

all times in U.T.

| | RT | TW | UU | WZ | XZ | AB | AB | AD | BD | BX | DS | QX | QX | RY | CX | CZ | EK | EK | XZ | KO | KP | OO | OO |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | AND | AND | AND | AND | AND | AND | AND | AND | AND | AND | AND | AND | AND | AQR | AQR | AQR | AQR | AQR | AQL | AQL | AQL | AQL | AQL |
| MAX | 9.3 | 8.8 | 11.2 | 11.6 | 10.0 | 9.3 | 9.3 | 11.1 | 11.3 | 8.6 | 10.8 | 11.3 | 11.3 | 8.8 | 10.7 | 10.3 | 10.8 | 10.8 | 9.3 | 8.3 | 9.7 | 9.2 | 9.2 |
| MIN | 10.2 | 11.0 | 14.1 | 12.6 | 13.0 | 10.2 | 10.2 | 11.6 | 11.7 | 9.5 | 11.4 | 11.6 | 11.6 | 10.1 | 12.0 | 11.2 | 11.3 | 11.3 | 11.2 | 9.3 | 10.5 | 10.1 | 10.1 |
| DUR | 3 | 11 | 8 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 5 | 3 | 3 | 3 | 3 | 7 | 5 | 4 | 3 | 3 |
| TOT | | 2 | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | (S) | | | | | | (S) | | | | (S) | | | | | | (S) |
| 0- 1 | 6.5 | | | 5.5 | | 7.5 | 3.5 | | 9.0 | 6.0 | 9.0 | 9.0 | | | 6.0 | | 7.5 | | | | | 9.5 | 3.0 |
| 1- 2 | | | 5.5 | | | 7.0 | 3.0 | | 7.0 | | 9.5 | | | | 8.5 | | | | | 2.0 | 9.5 | 3.5 | |
| 2- 3 | 4.0 | | | 7.5 | | 7.0 | 3.0 | | 5.0 | | 9.5 | | 5.5 | | | | 11.0 | | | | | 10.0 | 4.0 |
| 3- 4 | 10.0 | 8.5 | | | | 7.0 | 3.0 | | 3.5 | 7.5 | 10.0 | 6.5 | | | | | 9.0 | | | | | 10.5 | 4.0 |
| 4- 5 | | | 5.0 | 9.5 | | 7.0 | 3.0 | | | | 10.0 | | 7.0 | | | | | 7.0 | | 11.0 | 10.5 | 4.5 | |
| 5- 6 | 7.5 | | | | | 6.5 | | | 11.0 | | 10.5 | 8.0 | | | 6.0 | 10.0 | | | | | | 11.0 | 5.0 |
| 6- 7 | | | | | | 6.5 | | | 9.0 | 8.5 | 10.5 | | 8.5 | | 9.0 | 6.5 | 10.5 | | | | | | 5.0 |
| 7- 8 | 4.5 | | | | | 6.5 | | | 7.5 | | 11.0 | 9.5 | | | | | | 8.5 | | | | | 5.5 |
| 8- 9 | 11.0 | | | | | 6.5 | | 11.0 | 5.5 | | 11.0 | | | | | | 6.5 | | | | | | 6.0 |
| 9-10 | 2.0 | | | 6.5 | 6.5 | 6.5 | | 11.0 | 4.0 | 9.5 | | | 6.0 | | | | | | | | | 4.5 | 6.0 |
| 10-11 | 8.0 | | | | | 6.0 | | 10.5 | 2.0 | | | 6.5 | | | 6.0 | | 10.0 | | | | | | 6.5 |
| 11-12 | | | | 8.5 | | 6.0 | | 10.0 | | 5.5 | | | 7.5 | 10.5 | 9.0 | 11.0 | 8.0 | | 7.5 | 10.5 | 4.5 | | 7.0 |
| 12-13 | 5.5 | | | | | 6.0 | | 10.0 | 9.5 | 11.0 | | 8.0 | | | | 7.5 | | 6.0 | | | | | 7.0 |
| 13-14 | | | 10.5 | 8.0 | | 6.0 | | 9.5 | 8.0 | | | | 9.0 | 10.0 | | | | | 11.0 | | | | 7.5 |
| 14-15 | 2.5 | | | | | 6.0 | | 9.0 | 6.0 | 7.0 | | 9.5 | | | | | 9.5 | | | 7.5 | | 1.5 | 8.0 |
| 15-16 | 9.0 | | | | | 5.5 | | 9.0 | 4.5 | | | | | 9.0 | 6.5 | | | 7.5 | | | | | 2.0 |
| 16-17 | | | 5.5 | | | 5.5 | | 8.5 | 2.5 | | | | 6.0 | | 9.0 | | | | | | | | 2.5 |
| 17-18 | 6.0 | | | 10.0 | | 5.5 | | 8.0 | | 8.0 | | 7.0 | | 8.5 | | | 11.0 | | | 4.0 | | | 2.5 |
| 18-19 | | | | 7.5 | | 5.5 | | 8.0 | 10.0 | | | | 7.5 | | | 8.5 | | 9.0 | | | | | 3.0 |
| 19-20 | 3.5 | | | | | 5.5 | | 7.5 | 8.5 | | | 8.5 | | 7.5 | | | 7.0 | | | | | | 3.5 |
| 20-21 | 9.5 | | | 9.5 | | 5.0 | | 7.0 | 6.5 | 9.5 | | | 9.0 | | 6.5 | | | | | | | | 3.5 |
| 21-22 | | | | | | 5.0 | | 7.0 | 4.5 | | | 9.5 | | 6.5 | 9.0 | | | 10.5 | | | 7.0 | | 4.0 |
| 22-23 | 7.0 | | | | | 5.0 | | 6.5 | 3.0 | | | 5.5 | | | | | 9.0 | | | | | | 4.5 |
| 23-24 | | | | | | 5.0 | | 6.0 | | 10.5 | | | 6.0 | 6.0 | | | | 7.0 | | | | | 4.5 |
| 24-25 | 4.0 | | | | | 5.0 | | 6.0 | 10.5 | | | 7.0 | | | | 9.5 | | | 3.5 | | | | 5.0 |
| 25-26 | 10.5 | | | 6.5 | | 4.5 | | 5.5 | 8.5 | 6.5 | | | 7.5 | 5.0 | 6.5 | 6.0 | 10.5 | | | | | | 5.5 |
| 26-27 | | | | | | 4.5 | | 5.0 | 7.0 | | | 8.5 | | | 9.0 | | | 8.5 | 7.0 | | | | 5.5 |
| 27-28 | 7.5 | | | 8.5 | | 4.5 | | 5.0 | 5.0 | | | | 9.0 | 4.5 | | | 6.5 | | | | | | 6.0 |
| 28-29 | | | | | 6.5 | 4.5 | | 4.5 | 3.5 | 7.5 | | 10.0 | | | | | | | 10.5 | | | | 6.5 |
| 29-30 | 5.0 | | | 10.5 | | 4.0 | | 4.0 | | | | 5.5 | | | | | | 10.0 | | | | | 6.5 |
| 30-31 | | | | | | 4.0 | | 4.0 | 11.0 | | | | 6.5 | | 6.5 | 10.5 | 8.0 | | | | | | 7.0 |

