 | 3.218 | 16.9 | 1955- XII- 1 | 1352 | |
| 233 | 1955 XO | XII -12 | 76.4 | 205.3 | 12.7 | 0.1826 | 3.106 | 15.9 | 1955- XII- 8 | 1352 | |
| 234 | 1955 XQ | XII -12 | 89.3 | 11.6 | 5.7 | 0.3407 | 2.035 | 15.8 | 1955- XII-27 | 1352 | |
| [illegible] | [illegible] | XII -13 | 71.5 | 177.9 | 15.7 | 0.1512 | 3.516 | 16.5 | 1955- XII- 3 | 1353 | |
| [illegible] | [illegible] | XII -13 | 69.7 | 130.3 | 12.1 | 0.2081 | 2.829 | 15.6 | 1955- XI-30 | 1353 | |
| [illegible] | [illegible] | XII -13 | 81.6 | 169.0 | 13.3 | 0.2786 | 2.355 | 16.5 | 1955- XII-15 | 1353 | |
| [illegible] | [illegible] | XII -19 | 88.2 | 321.0 | 0.3 | 0.5924 | 1.406 | 14.7 | 1955- XII-23 | 1339 | |
| 239 | 1955 [illegible] | XII -20 | 75.5 | 151.3 | 2.6 | 0.1917 | 2.981 | 14.5 | 1955- XII- 5 | 1339 | |

1/ 1955 EG /14-III/ ≠ 1955 EG /23-III/

2/ 1955 MB /[illegible]-VI/ ≠ 1955 MB /22-VI/

3/ 1955 MV - deux objets différents
4/ 1955 QZ - "
5/ 1955 $QA_1$ - "
6/ 1955 $QC_1$ - "
7/ 1955 SH = 1955 $UU_1$ /?/
8/ 1955 SW = 1955 VA /?/
9/ 1955 $SQ_2$ /16-IX/ ≠ 1955 $SQ_2$ /19-IX/

10/ 1955 TD /[illegible]-X/ ≠ 1955 TD /11-X/

11/ 1955 TJ /11-X/ ≠ 1955 TJ /12-X/

12/ 1955 $UU_1$ = 1955 SH /?/

13/ 1955 VA = 1955 SW /?/

Remarque. Les valeurs de r mises entre crochets sont hypothétiques or, les éléments sont peu certains.

Déterminations de l'heure en 1960
Corrections de la pendule fondamentale et leurs écarts
par Z.M.Brkić, Lj.A.Mitić et M.Jovanović

| Date | Cp | E | TU | Obs. | Date | Cp | E | TU | Obs. | Date | Cp | E | TU | Obs. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Janvier en $10^{-3}$ | | | | | Février en $10^{-3}$ | | | | | Février en $10^{-3}$ | | | |
| 1 | +85.551 | + 3 | 16.5 | B | 1 | +84.813 | -31 | 16.7 | J | 27 | +83.222 | -56 | 18.8 | J |
| 8 | 85.646 | + 5 | 21.4 | J | 2 | 84.723 | +12 | 16.5 | M | 29 | 83.076 | -27 | 18.0 | B |
| 14 | 85.577 | +24 | 17.9 | M | 3 | 84.692 | - 4 | 16.6 | J | 29 | +83.036 | +10 | 19.3 | J |
| 19 | 85.431 | +33 | 16.3 | M | 4 | 84.611 | +26 | 17.3 | M | | Mars | | | |
| 21 | 85.322 | +38 | 16.1 | M | 5 | 84.601 | - 6 | 16.6 | J | 4 | +82.750 | +43 | 19.1 | J |
| 21 | 85.306 | +52 | 17.0 | J | 8 | 84.382 | +29 | 19.2 | J | 6 | 82.669 | - 7 | 17.6 | B |
| 22 | 85.330 | -27 | 16.8 | J | 9 | 84.342 | - 7 | 21.1 | M | 6 | 82.657 | + 2 | 18.7 | J |
| 23 | 85.285 | -41 | 16.7 | J | 11 | 84.208 | + 4 | 16.4 | M | 9 | 82.483 | - 3 | 17.7 | J |
| 24 | 85.198 | -14 | 17.4 | B | 13 | 84.097 | -25 | 17.2 | M | 22 | 81.517 | + 3 | 21.7 | M |
| 25 | 85.118 | + 1 | 16.9 | J | 24 | 83.272 | +61 | 19.4 | J | 23 | 81.402 | +40 | 18.5 | J |
| 30 | +84.750 | +21 | 16.7 | J | 25 | +83.272 | + 5 | 19.8 | M | 23 | +81.444 | - 6 | 19.7 | J |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | | Avril | | |
| | | en $10^{-3}$ | | |
| 5 | +80.297 | +14 | 20.4 | M |
| 6 | 80.194 | +24 | 18.2 | J |
| 6 | 80.234 | -21 | 19.5 | B |
| 8 | 79.979 | +41 | 18.1 | J |
| 11 | 79.714 | +16 | 17.9 | J |
| 11 | 79.751 | -25 | 18.9 | J |
| 13 | 79.541 | -12 | 18.3 | B |
| 13 | 79.513 | + 8 | 19.3 | J |
| 14 | 79.369 | +36 | 20.6 | M |
| 15 | 79.288 | + 4 | 20.7 | J |
| 22 | 78.651 | - 9 | 21.2 | J |
| 24 | 78.467 | - 1 | 19.0 | B |
| 26 | 78.274 | + 1 | 20.1 | M |
| 30 | +77.850 | +28 | 20.7 | B |
| | | M a i | | |
| 3 | +77.516 | +20 | 18.2 | M |
| 3 | 77.553 | -26 | 20.3 | B |
| 1 | 76.580 | +15 | 18.4 | J |
| 1 | 76.586 | - 3 | 20.8 | J |
| 2 | 76.462 | +17 | 19.0 | M |
| 3 | 76.396 | -34 | 18.5 | J |
| 3 | 76.396 | -28 | 19.7 | J |
| 4 | 76.261 | -11 | 21.4 | J |
| 6 | 75.998 | +23 | 20.8 | J |
| 1 | 75.407 | - 8 | 18.7 | J |
| 1 | 75.328 | +54 | 22.0 | M |
| 1 | 75.347 | -70 | 22.9 | M |
| 3 | 75.137 | - 9 | 19.3 | J |
| 3 | 75.117 | + 3 | 20.7 | J |
| 4 | 74.941 | +30 | 19.0 | M |
| 5 | +74.811 | + 1 | 19.2 | J |
| | | Juin | | |
| 2 | +73.473 | +11 | 19.1 | M |
| 3 | 73.311 | - 5 | 20.8 | J |
| 5 | 72.960 | + 3 | 19.1 | J |
| 5 | 72.933 | +16 | 20.9 | J |
| 5 | 72.775 | - 9 | 20.7 | J |
| 3 | 72.399 | - 3 | 19.0 | J |
| 9 | 72.134 | +51 | 20.6 | M |
| 0 | 71.965 | +29 | 19.5 | J |
| 0 | +72.009 | -26 | 20.9 | J |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | | Juin | | |
| | | en $10^{-3}$ | | |
| 13 | +71.395 | -25 | 19.4 | J |
| 14 | 71.101 | +33 | 21.6 | M |
| 17 | 70.494 | -10 | 19.1 | J |
| 18 | 70.244 | + 4 | 19.1 | J |
| 19 | 69.981 | +31 | 19.0 | J |
| 24 | 68.819 | + 1 | 19.2 | J |
| 28 | 67.894 | - 6 | 19.2 | M |
| 29 | +67.643 | - 2 | 20.8 | J |
| | | Juillet | | |
| 5 | +66.117 | +18 | 21.5 | M |
| 6 | 65.904 | -10 | 19.4 | B |
| 7 | 65.619 | + 3 | 19.3 | M |
| 8 | 65.344 | + 5 | 19.5 | B |
| 10 | 64.786 | +18 | 19.5 | B |
| 11 | 64.528 | + 6 | 19.2 | B |
| 11 | 64.540 | -15 | 20.0 | B |
| 12 | 64.251 | +19 | 19.1 | B |
| 12 | 64.270 | -12 | 20.3 | M |
| 14 | 63.773 | + 6 | 19.5 | M |
| 15 | 63.558 | - 5 | 19.1 | B |
| 18 | 62.811 | +11 | 18.8 | B |
| 19 | 62.574 | -27 | 20.3 | M |
| 20 | 62.274 | +16 | 19.5 | B |
| 22 | 61.756 | + 1 | 19.1 | B |
| 31 | 59.213 | +25 | 19.0 | B |
| 31 | +59.252 | -15 | 19.9 | B |
| | | Août | | |
| 1 | +58.972 | -34 | 18.9 | J |
| 4 | 57.927 | +16 | 20.0 | M |
| 5 | 57.614 | + 5 | 21.1 | J |
| 7 | 57.047 | + 2 | 18.7 | B |
| 10 | 56.071 | +35 | 21.0 | J |
| 11 | 55.856 | -30 | 18.9 | M |
| 15 | 54.594 | - 8 | 18.5 | J |
| 16 | 54.201 | +41 | 19.7 | M |
| 17 | 53.919 | - 6 | 19.1 | J |
| 20 | 52.867 | - 2 | 18.7 | J |
| 20 | 52.797 | +24 | 21.6 | M |
| 22 | 52.158 | - 4 | 18.7 | J |
| 23 | 51.793 | +21 | 18.0 | M |
| 24 | +51.467 | -16 | 18.8 | J |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | | Août | | |
| | | en $10^{-3}$ | | |
| 25 | +51.024 | +77 | 18.7 | M |
| 26 | 50.751 | -21 | 20.1 | J |
| 27 | 50.377 | +29 | 18.5 | B |
| 27 | 50.394 | - 3 | 19.5 | B |
| 28 | 50.040 | -27 | 21.0 | J |
| 30 | +49.274 | +32 | 18.5 | M |
| | | Septembre | | |
| 1 | + 5.132 | -14 | 20.2 | M |
| 2 | 5.172 | +19 | 19.4 | J |
| 3 | 5.241 | +21 | 18.1 | J |
| 5 | 5.455 | -40 | 18.9 | J |
| 7 | 5.572 | - 1 | 19.9 | J |
| 9 | 5.724 | - 7 | 19.1 | J |
| 10 | 5.796 | -16 | 17.8 | B |
| 12 | 5.871 | +37 | 20.3 | J |
| 13 | 5.971 | - 8 | 17.9 | B |
| 13 | 5.937 | +29 | 21.6 | M |
| 14 | 6.018 | - 9 | 19.2 | J |
| 16 | 6.096 | + 1 | 19.1 | J |
| 17 | 6.145 | -10 | 17.4 | J |
| 17 | 6.155 | -17 | 18.9 | J |
| 18 | 6.158 | +29 | 17.8 | J |
| 18 | 6.167 | +22 | 18.9 | J |
| 19 | 6.283 | -41 | 20.6 | J |
| 19 | 6.213 | +29 | 20.6 | J |
| 24 | 6.443 | - 6 | 21.9 | J |
| 25 | 6.434 | +30 | 17.4 | B |
| 25 | 6.483 | -18 | 18.4 | B |
| 26 | 6.477 | +27 | 17.8 | B |
| 26 | 6.508 | - 2 | 18.9 | B |
| 30 | +6.628 | + 4 | 21.3 | J |
| | | Octobre | | |
| 2 | +6.692 | -10 | 21.4 | J |
| 3 | 6.640 | +47 | 18.9 | J |
| 4 | 6.702 | -10 | 18.0 | J |
| 4 | 6.674 | +18 | 19.0 | J |
| 6 | 6.661 | + 2 | 20.4 | J |
| 6 | 6.606 | +56 | 21.4 | J |
| 8 | 6.631 | - 5 | 21.7 | J |
| 9 | +6.611 | 0 | 16.7 | B |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | Octobre | | | |
| | | en $10^{-3}$ | | |
| 9 | + 6.644 | -34 | 17.9 | B |
| 9 | 6.594 | +14 | 18.9 | B |
| 11 | 6.498 | +24 | 21.8 | J |
| 12 | 6.478 | - 1 | 20.8 | J |
| 14 | 6.383 | 0 | 19.9 | J |
| 18 | 6.161 | + 9 | 19.4 | J |
| 19 | 6.116 | + 4 | 16.7 | B |
| 19 | 6.160 | -42 | 17.8 | B |
| 20 | 6.047 | + 9 | 22.4 | M |
| 22 | 5.969 | - 2 | 20.7 | J |
| 23 | 5.969 | -43 | 18.4 | J |
| 24 | + 5.827 | +45 | 21.1 | J |
| | Novembre | | | |
| 1 | + 5.460 | +48 | 20.5 | M |
| 4 | 5.411 | - 2 | 17.6 | J |
| 9 | 5.251 | - 1 | 16.3 | J |
| 11 | 5.186 | - 2 | 21.1 | J |
| 12 | 5.173 | -10 | 18.1 | J |
| 17 | 4.979 | +13 | 18.4 | M |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | Novembre | | | |
| | | en $10^{-3}$ | | |
| 20 | +4.860 | - 3 | 20.0 | J |
| 21 | 4.767 | +49 | 16.3 | J |
| 21 | 4.808 | + 4 | 18.6 | J |
| 22 | 4.770 | - 2 | 18.0 | M |
| 26 | 4.557 | + 3 | 16.4 | B |
| 30 | 4.313 | +23 | 16.5 | J |
| 30 | +4.336 | - 2 | 17.5 | J |
| | Décembre | | | |
| 1 | +4.289 | -12 | 15.9 | M |
| 2 | 4.206 | +18 | 15.8 | Ð |
| 2 | 4.209 | +13 | 16.7 | J |
| 2 | 4.231 | -11 | 17.6 | J |
| 3 | 4.123 | +34 | 21.0 | J |
| 4 | 4.112 | + 1 | 18.2 | J |
| 4 | 4.100 | +10 | 19.3 | J |
| 5 | 4.099 | -23 | 16.5 | B |
| 5 | 4.106 | -31 | 17.4 | B |
| 5 | 4.054 | +19 | 18.6 | Ð |
| 6 | 4.080 | -42 | 17.8 | M |

| Date | Cp | E | TU | Obs |
|---|---|---|---|---|
| | Désembre | | | |
| | | en $10^{-3}$ | | |
| 10 | +3.925 | -22 | 17.6 | Ð |
| 10 | 3.897 | + 5 | 16.7 | B |
| 10 | 3.930 | -29 | 17.6 | B |
| 10 | 3.953 | -53 | 18.6 | J |
| 10 | 3.901 | - 3 | 20.0 | J |
| 14 | 3.768 | - 4 | 18.5 | J |
| 14 | 3.743 | +19 | 20.0 | Ð |
| 14 | 3.775 | -15 | 21.2 | Ð |
| 15 | 3.746 | -15 | 17.6 | Ð |
| 15 | 3.721 | + 8 | 18.7 | M |
| 16 | 3.729 | -28 | 15.8 | Ð |
| 16 | 3.686 | +13 | 16.9 | Ð |
| 16 | 3.687 | +10 | 18.8 | J |
| 16 | 3.696 | - 1 | 19.9 | J |
| 18 | 3.641 | -11 | 20.8 | J |
| 20 | 3.600 | -18 | 15.6 | M |
| 26 | 3.345 | +39 | 15.8 | J |
| 26 | 3.368 | +15 | 17.0 | J |
| 26 | 3.398 | -17 | 18.2 | Ð |
| 26 | +3.390 | -11 | 19.4 | Ð |

# HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTRÉES DE T.S.F. DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960, A L'OBSERVATOIRE DE BEOGRAD

par Z.M. BRKIĆ

## J A N V I E R

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_1 - TU_c$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 017 | 021 | 003 | - | 011 | - | + 4 | - 11 | - 7 |
| 2 | 013 | 020 | 998 | - | 011 | - | 4 | 11 | 7 |
| 3 | - | - | - | - | - | - | 4 | 11 | 7 |
| 4 | 015 | 015 | 001 | - | 017 | - | 5 | 11 | 6 |
| 5 | 003 | 009 | 997 | - | 002 | - | 5 | 10 | 5 |
| 6 | 002 | 002 | 988 | - | 011 | - | 5 | 10 | 5 |
| 7 | 010 | 008 | 995 | - | 016 | - | 5 | 10 | 5 |
| 8 | 009 | 006 | 989 | - | 013 | - | 5 | 10 | 5 |
| 9 | 003 | 993 | 975 | - | 008 | - | 5 | 10 | 5 |
| 10 | 000 | 990 | 970 | - | 002 | - | 6 | 10 | 4 |
| 11 | 988 | 979 | 960 | - | 992 | - | 6 | 10 | 4 |
| 12 | 985 | 986 | 960 | - | 991 | - | 6 | 10 | 4 |
| 13 | 000 | 992 | 973 | - | 992 | - | 6 | 9 | 3 |
| 14 | 991 | 986 | 971 | - | - | - | 6 | 9 | 3 |
| 15 | 000 | 992 | 967 | - | 988 | - | 6 | 9 | 3 |
| 16 | 981 | 992 | 966 | - | 978 | - | 6 | 9 | 3 |
| 17 | 972 | 981 | 974 | - | 974 | - | 7 | 9 | 2 |
| 18 | 975 | 976 | 957 | - | 965 | - | 7 | 9 | 2 |
| 19 | 985 | 991 | 974 | 977 | 982 | - | 7 | 9 | 2 |
| 20 | 986 | 987 | 978 | - | 988 | 976 | 7 | 9 | 2 |
| 21 | 987 | 989 | 976 | 988 | 990 | - | 7 | 8 | 1 |
| 22 | 990 | - | 976 | 985 | 005 | 985 | 7 | 8 | 1 |
| 23 | 987 | 989 | 979 | 984 | 990 | 982 | 7 | 8 | - 1 |
| 24 | - | 995 | 979 | 997 | 004 | 985 | 8 | 8 | 0 |
| 25 | 994 | 994 | 980 | 993 | 004 | 000 | 8 | 8 | 0 |
| 26 | 012 | 997 | - | 002 | 010 | 999 | 8 | 8 | 0 |
| 27 | 019 | 003 | 006 | 009 | 018 | 012 | 8 | 8 | 0 |
| 28 | 014 | 001 | 988 | 999 | 008 | 999 | 8 | 7 | + 1 |
| 29 | 002 | 993 | 974 | 987 | 996 | 988 | 8 | 7 | 1 |
| 30 | 992 | 984 | 969 | 974 | 987 | 964 | 8 | 7 | 1 |
| 31 | 979 | 976 | 963 | 967 | 980 | 967 | + 9 | - 7 | + 1 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

F E V R I E R

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 980 | 981 | - | 971 | 977 | 977 | + 9 | - 7 | + 2 |
| 2 | 973 | 977 | 962 | 961 | 968 | 966 | 9 | 7 | 2 |
| 3 | 967 | 967 | 951 | - | 961 | 958 | 9 | 6 | 3 |
| 4 | 958 | 960 | 947 | 952 | 958 | 962 | 9 | 6 | 3 |
| 5 | 963 | 969 | 952 | 957 | 967 | 979 | 9 | 6 | 3 |
| 6 | 978 | 985 | 979 | 976 | 979 | 972 | 9 | 6 | 3 |
| 7 | 978 | 982 | - | 974 | 974 | 962 | 9 | 6 | 3 |
| 8 | 973 | 976 | 974 | 978 | 976 | 979 | 9 | 5 | 4 |
| 9 | 969 | 975 | 963 | 973 | 979 | 976 | 10 | 5 | 5 |
| 10 | 975 | 979 | 966 | 980 | 980 | 979 | 10 | 5 | 5 |
| 11 | 975 | 979 | 974 | 985 | 986 | 988 | 10 | 5 | 5 |
| 12 | 984 | 983 | 988 | 991 | 996 | - | 10 | 4 | 6 |
| 13 | 996 | 985 | 985 | 988 | 994 | 990 | 10 | 4 | 6 |
| 14 | 001 | 984 | 980 | 992 | 995 | 997 | 10 | 4 | 6 |
| 15 | 998 | 987 | 979 | 989 | 993 | 993 | 10 | 4 | 6 |
| 16 | 995 | 991 | 985 | 995 | 000 | - | 10 | 3 | 7 |
| 17 | 003 | 996 | 986 | - | 994 | 997 | 10 | 3 | 7 |
| 18 | 001 | 002 | 976 | 977 | 998 | 991 | 10 | 3 | 7 |
| 19 | 994 | 995 | 983 | 993 | 996 | 984 | 10 | 3 | 7 |
| 20 | 003 | 003 | 987 | 985 | 994 | 998 | 10 | 2 | 8 |
| 21 | 994 | 995 | 975 | 984 | 990 | 987 | 10 | 2 | 8 |
| 22 | 993 | 999 | 988 | 985 | 990 | 991 | 11 | 2 | 9 |
| 23 | 992 | 000 | 991 | 983 | 985 | 979 | 11 | 1 | 10 |
| 24 | 986 | 989 | 981 | 979 | 983 | 980 | 11 | 1 | 10 |
| 25 | 989 | 991 | - | - | 985 | 982 | 11 | - 1 | 10 |
| 26 | 987 | 988 | 979 | 967 | 973 | 973 | 11 | 0 | 11 |
| 27 | 966 | 971 | 969 | 967 | 977 | 961 | 11 | 0 | 11 |
| 28 | 966 | 971 | 960 | 972 | 976 | 974 | 11 | 0 | 11 |
| 29 | 989 | 992 | 990 | 993 | 995 | 966 | + 11 | + 1 | + 12 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD

par Z.M.BRKIĆ

M A R S

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 984 | 976 | 967 | 955 | 985 | 951 | +11 | + 1 | +12 |
| 2 | 976 | 970 | 963 | - | 983 | 953 | 11 | 1 | 12 |
| 3 | 977 | 968 | 957 | 946 | 982 | 950 | 11 | 2 | 13 |
| 4 | 974 | 970 | 961 | 949 | 982 | 953 | 11 | 2 | 13 |
| 5 | 980 | 977 | 966 | 947 | 984 | 961 | 11 | 3 | 14 |
| 6 | 978 | 978 | 972 | 953 | 979 | 956 | 11 | 3 | 14 |
| 7 | 988 | 983 | 978 | 950 | 980 | 949 | 11 | 3 | 14 |
| 8 | 985 | 981 | 965 | 940 | 976 | 944 | 11 | 4 | 15 |
| 9 | 972 | 973 | 965 | 932 | 970 | 948 | 11 | 4 | 15 |
| 10 | 971 | 980 | 972 | 937 | 974 | 946 | 11 | 5 | 16 |
| 11 | 981 | 984 | 975 | 943 | 978 | 949 | 11 | 5 | 16 |
| 12 | 984 | 988 | 982 | 939 | 962 | 927 | 11 | 6 | 17 |
| 13 | 964 | 968 | 966 | 943 | 965 | 939 | 11 | 6 | 17 |
| 14 | 974 | 983 | 974 | 948 | 983 | 953 | 11 | 7 | 18 |
| 15 | 985 | 988 | - | 955 | 988 | 959 | 11 | 7 | 18 |
| 16 | - | 987 | 980 | - | 994 | 958 | 11 | 8 | 19 |
| 17 | 983 | 977 | 971 | 958 | 988 | 959 | 11 | 8 | 19 |
| 18 | 985 | 980 | 972 | 957 | 988 | 950 | 11 | 8 | 19 |
| 19 | 981 | 974 | 970 | 951 | 977 | 947 | 11 | 9 | 20 |
| 20 | 978 | 967 | 961 | 942 | - | 946 | 11 | 9 | 20 |
| 21 | 970 | 961 | 958 | 935 | 965 | 934 | 11 | 10 | 21 |
| 22 | 964 | 960 | 954 | 930 | 958 | 934 | 11 | 11 | 22 |
| 23 | 956 | 960 | 949 | 925 | 955 | 930 | 11 | 11 | 22 |
| 24 | 952 | 952 | 947 | 921 | 951 | 927 | 11 | 12 | 23 |
| 25 | 949 | 951 | 950 | 916 | 945 | 921 | 11 | 12 | 23 |
| 26 | 947 | 952 | 949 | 923 | 944 | 926 | 10 | 13 | 23 |
| 27 | 947 | 957 | 957 | 923 | 949 | 929 | 10 | 13 | 23 |
| 28 | 953 | 955 | 955 | 933 | 945 | 937 | 10 | 14 | 24 |
| 29 | 974 | 971 | 976 | 946 | 965 | 948 | 10 | 14 | 24 |
| 30 | 962 | 965 | 967 | 946 | 964 | 942 | 10 | 15 | 25 |
| 31 | - | 962 | 966 | 942 | 963 | 938 | +10 | +15 | +25 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

A V R I L

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 979 | - | - | 957 | 983 | 959 | +10 | +16 | +26 |
| 2 | 979 | 979 | 949 | 963 | 982 | 960 | 10 | 16 | 26 |
| 3 | 981 | 982 | 953 | 961 | 986 | 959 | 10 | 17 | 27 |
| 4 | 981 | 976 | 952 | 949 | 986 | 956 | 10 | 17 | 27 |
| 5 | 986 | 977 | 955 | - | 982 | 948 | 10 | 18 | 28 |
| 6 | 971 | 962 | 941 | - | 971 | 943 | 10 | 18 | 28 |
| 7 | 968 | 956 | 936 | 934 | 964 | 940 | 9 | 19 | 28 |
| 8 | 963 | 959 | 926 | 932 | 960 | 931 | 9 | 19 | 28 |
| 9 | 962 | 959 | 933 | 929 | 958 | 936 | 9 | 20 | 29 |
| 10 | 972 | 971 | 956 | 949 | 978 | 955 | 9 | 20 | 29 |
| 11 | 984 | 992 | - | 943 | 971 | 952 | 9 | 21 | 30 |
| 12 | 978 | 982 | 960 | 945 | 970 | 952 | 9 | 21 | 30 |
| 13 | 980 | 982 | 966 | 953 | 975 | 945 | 9 | 22 | 31 |
| 14 | 974 | 977 | 959 | 941 | 967 | 945 | 9 | 23 | 32 |
| 15 | 962 | 967 | 946 | 933 | 958 | - | 9 | 23 | 32 |
| 16 | 961 | 966 | 949 | 936 | 958 | 939 | 9 | 24 | 33 |
| 17 | 962 | 968 | 952 | 942 | 967 | 943 | 9 | 24 | 33 |
| 18 | 973 | 974 | 965 | 955 | 983 | 951 | 8 | 25 | 33 |
| 19 | 987 | 988 | 974 | 963 | 989 | 957 | 8 | 25 | 33 |
| 20 | 976 | 972 | 967 | - | 975 | 933 | 8 | 26 | 34 |
| 21 | 962 | 954 | 943 | 930 | 958 | 934 | 8 | 26 | 34 |
| 22 | 946 | 944 | 937 | 934 | 952 | 919 | 8 | 26 | 34 |
| 23 | 954 | 942 | 933 | 918 | 945 | 924 | 8 | 27 | 35 |
| 24 | 949 | 938 | 931 | 917 | 948 | - | 8 | 27 | 35 |
| 25 | 948 | 947 | 932 | 917 | 946 | 919 | 8 | 28 | 36 |
| 26 | 949 | 936 | 928 | 914 | 943 | 923 | 8 | 28 | 36 |
| 27 | 953 | 947 | 935 | 917 | 944 | 919 | 8 | 29 | 37 |
| 28 | 957 | 950 | 947 | 923 | 948 | 931 | 8 | 29 | 37 |
| 29 | 959 | 964 | 949 | 928 | 960 | 932 | 8 | 29 | 37 |
| 30 | 962 | 960 | 955 | 924 | 953 | 928 | + 7 | +30 | +37 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