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| | V342 | V343 | V346 | RX | SS | SS | RY | SX | TT | WW | AP | AR | CL | EM | EP | HP | HP | V459 | SS | SS | SS | TU | TU |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | AQL | AQL | AQL | ARI | ARI | ARI | AUR | AUR | AUR | AUR | AUR | AUR | AUR | AUR | AUR | AUR | AUR | AUR | BOO | BOO | BOO | BOO | BOO |
| MAX | 9.0 | 10.6 | 9.0 | 9.4 | 10.1 | 10.1 | 11.7 | 8.2 | 8.7 | 5.7 | 10.9 | 6.0 | 11.7 | 11.0 | 10.8 | 10.8 | 10.8 | 7.7 | 10.3 | 10.3 | 10.3 | 11.7 | 11.7 |
| MIN | 12.5 | 12.3 | 10.4 | 9.9 | 11.1 | 11.1 | 14.0 | 9.0 | 9.7 | 6.4 | 11.4 | 6.7 | 13.2 | 11.9 | 11.3 | 11.5 | 11.5 | 8.1 | 11.0 | 11.0 | 11.0 | 12.7 | 12.7 |
| DUR | 7 | 4 | 4 | 4 | 3 | 3 | 6 | 4 | 5 | 5 | 4 | 5 | 4 | 4 | 3 | 3 | 3 | 4 | 18 | 18 | 18 | 3 | 3 |
| TOT | 3 | | | | | | | | | | | | | | | | | | 6 | 6 | 6 | | |
| | | | | | | (S) | | | | (S) | | (S) | | | | | (S) | | (2) | | (3) | | (S) |
| 0- 1 | | | | | 6.5 | | | 10.0 | | | | | | | | | | | | | | 7.0 | 3.0 |
| 1- 2 | | | | | | 7.0 | | | 11.0 | | | | | | | | 10.0 | | | | | 6.0 | 2.0 |
| 2- 3 | 2.0 | | | | 7.5 | | | | | | | | | | | | | | | | | 5.5 | |
| 3- 4 | | | | | | 8.0 | | | | | | | | | | | | | | | | 5.0 | |
| 4- 5 | | | | | 8.0 | | | | | | | | | | | | | 10.5 | | | | 4.0 | |
| 5- 6 | | | | | | 8.5 | | | 11.0 | | 11.0 | | | | | | | | | | | 3.5 | 7.5 |
| 6- 7 | | 9.0 | 3.0 | | 9.0 | | | | | | | | | | | 9.5 | | | | | | 3.0 | 7.0 |
| 7- 8 | | | 5.5 | | 9.0 | | | | | | | 10.0 | | | | | | | | | | 2.0 | 6.0 |
| 8- 9 | | 5.5 | 8.0 | | 9.5 | | | | | | | | | | | | | | | | | | 5.5 |
| 9-10 | | | 10.5 | | | | | | 11.0 | | | | | 10.0 | | | | | | | | | 5.0 |
| 10-11 | | 1.5 | | | | | | | | | | | | | | | | | 2.0 | 5.0 | 8.0 | | 4.0 |
| 11-12 | | | | | | | | | | | | | | 10.5 | | | 9.0 | | | | | 7.5 | 3.5 |
| 12-13 | 6.0 | | | | | | | | | | | | | | | | | | | | | 6.5 | 3.0 |
| 13-14 | | | | | | | | | 11.0 | | | | | | | | | | | | | 6.0 | 2.0 |
| 14-15 | | | | | | 7.0 | 11.0 | | | | | | | | | | | | | | | 5.5 | |
| 15-16 | | | | 7.0 | 7.0 | | | | | | | | | | | | | | | | | 5.0 | |
| 16-17 | | | 2.0 | 7.5 | | 7.5 | | | | | | | | | | | | | | | | 4.0 | |
| 17-18 | | 11.0 | 4.5 | 8.5 | 8.0 | | | 8.5 | 11.0 | | | | | | | | | | | | | 3.5 | 7.5 |
| 18-19 | | | 7.0 | 9.0 | | 8.5 | | | | | | | | | | | | | | | | 3.0 | 6.5 |
| 19-20 | | 7.0 | 9.5 | 9.5 | 8.5 | | | | | | | | | | | | | | | | | 2.0 | 6.0 |
| 20-21 | | | | 10.5 | | 9.0 | | | | | | | | | | | | | | | | | 5.5 |
| 21-22 | | 3.5 | | 11.0 | 9.5 | | | | 11.0 | | | | 11.0 | | | | | 10.5 | | | | | 5.0 |
| 22-23 | 10.0 | | | | | 9.5 | | | | 11.0 | | | | | | | | | | | | | 4.0 |
| 23-24 | | | | | | | | 10.0 | | | | | | | | | | | | | | 7.5 | 3.5 |
| 24-25 | | | | | | | | | | | | | | 10.5 | | | | | | | | 6.5 | 3.0 |
| 25-26 | | | | | | | | 10.5 | | | | | | | | | | | 7.0 | | | 6.0 | 2.0 |
| 26-27 | | | | | | | | | | | | 10.5 | | | | | | | | | | 5.5 | |
| 27-28 | | | 3.5 | | | 6.5 | | | | | | | | | | | | | | | | 5.0 | |
| 28-29 | | | 6.0 | | 7.0 | | | | | | | | | | | | 11.0 | | | | | 4.0 | |
| 29-30 | 5.0 | | 8.5 | | 7.5 | | 7.5 | 11.0 | 10.5 | | | | | 11.0 | | | | | | | | 3.5 | 7.5 |
| 30-31 | | 8.5 | | | 7.5 | | | | | | | | | | | | | | | | | 3.0 | 6.5 |

| | TY | TY | TZ | TZ | UW | VW | VW | ZZ | AD | AD | BW | BW | 44 | 44 | Y | SV | AL | AN | CD | CD | RW | TY | RZ | |
|-------|------|------|------|------|------|------|------|-----|------|------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|-----|
| | BOO | BOO | BOO | BOO | BOO | BOO | BOO | BOO | BOO | BOO | BOO | BOO | BOO | BOO | CAM | CAM | CAM | CAM | CAM | CAM | CAM | CAP | CAP | CAS |
| MAX | 11.8 | 11.8 | 10.6 | 10.6 | 10.4 | 10.5 | 10.5 | 6.8 | 9.8 | 9.8 | 7.1 | 7.1 | 4.7 | 4.7 | 10.6 | 8.6 | 10.5 | 9.7 | 11.6 | 11.6 | 9.8 | 10.5 | 6.4 | |
| MIN | 12.3 | 12.3 | 11.1 | 11.1 | 11.4 | 11.0 | 11.0 | 7.6 | 10.4 | 10.2 | 7.5 | 7.5 | 4.9 | 4.8 | 12.4 | 9.4 | 11.3 | 10.5 | 11.8 | 11.8 | 10.8 | 11.6 | 7.8 | |
| DUR | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 4 | 5 | 5 | 3 | 3 | 6 | 3 | 5 | 8 | 5 | 5 | 5 | 4 | 4 | |
| TOT | | | | | | | | | | | | | | | | | | | | | | | | |
| | | (S) | | (S) | | | (S) | | (S) | | (S) | | (S) | | | | | | (S) | | | | | |
| 0- 1 | 2.5 | 6.5 | 6.5 | 3.0 | | | 4.5 | | | | | | | | | 10.5 | | | | 6.5 | | 7.0 | | |
| 1- 2 | | 5.0 | 4.0 | | | | 5.5 | | | | | | 2.5 | 6.0 | | | 9.0 | | 10.0 | | | | | |
| 2- 3 | | 4.0 | | 5.0 | | 2.0 | 6.0 | 5.5 | | | | | 4.5 | | | 5.0 | | | 4.5 | | | | | |
| 3- 4 | 6.5 | 3.0 | 6.0 | 2.5 | | 2.5 | 6.5 | | | | | | 6.0 | 3.0 | | 9.5 | | | | 8.0 | | 3.5 | 2.5 | |
| 4- 5 | 5.5 | 1.5 | 3.0 | 7.0 | | 3.0 | | | | | | | 4.5 | | | | | | | 2.5 | | | 7.0 | |
| 5- 6 | 4.5 | | | 4.0 | | 4.0 | | | | | 8.0 | 3.0 | 6.0 | | | 4.5 | 8.5 | | 6.0 | | 4.5 | | | |
| 6- 7 | 3.0 | 7.0 | 5.0 | | | 4.5 | | | | | | 4.5 | | 7.5 | 9.0 | | | | | 9.5 | | | | |
| 7- 8 | 2.0 | 6.0 | 2.5 | 6.0 | | 5.0 | | 5.5 | | | 7.0 | | 6.5 | 3.0 | | | | | | 3.5 | | 10.0 | | |
| 8- 9 | | 4.5 | 7.0 | 3.5 | | 6.0 | | | | 1.5 | | | | | 5.0 | | 3.5 | | 7.0 | | | | | |
| 9-10 | 7.5 | 3.5 | 4.5 | | | 6.5 | 2.5 | | 2.5 | | | | 3.5 | | | 8.0 | 8.5 | | | 10.5 | | | | |
| 10-11 | 6.0 | 2.5 | 2.0 | 5.5 | | 3.0 | | | | 3.5 | | | 5.0 | 2.0 | | | | | | 5.0 | | 6.0 | 6.5 | |
| 11-12 | 5.0 | | 6.5 | 3.0 | | 3.5 | | | 4.0 | | | | | 3.5 | | 2.5 | | 11.0 | 8.5 | | | | 11.0 | |
| 12-13 | 4.0 | | 4.0 | | | 4.5 | 5.0 | | 5.0 | | | | 2.0 | 5.5 | | 7.0 | | | | 3.0 | | | | |
| 13-14 | 2.5 | 6.5 | | 5.0 | 2.0 | 5.0 | | | 6.0 | | | | 4.0 | | | | 8.0 | | | 6.5 | | | | |
| 14-15 | | 5.5 | 5.5 | 2.0 | 2.0 | 5.5 | | | 6.5 | | | | 5.5 | 2.5 | | 2.0 | | | 10.0 | | | | | |
| 15-16 | | 4.0 | 3.0 | 6.5 | 2.0 | 2.0 | 6.0 | | 7.5 | | 8.0 | | 4.0 | | | 6.5 | | | | 4.0 | | 9.0 | | |
| 16-17 | 7.0 | 3.0 | | 4.0 | 2.0 | 3.0 | 7.0 | | | | | | 2.5 | 5.5 | 5.5 | 11.0 | | | | 7.5 | | | 6.0 | |
| 17-18 | 5.5 | 2.0 | 5.0 | | 2.5 | 3.5 | | 5.0 | | | 7.0 | | 4.0 | | | | 7.5 | | | 2.0 | | 9.0 | 10.5 | |
| 18-19 | 4.5 | | 2.5 | 6.0 | 2.5 | 4.0 | | | | | | | 6.0 | 2.5 | | 5.5 | | | 5.5 | | | | | |
| 19-20 | 3.5 | 7.0 | 7.0 | 3.5 | 2.5 | 4.5 | | | | | | | | 4.5 | | 10.0 | | | | | | | | |
| 20-21 | 2.0 | 6.0 | 4.5 | | 2.5 | 5.5 | | | | | | | 3.0 | 6.0 | | | | | | 3.5 | | 5.5 | | |
| 21-22 | | 5.0 | 2.0 | 5.5 | 2.5 | 6.0 | 2.0 | | | | | | 4.5 | | | 4.5 | 7.5 | | 7.0 | | | | | |
| 22-23 | 7.5 | 3.5 | 6.5 | 2.5 | 3.0 | 6.5 | 2.5 | 5.0 | | | | | 6.5 | 3.0 | | 9.0 | | | | | 10.5 | 3.5 | 5.0 | |
| 23-24 | 6.0 | 2.5 | 3.5 | | 3.0 | 3.0 | | | | | | | | 5.0 | | | | | | 5.0 | | | 10.0 | |
| 24-25 | 5.0 | | | 4.5 | 3.0 | 4.0 | | | | | | | 3.5 | | | 4.0 | | | | 8.5 | | | | |
| 25-26 | 4.0 | | 5.5 | 2.0 | 3.0 | 4.5 | | | | | 8.0 | 5.0 | 2.0 | | | 8.5 | 7.0 | | 2.5 | | | | | |
| 26-27 | 2.5 | 6.5 | 3.0 | 6.5 | 3.5 | 5.0 | | | | | | | 3.5 | 3.5 | | | | | | 6.0 | | | | |
| 27-28 | | 5.5 | | 4.0 | 3.5 | 6.0 | 4.5 | | | | 7.0 | | 2.0 | 5.5 | | 3.0 | | | | 9.5 | | 8.0 | | |
| 28-29 | | 4.0 | 5.0 | | 3.5 | 2.5 | 6.5 | | | | | | 4.0 | | | 7.5 | | | 4.0 | | | | 4.5 | |
| 29-30 | 7.0 | 3.0 | 2.5 | 6.0 | 3.5 | 3.0 | | | | | | | 5.5 | 2.5 | 10.5 | | 6.5 | | | 7.5 | | | 9.5 | |
| 30-31 | 5.5 | 2.0 | 7.0 | 3.5 | 3.5 | 3.5 | | | | | | | | 4.0 | | 2.0 | | | | 11.0 | 2.0 | 4.5 | | |