M A I

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 930 | 935 | 929 | 898 | 921 | 899 | + 7 | +30 | +37 |
| 2 | 927 | 926 | 916 | 895 | 921 | 896 | 7 | 31 | 38 |
| 3 | 923 | 927 | 920 | 896 | 920 | - | 7 | 31 | 38 |
| 4 | 921 | 924 | 919 | - | 914 | - | 7 | 31 | 38 |
| 5 | 921 | 925 | 925 | 900 | 925 | 889 | 7 | 32 | 39 |
| 6 | 927 | 922 | 925 | 896 | 928 | 895 | 7 | 32 | 39 |
| 7 | 926 | 925 | 924 | 906 | 930 | 901 | 7 | 32 | 39 |
| 8 | 931 | 928 | 933 | 906 | 933 | 907 | 7 | 32 | 39 |
| 9 | 935 | 930 | 932 | 910 | 940 | 909 | 6 | 33 | 39 |
| 10 | 949 | 937 | 932 | 916 | 939 | 918 | 6 | 33 | 39 |
| 11 | 949 | 939 | 933 | 906 | 945 | 910 | 6 | 33 | 39 |
| 12 | 945 | 932 | 935 | 908 | 943 | 912 | 6 | 34 | 40 |
| 13 | 952 | 944 | 939 | 915 | 954 | 922 | 6 | 34 | 40 |
| 14 | 959 | 952 | 947 | 919 | 961 | 927 | 6 | 34 | 40 |
| 15 | 968 | 970 | 969 | 931 | 967 | 927 | 6 | 34 | 40 |
| 16 | 967 | 971 | 969 | 933 | 969 | 934 | 6 | 34 | 40 |
| 17 | 965 | - | 962 | 924 | 962 | 926 | 6 | 34 | 40 |
| 18 | 957 | 963 | 961 | - | 957 | 919 | 6 | 35 | 41 |
| 19 | 957 | 961 | 958 | 915 | 955 | - | 6 | 35 | 41 |
| 20 | 950 | 949 | 951 | 908 | 939 | 906 | 5 | 35 | 40 |
| 21 | 943 | 947 | 948 | 911 | 941 | 915 | 5 | 35 | 40 |
| 22 | 960 | 964 | 963 | 920 | 952 | 926 | 5 | 35 | 40 |
| 23 | 963 | 967 | 973 | 933 | 961 | 933 | 5 | 35 | 40 |
| 24 | 961 | 964 | 966 | 928 | 960 | 923 | 5 | 35 | 40 |
| 25 | 948 | 949 | 960 | 917 | 949 | 918 | 5 | 35 | 40 |
| 26 | 937 | 949 | 946 | 907 | 939 | 899 | 5 | 35 | 40 |
| 27 | 939 | 934 | 939 | 908 | 945 | 917 | 5 | 35 | 40 |
| 28 | 938 | 934 | 942 | 908 | 946 | 899 | 5 | 35 | 40 |
| 29 | 943 | 941 | 941 | 903 | 944 | 905 | 5 | 35 | 40 |
| 30 | 943 | 933 | 939 | 903 | 943 | 906 | 4 | 35 | 39 |
| 31 | 943 | 940 | 946 | 904 | 945 | 907 | + 4 | +35 | +39 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

J U I N

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 936 | - | - | - | 938 | 915 | + 4 | +35 | +39 |
| 2 | 939 | 938 | 946 | 905 | 935 | 911 | 4 | 35 | 39 |
| 3 | 943 | 943 | 946 | 911 | 946 | 920 | 4 | 35 | 39 |
| 4 | 950 | 952 | 956 | 910 | 942 | 921 | 4 | 34 | 38 |
| 5 | 954 | 953 | 964 | 918 | 949 | 925 | 4 | 34 | 38 |
| 6 | 953 | 959 | 969 | 919 | 950 | 923 | 4 | 34 | 38 |
| 7 | 953 | 959 | 973 | 919 | 947 | - | 4 | 34 | 38 |
| 8 | 955 | 962 | 975 | - | 948 | 919 | 4 | 34 | 38 |
| 9 | 951 | 955 | 971 | 921 | 945 | 915 | 4 | 33 | 37 |
| 10 | 953 | 962 | 982 | 929 | 955 | 927 | 4 | 33 | 37 |
| 11 | 961 | 969 | 987 | 938 | 967 | 939 | 3 | 33 | 36 |
| 12 | 970 | 969 | 989 | 942 | 971 | 937 | 3 | 32 | 35 |
| 13 | 965 | 963 | 984 | 939 | 968 | 929 | 3 | 32 | 35 |
| 14 | 963 | 958 | 982 | 937 | 969 | 934 | 3 | 32 | 35 |
| 15 | 959 | 954 | 972 | - | 965 | 928 | 3 | 31 | 34 |
| 16 | 958 | 954 | - | 923 | 965 | 931 | 3 | 31 | 34 |
| 17 | 963 | 954 | 975 | 930 | 962 | 940 | 3 | 31 | 34 |
| 18 | 965 | 955 | 979 | 926 | 964 | 927 | 3 | 30 | 33 |
| 19 | 959 | 957 | 981 | 923 | 955 | 925 | 3 | 30 | 33 |
| 20 | 957 | 950 | 968 | 917 | 955 | 922 | 3 | 29 | 32 |
| 21 | 946 | 946 | 959 | 905 | 941 | 911 | 3 | 29 | 32 |
| 22 | 945 | 945 | 962 | 902 | 937 | 908 | 3 | 28 | 31 |
| 23 | 946 | 946 | 966 | 908 | 941 | 911 | 2 | 28 | 30 |
| 24 | 945 | 950 | 965 | 902 | 932 | 901 | 2 | 28 | 30 |
| 25 | 956 | 960 | 963 | 897 | 950 | 901 | 2 | 27 | 29 |
| 26 | 956 | 963 | 961 | 897 | 952 | 906 | 2 | 26 | 28 |
| 27 | 960 | 965 | 969 | 909 | 956 | 911 | 2 | 26 | 28 |
| 28 | 959 | 968 | 969 | 914 | 963 | - | 2 | 25 | 27 |
| 29 | 966 | 969 | 976 | 920 | 971 | 923 | 2 | 25 | 27 |
| 30 | 972 | 972 | 974 | 922 | 977 | - | + 2 | +24 | +26 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD

par Z.M.BRKIĆ

J U I L L E T

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 989 | 990 | 991 | 983 | 996 | 984 | +0.002 | +0.024 | +0.026 |
| 2 | 989 | 995 | 000 | 992 | 992 | 985 | 2 | 23 | 25 |
| 3 | 987 | 977 | 985 | - | 993 | 977 | 1 | 22 | 23 |
| 4 | 990 | 982 | 985 | - | 989 | 979 | 1 | 22 | 23 |
| 5 | 991 | 985 | 984 | 977 | 995 | 981 | 1 | 21 | 22 |
| 6 | 992 | 984 | 981 | - | 990 | 978 | 1 | 20 | 21 |
| 7 | 989 | 971 | 983 | 968 | 986 | 966 | 1 | 20 | 21 |
| 8 | 982 | 973 | 967 | 960 | 971 | 962 | 1 | 19 | 20 |
| 9 | 981 | 973 | - | 962 | 974 | 959 | 1 | 18 | 19 |
| 10 | 976 | 972 | 969 | 953 | 971 | 958 | 1 | 18 | 19 |
| 11 | 968 | 972 | 966 | 944 | 965 | 947 | + 1 | 17 | 18 |
| 12 | 961 | 971 | 978 | 947 | 964 | - | 0 | 16 | 16 |
| 13 | 982 | 990 | 989 | 963 | 978 | 955 | 0 | 16 | 16 |
| 14 | 969 | 977 | 978 | 954 | 963 | 966 | 0 | 15 | 15 |
| 15 | 979 | 981 | 983 | 974 | 975 | - | 0 | 14 | 14 |
| 16 | 977 | 983 | 981 | 969 | 979 | 967 | 0 | 13 | 13 |
| 17 | 992 | 994 | 995 | 982 | 993 | - | 0 | 13 | 13 |
| 18 | 996 | 001 | 000 | 985 | 003 | 980 | 0 | 12 | 12 |
| 19 | 999 | 998 | 002 | 991 | 003 | 991 | 0 | 11 | 11 |
| 20 | 002 | 997 | 997 | - | 002 | 989 | 0 | 10 | 10 |
| 21 | 997 | 996 | 003 | 987 | 005 | 988 | - 1 | 10 | 9 |
| 22 | 002 | 997 | 996 | 989 | 007 | 991 | 1 | 9 | 8 |
| 23 | 001 | 995 | 995 | 985 | 008 | 982 | 1 | 8 | 7 |
| 24 | 991 | 979 | 978 | 970 | 991 | 974 | 1 | 7 | 6 |
| 25 | 985 | 978 | 971 | 967 | 986 | 970 | 1 | 7 | 6 |
| 26 | 993 | 975 | 972 | 961 | 983 | 961 | 1 | 6 | 5 |
| 27 | 980 | 973 | 965 | 948 | 975 | 953 | 2 | 5 | 3 |
| 28 | 975 | 973 | 965 | 943 | 973 | 962 | 2 | 4 | 2 |
| 29 | - | - | - | - | - | - | 2 | 3 | 1 |
| 30 | 988 | 989 | 981 | 965 | 994 | 978 | 2 | 3 | 1 |
| 31 | 997 | 000 | 993 | 973 | 001 | 982 | -0.002 | +0.002 | +0.000 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD

par Z.M.BRKIĆ

A O Ŭ T

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 012 | - | 006 | 983 | 008 | - | -0.002 | +0.001 | -0.001 |
| 2 | 007 | 009 | - | 983 | 999 | 977 | 2 | 0 | 2 |
| 3 | 998 | 000 | 992 | - | 988 | 973 | 2 | 0 | 2 |
| 4 | 981 | 991 | 983 | 958 | 976 | - | 3 | - 1 | 4 |
| 5 | 980 | 984 | 976 | 954 | 970 | 948 | 3 | 2 | 5 |
| 6 | 955 | 959 | 951 | 932 | 950 | 928 | 3 | 3 | 6 |
| 7 | 946 | 948 | 940 | 925 | 942 | 930 | 3 | 4 | 7 |
| 8 | 940 | 943 | 938 | 923 | 940 | 920 | 3 | 4 | 7 |
| 9 | 934 | 939 | 931 | 927 | 936 | 912 | 3 | 5 | 8 |
| 10 | 943 | 938 | 925 | 914 | 939 | 919 | 3 | 6 | 9 |
| 11 | 938 | 935 | 923 | 918 | 949 | 923 | 4 | 6 | 10 |
| 12 | 944 | 939 | 931 | 920 | 948 | 935 | 4 | 7 | 11 |
| 13 | 958 | 951 | 936 | 929 | 960 | - | 4 | 8 | 12 |
| 14 | 971 | 965 | 961 | 943 | 975 | 949 | 4 | 9 | 13 |
| 15 | 984 | 984 | 966 | 958 | 978 | 983 | 4 | 9 | 13 |
| 16 | 989 | 986 | 967 | 958 | 984 | 977 | 4 | 10 | 14 |
| 17 | 992 | 991 | 981 | - | 990 | 974 | 4 | 11 | 15 |
| 18 | 989 | 984 | 980 | 965 | 979 | 966 | 4 | 11 | 15 |
| 19 | 984 | 990 | 981 | 958 | 979 | - | 4 | 12 | 16 |
| 20 | 977 | 978 | 974 | 944 | 971 | 952 | 4 | 13 | 17 |
| 21 | - | 971 | 963 | 944 | 956 | - | 5 | 13 | 18 |
| 22 | 953 | 958 | 951 | 928 | 948 | 929 | 5 | 14 | 19 |
| 23 | 953 | 955 | 948 | 923 | 949 | 932 | 5 | 15 | 20 |
| 24 | 955 | 957 | 947 | 924 | 959 | 935 | 5 | 15 | 20 |
| 25 | 950 | 955 | 952 | 927 | 955 | 949 | 5 | 16 | 21 |
| 26 | 955 | 955 | 949 | 930 | 953 | 939 | 5 | 16 | 21 |
| 27 | 966 | 965 | 956 | 950 | 967 | 951 | 5 | 17 | 22 |
| 28 | 976 | 976 | 970 | 969 | 986 | 967 | 6 | 17 | 23 |
| 29 | 985 | 986 | 979 | 966 | 999 | 970 | 6 | 18 | 24 |
| 30 | 980 | 973 | 973 | 957 | 983 | 958 | 6 | 19 | 25 |
| 31 | 957 | 949 | 939 | 927 | 950 | 905 | -0.006 | -0.019 | -0.025 |