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| | TV | TW | ZZ | AB | CW | CW | DZ | GT | IR | IS | IT | MM | OR | OX | OX | PV | PV | V364 | V364 | V375 | V380 | U | SU |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CAS | CEP | CEP |
| MAX | 7.3 | 8.3 | 10.7 | 10.2 | 11.8 | 11.8 | 11.6 | 11.9 | 10.8 | 11.6 | 11.0 | 11.3 | 11.4 | 10.1 | 10.1 | 10.0 | 10.0 | 11.2 | 11.2 | 10.1 | 10.4 | 6.7 | 8.8 |
| MIN | 8.4 | 8.9 | 11.1 | 12.2 | 12.5 | 12.5 | 12.3 | 12.8 | 12.1 | 12.6 | 11.8 | 11.9 | 12.4 | 10.9 | 10.9 | 10.6 | 10.6 | 11.7 | 11.7 | 10.9 | 11.1 | 9.8 | 9.8 |
| DUR | 4 | 5 | 4 | 4 | 3 | 3 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 3 | 3 | 4 | 4 | 5 | 5 | 4 | 4 |
| TOT | | | | | | | | | | | | | | | | | | | | | | 2 | |
| | | | | | | (S) | | | | | | | | | (S) | | (S) | | (S) | | | | |
| 0- 1 | | | 9.5 | | | 4.0 | | 2.0 | 6.5 | 5.0 | 8.0 | 10.0 | | | | | | 9.5 | | | | | |
| 1- 2 | | 7.0 | | | 7.0 | 3.0 | | | | | | | | | | 2.5 | | | 4.5 | | | | |
| 2- 3 | | | | 10.0 | 6.0 | 2.0 | 7.0 | | 7.5 | | | | | 10.0 | | | | | | 2.5 | 6.5 | 9.0 | 9.0 |
| 3- 4 | | | | | 4.5 | | | 2.0 | | | | | | | | | | | | | | | 7.0 |
| 4- 5 | | 3.5 | 3.0 | | 3.5 | 7.5 | | | 8.5 | | 5.5 | | 7.0 | | | | | | | 6.5 | | | 4.5 |
| 5- 6 | | | 9.0 | 3.5 | 2.5 | 6.5 | 10.0 | | | | | | | | | 7.5 | | | | | | | 2.0 |
| 6- 7 | 9.0 | | | | | 5.5 | 5.0 | | 9.5 | | | 5.5 | | | 2.0 | | 5.0 | | | | 8.0 | | |
| 7- 8 | | | | | | 4.5 | | | 2.0 | | | 9.0 | | 9.5 | | | | | | 8.5 | | 9.0 | |
| 8- 9 | 4.5 | 10.5 | | | 7.0 | 3.5 | | | 10.5 | | 3.0 | | | | | | | | | | | | |
| 9-10 | | | | 2.5 | 6.0 | 6.0 | 2.5 | 8.5 | | 3.0 | 10.0 | | 6.5 | | | | | | | | | | |
| 10-11 | | | | 8.5 | | 5.0 | | 3.5 | | | | | | | | | | | | 10.5 | | 10.0 | |
| 11-12 | | 7.0 | | | 4.0 | | | | 4.0 | 6.0 | | | | | | | | 5.0 | | | | | 9.5 |
| 12-13 | | | | | 3.0 | 7.0 | | | | | | | | 9.0 | | 7.5 | | | | 10.0 | | 8.5 | 7.0 |
| 13-14 | | | | 8.5 | 2.0 | 6.0 | 6.5 | | 5.0 | 2.5 | | 4.0 | | | | | 5.0 | | | | 3.0 | | 4.5 |
| 14-15 | | 3.5 | 2.0 | | | 4.5 | | | | | | 8.0 | 6.0 | | | | | 7.0 | | | | | 2.5 |
| 15-16 | 10.5 | | 8.0 | | 7.5 | 3.5 | | | 6.0 | | | | | | | | | | | 8.5 | | | |
| 16-17 | | | | 2.0 | 6.5 | 2.5 | 10.0 | | | | | | | | | | | | | | | | |
| 17-18 | 6.0 | | | 11.0 | 5.5 | | 5.0 | | 7.0 | | | | | 8.5 | | | | 9.0 | | | 4.5 | 8.0 | |
| 18-19 | | 10.5 | | | 4.5 | | | | | | | | | | | | | | | 3.5 | 7.5 | | |
| 19-20 | | | | | 3.5 | 7.0 | | | 8.0 | | | | 5.5 | | | 7.5 | | | | | | | |
| 20-21 | | | 7.0 | 4.5 | 2.5 | 6.0 | 8.0 | | | 11.0 | | 3.0 | | | | | 5.5 | | | | | | 10.0 |
| 21-22 | | 7.0 | | | | 5.0 | 3.0 | | 9.0 | | | 6.5 | | | | | | | | | | | 7.5 |
| 22-23 | | | | | | 4.0 | | | | 7.5 | | 10.5 | | 8.0 | | | | | | | | 8.0 | 5.0 |
| 23-24 | | | | | 7.0 | 3.0 | | | 10.0 | | | | | | | | | | | | | | 2.5 |
| 24-25 | | 3.5 | | 7.0 | 6.0 | 2.0 | 6.5 | | 2.5 | 3.5 | | | 5.0 | | | | | | | 8.0 | 5.0 | | |
| 25-26 | | | 6.5 | | 4.5 | | | | 11.0 | | | | 11.0 | | | | | | | | | 8.0 | |
| 26-27 | 7.5 | | | | 3.5 | 7.5 | | | 3.5 | | | | | | | 7.5 | | | | | | | |
| 27-28 | | | | | 2.5 | 6.5 | 9.5 | | | | | | | 7.5 | | | 5.5 | | 10.0 | 3.5 | | 7.5 | |
| 28-29 | 3.0 | 10.5 | | 9.5 | | 5.5 | 4.5 | | 4.5 | | | 5.5 | | | | | | 4.5 | | | | | |
| 29-30 | | | | | | 4.5 | | | | | | 9.5 | 5.0 | | | | | | | | 10.0 | | 10.0 |
| 30-31 | | | 6.0 | | 7.0 | 3.5 | | | 5.5 | | | | 10.5 | | | | | | | | 2.5 | | 8.0 |

| | WW | WZ | WZ | XX | ZZ | CW | CW | DK | DL | DV | EG | EK | GK | TT | TX | RW | RW | RZ | RZ | SS | SS | CC | CC |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | CEP | CEP | CEP | CEP | CEP | CEP | CEP | CEP | CEP | CEP | CEP | CEP | CEP | CET | CET | COM | COM | COM | COM | COM | COM | COM | COM |
| MAX | 11.1 | 11.7 | 11.7 | 8.5 | 9.3 | 7.6 | 7.6 | 12.2 | 12.4 | 11.6 | 9.6 | 8.2 | 6.9 | 10.8 | 10.9 | 11.0 | 11.0 | 10.0 | 10.0 | 10.9 | 10.9 | 11.0 | 11.0 |
| MIN | 11.9 | 11.3 | 11.1 | 9.6 | 10.0 | 8.0 | 8.0 | 14.2 | 13.2 | 12.4 | 10.6 | 9.5 | 7.4 | 11.3 | 11.5 | 11.6 | 11.6 | 10.7 | 10.7 | 11.5 | 11.5 | 11.9 | 11.9 |
| DUR | 4 | 3 | 3 | 4 | 5 | 5 | 5 | 4 | 5 | 4 | 3 | 6 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 2 | 2 |
| TOT | | | | | | | | | | | | | | | 1 | | | | | | | | |
| | | | (S) | | | | (S) | | | | | | | | | | (S) | | (S) | | (S) | | (S) |
| 0- 1 | 8.0 | 3.0 | 8.0 | 10.0 | | | | | | | 8.0 | | | | | 2.0 | 4.5 | | 4.5 | | | | 4.0 |
| 1- 2 | | 9.0 | 4.0 | | | | 7.5 | | | | 10.0 | | | | 9.0 | | 3.5 | | 5.0 | | 2.0 | 3.5 | |
| 2- 3 | | 5.0 | | | | | | | | | | | | | | 5.0 | 2.5 | | 5.0 | 2.5 | | | 3.5 |
| 3- 4 | | | 6.5 | | | | | | 7.5 | | | | | | | 4.0 | | | 5.5 | | 3.5 | 3.5 | |
| 4- 5 | | 7.5 | 2.5 | | 3.5 | | | 11.0 | | 5.5 | 3.5 | | | | 8.0 | 2.5 | 5.5 | 2.0 | | 4.0 | | | 3.0 |
| 5- 6 | | 3.5 | 8.5 | 2.5 | | 10.0 | | 10.5 | | 9.5 | 5.5 | | | 11.0 | | | 4.5 | 2.5 | | | 5.0 | 3.0 | |
| 6- 7 | | 9.5 | 4.5 | | 7.0 | | | 10.5 | | | 8.0 | | 10.0 | 10.0 | | | 3.0 | 2.5 | | 5.5 | | | 3.0 |
| 7- 8 | | 5.5 | | 10.5 | | | | 10.0 | | | 10.0 | 4.0 | 8.5 | 9.5 | | 4.5 | 2.0 | 3.0 | | | | 2.5 | 5.5 |
| 8- 9 | | | 6.5 | | 10.0 | 3.5 | | 9.5 | 4.5 | | | | 7.0 | 9.0 | | 3.5 | | 3.5 | | | 2.5 | 5.0 | 2.5 |
| 9-10 | | 7.5 | 2.5 | | | | | 9.5 | | | | | 5.5 | 8.0 | | 2.5 | 5.0 | 4.0 | | 3.0 | | 2.5 | 5.0 |
| 10-11 | | 3.5 | 8.5 | | | | | 9.0 | | | 3.5 | | 4.0 | | | | 4.0 | 4.0 | | | 4.0 | 5.0 | 2.0 |
| 11-12 | | 9.5 | 4.5 | | | | | 8.5 | 11.0 | 5.0 | 5.5 | | 2.5 | | | 5.5 | 2.5 | 4.5 | | 4.5 | | 2.0 | 4.5 |
| 12-13 | | 5.5 | | 2.5 | | | 5.5 | 8.5 | | 8.5 | 7.5 | | | | | 4.5 | | 5.0 | | | 5.5 | 4.5 | 2.0 |
| 13-14 | | | 6.5 | | | | | 8.0 | 2.0 | | 10.0 | | | | | 3.0 | | 5.5 | | | | 4.5 | 4.5 |
| 14-15 | 3.5 | 7.5 | 2.5 | 11.0 | | | | 7.5 | | | | | | | | 2.0 | 5.0 | 5.5 | | 2.0 | | 4.0 | |
| 15-16 | | 4.0 | 9.0 | | | | | 7.5 | | | | | | | 11.0 | | 3.5 | | 2.0 | | 2.5 | 2.5 | 4.0 |
| 16-17 | | 10.0 | 5.0 | | | 8.0 | | 7.0 | 8.5 | | 3.0 | | | | | 5.0 | 2.5 | | 2.5 | 3.5 | | 4.0 | |
| 17-18 | | 6.0 | | | | | | 6.5 | | | 5.5 | | | | | 4.0 | | | 2.5 | | 4.5 | | 3.5 |
| 18-19 | | 2.0 | 7.0 | | | | | 6.5 | | 4.0 | 7.5 | | | | 10.0 | 3.0 | 5.5 | | 3.0 | 5.0 | | 3.5 | |
| 19-20 | | 8.0 | 3.0 | 3.0 | 3.5 | | | 6.0 | | 8.0 | 9.5 | | | | | | 4.5 | | 3.5 | | 6.0 | | 3.5 |
| 20-21 | | 4.0 | 9.0 | | | | 10.0 | 5.5 | | | | 10.5 | 11.0 | | | | 3.0 | | 4.0 | | | 3.0 | |
| 21-22 | | | 5.0 | 11.0 | 6.5 | | | 5.5 | 5.5 | | | | 9.5 | | 9.0 | 5.0 | 2.0 | | 4.0 | 2.5 | | | 3.0 |
| 22-23 | | 6.0 | | | | | | 5.0 | | | 3.0 | | 8.0 | 11.0 | | 3.5 | | | 4.5 | | 3.0 | 3.0 | |
| 23-24 | 8.0 | 2.0 | 7.0 | | 10.0 | | 3.5 | 4.5 | | | 5.0 | | 6.5 | 10.5 | | 2.5 | 5.5 | | 5.0 | 4.0 | | 5.5 | 2.5 |
| 24-25 | | 8.0 | 3.0 | | | | | 4.5 | | | 7.0 | | 5.0 | 9.5 | 8.0 | | 4.0 | | 5.5 | | 4.5 | 2.5 | 5.0 |
| 25-26 | | 4.0 | 9.0 | | | | | 4.0 | | 3.5 | 9.5 | | 3.5 | 9.0 | | 5.5 | 3.0 | | 5.5 | 5.5 | | 5.0 | 2.5 |
| 26-27 | | | 5.5 | 3.5 | | | | 3.5 | 3.0 | 7.5 | | | 2.0 | 8.5 | | 4.5 | | 2.0 | | | | 2.0 | 5.0 |
| 27-28 | | 6.5 | | | | 6.0 | | 3.5 | | | | | | | | 3.0 | | 2.5 | | | 2.0 | 4.5 | 2.0 |
| 28-29 | | 2.5 | 7.5 | | | | | 3.0 | | | 2.5 | | | | | 2.0 | 5.0 | 2.5 | | 3.0 | | 2.0 | 4.5 |
| 29-30 | | 8.5 | 3.5 | | | | | 2.5 | 9.5 | | 5.0 | 7.0 | | | | | 3.5 | 3.0 | | | 3.5 | 4.5 | |
| 30-31 | | 4.5 | 9.5 | | | | | 2.0 | | | 7.0 | | | | | 5.5 | 2.5 | 3.5 | | 4.5 | | | 4.0 |

all times in U.T.