HEURES DEMI-DÉEINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

S E P T E M B R E

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 982 | 980 | 974 | 965 | 981 | 967 | -0.006 | -0.019 | -0.025 |
| 2 | 987 | 980 | 976 | 967 | 983 | 965 | 6 | 20 | 26 |
| 3 | 986 | 975 | 970 | 956 | 973 | 947 | 6 | 20 | 26 |
| 4 | 957 | 958 | 958 | 952 | 964 | 946 | 6 | 21 | 27 |
| 5 | 974 | - | 968 | 948 | 971 | - | 6 | 21 | 27 |
| 6 | 981 | 980 | 973 | 959 | 979 | 963 | 6 | 22 | 28 |
| 7 | 986 | 988 | 977 | - | 982 | 976 | 7 | 22 | 29 |
| 8 | - | - | - | - | - | - | 7 | 23 | 30 |
| 9 | 974 | 971 | 969 | 948 | 966 | 958 | 7 | 23 | 30 |
| 10 | 969 | 968 | 965 | 947 | 968 | 956 | 7 | 23 | 30 |
| 11 | 962 | 968 | 966 | - | 962 | 951 | 7 | 24 | 31 |
| 12 | 963 | 971 | 973 | 949 | 962 | 950 | 7 | 24 | 31 |
| 13 | 960 | 965 | 967 | 946 | 960 | - | 7 | 24 | 31 |
| 14 | 952 | 955 | 957 | 937 | 953 | 938 | 7 | 25 | 32 |
| 15 | 948 | 948 | 946 | 929 | 945 | 932 | 7 | 25 | 32 |
| 16 | 944 | 947 | 942 | 939 | 948 | 935 | 7 | 25 | 32 |
| 17 | 950 | - | 942 | 932 | 947 | 937 | 7 | 26 | 33 |
| 18 | 957 | 954 | 949 | 948 | 960 | 947 | 7 | 26 | 33 |
| 19 | 967 | 967 | 970 | 954 | 971 | 958 | 7 | 26 | 33 |
| 20 | 971 | 972 | 972 | 963 | - | 963 | 7 | 27 | 34 |
| 21 | 984 | 985 | 983 | - | 984 | 971 | 7 | 27 | 34 |
| 22 | 982 | 975 | 972 | 961 | - | 968 | 8 | 27 | 35 |
| 23 | 978 | 971 | 969 | 955 | 973 | 955 | 8 | 27 | 35 |
| 24 | 968 | 964 | 965 | 950 | 967 | 952 | 8 | 27 | 35 |
| 25 | 964 | 963 | 962 | 945 | 963 | - | 8 | 27 | 35 |
| 26 | 959 | 957 | 954 | 938 | 951 | 948 | 8 | 28 | 36 |
| 27 | 956 | 959 | 956 | 946 | 954 | 944 | 8 | 28 | 36 |
| 28 | 963 | 965 | 963 | 947 | 960 | 953 | 8 | 28 | 36 |
| 29 | 964 | 967 | 966 | 947 | 965 | 959 | 8 | 28 | 36 |
| 30 | 969 | 973 | 971 | 959 | 972 | 969 | -0.008 | -0.028 | -0.036 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

O C T O B R E

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{33}$ 22.13 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 988 | 990 | 991 | 978 | 992 | 991 | -0.008 | -0.028 | -0.036 |
| 2 | 992 | 994 | 995 | 982 | 999 | 980 | 8 | 28 | 36 |
| 3 | 998 | 993 | 990 | 979 | 994 | 980 | 8 | 28 | 36 |
| 4 | 994 | 993 | 991 | 979 | 994 | 984 | 8 | 28 | 36 |
| 5 | 999 | 992 | 993 | - | 994 | 976 | 8 | 28 | 36 |
| 6 | 986 | 982 | 979 | 972 | 987 | 976 | 8 | 28 | 36 |
| 7 | 980 | 982 | 977 | 965 | 977 | 965 | 8 | 28 | 36 |
| 8 | 970 | 967 | 970 | 951 | 973 | 958 | 8 | 28 | 36 |
| 9 | 968 | 965 | 960 | 945 | 966 | 950 | 8 | 28 | 36 |
| 10 | 961 | 957 | 955 | 942 | 962 | 941 | 8 | 28 | 36 |
| 11 | 958 | 954 | 953 | 936 | 955 | 937 | 8 | 28 | 36 |
| 12 | 950 | 944 | 945 | 930 | 951 | 932 | 8 | 28 | 36 |
| 13 | 944 | 941 | 943 | 923 | 940 | 925 | 8 | 28 | 36 |
| 14 | 942 | 943 | 942 | 926 | 939 | 934 | 8 | 28 | 36 |
| 15 | 932 | 933 | 933 | 916 | 932 | 917 | 8 | 28 | 36 |
| 16 | 929 | 934 | 930 | 914 | 928 | 911 | 8 | 27 | 35 |
| 17 | 916 | 922 | 924 | 900 | 920 | 909 | 8 | 27 | 35 |
| 18 | 923 | 926 | 927 | 909 | 926 | 910 | 8 | 27 | 35 |
| 19 | 925 | 930 | 927 | - | 932 | 918 | 8 | 27 | 35 |
| 20 | 939 | 934 | 940 | 926 | 941 | 930 | 8 | 27 | 35 |
| 21 | 950 | 948 | 947 | 936 | 952 | 945 | 8 | 27 | 35 |
| 22 | 964 | 962 | 961 | 949 | 966 | 933 | 8 | 27 | 35 |
| 23 | 960 | 963 | 964 | 950 | 967 | 950 | 8 | 26 | 34 |
| 24 | 970 | 971 | 969 | 957 | 972 | 955 | 8 | 26 | 34 |
| 25 | 981 | 973 | 977 | 960 | 980 | 964 | 8 | 26 | 34 |
| 26 | 982 | 978 | 978 | 967 | 977 | 963 | 8 | 26 | 34 |
| 27 | 979 | 975 | 974 | 960 | 981 | 961 | 8 | 26 | 34 |
| 28 | 983 | 980 | 978 | 957 | 983 | - | 8 | 25 | 33 |
| 29 | 981 | 977 | 981 | 953 | 977 | 958 | 8 | 25 | 33 |
| 30 | 976 | 972 | 974 | 951 | 974 | 948 | 8 | 25 | 33 |
| 31 | 965 | 968 | 964 | 938 | 961 | 941 | -0.008 | -0.025 | -0.033 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

N O V E M B R E

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{27}$ 40.55 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_1-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 964 | 965 | - | 943 | 964 | 942 | -0.008 | -0.024 | -0.032 |
| 2 | 962 | 962 | - | - | 961 | 937 | 8 | 24 | 32 |
| 3 | 964 | 967 | 947 | 939 | 967 | 945 | 8 | 24 | 32 |
| 4 | 968 | 970 | 969 | 944 | 974 | 955 | 8 | 24 | 32 |
| 5 | 979 | 977 | 962 | 950 | 977 | 949 | 8 | 24 | 32 |
| 6 | 966 | 966 | 951 | 941 | 965 | 947 | 8 | 23 | 31 |
| 7 | 970 | 968 | 951 | 941 | 965 | 941 | 8 | 23 | 31 |
| 8 | 972 | 961 | 962 | 935 | 963 | - | 8 | 23 | 31 |
| 9 | 963 | 957 | 946 | 931 | 958 | 924 | 8 | 23 | 31 |
| 10 | 958 | 958 | 941 | 932 | 963 | 934 | 8 | 22 | 30 |
| 11 | 960 | 960 | 944 | 930 | 960 | 934 | 8 | 22 | 30 |
| 12 | 961 | 959 | 946 | 928 | 964 | 954 | 8 | 22 | 30 |
| 13 | 968 | - | 953 | 941 | 965 | 930 | 8 | 21 | 29 |
| 14 | 967 | 961 | 949 | 925 | 967 | 934 | 8 | 21 | 29 |
| 15 | 966 | 959 | 958 | 924 | 966 | 930 | 8 | 21 | 29 |
| 16 | 965 | 965 | 952 | - | 966 | 932 | 8 | 21 | 29 |
| 17 | 963 | 964 | 952 | 927 | 962 | 929 | 7 | 20 | 27 |
| 18 | 966 | 970 | 957 | 933 | 964 | - | 7 | 20 | 27 |
| 19 | 963 | 966 | 950 | 927 | 964 | 928 | 7 | 20 | 27 |
| 20 | 963 | 964 | 942 | 923 | 964 | 926 | 7 | 20 | 27 |
| 21 | 961 | 961 | - | 922 | 960 | 926 | 7 | 19 | 26 |
| 22 | 958 | 963 | 950 | 920 | 960 | 923 | 7 | 19 | 26 |
| 23 | 959 | 959 | 951 | 922 | 961 | 923 | 7 | 19 | 26 |
| 24 | 957 | 959 | 954 | 926 | 958 | 926 | 7 | 19 | 26 |
| 25 | 968 | 964 | 949 | 920 | 968 | 927 | 7 | 18 | 25 |
| 26 | 964 | 962 | 958 | 923 | 967 | 920 | 7 | 18 | 25 |
| 27 | 965 | 965 | 964 | 929 | 970 | 923 | 6 | 18 | 24 |
| 28 | 962 | 959 | 953 | 915 | 965 | 915 | 6 | 18 | 24 |
| 29 | 964 | 964 | 958 | 917 | 972 | 918 | 6 | 17 | 23 |
| 30 | 970 | - | 956 | 917 | 970 | 914 | -0.006 | -0.017 | -0.023 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1960.
A L'OBSERVATOIRE DE BEOGRAD

par Z.M.BRKIĆ

D E C E M B R E

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{27}$ 40.55 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 960 | 957 | 952 | 917 | 964 | 915 | -0.006 | -0.017 | -0.023 |
| 2 | 961 | 957 | 950 | 909 | 960 | 911 | 6 | 17 | 23 |
| 3 | 947 | 956 | 945 | 898 | 955 | 902 | 6 | 16 | 22 |
| 4 | 952 | 947 | 947 | 893 | 956 | 900 | 6 | 16 | 22 |
| 5 | 949 | 948 | 939 | 889 | 954 | 898 | 6 | 16 | 22 |
| 6 | 951 | 948 | 942 | 892 | 953 | 903 | 5 | 16 | 21 |
| 7 | 955 | 955 | 952 | - | 956 | 903 | 5 | 15 | 20 |
| 8 | 944 | 948 | 952 | 894 | 960 | 894 | 5 | 15 | 20 |
| 9 | 955 | 950 | 946 | 896 | 955 | - | 5 | 15 | 20 |
| 10 | 957 | 960 | - | - | 962 | 903 | 5 | 15 | 20 |
| 11 | 965 | 962 | 955 | 906 | 967 | 906 | 5 | 14 | 19 |
| 12 | 953 | 951 | 944 | 897 | 956 | 892 | 5 | 14 | 19 |
| 13 | 950 | 946 | 947 | 893 | 957 | 891 | 5 | 14 | 19 |
| 14 | 950 | 944 | 937 | 898 | 958 | - | 5 | 14 | 19 |
| 15 | 950 | 948 | 942 | 893 | 959 | 892 | 5 | 14 | 19 |
| 16 | 941 | 950 | 946 | 889 | 953 | 894 | 4 | 14 | 18 |
| 17 | 949 | 952 | 950 | 891 | 956 | 892 | 4 | 13 | 17 |
| 18 | 956 | 954 | 954 | 896 | 961 | 896 | 4 | 13 | 17 |
| 19 | 965 | 968 | 954 | 896 | 967 | - | 4 | 13 | 17 |
| 20 | 961 | 963 | 964 | 900 | 965 | 905 | 4 | 13 | 17 |
| 21 | 971 | 977 | 961 | - | 967 | 882 | 4 | 13 | 17 |
| 22 | 962 | 962 | 956 | 887 | 957 | 901 | 4 | 13 | 17 |
| 23 | 965 | 971 | 966 | 894 | 968 | 896 | 4 | 12 | 16 |
| 24 | 972 | 971 | 969 | 901 | 966 | 905 | 4 | 12 | 16 |
| 25 | 974 | 974 | - | 906 | 975 | 909 | 4 | 12 | 16 |
| 26 | 978 | 978 | 977 | 908 | 979 | 909 | 3 | 12 | 15 |
| 27 | 981 | 988 | 982 | 927 | 985 | 911 | 3 | 12 | 15 |
| 28 | 984 | 984 | 984 | 914 | 986 | 910 | 3 | 12 | 15 |
| 29 | 983 | 982 | 985 | 912 | 987 | 920 | 3 | 11 | 14 |
| 30 | 982 | 980 | 981 | 903 | 976 | 905 | 3 | 11 | 14 |
| 31 | 975 | 982 | - | 910 | 980 | - | -0.003 | -0.011 | -0.014 |