| | U | RW | TW | W | W | RV | SX | SX | V | Y | SW | WW | ZZ | AE | BR | CG | DK | KR | KV | V346 | V387 | V388 | V401 |
|-------|-----|------|------|------|------|------|-----|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | CRB | CRB | CRB | CRV | CRV | CRV | CRV | CRV | CRT | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG |
| MAX | 7.6 | 10.1 | 10.5 | 10.6 | 10.6 | 9.0 | 8.9 | 8.9 | 9.5 | 7.0 | 9.3 | 9.9 | 10.7 | 11.8 | 9.4 | 11.0 | 10.3 | 9.2 | 11.5 | 11.8 | 11.5 | 9.7 | 10.8 |
| MIN | 8.8 | 10.6 | 11.3 | 11.2 | 11.2 | 10.0 | 9.2 | 9.2 | 10.2 | 7.6 | 11.8 | 13.2 | 12.0 | 12.8 | 10.5 | 11.8 | 10.8 | 10.0 | 12.6 | 13.6 | 12.3 | 10.3 | 11.6 |
| DUR | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 6 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 5 | 5 | 3 | 3 | 4 |
| TOT | | | | | | | | | | | 2 | | | | | | | | | | | | |
| | | | | (S) | | | (S) | | | | | | | | | | | | | | | | |
| 0- 1 | | 4.5 | | | | | | 2.0 | | 9.0 | | | | | | 4.5 | 3.0 | 8.0 | | | | 10.0 | |
| 1- 2 | | | | | | | | | | | 6.5 | 5.0 | 6.5 | | 8.5 | 11.0 | | 4.5 | | | 8.0 | 6.5 | 3.5 |
| 2- 3 | | 9.0 | 4.5 | | | | 3.5 | | | | | | | | | 2.0 | | | | | | 3.0 | 7.5 |
| 3- 4 | | 2.0 | 8.5 | | | | 2.0 | | | 9.0 | | | 4.0 | | | 8.5 | 10.0 | | 7.5 | | 6.0 | | |
| 4- 5 | | | | | | | | | | | | 10.0 | | | | | 9.0 | | | | | | |
| 5- 6 | | 6.5 | 3.0 | | 3.0 | | | | | | | | | | 8.5 | 6.0 | 7.5 | 10.0 | | | 4.0 | | 5.5 |
| 6- 7 | | | 7.0 | 2.0 | | | | 2.5 | | 8.5 | | | 7.5 | | | | 6.0 | 6.0 | 3.5 | | 11.0 | 10.5 | 9.5 |
| 7- 8 | | | | | | | | | | | | | | | | 3.5 | 4.5 | 2.5 | | 11.0 | 2.0 | 7.0 | |
| 8- 9 | | 4.0 | | | | | | | | | | | 4.5 | | | 9.5 | 3.0 | | | | 9.0 | 3.5 | 3.5 |
| 9-10 | | | 6.0 | | | | 2.5 | | | 8.5 | | | 11.0 | | 8.5 | | 1.5 | | | | | | 7.5 |
| 10-11 | | 8.5 | | | | | | | | | 10.0 | | 2.0 | | | 7.0 | | | | 5.0 | 7.0 | | |
| 11-12 | | 2.0 | | 3.0 | | | | | | | | 3.5 | 8.0 | | | | 10.0 | 8.0 | | | | | |
| 12-13 | 7.0 | | 4.5 | | 2.5 | | | 2.5 | | 8.5 | | | | | | 4.5 | 9.0 | 4.0 | | | 5.0 | 10.5 | 5.0 |
| 13-14 | | 6.5 | 9.0 | | | 3.5 | | | | | | | 5.5 | 8.5 | 11.0 | 7.5 | | | | | | 7.0 | 9.0 |
| 14-15 | | | | | | | | | | | | | | | | 2.0 | 6.0 | | | | 3.5 | 4.0 | |
| 15-16 | | | 3.0 | | | | 3.0 | | | 8.5 | | | 2.5 | | | 8.0 | 4.5 | | | | 10.0 | | 3.0 |
| 16-17 | | 4.0 | 7.5 | | | 3.0 | 1.5 | | | | | | 9.0 | | | | 3.0 | 9.5 | | | | | 7.0 |
| 17-18 | | | | | | | | | | | | | | | 8.5 | 5.5 | 2.0 | 6.0 | | | 8.0 | | 11.0 |
| 18-19 | | 8.5 | 2.0 | 3.0 | | | | 3.0 | | 8.5 | | | 6.0 | 10.5 | | | | 2.0 | | 10.5 | | 11.0 | |
| 19-20 | 4.5 | 2.0 | 6.0 | | 2.0 | 3.0 | | 2.0 | | | | | | 10.0 | | 3.0 | 10.5 | | | | 6.5 | 7.5 | 5.0 |
| 20-21 | | | | | | | | | | | | | 3.5 | 9.0 | | 9.5 | 9.0 | | 8.5 | | | 4.0 | 9.0 |
| 21-22 | | 6.0 | | | | | | 3.5 | | 8.5 | | 2.5 | 9.5 | 8.5 | 8.5 | | 7.5 | | | | 4.5 | 4.5 | |
| 22-23 | | | 5.0 | | | 2.5 | 2.0 | | | | | | | | | 7.5 | 7.0 | 6.0 | 7.5 | | | 11.0 | 3.0 |
| 23-24 | | | 9.0 | | | | | | | | | | 6.5 | 7.0 | | | 4.5 | 4.0 | 4.5 | | 2.5 | | 7.0 |
| 24-25 | | 4.0 | | | 3.0 | | | | 2.0 | 8.0 | 3.5 | 10.0 | | 6.0 | | 4.5 | 3.0 | | | | 9.5 | | 11.0 |
| 25-26 | | | 3.5 | 2.5 | | 2.5 | | 2.5 | | | | | | 4.0 | 5.5 | 8.0 | 10.5 | 2.0 | | | | 8.0 | |
| 26-27 | 2.0 | 8.0 | 7.5 | | 1.5 | | | | | | | | 10.0 | 4.5 | | 1.5 | | | | | 7.5 | 4.5 | 5.0 |
| 27-28 | | | | | | | | | | 8.0 | | | | 4.0 | | 8.0 | 10.5 | 9.5 | | | | | 9.0 |
| 28-29 | | | 2.0 | | | 2.0 | 2.5 | | | | | | 7.5 | 3.0 | | | 9.0 | 5.5 | | | 5.5 | | |
| 29-30 | | 6.0 | 6.5 | | | | | | | | | | | 2.5 | 8.0 | 5.5 | 7.5 | 2.0 | | 10.0 | | | 3.0 |
| 30-31 | | | | | | | | | | 8.0 | | | 4.5 | | | | 6.0 | | | | 3.5 | | 6.5 |

MAS Eclipsing Binary Ephemeris for July 2024

all times in U.T.

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| | V456 | V466 | V466 | V477 | V477 | V548 | V704 | 1034 | W | TT | TY | YY | FZ | Z | RZ | TW | UZ | UZ | AI | BH | S | TZ | Z |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|------|------|------|
| | CYG | CYG | CYG | CYG | CYG | CYG | CYG | CYG | DEL | DEL | DEL | DEL | DEL | DRA | DRA | DRA | DRA | DRA | DRA | DRA | EQU | ERI | HER |
| MAX | 10.8 | 10.8 | 10.8 | 8.3 | 8.3 | 8.9 | 13.8 | 9.6 | 9.4 | 10.6 | 9.6 | 11.0 | 10.2 | 10.8 | 10.0 | 7.8 | 9.9 | 9.9 | 7.2 | 8.0 | 8.0 | 9.8 | 7.3 |
| MIN | 11.9 | 11.6 | 11.6 | 9.2 | 8.7 | 9.7 | 14.6 | 10.6 | 12.7 | 12.5 | 10.8 | 12.0 | 11.3 | 13.6 | 10.9 | 9.5 | 10.7 | 10.7 | 8.2 | 8.6 | 10.0 | 12.6 | 8.2 |
| DUR | 3 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 7 | 5 | 4 | 4 | 3 | 4 | 3 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 8 |
| TOT | | | | | | | | | 2 | | | | | | | 1 | | | | | | 1 | |
| | | | (S) | | (S) | | | | | | | | | | | | | (S) | | | | | |
| 0- 1 | | | | | | | 11.0 | | | | 10.5 | | 5.0 | | 8.5 | | | | | 7.5 | | 10.5 | 10.5 |
| 1- 2 | 9.5 | 6.0 | | 6.0 | | | 4.0 | 10.5 | | | | | | | | | | | | | | | |
| 2- 3 | 7.0 | | | | | | 7.5 | 10.0 | | | | 7.0 | | 8.0 | | | | | 4.0 | 3.0 | | | |
| 3- 4 | 4.5 | | 8.5 | | | | 11.0 | 9.5 | 10.5 | | | 2.0 | 8.0 | | 3.0 | | 3.0 | | 8.5 | | | | |
| 4- 5 | 2.0 | | | | 7.5 | | | 9.0 | | | | | 3.0 | | 5.5 | | | | | | | | 10.0 |
| 5- 6 | | 10.5 | | | | 7.5 | 4.0 | 8.5 | | | | 4.5 | | | 7.5 | | | | | | | | |
| 6- 7 | | | 3.0 | | | | 7.5 | 7.5 | | | | 9.5 | 6.5 | 10.0 | 10.0 | | 9.0 | | | | 10.0 | | |
| 7- 8 | | | | | | 3.0 | 11.0 | 7.0 | | | | | | 6.0 | | | | | | | | | |
| 8- 9 | | 5.0 | | 7.0 | | | | 6.5 | 6.0 | 9.0 | | | | | 2.0 | | | | 4.0 | | | | 10.0 |
| 9-10 | 10.0 | | | | | | 4.0 | 6.0 | | | | 10.5 | | 3.0 | 4.5 | | | | 8.5 | 9.5 | | | |
| 10-11 | 7.5 | | 7.5 | | | | 7.5 | 5.5 | | | | 5.5 | 9.0 | | 6.5 | 10.0 | | | | | | | |
| 11-12 | 5.0 | | | | 8.5 | | 10.5 | 5.0 | | 6.0 | 3.5 | | 4.0 | | 9.0 | | | 6.5 | | 5.0 | | | |
| 12-13 | 2.5 | 9.5 | | | | | | 4.5 | | | | 8.0 | | | | | | | | | | | 9.5 |
| 13-14 | | | 2.0 | | | | 4.0 | 4.0 | | | | 9.5 | | 4.5 | | 5.0 | | | | | 7.0 | | |
| 14-15 | | | | | | 8.0 | 7.0 | 3.5 | | 3.0 | | 4.5 | 7.0 | | 3.5 | | | | 3.5 | | | | |
| 15-16 | | 4.0 | | 8.0 | | | 10.5 | 2.5 | | | | | | | 5.5 | | | | 8.5 | | | | |
| 16-17 | | | | | | 3.5 | | 2.0 | | | | | | | 8.0 | | 4.0 | | | | | | 9.5 |
| 17-18 | 10.5 | | 6.5 | | | | 3.5 | | | | 2.5 | 9.0 | 10.5 | 6.5 | 10.5 | | | | | | | | |
| 18-19 | 8.0 | | | | 9.5 | | 7.0 | | | | 7.0 | 4.0 | 5.0 | | | | | | | | | | |
| 19-20 | 5.5 | 8.5 | | | | | 10.5 | | | | | | | | | | | | | | | | |
| 20-21 | 3.0 | | | | | | | | | | | | | | 2.0 | | 10.5 | | | | | | |
| 21-22 | | | | | | | | | | | | 8.0 | 8.5 | 8.0 | 7.0 | | | | 3.5 | 7.0 | 3.5 | | 9.5 |
| 22-23 | | 3.0 | | 9.0 | | | 7.0 | | | | | 3.0 | 3.0 | | 9.5 | | | | | | | | |
| 23-24 | | | | | 2.0 | 8.5 | 10.5 | | | | | | | | | | | | | | | | |
| 24-25 | | | 5.5 | | | | | | | | 6.0 | | | | | 10.5 | | 7.5 | | | | | 9.0 |
| 25-26 | | | | | 10.5 | 4.0 | 3.5 | | | | 10.5 | 7.0 | 6.5 | 10.0 | 3.5 | | | | | | | | |
| 26-27 | 8.5 | 7.5 | | | | | 7.0 | | | | | 2.0 | | | 6.0 | | | | 3.5 | | | | |
| 27-28 | 6.0 | | | 2.0 | | | 10.5 | | 11.0 | | | | | | 8.5 | 6.0 | | | 8.0 | | | | |
| 28-29 | 3.5 | | 9.5 | | | | | | | | | | 9.5 | 3.0 | 11.0 | | | | | | | | 9.0 |
| 29-30 | | 2.0 | | 10.0 | | | 3.5 | | | | | 6.5 | 4.5 | | | | 5.0 | | | 9.0 | | | |
| 30-31 | | | | | 3.0 | | 6.5 | | | | 5.0 | | | | | 2.5 | | | | | 11.0 | | |