Déterminations de l'heure en 1961
Corrections de la pendule fondamentale et leurs écarts
par D.Djurović et M.Jovanović

| Date | Cp | E | TU | Obs. | Date | Cp | E | TU | Obs. | Date | Cp | E | TU | Obs. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Janvier | | | | | Mars | | | | | Mai | | | |
| | en $10^{-3}$ | | | | | en $10^{-3}$ | | | | | en $10^{-3}$ | | | |
| 3 | + 3.051 | +41 | 21.5 | M | 4 | -5.112 | - 1 | 17.8 | J | 5 | +140.074 | -10 | 19.0 | Đ |
| 7 | 2.911 | + 1 | 20.7 | J | 5 | 5.292 | +20 | 17.9 | Đ | 6 | 139.903 | +18 | 18.5 | J |
| 11 | 2.610 | -12 | 19.3 | J | 5 | 5.276 | +20 | 19.0 | Đ | 7 | 139.756 | - 3 | 21.8 | J |
| 13 | 2.583 | - 8 | 17.5 | J | 8 | 5.740 | +45 | 18.2 | Đ | 13 | 138.893 | + 7 | 22.1 | J |
| 13 | 2.584 | -11 | 18.5 | J | 12 | 6.255 | +16 | 18.2 | J | 14 | 138.786 | -12 | 18.9 | J |
| 13 | 2.549 | +19 | 20.4 | Đ | 16 | 6.784 | +54 | 19.3 | Đ | 18 | 138.206 | + 2 | 19.2 | J |
| 13 | 2.558 | + 7 | 21.6 | Đ | 17 | 6.869 | + 2 | 18.1 | Đ | 23 | 137.496 | +11 | 19.1 | J |
| 14 | 2.507 | +12 | 16.6 | J | 17 | 6.855 | + 2 | 19.3 | Đ | 23 | 137.500 | - 3 | 20.8 | J |
| 14 | 2.535 | -20 | 17.8 | J | 18 | 6.992 | + 2 | 19.1 | Đ | 26 | 137.074 | +14 | 19.1 | Đ |
| 18 | 2.263 | + 4 | 16.5 | J | 20 | 7.264 | +28 | 21.0 | Đ | 26 | 137.091 | -10 | 20.3 | Đ |
| 18 | 2.272 | - 8 | 17,7 | Đ | 26 | 7.917 | - 1 | 20.9 | Đ | 31 | 136.347 | + 4 | 19.0 | Đ |
| 19 | 2.163 | +21 | 16.1 | M | 29 | 8.265 | - 3 | 20.7 | Đ | 31 | +136.354 | -10 | 20.2 | J |
| 19 | 2.221 | +49 | 17.3 | Đ | 30 | -8.371 | - 5 | 18.4 | Đ | | Juin | | | |
| 20 | 2.094 | + 3 | 16.8 | Đ | | Avril | | | | 1 | +136.175 | +10 | 20.9 | J |
| 20 | 2.096 | - 3 | 17.9 | Đ | 1 | -8.635 | +10 | 19.4 | Đ | 2 | 136.078 | -41 | 20.2 | J |
| 22 | 1.929 | +15 | 16.1 | Đ | 2 | 8.746 | + 6 | 18.4 | Đ | 8 | 135.224 | +64 | 0.1 | J |
| 22 | 1.960 | -20 | 17.3 | Đ | 2 | 8.751 | + 6 | 19.4 | Đ | 8 | 135.156 | + 7 | 20.7 | J |
| 28 | 1.380 | +16 | 16.5 | Đ | 4 | 8.904 | - 1 | 17.7 | Đ | 9 | 135.020 | 0 | 20.8 | J |
| 28 | 1.393 | - 2 | 17.6 | Đ | 4 | 8.940 | - 1 | 18.9 | Đ | 12 | 134.611 | - 2 | 19.2 | Đ |
| 28 | 1.357 | +19 | 18.8 | J | 6 | 9.075 | + 1 | 17.9 | Đ | 12 | 134.569 | +34 | 20.1 | Đ |
| 29 | 1.312 | -14 | 17.0 | J | 6 | 9.078 | + 1 | 19.0 | Đ | 13 | 134.516 | -57 | 21.8 | J |
| 29 | 1.296 | - 4 | 18.6 | Đ | 7 | 9.126 | -17 | 18.2 | J | 15 | 134.196 | + 3 | 19.5 | J |
| 30 | 1.201 | - 6 | 16.5 | Đ | 8 | 9.228 | 0 | 18.4 | Đ | 15 | 134.203 | - 6 | 19.8 | J |
| 30 | + 1.193 | - 3 | 17.6 | Đ | 9 | 9.319 | + 7 | 21.5 | J | 16 | 134.061 | + 2 | 19.2 | Đ |
| | Février | | | | 10 | 9.387 | - 1 | 20.8 | J | 16 | 134.063 | - 6 | 20.3 | Đ |
| 2 | + 0.810 | +12 | 18.2 | J | 11 | 9.459 | + 7 | 20.9 | J | 17 | 133.843 | +75 | 21.1 | J |
| 6 | 0.365 | -22 | 19.0 | Đ | 12 | 9.524 | - 2 | 21.1 | J | 18 | 133.787 | + 7 | 19.3 | J |
| 6 | + 0.292 | +41 | 20.9 | Đ | 13 | 9.578 | + 3 | 18.0 | Đ | 19 | 133.644 | + 4 | 20.7 | J |
| 14 | - 0.694 | + 2 | 18.9 | J | 14 | 9.644 | -10 | 18.1 | Đ | 20 | 133.510 | + 9 | 19.3 | J |
| 15 | 0.820 | + 2 | 17.0 | J | 14 | 9.630 | -10 | 19.2 | Đ | 20 | 133.454 | +49 | 22.0 | J |
| 16 | 1.003 | +31 | 20.9 | J | 16 | 9.834 | + 9 | 21.1 | J | 21 | 133.389 | -14 | 19.2 | Đ |
| 18 | 1.260 | +56 | 18.9 | J | 17 | 9.907 | + 5 | 19.4 | Đ | 21 | 133.386 | -19 | 20.7 | Đ |
| 19 | 1.366 | +37 | 20.9 | Đ | 22 | 10.321 | - 5 | 19.0 | J | 22 | 133.226 | + 3 | 19.2 | J |
| 21 | 1.575 | 0 | 19.7 | J | 26 | 10.705 | +17 | 18.6 | Đ | 22 | 133.219 | - 2 | 21.1 | J |
| 22 | 1.746 | +39 | 19.1 | Đ | 28 | 10.910 | -13 | 18.5 | Đ | 23 | 133.059 | +17 | 19.0 | J |
| 26 | 2.210 | -38 | 16.9 | J | 28 | -10.884 | -13 | 19.3 | Đ | 23 | 133.059 | +12 | 20.9 | J |
| 27 | 2.462 | +48 | 19.6 | Đ | | Mai | | | | 24 | 132.959 | - 5 | 19.6 | J |
| 28 | - 2.580 | + 6 | 19.7 | J | 3 | +140.332 | +11 | 19.1 | Đ | 25 | +132.832 | + 2 | 19.3 | J |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | Juin | | | |
| | | en $10^{-3}$ | | |
| 26 | +132.705 | - 6 | 20.8 | J |
| 27 | 132.551 | +20 | 19.0 | Đ |
| 27 | 132.554 | + 1 | 20.8 | Đ |
| 30 | +132.239 | -79 | 22.7 | J |
| | Juillet | | | |
| 1 | +132.040 | + 3 | 19.1 | Đ |
| 1 | 132.036 | - 2 | 20.8 | Đ |
| 2 | 131.869 | +38 | 19.3 | J |
| 3 | 131.793 | -21 | 19.1 | Đ |
| 4 | 131.604 | +27 | 19.2 | Đ |
| 4 | 131.637 | -14 | 20.7 | Đ |
| 6 | 131.361 | - 7 | 19.4 | Đ |
| 6 | 131.333 | +12 | 20.8 | Đ |
| 7 | 131.229 | - 9 | 19.2 | Đ |
| 8 | 131.033 | +45 | 20.3 | J |
| 10 | 130.820 | -12 | 19.2 | Đ |
| 10 | 130.810 | - 8 | 20.1 | Đ |
| 11 | 130.645 | +22 | 19.4 | J |
| 13 | 130.364 | - 5 | 21.8 | Đ |
| 14 | 130.226 | + 3 | 19.2 | Đ |
| 15 | 130.075 | + 7 | 19.2 | Đ |
| 15 | 130.066 | + 8 | 20.6 | Đ |
| 16 | 129.938 | -11 | 20.8 | Đ |
| 18 | 129.606 | +32 | 19.0 | Đ |
| 18 | 129.609 | +23 | 19.9 | Đ |
| 19 | 129.494 | - 8 | 18.9 | Đ |
| 21 | 129.183 | -10 | 19.2 | Đ |
| 24 | 128.647 | +42 | 20.4 | Đ |
| 26 | 128.340 | +34 | 19.3 | B |
| 27 | 128.245 | -30 | 19.1 | Đ |
| 28 | 128.024 | +15 | 21.2 | Đ |
| 31 | +127.581 | -10 | 19.4 | Đ |
| | Août | | | |
| 1 | +127.393 | -13 | 19.4 | Đ |
| 2 | 127.206 | + 2 | 19.4 | Đ |
| 2 | 127.206 | - 5 | 20.4 | Đ |
| 3 | 127.044 | - 6 | 19.1 | Đ |
| 4 | 126.851 | +12 | 19.2 | Đ |
| 5 | 126.627 | +58 | 19.3 | Đ |
| 6 | 126.514 | - 9 | 19.1 | Đ |
| 6 | +126.486 | + 7 | 20.6 | Đ |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | Août | | | |
| | | en $10^{-3}$ | | |
| 7 | +126.326 | - 3 | 18.8 | Đ |
| 8 | 126.125 | +16 | 19.2 | Đ |
| 9 | 125.962 | - 5 | 19.3 | Đ |
| 10 | 125.791 | - 4 | 19.2 | Đ |
| 11 | 125.632 | - 6 | 19.2 | J |
| 12 | 125.496 | -39 | 18.9 | J |
| 15 | 124.865 | +33 | 19.1 | J |
| 18 | 124.319 | + 8 | 19.3 | J |
| 19 | 124.138 | - 4 | 18.9 | J |
| 21 | 123.745 | + 1 | 18.6 | J |
| 23 | 123.300 | +40 | 20.8 | J |
| 24 | 123.167 | - 3 | 18.8 | J |
| 25 | 122.973 | 0 | 18.4 | J |
| 27 | 122.587 | -14 | 20.8 | J |
| 28 | 122.374 | + 6 | 20.8 | J |
| 29 | 122.205 | -16 | 20.7 | J |
| 30 | 121.993 | +19 | 18.5 | J |
| 31 | +121.754 | +48 | 20.0 | J |
| | Septembre | | | |
| 1 | +121.629 | -29 | 18.5 | J |
| 2 | 121.408 | + 8 | 18.2 | Đ |
| 2 | 121.392 | + 6 | 20.1 | Đ |
| 3 | 121.224 | -10 | 19.1 | J |
| 4 | 121.005 | +16 | 18.3 | Đ |
| 5 | 120.833 | - 4 | 18.7 | J |
| 8 | 120.208 | + 9 | 18.8 | Đ |
| 10 | 119.811 | 0 | 20.7 | J |
| 11 | 119.705 | -41 | 18.0 | Đ |
| 11 | 119.636 | +24 | 19.1 | Đ |
| 12 | 119.479 | + 5 | 18.0 | Đ |
| 13 | 119.274 | +23 | 17.6 | J |
| 14 | 119.068 | +30 | 18.1 | J |
| 15 | 118.943 | 0 | 19.3 | Đ |
| 16 | 118.635 | - 7 | 18.5 | J |
| 17 | 118.178 | + 7 | 18.6 | Đ |
| 18 | 117.819 | -41 | 17.8 | J |
| 19 | 117.344 | + 1 | 18.2 | Đ |
| 20 | 116.899 | +12 | 18.8 | Đ |
| 21 | 116.450 | +32 | 18.9 | J |
| 22 | 116.107 | -10 | 18.1 | Đ |
| 22 | +116.123 | -40 | 19.1 | B |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | Septembre | | | |
| | | en $10^{-3}$ | | |
| 23 | +115.651 | +15 | 20.9 | J |
| 24 | 115.347 | -24 | 19.2 | Đ |
| 25 | 114.989 | -12 | 17.9 | J |
| 26 | 114.592 | - 7 | 19.3 | Đ |
| 27 | 114.187 | +20 | 18.1 | J |
| 28 | 113.776 | + 5 | 20.7 | Đ |
| 29 | 113.482 | -43 | 18.2 | J |
| 30 | 113.060 | + 6 | 17.4 | Đ |
| 30 | +113.037 | +13 | 18.5 | Đ |
| | Octobre | | | |
| 1 | +112.662 | + 1 | 17.7 | Đ |
| 3 | 111.834 | +13 | 20.7 | Đ |
| 4 | 111.508 | -14 | 17.5 | Đ |
| 5 | 111.137 | + 2 | 17.1 | Đ |
| 6 | 110.745 | - 3 | 18.2 | J |
| 7 | 110.291 | +20 | 21.7 | J |
| 10 | 109.238 | +10 | 17.1 | Đ |
| 11 | 108.867 | -20 | 17.9 | J |
| 12 | 108.380 | +27 | 21.0 | Đ |
| 15 | 107.305 | +13 | 17.0 | Đ |
| 15 | 107.315 | -15 | 18.1 | Đ |
| 16 | 106.895 | +13 | 19.2 | J |
| 17 | 106.568 | - 7 | 17.2 | J |
| 20 | 105.319 | + 8 | 22.2 | J |
| 21 | 105.046 | - 7 | 16.7 | Đ |
| 21 | 105.021 | + 5 | 17.7 | Đ |
| 22 | 104.635 | +31 | 17.0 | J |
| 23 | 104.240 | +15 | 19.2 | Đ |
| 24 | 103.934 | -13 | 16.8 | Đ |
| 24 | 103.924 | -25 | 17.7 | Đ |
| 25 | 103.530 | +24 | 17.2 | J |
| 26 | 103.198 | -15 | 16.6 | Đ |
| 26 | 103.166 | + 5 | 17.6 | Đ |
| 27 | 102.799 | -32 | 19.2 | J |
| 28 | 102.426 | + 4 | 16.7 | Đ |
| 28 | 102.388 | +27 | 17.7 | Đ |
| 29 | 101.951 | +18 | 20.7 | J |
| 31 | +101.227 | +13 | 18.9 | J |
| | Novembre | | | |
| 1 | +100.905 | + 4 | 17.4 | J |
| 2 | +100.584 | -18 | 16.4 | Đ |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | Novembre en $10^{-3}$ | | | |
| 3 | +100.206 | -29 | 17.7 | J |
| 9 | 97.866 | + 4 | 21.1 | Đ |
| 20 | 93.651 | - 4 | 17.5 | Đ |
| 20 | 93.621 | + 4 | 18.9 | Đ |
| 21 | 93.276 | + 1 | 16.2 | Đ |
| 21 | 93.271 | -14 | 17.3 | Đ |
| 22 | + 92.817 | +10 | 19.9 | Đ |

| Date | Cp | E | TU | Obs |
|---|---|---|---|---|
| | Novembre en $10^{-3}$ | | | |
| 23 | + 92.523 | -33 | 16.2 | Đ |
| 23 | 92.500 | -23 | 17.2 | Đ |
| 24 | 92.085 | +11 | 16.9 | J |
| 27 | 90.876 | - 6 | 18.2 | Đ |
| 29 | 90.085 | - 7 | 17.1 | Đ |
| 29 | + 90.061 | 0 | 18.1 | Đ |

| Date | Cp | E | TU | Obs. |
|---|---|---|---|---|
| | Décembre en $10^{-3}$ | | | |
| 1 | + 89.241 | +29 | 17.4 | J |
| 2 | 88.869 | + 8 | 16.6 | Đ |
| 3 | 88.405 | -26 | 22.5 | J |
| 4 | 87.999 | +45 | 18.4 | J |
| 5 | 87.657 | + 4 | 16.5 | Đ |
| 14 | 83.963 | + 6 | 16.0 | Đ |
| 30 | + 76.803 | +36 | 16.8 | Đ |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

J A N V I E R

| Date | $TQC_9$ 27.84 $8^h6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{37}$ 16.96 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.0 λ $20^h6^m$ | Δλ | $\Delta T_5$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 992 | 988 | 986 | 971 | 990 | 965 | -0.003 | -0.011 | -0.014 |
| 2 | 996 | 993 | 994 | 967 | 994 | - | 3 | 11 | 14 |
| 3 | 999 | 998 | 992 | 967 | 996 | 972 | 3 | 11 | 14 |
| 4 | 000 | 993 | 991 | - | 997 | 966 | 3 | 11 | 14 |
| 5 | 002 | 997 | 001 | 973 | 999 | 975 | 3 | 10 | 13 |
| 6 | 000 | 001 | 996 | 972 | 002 | 976 | 3 | 10 | 13 |
| 7 | 001 | 003 | 998 | 966 | 013 | 973 | 3 | 10 | 13 |
| 8 | 000 | 998 | 992 | 970 | 998 | 966 | 3 | 10 | 13 |
| 9 | 000 | 993 | 991 | 963 | 995 | 964 | 3 | 10 | 13 |
| 10 | 990 | 988 | 981 | 959 | 994 | 955 | 3 | 10 | 13 |
| 11 | 983 | 991 | 993 | 964 | 991 | 959 | 3 | 10 | 13 |
| 12 | 986 | 985 | 979 | 951 | 981 | 946 | 3 | 10 | 13 |
| 13 | 980 | 979 | 974 | 951 | 980 | 949 | 3 | 9 | 12 |
| 14 | 969 | 970 | 968 | 941 | 968 | 936 | 3 | 9 | 12 |
| 15 | 965 | 968 | 954 | 935 | 972 | 930 | 3 | 9 | 12 |
| 16 | 963 | 960 | 957 | 929 | 965 | 937 | 2 | 9 | 11 |
| 17 | 964 | - | 952 | 931 | 963 | 931 | 2 | 9 | 11 |
| 18 | 966 | 964 | 961 | - | 967 | 928 | 2 | 9 | 11 |
| 19 | 947 | 945 | 941 | 906 | 945 | 909 | 2 | 9 | 11 |
| 20 | 952 | 941 | 946 | 918 | 959 | 925 | 2 | 9 | 11 |
| 21 | 960 | 961 | 953 | 922 | 963 | 926 | 2 | 8 | 10 |
| 22 | 966 | 968 | 960 | 932 | 970 | 938 | 2 | 8 | 10 |
| 23 | 978 | 968 | 965 | 936 | 974 | 930 | 2 | 8 | 10 |
| 24 | 971 | 966 | 959 | 927 | 968 | 930 | 2 | 8 | 10 |
| 25 | 980 | 977 | 969 | 942 | 979 | 937 | 2 | 8 | 10 |
| 26 | - | - | - | - | - | 936 | 2 | 8 | 10 |
| 27 | 984 | 981 | 973 | 935 | 980 | 932 | 2 | 7 | 9 |
| 28 | 982 | 975 | 969 | 931 | 984 | 933 | 2 | 7 | 9 |
| 29 | 989 | 985 | 982 | 938 | 989 | 945 | 2 | 7 | 9 |
| 30 | 996 | 994 | 985 | 945 | 996 | 954 | 2 | 7 | 9 |
| 31 | 996 | 999 | 992 | 948 | 006 | 958 | -0.001 | -0.007 | -0.008 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

F É V R I E R

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GIC_{37}$ 16.96 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 999 | 997 | 995 | - | 999 | 948 | -0.001 | -0.007 | -0.008 |
| 2 | 000 | 001 | 993 | 950 | 997 | 953 | 1 | 7 | 8 |
| 3 | 999 | 003 | 991 | 944 | 003 | 948 | 1 | 6 | 7 |
| 4 | 000 | 998 | 988 | 943 | 000 | 940 | 1 | 6 | 7 |
| 5 | 993 | - | - | - | - | 946 | 1 | 6 | 7 |
| 6 | 002 | 998 | - | 943 | 001 | 941 | 1 | 6 | 7 |
| 7 | - | 997 | 989 | 942 | 999 | 939 | 1 | 5 | 6 |
| 8 | 997 | 001 | 990 | 946 | 004 | 944 | 1 | 5 | 6 |
| 9 | 001 | 001 | 991 | 940 | 004 | 945 | 1 | 5 | 6 |
| 10 | 002 | 001 | 994 | 940 | 005 | 937 | 1 | 5 | 6 |
| 11 | 998 | 001 | 987 | 936 | 999 | 936 | 1 | 5 | 6 |
| 12 | 995 | 999 | 986 | 933 | 995 | 926 | - 1 | 4 | 5 |
| 13 | 995 | 989 | - | 925 | 996 | 927 | 0 | 4 | 4 |
| 14 | 991 | 991 | 980 | 923 | 990 | 924 | 0 | 4 | 4 |
| 15 | 995 | 999 | 987 | 926 | 992 | 924 | 0 | 4 | 4 |
| 16 | 981 | - | 973 | 911 | 984 | 907 | 0 | 3 | 3 |
| 17 | 976 | 978 | 972 | 912 | 979 | 902 | 0 | 3 | 3 |
| 18 | 982 | 983 | - | 903 | - | 910 | 0 | 3 | 3 |
| 19 | 992 | 997 | - | 919 | 994 | 931 | 0 | 2 | 2 |
| 20 | 992 | 993 | 990 | 922 | 990 | 915 | 0 | 2 | 2 |
| 21 | 987 | 986 | 982 | 908 | 987 | 912 | 0 | 2 | 2 |
| 22 | 982 | 982 | 979 | 909 | 990 | 911 | 0 | 2 | - 2 |
| 23 | 985 | 987 | 981 | 909 | 997 | 910 | + 1 | 1 | 0 |
| 24 | 985 | 986 | 977 | 905 | 997 | 903 | 1 | 1 | 0 |
| 25 | 991 | 992 | 976 | 909 | 993 | 909 | 1 | - 1 | 0 |
| 26 | 992 | 994 | 979 | 911 | 997 | 910 | 1 | 0 | + 1 |
| 27 | 992 | 986 | 982 | 899 | 985 | 894 | 1 | 0 | 1 |
| 28 | 978 | 971 | 965 | 880 | 969 | 939 | +0.001 | 0.000 | +0.001 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
A L'OBSERVATOIRE DE BEOGRAD

par Z.M.BRKIĆ

M A R S

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 060 | - | 042 | - | 052 | 015 | $+0^s.001$ | $+0^s.001$ | +0.002 |
| 2 | 041 | 038 | 033 | 003 | 041 | 000 | 1 | 1 | 2 |
| 3 | 028 | 027 | 017 | 997 | - | 992 | 1 | 2 | 3 |
| 4 | 014 | 009 | 006 | 979 | 008 | 975 | 1 | 2 | 3 |
| 5 | 000 | 001 | 988 | 973 | 998 | 966 | 2 | 2 | 4 |
| 6 | 998 | 000 | 987 | - | 991 | 960 | 2 | 3 | 5 |
| 7 | - | - | - | - | - | 954 | 2 | 3 | 5 |
| 8 | 979 | 982 | 977 | 953 | - | 951 | 2 | 4 | 6 |
| 9 | 980 | 982 | - | - | - | 951 | 2 | 4 | 6 |
| 10 | 979 | 985 | 976 | - | - | 952 | 2 | 4 | 6 |
| 11 | - | 987 | 976 | - | 983 | 953 | 2 | 5 | 7 |
| 12 | 979 | 982 | 972 | 955 | 979 | 950 | 2 | 5 | 7 |
| 13 | 977 | 981 | 972 | 956 | 979 | 953 | 2 | 6 | 8 |
| 14 | 971 | 971 | 967 | 953 | 978 | 967 | 2 | 6 | 8 |
| 15 | 998 | 998 | 983 | - | 000 | 975 | 2 | 7 | 9 |
| 16 | 995 | 001 | 990 | 975 | 000 | 972 | 3 | 7 | 10 |
| 17 | 996 | 997 | 992 | 974 | 995 | 966 | 3 | 8 | 11 |
| 18 | 986 | 980 | 969 | 958 | 983 | 956 | 3 | 8 | 11 |
| 19 | 979 | 975 | 965 | 959 | 978 | 952 | 3 | 9 | 12 |
| 20 | 974 | 971 | 962 | 945 | 962 | 946 | 3 | 9 | 12 |
| 21 | 969 | 962 | 952 | 941 | 966 | 942 | 3 | 10 | 13 |
| 22 | 969 | 966 | 960 | 941 | 968 | 949 | 3 | 10 | 13 |
| 23 | 972 | 970 | 975 | 948 | 971 | - | 3 | 11 | 14 |
| 24 | 963 | 969 | 954 | - | 966 | - | 3 | 11 | 14 |
| 25 | 975 | 973 | 961 | 944 | 972 | 951 | 3 | 12 | 15 |
| 26 | 970 | 971 | - | 943 | 970 | 947 | 3 | 12 | 15 |
| 27 | 973 | 977 | 967 | 947 | 974 | 951 | 3 | 13 | 16 |
| 28 | 979 | 979 | 972 | 953 | 973 | 948 | 4 | 13 | 17 |
| 29 | 969 | 978 | 977 | 961 | 977 | 961 | 4 | 14 | 18 |
| 30 | 980 | 984 | 974 | 956 | 977 | 948 | 4 | 14 | 18 |
| 31 | 975 | 976 | 970 | 958 | 983 | 952 | +0.004 | +0.015 | +0.019 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

A V R I L

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 970 | 970 | 965 | 948 | 970 | 944 | +0.004 | +0.015 | +0.019 |
| 2 | 974 | 968 | 961 | 945 | 966 | 947 | 4 | 16 | 20 |
| 3 | 977 | 975 | 969 | 956 | 978 | 959 | 4 | 16 | 20 |
| 4 | 989 | 986 | 978 | 965 | 990 | 967 | 4 | 17 | 21 |
| 5 | - | - | - | - | - | 981 | 4 | 18 | 22 |
| 6 | 010 | 011 | 003 | 990 | 015 | 994 | 4 | 18 | 22 |
| 7 | 022 | 017 | 008 | 994 | 013 | 992 | 4 | 19 | 23 |
| 8 | 007 | 004 | 998 | 976 | 004 | 975 | 4 | 19 | 23 |
| 9 | 991 | 993 | 984 | 963 | 994 | 961 | 4 | 20 | 24 |
| 10 | 992 | 994 | 984 | 965 | 988 | 964 | 4 | 20 | 24 |
| 11 | 991 | 992 | 991 | 961 | 991 | 964 | 5 | 21 | 26 |
| 12 | 989 | 988 | 986 | 962 | 994 | 967 | 5 | 21 | 26 |
| 13 | 995 | 996 | 987 | 967 | 996 | 976 | 5 | 22 | 27 |
| 14 | 005 | 008 | 974 | 974 | 005 | 981 | 5 | 22 | 27 |
| 15 | 993 | 994 | 989 | 959 | 987 | 957 | 5 | 23 | 28 |
| 16 | - | - | 977 | 952 | 984 | 951 | 5 | 23 | 28 |
| 17 | 984 | 985 | 989 | 966 | 985 | 969 | 5 | 24 | 29 |
| 18 | 992 | 995 | 991 | 963 | 994 | 967 | 5 | 24 | 29 |
| 19 | 995 | 994 | 989 | - | 993 | 969 | 5 | 25 | 30 |
| 20 | 995 | 999 | 997 | 974 | 001 | 971 | 5 | 25 | 30 |
| 21 | 005 | 006 | 003 | 979 | 010 | 982 | 5 | 26 | 31 |
| 22 | 991 | 991 | 015 | 984 | 995 | 986 | 5 | 26 | 31 |
| 23 | 993 | 990 | 010 | 985 | 999 | 985 | 5 | 27 | 32 |
| 24 | 997 | 992 | 012 | 983 | 994 | 982 | 5 | 27 | 32 |
| 25 | 000 | 998 | 014 | 995 | 001 | 990 | 5 | 28 | 33 |
| 26 | 999 | 000 | 018 | 992 | 002 | 993 | 5 | 28 | 33 |
| 27 | 005 | 002 | 022 | - | 003 | - | 5 | 28 | 33 |
| 28 | 000 | 001 | 026 | 991 | 003 | 991 | 5 | 29 | 34 |
| 29 | 003 | 000 | 017 | 989 | 995 | 990 | 5 | 29 | 34 |
| 30 | 004 | 004 | - | 988 | 002 | 012 | +0.005 | +0.030 | +0.035 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