| | RX | SZ | TT | TU | UX | CC | CT | DI | DI | HS | HS | LT | V728 | 68 | AV | SW | SW | VX | AW | CM | CO | CO | DG |
|-------|------|------|------|------|------|------|------|-----|-----|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|
| | HER | HER | HER | HER | HER | HER | HER | HER | HER | HER | HER | HER | HER | HER | HER | HER | LAC | LAC | LAC | LAC | LAC | LAC | LAC |
| MAX | 7.1 | 10.2 | 9.7 | 10.6 | 8.9 | 9.5 | 9.9 | 8.4 | 8.4 | 8.5 | 8.5 | 10.7 | 10.9 | 4.7 | 10.2 | 9.2 | 9.2 | 10.9 | 10.6 | 8.5 | 10.5 | 10.5 | 10.8 |
| MIN | 7.7 | 12.0 | 10.4 | 13.4 | 9.8 | 12.8 | 11.2 | 9.1 | 9.1 | 9.0 | 9.0 | 11.1 | 11.5 | 5.4 | 10.6 | 10.0 | 10.0 | 12.3 | 11.3 | 9.5 | 11.0 | 11.0 | 12.0 |
| DUR | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 6 | 6 | 4 | 4 | 4 | 3 | 5 | 4 | 3 | 3 | 4 | 5 | 4 | 5 | 5 | 4 |
| TOT | | | | 1 | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | (S) | | (S) | | | | | | | (S) | | | | (S) | |
| 0- 1 | 8.0 | | | | | | | | | | | 7.0 | 10.0 | | | 7.5 | 3.5 | 5.5 | 7.5 | | 2.5 | | |
| 1- 2 | | | | | 6.0 | | 9.0 | | | | | 9.0 | 8.5 | | | 6.5 | 2.5 | 7.5 | 10.5 | 6.0 | | | |
| 2- 3 | 2.5 | 7.5 | 8.5 | 4.0 | | | | | | | | | 7.5 | | | 5.5 | | 9.5 | | | | 9.5 | |
| 3- 4 | | 3.5 | 6.5 | | | | 4.0 | 4.5 | | | 8.0 | | 6.0 | | | 4.5 | | 11.0 | | | 4.5 | | |
| 4- 5 | | | 4.0 | 10.0 | 8.0 | | | | | 2.5 | | | 4.5 | | | 3.5 | 7.5 | | | | | | |
| 5- 6 | | | 2.0 | | | 3.0 | | | | | | | 3.0 | | | 3.0 | 6.5 | | | | | | 4.0 |
| 6- 7 | | 10.0 | | | | | | | | | | | 2.0 | | | | 6.0 | | | 2.0 | 6.5 | | |
| 7- 8 | 10.5 | 5.5 | | | 10.5 | | | | | 9.5 | | | | | | | 5.0 | | 4.0 | | | | 9.0 |
| 8- 9 | | | | | | | | | | | 6.0 | | 10.5 | | | | 4.0 | | 7.5 | | | | |
| 9-10 | 5.5 | | | | | | | | | | | | 9.0 | 1.5 | 7.0 | 3.0 | | 10.5 | 7.0 | 8.5 | | | |
| 10-11 | | | | | | 8.0 | 7.5 | | | | | | 7.5 | | | 6.0 | | | | | | 2.5 | |
| 11-12 | | 7.5 | | 5.5 | | | | | 7.5 | | | | 3.5 | 6.0 | | 5.0 | | | | | | | |
| 12-13 | | 3.5 | 9.0 | | 2.0 | | 2.0 | | | 7.0 | | | 5.5 | 5.0 | | 4.0 | | | | 10.5 | | | |
| 13-14 | | | 7.0 | | | | | | | | 4.0 | 7.5 | 3.5 | | | 3.5 | 7.0 | 3.0 | | | | 4.5 | |
| 14-15 | | | 5.0 | | | | | | | | | | 2.0 | | | | 6.0 | 5.0 | | 2.5 | | | |
| 15-16 | | 10.0 | 3.0 | | 4.5 | | | | | | | | | | | | 5.5 | 6.5 | 4.0 | | | | |
| 16-17 | 8.0 | 5.5 | | | | | | | | | 10.5 | 10.5 | | | | | 4.5 | 8.5 | 7.5 | | | 6.5 | 4.5 |
| 17-18 | | | | | | 6.5 | | | | 5.0 | | | 9.0 | | | 7.5 | 3.5 | 10.5 | 10.5 | 7.5 | | | |
| 18-19 | 2.5 | | | | 7.0 | | | | | | | | 8.0 | | | 6.5 | 2.5 | | | | | | 9.5 |
| 19-20 | | | | | | | | | | | | | 6.5 | | | 5.5 | | | | | | 8.5 | |
| 20-21 | | 7.5 | | 7.0 | | | | | | | | | 5.0 | | | 4.5 | | | | | 3.5 | | |
| 21-22 | | 3.5 | | | 9.0 | | | | | | | | 8.5 | | | 3.5 | 7.5 | | | | | | |
| 22-23 | | | | | | | | | | | 3.0 | | 2.5 | | | 3.0 | 6.5 | | | 3.0 | | 10.5 | |
| 23-24 | 11.0 | | 8.0 | | | | | | | | | | | | | | 5.5 | | 4.0 | | 5.5 | | |
| 24-25 | | 10.0 | 6.0 | | | 5.0 | | 7.0 | | | | 3.5 | 11.0 | | | | 5.0 | | 7.5 | | | | |
| 25-26 | 5.5 | 5.5 | 3.5 | | | | | | | 9.5 | | 5.5 | 9.5 | | | | 4.0 | | 10.5 | 8.0 | | | |
| 26-27 | | | | | | | 9.0 | | | | 6.0 | 7.5 | 8.0 | 3.0 | | 7.0 | 3.0 | | | | 7.5 | | |
| 27-28 | | | | 2.5 | | | | | | | | | 7.0 | | | 6.0 | | 2.5 | | | | | 5.5 |
| 28-29 | | | | | | | 4.0 | | | | | | 5.5 | 4.0 | | 5.0 | | 4.0 | | | | | |
| 29-30 | | 7.5 | | 8.5 | 3.0 | | | | | | | | 4.0 | | | 4.0 | | 6.0 | | | 9.5 | | 10.5 |
| 30-31 | | 3.5 | | | | | | | | 7.5 | | | 2.5 | 5.5 | | 3.0 | 7.0 | 7.5 | | 3.5 | | 3.5 | |

all times in U.T.