M A I

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 997 | 002 | 022 | 009 | 994 | 007 | +0.005 | +0.030 | +0.035 |
| 2 | 997 | 996 | 017 | 001 | 994 | 012 | 5 | 30 | 35 |
| 3 | 995 | 997 | 020 | - | 994 | 004 | 5 | 31 | 36 |
| 4 | 997 | 999 | 025 | - | 002 | 003 | 5 | 31 | 36 |
| 5 | 998 | 999 | 026 | 008 | 997 | 008 | 5 | 31 | 36 |
| 6 | 995 | 995 | 025 | 005 | 997 | 004 | 5 | 32 | 37 |
| 7 | 988 | 988 | 010 | 993 | 988 | 991 | 5 | 32 | 37 |
| 8 | 984 | 985 | 012 | 001 | 989 | 997 | 5 | 32 | 37 |
| 9 | 987 | 985 | 014 | 998 | 993 | 992 | 5 | 33 | 38 |
| 10 | 987 | 981 | - | 995 | 984 | 994 | 5 | 33 | 38 |
| 11 | 985 | 985 | - | 998 | 987 | 002 | 5 | 33 | 38 |
| 12 | 989 | 984 | 016 | 998 | 991 | 001 | 5 | 33 | 38 |
| 13 | 995 | 990 | 021 | 006 | 997 | 005 | 5 | 34 | 39 |
| 14 | 996 | 991 | - | 004 | 994 | 006 | 5 | 34 | 39 |
| 15 | 994 | 996 | 020 | 000 | 995 | 003 | 5 | 34 | 39 |
| 16 | 996 | 997 | 020 | 000 | 995 | 002 | 5 | 34 | 39 |
| 17 | 989 | 991 | 024 | - | 988 | 994 | 5 | 34 | 39 |
| 18 | 991 | 988 | 023 | 997 | 984 | 999 | 5 | 35 | 40 |
| 19 | 989 | 990 | 025 | 994 | 988 | 999 | 5 | 35 | 40 |
| 20 | 989 | 989 | 017 | 991 | - | 996 | 5 | 35 | 40 |
| 21 | 995 | 993 | 023 | 996 | 985 | 997 | 5 | 35 | 40 |
| 22 | 987 | 988 | 021 | - | 987 | 996 | 5 | 35 | 40 |
| 23 | 983 | 985 | 017 | 988 | 981 | 990 | 5 | 35 | 40 |
| 24 | 983 | 986 | 020 | 995 | 986 | 992 | 5 | 35 | 40 |
| 25 | 992 | 993 | 026 | 002 | 993 | 000 | 5 | 35 | 40 |
| 26 | 992 | 996 | 030 | 006 | 002 | 005 | 5 | 35 | 40 |
| 27 | 997 | 000 | 031 | 009 | 000 | 008 | 5 | 35 | 40 |
| 28 | 000 | 003 | 036 | 011 | 001 | 011 | 5 | 35 | 40 |
| 29 | 001 | 996 | 041 | - | 005 | 011 | 5 | 35 | 40 |
| 30 | 004 | 998 | 044 | 018 | 006 | 014 | 5 | 35 | 40 |
| 31 | 004 | 000 | 040 | 012 | 008 | 020 | +0.005 | +0.035 | +0.040 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
A L'OBSERVATOIRE DE BEOGRAD
par Z.M.BRKIĆ

J U I N

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 006 | 008 | 044 | 013 | 008 | 015 | +0.005 | +0.035 | +0.040 |
| 2 | 006 | 005 | 040 | 009 | 004 | 013 | 5 | 35 | 40 |
| 3 | 000 | 001 | 036 | 009 | 997 | 001 | 5 | 34 | 39 |
| 4 | 997 | 998 | - | 000 | 994 | 001 | 5 | 34 | 39 |
| 5 | 002 | 003 | 037 | 005 | 997 | 005 | 5 | 34 | 39 |
| 6 | 999 | 999 | 038 | 005 | 996 | 007 | 5 | 34 | 39 |
| 7 | 000 | 003 | 045 | - | 998 | 010 | 5 | 34 | 39 |
| 8 | 998 | 001 | 041 | 005 | - | 010 | 5 | 34 | 39 |
| 9 | 000 | 996 | 039 | 002 | 997 | 006 | 5 | 33 | 38 |
| 10 | 990 | 997 | 039 | 003 | 992 | 000 | 5 | 33 | 38 |
| 11 | 989 | 993 | 031 | 998 | 986 | 996 | 5 | 33 | 38 |
| 12 | 986 | 988 | 033 | 997 | 987 | 994 | 5 | 33 | 38 |
| 13 | 980 | 984 | 023 | 992 | 981 | 996 | 5 | 32 | 37 |
| 14 | 983 | 979 | 028 | 990 | 981 | 989 | 5 | 32 | 37 |
| 15 | 982 | 981 | 023 | 990 | 982 | 997 | 5 | 32 | 37 |
| 16 | 973 | 972 | 015 | 983 | 975 | 988 | 5 | 31 | 36 |
| 17 | 970 | 970 | 020 | 984 | - | 987 | 5 | 31 | 36 |
| 18 | 975 | 971 | 015 | - | 976 | 991 | 5 | 30 | 35 |
| 19 | 976 | 973 | 021 | 986 | 979 | 987 | 4 | 30 | 34 |
| 20 | 980 | 974 | 020 | 990 | 977 | 992 | 4 | 30 | 34 |
| 21 | 980 | 974 | 027 | - | 977 | 990 | 4 | 29 | 33 |
| 22 | 971 | 971 | 020 | 988 | 968 | 984 | 4 | 29 | 33 |
| 23 | 970 | 962 | 011 | 978 | 967 | 979 | 4 | 28 | 32 |
| 24 | 964 | 971 | 013 | 983 | 972 | 990 | 4 | 28 | 32 |
| 25 | 979 | 977 | 031 | 997 | 980 | 999 | 4 | 27 | 31 |
| 26 | 995 | 998 | - | 014 | 996 | 012 | 4 | 27 | 31 |
| 27 | 990 | 995 | 045 | 009 | 996 | 005 | 4 | 26 | 30 |
| 28 | 992 | - | 044 | 012 | 999 | 007 | 4 | 26 | 30 |
| 29 | 994 | 993 | - | 012 | 999 | 005 | 4 | 25 | 29 |
| 30 | 991 | 993 | 038 | 014 | 989 | - | +0.004 | +0.024 | +0.028 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
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par Z.M.BRKIĆ

J U I L L E T

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 982 | 981 | 034 | 938 | 971 | 939 | +0.004 | +0.024 | +0.028 |
| 2 | 966 | 966 | - | 929 | 963 | 926 | 4 | 23 | 27 |
| 3 | 957 | 952 | 022 | 932 | 959 | 925 | 4 | 23 | 27 |
| 4 | 960 | 955 | 007 | 927 | 959 | 924 | 4 | 22 | 26 |
| 5 | 955 | 952 | 011 | - | 958 | 926 | 3 | 22 | 25 |
| 6 | 958 | 951 | 019 | 927 | - | 930 | 3 | 21 | 24 |
| 7 | 960 | 959 | 028 | 928 | 967 | 938 | 3 | 20 | 23 |
| 8 | 974 | 967 | 023 | 938 | 976 | 948 | 3 | 19 | 22 |
| 9 | 971 | 970 | 019 | 943 | 972 | 946 | 3 | 19 | 22 |
| 10 | 974 | 969 | 030 | 940 | 969 | 947 | 3 | 18 | 21 |
| 11 | 977 | 976 | 025 | 942 | 974 | 951 | 3 | 17 | 20 |
| 12 | 980 | 982 | 029 | 950 | - | 949 | 3 | 16 | 19 |
| 13 | 981 | 979 | 034 | 952 | 976 | 955 | 3 | 16 | 19 |
| 14 | 997 | 977 | 034 | 951 | 981 | 963 | 3 | 15 | 18 |
| 15 | 993 | 989 | 043 | 958 | 984 | 963 | 3 | 14 | 17 |
| 16 | 993 | 993 | 051 | 963 | 985 | 970 | 3 | 14 | 17 |
| 17 | 992 | 995 | 047 | 965 | 989 | 964 | 3 | 13 | 16 |
| 18 | 987 | 987 | - | 967 | 989 | 969 | 3 | 12 | 15 |
| 19 | 990 | 990 | 037 | - | 982 | 969 | 2 | 11 | 13 |
| 20 | 995 | 990 | 042 | 969 | 991 | 972 | 2 | 11 | 13 |
| 21 | 989 | 981 | 044 | 967 | 984 | 970 | 2 | 10 | 12 |
| 22 | 987 | 985 | 038 | 963 | 987 | 965 | 2 | 9 | 11 |
| 23 | 983 | 983 | 033 | 964 | 985 | - | 2 | 8 | 10 |
| 24 | 982 | 984 | 037 | 963 | 982 | 970 | 2 | 8 | 10 |
| 25 | 990 | 980 | 039 | 964 | 985 | 965 | 2 | 7 | 9 |
| 26 | 978 | 978 | 034 | 960 | 984 | 963 | 2 | 6 | 8 |
| 27 | 990 | 985 | 040 | 960 | 985 | 965 | 2 | 5 | 7 |
| 28 | 983 | 984 | 035 | 961 | 978 | 964 | 2 | 4 | 6 |
| 29 | 985 | 980 | 036 | 961 | 980 | 969 | 2 | 4 | 6 |
| 30 | 989 | 992 | 040 | 970 | 987 | 977 | 2 | 3 | 5 |
| 31 | 991 | 990 | 045 | 976 | 989 | 974 | +0.002 | +0.002 | +0.004 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
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par Z.M.BRKIĆ

A O Û T

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 966 | 968 | 972 | 954 | - | 957 | +0.001 | +0.001 | +0.002 |
| 2 | 970 | 975 | 974 | - | 967 | 958 | 1 | + 1 | 2 |
| 3 | 968 | 969 | 978 | 959 | 967 | 958 | 1 | 0 | + 1 |
| 4 | 978 | 974 | 978 | 957 | 975 | 957 | 1 | - 1 | 0 |
| 5 | 971 | 972 | 975 | 954 | 972 | 952 | 1 | 2 | - 1 |
| 6 | 976 | 965 | 972 | 955 | 974 | 949 | 1 | 2 | 1 |
| 7 | 959 | 959 | - | 946 | 963 | 943 | 1 | 3 | 2 |
| 8 | 959 | 960 | 958 | 945 | 962 | 946 | 1 | 4 | 3 |
| 9 | 960 | 958 | 965 | 946 | 966 | 937 | 1 | 5 | 4 |
| 10 | 955 | 960 | 958 | 947 | 963 | 949 | 1 | 5 | 4 |
| 11 | 957 | 958 | 963 | 942 | 962 | 952 | 1 | 6 | 5 |
| 12 | 980 | 980 | 978 | 961 | 982 | 963 | 1 | 7 | 6 |
| 13 | 984 | 982 | 979 | 961 | 983 | 960 | 1 | 8 | 7 |
| 14 | 979 | 976 | 979 | 957 | 977 | 957 | 1 | 8 | 7 |
| 15 | 983 | 971 | 986 | 952 | 973 | 952 | 1 | 9 | 8 |
| 16 | 972 | 973 | 977 | - | - | 953 | 1 | 10 | 9 |
| 17 | 975 | 971 | 969 | 943 | 976 | 947 | 1 | 10 | 9 |
| 18 | 965 | 967 | 965 | 940 | 969 | 943 | 1 | 11 | 10 |
| 19 | 958 | 958 | 958 | 933 | 960 | 935 | 1 | 12 | 11 |
| 20 | 962 | 964 | 961 | 934 | 963 | 930 | 1 | 12 | 11 |
| 21 | 955 | 956 | 959 | 934 | 954 | 933 | 1 | 13 | 12 |
| 22 | 939 | 945 | 941 | 915 | 941 | 919 | 1 | 14 | 13 |
| 23 | 941 | 940 | 944 | 915 | 940 | 917 | 1 | 14 | 13 |
| 24 | 936 | 939 | 938 | 910 | 943 | 908 | 1 | 15 | 14 |
| 25 | 933 | 936 | 936 | 908 | 938 | 910 | 1 | 16 | 15 |
| 26 | 938 | 935 | 934 | 910 | 940 | 911 | 1 | 16 | 15 |
| 27 | 943 | 936 | 935 | 910 | 938 | 905 | 1 | 17 | 16 |
| 28 | 935 | 937 | 946 | 910 | 942 | 909 | 1 | 17 | 16 |
| 29 | 939 | 938 | - | 909 | 938 | 913 | 1 | 18 | 17 |
| 30 | 942 | 937 | 939 | 903 | 942 | 917 | 1 | 18 | 17 |
| 31 | 943 | 940 | 939 | 901 | 945 | 916 | +0.001 | -0.019 | -0.018 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
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par Z.M.BRKIĆ