| | GX | MZ | MZ | Y | UU | XY | XZ | AM | T | SS | DELT | RY | UZ | EW | FL | U | SX | V501 | V508 | V839 | 1010 | 1010 | ET |
|-------|------|------|------|------|------|-----|------|-----|------|------|------|------|------|------|-----|-----|------|------|------|------|------|------|------|
| | LAC | LAC | LAC | LEO | LEO | LEO | LEO | LEO | LMI | LIB | LIB | LYN | LYR | LYR | LYR | OPH | OPH | OPH | OPH | OPH | OPH | OPH | ORI |
| MAX | 10.1 | 11.2 | 11.2 | 9.5 | 11.4 | 9.5 | 10.6 | 9.2 | 10.2 | 10.4 | 4.8 | 11.9 | 9.8 | 11.2 | 8.7 | 5.8 | 10.5 | 10.9 | 10.1 | 8.8 | 6.2 | 6.2 | 11.2 |
| MIN | 10.4 | 12.1 | 12.1 | 12.7 | 12.7 | 9.9 | 11.2 | 9.8 | 12.6 | 11.3 | 5.9 | 13.3 | 11.0 | 13.6 | 9.5 | 6.5 | 11.2 | 11.8 | 10.7 | 9.4 | 7.0 | 7.0 | 12.4 |
| DUR | 6 | 4 | 4 | 5 | 4 | 2 | 3 | 3 | 6 | 6 | 7 | 4 | 5 | 5 | 4 | 5 | 5 | 4 | 3 | 3 | 4 | 4 | 5 |
| TOT | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | (S) | | | | | | | | | | | | | | | | | | | (S) |
| 0- 1 | 9.5 | 11.0 | | | | | | | | 3.0 | 2.5 | | | | | | 7.0 | 10.0 | 3.5 | 8.0 | 5.5 | | |
| 1- 2 | | | | | | | | | 3.0 | | | | 8.0 | | | 6.0 | | 9.0 | 4.5 | 3.5 | | | 5.5 |
| 2- 3 | | | | | | | | | | | | | | | | | | 8.5 | 5.5 | 9.0 | 5.5 | | |
| 3- 4 | | | | | | | | | | | | | 5.5 | | | | | 7.5 | 6.0 | 4.5 | | | 5.0 |
| 4- 5 | | | | 2.5 | | 3.0 | | | | | | | | | | | | 7.0 | 7.0 | | 5.0 | | |
| 5- 6 | | | 4.0 | | | | | 2.0 | | | | 2.0 | 3.0 | | | | | 6.0 | 8.0 | 5.5 | | | 4.5 |
| 6- 7 | | | | | 2.0 | 2.5 | | | | | | | | | | 7.0 | | 5.5 | | | | | 4.5 |
| 7- 8 | | | | | | | | | | 2.0 | | | | | 5.0 | | | 4.5 | | 6.5 | | | 4.5 |
| 8- 9 | | | 7.5 | | | 2.5 | | | | | | | | | | | | 4.0 | 2.0 | 2.5 | 4.0 | | |
| 9-10 | | | | | | | | 2.5 | | | | | | | 9.5 | | | 3.0 | 3.0 | 8.0 | | | 4.0 |
| 10-11 | | | | | | 2.0 | | | | 4.5 | | | | | | | | 2.5 | 3.5 | 3.5 | 4.0 | | |
| 11-12 | | | | | | | | | | | | | | | | 7.5 | | | 4.5 | 9.0 | | | 3.5 |
| 12-13 | | | | | | 1.5 | | | | | | | | | | | | | 5.5 | 4.5 | 3.5 | | |
| 13-14 | 2.5 | 2.5 | | | | | | 3.5 | | | | | | | | | | | 6.0 | | | | 3.0 |
| 14-15 | | | | | | | | | | | | | | | | | | | 7.0 | 5.5 | 3.0 | | |
| 15-16 | | | | | | | | | | | | 3.0 | | | | | | | 8.0 | | | | 3.0 |
| 16-17 | | 6.0 | | | | | 2.5 | | | | | | | | | 8.5 | | | | 6.5 | 2.5 | | |
| 17-18 | | | | | | | 1.5 | | | | | | | | | | | | | 2.5 | | | 2.5 |
| 18-19 | | | | | | | | | | | | | 8.5 | 2.5 | | | | | 2.0 | 8.0 | 2.5 | | 11.0 |
| 19-20 | | 10.0 | | | | | | | | | | | | | | | | | 3.0 | 3.5 | | | 2.0 |
| 20-21 | | | | | | | | 2.0 | | 6.0 | | | 6.0 | 7.0 | | | | | 3.5 | 9.0 | 2.0 | | |
| 21-22 | | | | | | | | | | | | | | | | 9.0 | | | 4.5 | 4.5 | | | |
| 22-23 | | | | | | | | | | | | | 3.5 | 11.0 | | | | | 5.5 | | | | |
| 23-24 | | | | | | | | | | 3.0 | | | | | | | | | 6.0 | 5.5 | | | |
| 24-25 | | | 2.5 | | | | | 2.5 | | | | | | 10.5 | | | | | 7.0 | | | | |
| 25-26 | | | | | | | | | | | | | | | | | | | 8.0 | 6.5 | | | |
| 26-27 | | | | | | | | | | | | | | 9.5 | | | | | | | 2.5 | | |
| 27-28 | | | 6.5 | | | | | | | | | | | | | | 3.0 | | | 7.5 | | | |
| 28-29 | | | | | | | | 3.0 | | | | | 8.0 | | 2.0 | | | | 2.0 | 3.5 | | | |
| 29-30 | | | | | | | | | | | | | | | | | 4.5 | 11.0 | 3.0 | 9.0 | | | |
| 30-31 | | | 10.5 | | | | | | | | | | | 7.0 | | | | 10.0 | 3.5 | 4.5 | | | |

| | TX | TY | TY | UX | UX | VV | XZ | ZZ | AF | W | RU | VV | AG | AH | AH | AK | AW | AW | AX | AZ | AZ | BH | MS |
|-------|-----|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|-----|
| | UMA | UMA | UMA | UMA | UMA | UMA | UMA | UMA | UMA | UMI | UMI | VIR | VIR | VIR | VIR | VIR | VIR | VIR | VIR | VIR | VIR | VIR | VIR |
| MAX | 6.8 | 11.7 | 11.7 | 12.7 | 12.7 | 10.1 | 10.1 | 9.8 | 10.8 | 8.6 | 10.7 | 11.7 | 8.8 | 9.7 | 9.7 | 10.0 | 10.8 | 10.8 | 10.0 | 11.0 | 11.0 | 9.9 | 9.4 |
| MIN | 8.9 | 12.4 | 12.4 | 13.8 | 13.8 | 11.0 | 11.7 | 11.2 | 11.6 | 9.7 | 11.4 | 13.5 | 9.4 | 10.2 | 10.2 | 11.5 | 11.9 | 11.9 | 10.8 | 11.8 | 11.8 | 11.3 | 9.7 |
| DUR | 6 | 3 | 3 | 1 | 1 | 3 | 3 | 4 | 8 | 7 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 3 |
| TOT | | | | | | | | | | | | | | | | | | | | | | | |
| | | | (S) | | | | | | | | | | | (S) | | | (S) | | | (S) | | | |
| 0- 1 | | 3.0 | 7.5 | 5.5 | | | 3.0 | | 6.0 | | | 2.5 | | | | 2.0 | | 5.0 | | | 2.5 | | 5.5 |
| 1- 2 | | 5.0 | | | 5.0 | | | 7.0 | | | | 4.0 | | 2.5 | | | | | 2.0 | 4.0 | 3.5 | | |
| 2- 3 | | 6.5 | 2.0 | 4.5 | | | | | | | | 5.0 | | | 3.0 | 4.0 | | | 3.5 | | 5.0 | | 4.5 |
| 3- 4 | | 8.0 | 3.5 | 9.0 | 4.0 | 2.5 | | | | 5.5 | 6.5 | 4.5 | | 3.5 | | | | | 5.0 | | | 2.0 | 3.0 |
| 4- 5 | | | 5.0 | 4.0 | 8.5 | | | | | | | 7.5 | 2.0 | | 4.0 | | | 2.5 | | | 3.0 | | |
| 5- 6 | | 2.5 | 6.5 | 8.0 | 3.5 | 4.0 | | | | | | 8.5 | | 4.5 | | | | 4.0 | | | 4.0 | 3.0 | |
| 6- 7 | | 4.0 | 8.0 | 3.0 | 7.5 | | | | | | | 10.0 | | 4.5 | | | | 5.0 | | 2.0 | 5.5 | | |
| 7- 8 | | 5.5 | | 7.5 | 2.5 | 5.5 | | | | | | 11.0 | 5.0 | | | | | | 2.5 | | 2.5 | | 4.5 |
| 8- 9 | | 7.0 | 2.5 | 2.0 | 7.0 | | | 4.5 | | 8.0 | | 2.5 | 3.0 | | | 3.0 | | | 4.0 | 4.5 | 3.5 | | 3.0 |
| 9-10 | | | 4.0 | 6.5 | 2.0 | | | | | | | | | | | | | | 5.5 | | 4.5 | | 5.0 |
| 10-11 | | | 5.5 | | 6.0 | | | | | | | 2.0 | | 2.0 | | | | 2.5 | | | 6.0 | | |
| 11-12 | | 3.0 | 7.5 | 5.5 | | | 3.0 | | | | | 3.5 | 5.5 | | 2.0 | | 4.0 | | | | 3.0 | | |
| 12-13 | | 4.5 | | | 5.5 | | | | | | | 4.5 | 3.0 | 2.5 | | | | | | | 4.0 | | 4.5 |
| 13-14 | | 6.0 | 2.0 | 5.0 | | | | | | 10.5 | 5.5 | | | 3.0 | | | | 3.0 | 2.5 | | 5.0 | | 3.0 |
| 14-15 | | 7.5 | 3.5 | | 4.5 | 2.5 | | | | | | 7.0 | | 3.5 | 2.0 | | | 4.5 | | 2.0 | | 2.5 | |
| 15-16 | 3.0 | | 5.0 | 4.0 | 9.0 | | | | | 3.0 | 8.0 | | 4.5 | 4.0 | | | | | 5.0 | | 3.5 | | |
| 16-17 | | 2.0 | 6.5 | 8.5 | 3.5 | 4.0 | | | | | | 9.5 | 3.0 | 4.5 | | | | 3.0 | | | 4.5 | | |
| 17-18 | | 3.5 | 8.0 | 3.5 | 8.0 | | | 9.0 | | | | 10.5 | | 2.5 | | | | 4.5 | | | 5.5 | | 4.5 |
| 18-19 | 4.5 | 5.0 | | 7.5 | 3.0 | 5.5 | | | | | | | | | | | | | | | 2.5 | 4.5 | 3.0 |
| 19-20 | | 6.5 | 2.5 | 2.5 | 7.0 | | | | | | | | | | | | | 2.0 | | | 4.0 | | |
| 20-21 | | 8.5 | 4.0 | 7.0 | 2.0 | | | | | 5.5 | | 3.5 | | | | | | 5.0 | 3.5 | | 5.0 | | |
| 21-22 | | | 5.5 | | 6.5 | | | | 6.5 | | | 2.5 | | 2.0 | | | | 2.0 | | | 2.0 | | |
| 22-23 | | 3.0 | 7.0 | 6.0 | | | 3.0 | | | | | 4.0 | | | 2.5 | | | 3.5 | | | 3.0 | | 4.5 |
| 23-24 | | 4.5 | | | 5.5 | | | | | | | 5.0 | | 3.0 | | | | 5.0 | | | 4.5 | 2.5 | 3.0 |
| 24-25 | | 6.0 | | 5.0 | | | | 6.5 | | | | 6.5 | 4.0 | 4.5 | 3.0 | | | | 2.5 | | 5.5 | | |
| 25-26 | | 7.5 | 3.0 | | 5.0 | 2.5 | | | | 8.0 | 7.5 | | | 3.5 | | | | 4.0 | | | | 2.5 | |
| 26-27 | | | 4.5 | 4.5 | | | | | | | | 8.5 | | 2.5 | 4.0 | | | 5.5 | | | 3.5 | | |
| 27-28 | | 2.0 | 6.0 | 8.5 | 4.0 | 4.0 | | | | | | 10.0 | | 4.5 | | | | 2.5 | | 4.0 | 5.0 | 4.5 | 4.0 |
| 28-29 | | 3.5 | 7.5 | 3.5 | 8.5 | | | | | | | 11.0 | 4.0 | | | | | 4.0 | | 2.0 | | | 2.5 |
| 29-30 | | 5.0 | | 8.0 | 3.0 | 5.5 | | | | | | | | | | | | 5.5 | | 3.0 | | | |
| 30-31 | | 6.5 | 2.5 | 3.0 | 7.5 | | | | | 10.5 | | | | | | | | 2.5 | | 4.0 | | | |

| | MS | NY | Z | AW | AY | BE | BO | BS | BT | BU | CD | V495 | V495 |
|-------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|
| | VIR | VIR | VUL | VUL | VUL | VUL | VUL | VUL | VUL | VUL | VUL | VUL | VUL |
| MAX | 9.4 | 13.3 | 7.4 | 10.8 | 11.0 | 9.9 | 10.4 | 11.0 | 11.8 | 10.6 | 11.5 | 9.6 | 9.6 |
| MIN | 9.7 | 14.2 | 9.2 | 11.9 | 12.9 | 11.4 | 13.3 | 11.5 | 12.5 | 11.4 | 12.6 | 10.0 | 10.0 |
| DUR | 3 | 1 | 6 | 5 | 4 | 5 | 4 | 3 | 3 | 3 | 4 | 4 | 4 |
| TOT | | | | | | | | | | | | | |
| | (S) | | | | | | | | | | | | (S) |
| 0- 1 | 3.5 | | 9.0 | 4.0 | | 10.0 | | 4.0 | 2.5 | 2.0 | | | |
| 1- 2 | 2.0 | | | | 8.0 | | 6.5 | 2.5 | 6.0 | 5.5 | 5.5 | 7.0 | |
| 2- 3 | | | | | | | | | 9.5 | 8.5 | | | 4.5 |
| 3- 4 | | 2.0 | | 9.5 | | | 5.0 | | | | 7.0 | | |
| 4- 5 | | 2.0 | | 5.0 | | | | 10.5 | | | | | |
| 5- 6 | 3.5 | 2.5 | 7.0 | | | 2.0 | 4.0 | 9.5 | | 5.0 | 8.0 | | 11.0 |
| 6- 7 | 2.0 | | | | 3.5 | | | 8.5 | | 8.0 | | 4.5 | |
| 7- 8 | | | | 10.5 | | | 2.5 | 7.0 | | | 9.0 | | 2.0 |
| 8- 9 | | | | 5.5 | | 4.5 | | 6.0 | 2.5 | | | | |
| 9-10 | | | | | | | | 5.0 | 6.0 | 4.5 | 10.5 | | |
| 10-11 | 3.5 | | 4.5 | | | | | 3.5 | 9.0 | 8.0 | 3.0 | | 8.5 |
| 11-12 | 2.0 | | | 11.0 | | 7.0 | | 2.5 | | 11.0 | | 2.5 | |
| 12-13 | | | | 6.5 | | | | | | | 4.0 | | |
| 13-14 | | 2.0 | | 2.0 | 9.0 | | | | | 4.0 | | | |
| 14-15 | | 2.0 | | | | 9.5 | | 10.5 | | 7.5 | 5.5 | 9.0 | |
| 15-16 | 3.5 | 2.5 | 2.5 | | | | | 9.5 | | 10.5 | | | 6.5 |
| 16-17 | 2.0 | | | 7.0 | | | | 8.0 | 2.0 | | 6.5 | | |
| 17-18 | | | | 2.5 | | | | 7.0 | 5.5 | 3.5 | | | |
| 18-19 | | | | | 5.0 | | | 6.0 | 9.0 | 7.0 | 8.0 | | |
| 19-20 | | | | | | | | 5.0 | | 10.5 | | 6.5 | |
| 20-21 | 3.5 | | | 8.0 | | | | 3.5 | | | 9.0 | | 4.0 |
| 21-22 | 2.0 | | | 3.5 | | | | 2.5 | | 3.0 | | | |
| 22-23 | | | | | | 3.5 | | | | 6.5 | 10.0 | | |
| 23-24 | | 2.0 | | | | | | | | 10.0 | 2.5 | | 10.5 |
| 24-25 | 5.0 | 2.0 | | 8.5 | | | | 10.5 | 2.0 | | | 4.5 | |
| 25-26 | 3.5 | 2.5 | | 4.0 | 10.5 | 6.0 | | 9.5 | 5.0 | 3.0 | 4.0 | | 1.5 |
| 26-27 | 2.0 | | | | | | | 8.0 | 8.5 | 6.0 | | | |
| 27-28 | | | 9.0 | | | | | 7.0 | | 9.5 | 5.0 | 11.0 | |
| 28-29 | | | | 9.5 | | 8.5 | | 6.0 | | | | | 8.0 |
| 29-30 | 5.0 | | | 5.0 | | | | 4.5 | | 2.5 | 6.5 | 2.0 | |
| 30-31 | 3.5 | | | | 6.5 | | 11.0 | 3.5 | | 5.5 | | | |