S E P T E M B R E

| Date | $TQG_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 933 | 931 | 934 | 895 | 939 | 899 | +0.001 | -0.019 | -0.018 |
| 2 | 937 | 923 | 933 | 893 | 932 | 896 | 1 | 20 | 19 |
| 3 | 934 | 933 | 933 | 897 | 937 | 902 | 1 | 20 | 19 |
| 4 | 933 | 930 | 933 | 895 | 932 | 897 | 1 | 21 | 20 |
| 5 | 952 | 941 | 957 | 900 | 949 | 921 | 1 | 21 | 20 |
| 6 | 952 | 947 | 945 | - | 943 | - | 1 | 22 | 21 |
| 7 | 951 | 945 | 952 | 909 | 948 | 911 | 1 | 22 | 21 |
| 8 | 940 | 938 | 939 | 895 | 936 | 899 | 1 | 23 | 22 |
| 9 | 929 | 928 | 927 | 880 | 928 | 890 | 1 | 23 | 22 |
| 10 | 926 | 921 | 928 | 880 | 922 | 893 | 1 | 23 | 22 |
| 11 | 941 | 942 | 942 | 895 | 941 | 917 | 1 | 24 | 23 |
| 12 | 956 | 955 | 959 | 910 | 955 | 914 | 1 | 24 | 23 |
| 13 | 950 | 949 | 948 | 903 | 949 | 908 | 1 | 24 | 23 |
| 14 | 946 | 942 | 941 | 896 | 941 | 900 | 1 | 25 | 24 |
| 15 | 958 | 952 | 963 | 915 | 967 | 959 | 1 | 25 | 24 |
| 16 | 989 | 995 | 974 | 936 | 974 | 900 | 1 | 25 | 24 |
| 17 | 954 | 959 | 942 | 913 | 955 | 918 | + 1 | 26 | 25 |
| 18 | 980 | 990 | 973 | 945 | 991 | 943 | 0 | 26 | 26 |
| 19 | 988 | 994 | 977 | 944 | 987 | 929 | 0 | 26 | 26 |
| 20 | 974 | 980 | 964 | - | 980 | 919 | 0 | 26 | 26 |
| 21 | 956 | 964 | 945 | 905 | 954 | 897 | 0 | 27 | 27 |
| 22 | 957 | 960 | 945 | 906 | 959 | 896 | 0 | 27 | 27 |
| 23 | 966 | 973 | 936 | 892 | 968 | 897 | 0 | 27 | 27 |
| 24 | 985 | 982 | 955 | 904 | 987 | 906 | 0 | 27 | 27 |
| 25 | 991 | 987 | 956 | 909 | 987 | 917 | 0 | 27 | 27 |
| 26 | 006 | 008 | 986 | 927 | 007 | 932 | 0 | 27 | 27 |
| 27 | 000 | 008 | 967 | 923 | 003 | 917 | 0 | 28 | 28 |
| 28 | 999 | 002 | 964 | 916 | 003 | 916 | 0 | 28 | 28 |
| 29 | 000 | 009 | 971 | 921 | 000 | 912 | 0 | 28 | 28 |
| 30 | 994 | 001 | 961 | 915 | 992 | 908 | 0.000 | -0.028 | -0.028 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
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par Z.M.BRKIĆ

O C T O B R E

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_1-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 978 | 986 | 944 | 894 | 978 | 882 | 0.000 | -0.028 | -0.028 |
| 2 | 980 | 982 | 948 | 898 | 982 | 897 | 0 | 28 | 28 |
| 3 | 979 | 981 | 941 | 896 | 985 | 896 | 0 | 28 | 28 |
| 4 | 985 | 984 | 950 | - | 985 | 896 | 0 | 28 | 28 |
| 5 | 981 | 973 | 939 | 889 | 978 | 889 | 0 | 28 | 28 |
| 6 | 978 | 979 | 939 | 887 | 980 | 892 | 0 | 28 | 28 |
| 7 | 982 | 974 | 940 | 894 | 992 | 904 | 0 | 28 | 28 |
| 8 | 993 | 986 | 948 | 904 | 000 | 902 | 0 | 28 | 28 |
| 9 | 000 | 995 | 961 | 900 | 007 | 905 | 0 | 28 | 28 |
| 10 | 999 | 995 | 959 | 901 | 000 | 900 | 0 | 28 | 28 |
| 11 | 999 | 986 | 958 | 894 | 993 | 899 | 0 | 28 | 28 |
| 12 | 987 | 989 | 948 | 888 | 985 | 889 | 0 | 28 | 28 |
| 13 | 981 | 982 | 944 | 880 | 981 | 884 | 0 | 28 | 28 |
| 14 | 983 | 985 | 945 | 882 | 979 | 876 | 0 | 28 | 28 |
| 15 | 976 | 976 | 932 | 876 | 973 | 874 | 0 | 28 | 28 |
| 16 | 977 | 979 | 932 | 871 | 982 | 875 | 0 | 27 | 27 |
| 17 | 984 | 984 | 944 | 877 | 983 | 878 | 0 | 27 | 27 |
| 18 | 982 | 985 | 943 | - | 983 | 876 | 0 | 27 | 27 |
| 19 | 983 | 984 | 942 | 874 | - | 872 | 0 | 27 | 27 |
| 20 | 988 | 992 | 951 | 882 | 990 | 880 | 0 | 27 | 27 |
| 21 | 992 | 991 | 947 | 887 | 996 | 888 | 0 | 27 | 27 |
| 22 | 000 | 997 | 957 | 893 | 999 | 888 | 0 | 27 | 27 |
| 23 | 001 | 004 | 959 | 890 | 002 | 886 | 0 | 26 | 26 |
| 24 | 001 | 001 | 965 | 893 | 008 | 897 | 0 | 26 | 26 |
| 25 | 004 | 005 | 968 | 897 | 012 | 898 | 0 | 26 | 26 |
| 26 | 010 | 008 | 966 | 897 | 009 | 894 | 0 | 26 | 26 |
| 27 | 011 | 009 | 984 | 899 | 011 | 892 | 0 | 26 | 26 |
| 28 | 007 | 004 | 981 | 889 | - | 897 | 0 | 25 | 25 |
| 29 | 993 | 987 | 951 | 875 | 990 | 871 | 0 | 25 | 25 |
| 30 | 981 | 977 | 945 | 860 | 981 | 862 | 0 | 25 | 25 |
| 31 | 980 | 981 | 944 | 857 | 983 | 919 | 0.000 | -0.025 | -0.025 |

HEURES DEMI-DÉFINITIVES DES ÉMISSIONS ENREGISTÉES DE T.S.F.
DÉDUITES DES DÉTERMINATIONS DE L'HEURE, FAITES EN 1961.
A L'OBSERVATOIRE DE BEOGRAD

par Z.M.BRKIĆ

N O V E M B R E

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $TQG_5$ 21.62 $9^h36^m$ | $GPB_{30}$ 29.03 $10^h0^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2-TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 986 | 982 | 950 | - | 984 | 929 | 0.000 | -0.024 | -0.024 |
| 2 | 998 | 996 | 962 | 933 | 998 | 941 | 0 | 24 | 24 |
| 3 | 999 | 999 | 965 | 936 | 997 | 934 | 0 | 24 | 24 |
| 4 | 998 | 001 | 968 | 931 | 997 | 935 | 0 | 24 | 24 |
| 5 | - | - | - | - | - | - | 0 | 24 | 24 |
| 6 | 994 | 998 | - | 930 | 998 | - | 0 | 23 | 23 |
| 7 | 984 | 995 | 959 | 920 | 990 | 934 | 0 | 23 | 23 |
| 8 | 983 | 993 | 958 | 920 | 986 | 915 | 0 | 23 | 23 |
| 9 | 993 | 986 | 956 | 923 | 990 | 926 | 0 | 22 | 22 |
| 10 | 982 | 982 | 955 | 921 | 992 | 917 | 0 | 22 | 22 |
| 11 | 986 | 989 | 956 | 928 | 993 | 923 | 0 | 22 | 22 |
| 12 | - | - | - | - | - | 926 | 0 | 22 | 22 |
| 13 | 992 | 989 | 960 | 926 | 996 | 923 | 0 | 21 | 21 |
| 14 | 991 | 991 | 961 | 925 | 996 | - | 0 | 21 | 21 |
| 15 | 991 | 992 | 966 | - | 995 | 930 | 0 | 21 | 21 |
| 16 | 994 | 987 | 956 | 920 | 993 | - | 0 | 21 | 21 |
| 17 | 994 | 986 | 964 | 920 | 993 | 923 | 0 | 20 | 20 |
| 18 | 995 | 994 | 967 | 925 | 992 | 921 | 0 | 20 | 20 |
| 19 | 989 | 983 | 959 | 930 | 989 | 917 | 0 | 20 | 20 |
| 20 | 981 | 973 | 944 | 900 | 975 | 901 | 0 | 20 | 20 |
| 21 | 978 | 974 | 944 | 902 | 977 | 898 | 0 | 19 | 19 |
| 22 | 972 | 972 | 944 | 900 | 970 | 910 | 0 | 19 | 19 |
| 23 | 977 | 982 | 956 | 904 | 980 | 907 | 0 | 19 | 19 |
| 24 | 981 | 984 | 956 | 907 | 985 | 909 | 0 | 19 | 19 |
| 25 | 987 | 994 | 966 | 914 | 989 | 921 | 0 | 18 | 18 |
| 26 | 991 | 994 | 976 | 922 | 998 | 929 | 0 | 18 | 18 |
| 27 | 999 | 000 | 978 | 930 | 006 | 939 | 0 | 18 | 18 |
| 28 | 005 | 008 | 988 | 936 | 002 | 934 | 0 | 18 | 18 |
| 29 | 002 | 002 | 981 | - | - | 935 | 0 | 17 | 17 |
| 30 | 005 | 001 | - | 933 | 006 | 936 | 0.000 | -0.017 | -0.017 |

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D E C E M B R E

| Date | $TQC_9$ 27.84 $8^h\ 6^m$ | $GPB_{30}$ 29.03 $9^h\ 0^m$ | $TQG_5$ 21.62 $9^h36^m$ | RWM 20.00 $12^h6^m$ | $TQG_5$ 21.62 $13^h6^m$ | RWM 60.00 $20^h6^m$ | $\Delta\lambda$ | $\Delta T_s$ en $10^{-3}$ | $TU_2$-$TU_0$ |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 000 | 991 | 004 | 931 | 002 | 931 | 0.000 | -0.017 | -0.017 |
| 2 | 006 | 986 | 000 | 930 | 005 | 925 | 0 | 17 | 17 |
| 3 | 005 | 986 | 014 | 937 | - | 923 | 0 | 16 | 16 |
| 4 | 991 | 989 | 988 | 915 | 997 | 920 | 0 | 16 | 16 |
| 5 | 992 | 968 | 988 | 911 | 998 | 912 | 0 | 16 | 16 |
| 6 | 988 | 976 | 992 | - | 996 | 913 | 0 | 16 | 16 |
| 7 | 997 | 980 | 995 | 917 | 998 | 916 | 0 | 15 | 15 |
| 8 | 999 | 981 | - | - | - | 915 | 0 | 15 | 15 |
| 9 | 992 | 972 | 989 | 912 | 993 | 912 | 0 | 15 | 15 |
| 10 | 994 | 970 | 992 | 908 | 987 | 923 | 0 | 15 | 15 |
| 11 | 991 | 981 | 993 | 910 | 985 | 907 | 0 | 14 | 14 |
| 12 | 992 | 981 | 994 | 906 | 986 | 905 | 0 | 14 | 14 |
| 13 | 988 | 972 | 998 | 904 | 984 | 908 | 0 | 14 | 14 |
| 14 | 992 | 977 | 991 | 909 | 990 | 910 | 0 | 14 | 14 |
| 15 | 991 | - | 993 | 910 | 989 | 912 | 0 | 14 | 14 |
| 16 | 993 | 980 | 989 | 908 | 990 | 906 | 0 | 14 | 14 |
| 17 | 987 | 979 | 989 | 910 | 997 | 907 | 0 | 13 | 13 |
| 18 | 999 | 980 | 992 | 918 | 997 | 917 | 0 | 13 | 13 |
| 19 | 993 | 981 | 995 | 913 | 996 | 909 | 0 | 13 | 13 |
| 20 | 985 | 978 | 986 | - | 991 | 902 | 0 | 13 | 13 |
| 21 | 985 | 981 | 984 | 910 | 991 | 905 | 0 | 13 | 13 |
| 22 | 984 | 974 | 979 | 902 | 991 | 897 | 0 | 13 | 13 |
| 23 | 982 | 981 | 976 | 903 | 984 | 897 | - 1 | 12 | 13 |
| 24 | 991 | 974 | 978 | 900 | 977 | 899 | 1 | 12 | 13 |
| 25 | 975 | 973 | 973 | 899 | 981 | 898 | 1 | 12 | 13 |
| 26 | 980 | 983 | 976 | 878 | 980 | 898 | 1 | 12 | 13 |
| 27 | 978 | 978 | 971 | 892 | 979 | 895 | 1 | 12 | 13 |
| 28 | 977 | 988 | 974 | 896 | - | 904 | 1 | 12 | 13 |
| 29 | 975 | 975 | 971 | 889 | 979 | 897 | 1 | 11 | 12 |
| 30 | 979 | 982 | 975 | 894 | 984 | 901 | 1 | 11 | 12 |
| 31 | 981 | 986 | 984 | 899 | 985 | - | -0.001 | -0.011 | -0.012 |